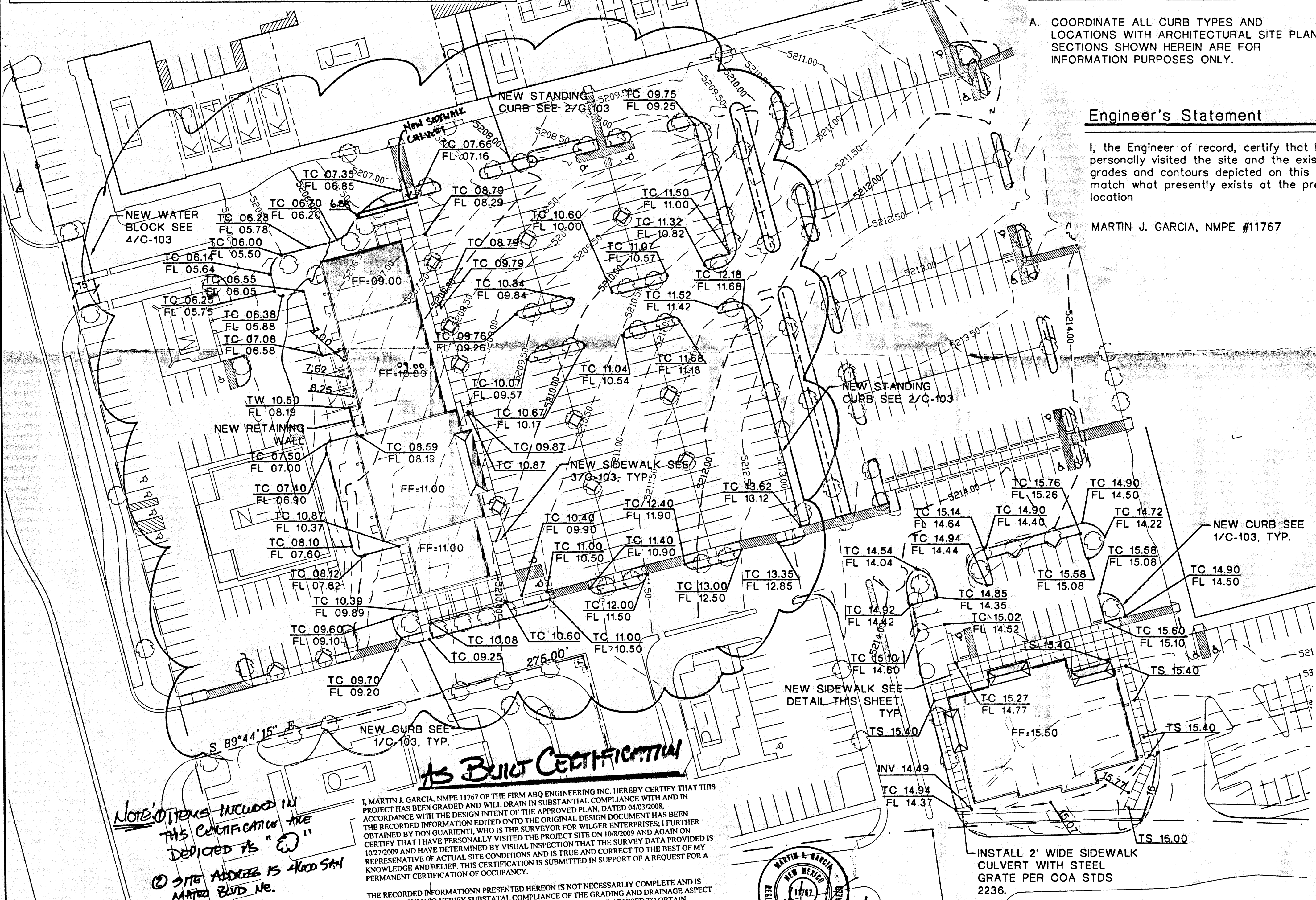




THIS CONCEPTUAL GRADING AND DRAINAGE PLAN DOCUMENTS THE PROPOSED CHANGES TO THE EXISTING SITE FOR THE FAR NORTH SHOPPING CENTER. WITH THIS PROJECT, TWO NEW BUILDINGS ARE PROPOSED: THE FIRST APPROXIMATELY 16,000 SQUARE FEET TOWARD THE WEST END OF THE SITE, AND THE SECOND APPROXIMATELY 10,000 SQUARE FEET TOWARD THE SOUTHEAST END OF THE SITE.

UPC Number

1018-062-055-145-303-01

Far North Shopping Center, Albuquerque, Bernalillo County, New Mexico as the same as is shown and designated on the Plat thereof filed in the Office of the County Clerk of Bernalillo County, New Mexico

ACS BRASS TABLET "1-E18A"

X = 400558.60

$$Y = 1509126.55$$

EL = 5222.411

(NGVD 1929)

A. COORDINATE ALL CURB TYPES AND LOCATIONS WITH ARCHITECTURAL SITE PLAN. SECTIONS SHOWN HEREIN ARE FOR INFORMATION PURPOSES ONLY.

