

VICINITY MAP G-14-Z

GRAPHIC SCALE IN FEET

0 250 500 750 1000

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 HERMS, 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 = N/A

CURB FLOWLINE ELEVATION = N/A

EXISTING SPOT ELEVATION = 66.1

EXISTING CONTOUR ELEVATION = 66.0

PROPOSED SPOT ELEVATION = N/A

PROPOSED CONTOUR ELEVATION = N/A

PROPOSED OR EXISTING CONCRETE SURFACE = N/A

EXISTING FENCE LINE = N/A

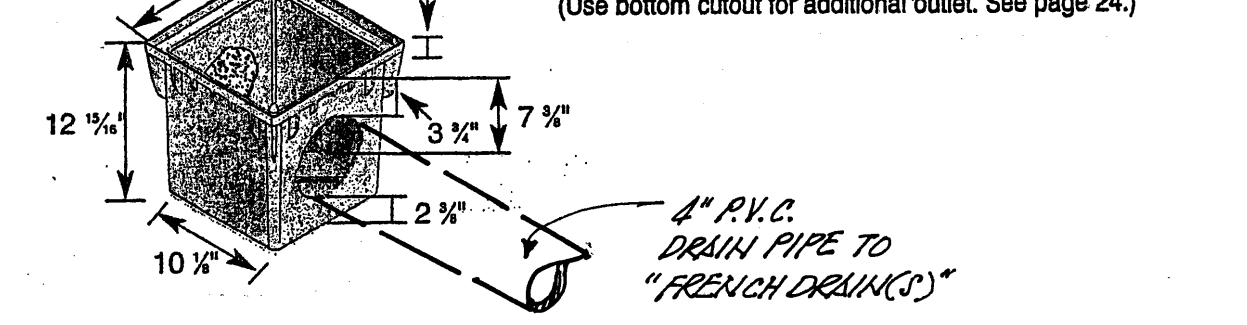
GENERAL NOTES:

- NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.

12" CATCH BASIN SERIES (PROVIDE 48" MIN. DEPTH "FRENCH DRAIN").

Part No.	Description	Color	Pkg. Qty.	Wt. (lbs.)	Est. Price (EA)	Product Class	Specifications
1200	12" x 12" Catch Basin, 2 Openings	Black	4	4.25	36.62	10ND	NDS #1200, #1203, or
1203	12" x 12" Catch Basin, 3 Openings	Black	4	3.75	45.28	10ND	#1204, 12" x 12" Tapered
1204	12" x 12" Catch Basin, 4 Openings	Black	4	3.75	49.61	10ND	Catch Basin.

Requires either #1206, #1242, #1243, #1245, #1266 or #1889 Universal Outlet for each opening. (Use bottom cutout for additional outlet. See page 24.)



Part No.	ADA Compliant Description	Color	Pkg. Qty.	Wt. (lbs.)	Est. Price (EA)	Product Class	Specifications
1213	12" x 12" Square Cast Iron Grate	Black	1	15.00	79.79	10ND	NDS #1213, 12" Square Heavy Duty Cast Iron Grate. Open surface area 59.50 square inches, 77.95 GPM.

Use with 12" x 12" Catch Basin Series.

ADA Compliant

LOAD RECOMMENDATION GUIDE

Load Recommendation Guide

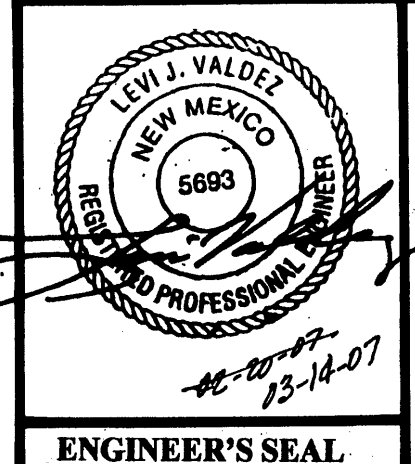
- Class A**
- Loads of 1-60 psi.
 - Recommended for pedestrians, bicycles and wheel chair traffic.
- Class B**
- Loads of 61-175 psi.
 - Recommended for medium-duty pneumatic tire traffic, autos and light trucks at speeds less than 20 m.p.h.
- Class C**
- Loads of 176-325 psi.
 - Recommended for heavy-duty pneumatic tire forklifts and tractor trailers at speeds less than 20 m.p.h., H-20 rated.
- Class D**
- Loads of 326-575 psi.
 - Recommended for heavy-duty hard tire forklifts at speeds less than 20 m.p.h., H-20 rated.

