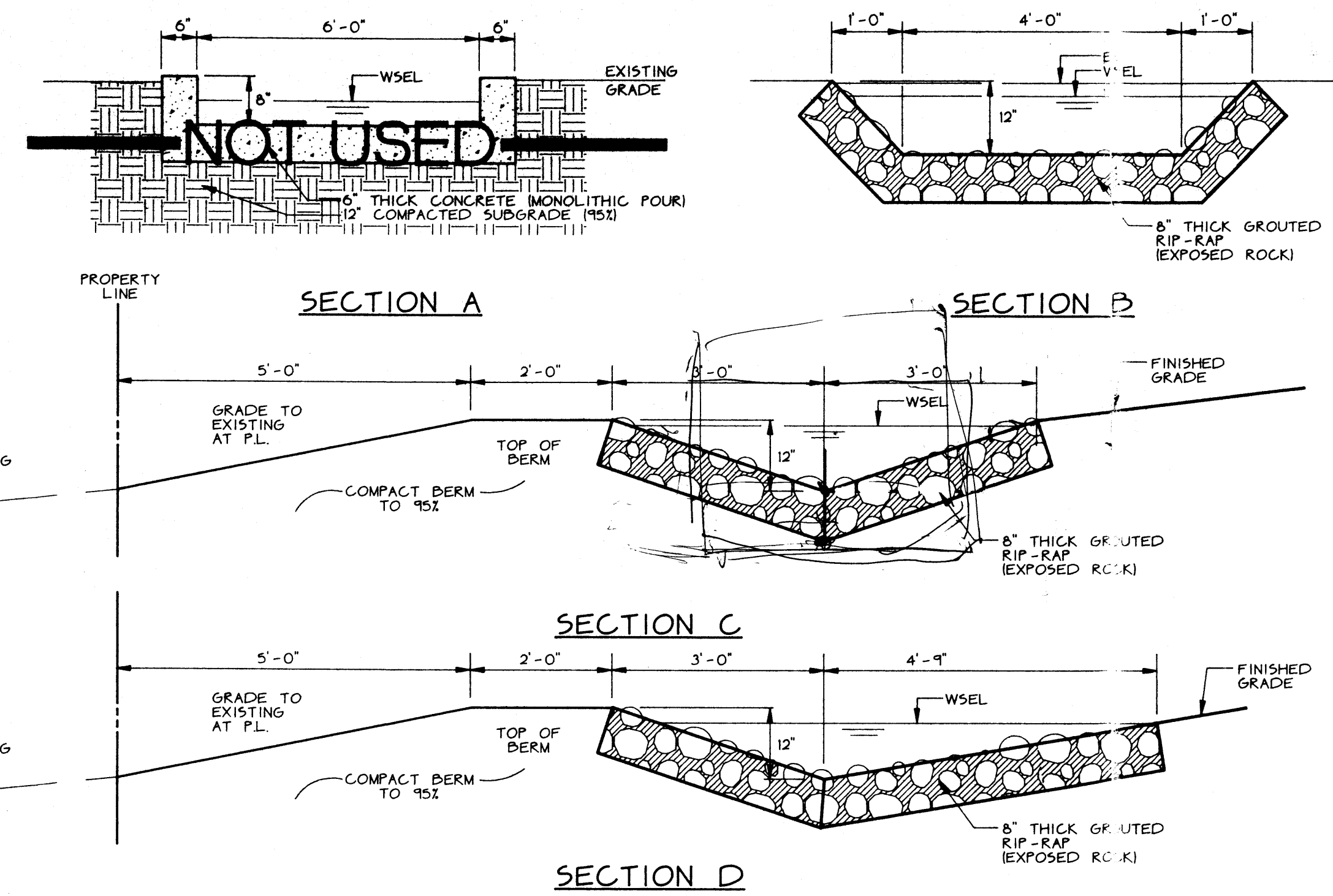


GENERAL NOTES
1. PROVIDE CONTRACTION JOINTS @ 10' O.C. MAX.
2. PROVIDE EXPANSION JOINTS ADJACENT TO BLDGS, WALLS AND CURB RETURNS
3. EDGES SHOULD BE REMOVED WITH 3/8" EDGING TOOL

DETAIL B
EXTRUDED CONCRETE CURB

LEGEND	
	SIDEWALK, CURB AND GUTTER (EXISTING, PROPOSED)
	PROPOSED PAVED DRIVE
	BUILDING (EXISTING, PROPOSED)
	PROPERTY LINE
	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED CONTOUR
	SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
	LANDSCAPED AREA
	TOP OF GRADE WALL (< 18" HIGH)
	TOP OF RETAINING WALL (> 18" HIGH)
	TOP OF ASPHALT
	TOP OF CURB
	FLOW LINE
	FINISHED FLOOR
	RIGHT OF WAY
	PROPERTY LINE
	POWER POLE
	ENTRY / EXIT LOCATION