I, the Engineer of record, certify that I have personally visited the site and the existing grades and contours depicted on this plan match what presently exists at the present location

MARTIN J. GARCIA, NMPE #11767



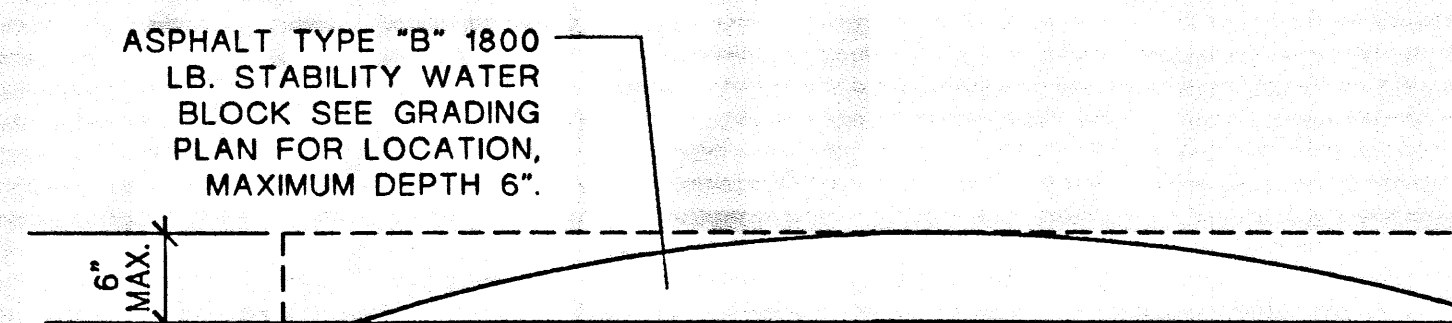
SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.



WATER BLOCK DETAIL

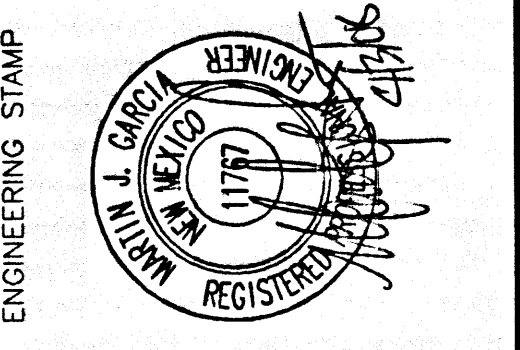
SCALE: N.T.S.

RECEIVED
OCT 27 2009
HYDROLOGY
SECTION

ABQ
ENGINEERING, INC.

6739 Academy Rd. NE
Suite 130
Albuquerque, NM 87109
505-255-7802

•Engineers • Planners
•Construction Services



DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY ALL
EXISTING CONDITIONS AND
DIMENSIONS- NOTIFY
ENGINEER/ARCHITECT OF ANY
DISCREPANCIES PRIOR TO
BEGINNING CONSTRUCTION

