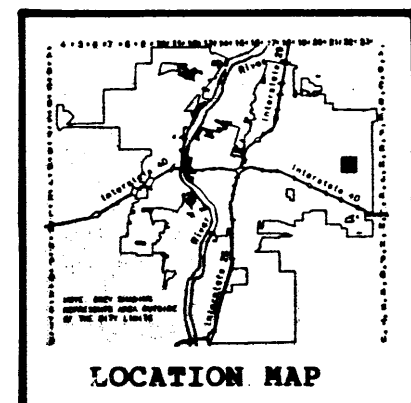


H22-Z



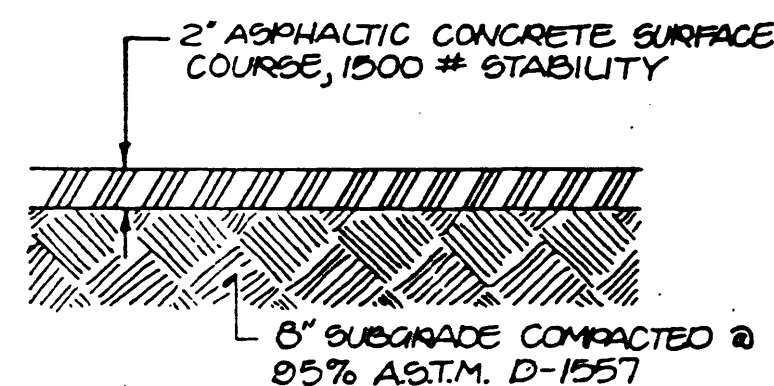
EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

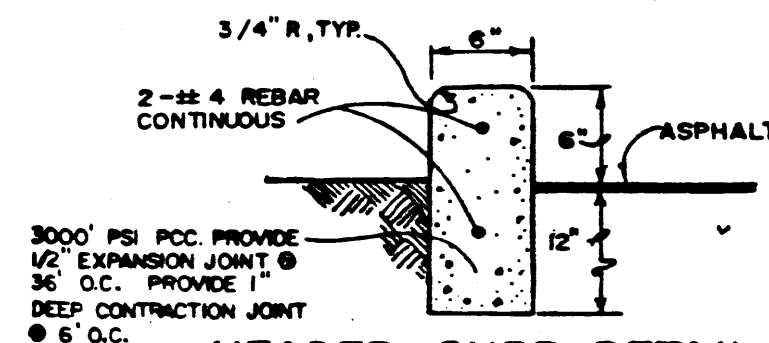
- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM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

CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION 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.
- 3.) 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.
- 4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.



TYPICAL PAVEMENT SECTION
SCALE: 1" = 1'-0"



HEADER CURB DETAIL
SCALE: 1" = 1'-0"

