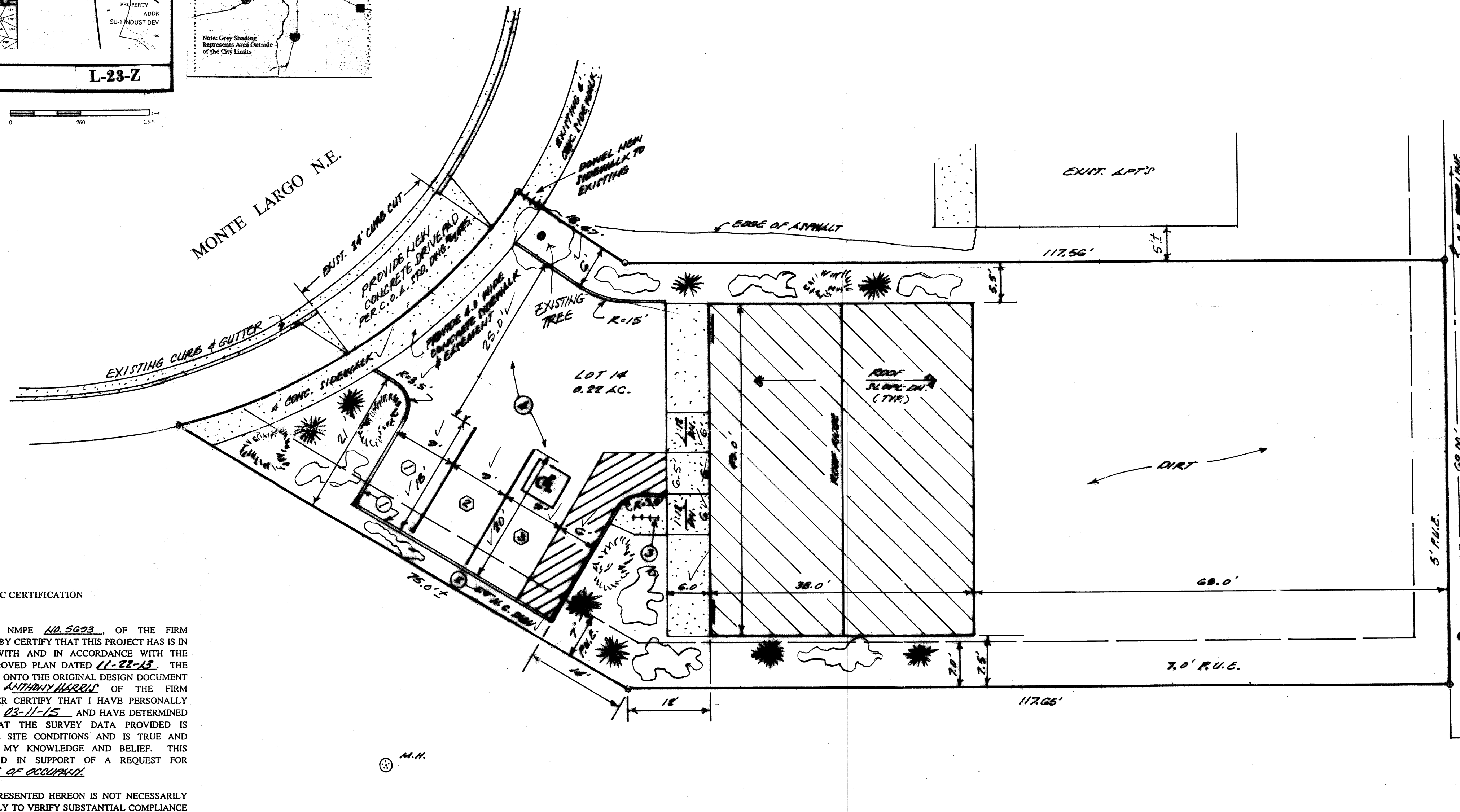
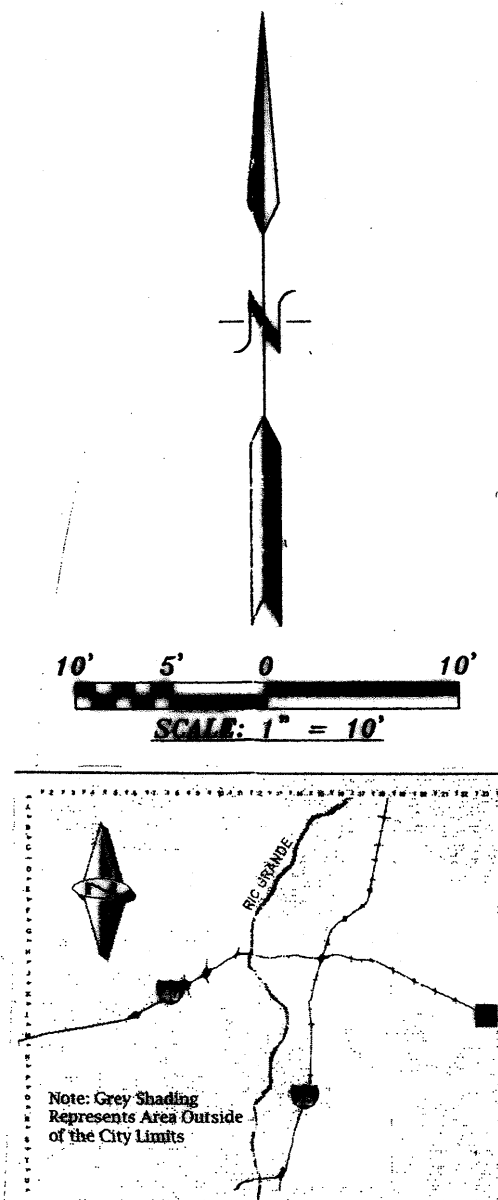
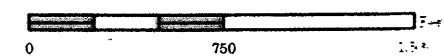


VICINITY MAP

L-23-Z



TRAFFIC CERTIFICATION

I, LEVI J. VALDEZ, NMPE NO. 5693, OF THE FIRM NEW MEXICO LAND DEVELOPMENT, HEREBY CERTIFY THAT THIS PROJECT HAS IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 11-22-13. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ANTHONY HERRON OF THE FIRM HARRIS SURVEY. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 03-11-15 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 PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE TRAFFIC LAYOUT ASPECTS OF THIS PROJECT. THOSE RELYING ON THE RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

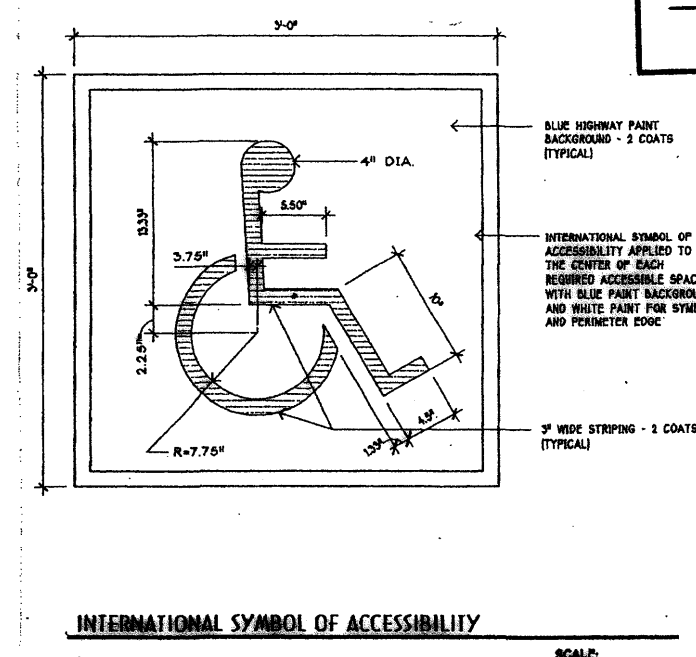
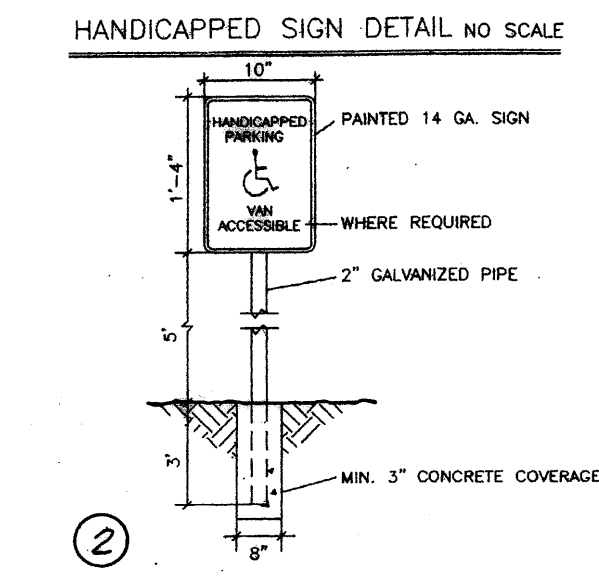
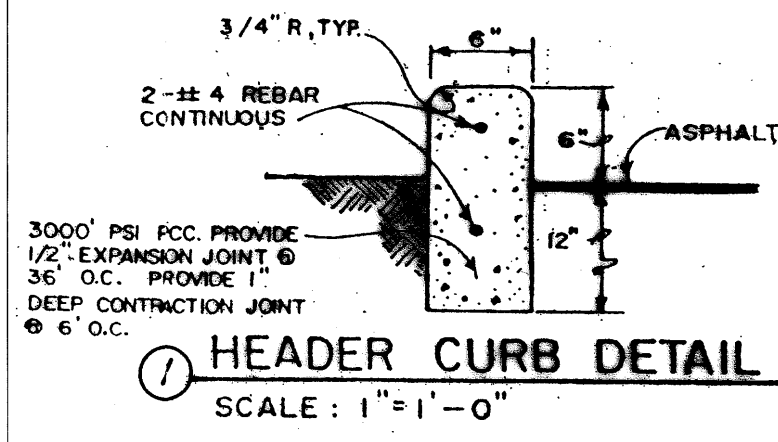
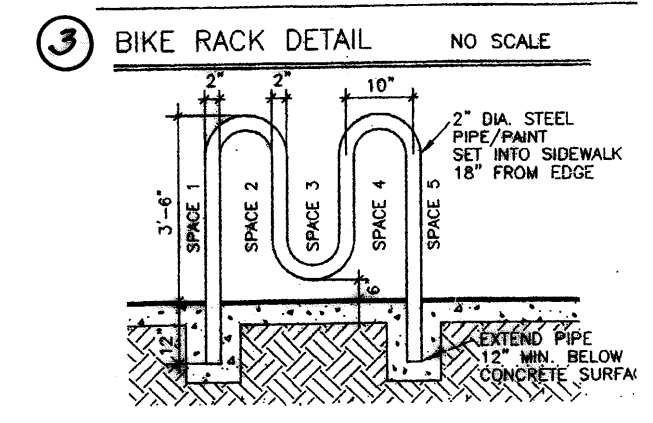
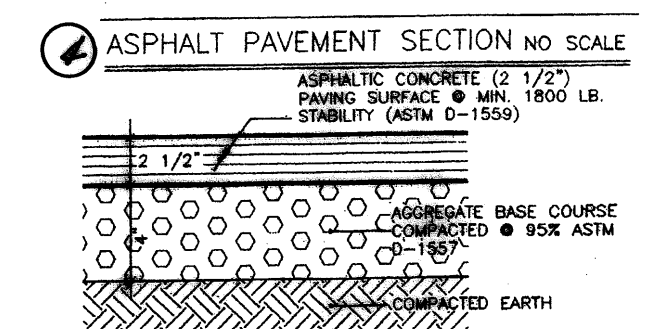
Signature of Engineer
03-13-15
Date

ENGINEER'S STAMP

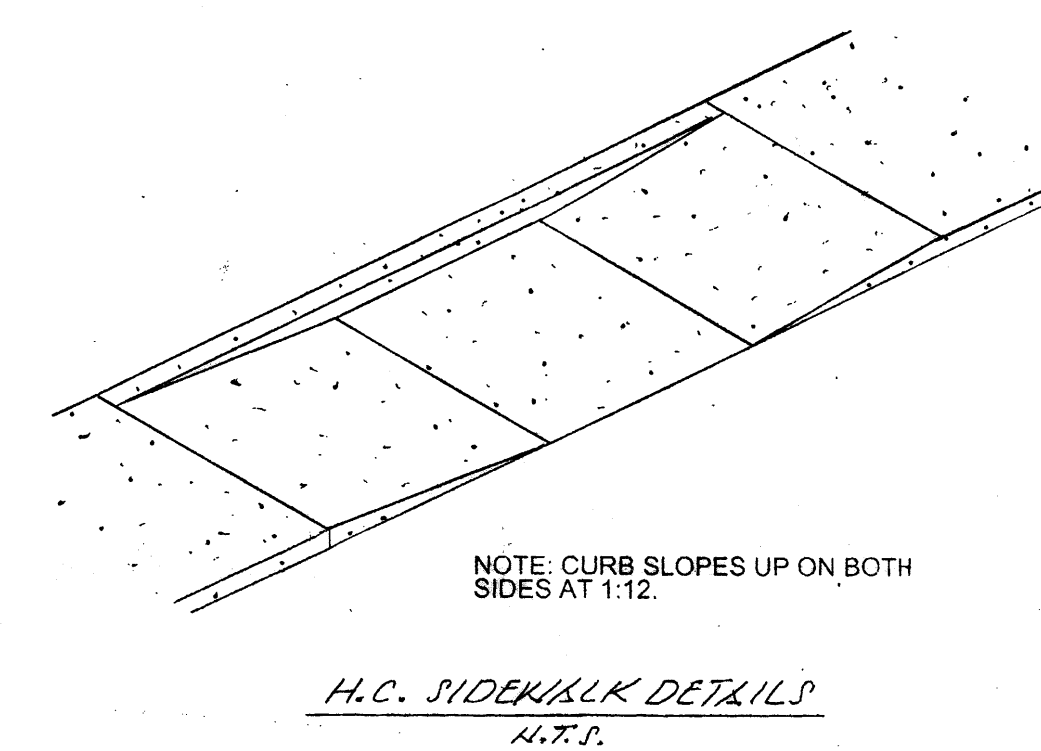
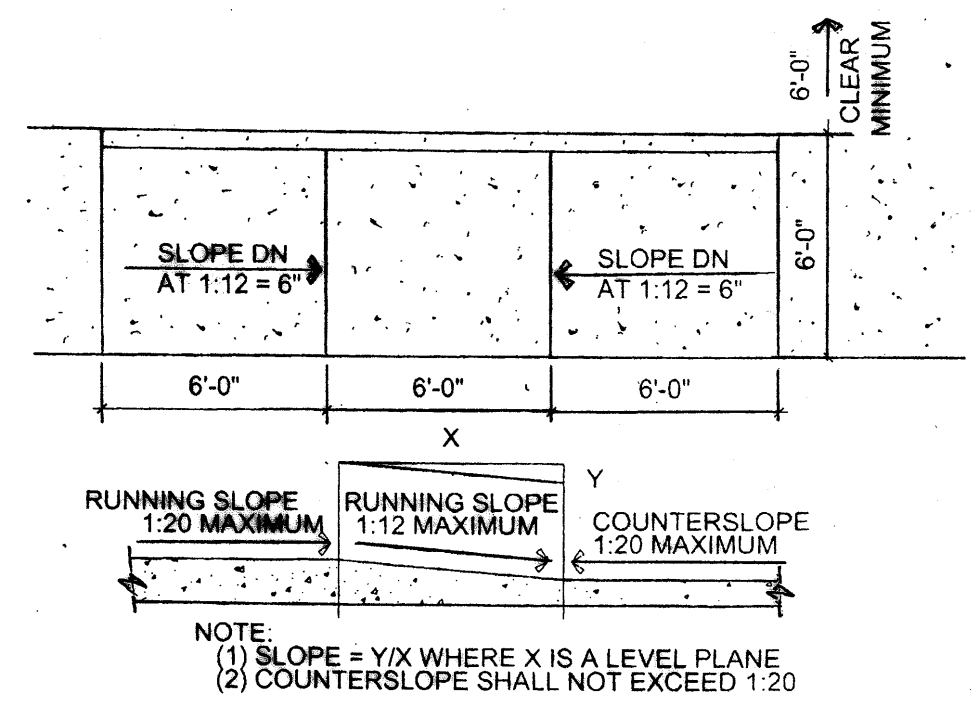
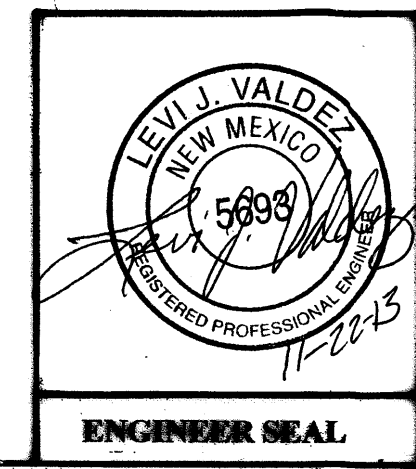


LEGAL DESCRIPTION: LOT 14, ORONA ADDITION, ALBUQUERQUE, NEW MEXICO.

UTILITY PRECAUTIONS
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.

