

GRADING NOTES:

- ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
- ALL SUBGRADE AND FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557.
- EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
- CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN ON PLANS WITHIN A TOLERANCE OF 0.3± FEET.
- SCARIFY AND COMPACT SUBGRADE FOR FILLS. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. MOISTEN AS NECESSARY TO PROVIDE OPTIMUM MOISTURE (±2%) CONTENT.
- UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE, COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
- MAXIMUM SLOPES SHALL BE 3:1 MINIMUM SLOPES SHALL BE 1%.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE. THEREFORE, 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.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT ERODED AND WASHED DOWN THE STREET.
- OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
- OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.

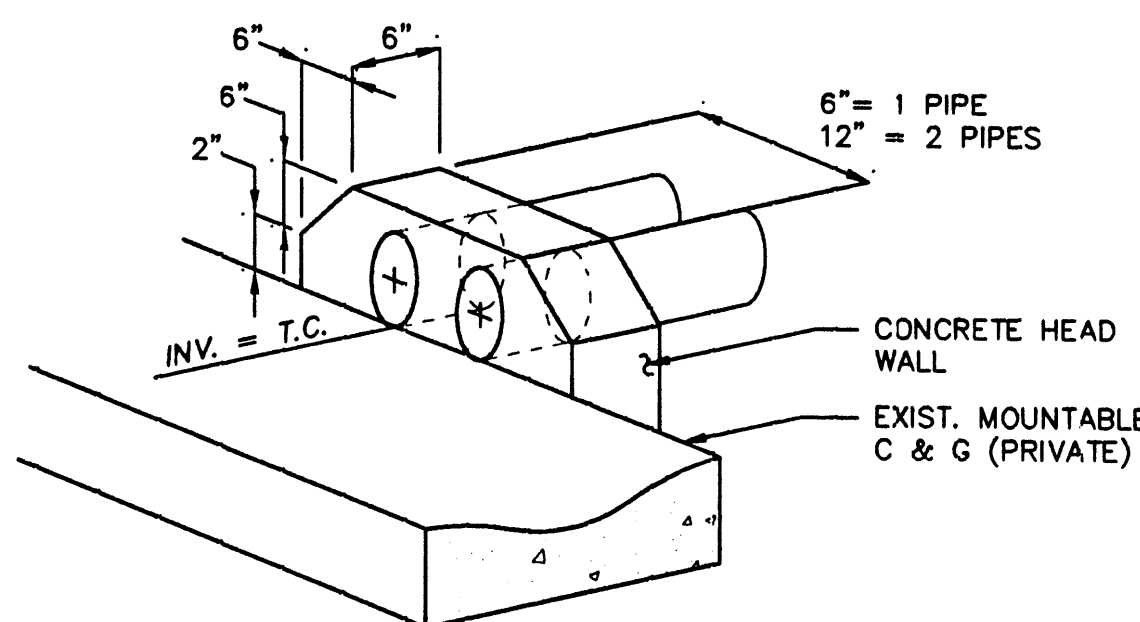
SCALE: 1"=20'