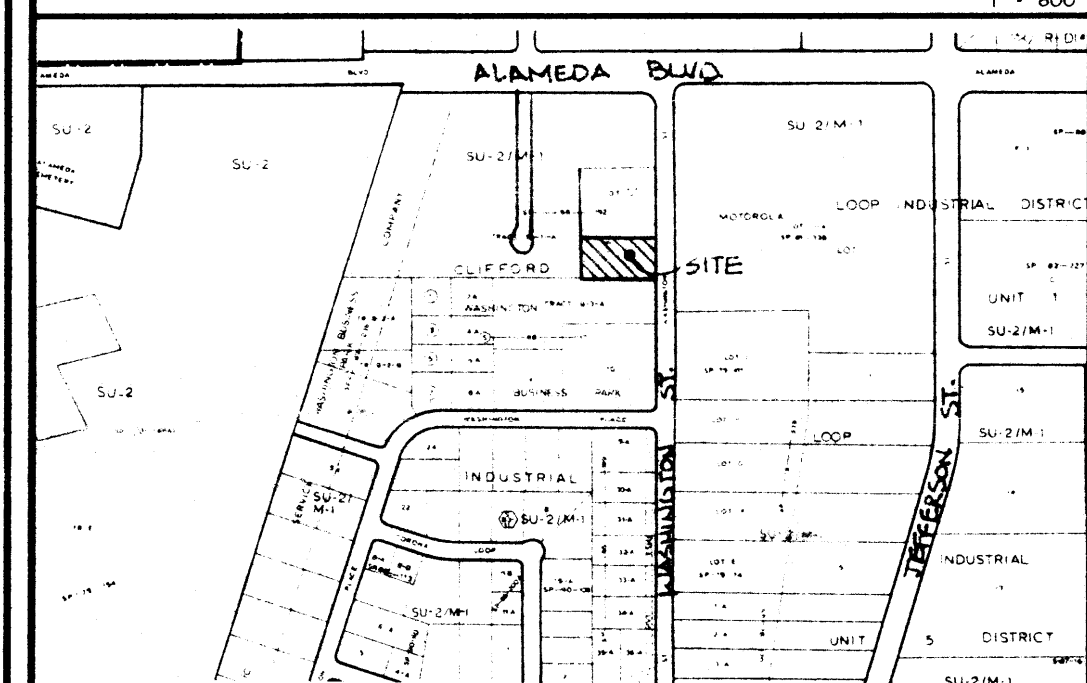
KEYNOTES

1. CONSTRUCT DRIVE ENTRANCE. PROVIDE SMOOTH RIDING TRANSITION. SEE ARCHITECTURAL FOR DIMENSIONS.
2. CONSTRUCT 6" CONC. CURB THROUGHOUT (UNLESS OTHERWISE NOTED)
3. CONSTRUCT STANDARD CURB AND GUTTER THIS AREA.
4. ROOF FLOWS TO DRAIN IN DIRECTIONS INDICATED ON D/G PLAN.
5. EXTENDED STEMWALL THIS AREA.
6. PROVIDE EROSION PROTECTION WITHIN 5' WIDE LANDSCAPING AREA. OWNERS OPTION.
7. CONSTRUCT A GROUTED RIP-RAP (EXPOSED ROCK) LINED 'V' DITCH. SEE SECTIONS C AND D THIS SHEET.
8. THICKENED EDGE ASPHALT ALONG WEST PARKING EDGE. 4" DEEP X 12" WIDE ALL SITE FLOWS TO PASS TO GROUTED RIP-RAP (EXPOSED ROCK) LINED SWALE.
9. CONSTRUCT 18" LF GROUTED RIP-RAP (EXPOSED ROCK) DRAINAGE CHANNEL. SEE SECTION THIS SHEET. SLOPE = 0.0200'/
10. SAWCUT 7' WIDE OPENING IN EXISTING CURB MATCH CHANNEL WIDTH. TRANSITION NEW CONCRETE CURB TO EXISTING PRESIDENT PLACE CURB.
11. CONSTRUCT COMPACTED BERM WITH RIP-RAP EROSION PROTECTION ON EAST SIDE. SEE DETAIL THIS SHEET.
12. PROVIDE EROSION PROTECTION / SEDIMENT CONTROL (ROCKED NG, GRAVEL W/ FILTER FABRIC, ETC., OWNERS OF CH.