FAR NORTH SHOPPING CENTER
SAN MATEO N.E.
ALBUQUERQUE, NEW MEXICO

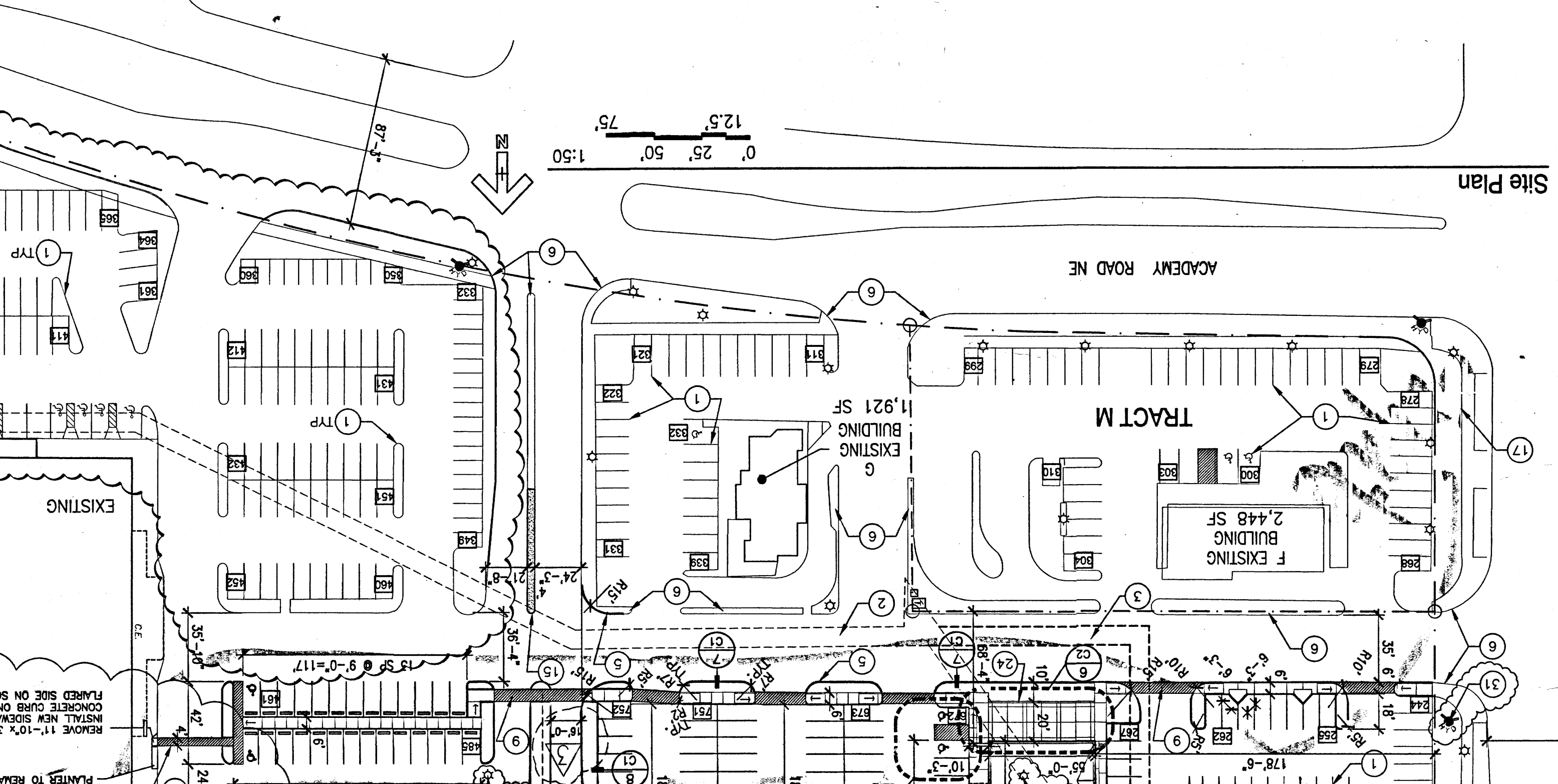
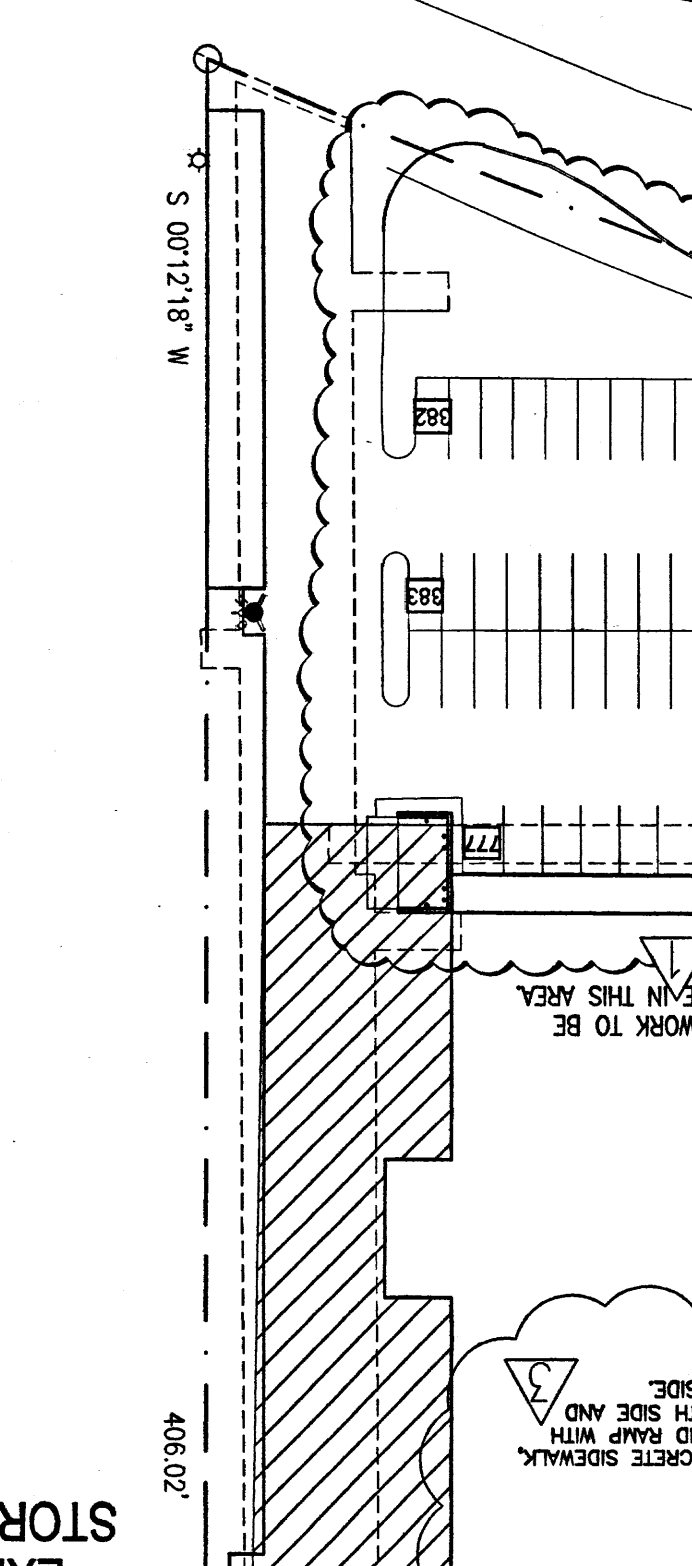
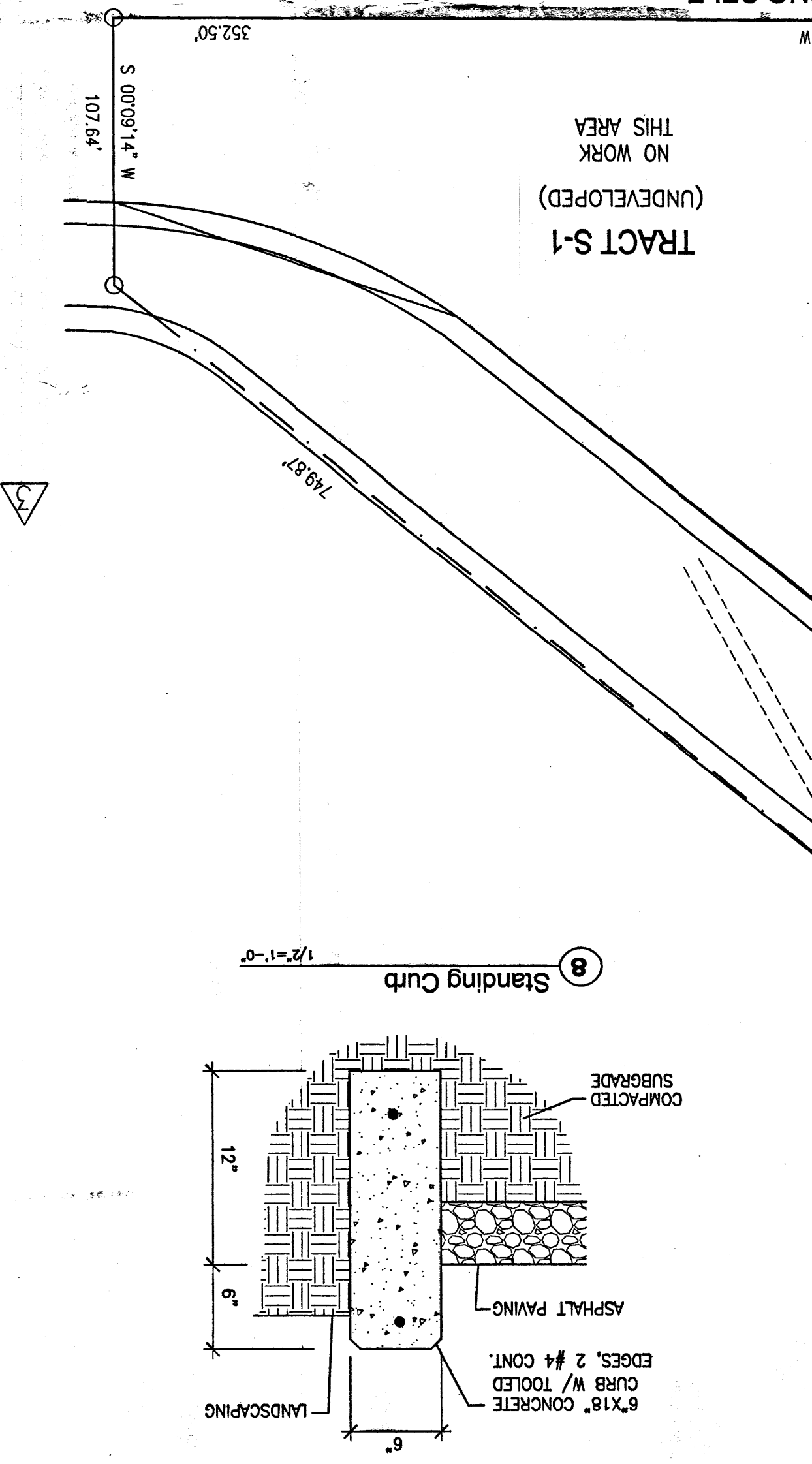
[illegible]