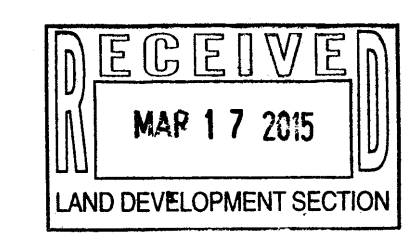


TRAFFIC CIRCULATION LAYOUT APPROVED
C.K.B. 27 Nov 13
Signed Date



SITE DATA:

USAGE: FLEX APARTMENTS
ZONED: R-2
LOT AREA: 0.22 ACRE
BUILDING AREA: 1,062.0 SQ. FT.
LANDSCAPE AREA REQ. = 1,158.0 SQ. FT.
LANDSCAPE AREA PROVIDED = 1,166.0 SQ. FT.
PARKING REQ. = 15.5 SPACES/UNIT = 3 SPACES
-10% BUS ROUTE = 0 SPACES
NET SPACES REQ. = 3 SPACES
SPACES PROVIDED = 3 SPACES

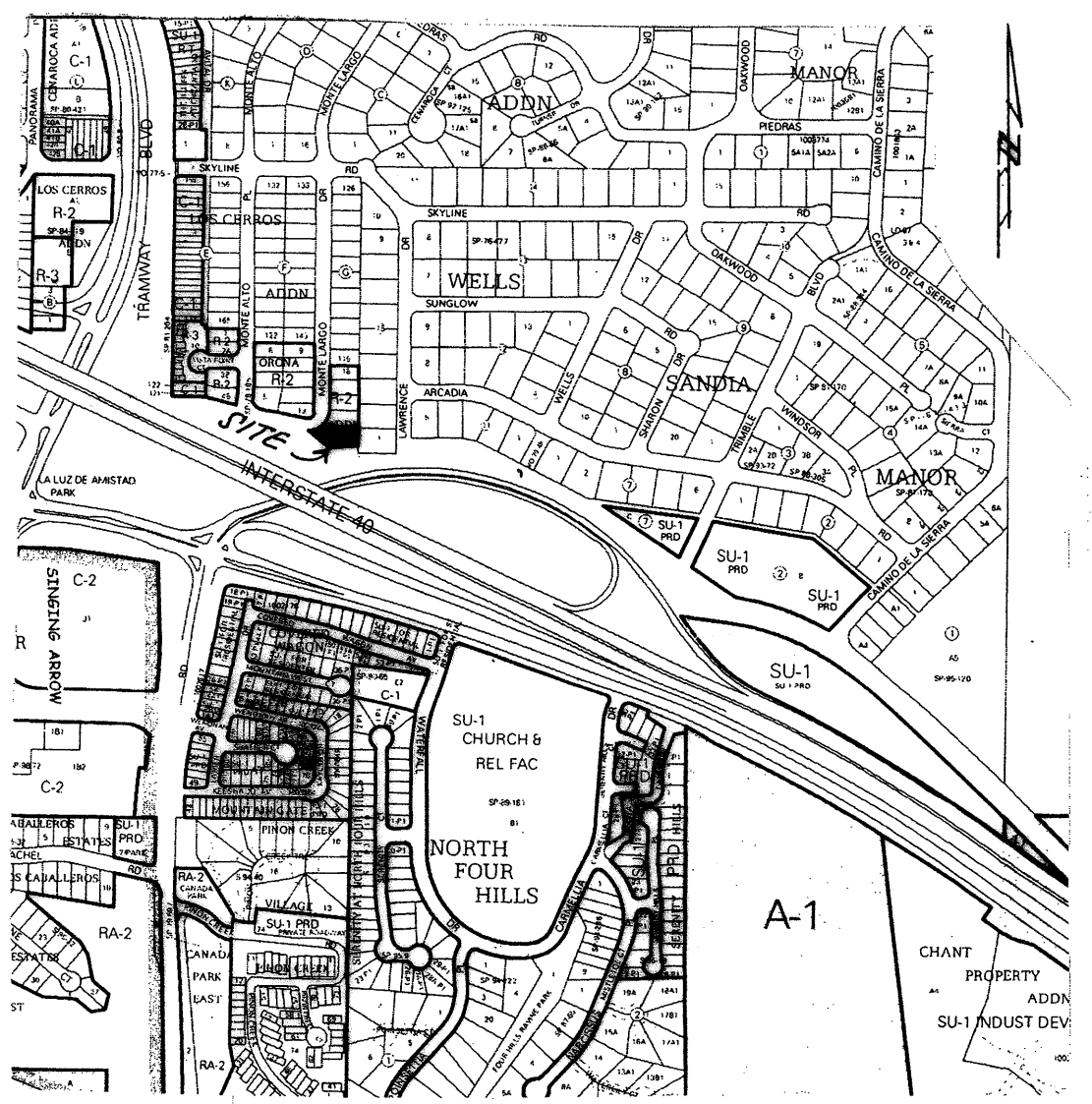


Public Infrastructure shown on these plans for information only and not part of approval. Separate DRC/Permit approval and Work Order required.

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.

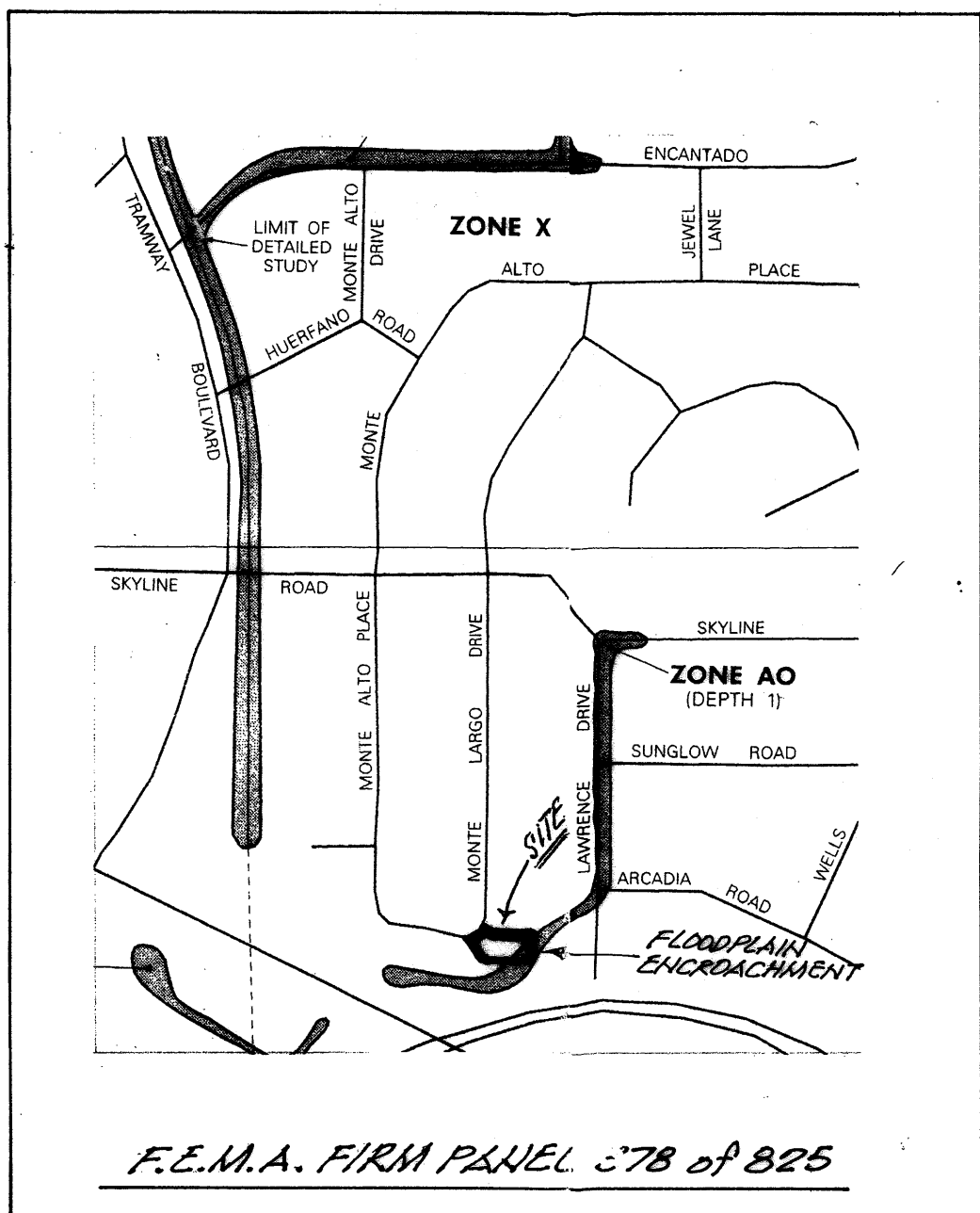
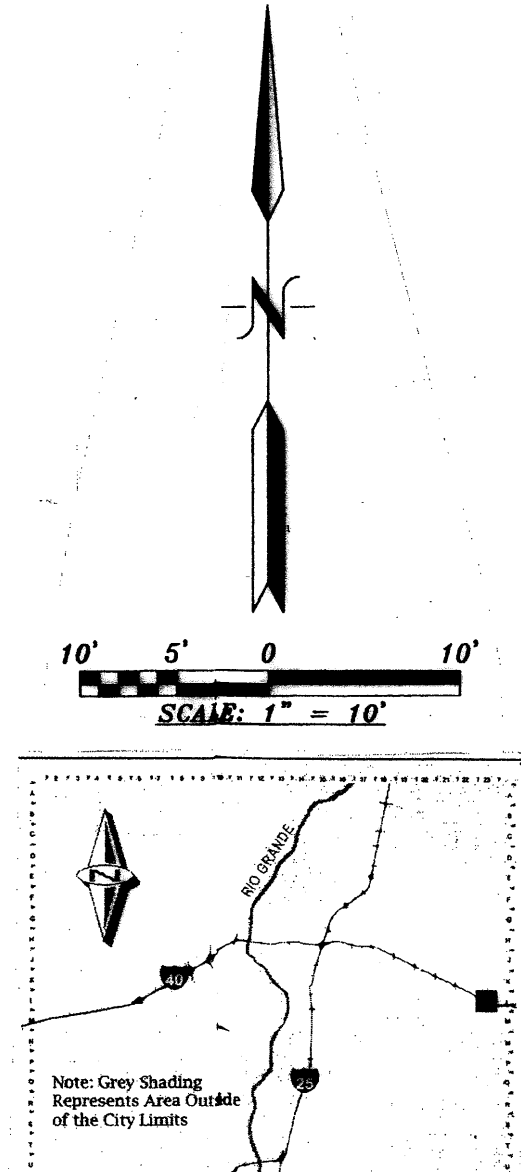
TRAFFIC CIRCULATION LAYOUT
(CERTIFICATION: MARCH 13, 2015)

A PROPOSED PLAN FOR
DUPLEX DWELLING UNITS
(172 MONTE LARGO N.E.)
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 2013



VICINITY MAP

L-23-Z



F.E.M.A. FIRM PANEL 57B of 825

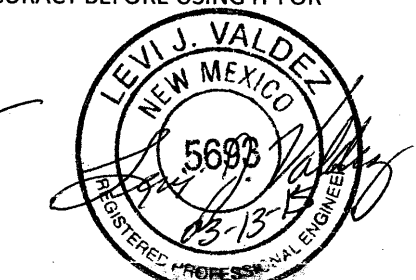
DRAINAGE CERTIFICATION:

I, LEVI J. VALDEZ, N.M.P.E. NO. 5693, DO 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 NOVEMBER 25, 2013. THE RECORD INFORMATION, EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ANTHONY HARRIS, N.M.P.L.S. NO. 11463, OF THE FIRM OF HARRIS SURVEYING. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE SUBJECT PROJECT SITE ON MARCH 11, 2015, AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF THE 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 CERTIFICATE OF OCCUPANCY.

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.

Levi J. Valdez
LEVI J. VALDEZ, N.M.P.E. NO. 5693

DATE: MARCH 13, 2015



A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40

Zone	Intensity	100-YR (2-YR, 10-YR)
1	4.70	(1.84, 3.14)
2	5.05	(2.04, 3.41)
3	5.38	(2.21, 3.65)
4	5.61	(2.34, 3.85)

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined Arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds, and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Zone	Treatment	100-YR (2-YR, 10-YR)
1	A	1.29 (0.00, 0.24)
2	B	2.03 (0.33, 0.76)
3	C	2.87 (0.47, 1.49)
4	D	4.37 (1.69, 2.89)

Drainage Comments:

As shown on the vicinity map hereon, the subject site is a vacant property located east of Tramway Blvd. N.E. and North of Interstate Highway 40, at 172 Monte Largo N.E., in the City of Albuquerque, Bernalillo County, New Mexico, (Zone Atlas Map L-23-Z).

The subject site, 1) does accept minimal offsite flows from the north of and adjacent property, these flows will continue to be accepted and passed through, 2) does not contribute to the offsite flows of adjacent properties, 3) is a vacant property that is to have an duplex apartment development and associated improvements constructed thereon, 4) is located adjacent to a man made water course, 5) is to free discharge the proposed developed flows into the adjacent street right-of-way.

Site Area: 0.22 acres
Precipitation Zone: Four (4)

SITE AREA = 0.22 ACRE ZONE: FOUR (4)
PRECIPITATION: 360 = 2.90 in.
1440 = 3.65 in.
10day = 5.95 in.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A 0.80 in	2.20 cfs/ac.
TREATMENT B 1.08 in	2.92 cfs/ac.
TREATMENT C 1.46 in	3.73 cfs/ac.
TREATMENT D 2.64 in	5.25 cfs/ac.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:
TREATMENT A 0.22 ac.	AREA 0.11 ac.
TREATMENT B 0.00 ac.	0.00 ac.
TREATMENT C 0.00 ac.	0.03 ac.
TREATMENT D 0.00 ac.	0.08 ac.

EXISTING EXCESS PRECIPITATION:
Weighted E = (0.80)(0.22) + (1.08)(0.00) + (1.46)(0.00) + (2.64)(0.00)/0.22 = 0.80 in
V100-360 = (0.80)(0.22)/12 = 0.014667 ac-ft = 638.9 cf

EXISTING PEAK DISCHARGE:
Q100 = (2.20)(0.22) + (2.92)(0.00) + (3.73)(0.00) + (5.25)(0.00) = 0.48 cfs

PROPOSED EXCESS PRECIPITATION:
Weighted E = (0.80)(0.11) + (1.08)(0.00) + (1.46)(0.03) + (2.64)(0.08)/0.22 = 1.55 in
V100-360 = (1.55)(0.22)/12.0 = 0.02842 ac-ft = 1,237.8 cf
V100-1440 = (0.03) + (0.08)(3.65 - 2.90)/12 = 0.03500 ac-ft = 1,524.2 cf
V100-10day = (0.03) + (0.08)(5.95 - 2.90)/12 = 0.05033 ac-ft = 2,172.5 cf

PROPOSED PEAK DISCHARGE:
Q100 = (2.20)(0.11) + (2.92)(0.00) + (3.73)(0.03) + (5.25)(0.08) = 0.77 cfs
INCREASE: V100-360 = 598.9 cf
Q100 = 0.21 cfs

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

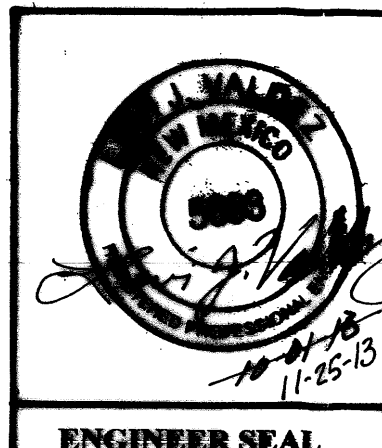
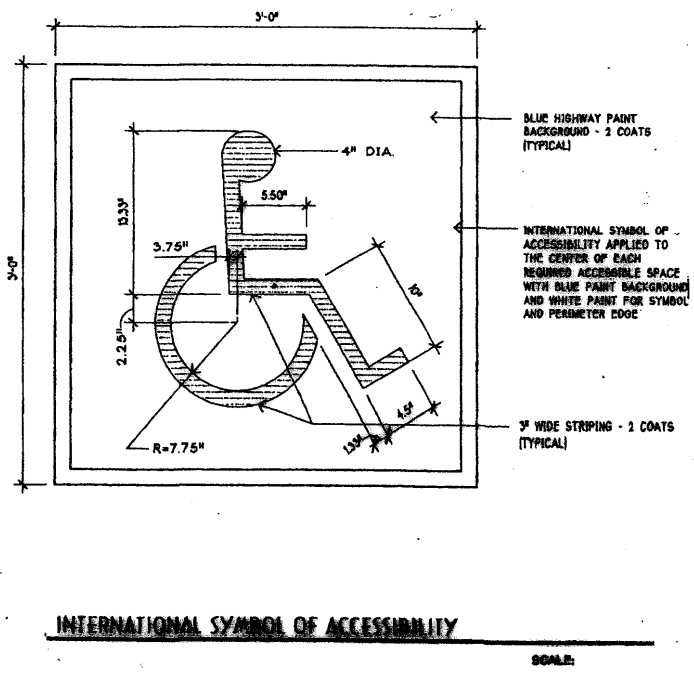
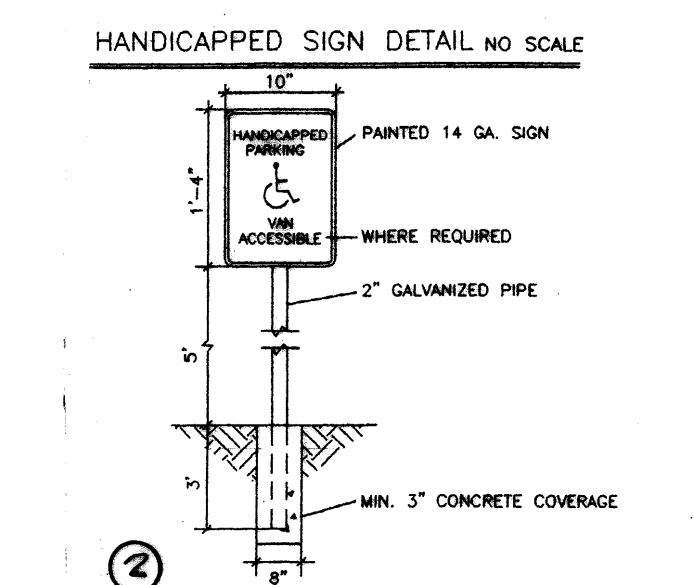
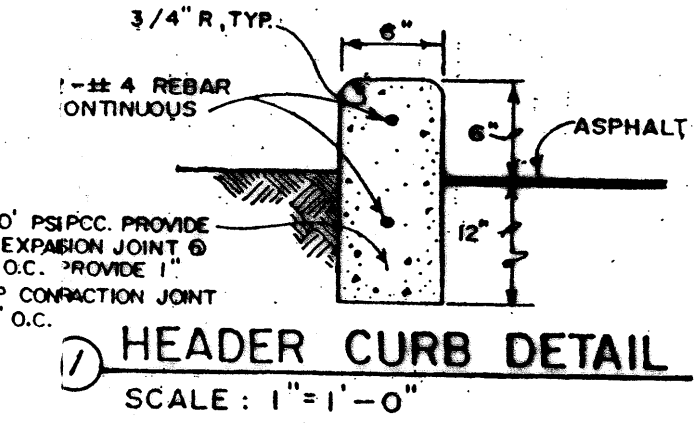
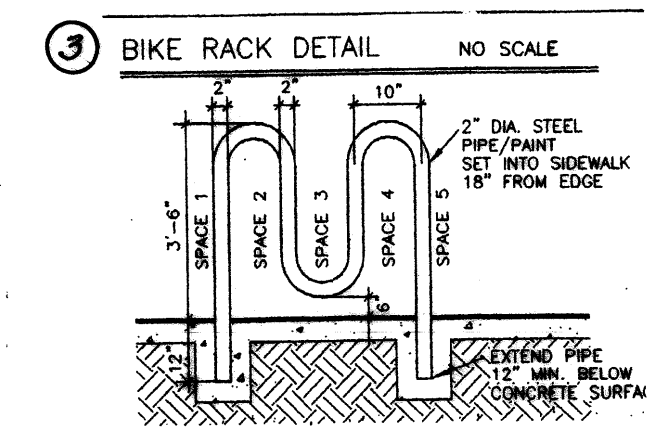
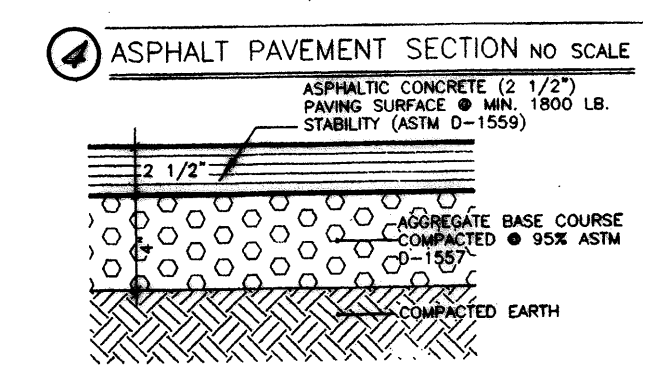
LEGEND:

TOP OF CURB ELEVATION = TC = 17.19
CURB FLOWLINE ELEVATION = EL = 16.55
EXISTING SPOT ELEVATION = 16.7
EXISTING CONTOUR ELEVATION = 5717
PROPOSED SPOT ELEVATION = 19.20
PROPOSED CONTOUR ELEVATION = 20.0
PROPOSED OR EXISTING CONCRETE SURFACE = 20.0
EXISTING FENCE LINE = 20.0

UTILITY PRECAUTIONS

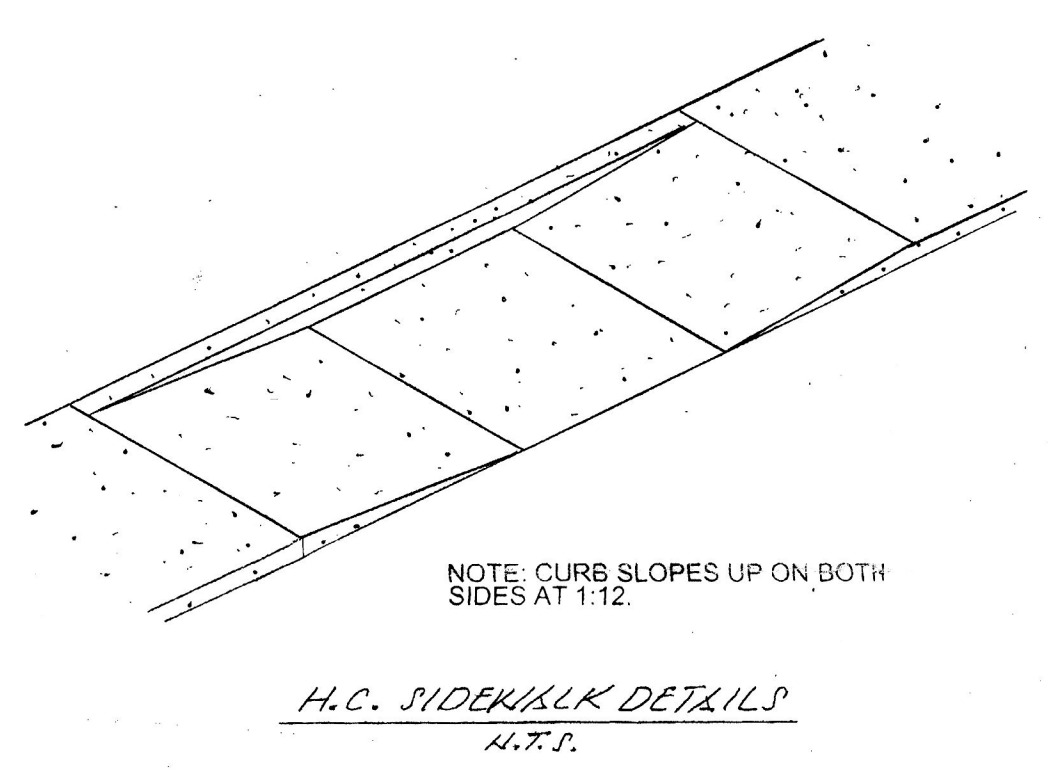
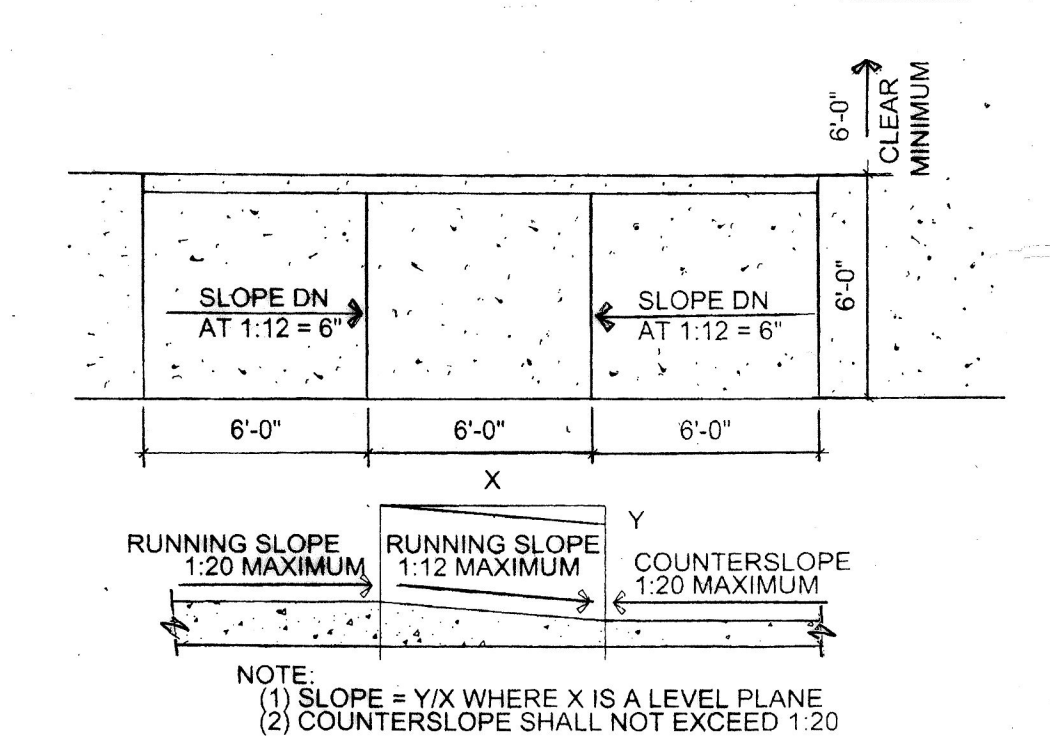
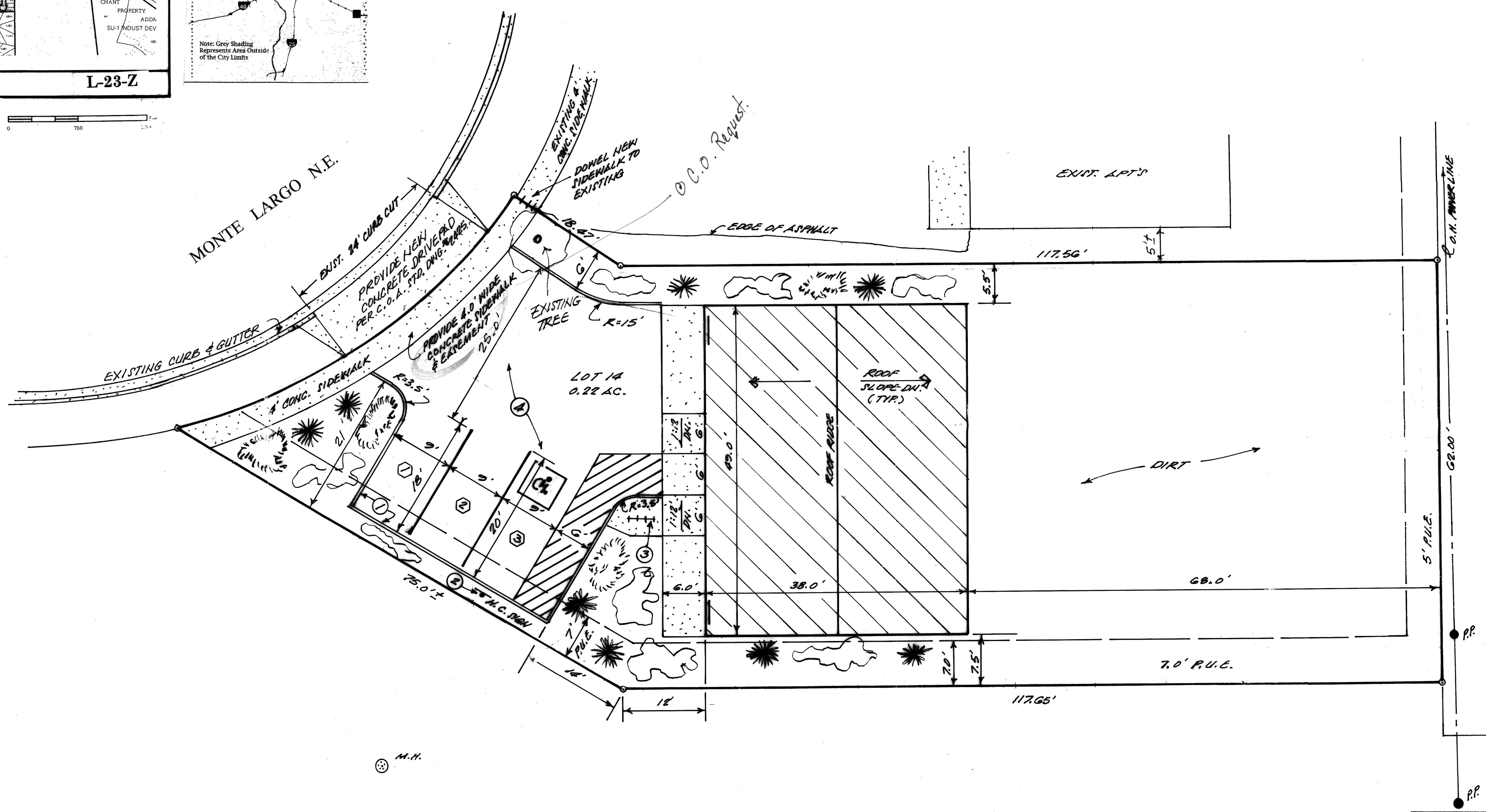
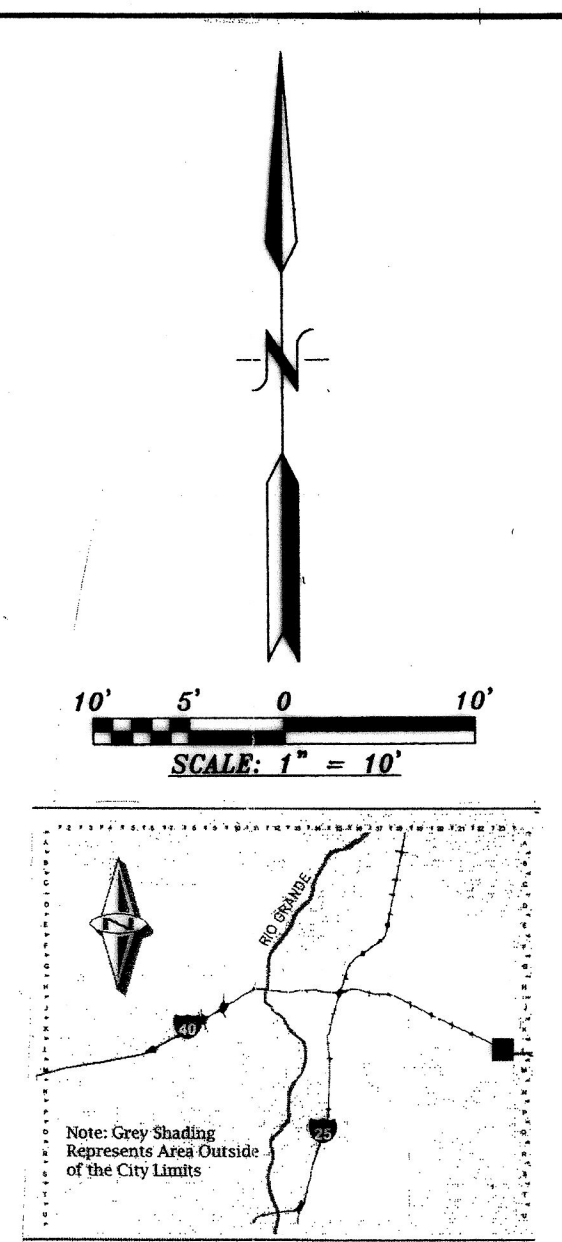
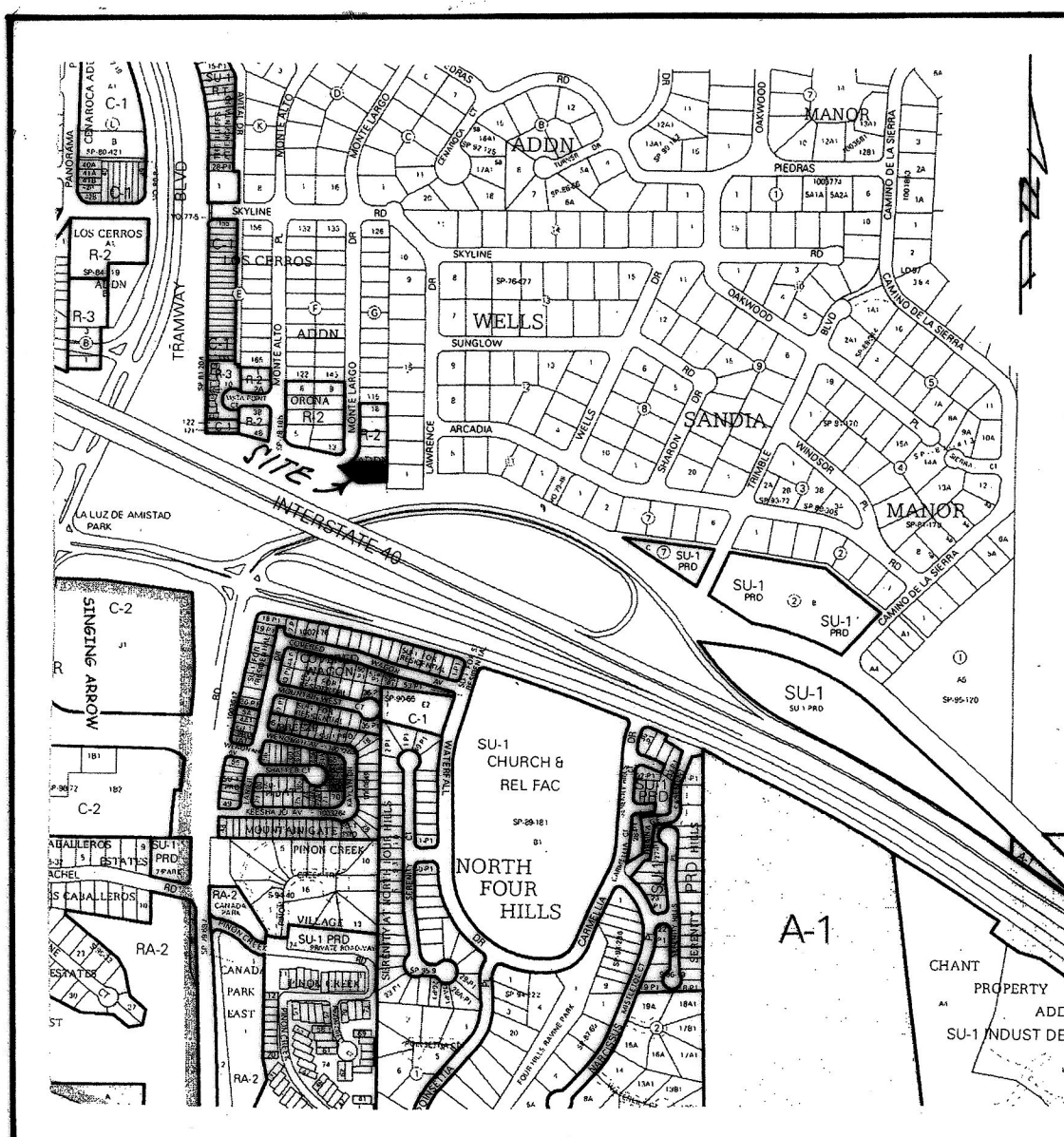
THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY 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.

LEGAL DESCRIPTION: LOT 14, ORONA ADDITION, ALBUQUERQUE, NEW MEXICO.
BENCH MARK REFERENCE: A.C.S. NO. "21-K23", ELEVATION = 5711.313; T.B.M. AS SHOWN ON THE PLAN HEREON.