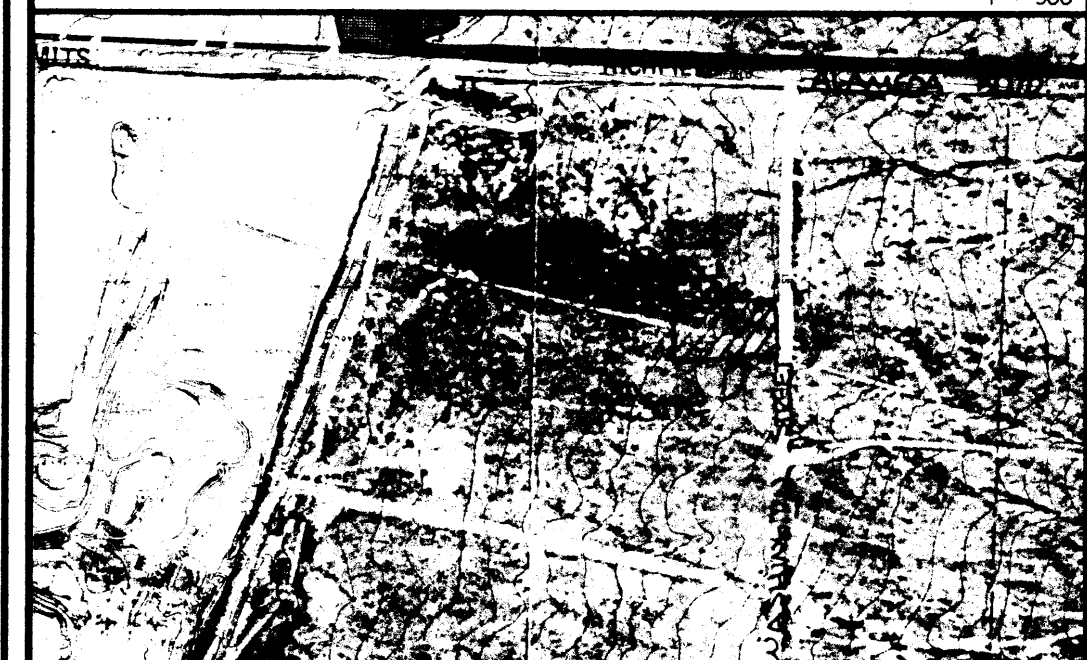
GENERAL NOTES

1. THE FOLLOWING APPLIES TO ALL COBBLES / RIP-RAP PERCENT PASSING
- | | |
|----|----------------|
| 8" | = 100% PASSING |
| 6" | = 50% PASSING |
| 4" | = 0% PASSING |

VICINITY MAP #C-17-Z



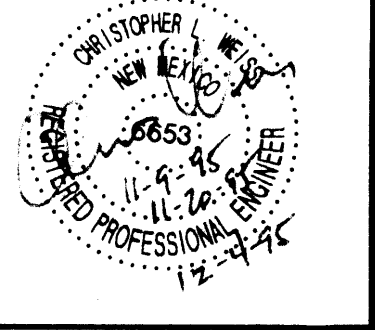
FEMA MAP #9



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Revisions

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BILL BUCKLEY - ARCHITECT
WASHINGTON - 3 OFFICES

Scale: 1" = 20' Drawn By: BJB Checked By: CLW Job Number: Date: OCT. 1995

Drainage and Grading Plan

C-1
SH. 1 OF 2

NOTICE TO CONTRACTOR

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 ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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 WITHIN A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO COLLECTOR STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXCAVATION PERMIT FOR SIDEWALK CULVERT/DRAIN.
8. PROOF OF ACCEPTANCE WILL BE REQUIRED PRIOR TO SIGN OFF FOR CERTIFICATE OF OCCUPANCY (C.O.).

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

DESIGN APPROVAL: _____
HYDROLOGY SECTION _____ DATE _____

INSPECTION APPROVAL: _____
CONSTRUCTION SECTION _____ DATE _____

ACCEPTANCE: _____
CONSTRUCTION SECTION/PERMITS _____ DATE _____

SCOPE

The proposed improvements include an approximately 9,450 SF (approx. footprint) building area with adjacent concrete and asphalt paved walkways / parking areas, general site work and site regrading.

The present site is an undeveloped commercial property which slopes at approx. 2% to the west. Washington Street NE abuts the property to the east, the property to the north is developed commercial, the property to the west and south are undeveloped commercial lots.

The intent of this plan is to show:

- Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- The extent of proposed site improvements, including buildings, walks and pavement.
- The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City of Albuquerque requirements for drainage management.
- The relationship of on-site improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

Drainage Plan Concept: All flows are to be routed around the proposed buildings to the south and released from the parking area into the dirt area as sheet flow. The flows will then run within a grouted rip-rap (exposed rock) triangular swale to the northwest property corner where they will enter the proposed grouted rip-rap (exposed rock) trapezoidal drainage channel within the existing 15' wide drainage easement to President Place N.E. At this point, the rip-rap channel will transition to a 7' wide concrete apron and into the President Place cul-de-sac where flows will enter the existing concrete lined channel on the south end of the cul-de-sac.