SHEET TITLE

GRADING AND DRAINAGE PLAN

C-103

SHEET of



ALL AREAS NORTH AND EAST OF
MAIN BUILDINGS ARE EXISTING
PAVED AREAS AND HAVE BEEN
RESURFACED AND RESTRIPTED BY A
PRIOR PROJECT - NO WORK IS
REQUIRED IN THIS AREA

EXISTING CONDITIONS:

THE SITE IS CURRENTLY 100% DEVELOPED, AND THERE IS 3.7 C.F.S. OFF-SITE FLOW ENTERING THE SITE DUE TO THE 100-YEAR STORM FROM THE 0.83 ACRES OF DEVELOPED PROPERTY TO THE EAST.

DEVELOPED CONDITIONS:

A NEW PARKING LOT IS BEING ADDED TO THE EAST SIDE OF THE SHOPPING CENTER AND ALL FLOW WILL BE DIRECTED TO THE EXISTING CONCRETE RUNDOWN THAT FLOW INTO THE BOREALIS ARROYO. TWO NEW CONCRETE RUNDOWNS ARE BEING ADDED TO HELP FACILITATE RUNOFF INTO THE ARROYO. ALL EXISTING FLOWS ON SITE WILL REMAIN AS IS. A NEW STORM DRAIN IS BEING CONSTRUCTED TO GIVE RELIEF TO THE AREA FACING SAN MATEO BOULEVARD WHICH IS NOT DRAINING PROPERLY. A NEW CONCRETE SWALE IS BEING CONSTRUCTED TO HELP DRAIN TO THE NEW STORM DRAIN. A NEW PARKING LOT ENTRANCE IS BEING BUILT ON THE NORTH SIDE TO GIVE ACCESS TO THAT BUSINESS. A WATER BLOCK IS BEING PUT IN TO KEEP ANY RUNOFF FROM GOING ONTO THE NEIGHBORING PROPERTY.