GRADING AND DRAINAGE PLAN (CERTIFICATION: MARCH 13, 2015)

A PROPOSED PLAN
FOR
DUPLEX DWELLING UNITS
(172 MONTE LARGO N.E.)
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 2013



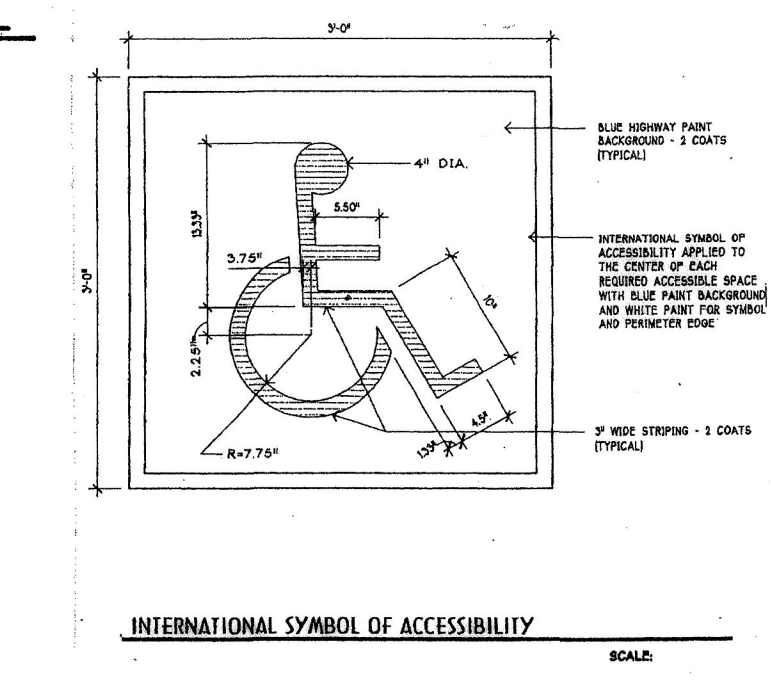
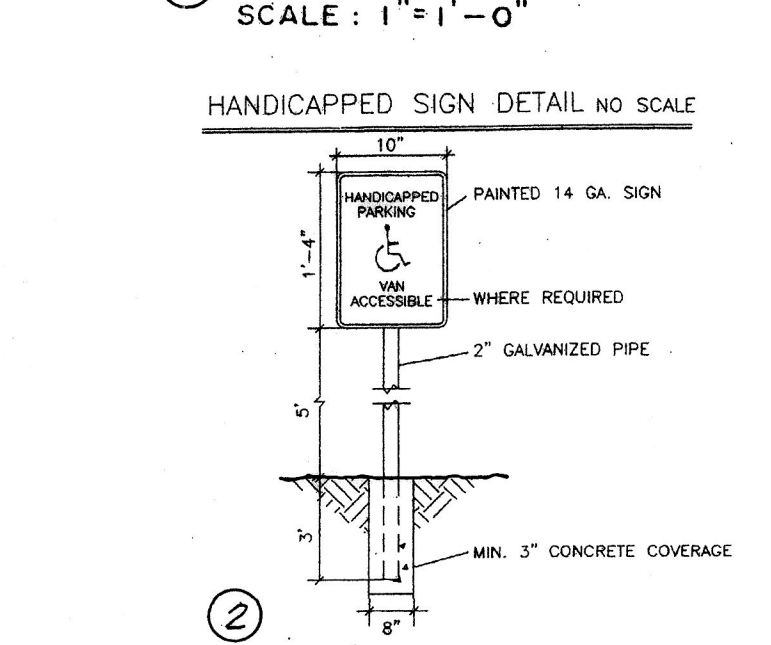
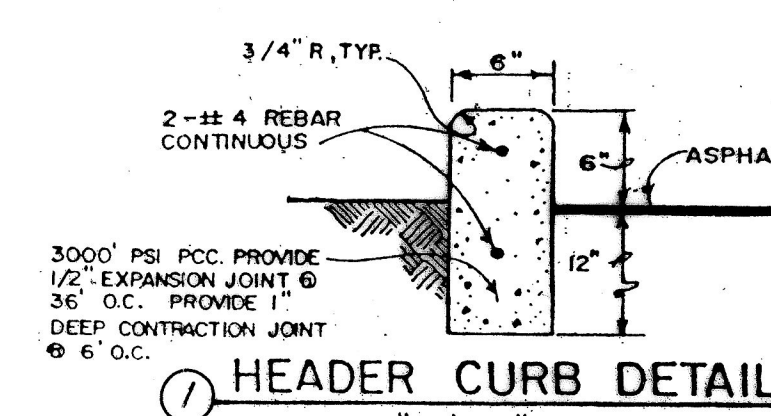
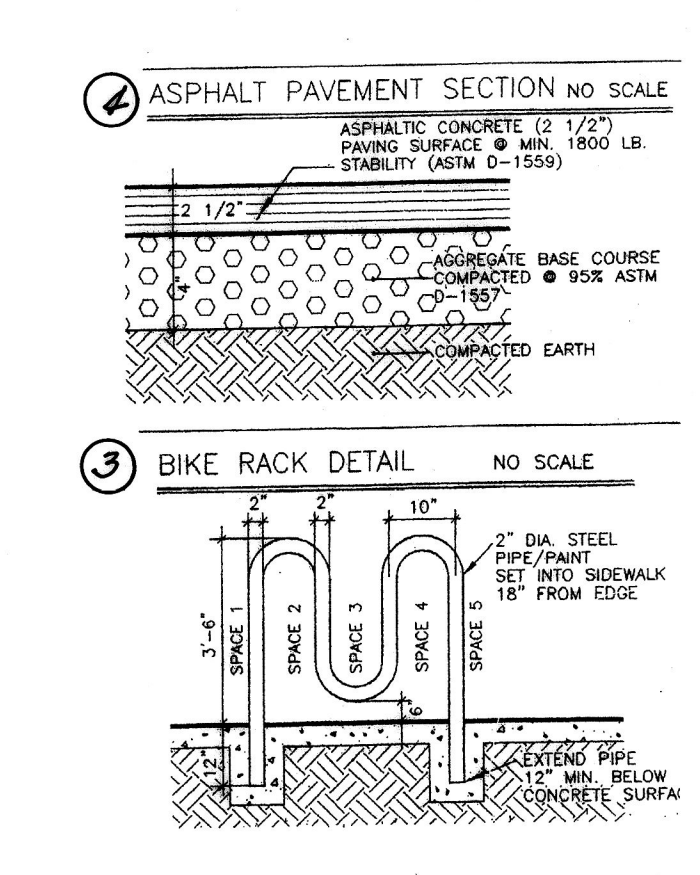
SITE DATA:

USAGE: FLEX APARTMENTS
 ZONED: "R-2"
 LOT AREA: 0.22 ACRE
 BUILDING AREA: 1,862.0 SQ. FT.
 LANDSCAPE AREA REQ. = 1,158.0 SQ. FT.
 LANDSCAPE AREA PROVIDED = 1,862.0 SQ. FT.
 PARKING REQ. = 15.5 SPACES/UNIT = 3 SPACES
 -10% BUS ROUTE = 0 SPACES
 NET SPACES REQ. = 3 SPACES
 SPACES PROVIDED = 3 SPACES

UTILITY PRECAUTIONS

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.

LEGAL DESCRIPTION: LOT 14, ORONA ADDITION, ALBUQUERQUE, NEW MEXICO.



TRAFFIC CIRCULATION LAYOUT APPROVED

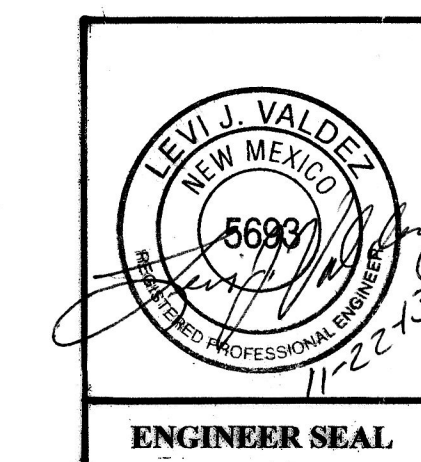
CLB 27 Nov '13
 Signed Date

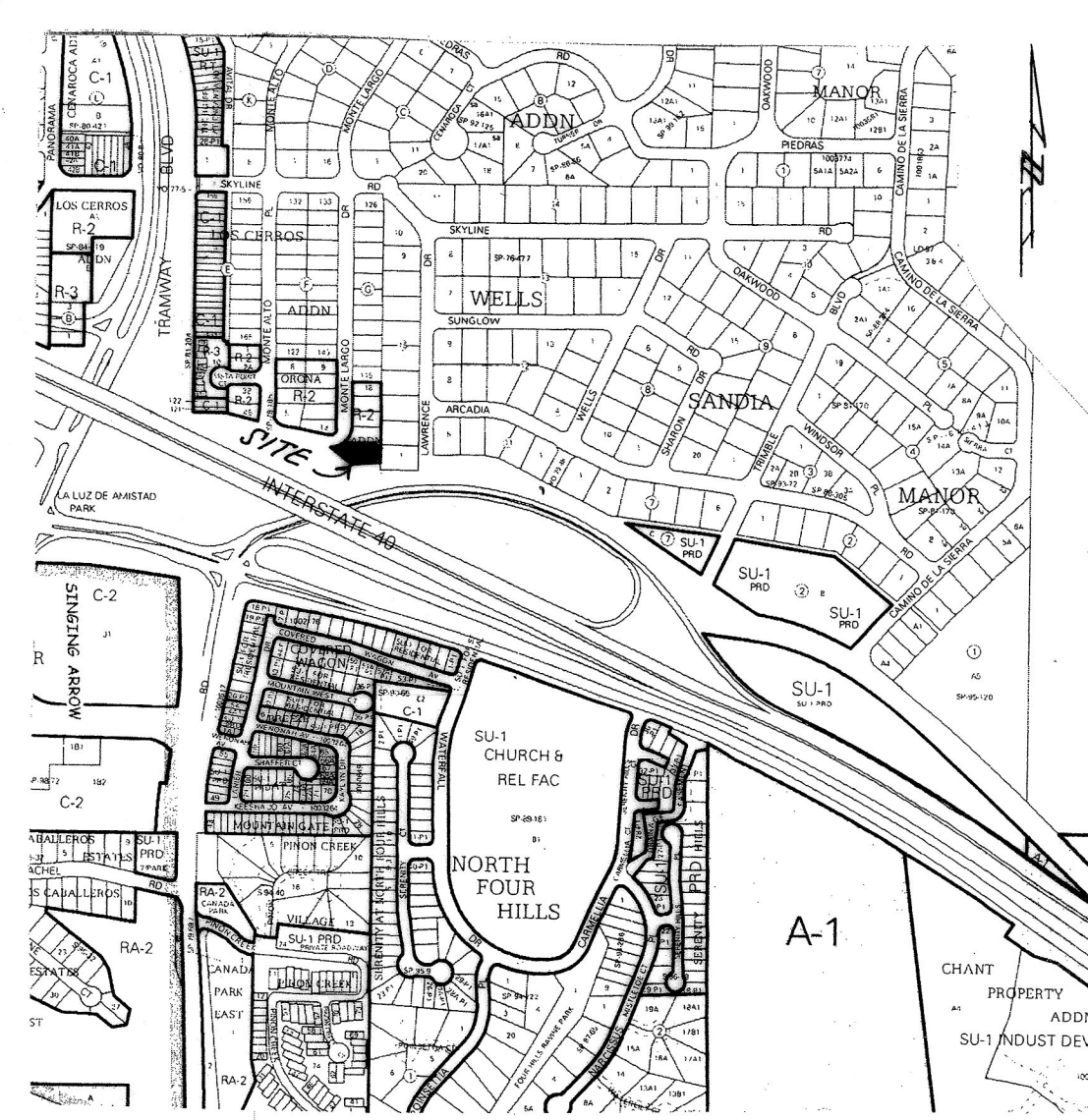
Public Infrastructure shown on these plans for information only and not part of approval. Separate DRG/Permit approval and Work Order required.

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.

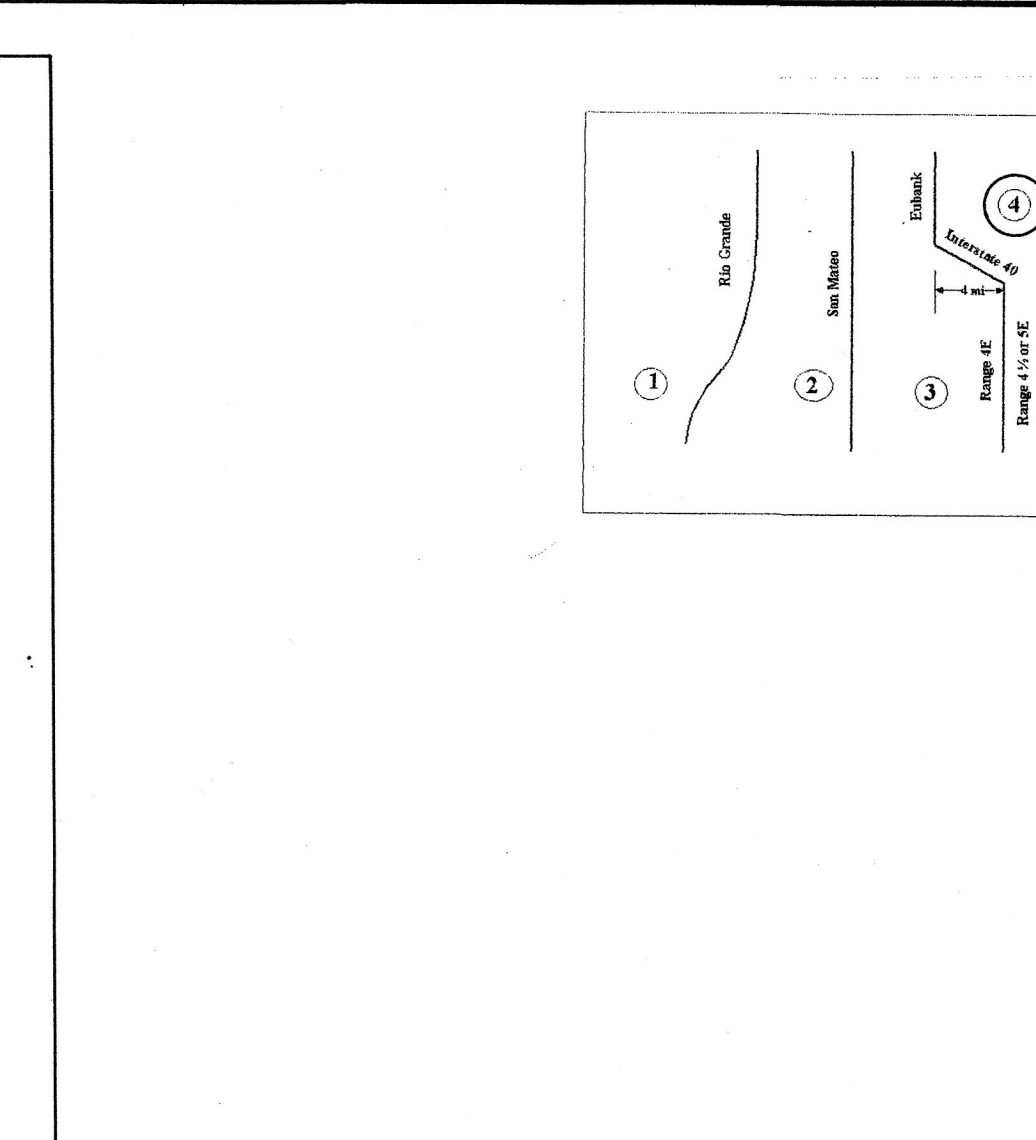
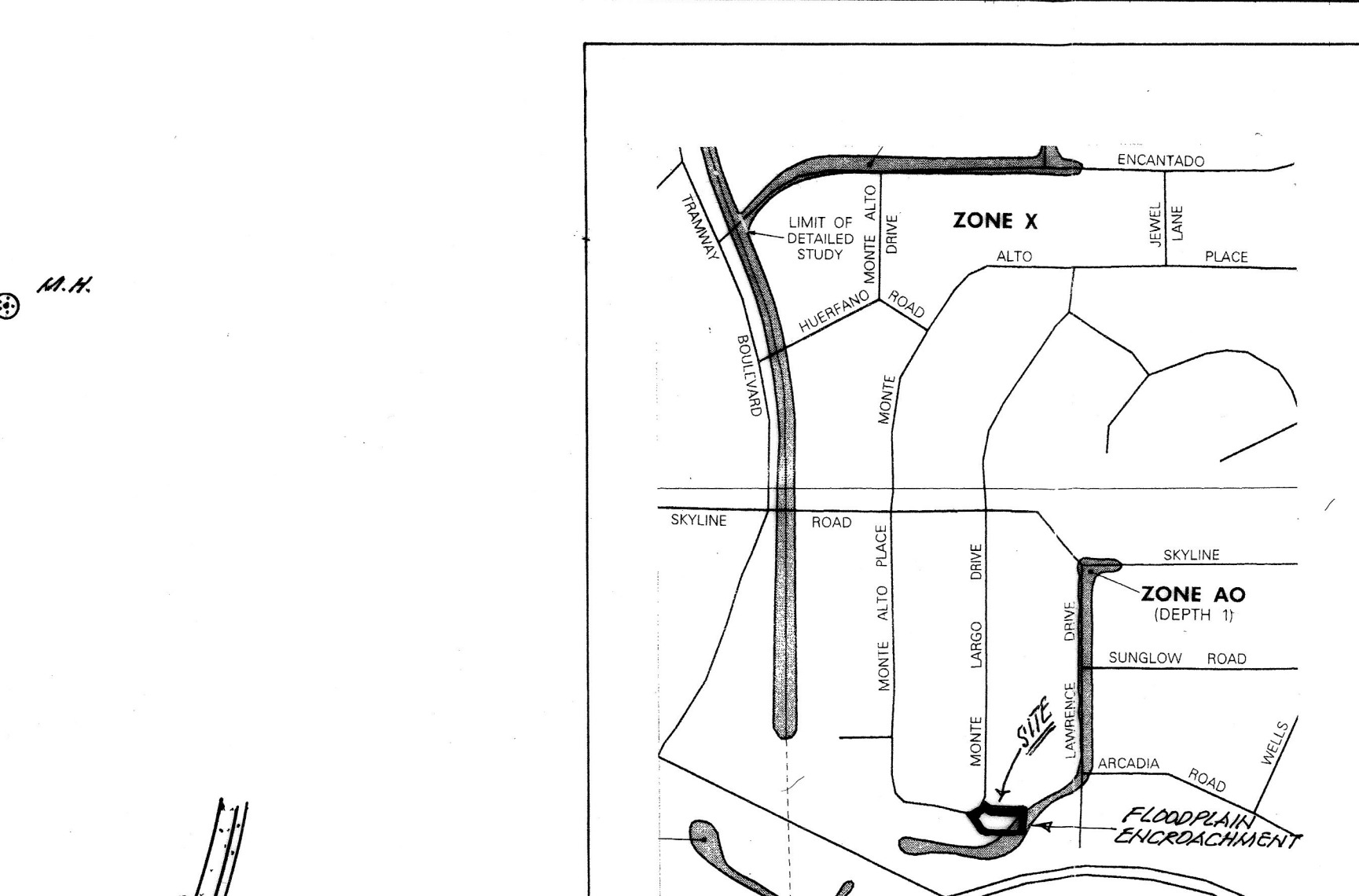
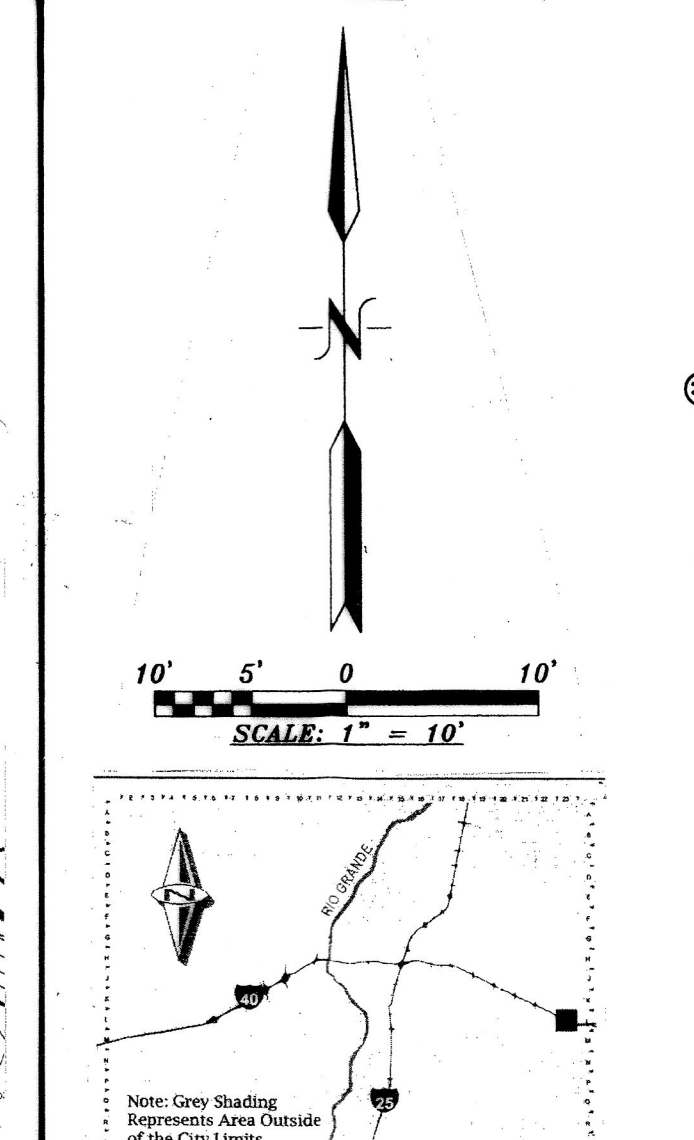
TRAFFIC CIRCULATION LAYOUT