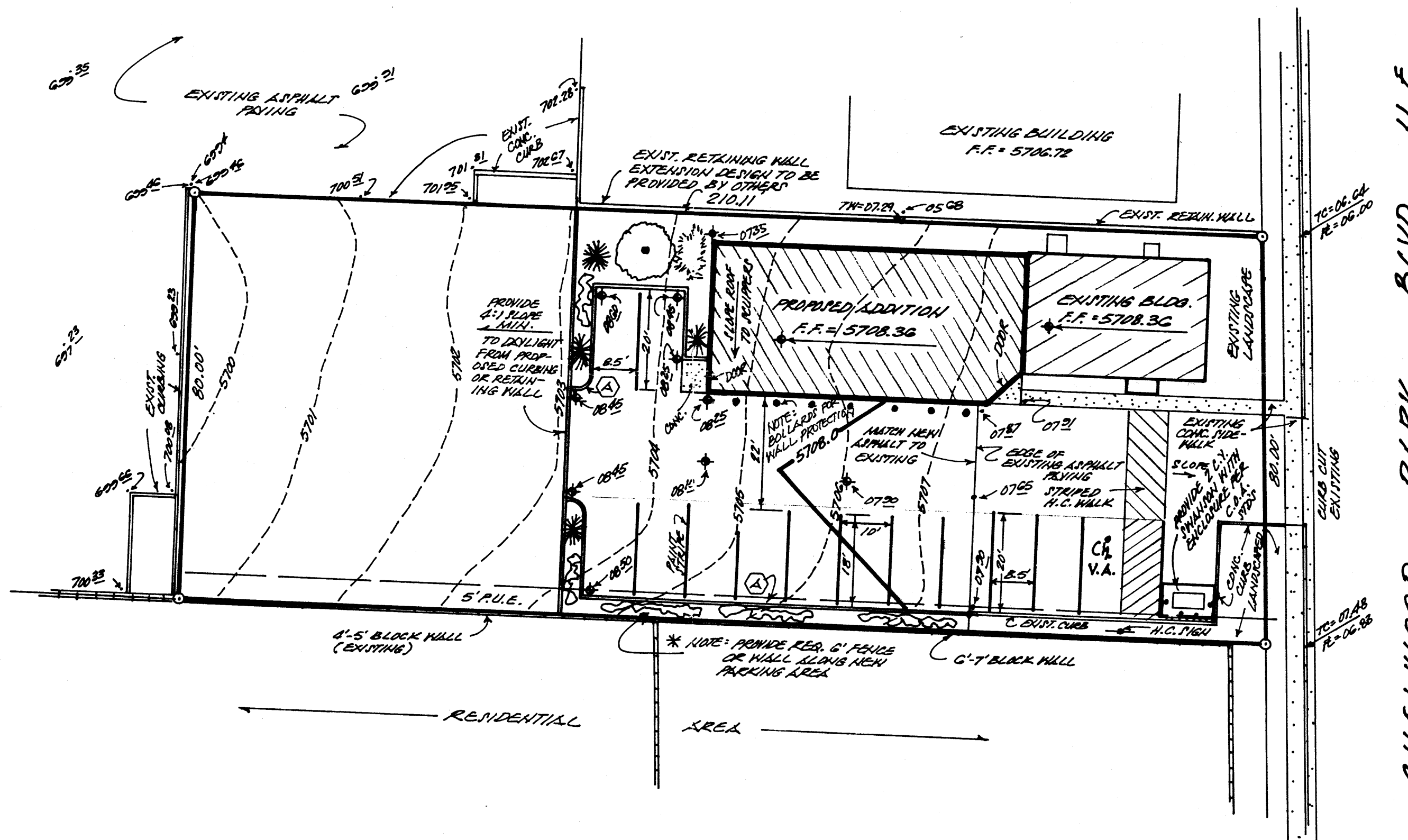
LANDSCAPE PLAN LEGEND:

PROPOSED ARIZONA ASH OR LOCUST TREE =
TAM JUNIPERS (LOW SPREADING EVERGREEN) =
5-GAL. MIN. 36" SPREAD
ARTEMISIA CANA (SILVER SAGE) =
YUCCA PENDULA =

** GROUND COVER TO BE GRAVEL OVER PLASTIC

NOTE: A.) LANDSCAPED AREA'S ARE TO BE IRRIGATED BY HAND-HELD HOSE-BIB.

B.) THE PROPOSED LANDSCAPED AREA'S ARE TO BE 100% LOW WATER USE.



PROJECT DATA:

ADDRESS: 2201 CHELWOOD PARK N.E.
ZONING: C-1
SITE AREA: 0.39 ACRE
NEW BUILDING AREA: 1,886.0 SQUARE FEET
TYPE OF CONSTRUCTION: VN
OCCUPANCY GROUP: B2
PARKING SPACES REQUIRED: 12 SPACES
PARKING SPACES PROVIDED: 13 SPACES

NOTE: PROJECT CONTRACTOR HAS STATED THAT HE HAS FIELD VERIFIED THAT THE EXISTING SANITARY SEWER SERVICE LINES HAVE ADEQUATE SLOPE TO SERVICE NEEDS FOR THE PROPOSED BUILDING ADDITION.

LEGEND:

TOP OF CURB ELEVATION = 70'-07.68
CURB FLOWLINE ELEVATION = 70'-07.67
EXISTING SPOT ELEVATION = 70'-06.00
EXISTING CONTOUR = 70'-06.00
PROPOSED SPOT ELEVATION = 70'-06.00
PROPOSED CONTOUR = 70'-06.00

LEGAL DESCRIPTION: TRACT "3-B2", BLOCK TWO (2), INDIAN RIDGE SUBDIVISION, ALBUQUERQUE, NEW MEXICO.