Note: Some installations may require a concrete collar to meet load rating. Loads are based on encasing product in concrete. Product must be installed using NDS instructions.

FRENCH DRAIN: 1.) 300.0 C.F.
2.) 270.0 C.F.
3.) 180.0 C.F.
TOTAL = 750.0 C.F. X 0.33 = 248.0 C.F.

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.



A PROPOSED PLAN FOR A SURFACE DRAINAGE INLET AT MATTHEW AVENUE, N.W. ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION:

Matthew Avenue N.W. Adjacent to Lots "4-A", "4-B", "4-C", and W1/2 of Lot "5", DICK'S ACRES, a Subdivision in Albuquerque, Bernalillo County, New Mexico.

BENCHMARK REFERENCE:

ACS Station "8-G14," 12th and Candelaria Rd. N.W.; Elevation = 4,966.436, (Project T.B.M. as shown on plan hereon).

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	5.03	(2.04, 3.41)
3	5.61	(2.21, 3.65)
4	5.61	(2.34, 3.83)

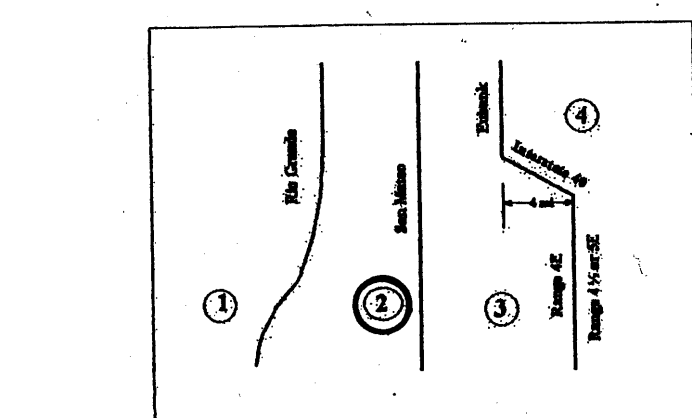


TABLE A-4. LAND TREATMENTS

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 (sheet piling). 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.

TABLE A-9. PEAK DISCHARGE (cfs/acre)

Zone	A	B	C	D
1	1.52	2.02	2.87	4.37
2	1.56	2.28	3.14	4.70
3	1.87	2.60	3.45	5.02
4	2.20	2.92	3.73	5.25

DRAINAGE COMMENTS:

The subject site is located on the north side of Matthew Avenue N.W., between 12th Street N.W. and the Griegos Lateral, in the City of Albuquerque, Bernalillo County, New Mexico.

The purpose of this plan is to provide a storm inlet that will accept the existing developed street flows of the North 1/2 of Matthew Avenue N.W. and the associated drainage basin so that said flows will not adversely affect downstream properties; these existing flows will be directed through the proposed storm inlet into the Alameda Drain.

HYDROLOGIC ANALYSIS:

To determine the peak flow of said basin a hydrologic analysis was performed in accordance to section 22.2 of the Development Process Manual (DPM). The property is located in Zone 2, which has a 100-year 24-hour storm event of 2.75 inches and a 100-year, 10 day storm event of 3.95 inches.

The subject site was assigned land treatment values in accordance with Tables A-4, A-1, A-9, and A-10 of the DPM's sections 22.2

SITE AREA: 0.33 ACRE TOTAL, ZONE: TWO (2)

PRECIPITATION: 360 = 2.35 IN.
1440 = 2.75 IN.
10 DAY = 3.95 IN.