LEGEND

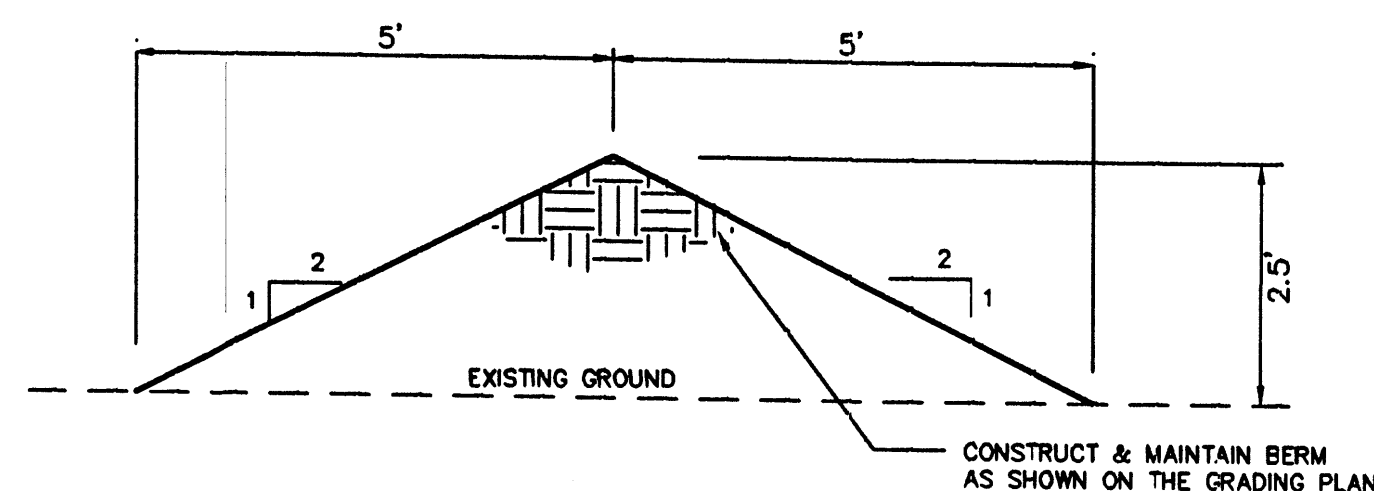
- 5200--- EXISTING CONTOUR
- 52--- PROPOSED CONTOUR
- ◆78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- PG=6881.0 PAD GRADE ELEVATION
- TC=81.95
FL=81.45 TOP OF CURB
FLOWLINE ELEVATION
- TA 42.0 TOP OF ASPHALT ELEVATION
- TW=52.0
BW=50.0 TOP OF WALL
BOTTOM OF WALL ELEVATION
- INV=72.5 INVERT ELEVATION
- RD ROOF DRAIN
- EROSION CONTROL BERM

LANDSCAPE MATERIAL SHALL BE SUITABLE FOR 3:1 SLOPE (MAX.)

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DRAIN PIPE OUTFALL NOT TO SCALE



EROSION CONTROL BERM SCALE: 1"=2'