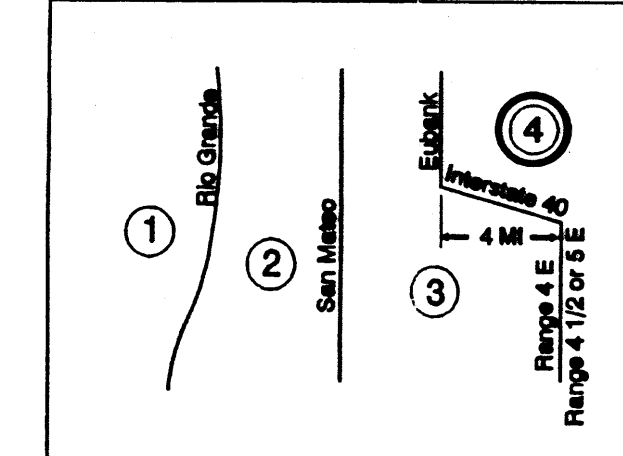
BENCH MARK REFERENCE: A.C.S. STATION "6-H22A", M.S.L. ELEVATION = 5706.54, (PROJECT T.S.M. AS SHOWN ON THE PLAN HEREON).

A.1 PRECIPITATION ZONES

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

TABLE A-1. PRECIPITATION ZONES	
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

FIGURE A-1



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DFM SECTION 22.2 - HYDROLOGY
January, 1993 Page A-4

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. 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 compacted 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 area percentages in TABLE A-5 may be employed.

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF CHELWOOD PARK BLVD. N.E. APPROXIMATELY 1/2 BLOCK SOUTH OF MENAUL BLVD. N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

THE SUBJECT SITE, 1.) IS PRESENTLY A PARTIALLY DEVELOPED COMMERCIAL PROPERTY THAT IS TO HAVE A PROPOSED BUILDING ADDITION AND ASSOCIATED IMPROVEMENTS CONSTRUCTED THEREON, 2.) IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (RE: F.E. N.A. FLOOD PANEL 357 OF 825), 3.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 4.) DOES CONTRIBUTE TO THE OFFSITE FLOWS OF THE ADJACENT PROPERTY THAT LIES WEST OF SAID SUBJECT PROPERTY, 5.) IS TO HAVE ALL DEVELOPED FLOWS DISCHARGE THROUGH THE EXISTING DRIVE PAD AND INTO AFOREMENTIONED CHELWOOD PARK BLVD. N.E., 6.) WITH THE PROPOSED AND DEVELOPED FLOWS WILL MINIMIZE THE AFOREMENTIONED OFFSITE FLOWS INTO THE AFOREMENTIONED ADJACENT PROPERTY.

CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY, 1993.

SITE AREA: 0.39 ACRE

PRECIPITATION ZONE: FOUR (4), TABLE A-1.

PEAK INTENSITY: IN./HR. AT T_c = TWELVE (12) MINUTES, 100-YR. = 5.61

LAND TREATMENT METHOD FOR THE CALCULATION OF " Q_p ", TABLES A-8 & A-9.

"LAND TREATMENT FACTORS", TABLE A-4

EXISTING CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.32	X 3.73	= 1.19
D	0.07	X 5.25	= 0.37

" Q_p " = 1.56 CFS

PROPOSED DEVELOPED CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.20	X 3.73	= 0.75
D	0.19	X 5.25	= 1.00

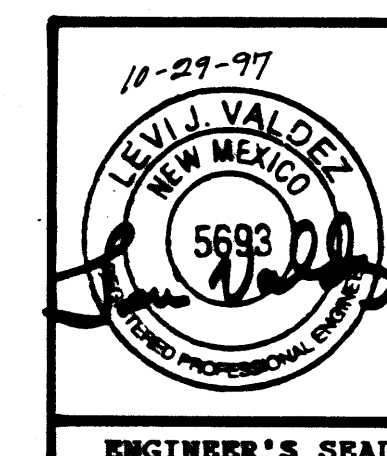
" Q_p " = 1.75 CFS *** INCREASE = 0.19 CFS