EXCESS PRECIPITATION: PEAK DISCHARGE: (CFS/AC)

TREATMENT 'A'	0.53 in.	1.56
TREATMENT 'B'	0.70 in.	2.28
TREATMENT 'C'	1.13 in.	3.14
TREATMENT 'D'	2.12 in.	4.70

EXISTING CONDITIONS:

DRAINAGE BASIN TO STORM INLET:

E1/2 OF LOT 5 = 0.25 AC.

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.13	X	3.14 = 0.41
D	0.12	X	4.70 = 0.56

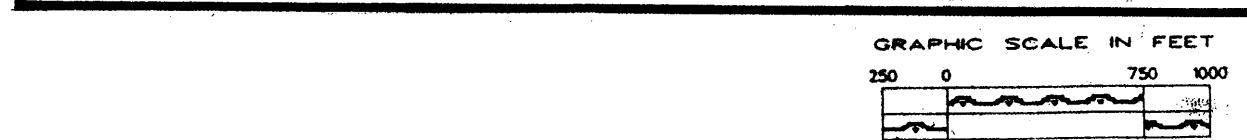
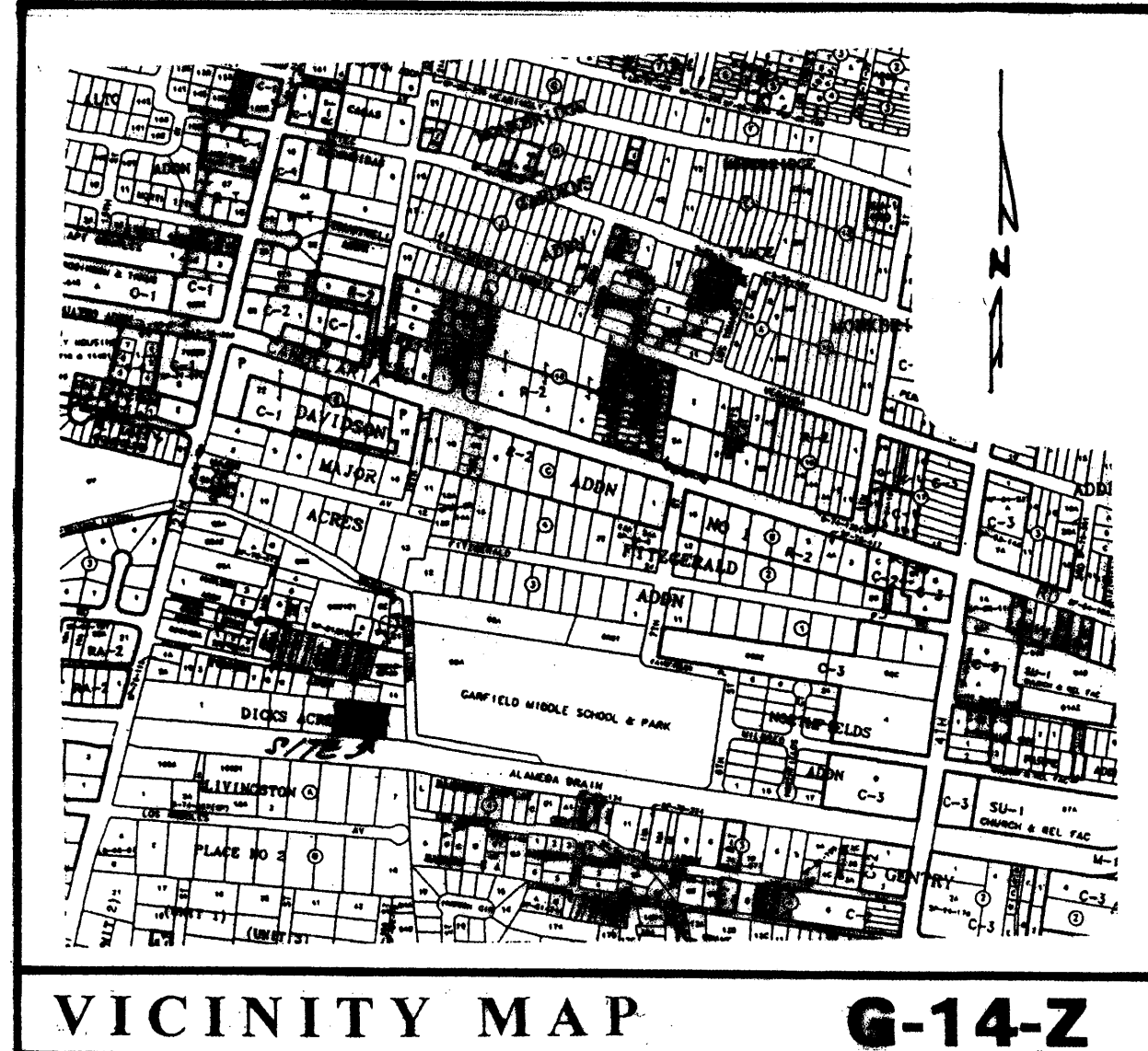
"Qp" = 0.97 cfs