A PROPOSED PLAN FOR
 DUPLEX DWELLING UNITS
 (172 MONTE LARGO N.E.)
 ALBUQUERQUE, NEW MEXICO
 SEPTEMBER, 2013





VICINITY MAP L-23-Z



PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

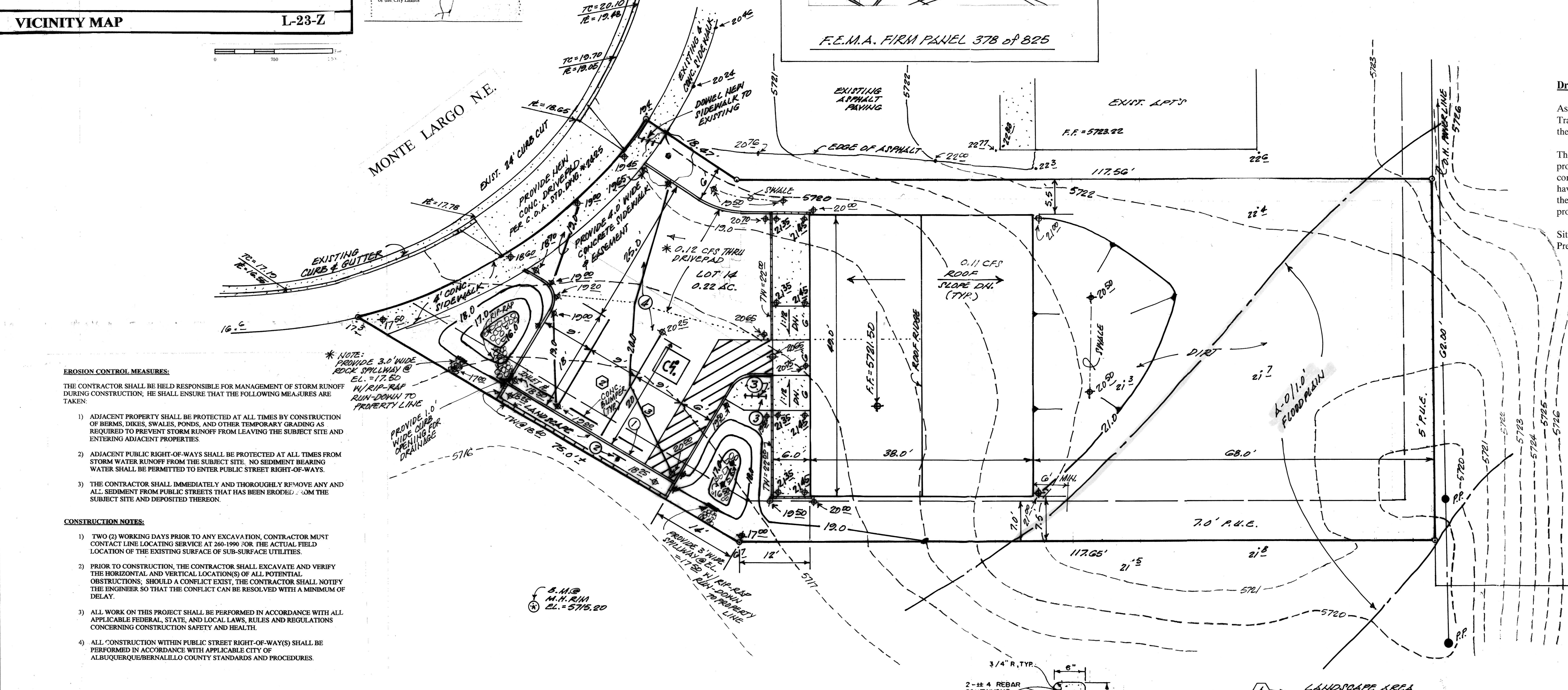
ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40, and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40, and East of the East boundary of Range 4 East, South of Interstate 40

Zone	Intensity
1	4.70 (1.84, 3.14)
2	5.05 (2.04, 3.41)
3	5.87 (2.31, 3.65)
4	5.61 (2.34, 3.83)

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundwater and infiltration capacity. Croplands. Unlined Arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (deeper landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by RCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the areal percentages in TABLE A-5 may be employed.

Zone	Treatment			
	A	B	C	D
1	1.29 (0.00, 0.24)	2.03 (0.33, 0.76)	2.87 (0.47, 1.49)	4.37 (1.69, 2.89)
2	1.56 (0.00, 0.38)	2.28 (0.08, 0.95)	3.14 (0.60, 1.71)	4.70 (1.86, 3.14)
3	1.87 (0.00, 0.58)	2.60 (0.21, 1.19)	3.45 (0.78, 2.09)	5.02 (2.04, 3.39)
4	2.20 (0.05, 0.87)	2.92 (0.38, 1.45)	3.73 (1.00, 2.26)	5.25 (2.17, 3.57)



Drainage Comments:

As shown on the vicinity map hereon, the subject site is a vacant property located east of Tramway Blvd. N.E. and North of Interstate Highway 40, at 172 Monte Largo N.E., in the City of Albuquerque, Bernalillo County, New Mexico, (Zone Atlas Map L-23-Z).

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Site Area: 0.22 acres
Precipitation Zone: Four (4)

SITE AREA = 0.22 ACRE ZONE: FOUR (4)
PRECIPITATION: 360 = 2.90 in.
1440 = 3.65 in.
10day = 5.95 in.

EXCESS PRECIPITATION: PEAK DISCHARGE:

TREATMENT	AREA	PEAK DISCHARGE
TREATMENT A	0.80 in.	2.20 cfs/ac.
TREATMENT B	1.08 in.	2.92 cfs/ac.
TREATMENT C	1.46 in.	3.73 cfs/ac.
TREATMENT D	2.64 in.	5.25 cfs/ac.

EXISTING CONDITIONS: PROPOSED CONDITIONS:

TREATMENT	AREA	AREA
TREATMENT A	0.22 ac.	0.11 ac.
TREATMENT B	0.00 ac.	0.00 ac.
TREATMENT C	0.00 ac.	0.03 ac.
TREATMENT D	0.00 ac.	0.08 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.80)(0.22) + (1.08)(0.00) + (1.46)(0.00) + (2.64)(0.00) / 0.22 = 0.80 in
V100-360 = (0.08)(0.22) / 12 = 0.014667 ac-ft = 638.9 cf

EXISTING PEAK DISCHARGE:

Q100 = (2.20)(0.22) + (2.92)(0.00) + (3.73)(0.00) + (5.25)(0.00) = 0.48 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.80)(0.11) + (1.08)(0.00) + (1.46)(0.03) + (2.64)(0.08) / 0.22 = 1.55 in
V100-360 = (1.55)(0.22) / 12 = 0.02861 ac-ft = 1,237.8 cf

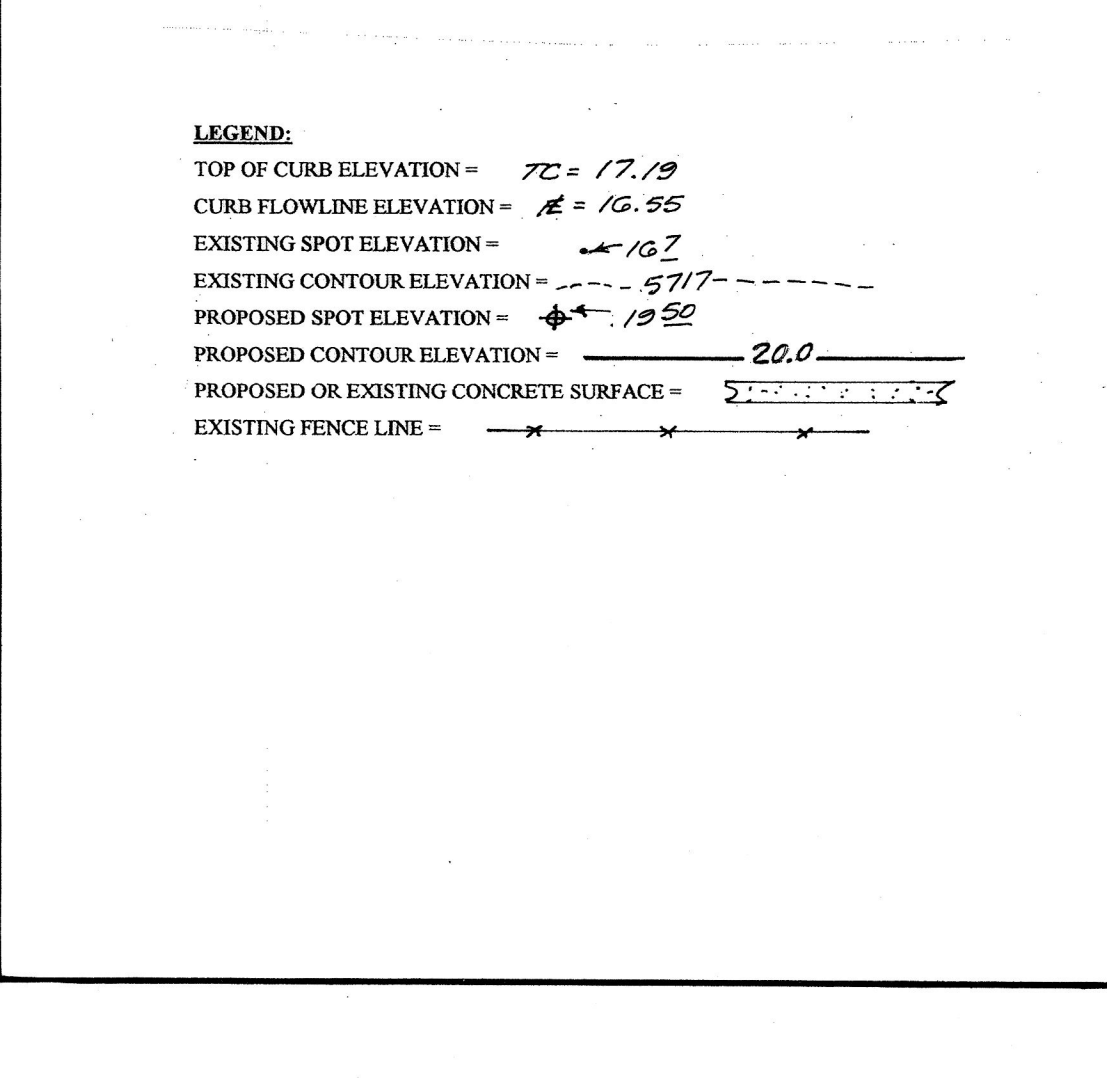
V100-1440 = (0.03) + (0.08)(3.65 - 2.90) / 12 = 0.05500 ac-ft = 1,524.6 cf

V100-10day = (0.05) + (0.08)(5.95 - 2.90) / 12 = 0.05033 ac-ft = 2,172.5 cf

PROPOSED PEAK DISCHARGE:

