

**PUBLIC IMPROVEMENT PLANS
FOR
WATER, SEWER AND DRAINAGE**

**LOTS 4-A THRU 4-H,
ALVARADO GARDENS UNIT 1**

**A SUBDIVISION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
FEBRUARY 2003**

PREPARED FOR:
WILLIAM RIORDAN AND MELBA AND PATRICK NAPOLEONE
7611 INDIAN SCHOOL RD, NE
ALBUQUERQUE, NM 87110

PREPARED BY:
TGC ENGINEERING INC.
330 LOUISIANA BLVD. NE
ALBUQUERQUE, NM 87108

INDEX TO DRAWINGS

SHEET NO.	TITLE
1 OF 10	COVER SHEET
2 OF 10	PLAT
3 OF 10	GRADING AND DRAINAGE PLAN
4 OF 10	WATER AND SEWER LOCATION
5 OF 10	PLAN AND PROFILE (RIO GRANDE)
6 OF 10	PLAN AND PROFILE (ACCESS ROAD)
7 OF 10	WATER DETAILS, WATER SHUT-OFF PLAN & ROAD DETAILS
8 OF 10	WATER DETAILS
9 OF 10	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
10 OF 10	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Dave Gatterman of the firm of TGC Engineering Inc., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specification approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Wayjohn Surveying, Inc. (Thomas D. Johnston) NMPS number 14269.

APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY OF ALBUQUERQUE
DATE: 6/21/04



VICINITY MAP (NO SCALE) G-12-Z

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION AS AMENDED WITH UPDATE NO. 6.
- 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.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT THE LINE LOCATION SERVICE, NM ONE CALL AT 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY, AND TO PROTECT THEM FROM DAMAGE, INJURY OR LOSS. CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADHERE TO SECTION 19 OF THE GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986, AS AMENDED WITH UPDATE NO. 6.
- CONTRACTOR AGREES THAT HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ENGINEER, AND CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, ENGINEER, OR CITY.
- TRAFFIC CONTROL: FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE CITY A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.
- WHEN ABUTTING EXISTING PAVEMENT TO NEW, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE FIELD ENGINEER. REMOVAL OF BROKEN OR CRACKED PAVEMENT WILL ALSO BE REQUIRED.
- EXISTING CURB AND GUTTER NOT TO BE REMOVED UNDER THE CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE.
- ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM 90 % MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY SECTION 701.14.2 AND STANDARD DRAWING NO. 2315.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY.
- CONTRACTOR SHALL SUPPORT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWERLINE COSTS.
- CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF RECORD DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN 7 DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO PRESERVE SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.
- WARNING - EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.
- THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY 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. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES, IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.
- ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES 24 HR. CONSTRUCTION.
- ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUBPART P.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 7038.81 10/04

DRB# 1001934

TGC ENGINEERING, INC. (505)266-7256
Fax: (505) 255-2887
330 LOUISIANA BLVD. NE
ALBUQUERQUE, NM 87108

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER	DATE	APPROVED FOR CONSTRUCTION	
DRC Chairman		Transportation		7-15-03			
Water/Wastewater		Hydrology		5/16/03			
AMAFCA		N/A		N/A			
Construction Mgmt.		Construction Coord.		7-15-03			
City Project No.				7038.81		SHEET 1 OF 10	



PLAT OF
LOTS 4-A THROUGH 4-H

ALVARADO GARDENS, UNIT 1
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

A REPLAT OF LOT 4, ALVARADO GARDENS UNIT 1
WITHIN SE 1/4, PROJECTED SECTION 1, T.10N., R.2E.
AND SW 1/4, PROJECTED SECTION 6, T. 10N., R.3E., N.M.P.M.

DECEMBER 2002

APPROVALS as specified by the City of Albuquerque Subdivision Ordinance:
 PROJECT NO. 1001934 APPLICATION NO. 02 DEB-01864

Sheran Minton
Planning Director, City of Albuquerque
1/9/03
Date

FREE CONSENT AND DEDICATION

The creation of eight lots from Lot 4 of ALVARADO GARDENS UNIT 1, together with grant of Public Utility Easement and Private Access, Public Waterline, and Public Sewerline easement and dedication of additional Right-of-way to the City of Albuquerque in fee simple with warranty covenants is with the free consent and in accordance with the desires of the undersigned owners.

William F. Riordan

SUBDIVISION DATA

1. DRB Proj. No.
2. Zone Atlas Index No. G-12 AND G-13
3. Current Zoning R-A-2
4. Gross acreage 2.4401
5. Total Number of Lots created - 8 -
6. This plot has been prepared for the private sale of lots and granting a Private Access, Private Sewerline, and Public Utility Easement

LOG NO. 2002161821

NOTES

1. Bearings shown on this plan are New Mexico State Plane Grid Bearings. Central Zone, NMD 1927.
2. Perimeter distances are field measurements were made on the ground (ported between corners) and the bearings were taken from the center of the corner. The distance shown on the warranty deed for said parcel, filed October 30, 1981 in Book D617, page 65, are shown in parentheses ().
3. Monuments recovered and accepted or set are noted on inscribed plat.
4. This plat shows all easements of record.
5. Additional Public right-of-way has been dedicated to the City of Albuquerque in fee simple with warranty covenants by this plat.
6. Six-foot-wide road (28') Private Access, Public Waterline, and Public Utility Easement is granted by this plat. Maintenance of the private access easement shall be the responsibility of the owners of Lots 1 through 6.
7. Five foot (5') public Utility Easement is granted by this plat. Easement includes existing overhead utility lines.
8. Ten foot by ten foot (10'X10') Water Meter easement granted by this plat.

NOTES

On this 9 day of DECEMBER, 2002, the foregoing instrument was acknowledged before me by Melba C. Napoleone and Patrick H. Napoleone.

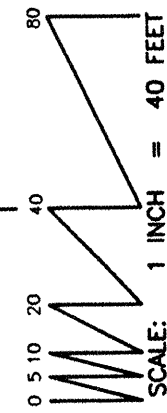
FOR BERNALILLO COUNTY TREASURER'S OFFICE USE ONLY

LILLO COUNTY TREASURER'S OFFICE
Theresa Kavanagh
 4/9/03

LEGEND:

- FOUND #4 REBAR AND
CAP "LS 11463"
- FOUND #5 REBAR -
NO CAP
- SET #4 REBAR AND
CAP "WAYJOHN PS 14269"

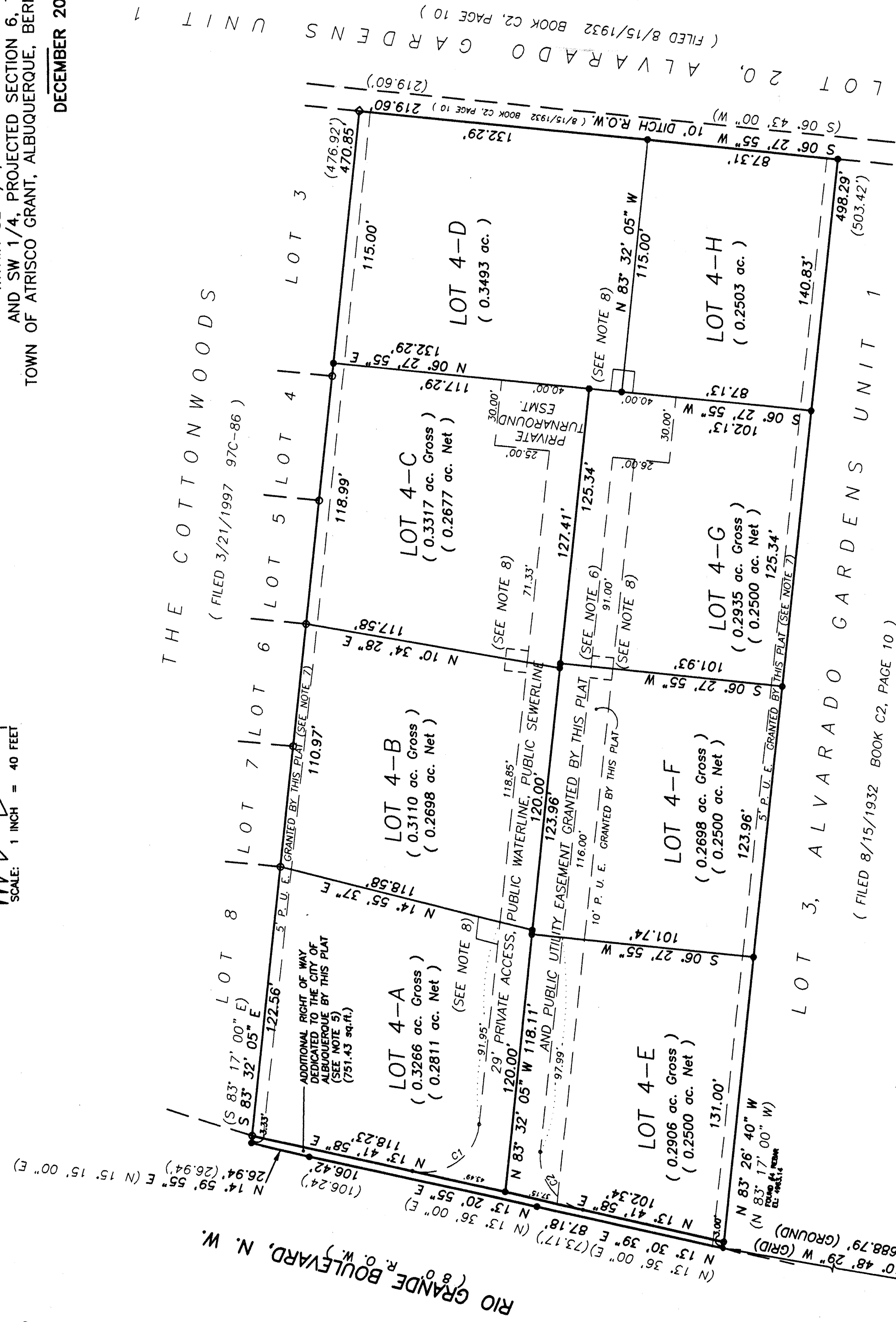
ALL FOUND AND ACCEPTED
MONUMENTS TAGGED WITH
WASHER "PS 14269".



PLAT OF
LOTS 4-A THROUGH 4-H
ALVARADO GARDENS, UNIT 1
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

WITHIN SE 1/4, PROJECTED SECTION 1, T. 10N., R. 2E.
 AND SW 1/4, PROJECTED SECTION 6, T. 10N., R. 3E, N.M.P.M.
 TOWN OF ATRISCO GRANT ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

DECEMBER 2002



CURVE INFORMATION:			
CURVE NO.	RADIUS	LENGTH	CENTRAL ANGLE
C1	25.00'	43.04'	98° 37' 56"
C2	25.00'	36.11'	82° 45' 57"
			CHORD
			S 34° 13' 07" E, 37.91'
			S 55° 04' 57" W, 33.05'

ACS CONTROL MONUMENT
"3-G12"
X=372.889.43
Y=1,498.606.10
G-G 0.9996812
ΔC -00'14.40"
ELEV 4963.29 NGVD 1929
NEW MEXICO STATE PLANE
CENTRAL ZONE (NAD 1923)

**WAYJOHN
SURVEYING, INC.**

**330 LOUISIANA BLVD., N.E.
ALBUQUERQUE, N.M. 87108
PHONE: 255-2052 FAX: 255-2887**

INDEXING INFORMATION FOR COUNTY	DRAWN: E W K		SCALE: 1" = 40'	FILE NO. SP-5-02-2002
CLIENT OWNER: RORDAN/ANPOLEONE	CHECKED: T D J			
LOCATION: 8000 N. 10TH AVE., TOWN PZL, SEC 8, T10N 10N, R10W 2E, SUSSEX CO., ILL. 62558	DRAWING NO. SP50202.DWG		17 APRIL 2002	SHEET 2 OF 2



Mary Herrera Bern. Co. PLAT R 12-88 BX-2993C Pg-95
84/09/2993 84-68P
5841335
Page: 2 of 2
L50000000

70 38 81

Drainage Data, Flat Grading and Drainage (45% Max. "D" Trmt.)

THIS SITE LIES WITHIN PRECIPITATION ZONE 2

Condition	Return Table 4 (Years)	Treatment Type	Area (sq. ft.)	Precip. (in.)	Runoff Table A-9 (cfs/ac)	Volume (cu. ft.)	Rate (cfs)
DEVELOPED LOT 4-A	100	A	0	0.53	1.56	0.0	0.00
		B	7,825	0.78	2.28	508.8	0.41
		C	0	1.13	3.14	0.0	0.00
		D	6,402	2.12	4.70	1,131.0	0.89
DEVELOPED LOT 4-B	100	A	0	0.53	1.56	0.0	0.00
		B	7,451	0.78	2.28	464.3	0.38
		C	0	1.13	3.14	0.0	0.00
		D	6,096	2.12	4.70	1,077.0	0.85
DEVELOPED LOT 4-C	100	A	0	0.53	1.56	0.0	0.00
		B	7,946	0.78	2.28	516.5	0.42
		C	0	1.13	3.14	0.0	0.00
		D	6,502	2.12	4.70	1,146.7	0.70
DEVELOPED LOT 4-D	100	A	0	0.53	1.56	0.0	0.00
		B	8,368	0.78	2.28	543.9	0.44
		C	0	1.13	3.14	0.0	0.00
		D	6,847	2.12	4.70	1,209.6	0.74
DEVELOPED LOT 4-E	100	A	0	0.53	1.56	0.0	0.00
		B	7,506	0.78	2.28	487.9	0.39
		C	0	1.13	3.14	0.0	0.00
		D	6,141	2.12	4.70	1,084.9	0.88
DEVELOPED LOT 4-F	100	A	0	0.53	1.56	0.0	0.00
		B	5,990	0.78	2.28	389.4	0.31
		C	0	1.13	3.14	0.0	0.00
		D	4,900	2.12	4.70	865.7	0.53
DEVELOPED LOT 4-G	100	A	0	0.53	1.56	0.0	0.00
		B	5,990	0.78	2.28	389.4	0.31
		C	0	1.13	3.14	0.0	0.00
		D	4,900	2.12	4.70	865.7	0.53
DEVELOPED LOT 4-H	100	A	0	0.53	1.56	0.0	0.00
		B	5,516	0.78	2.28	358.5	0.28
		C	0	1.13	3.14	0.0	0.00
		D	4,513	2.12	4.70	797.3	0.49

V(10day) = v360 + Ad(P10day - P360)/12

P10day = 3.95
P360 = 2.35

LOT 4-A POND VOLUME	2493 CU. FT.
LOT 4-B POND VOLUME	2374 CU. FT.
LOT 4-C POND VOLUME	2532 CU. FT.
LOT 4-D POND VOLUME	2696 CU. FT.
LOT 4-E POND VOLUME	2392 CU. FT.
LOT 4-F POND VOLUME	1908 CU. FT.
LOT 4-G POND VOLUME	1908 CU. FT.
LOT 4-H POND VOLUME	1758 CU. FT.