N1/2 OF SUBJECT ROADWAY: 0.13 AC.

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.03	X	3.14 = 0.09
D	0.10	X	4.70 = 0.47

"Qp" = 0.56 cfs TOTAL

"Qp" = 0.97 + 0.56 = 1.53 cfs TOTAL



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- 2) 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.
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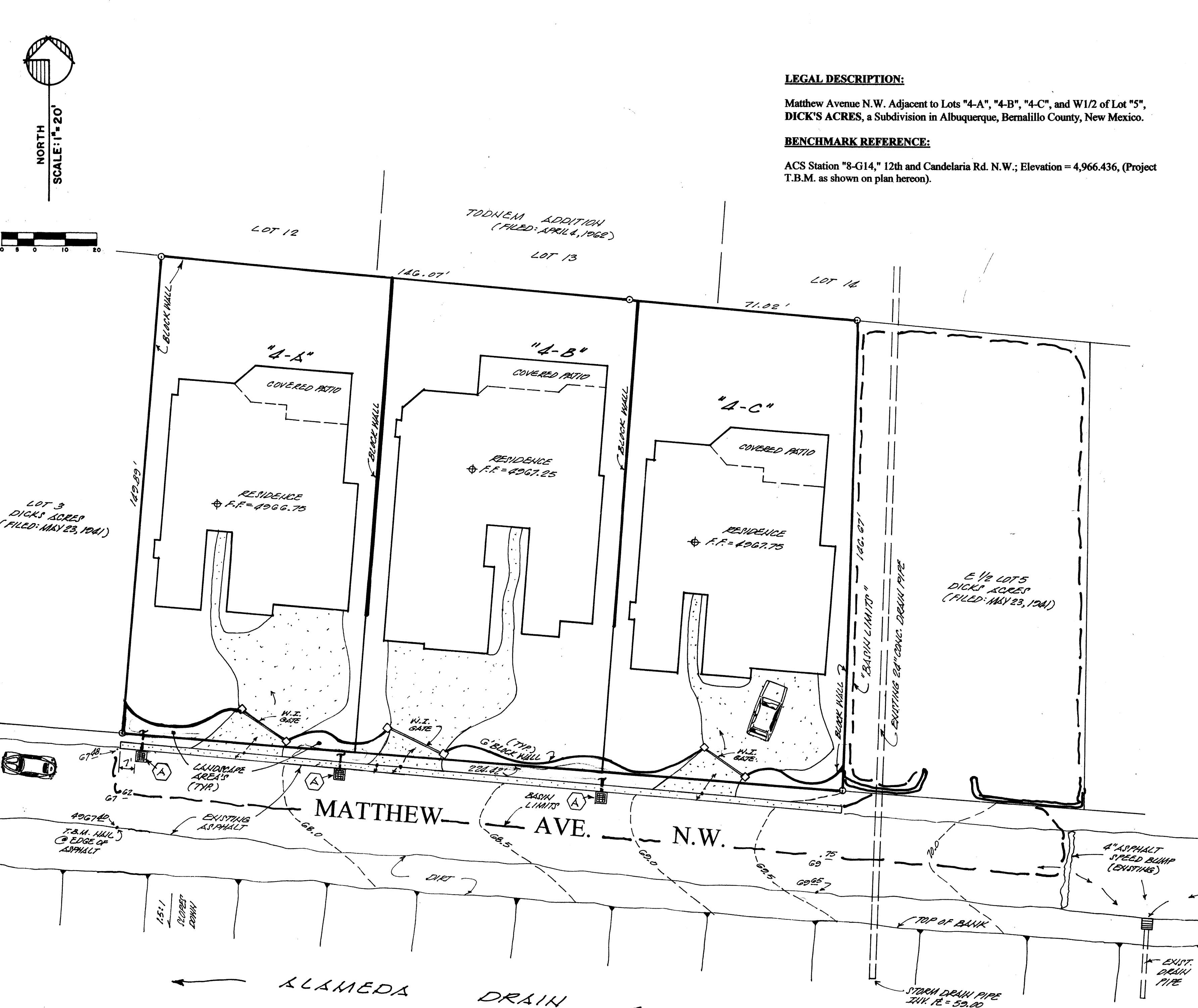
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LEGEND:
TOP OF CURB ELEVATION = N/A
CURB FLOWLINE ELEVATION = N/A
EXISTING SPOT ELEVATION = $GG-1$
EXISTING CONTOUR ELEVATION = $GG-0$
PROPOSED SPOT ELEVATION = N/A
PROPOSED CONTOUR ELEVATION = N/A
PROPOSED OR EXISTING CONCRETE SURFACE = N/A
EXISTING FENCE LINE = N/A