NOTES

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1995 EDITION," EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 785-1234, FOR LOCATION OF EXISTING UTILITIES.
4. 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 A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1995 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6" X 6", 10 GA. W.W.M.).
10. OWNERSHIP OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF EASTERLING & ASSOCIATES, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF EASTERLING & ASSOCIATES, INC.
11. CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. EROSION CONTROL: THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFORE, BE A PROBLEM.
13. CONSTRUCTION PHASE: THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF OBSTRUCTION FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

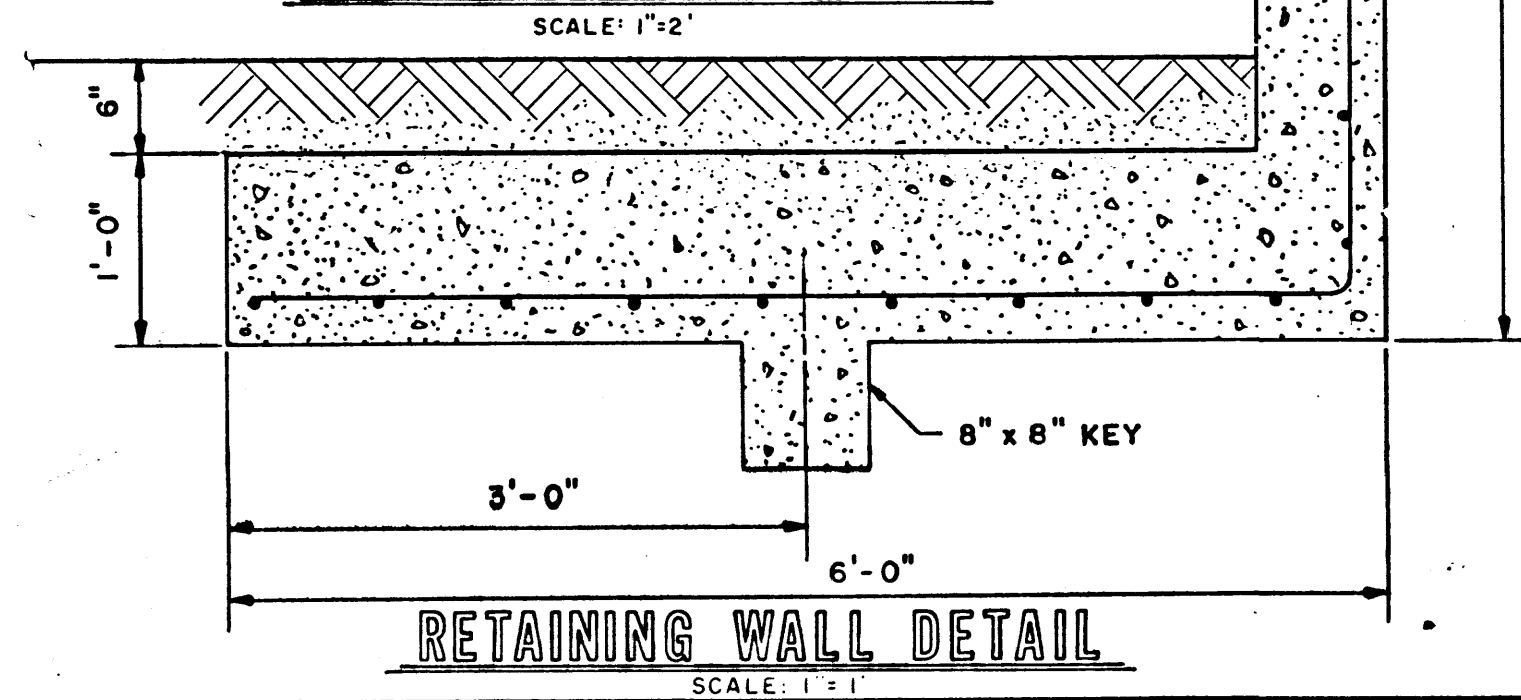
RETAINING WALL BAR SCHEDULE

SIZE OF REBAR	HEIGHT OF WALL
VERTICAL #6 @ 10" O.C.	10'-0"
HORIZONTAL #4 @ 12" O.C.	
VERTICAL #6 @ 12" O.C.	8'-0"
HORIZONTAL #4 @ 12" O.C.	
VERTICAL #6 @ 12" O.C.	7'-0"
HORIZONTAL #4 @ 12" O.C.	
VERTICAL #4 @ 12" O.C.	3'-0"
HORIZONTAL #4 @ 12" O.C.	