2493 CU. FT.
2374 CU. FT.
2532 CU. FT.
2696 CU. FT.
2392 CU. FT.
1908 CU. FT.
1908 CU. FT.
1758 CU. FT.

Drainage Certificate

I, David Gatterman, NMPE 14920, of the firm of TGC ENGINEERING INC. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 2/21/2003. The record information edited onto the original design document has been obtained by Thomas D. Johnston, NMPS 14269, of the firm of WAYJOHN SURVEYING INC. I further certify that I have personally visited the project site on 5/13/2003 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Subdivision Improvements Agreement Financial Guarantee Release.

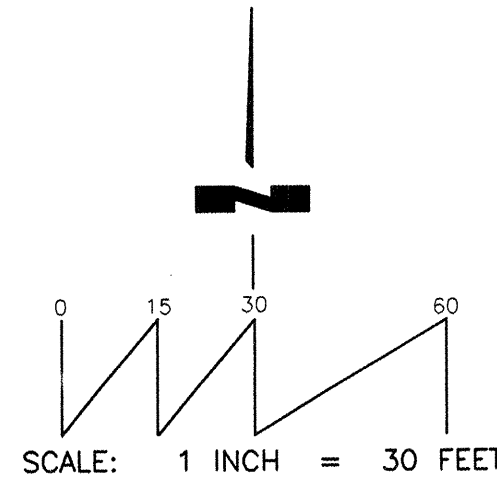
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.



Legend

- N - NORTH
- S - SOUTH
- E - EAST
- W - WEST
- TYP. - TYPICAL
- DIA. - DIAMETER
- P.L. - PROPERTY LINE
- NO. - NUMBER
- C.L. - CENTERLINE
- NG - NATURAL GROUND
- TA - TOP OF ASPHALT
- FL - FLOW LINE
- TC - TOP OF CURB
- TSW - TOP OF SIDEWALK
- PP - POWER POLE
- ANCHOR - ANCHOR
- TREE - TREE
- SET - SET #4 REBAR AND CAP "WAYJOHN PS 14269"
- PUBLIC UTILITY EASEMENT
- ROAD CENTERLINE
- LOT LINE
- GRAVELED ROAD SURFACE
- SPOT ELEVATION
- WATER SURFACE ELEVATION
- MASONRY WALL

VICINITY MAP (G-12/13) (NOT TO SCALE)



Drainage Notes

- PROPOSED BUILDING ENVELOPES ARE BASED ON A MAXIMUM OF 45% BUILDABLE AREA USING THE CRITERIA FOR FLAT GRADING SCHEME.
- ALL ELEVATIONS GIVEN ON THIS PLAN ARE TO FINISHED GRADE.
- LOT LINE FENCING SHALL ALLOW FOR LOT DRAINAGE TO RETENTION PONDS (E.G. NO SOLID WALLS W/O WEEP HOLES).
- CALCULATION OF MAX. BLDG. PAD SIZE BASED ON LOT SIZE, MINUS ROAD AREA ADJACENT TO LOT MINUS DRIVE PAD AREA (ASSUMED 20'X20').
- LOCATIONS AND ELEVATIONS OF BLDG. PADS ARE FOR ILLUSTRATION ONLY. LOCATION MAY VARY BUT FINISHED FLOOR AND MAX. SIZE MAY NOT VARY.
- LOCATIONS FOR BUILDINGS MUST CONFORM TO CITY SETBACK REQUIREMENTS.
- MAX. ALLOWABLE BUILDING PAD SIZES INCLUDE ALL IMPERVIOUS SURFACES, INCLUDING SIDEWALKS, SWIMMING POOLS, CONCRETE DECKS, ETC.
- BUILDINGS ON LOTS 4-F, 4-G & 4-H ARE TO REMAIN.

Water Surface Elevation Notes

- WATER SURFACE ELEVATION SHALL BE 62.45 FT. FOR LOTS 4-A AND 4-E.
- WATER SURFACE ELEVATION SHALL BE 62.45 FT. FOR LOTS 4-B AND 4-F.
- WATER SURFACE ELEVATION SHALL BE 62.45 FT. FOR LOTS 4-C AND 4-G.
- WATER SURFACE ELEVATION SHALL BE 62.40 FT. FOR LOTS 4-D AND 4-H.
- FROM WATER SURFACE ELEVATION, SLOPE AWAY FROM BLDG. PAD AT 3:1 TO BOTTOM SPOT ELEVATIONS GIVEN WITHIN POND AREA.
- FROM WATER SURFACE ELEVATION, SLOPE UP TO BLDG. PAD.

Pond Bottom Notes

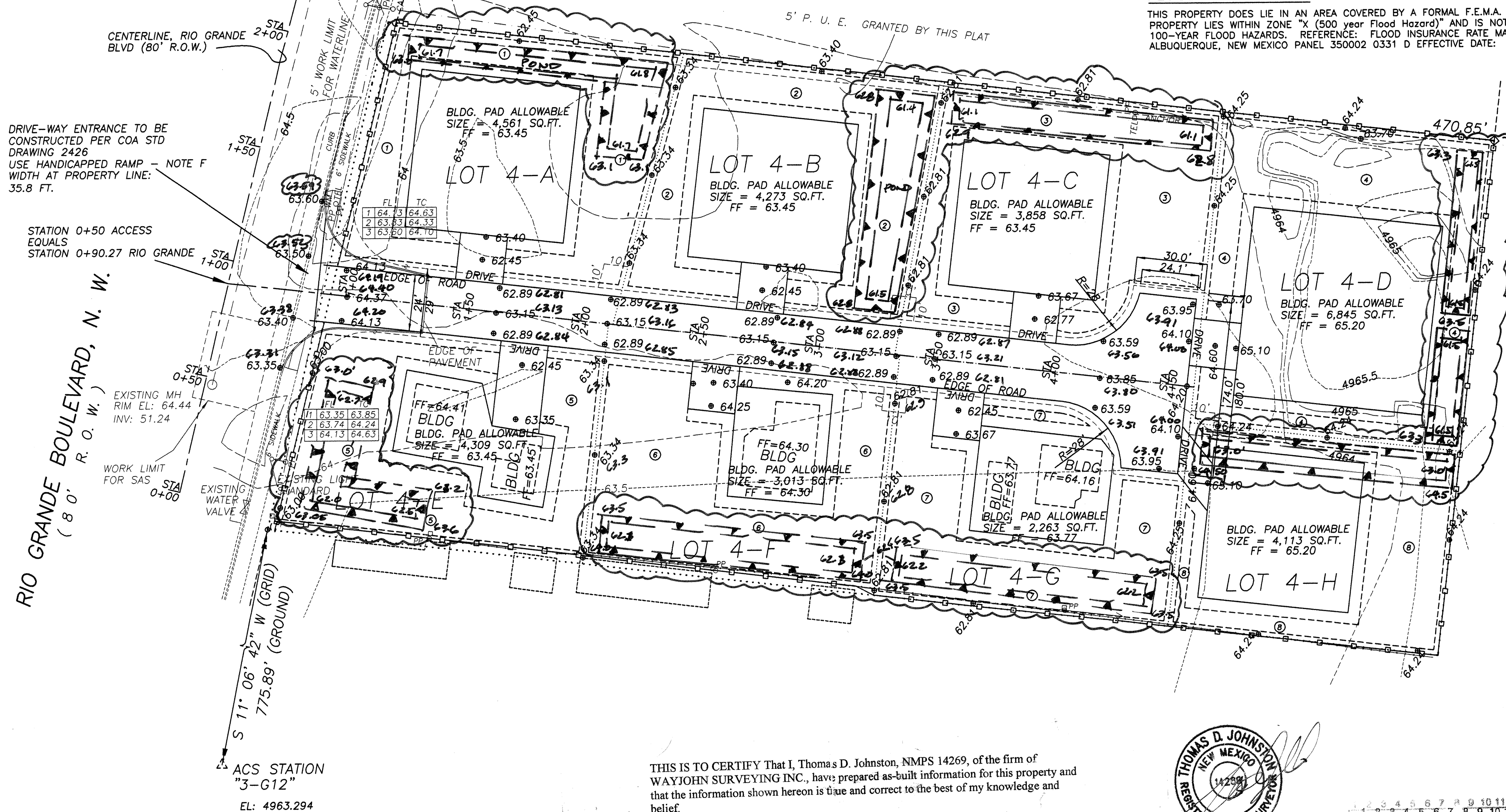
- POND BOTTOM ELEV. LOT 4-A = 61.95
- POND BOTTOM ELEV. LOT 4-B = 61.95
- POND BOTTOM ELEV. LOT 4-C = 62.03
- POND BOTTOM ELEV. LOT 4-D = 63.70
- POND BOTTOM ELEV. LOT 4-E = 62.00
- POND BOTTOM ELEV. LOT 4-F = 62.10
- POND BOTTOM ELEV. LOT 4-G = 62.03
- POND BOTTOM ELEV. LOT 4-H = 63.68

Ponding Volume Notes

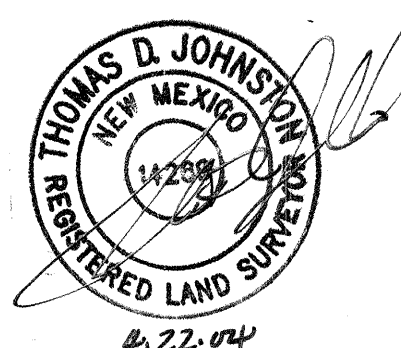
- POND VOLUME, LOT 4-A: 2,686 CF
- POND VOLUME, LOT 4-B: 2,567 CF
- POND VOLUME, LOT 4-C: 2,558 CF
- POND VOLUME, LOT 4-D: 2,943 CF
- POND VOLUME, LOT 4-E: 2,776 CF
- POND VOLUME, LOT 4-F: 2,413 CF
- POND VOLUME, LOT 4-G: 2,210 CF
- POND VOLUME, LOT 4-H: 1,883 CF

Flood Information:

THIS PROPERTY DOES LIE IN AN AREA COVERED BY A FORMAL F.E.M.A. FLOOD STUDY. PROPERTY LIES WITHIN ZONE "X (500 year Flood Hazard)" AND IS NOT SUBJECT TO 100-YEAR FLOOD HAZARDS. REFERENCE: FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO PANEL 350002 0331 D EFFECTIVE DATE: 9/20/1996



THIS IS TO CERTIFY That I, Thomas D. Johnston, NMPS 14269, of the firm of WAYJOHN SURVEYING INC., have prepared as-built information for this property and that the information shown hereon is true and correct to the best of my knowledge and belief.



TGC ENGINEERING, INC.
330 LOUISIANA BLVD. NE
266-7256 FAX 255-2887

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: LOTS 4-A THROUGH 4-H, ALVARADO GARDENS UNIT 1
GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
For Information Only		3/24/03	
City Project No. 7038.81	Zone Map G-12	Sheet 3	Of 10

DESIGNED BY: DAVID GATTERMAN, P.E.	DATE: 03-01-03
DRAWN BY: DG	DATE: 03-01-03
CHECKED BY: DG	DATE: 03-01-03

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Dave Gatterman of the firm of TGC Engineering Inc., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specification approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Wayjohn Surveying, Inc. (Thomas D. Johnston) NMPS number 14269.



LEGEND:

N - NORTH
S - SOUTH
E - EAST
W - WEST
TYP. - TYPICAL
DIA. - DIAMETER
P.L. - PROPERTY LINE
NO. - NUMBER
C.L. - CENTERLINE
NG - NATURAL GROUND
TA - TOP OF ASPHALT
FL - FLOW LINE
TC - TOP OF CURB
TSW - TOP OF SIDEWALK
FENCE LINE

PP - POWER POLE
ANCHOR - ANCHOR
TREE - TREE

SET - SET #4 REBAR AND CAP "WAYJOHN PS 14269"

PUBLIC UTILITY EASEMENT

ROAD CENTERLINE

LOT LINE

GRAVELED ROAD SURFACE

WATER METER (PROPOSED)

FIRE HYDRANT (PROPOSED)

GATE VALVE (PROPOSED)

WATER LINE (EXISTING)

WATER LINE (PROPOSED)

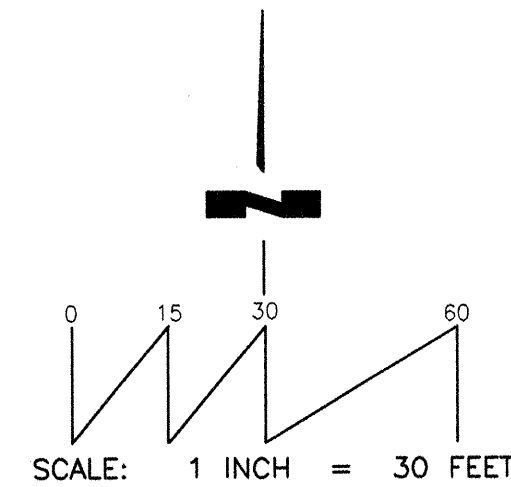
SEWER MAIN (PROPOSED)

SEWER (EXISTING)

SAS MANHOLE (PROPOSED)

REDUCER (PROPOSED)

GATE VALVE (EXISTING)

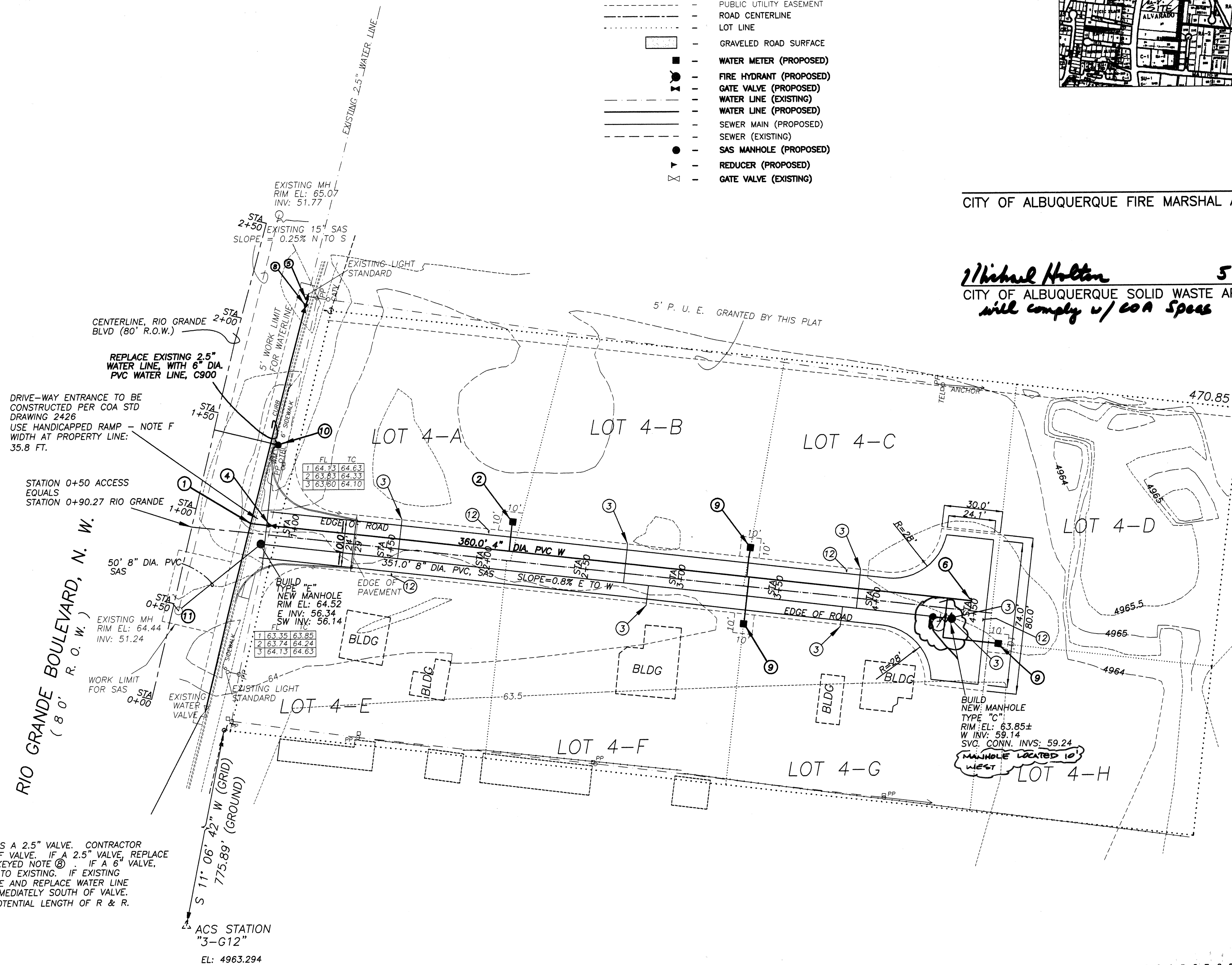


VICINITY MAP (G-12/13)
(NOT TO SCALE)