Q100 = (2.20)(0.11) + (2.92)(0.00) + (3.73)(0.03) + (5.25)(0.08) = 0.77 cfs

INCREASE: V100-360 = 598.9 cf
Q100 = 0.29 cfs

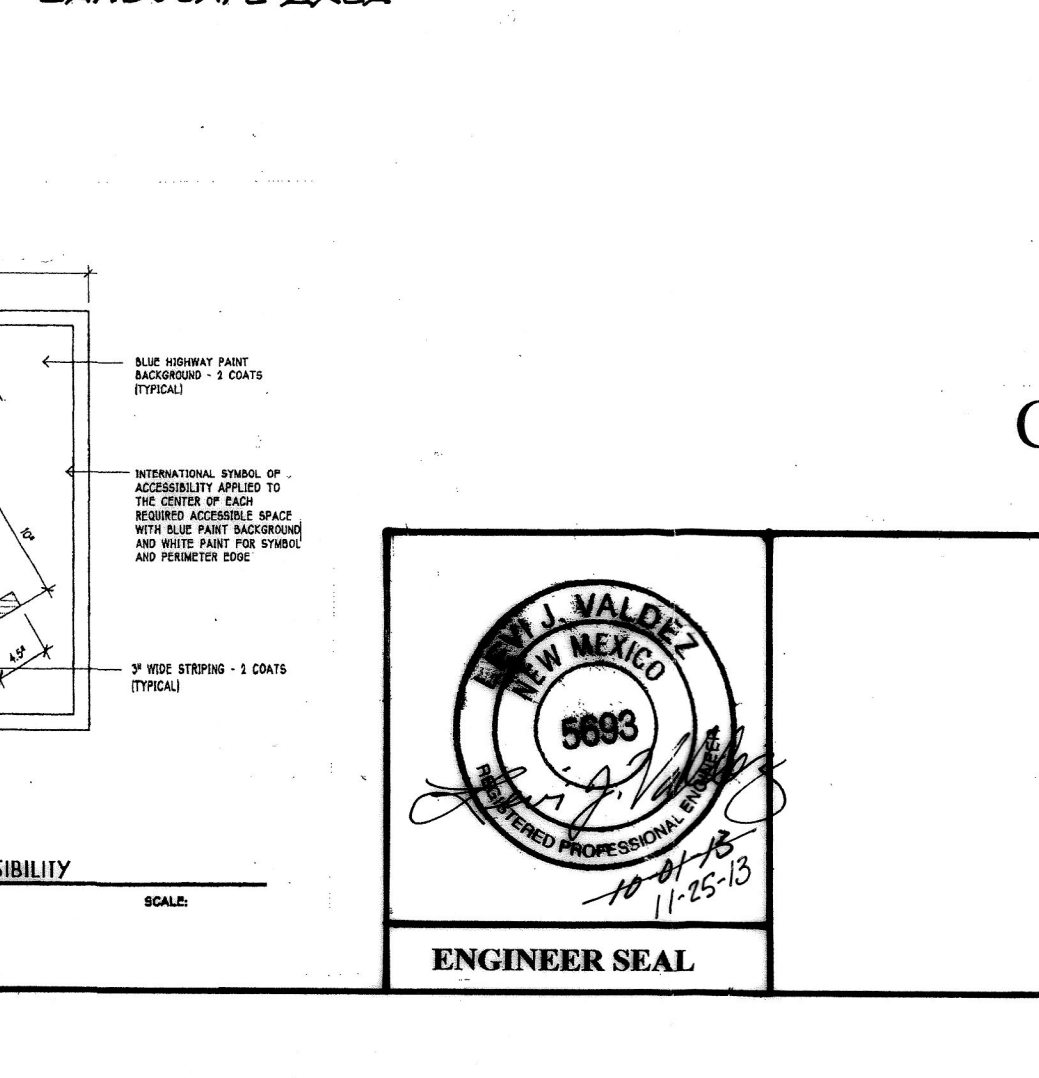
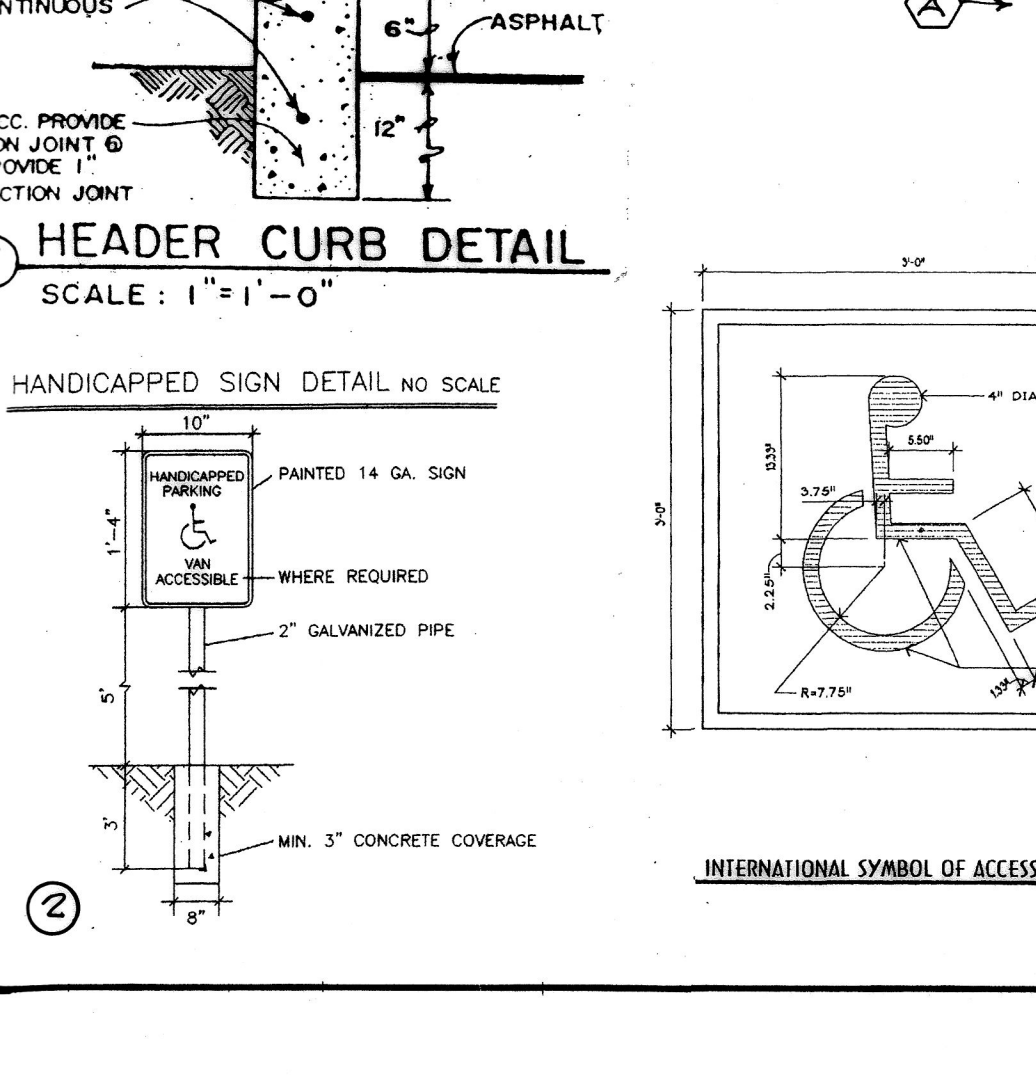
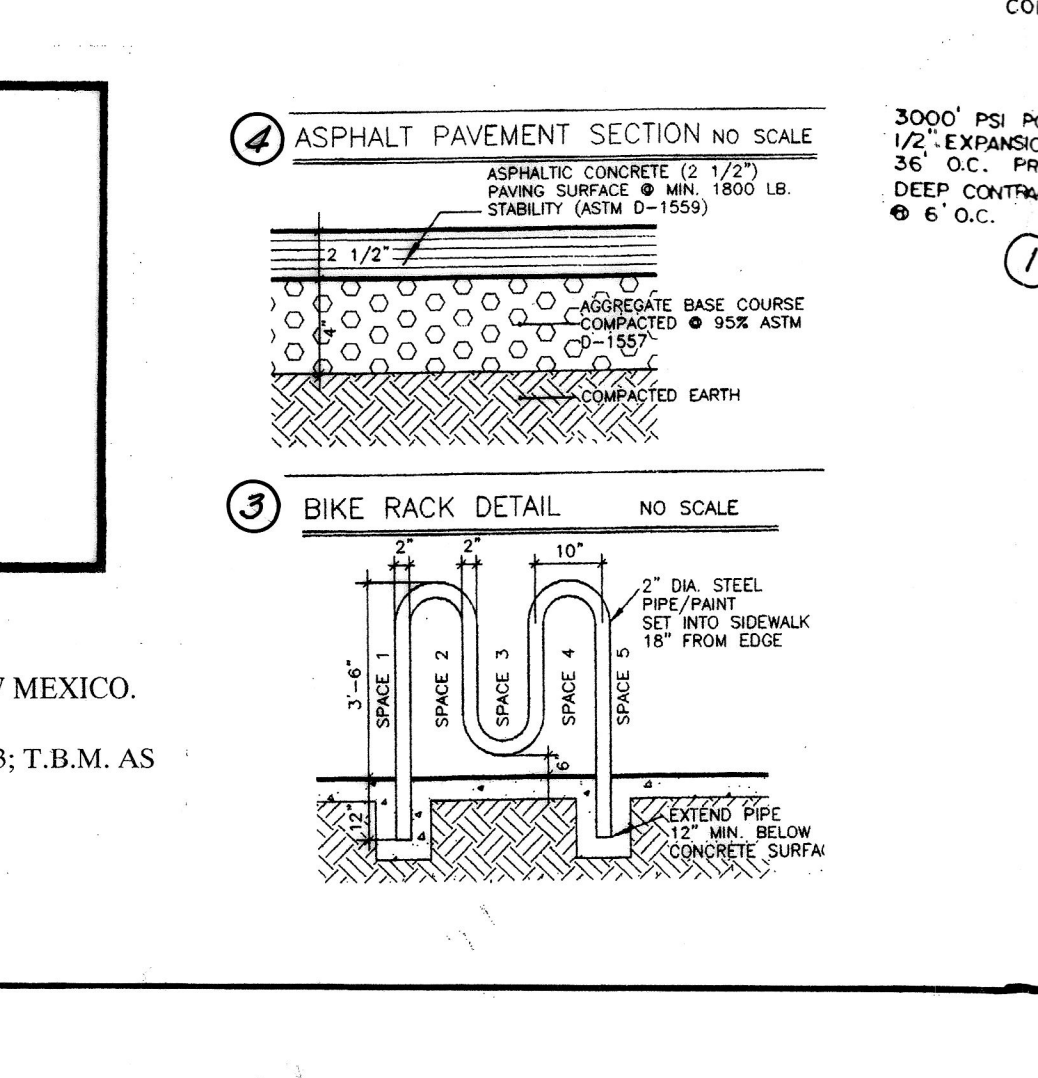


UTILITY PRECAUTIONS

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LEGAL DESCRIPTION: LOT 14, ORONA ADDITION, ALBUQUERQUE, NEW MEXICO.

BENCH MARK REFERENCE: A.C.S. NO. '21-K23', ELEVATION = 5711.313; T.B.M. AS SHOWN ON THE PLAN HEREON.

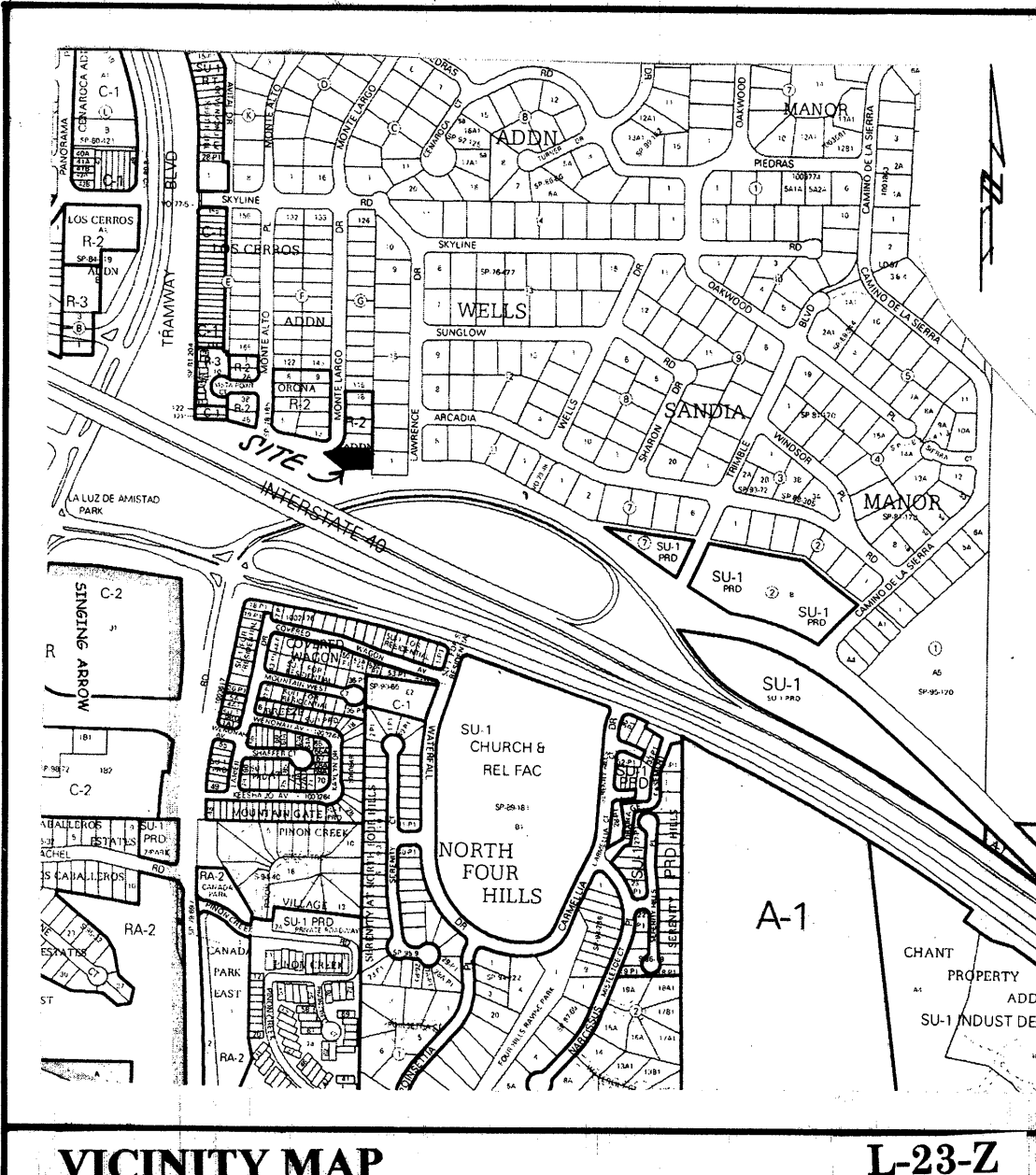


GRADING AND DRAINAGE PLAN

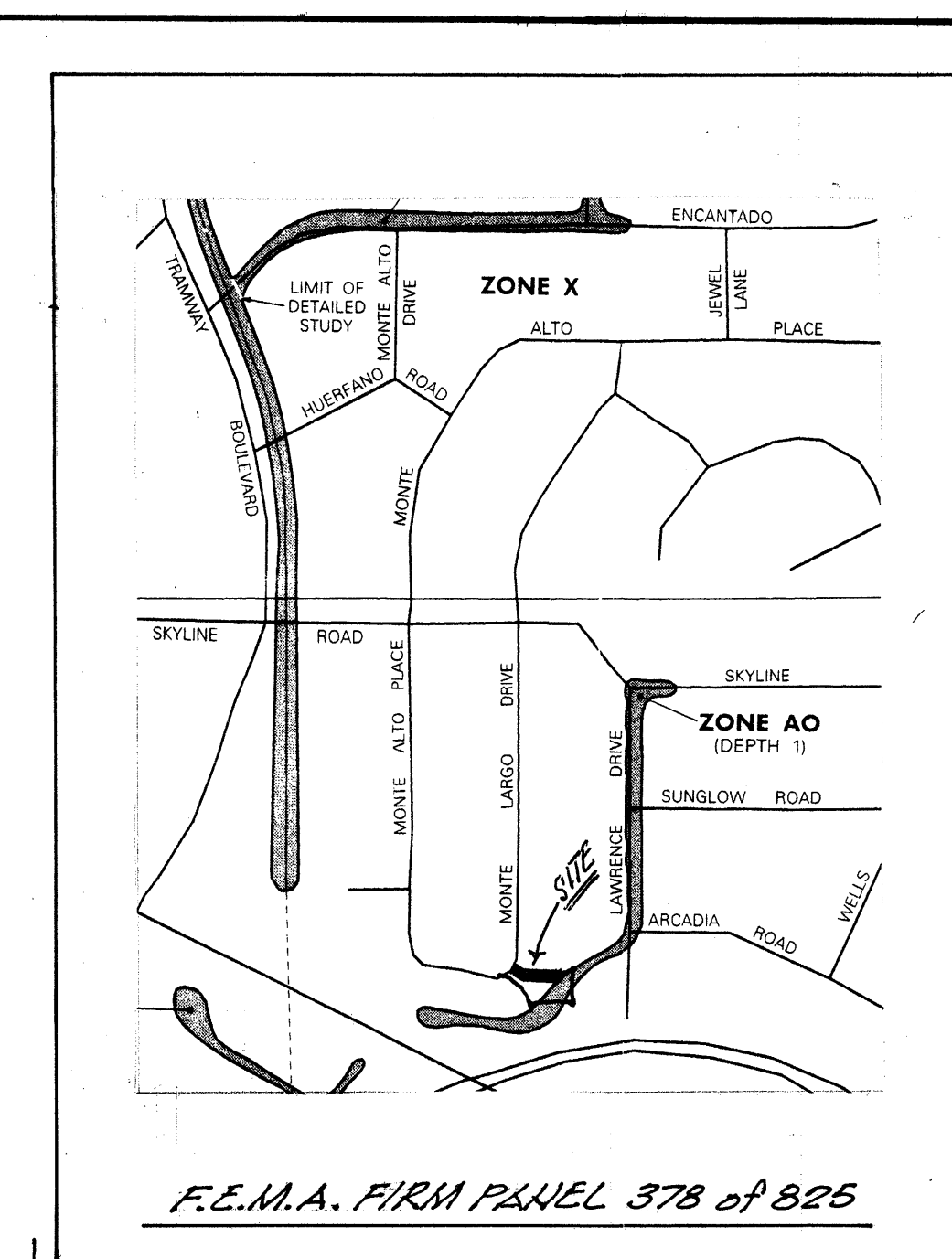
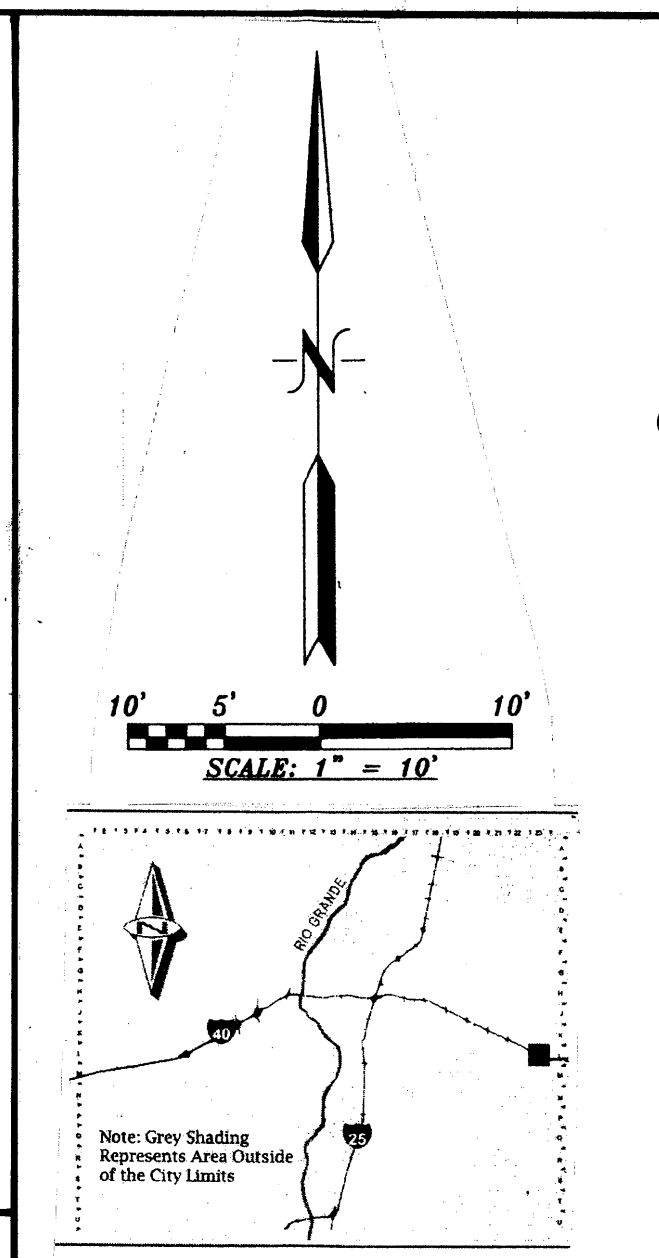
A PROPOSED PLAN FOR
DUPLIX DWELLING UNITS
(172 MONTE LARGO N.E.)
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 2013

RECEIVED NOV 27 2013 LAND DEVELOPMENT SECTION

ENGINEER SEAL



VICINITY MAP L-23-Z



PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40, and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40, and East of the East boundary of Range 4 East, South of Interstate 40

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unirrigated Arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds, and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the areal percentages in TABLE A-5 may be employed.