RETAINING WALL NOTES:

1. CONCRETE SHALL CONFORM TO SECTION 101 OF THE "CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS - PUBLIC WORKS CONSTRUCTION." MINIMUM COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS.
2. REINFORCING STEEL SHALL CONFORM TO SECTION 102 OF THE SPECIFICATIONS REFERENCED ABOVE. REINFORCING STEEL SHALL BE GRADE 60.
3. COMPACT SUBGRADE TO 95% OF MAXIMUM DENSITY, PER ASTM D-1557 TO A DEPTH OF 12 INCHES. BACKFILL SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY, PER ASTM D-1557. BACKFILL SHALL NOT BE PLACED UNTIL CONCRETE REACHES REQUIRED STRENGTH.
4. PROVIDE KEYED DOWELED CONSTRUCTION JOINTS AT SPACING NOT TO EXCEED 40 FEET.
5. PROVIDE 3/4" CHAMFER AT ALL EXPOSED EDGES.

TYPICAL CONSTRUCTION JOINT



RETAINING WALL DETAIL

SCALE: 1"=1'

HYDROLOGY

	AP	DA	H	S	L	T _c	SOIL	%	C _N	C	P ₂	P ₁₀	P ₁₀₀	I ₂	I ₁₀	I ₁₀₀	Vol ₂	Vol ₁₀	Vol ₁₀₀	Q ₂	Q ₁₀	Q ₁₀₀
	#	AC	FT	FT/FT	FT	MIN	TYPE	IMP			IN	IN	IN	IN	IN	IN	CU	CU	CU	CFS	CFS	CFS
EXISTING	A	11.9	14'	.0121	1,160'	9.8	B	95%	97	.91	1.0	1.4	2.2	2.2	3.1	4.8	30,670	47,085	80,778	23.8	33.6	52.0
EXISTING	B	3.8	9'	.0107	840'	8.0	B	98%	98	.93	1.0	1.4	2.2	2.2	3.1	4.8	10,897	16,277	27,174	7.8	11.0	17.0
DEVELOPED	A	11.9	14'	.0121	1,160'	9.8	B	91%	96	.88	1.0	1.4	2.2	2.2	3.1	4.8	27,214	43,197	76,459	23.0	32.5	50.3
DEVELOPED	B	3.8	9'	.0107	840'	8.0	B	98%	98	.93	1.0	1.4	2.2	2.2	3.1	4.8	10,897	16,277	27,174	7.8	11.0	17.0
EXISTING	C	1.43	15'	.0319	470'	3.4	B	0%	70	40	1.0	1.4	2.2	2.2	3.1	4.8	0	311	1,661	1.3	1.8	2.7
DEVELOPED	C	1.43	15'	.0319	470'	3.4	B	79%	97	95	1.0	1.4	2.2	2.2	3.1	4.8	3,686	5,658	9,707	3.0	4.2	6.5

SOILS INFORMATION FROM SOIL SURVEY, BERNALILLO CO. U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR					SUITABILITY AS SOURCE OF —				SOIL FEATURES AFFECTING —			HYDROLOGIC SOIL GROUP
	SEPTIC TANK: ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC For Tijeras part of EtC, see Tijeras series.	Slight	Severe: seepage.	Moderate: small stones.	Slight	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping; compressible	B

Embudo Series

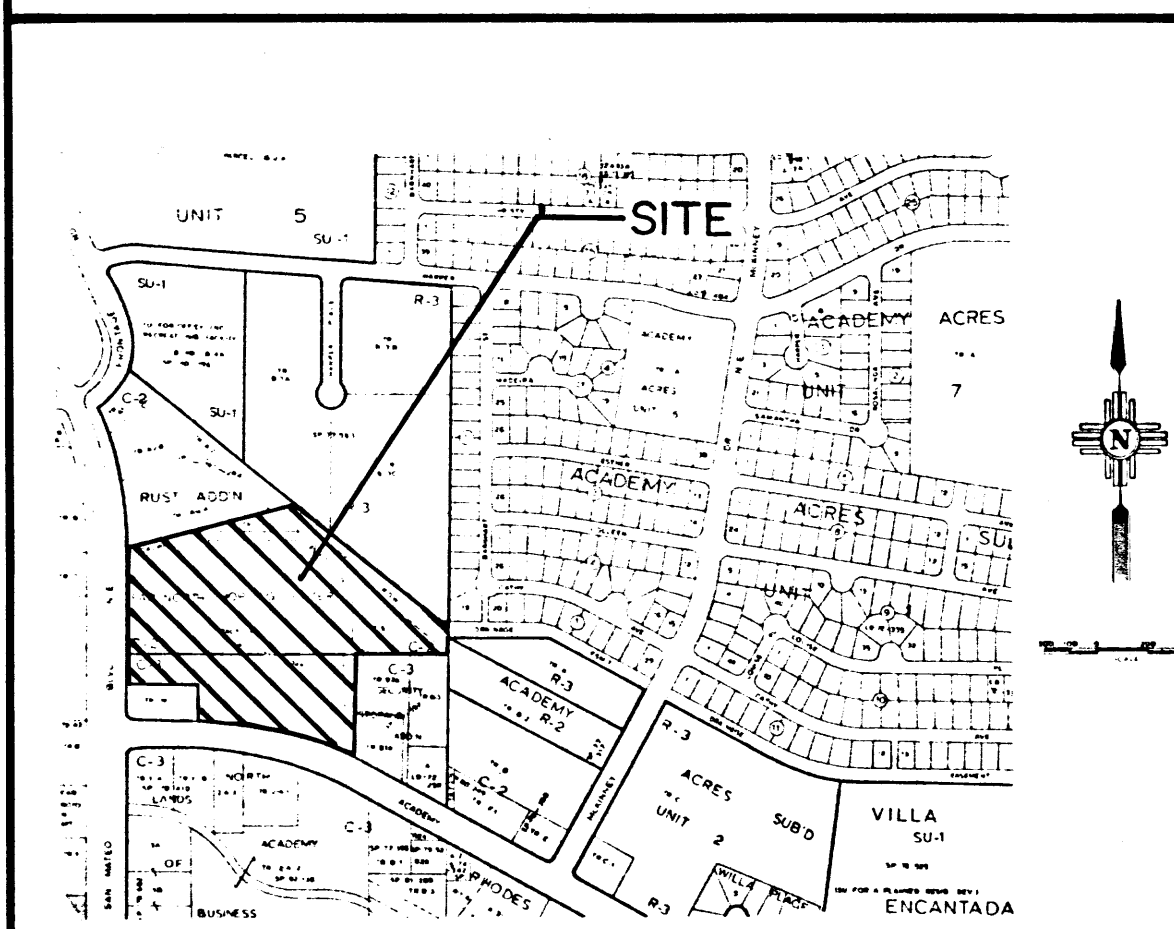
The Embudo series consists of deep, well drained soils that formed in alluvium derived from decomposed, coarse grained, granitic rocks on old alluvial fans. Slopes are 0 to 5 percent. The native vegetation is principally mesa dropseed, blue grama, black grama, and some cholla cactus. Elevations range from 5,000 to 6,500 feet. The mean annual precipitation is 7 to 10 inches, the mean annual air temperature is 58° to 60° F, and the frost-free season is 170 to 195 days. Embudo soils are associated with Tijeras and Wink soils.