CITY OF ALBUQUERQUE FIRE MARSHAL APPROVAL

Michael Holton 5-15-03
CITY OF ALBUQUERQUE SOLID WASTE APPROVAL
will comply w/ COA specs



VALVE #1091:
CITY INDICATES THIS IS A 2.5" VALVE. CONTRACTOR SHALL VERIFY SIZE OF VALVE. IF A 2.5" VALVE, REPLACE WITH 6" VALVE PER KEYED NOTE @. IF A 6" VALVE, TIE NEW WATER LINE TO EXISTING. IF EXISTING VALVE IS 2.5" REMOVE AND REPLACE WATER LINE TO SOUTH TO TEE IMMEDIATELY SOUTH OF VALVE. SEE SHEET 7 FOR POTENTIAL LENGTH OF R & R.

SHEET NOTES

- EASEMENT LANGUAGE NOT SHOWN FOR CLARITY. REFER TO SHEET 2

SEWER SYSTEM NOTES:

- ALL SEWER MAIN SHALL BE PVC SCHEDULE 80
- ALL PIPE JOINTS SHALL BE BELL AND SPIGOT
- LOT 4-E CURRENTLY MAINTAINS AN EXISTING SEWER CONNECTION
- ALL LINE SAS SERVICE CONNECTIONS PER COA STD. DWG. 2125

WATER SYSTEM NOTES:

- WATER LINES SHALL COMPLY WITH AWWA C900 SPECIFICATIONS
- TEES AND END CAP SHALL BE RESTRAINED
- AS-BUILT DRAWINGS FROM C.O.A. DO NOT SHOW LOCATION OF EXISTING 2.5" WATER MAIN. LOCATION IDENTIFIED HAS BEEN PROJECTED FROM EXISTING WATER VALVE.
- TRENCHING FOR WATER LINES SHALL COMPLY WITH DETAIL ON SHEET 7
- VALVES SHALL HAVE FLANGED CONNECTIONS TO WATER LINE
- LOT 4-E CURRENTLY MAINTAINS EXISTING CITY WATER CONNECTION
- ALL METERS SHALL HAVE HEAVY WEIGHT BOX COVER & LID PER COA STD. DWG. 2369

CURB & GUTTER/SIDEWALK NOTES:

- ALL CURB & GUTTER WORK SHALL COMPLY WITH COA STD. DWG. 2415
- ALL SIDEWALK WORK SHALL COMPLY WITH COA STD. DWG. 2430

PAVING NOTES

- PAVEMENT RESTORATION WITHIN RIO GRANDE SHALL COMPLY WITH COA STD. DWG. 2465, ARTERIAL
- PAVED ENTRANCE PAVING SHALL COMPLY WITH COA STD. DWG. 2405, FLEXIBLE PAVEMENT SECTION
- NO DIAGONAL PAVEMENT CUTS ARE ALLOWED IN RIO GRANDE. ALL PAVEMENT CUTS SHALL BE SQUARE TO RIO GRANDE CENTERLINE

SOLID WASTE NOTE

- HAVE EXISTING RESIDENCE REFUSE SERVICE - FUTURE LOTS WILL UTILIZE EXISTING AUTOMATED SERVICE AND WILL HAVE STORAGE FOR SOLID WASTE CARTS. CARTS WILL BE PLACED ON RIO GRANDE FOR COLLECTION.

KEYED NOTES:

- 1 - 6"x6"x4" TEE, Lr=5' & Lb=10'
- 2 - SINGLE SERVICE CONNECTION, PER DETAILS ON SHEETS 7 & 8 & COA STD. DWG. 2360
- 3 - SAS SERVICE CONNECTION, MARK STUB-OUT WITH ELECTRONIC MARKING DISK
- 4 - 4" GATE VALVE, DETAIL SHEET 8
- 5 - TRANSITION FROM NEW 6" VALVE TO EXISTING 2.5" PIPE WITH 6" X 2.5" REDUCER, FLANGED, Lr=35'
- 6 - FLANGED END CAP. MIN. RESTRAINED JOINT LENGTH = 38 FT.
- 7 - MANHOLE SVC. CONN. TYPICAL PER COA STANDARD DRAWING 2118
- 8 - 6" GATE VALVE, DETAIL SHEET 8 & COA STD DWG 2333
- 9 - DOUBLE SERVICE CONNECTION PER DETAIL SHEETS 7 & 8 & COA STD. DWG. 2360
- 10 - FIRE HYDRANT PER COA STD. DWG. 2340, FULLY RESTRAINED JOINTS, FLANGE ELEV. = 64.80
- 11 - CONSTRUCT VERTICAL DROP AT MANHOLE, PER COA STD. DWG. 2116
- 12 - 12" X 8" R7-100 NO PARKING ANYTIME SIGN

St. Andrew & Crave
5/16/03

TGC ENGINEERING, INC.
330 LOUISIANA BLVD. NE
266-7256 FAX 255-2887

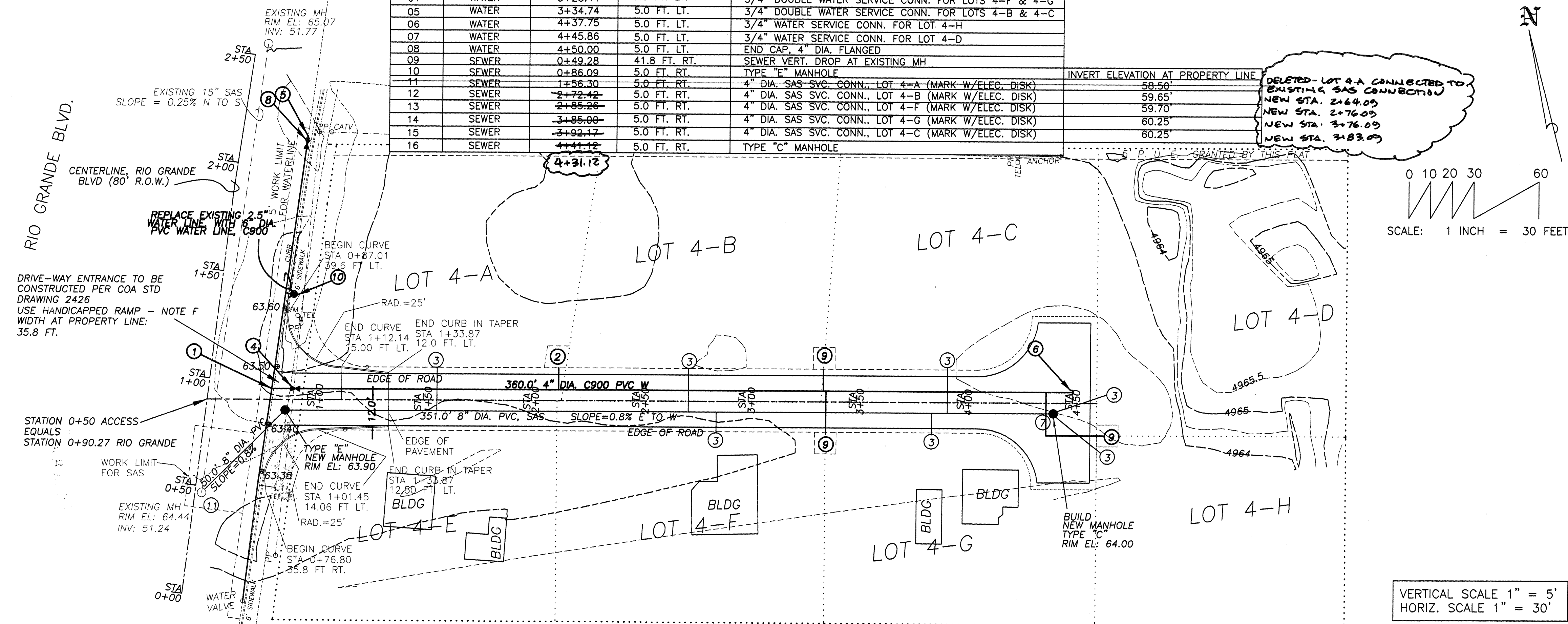
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: LOTS 4-A THROUGH 4-H, ALVARADO GARDENS UNIT 1
WATER AND SEWER LOCATION

Design/Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
3/24/03		3/24/03	
Last Design Update			

City Project No. 7038.81 Zone Map G-12 Sheet 4 of 10

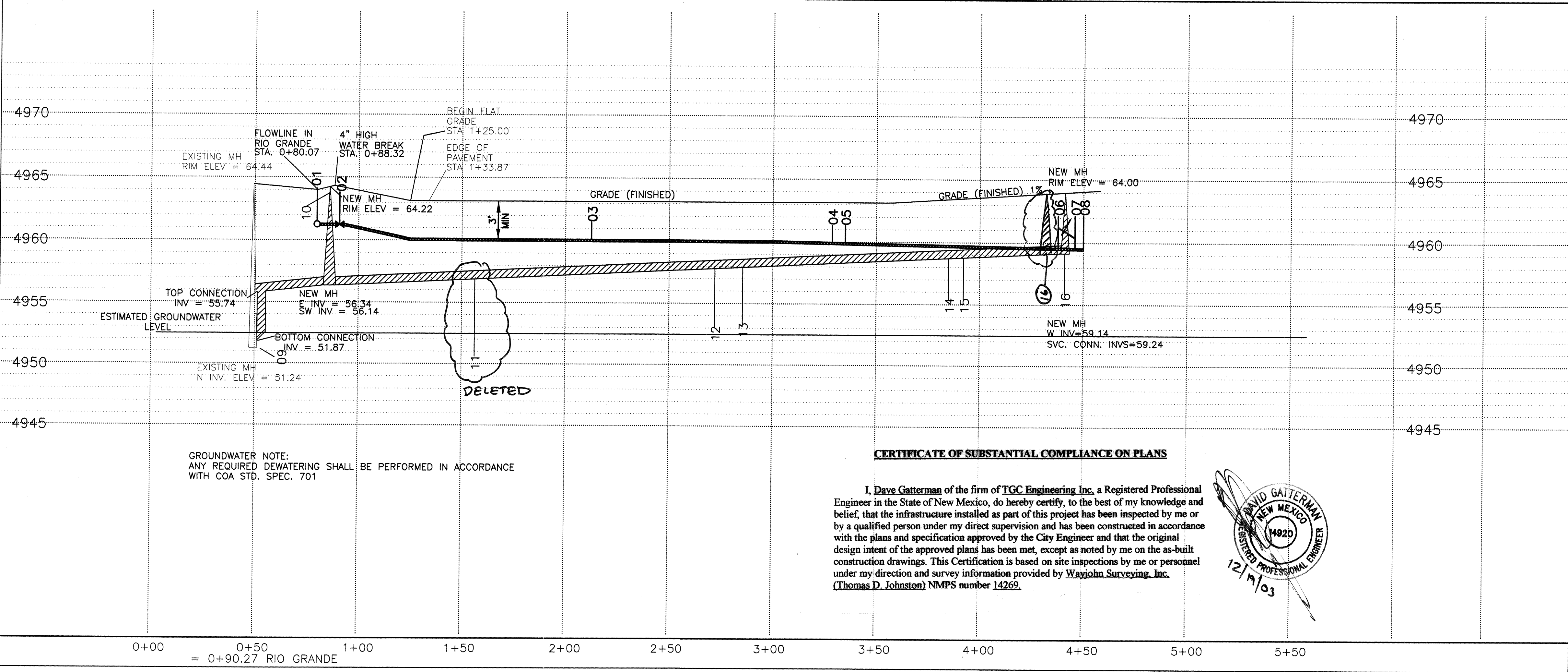
ITEM NO.	WATER/SEWER?	STATION	OFFSET (L/R & DIST)	DESCRIPTION
01	WATER	0+79.83	5.0 FT. LT.	6"X6"X4" TEE, CONNECTION TO NEW UPGRADED 6" MAIN
02	WATER	0+90.70	5.0 FT. LT.	4" DIA. GATE VALVE
03	WATER	2+12.47	5.0 FT. LT.	3/4" SINGLE WATER SERVICE CONN. FOR LOT 4-A
04	WATER	3+28.44	5.0 FT. LT.	3/4" DOUBLE WATER SERVICE CONN. FOR LOTS 4-F & 4-G
05	WATER	3+34.74	5.0 FT. LT.	3/4" DOUBLE WATER SERVICE CONN. FOR LOTS 4-B & 4-C
06	WATER	4+37.75	5.0 FT. LT.	3/4" WATER SERVICE CONN. FOR LOT 4-H
07	WATER	4+45.86	5.0 FT. LT.	3/4" WATER SERVICE CONN. FOR LOT 4-D
08	WATER	4+50.00	5.0 FT. LT.	END CAP, 4" DIA. FLANGED
09	SEWER	0+49.28	41.8 FT. RT.	SEWER VERT. DROP AT EXISTING MH
10	SEWER	0+86.09	5.0 FT. RT.	TYPE "E" MANHOLE
11	SEWER	1+56.30	5.0 FT. RT.	4" DIA. SAS SVC. CONN., LOT 4-A (MARK W/ELEC. DISK)
12	SEWER	2+72.42	5.0 FT. RT.	4" DIA. SAS SVC. CONN., LOT 4-B (MARK W/ELEC. DISK)
13	SEWER	2+85.26	5.0 FT. RT.	4" DIA. SAS SVC. CONN., LOT 4-F (MARK W/ELEC. DISK)
14	SEWER	3+85.00	5.0 FT. RT.	4" DIA. SAS SVC. CONN., LOT 4-G (MARK W/ELEC. DISK)
15	SEWER	3+92.17	5.0 FT. RT.	4" DIA. SAS SVC. CONN., LOT 4-C (MARK W/ELEC. DISK)
16	SEWER	4+41.12	5.0 FT. RT.	TYPE "C" MANHOLE