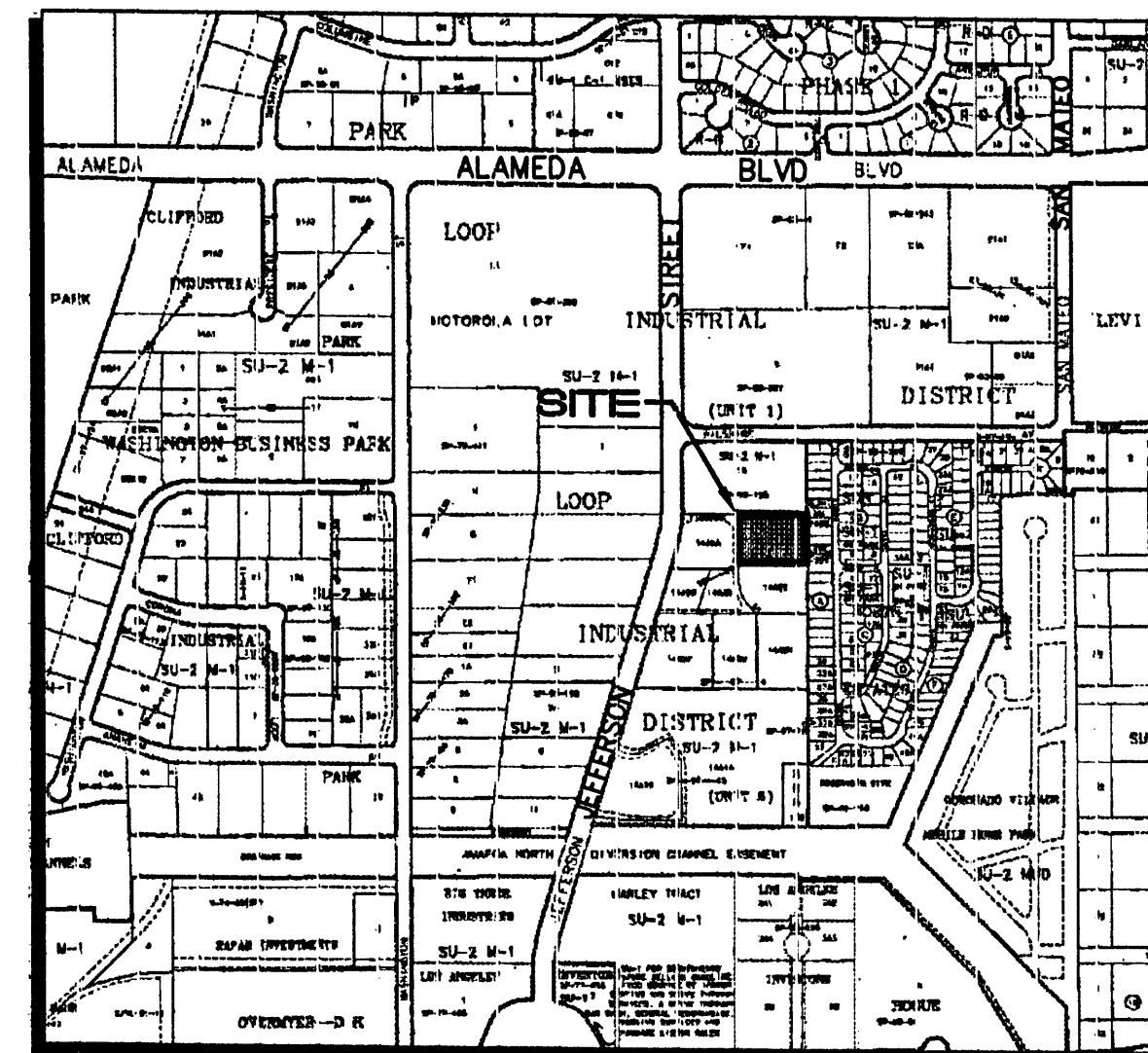
EROSION CONTROL

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS (AS DETAILED AT RIGHT) AS SHOWN ON THE PLAN AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
- SEE GRADING NOTES.

ENGINEER'S CERTIFICATION

I, FRED C. ARFMAN, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THOSE GRADES AND IMPROVEMENTS SHOWN HEREON AS FIELD VERIFIED BY PRECISION SURVEY (NMPS#1993) ON 8/11/00, IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT", SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

FRED C. ARFMAN
STATE OF NEW MEXICO
7322
DATE 08-21-00



C-17
VICINITY MAP
1"=750'±

LEGAL DESCRIPTION: LOT 14-A-2-B OF LOOP INDUSTRIAL DISTRICT UNIT V
AREA: 1.207 ACRES

BENCHMARKS: 1) ACS BRASS CAP
"LOOP INDUSTRIAL DISTRICT UNIT IV"
JEFFERSON/WILSHIRE
ELEVATION = 5131.89
2) AMAFCA BRASS CAP
"NDC 7-182"
ELEVATION = 5064.40

FLOOD ZONE DESIGNATION: NO PORTION OF THIS SITE LIES WITHIN A FLOOD PLAIN AS DESIGNATED ON PANEL 137 OF 825 OF THE FEMA FLOOD INSURANCE RATE MAPS DATE SEPTEMBER 20, 1996.

EXISTING CONDITIONS: THE PROPOSED SITE IS PREVIOUSLY UNDEVELOPED WITH COMPACTED SOILS AND NATIVE SHRUBS AND GRASSES. IT HAS A SLOPE OF APPROXIMATELY 3% TO THE WEST. THIS SITE IS BOUNDED TO THE NORTH BY AN INDUSTRIAL OFFICE, TO THE SOUTH BY AN EMPTY LOT, AND TO THE WEST BY AN EXISTING PRIVATE ACCESS ROADWAY, FIRESTONE LANE. OFF-SITE FLOWS ENTER THE SITE FROM THE MOBILE HOME PARK TO THE EAST. THIS LOT FALLS WITHIN THE PREVIOUSLY APPROVED "JEFFERSON STREET INDUSTRIAL PARK-GRADING AND DRAINAGE PLAN FOR SUBDIVISION" DATED 6/24/96.