In a representative profile, the surface layer is brown gravelly fine sandy loam about 4 inches thick (fig. 4). Next is about 16 inches of brown and light brownish gray gravelly sandy loam. Below this to a depth of 60 inches or more is stratified, pale brown gravelly loamy coarse sand. The soil is moderately alkaline. Permeability is moderate in the upper 20 inches and very rapid below. Available water capacity is 3 or 4 inches. Effective rooting depth is 60 inches or more. Embudo soils are used for community development, watershed, range, and wildlife habitat.

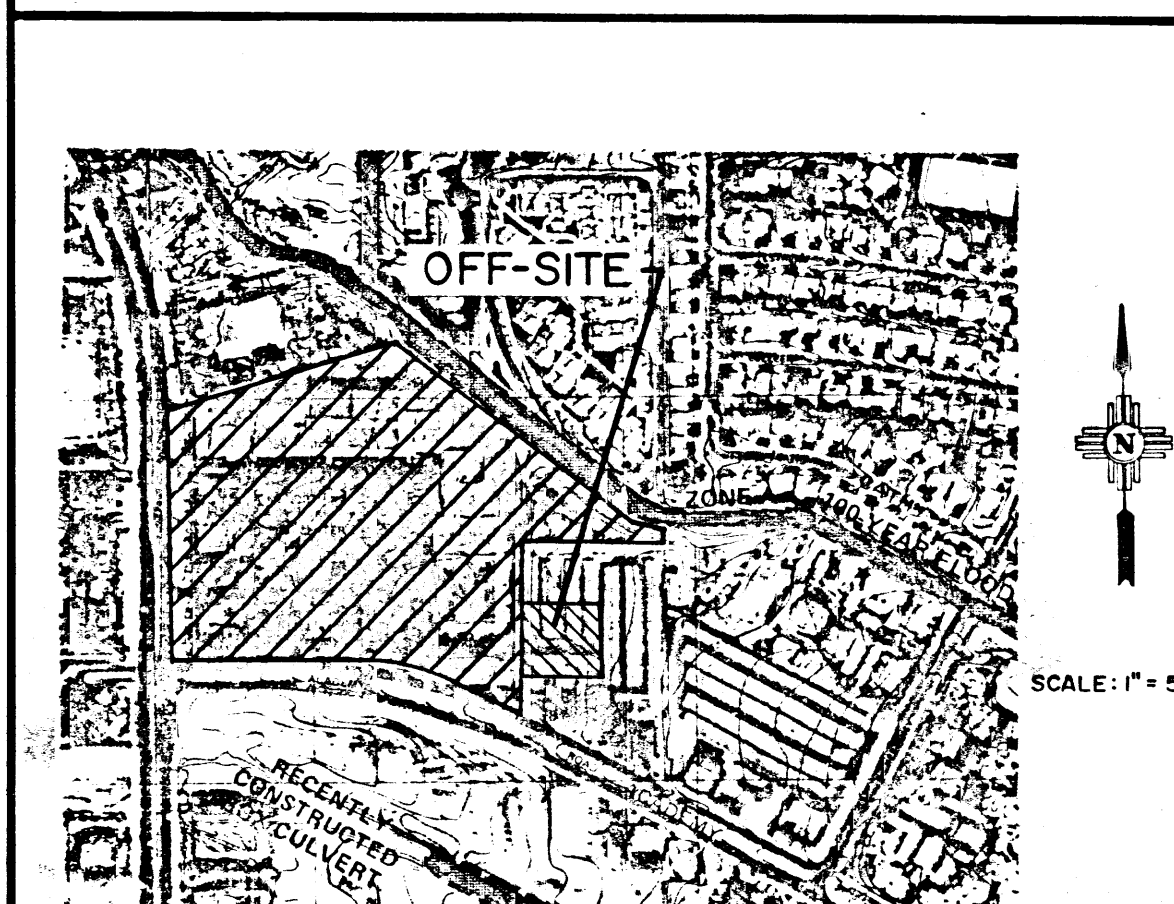
EmB—Embudo gravelly fine sandy loam, 0 to 5 percent slopes. This level to gently sloping soil is on the East Mesa. It has the profile described as representative of the series. Included in mapping are areas around Central Avenue and Trauway Road in Albuquerque where the surface layer is thick and slightly darker than is typical and the substratum is limy and cobbly. Also included are areas of Tijeras, Millett, and Tesajo soils. Runoff is medium, and the hazard of water erosion is moderate.