- SHEET NOTES**
- EASEMENT LANGUAGE NOT SHOWN FOR CLARITY. REFER TO SHEET 2
- SEWER SYSTEM NOTES:**
- ALL SEWER MAIN SHALL BE PVC SCHEDULE 80
 - ALL PIPE JOINTS SHALL BE BELL AND SPIGOT
 - LOT 4-E CURRENTLY MAINTAINS AN EXISTING SEWER CONNECTION
 - ALL LINE SAS SERVICE CONNECTIONS PER COA STD. DWG. 2125
- WATER SYSTEM NOTES:**
- WATER LINES SHALL COMPLY WITH AWWA C900
 - TEES AND END CAP SHALL BE RESTRAINED
 - AS-BUILT DRAWINGS FROM C.O.A. DO NOT SHOW LOCATION OF EXISTING 2.5" WATER MAIN. LOCATION IDENTIFIED HAS BEEN PROJECTED FROM EXISTING WATER VALVE.
 - TRENCHING FOR WATER LINES SHALL COMPLY WITH DETAIL ON SHEET 7
 - VALVES SHALL HAVE FLANGED CONNECTIONS TO WATER LINE
 - LOT 4-E CURRENTLY MAINTAINS EXISTING CITY WATER CONNECTION

- CURB & GUTTER/SIDEWALK NOTES:**
- ALL CURB & GUTTER WORK SHALL COMPLY WITH COA STD. DWG. 2415
 - ALL SIDEWALK WORK SHALL COMPLY WITH COA STD. DWG. 2430
- PAVING NOTES**
- PAVEMENT RESTORATION WITHIN RIO GRANDE SHALL COMPLY WITH COA STD. DWG. 2465, ARTERIAL
 - PAVED ENTRANCE PAVING SHALL COMPLY WITH COA STD. DWG. 2405, FLEXIBLE PAVEMENT SECTION
 - NO DIAGONAL PAVEMENT CUTS ARE ALLOWED IN RIO GRANDE. ALL PAVEMENT CUTS SHALL BE SQUARE TO RIO GRANDE CENTERLINE

- KEYED NOTES:**
- 6"X6"X4" TEE, Lr=5' & Lb=10'
 - SINGLE SERVICE CONNECTION, PER DETAILS ON SHEETS 7 & 8 & COA STD. DWG. 2360
 - SAS SERVICE CONNECTION, MARK STUB-OUT WITH ELECTRONIC MARKING DISK
 - 4" GATE VALVE, DETAIL SHEET 8
 - TRANSITION FROM NEW 6" VALVE TO EXISTING 2.5" PIPE WITH 6" X 2.5" REDUCER, FLANGED, Lr=35'
 - FLANGED END CAP. MIN. RESTRAINED JOINT LENGTH = 38"
 - MANHOLE SVC. CONN. TYPICAL PER COA STANDARD DRAWING 2118
 - 6" GATE VALVE, DETAIL SHEET 8& COA STD DWG 2333
 - DOUBLE SERVICE CONNECTION PER DETAIL SHEETS 7 & 8 & COA STD. DWG. 2360
 - FIRE HYDRANT PER COA STD. DWG. 2340, FULLY RESTRAINED JOINTS, FLANGE ELEV.= 64.80
 - CONSTRUCT VERTICAL DROP AT MANHOLE, PER COA STD. DWG. 2116



26 7038.81 0604

TGC ENGINEERING, INC.
330 LOUISIANA BLVD. NE
266-7256 FAX 255-2887

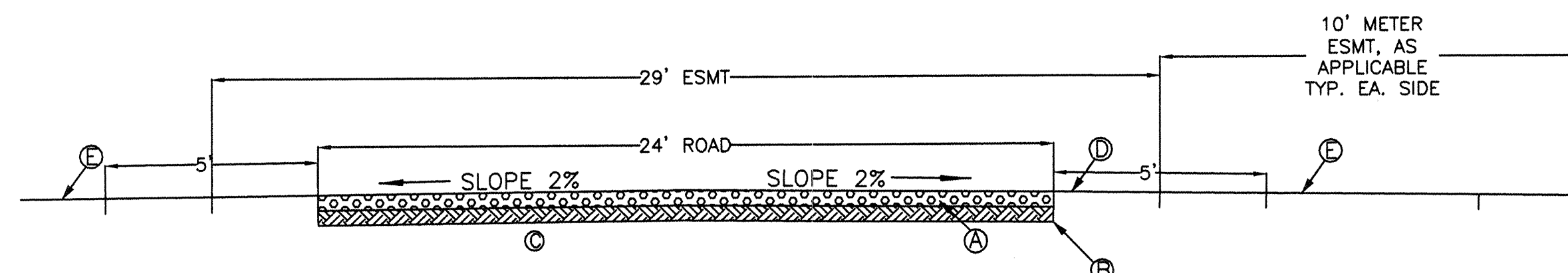
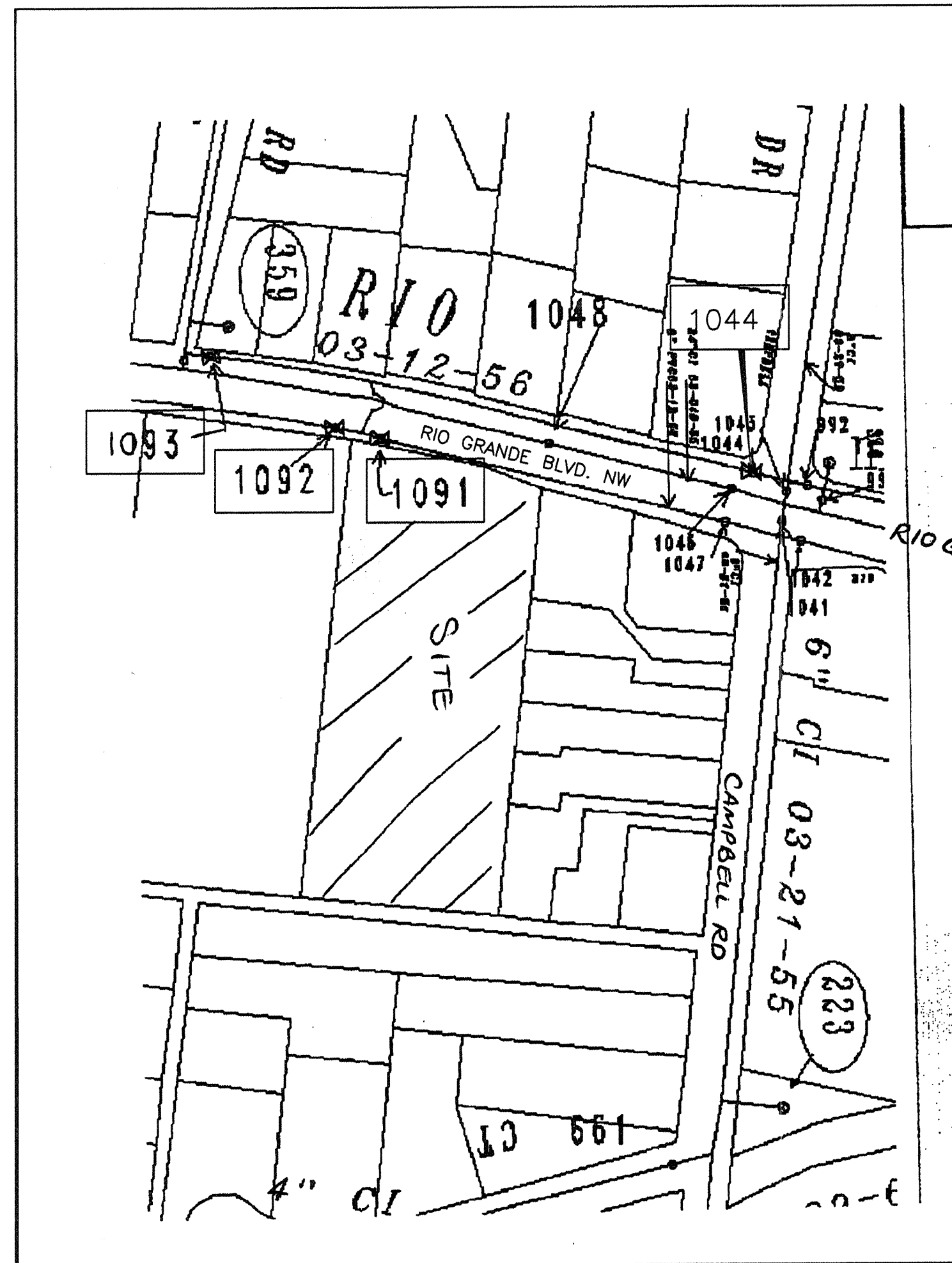
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: LOTS 4-A THROUGH 4-H, ALVARADO GARDENS UNIT 1
PLAN AND PROFILE (ACCESS ROAD)

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED	3/24/03	
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map	Sheet	of
7038.81	G-12	6	10

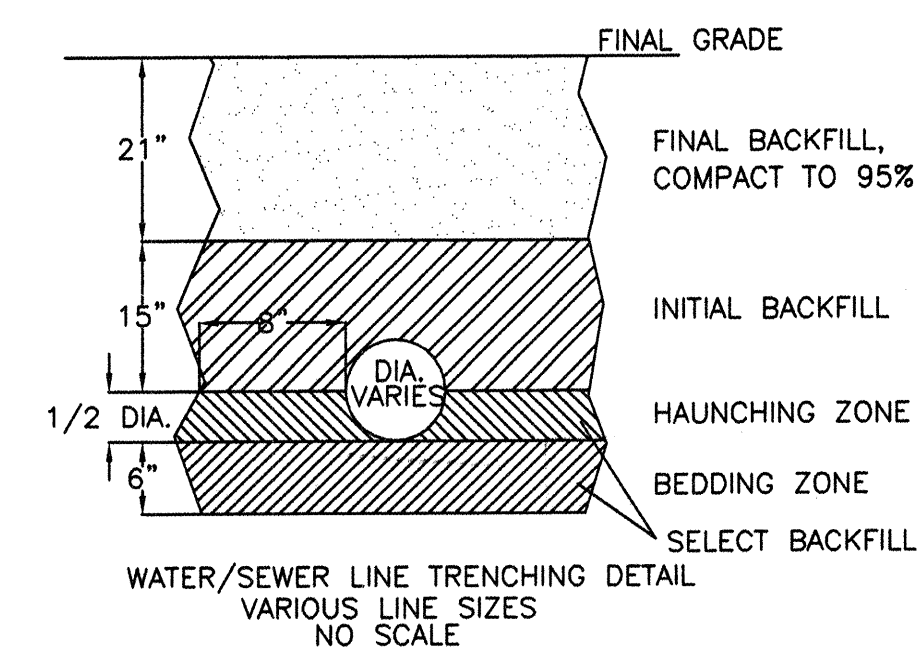
GENERAL NOTES

-
- HYV. WEIGHT METER BOX COVER AND LID, COA STD. DWG. 2369
- CONCRETE PAD PER COA STD. DWG. 2362 (DRAFT), SHEET 7
- 12" TYP.
- 1"
- 2'-0" ±
- 3"
- 3,000 PSI CONCRETE, 28-DAY CURE
- #4 RE-BAR 8" O.C. EA. WAY, 3" MIN. COVER
- 4" PVC SLEEVE FOR PIG TAIL, BOTH SIDES THROUGH CONCRETE
- 3"
- SET SLEEVE FLUSH TO CONCRETE, BOTH SIDES
- GRADE COMPACT ASTM D1557 CONCRETE
- WATER METER BOX REINFORCEMENT DETAIL PROFILE



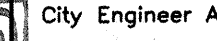
KEYED NOTES, ROAD:

- Ⓐ GRAVEL ROAD, 6" DEEP
- Ⓑ COMPACT SUBGRADE TO 95% MODIFIED PROCTOR, 12" DEPTH, Rvalue>50
- Ⓒ SUBGRADE SHALL BE COMPACTED TO 90% MOD. PROCTOR
- Ⓓ MATCH GRADE TO TOP OF GRAVEL SURFACE
- Ⓔ WATER METER LOCATION, TYPICAL

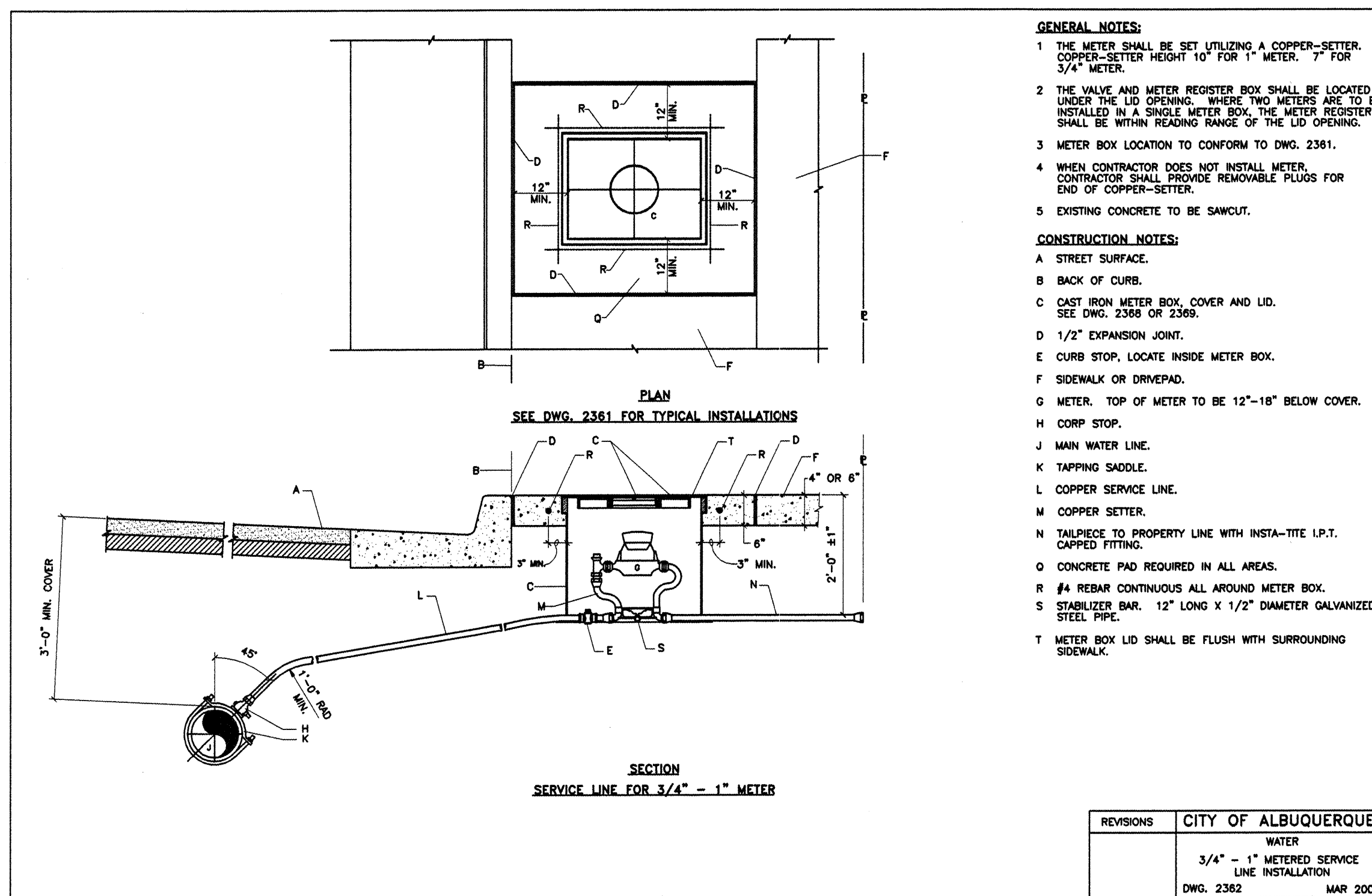


TCC ENGINEERING, INC.
330 LOUISIANA BLVD. NE
266-7256 FAX 255-2887

TITLE: LOTS 4-A THROUGH 4-H, ALVARADO GARDENS UNIT 1
WATER DETAILS, WATER SHUT-OFF PLAN & ROAD DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
			3/24/03	