EXISTING HYDROLOGY:
PRECIPITATION ZONE 2

OFF-SITE FLOWS (FROM PREVIOUS REPORT, BASED ON PERCENT FRONTAGE TO MOBILE HOME PARK):

7.1 CFS (195 FT/711 FT) = 1.95 CFS

LAND TREATMENTS: 1.20 ACRES (TYPE C)
0.07 ACRES (TYPE D)

$Q_p(\text{existing}) = 1.20 (3.14) + 0.07 (4.70) + 1.95 \text{ CFS} = 6.1 \text{ CFS}$

MASTER-PLANNED CONDITIONS: THE PREVIOUS PLAN CALLED FOR 39.8 CFS OF STORM FLOWS FROM 9.4 ACRES (8 LOTS TOTAL) AND 7.1 CFS OF OFF-SITE FLOWS FOR THE 100 YEAR-6 HOUR STORM TO BE DISCHARGED TO JEFFERSON STREET THROUGH FIRESTONE LANE AND DRAINAGE EASEMENTS. WHEN CALCULATED BY PERCENTAGE OF LAND, THE LOT PROPOSED IN THIS PLAN IS ALLOWED TO DISCHARGE 7.1 CFS DIRECTLY TO FIRESTONE LANE.

MASTER-PLANNED HYDROLOGY:

LAND TREATMENTS: 0.36 ACRES (TYPE C)
0.85 ACRES (TYPE D)

$Q_p(\text{allowed}) = 39.8 \text{ CFS} (1.21 \text{ AC}/9.4 \text{ AC}) + 1.95 \text{ CFS} = 7.1 \text{ CFS}$

$V(\text{allowed}) = [0.36 (1.13) + 0.85 (2.12)] / 12 = 0.184 \text{ AC-FT}$

PROPOSED CONDITIONS: THIS SITE IS PROPOSED TO BE AN OFFICE/WAREHOUSE BUILDING WITH 57 PARKING SPACES. EXISTING OFF-SITE FLOWS WILL CONTINUE TO CROSS THE SITE. STORM WATERS WILL BE DISCHARGED TO FIRESTONE LANE. THE NORTHWEST CORNER OF THE PARKING LOT WILL SERVE AS A SMALL DETENTION POND TO HANDLE FLOWS IN EXCESS OF THE PREVIOUSLY APPROVED QUANTITIES. SEVERAL 4" PVC DRAIN PIPES WILL REGULATE FLOWS OUT OF THE DETENTION AREA.

PROPOSED HYDROLOGY:

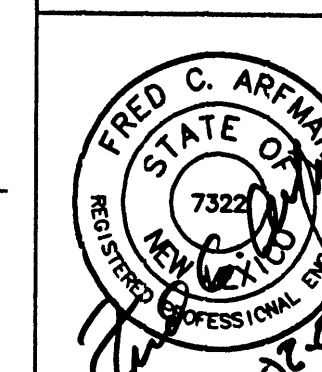
LAND TREATMENTS: 0.13 ACRES (TYPE C)
1.07 ACRES (TYPE D)

$Q_p(\text{proposed}) = 0.13 (3.14) + 1.07 (4.70) + 1.95 \text{ CFS} = 7.4 \text{ CFS}$

$V(\text{proposed}) = [0.13 (1.13) + 1.07 (2.12)] / 12 = 0.201 \text{ AC-FT}$

ELCON ELECTRIC

GRADING & DRAINAGE PLAN



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117GRD.DWGdvw 02/22/00

SHEET 1 OF 1