This soil is used for watershed, wildlife habitat, community development, and range. It is subject to periodic flooding. Control of moisture is needed for proper compaction. Dryland capability subclass VIIc; native plant community 4.

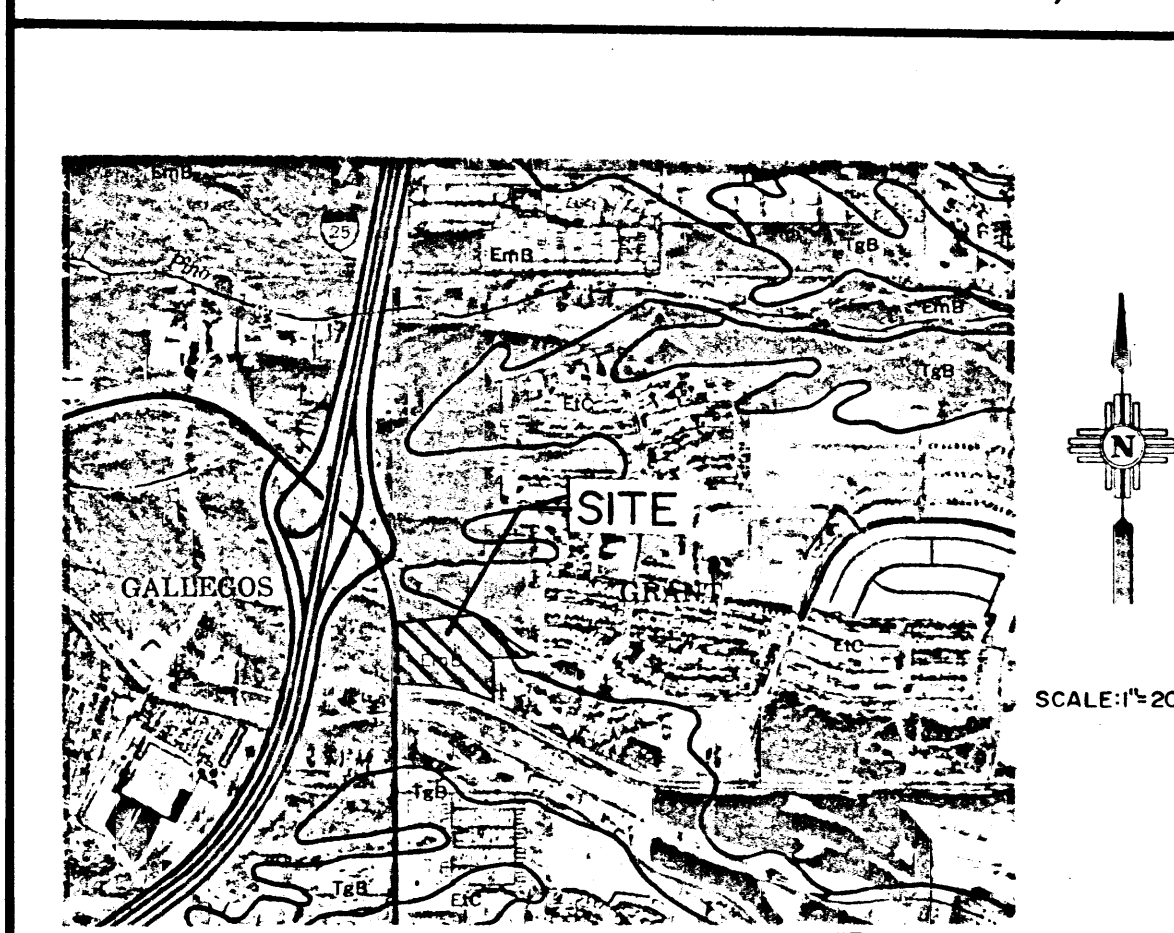
VICINITY MAP ZONE ATLAS MAP NO. E-18



FLOOD HAZARD MAP & OFFSITE FLOWS FROM F.E.M.A. MAP NO. 21



SOILS MAP FROM SOIL SURVEY, BERN. CO. U.S.D.A., S.C.S.



NO.		REVISIONS		BY		DATE	

FAR NORTH SHOPPING CENTER REMODEL

GRADING AND DRAINAGE PLAN

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: **D.L.S.** Drawn: **J.E.L.** Checked: **C.M.E.** Sheet **1**
Job No: 607901 Date: JAN. 1987 of **2**