City Project No.	7038.81	Zone Map	G-12	Sheet	7	Of	10
------------------	---------	----------	------	-------	---	----	----

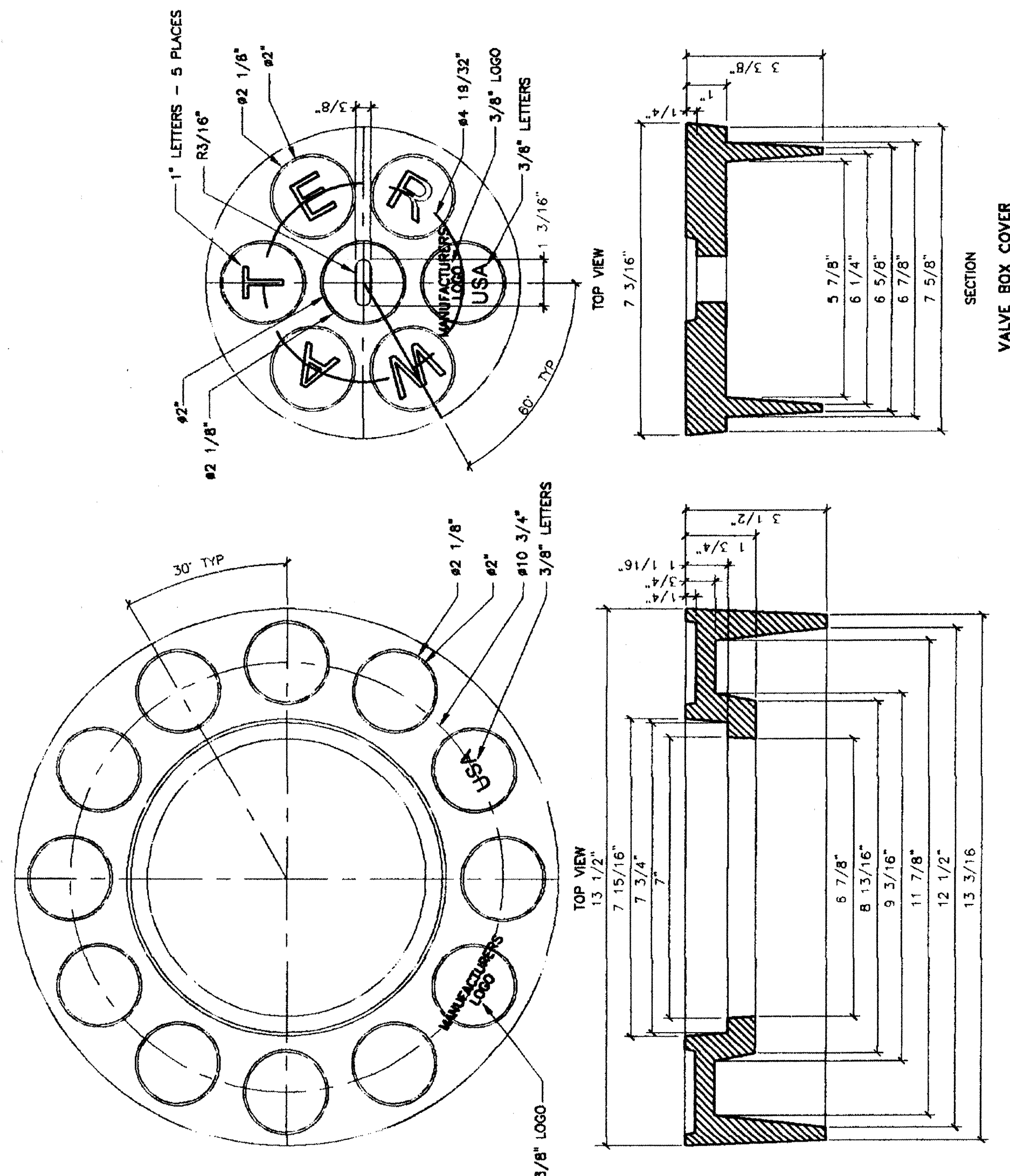


GENERAL NOTES — RING

1. ALBUQUERQUE VALVE BOX COVER. RING DESIGNED TO ACCEPT AN ALBUQUERQUE VALVE BOX COVER.
2. THE CASTING NUMBER, MANUFACTURER'S LOGO, DATE OF CASTING AND CONSPICUOUS LOCATION SHALL BE CAST IN A CONSPICUOUS LOCATION ON BOTH THE RING AND THE COVER.
3. FILLETS SHALL BE 1/4" UNLESS OTHERWISE SPECIFIED.
4. A DRAFT ANGLE OF 3-5° SHALL BE APPLIED UNLESS OTHERWISE SPECIFIED.
5. FINISH: REMOVE EXCESS IRON AND FINS.
6. THIS DETAIL DOES NOT APPLY FOR VALVE BOX RING USED IN THE ALBUQUERQUE VALVE BOX COVER WATER SYSTEMS.

GENERAL NOTES — COVER

1. ALBUQUERQUE VALVE BOX COVER DESIGNED TO FIT INTO AN ALBUQUERQUE VALVE BOX RING.
2. THE CASTING NUMBER, MANUFACTURER'S LOGO, DATE OF CASTING AND CONSPICUOUS LOCATION SHALL BE CAST IN A CONSPICUOUS LOCATION ON BOTH THE RING AND THE COVER.
3. FILLETS SHALL BE 1/4" UNLESS OTHERWISE SPECIFIED.
4. A DRAFT ANGLE OF 3-5° SHALL BE APPLIED UNLESS OTHERWISE SPECIFIED.
5. FINISH: REMOVE EXCESS IRON AND FINS.



COA STANDARD DETIAL 2328

VALVE BOX COVER

TCC ENGINEERING, INC.
330 LOUISIANA BLVD. NE
266-7256 FAX 255-2887

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: LOTS 4-A THROUGH 4-H, ALVARADO GARDENS UNIT 1
WATER DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
COA STD DRAFT	COA STD DRAFT		3/24/03	

City Project No.	7038.81	Zone Map	G-12	Sheet	8	Of	10
------------------	---------	----------	------	-------	---	----	----

COA STD (DRAFT)		REVISIONS		DESIGN		BENCH MARK		AS-BUILT INFORMATION	
						SURVEY INFORMATION		CONTRACTOR	
NO.	DATE	REMARKS	BY	FIELD NOTES		DATE		INSPECTOR'S DATE	
				BY		DATE		FIELD DATE	
NO.	DATE	REMARKS	BY	ELEV. 4963.294 (NGVD 29)		ELEV. 4963.294 (NGVD 29)		CORRECTED BY:	
				ELEV. 4963.294 (NGVD 29)		CORRECTED BY:		DATE	
DESIGNED BY: DAVID GATTERMAN, P.E.		DATE: 03-01-03		RECORDED BY:		DATE		MICRO-FILM INFORMATION	
DRAWN BY: DG		DATE: 03-01-03		RECORDED BY:		DATE		DATE	
CHECKED BY: DG		DATE: 03-01-03		RECORDED BY:		DATE		DATE	

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 SEPERATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

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

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

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

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

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

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

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

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 48 HOURS PRIOR TO 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.

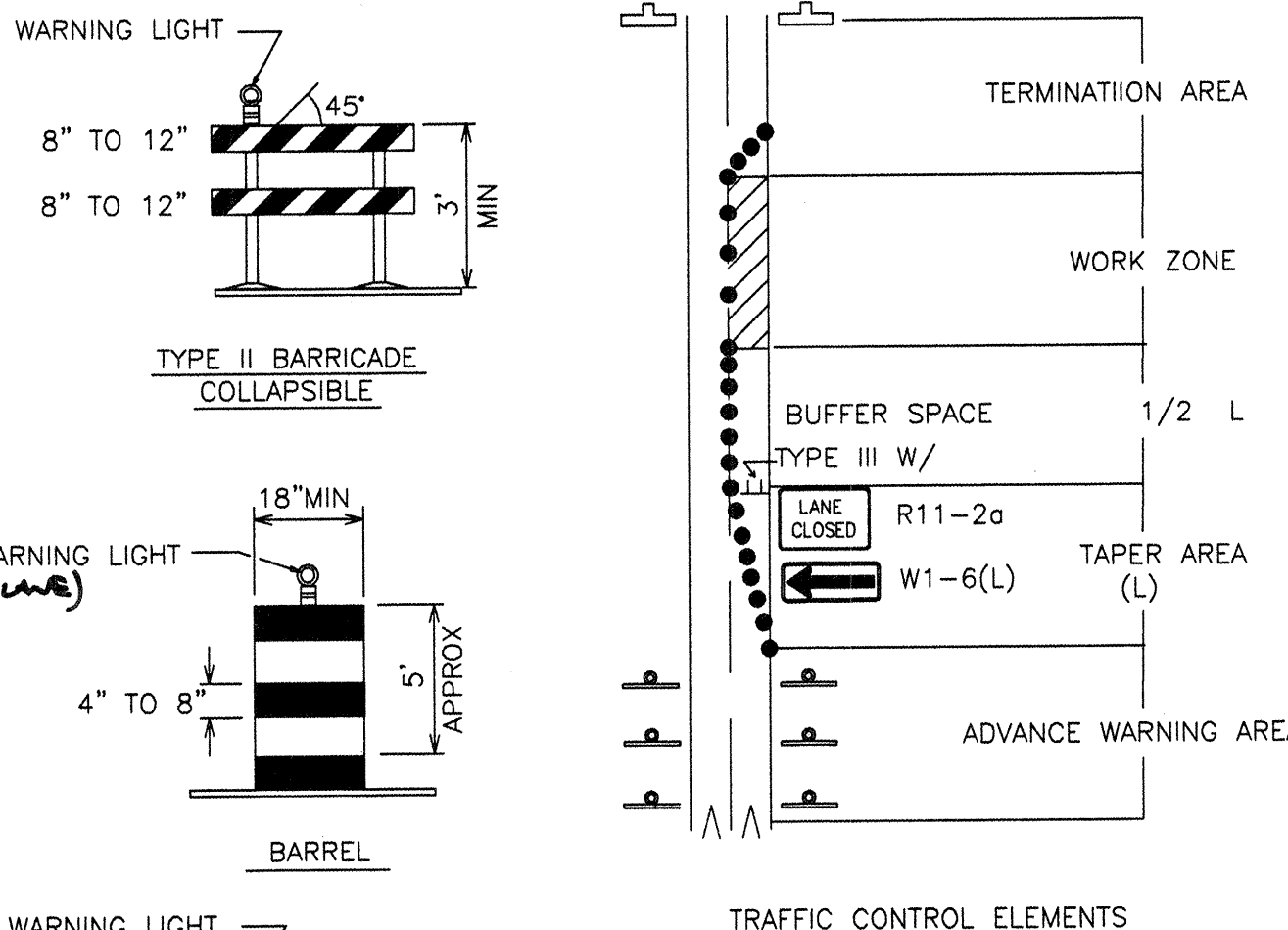
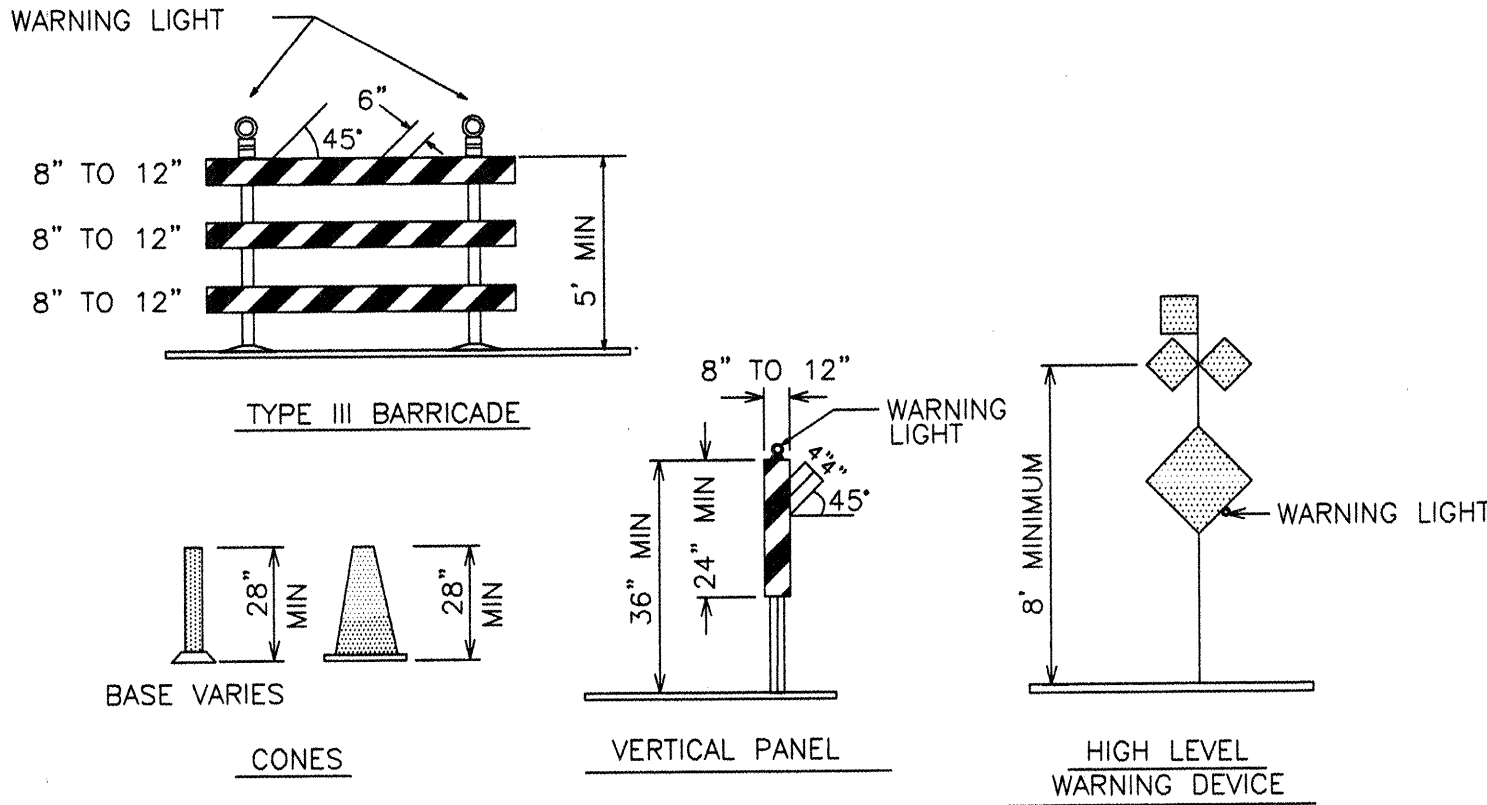
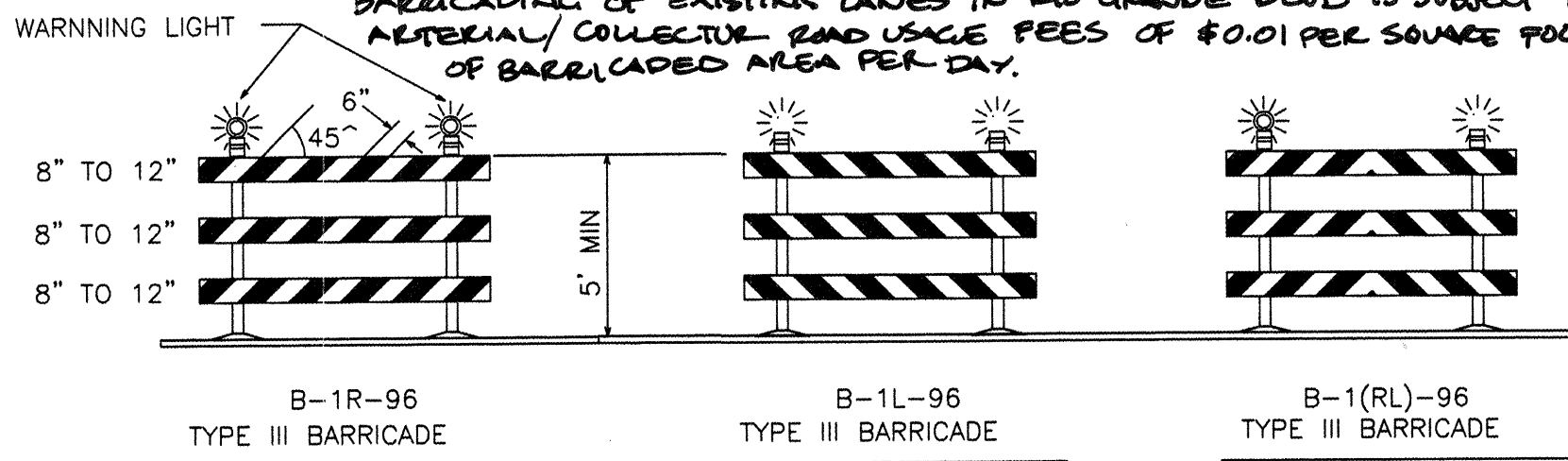
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