Zone	Intensity (IN/HR AT t _c = 0.2 hour)
1	4.70 (1.84, 3.14)
2	5.35 (2.04, 3.41)
3	3.38 (2.21, 3.65)
4	5.61 (2.34, 3.83)

Zone	Treatment 100-YR (2-YR, 10-TR)			
	A	B	C	D
1	1.29 (0.00, 0.24)	2.03 (0.33, 0.76)	2.97 (0.47, 1.49)	4.37 (1.69, 2.89)
2	1.56 (0.00, 0.38)	2.28 (0.08, 0.95)	3.14 (0.60, 1.71)	4.70 (1.86, 3.14)
3	1.87 (0.00, 0.58)	2.60 (0.21, 1.19)	3.45 (0.78, 2.009)	5.02 (2.04, 3.39)
4	2.20 (0.05, 0.87)	2.92 (0.38, 1.45)	3.73 (1.00, 2.26)	5.25 (2.17, 3.57)

Drainage Comments:

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Precipitation Zone: Four (4)

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1440 = 3.65 in.
10day = 5.95 in.

EXCESS PRECIPITATION: PEAK DISCHARGE:
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TREATMENT C 1.46 in. 3.73 cfs/ac.
TREATMENT D 2.64 in. 5.25 cfs/ac.

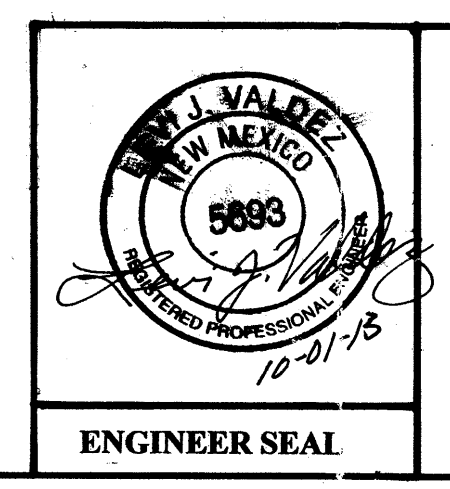
EXISTING CONDITIONS: PROPOSED CONDITIONS:
TREATMENT A AREA 0.22 ac. AREA 0.00 ac.
TREATMENT B 0.00 ac. AREA 0.00 ac.
TREATMENT C 0.00 ac. AREA 0.09 ac.
TREATMENT D 0.00 ac. AREA 0.13 ac.

EXISTING EXCESS PRECIPITATION: 0.22 ac.
Weighted E = (0.80)x(0.22)+(1.08)x(0.00)+(1.46)x(0.00)+(2.64)x(0.00)/0.22 = 0.80 in
V100-360 = (0.08)x(0.22)/12 = 0.014667 ac-ft = 638.9 cf

EXISTING PEAK DISCHARGE: Q100 = (2.20)x(0.22)+(2.92)x(0.00)+(3.73)x(0.00)+(5.25)x(0.00) = 0.48 cfs
PROPOSED EXCESS PRECIPITATION: Weighted E = (0.80)x(0.00)+(1.08)x(0.00)+(1.46)x(0.09)+(2.64)x(0.13)/0.22 = 2.16 in
V100-360 = (2.16)x(0.22)/12.0 = 0.03960 ac-ft = 1,725.0 cf
V100-1440 = (0.04)+(0.13)x(3.65 - 2.90)/12 = 0.048125 ac-ft = 2,096.3 cf
V100-10day = (0.04)+(0.13)x(5.95 - 2.90)/12 = 0.073042 ac-ft = 3,181.7 cf

PROPOSED PEAK DISCHARGE: Q100 = (2.20)x(0.00)+(2.92)x(0.00)+(3.73)x(0.09)+(5.25)x(0.13) = 1.02 cfs
INCREASE: V100-360 = 1,052.7 cf
Q100 = 0.45 cfs

GRADING AND DRAINAGE PLAN



A PROPOSED PLAN
FOR
DUPLEX DWELLING UNITS
(172 MONTE LARGO N.E.)
ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 2013

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

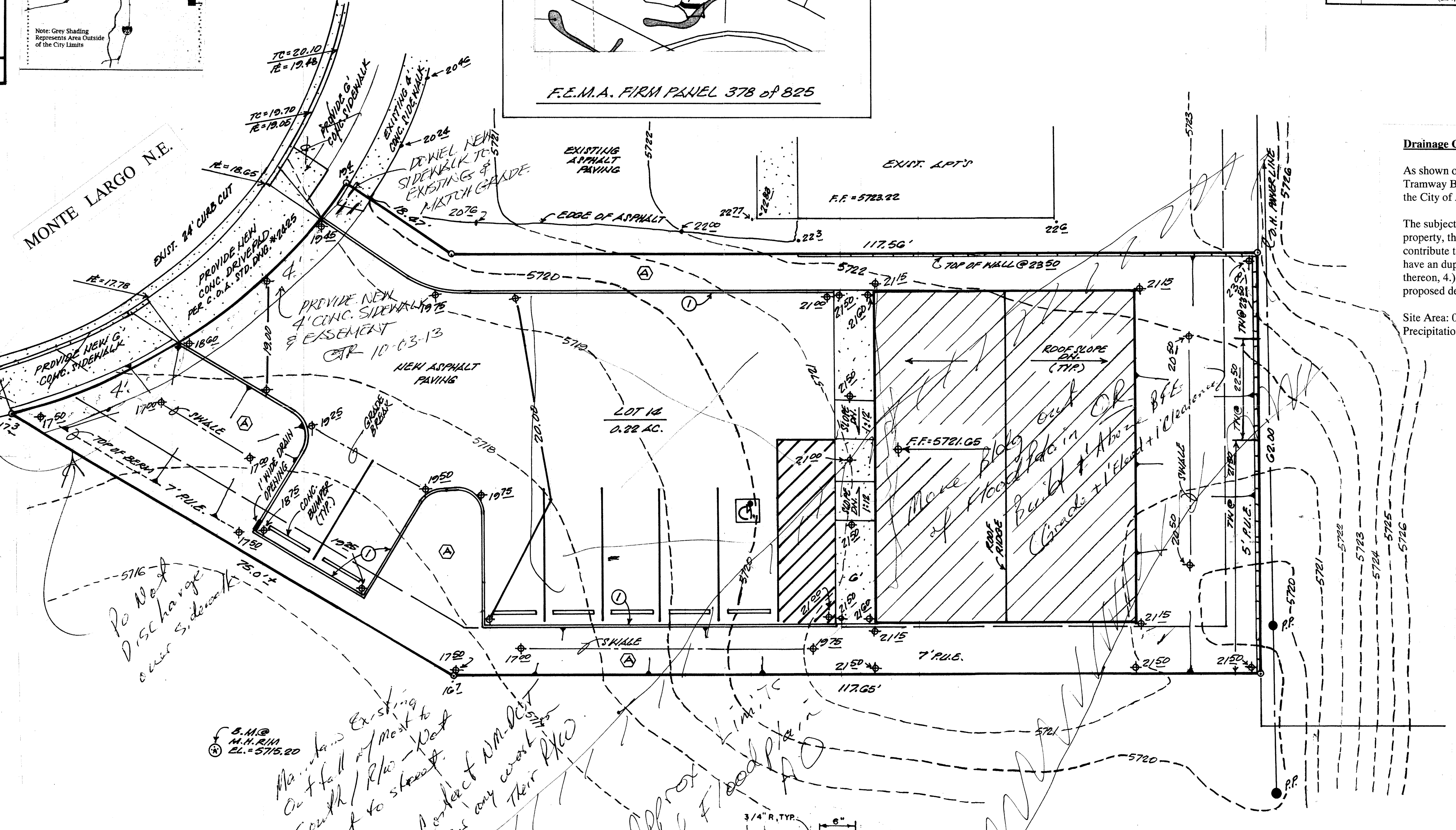
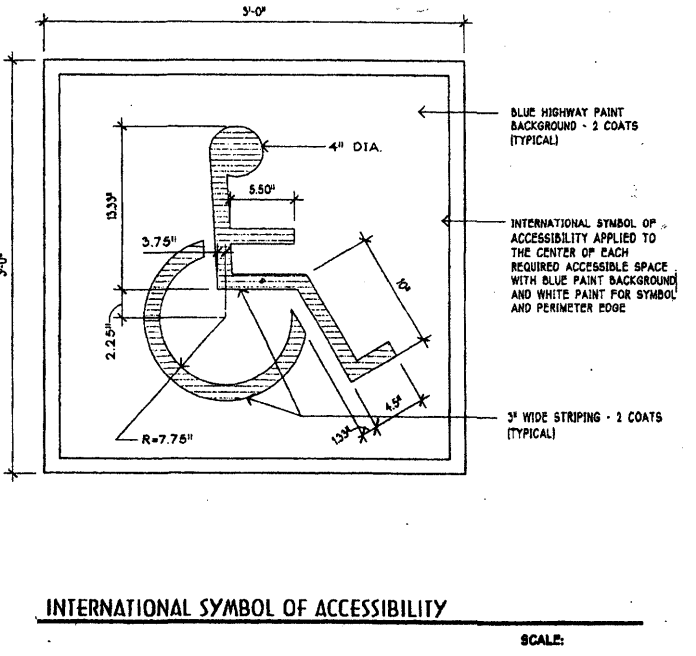
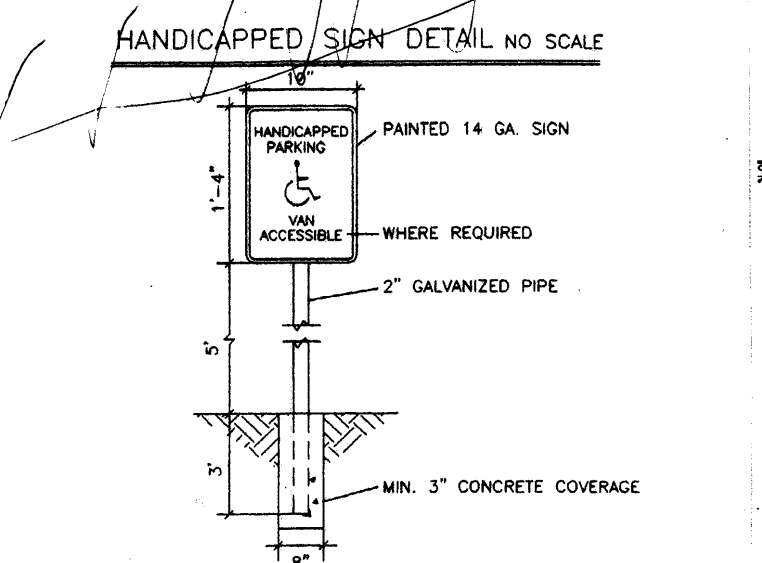
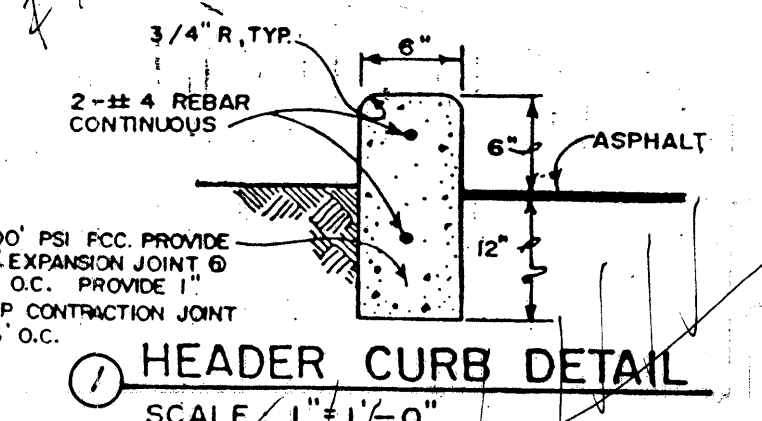
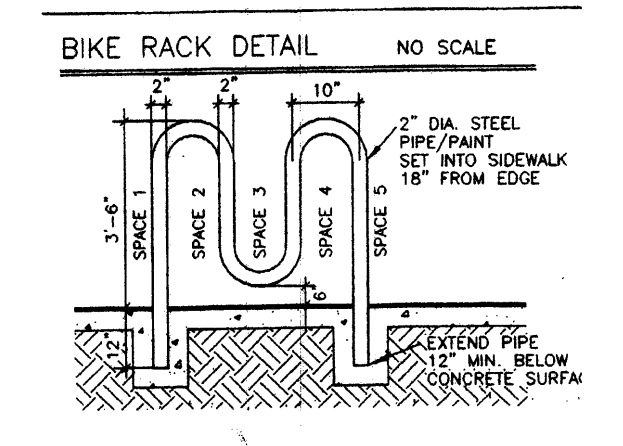
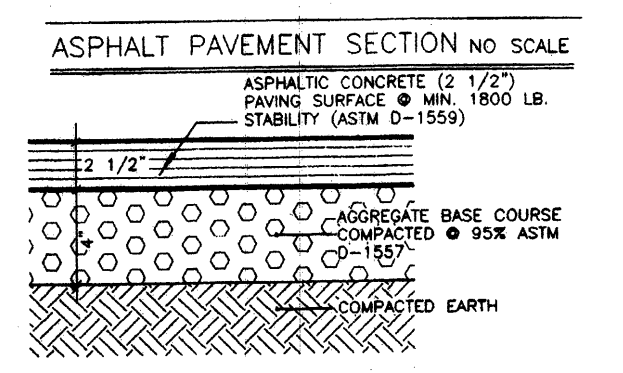
- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

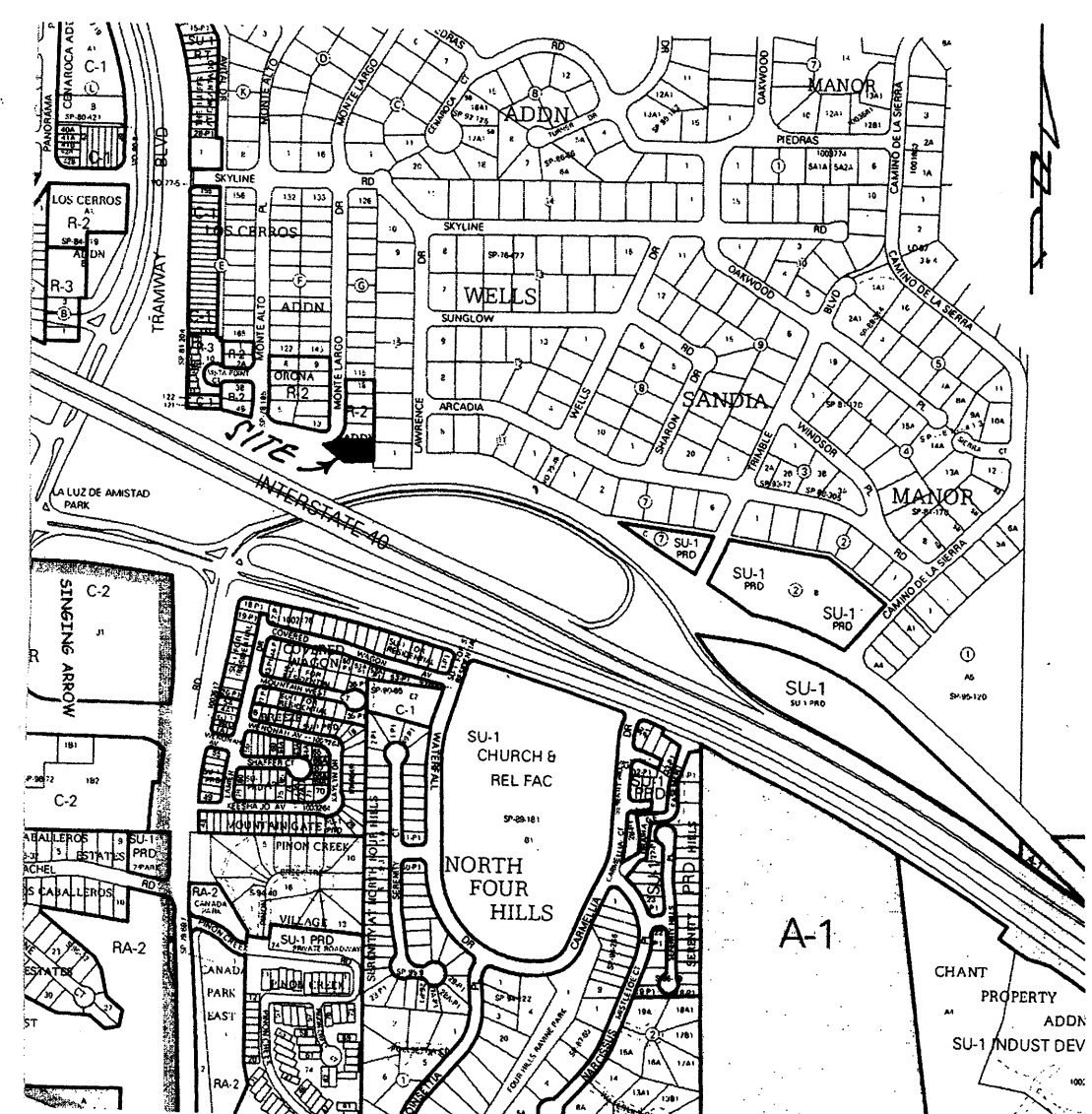
CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 360-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAYS(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND:
TOP OF CURB ELEVATION = 72 = 17.19
CURB FLOWLINE ELEVATION = 72 = 16.55
EXISTING SPOT ELEVATION = 16.7
EXISTING CONTOUR ELEVATION = 16.7
PROPOSED SPOT ELEVATION = 17.19
PROPOSED CONTOUR ELEVATION = 20.0
PROPOSED OR EXISTING CONCRETE SURFACE = 20.0
EXISTING FENCE LINE =