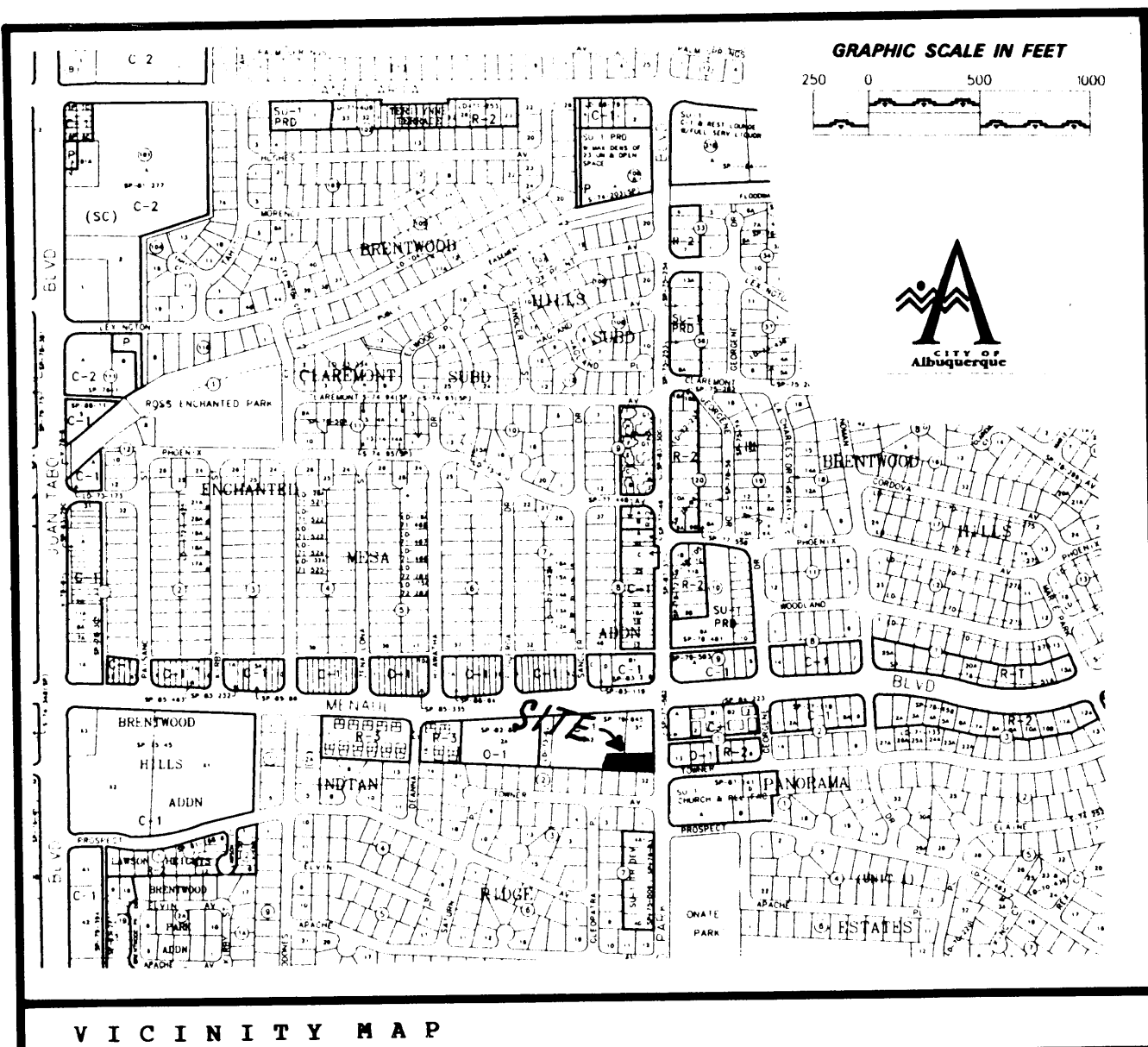
GENERAL NOTES:

- 1.) TOPOGRAPHY SURVEY INFORMATION FURNISHED BY TORRES SURVEYING COMPANY, ALBUQUERQUE, NEW MEXICO.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT SITE OTHER THAN MAY BE SHOWN ON THE PLAN HEREON.

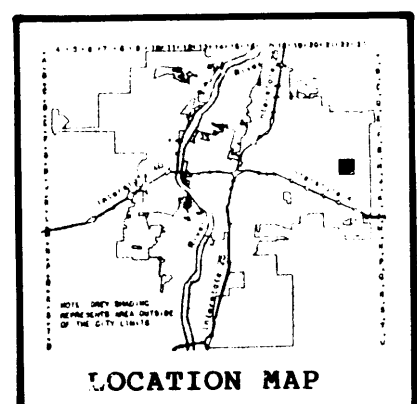
RECEIVED
OCT 30 1997
HYDROLOGY SECTION

A PROPOSED DRAINAGE PLAN
FOR A BUILDING ADDITION LOCATED AT
2201 CHELWOOD PARK N.E.
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1997