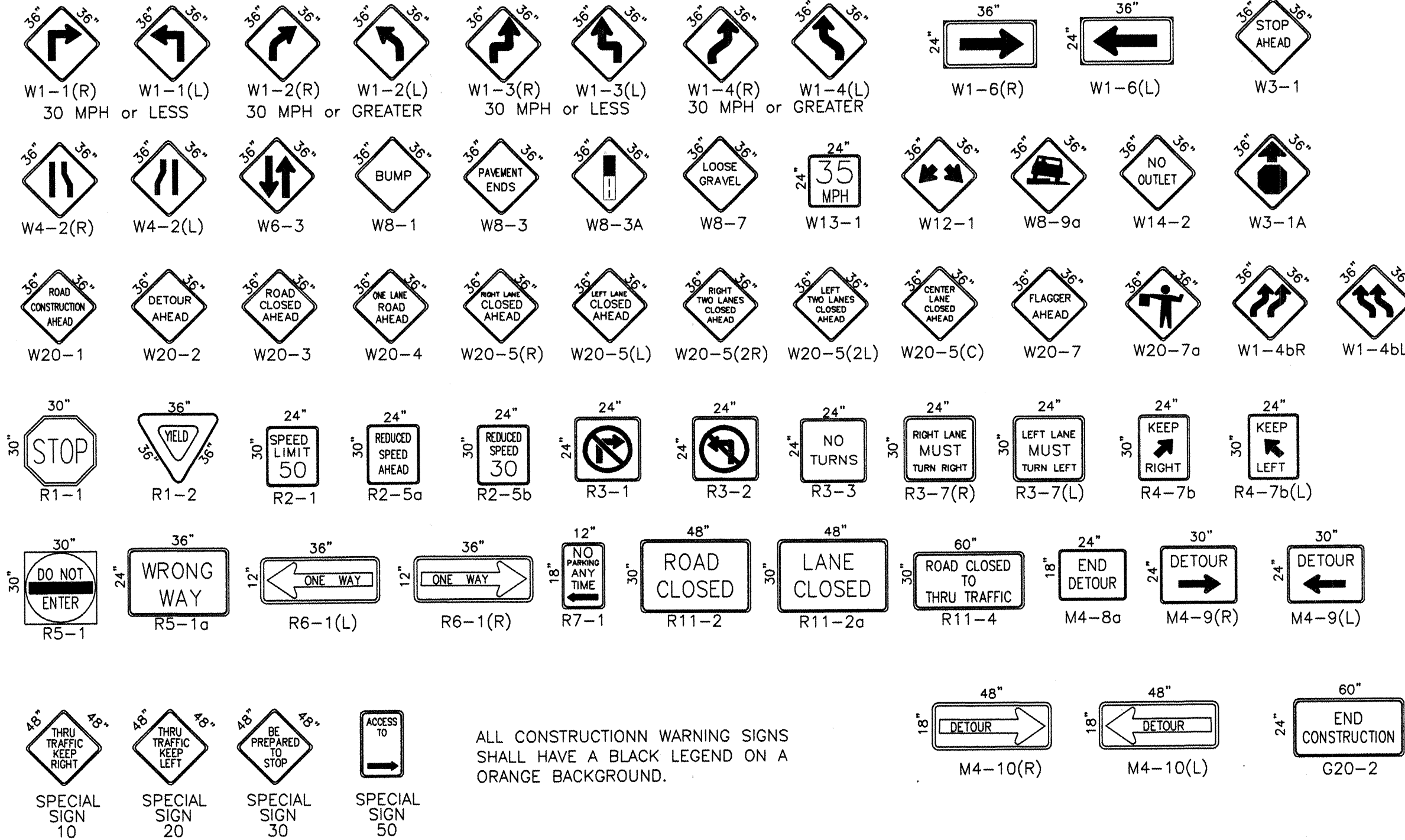
27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.

SPECIAL TRAFFIC CONTROL NOTES

- 1) ONLY NORTHBOUND SINGLE RIGHT LANE CLOSURES ON RIO GRANDE BLVD WILL BE ALLOWED FOR THE INSTALLATION OF THE 6" WATER LINE AND THE ROADWAY ENTRANCE.
- 2) LANE CLOSURES ON RIO GRANDE BLVD WILL NOT BE ALLOWED AFTER 4PM ON WEEKDAYS MONDAY THROUGH FRIDAY, UNLESS A SAFETY HAZARD EXISTS AT THE END OF THE WORK SHIFT (SUCH AS AN OPEN EXCAVATION ADJACENT TO TRAVEL LANE).
- 3) WHEN LANE CLOSURES MUST REMAIN AT THE END OF THE WORK SHIFT, THE CONTRACTOR IS REQUIRED TO WORK FROM 7:00am TO 10:00pm, SEVEN DAYS A WEEK UNTIL ALL TRAFFIC LANES ARE OPEN TO TRAFFIC.
- BARRICADING OF EXISTING LANES IN RIO GRANDE BLVD IS SUBJECT TO MATERIAL/ COLLECTIVE ROAD USAGE FEES OF \$0.01 PER SQUARE FOOT OF BARRICADED AREA PER DAY.



SIGN FACE DETAILS



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

LEGEND

WORK AREA
BARRICADE - TYPE I, TYPE II, OR BARREL
BARRICADE - TYPE III
VERTICAL PANEL
WARNING SIGN
DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
FLAGMAN POSITION
SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET
TAPER LENGTH - SEE CHART BELOW
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED LIMIT (MPH)	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	MINIMUM DISTANCE IN FEET FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTLING 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	L = WS ² / 60
40 MPH OR LESS	
40 MPH OR GREATER	L = W X S
	L = TAPER LENGTH
	W = WIDTH OF OFFSET IN FEET
	S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH



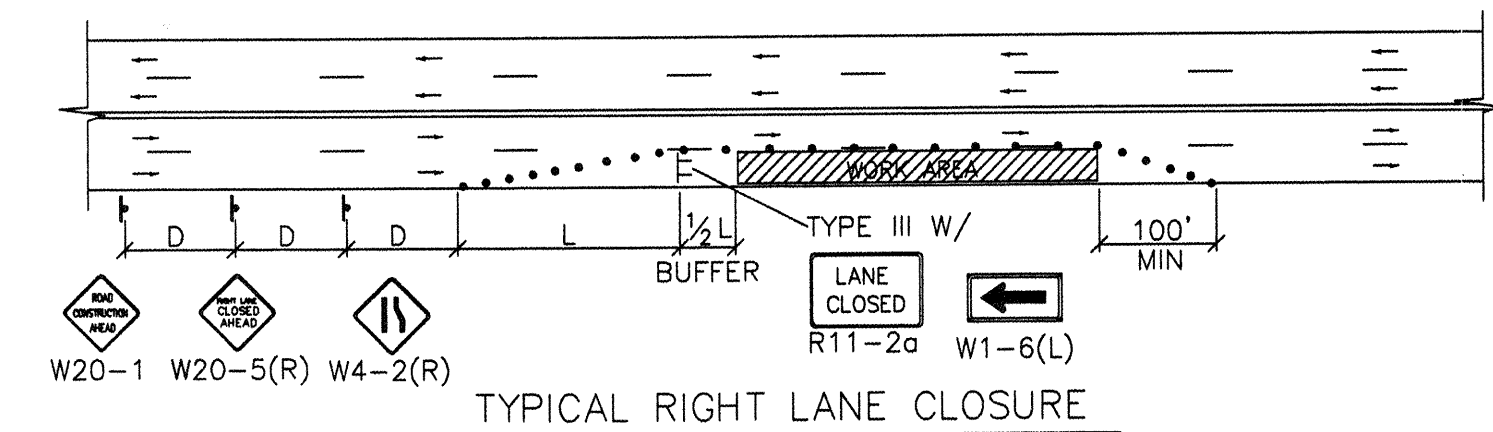
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: TRAFFIC CONTROL
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

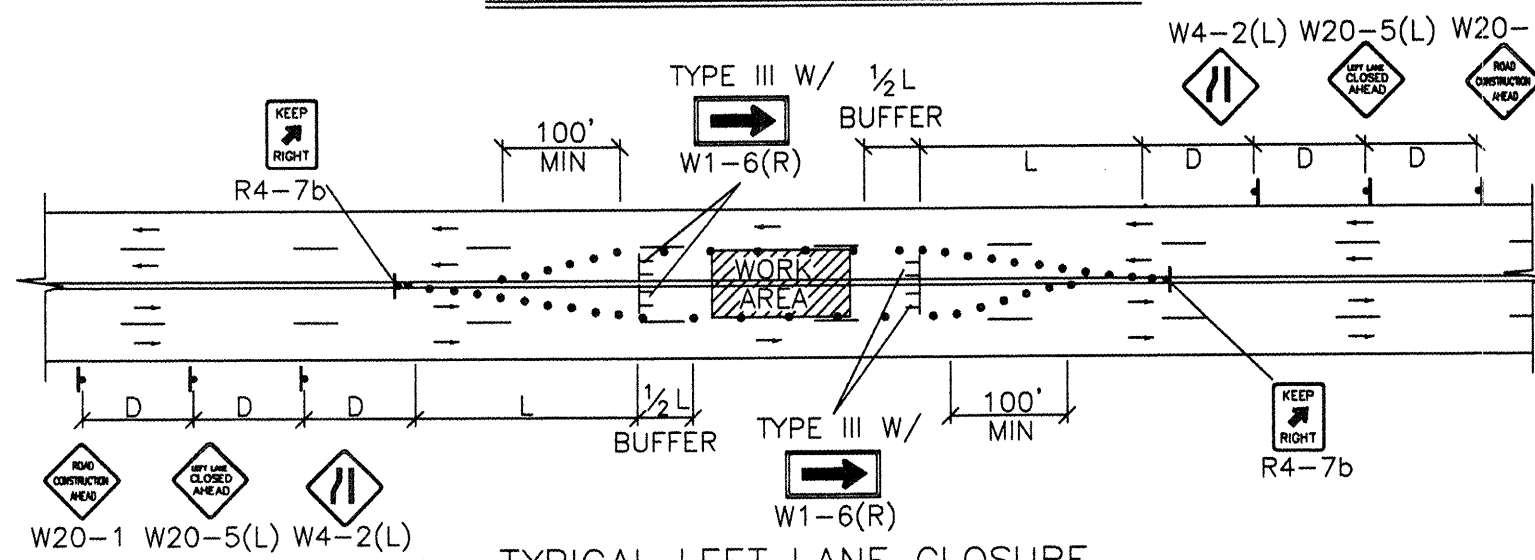
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	7038.81	ZONE MAP NO.	G-12	SHEET	9	OF	10
------------------	---------	--------------	------	-------	---	----	----