GENERAL NOTES:

- 1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.



12" CATCH BASIN SERIES (A) (PROVIDE 48" MIN. DEPTH "FRENCH DRAIN").

Part No.	Description	Color	Pkg. Qty.	Wt. (lbs.)	Est. Price (EA)	Product Class	Specifications
1200	12" x 12" Catch Basin, 2 Openings	Black	4	4.25	36.62	10ND	NDS #1200, #1203, or
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Requires either #1206, #1242, #1243, #1245, #1266 or #1889 Universal Outlet for each opening. (Use bottom cutout for additional outlet. See page 24.)

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Use with 12" x 12" Catch Basin Series.

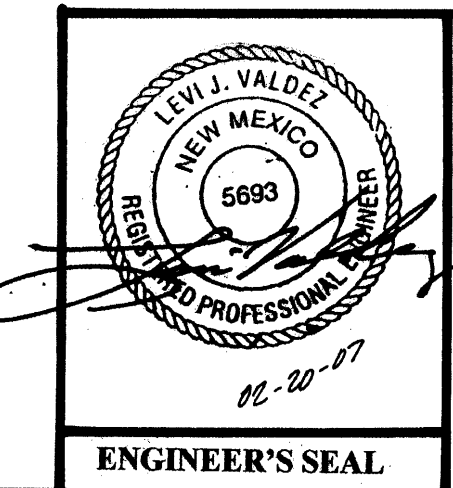
ADA Compliant

LOAD RECOMMENDATION GUIDE

Class	Load Recommendation
Class A	• Loads of 1-60 psi. • Recommended for pedestrians, bicycles and wheel chair traffic.
Class B	• Loads of 61-175 psi. • Recommended for medium-duty pneumatic tire traffic, autos and light trucks at speeds less than 20 m.p.h.
Class C	• Loads of 176-325 psi. • Recommended for heavy-duty pneumatic tire forklifts and tractor trailers at speeds less than 20 m.p.h., H-20 rated.
Class D	• Loads of 326-575 psi. • Recommended for heavy-duty hard tire forklifts at speeds less than 20 m.p.h., H-20 rated.