H22-Z



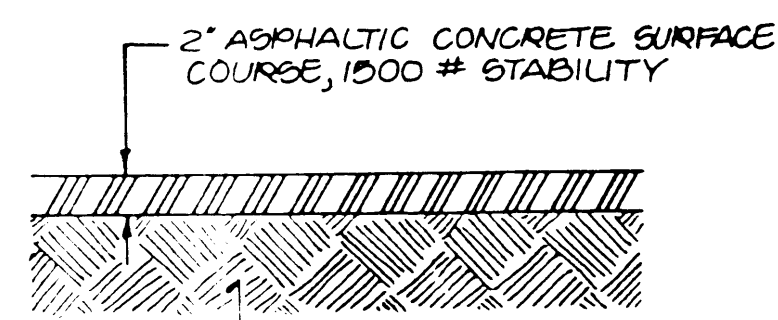
EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) 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 SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

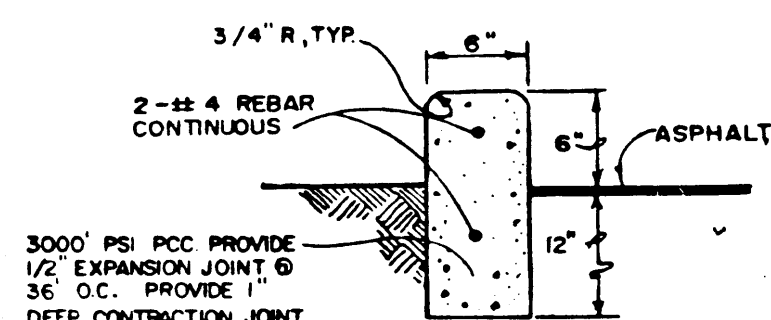
CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 262-1900 FOR LOCATION OF EXISTING UTILITIES.
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION 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.
- 3.) 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.
- 4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.



TYPICAL PAVEMENT SECTION

SCALE: 1" = 1'-0"



HEADER CURB DETAIL

SCALE: 1" = 1'-0"

LEGEND:

TOP OF CURB ELEVATION = 70-01.48
CURB FLOWLINE ELEVATION = 70-01.07
EXISTING SPOT ELEVATION = 70-00.15
EXISTING CONTOUR = 70-01.07
PROPOSED SPOT ELEVATION = 70-01.07
PROPOSED CONTOUR = 70-01.07
"AS-BUILT" ELEVATIONS = (08.47)

LEGAL DESCRIPTION: TRACT "3-B2", BLOCK TWO (2), INDIAN RIDGE SUBDIVISION, ALBUQUERQUE, NEW MEXICO.

BENCH MARK REFERENCE: A.C.S. STATION "6-H22A", M.S.L. ELEVATION = 5706.54, (PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON).

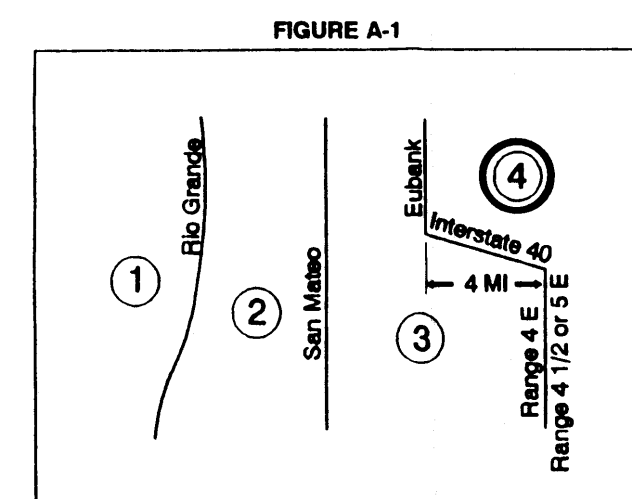
Zone	TABLE A-8. PEAK DISCHARGE (cfs/acre)			
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]
2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.60, 1.71]	4.70 [1.86, 3.14]
3	1.87 [0.00, 0.58]	2.80 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.92 [0.36, 1.45]	3.79 [1.00, 2.26]	5.25 [2.17, 3.57]

Zone	TABLE A-10. PEAK INTENSITY (NHR at $t_c = 0.2$ hour)	
	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, 3.83]	

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



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DPM SECTION 22.2 - HYDROLOGY
January, 1993 Page A-4

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. 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 compacted 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 day 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.