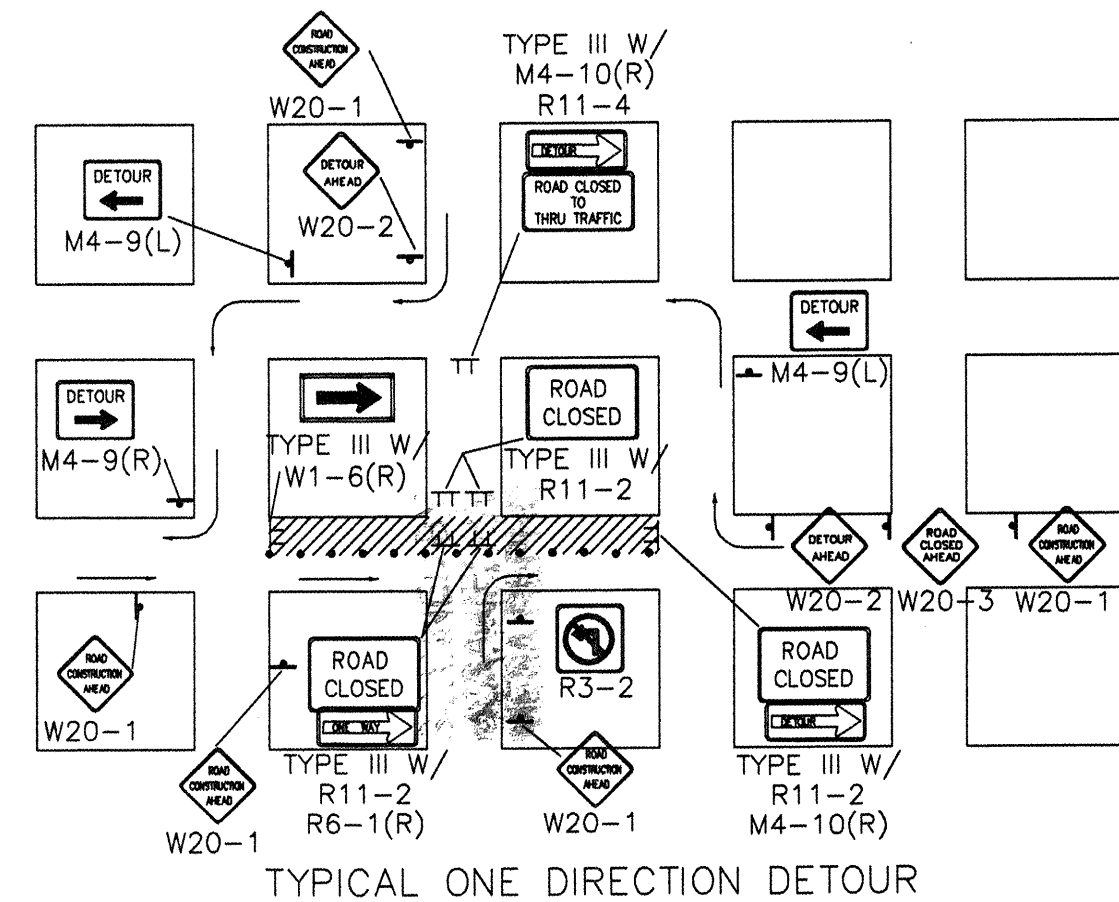
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 7038.81 0904



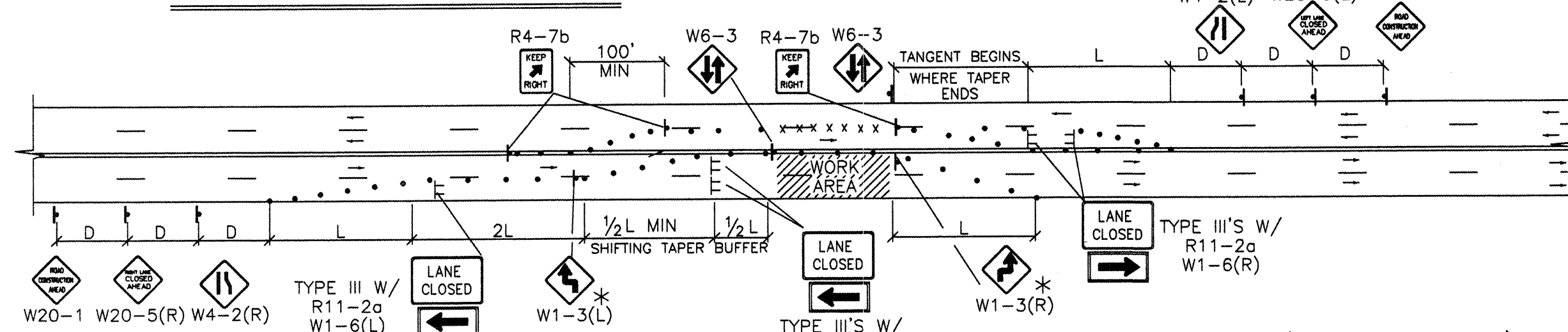
TYPICAL RIGHT LANE CLOSURE



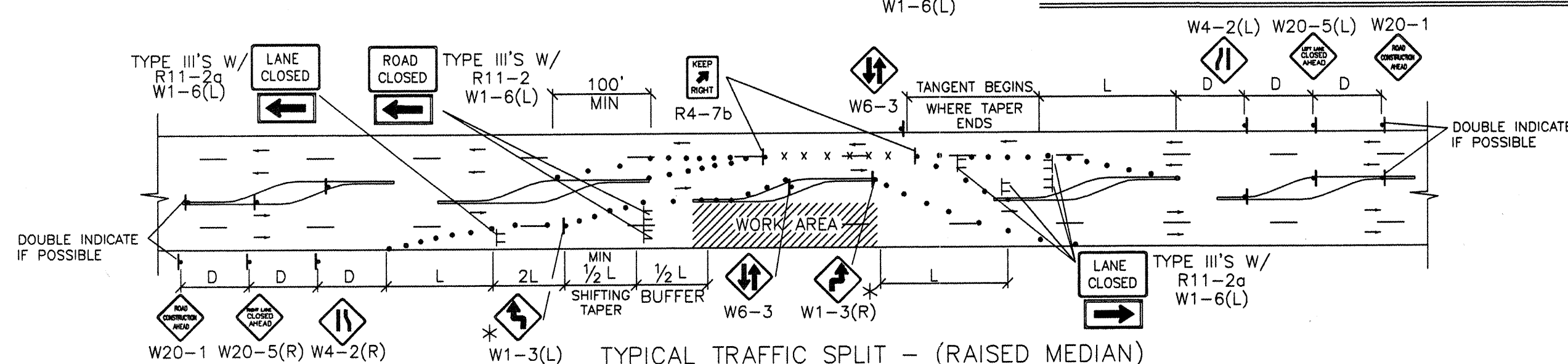
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR

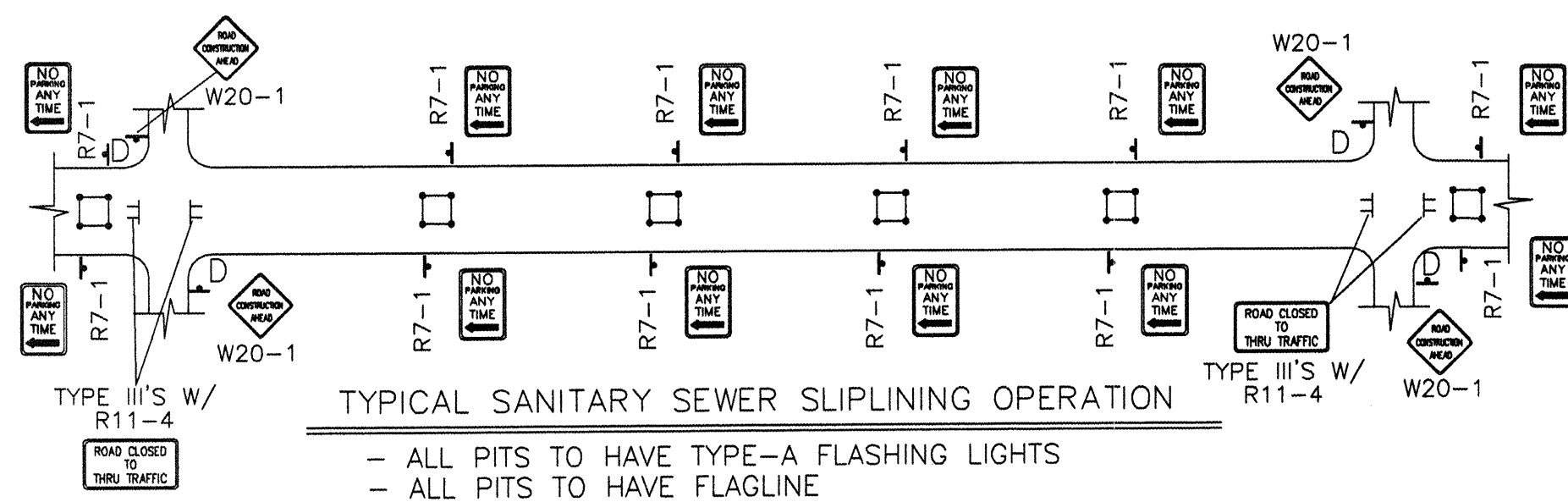


TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

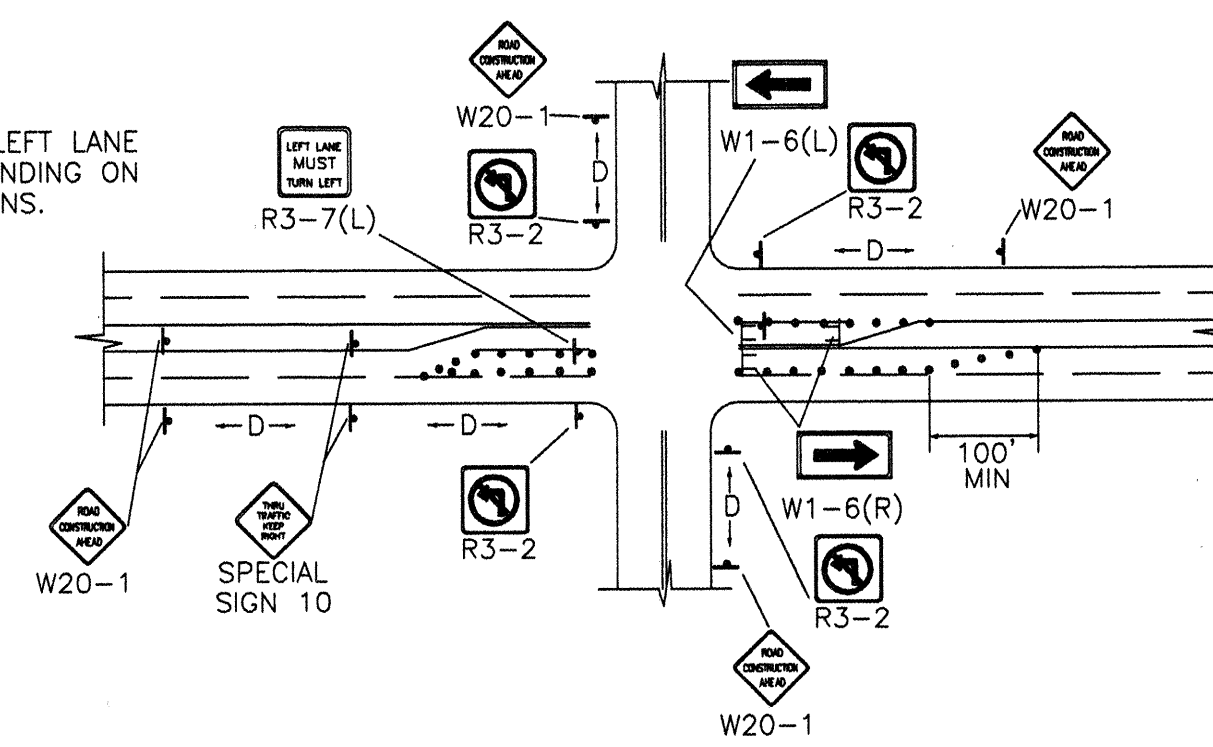
- TRAFFIC SPLIT NOTES:
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
 2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
 3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
 4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
 5. REDUCED SPEED MAY BE CONSIDERED.
 6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



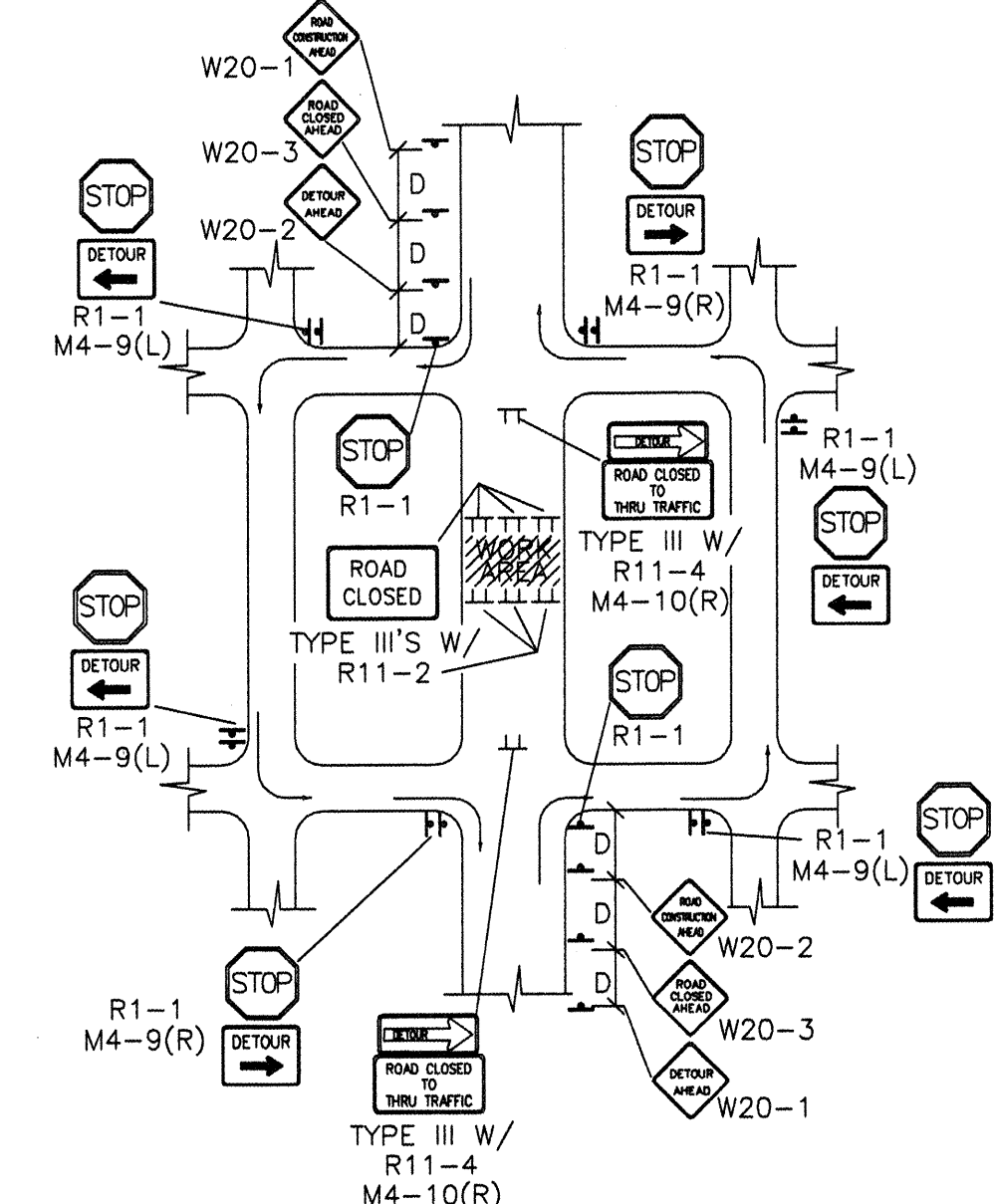
TYPICAL SANITARY SEWER SLIPLINING OPERATION