GENERAL NOTES:

Legal: Tract B-1-A-7, Clifford Industrial Park, Albuquerque, NM.

Surveyor: John F. Esqueib, New Mexico registered Land Surveyor No. 5949.

B.M.: Station is an A.M.A.F.C.A. brass tablet stamped "NDC 7" set on a concrete post projecting 0.3' above ground. Station is located at the Alameda Boulevard Bridge over the A.M.A.F.C.A. North Diversion Channel, 2.5 feet from southwest corner of Bridge headwall. Elevation = 5062.600 ft. (M.S.L.D.)

T.B.M.: Located at T.C. adjacent to northeast property corner. See Plan. Elevation = 5105.56' (M.S.L.D.) - see plan.

Flood Hazard: Based on FEMA Map #9, the property is not located within a flood zone.

Off-Site Drainage: Based on site visits and contour map analysis, no off-site flows affect this property.

Erosion Control: The contractor is responsible for retaining on-site all sediment generated during construction by means of temporary earth berms or silt fences at the low points on the west property line.

Calculations are based on the Drainage Design Criteria for City of Albuquerque, Section 22.2, DPM, Vol. 2, dated Jan., 1993.

AREA OF SITE: 48469 SF = 1.11 Ac.

ON-SITE

HISTORIC FLOWS:	DEVELOPED FLOWS:	EXCESS PRECIPITATION:
On-Site Historic Land Condition	On-Site Developed Land Condition	Precip. Zone = 2
Area a = 0 SF	Area a = 0 SF	Ea = 0.53
Area b = 0 SF	Area b = 2744 SF	Eb = 0.78
Area c = 48469 SF	Area c = 5455 SF	Ec = 1.13
Area d = 0 SF	Area d = 40270 SF	Ed = 2.12
Total Area = 48469 SF	Total Area = 48469 SF	

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$$

Historic E = 1.13 in. Developed E = 1.93 in.

On-Site Volume of Runoff: V360 = E'A

Historic V360 = 4564 CF Developed V360 = 7806 CF

On-Site Peak Discharge Rate: $Qp = QpAa + QpAb + QpAc + QpAd / 43,560$

For Precipitation Zone 2

Qpa = 1.56 Qpb = 2.28 Qpc = 3.14 Qpd = 4.70
Historic Qp = 3.5 CFS Developed Qp = 4.9 CFS

Note: all flows will be released into the existing private drainage easement at the NW property corner and taken to President Pl. N.E.

LOT J GENERAL DATA

This data is included for channel sizing only - assumed 85% D, 15% C	
Area of Lot J	= 78003 sf
Developed E	= 1.97 in.
Developed V360	= 12815 CF
Developed Q	= 8.0 CFS

SECTION A - CONCRETE APRON @ PRESIDENT STREET

Based on Haestad Methods Calculations for Triangular Channel with the following dimensions:

Bottom Width	= 6.0 ft	Discharge	= 12.9 cfs
Manning's n	= 0.015	Depth	= 0.34 ft
Channel Slope	= 0.0200 /'	Velocity	= 6.34 fps

SECTION B - GROUTED RIP-RAP WITHIN DRAINAGE EASEMENT

Based on Haestad Methods Calculations for Triangular Channel with the following dimensions:

Bottom Width	= 4.0 ft	Channel Slope	= 0.0200 /'
Lt. Side Slope	= 1:1	Discharge	= 12.90 cfs
Rt. Side Slope	= 1:1	Depth	= 0.8 ft
Manning's n	= 0.045	Velocity	= 3.37 fps
	E.G. = V ² /2g	Depth provided = 1.0'	OK

SECTION C - 6' WIDE ON-SITE SWALE

Based on Haestad Methods Calculations for Triangular Channel with the following dimensions:

Lt. Side Slope	= 3:1	Channel Slope	= 0.0100 /'
Rt. Side Slope	= 3:1	Discharge	= 4.90 cfs
Manning's n	= 0.0450	Depth	= 0.93 ft

SECTION D - 7'-9" WIDE ON-SITE SWALE

Based on Haestad Methods Calculations for Triangular Channel with the following dimensions:

Lt. Side Slope	= 3:1	Channel Slope	= 0.0100 /'
Rt. Side Slope	= 6:1	Discharge	= 4.90 cfs
Manning's n	= 0.0450	Depth	= 0.79 ft

KEYNOTES

*Allow Q
2.56
Based on 2.3 cfs allowed
for Basin L Area on m
Clifford Ind. Park
CITDIU*

C.L. WEISS ENGINEERING, INC.



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Information
Additional

C-2
SH. 2 OF 2