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF CHELWOOD PARK BLVD. N.E. APPROXIMATELY 1/2 BLOCK SOUTH OF MENAUL BLVD. N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

THE SUBJECT SITE, 1.) IS PRESENTLY A PARTIALLY DEVELOPED COMMERCIAL PROPERTY THAT IS TO HAVE A PROPOSED BUILDING ADDITION AND ASSOCIATED IMPROVEMENTS CONSTRUCTED THEREON, 2.) IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (RE: F.B. M.A. FLOOD PANEL 357 OF 825), 3.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 4.) DOES CONTRIBUTE TO THE OFFSITE FLOWS OF THE ADJACENT PROPERTY THAT LIES WEST OF SAID SUBJECT PROPERTY. 5.) IS TO HAVE ALL DEVELOPED FLOWS DISCHARGE THROUGH THE EXISTING DRIVE PAD AND INTO AFOREMENTIONED CHELWOOD PARK BLVD. N.E., 6.) WITH THE PROPOSED AND DEVELOPED FLOWS WILL MINIMIZE THE AFOREMENTIONED OFFSITE FLOWS INTO THE AFOREMENTIONED ADJACENT PROPERTY.

CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY, 1993.

SITE AREA: 0.39 ACRE

PRECIPITATION ZONE: FOUR (4), TABLE A-1.

PEAK INTENSITY: IN./HR. AT T_c = TWELVE (12) MINUTES, 100-YR. = 5.61

LAND TREATMENT METHOD FOR THE CALCULATION OF " Q_p ", TABLES A-8 & A-9.

"LAND TREATMENT FACTORS", TABLE A-4

EXISTING CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.32	X 3.73	= 1.19
D	0.07	X 5.25	= 0.37

" Q_p " = 1.56 CFS

PROPOSED DEVELOPED CONDITIONS:

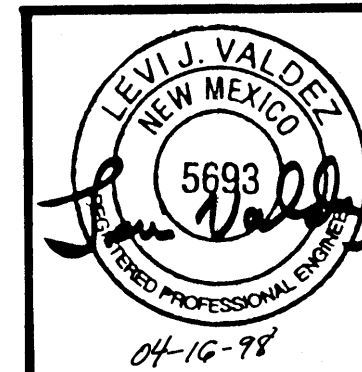
TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.20	X 3.73	= 0.75
D	0.19	X 5.25	= 1.00

" Q_p " = 1.75 CFS

*** INCREASE = 0.19 CFS

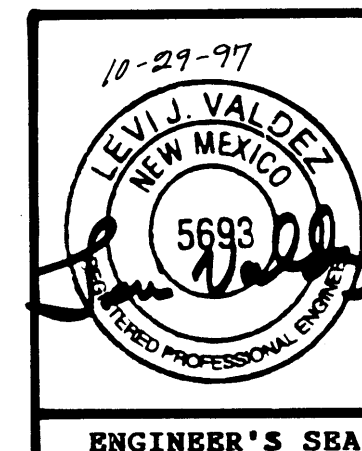
GENERAL NOTES:

- 1.) TOPOGRAPHY SURVEY INFORMATION FURNISHED BY TORRES SURVEYING COMPANY, ALBUQUERQUE, NEW MEXICO.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT SITE OTHER THAN MAY BE SHOWN ON THE PLAN HEREON.



ENGINEER'S CERTIFICATION:

I, LEVI J. VALDEZ, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO. 5693, LICENSED AND REGISTERED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT AN ACTUAL ON THE GROUND FIELD SURVEY OF THE GRADES OF THE NEW IMPROVEMENTS SHOWN ON THE PLAN HEREON, VERIFY THAT SAID IMPROVEMENTS WERE CONSTRUCTED IN "SUBSTANTIAL COMPLIANCE" WITH THE APPROVED DRAINAGE PLAN FOR SAID SITE WITH THE EXCEPTION OF THE DIRECTION OF THE "AS-BUILT" ROOF FLOWS OF THE NEW ADDITION WHICH IS NOT IN COMPLIANCE WITH SAID APPROVED PLAN, (A "HOLD HARMLESS LETTER" FROM SUBJECT PROPERTY OWNER IS ATTACHED HERETO).



ENGINEER'S SEAL

• ENGINEER'S CERTIFICATION •
A PROPOSED DRAINAGE PLAN
FOR A BUILDING ADDITION LOCATED AT
2201 CHELWOOD PARK N.E.
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1997
(CERTIFICATION: 04-17-98)

RECEIVED
APR 17 1998
HYDROLOGY SECTION