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

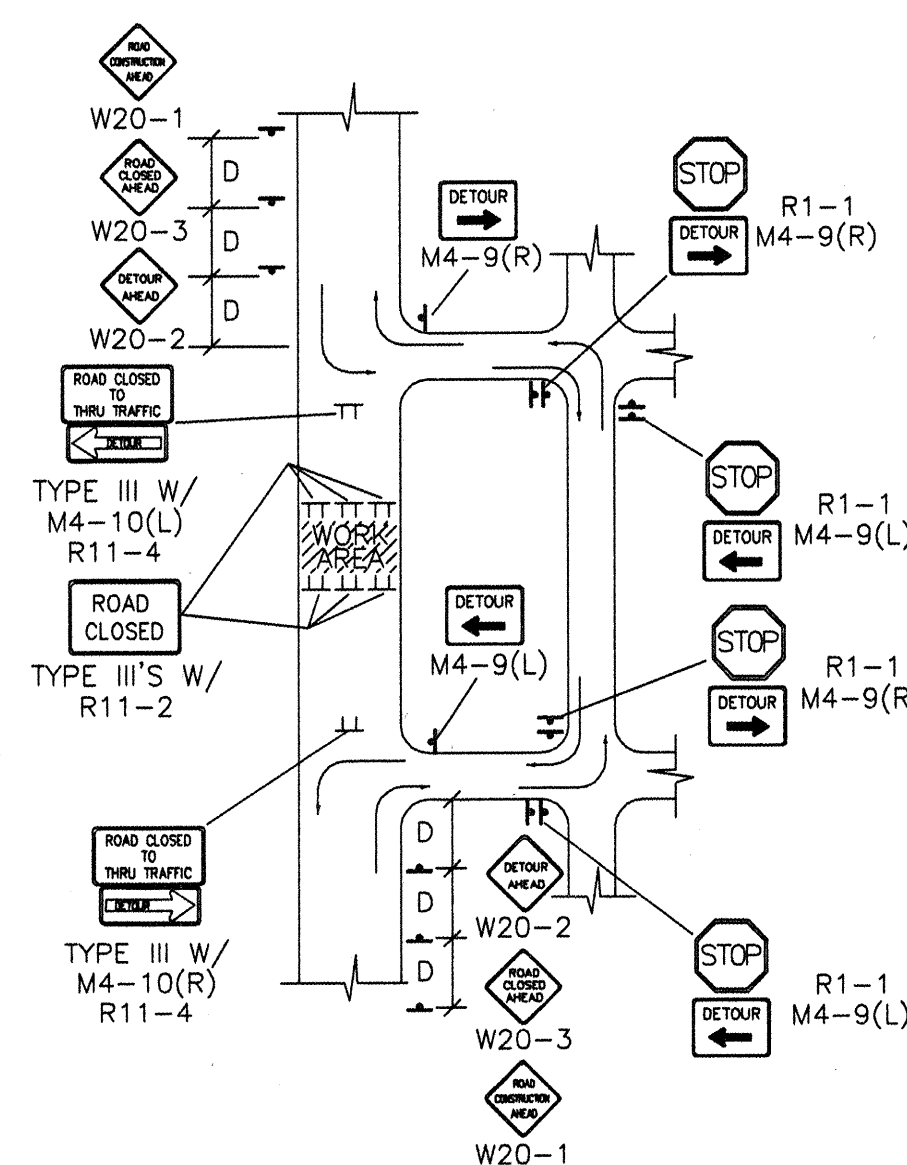
NOTE:
MAY REQUIRE LEFT LANE
CLOSURE DEPENDING ON
FIELD CONDITIONS.



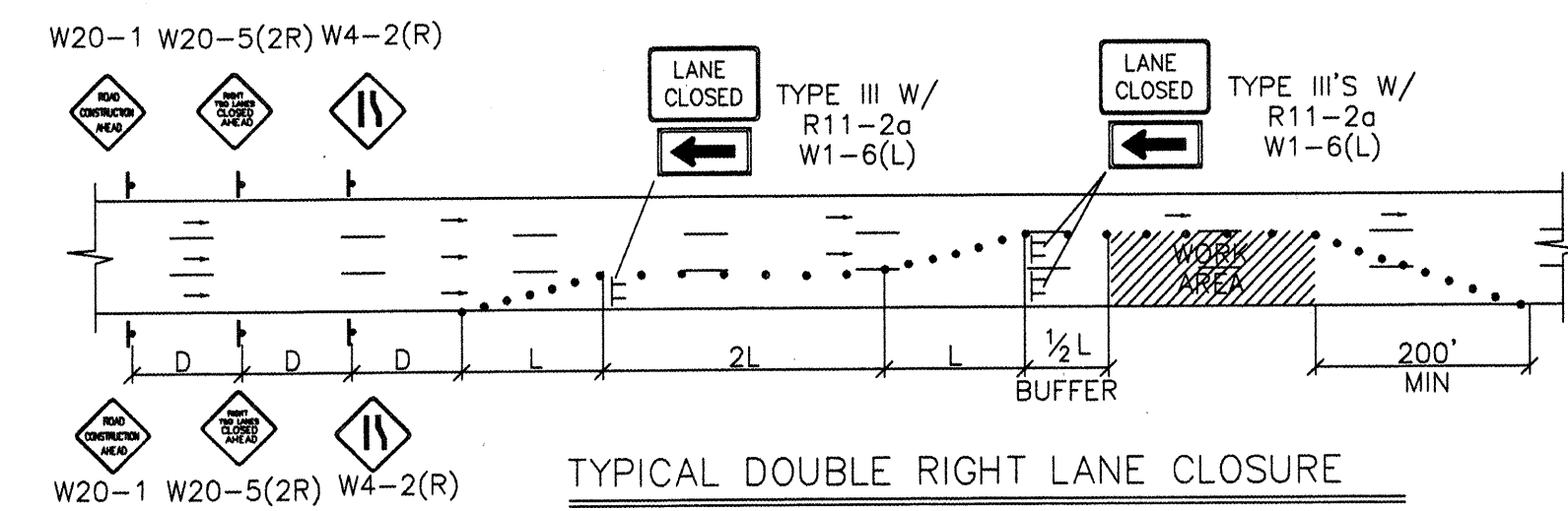
TYPICAL LANE CLOSURE AT INTERSECTION
NOTE: DEPENDING ON WORK ZONE LOCATION.



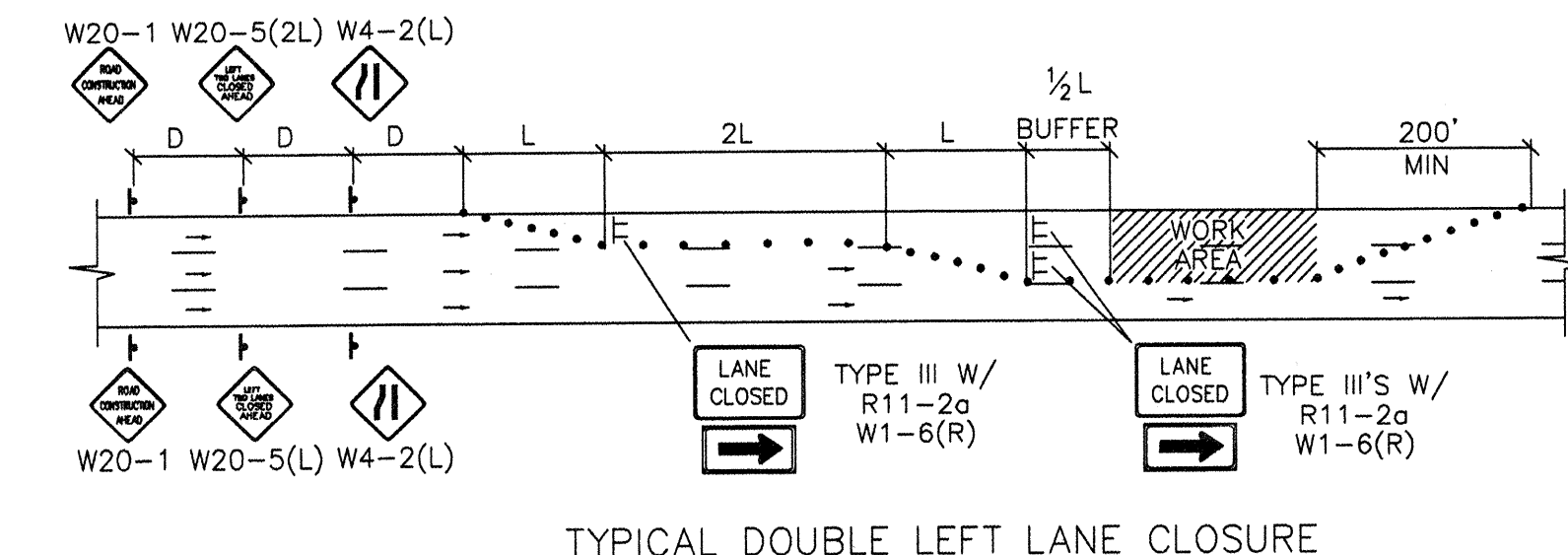
TYPICAL MID-BLOCK CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



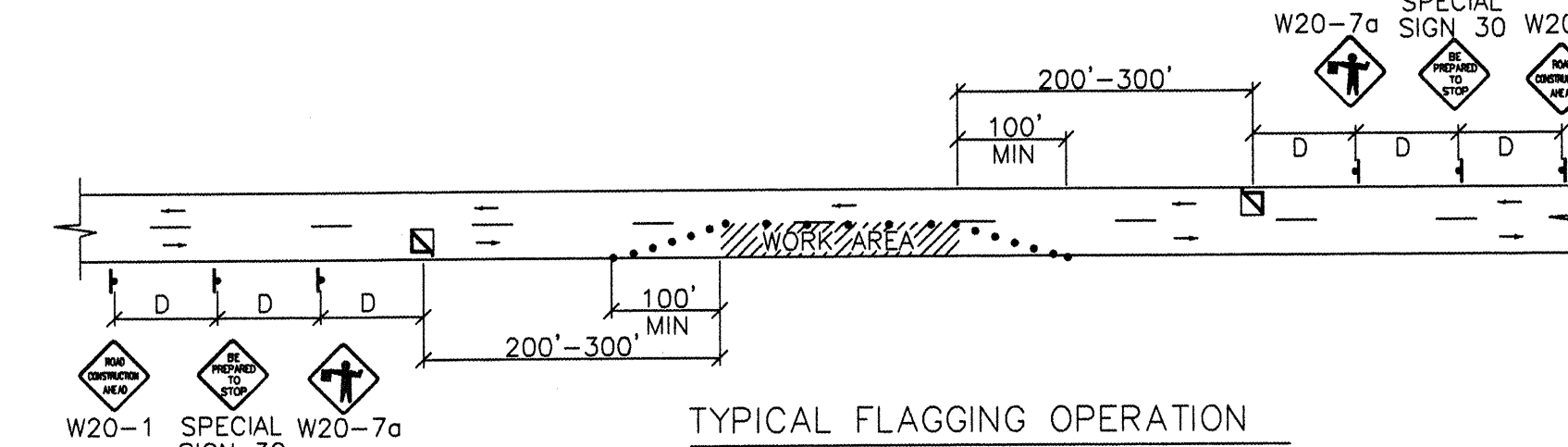
TYPICAL STREET CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



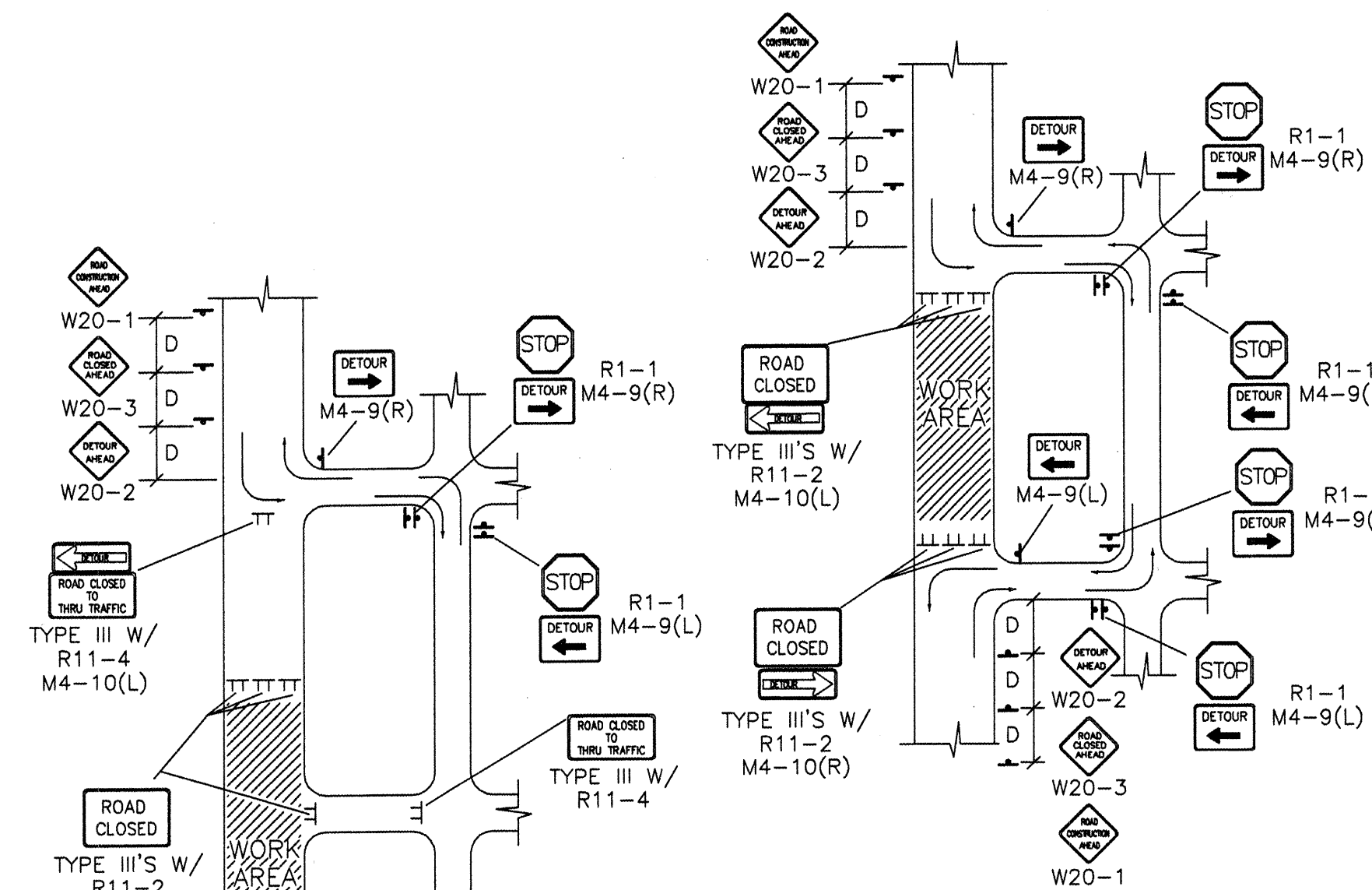
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



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

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP		TITLE: TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF MUTCD)	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
DATE	DATE	DATE	DATE
NO.	DATE	REVISIONS	DESIGN
DESIGNED BY BOHANNAN HUSTON		DATE 5-97	
DRAWN BY BOHANNAN HUSTON		DATE 5-97	
CHECKED BY BOHANNAN HUSTON		DATE 5-97	
CITY PROJECT NO. 7038.81		SHEET 10 OF 10	