Note: Some installations may require a concrete collar to meet load rating. Loads are based on encasing product in concrete. Product must be installed using NDS instructions.

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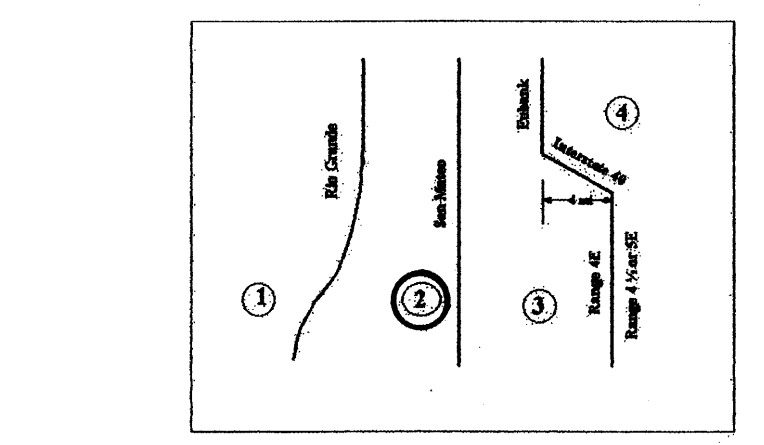


A PROPOSED PLAN FOR A SURFACE DRAINAGE INLET AT MATTHEW AVENUE, N.W. ALBUQUERQUE, NEW MEXICO

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 (IN/HR at $t_p=0.2$ hour)
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. Unirrigated.
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. Unirrigated 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 treatment, measure respective subarea. In lieu of specific measurements for treatment D, the areal percentages in TABLE A-5 may be employed.

Zone	Treatment	100-YR (2-YR, 10-TR)
1	A	1.56 (0.00, 0.24)
2	B	2.28 (0.08, 0.95)
3	C	3.14 (0.60, 1.71)
4	D	4.70 (1.86, 3.14)

DRAINAGE COMMENTS:

The subject site is located on the north side of Matthew Avenue N.W., between 12th Street N.W. and the Griegos Lateral, in the City of Albuquerque, Bernalillo County, New Mexico.

The purpose of this plan is to provide a storm inlet that will accept the existing developed street flows of the North 1/2 of Matthew Avenue N.W. and the associated drainage basin so that said flows will not adversely affect downstream properties; these existing flows will be directed through the proposed storm inlet into the Alameda Drain.

HYDROLOGIC ANALYSIS:

To determine the peak flow of said basin a hydrologic analysis was performed in accordance to section 22.2 of the Development Process Manual (DPM). The property is located in Zone 2, which has a 100-year 24-hour storm event of 2.75 inches and a 100-year, 10 day storm event of 3.95 inches.

The subject site was assigned land treatment values in accordance with Tables A-4, A-1, A-9, and A-10 of the DPM's sections 22.2.

SITE AREA: 0.38 ACRE TOTAL, ZONE: TWO (2)

PRECIPITATION: 360 = 2.35 IN.
1440 = 2.75 IN.
10 DAY = 3.95 IN.

EXCESS PRECIPITATION:

TREATMENT	AREA/ACRES	FACTOR	CFS
TREATMENT 'A'	0.00 in.	1.56	
TREATMENT 'B'	0.00 in.	2.28	
TREATMENT 'C'	0.16 in.	3.14	
TREATMENT 'D'	0.22 in.	4.70	

PEAK DISCHARGE: (CFS/AC)

EXISTING CONDITIONS:

DRAINAGE BASIN TO STORM INLET:
E1/2 OF LOT 5 = 0.25 AC

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.13	X	3.14 = 0.41
D	0.12	X	4.70 = 0.56
"Op" = 0.97 cfs			

N1/2 OF SUBJECT ROADWAY: 0.13 AC

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.03	X	3.14 = 0.09
D	0.10	X	4.70 = 0.47
"Op" = 0.56 cfs			

*** "Op" = 0.97 + 0.56 = 1.53 cfs TOTAL**