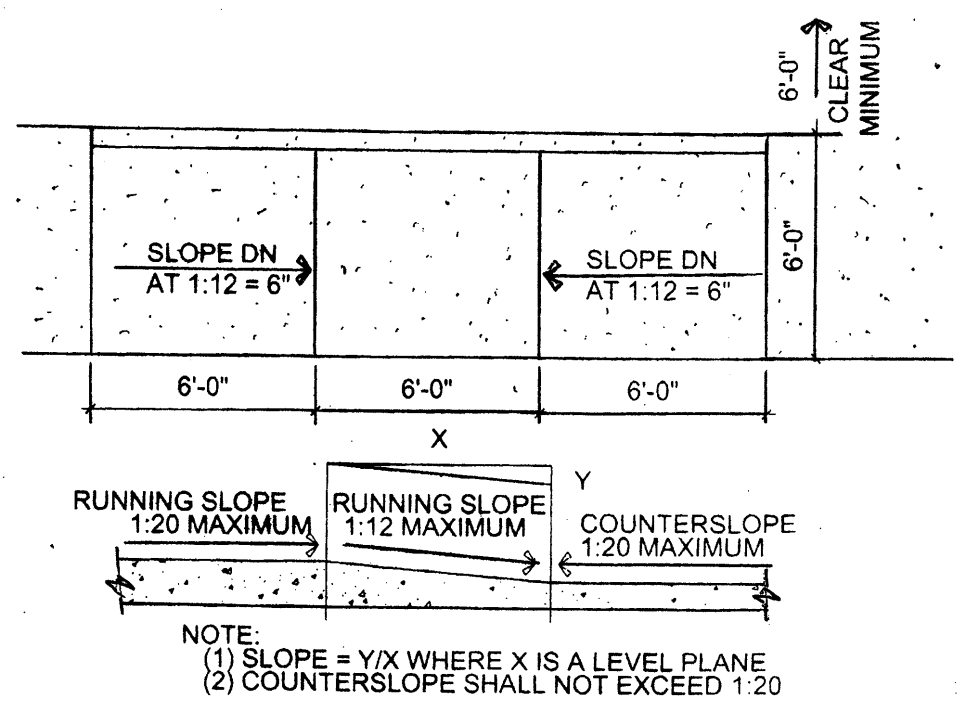
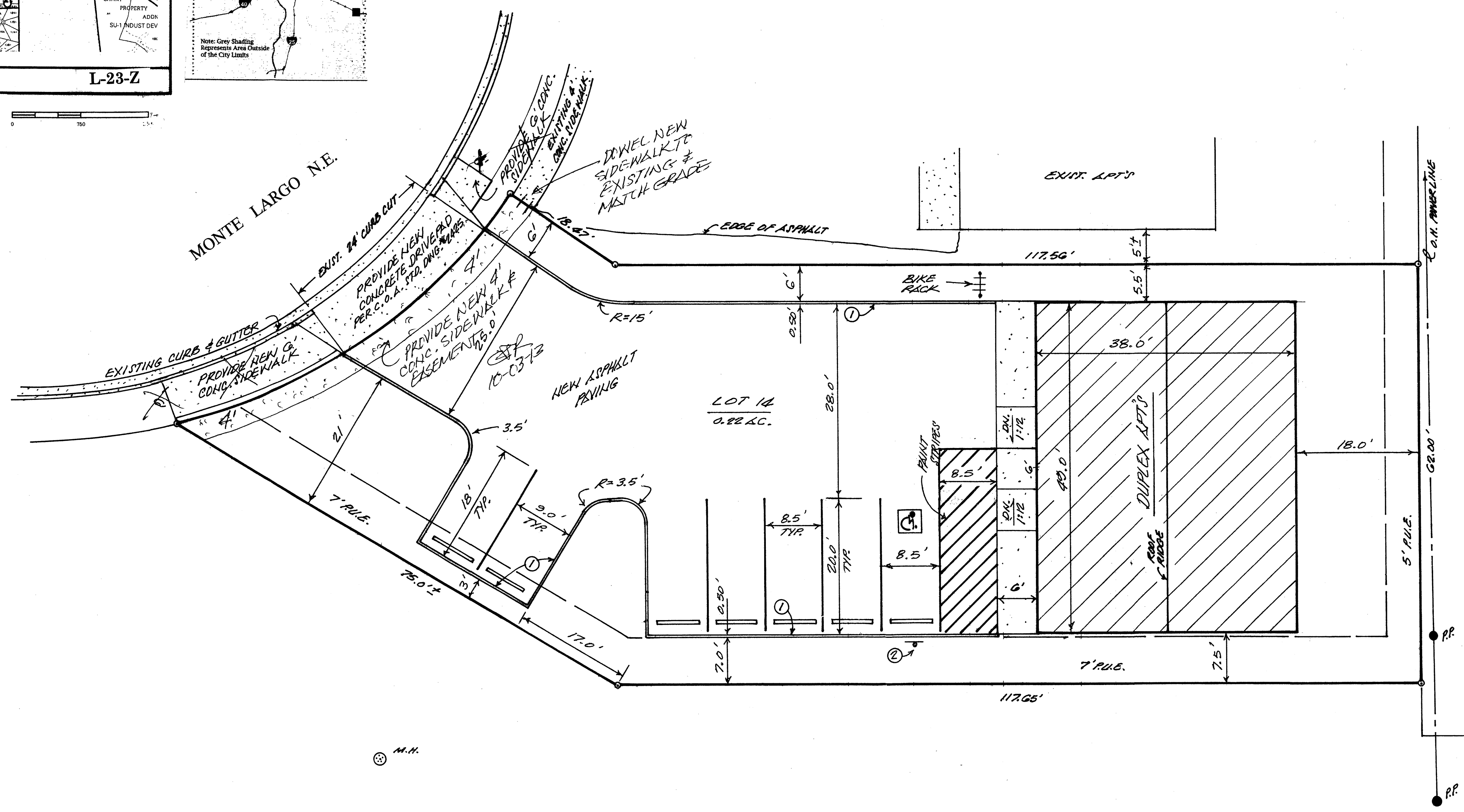
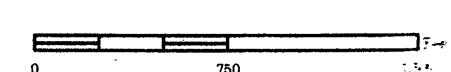
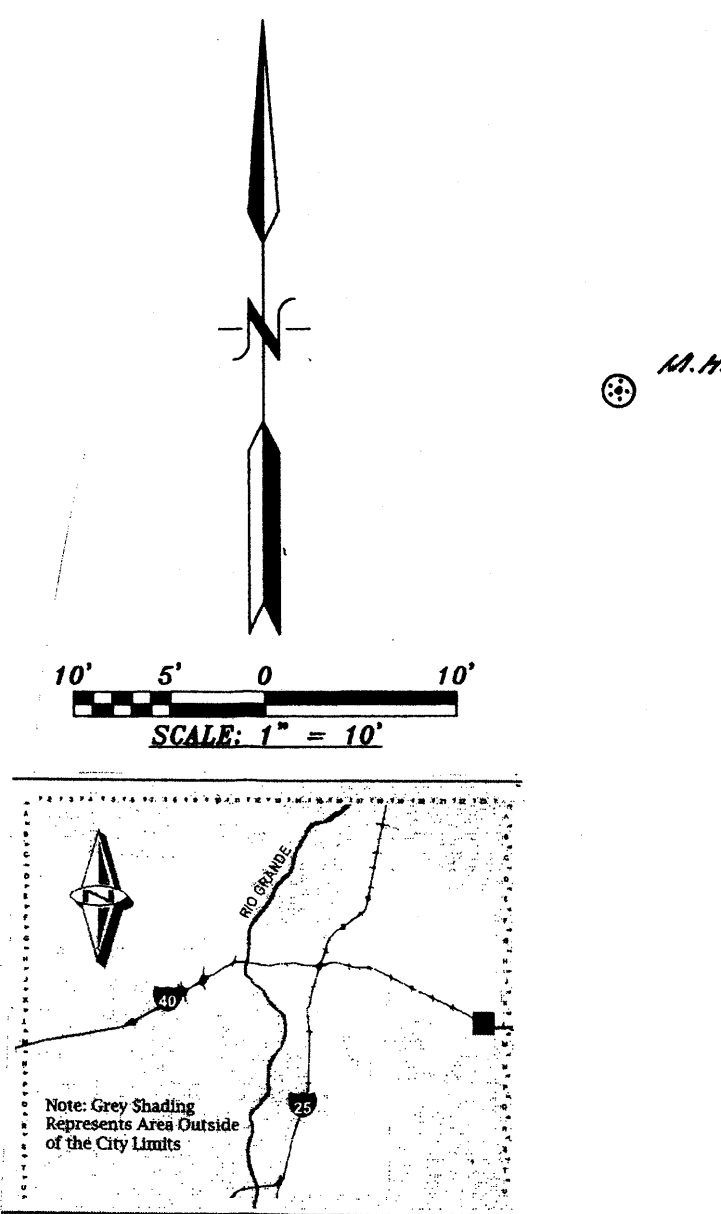
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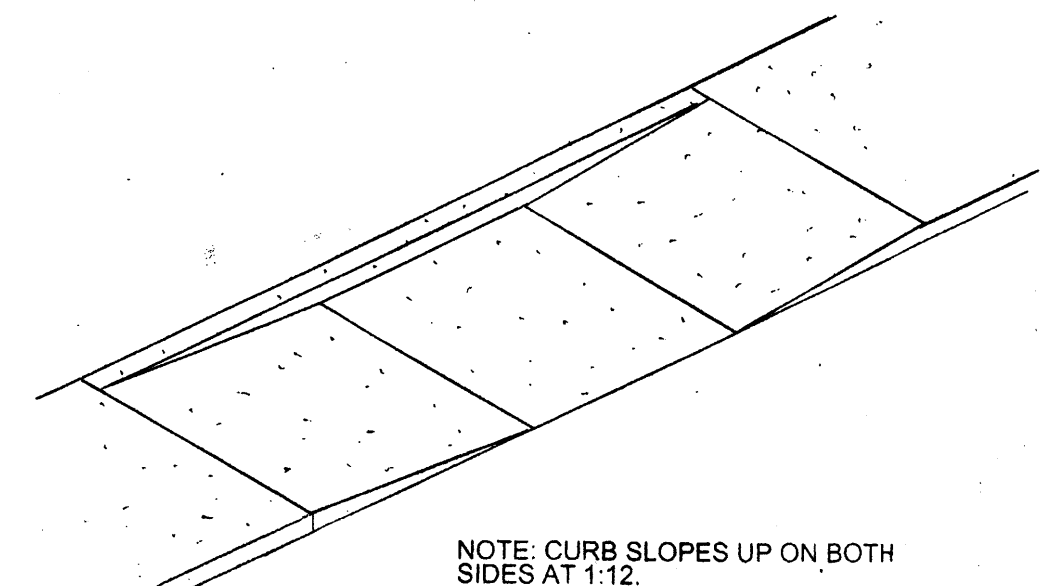


VICINITY MAP

L-23-Z



NOTE:
(1) SLOPE = Y/X WHERE X IS A LEVEL PLANE
(2) COUNTERSLOPE SHALL NOT EXCEED 1:20



NOTE: CURB SLOPES UP ON BOTH SIDES AT 1:12.

H.C. SIDEWALK DETAILS
N.T.S.

SITE DATA:

USAGE: PLEX APARTMENTS
ZONED: "R-2"
LOT AREA: 0.22 ACRE
BUILDING AREA: 1,862.0 SQ. FT.
LANDSCAPE AREA REQ. = 1,158.0 SQ. FT.
LANDSCAPE AREA PROVIDED = 2,141.0 SQ. FT.
PARKING REQ. = 1.5 SPACES/UNIT = 3 SPACES
-10% BUS ROUTE = 0 SPACES
NET SPACES REQ. = 3 SPACES
SPACES PROVIDED = 7 SPACES

ALL WHEELCHAIR RAMPS LOCATED WITHIN THE PUBLIC RIGHT OF WAY MUST HAVE TRUNCATED DOMES.

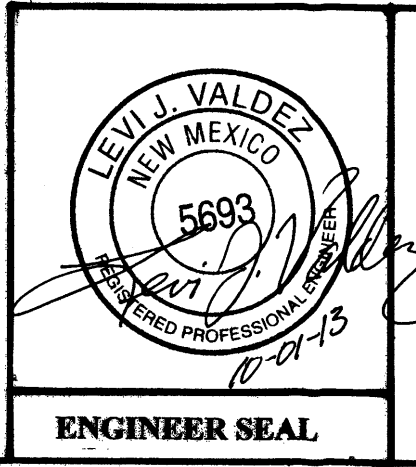
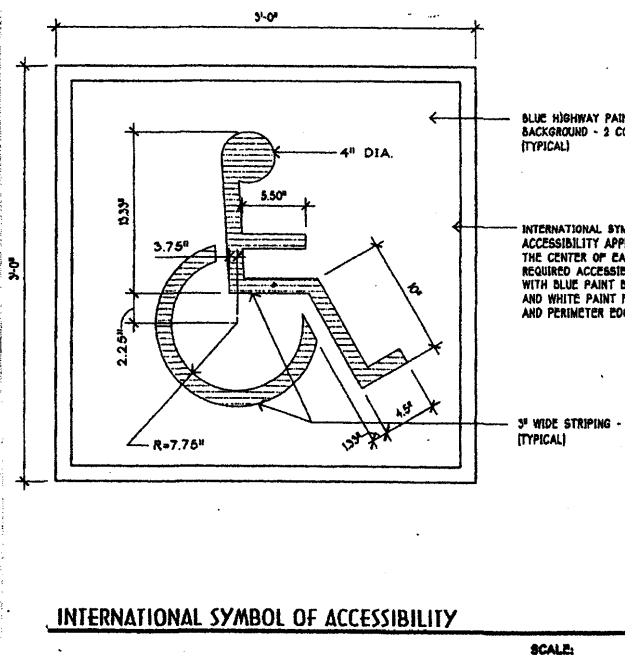
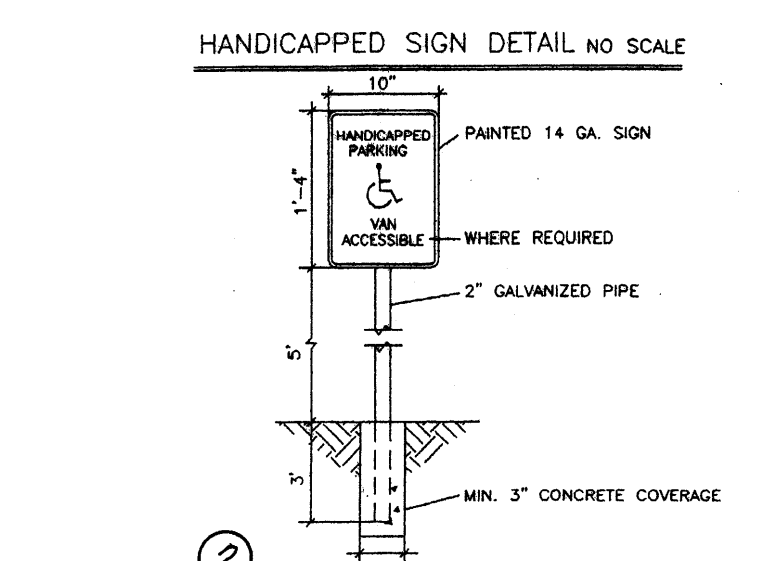
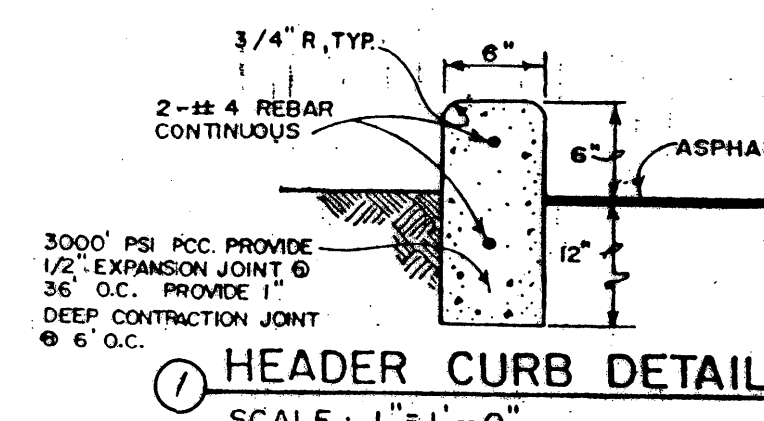
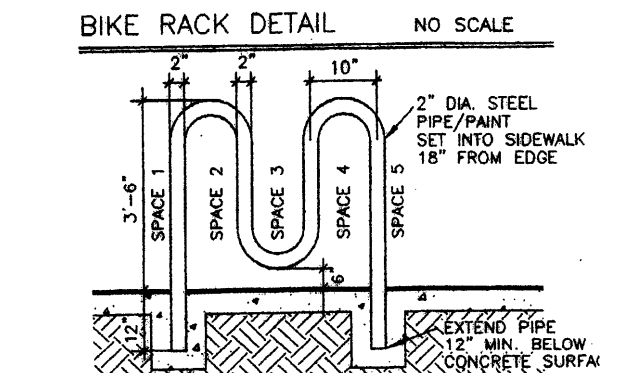
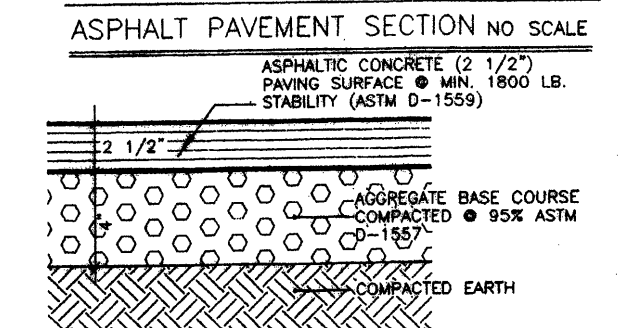
TRAFFIC CIRCULATION LAYOUT APPROVED

Signed: *CLB* Date: 10/3/13

Public Infrastructure shown on these plans for information only and not part of approval. Separate DRC/Permit approval and Work Order required.

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