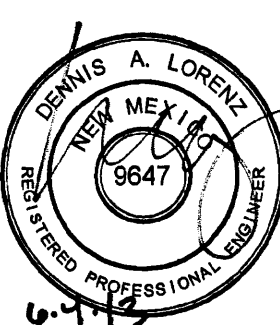
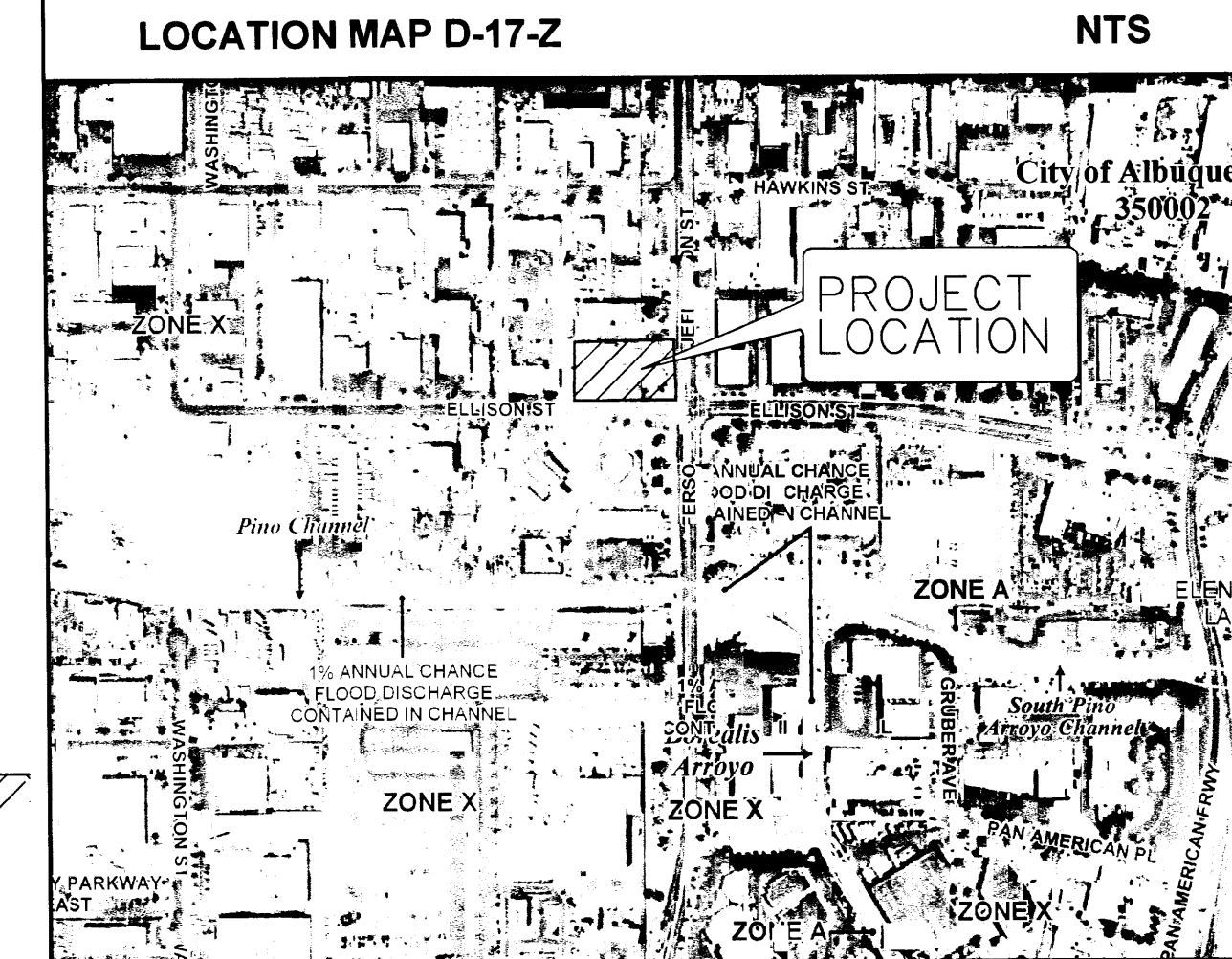
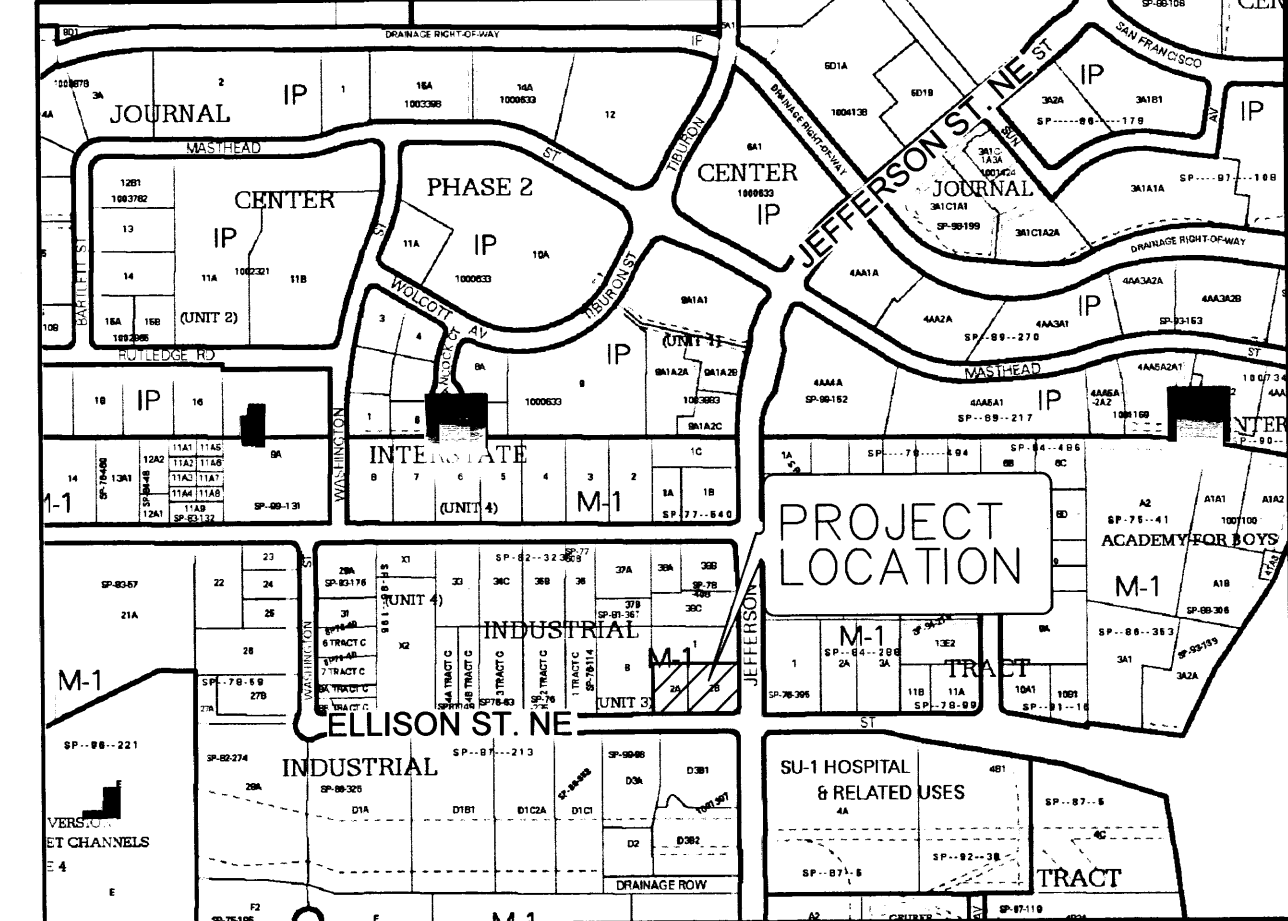


REVISION DATE



DATE
04/06/2013

SHEET NUMBER
C.1



LEGEND		
ITEM	EXISTING	PROPOSED
CURB AND GUTTER	---	---
CURB ELEVATIONS	---	---
SPOT ELEV.	×	+
STORM DRAIN EASEMENT	---	---
TOP OF ASPHALT ELEV.	TA 16.2	TA 16.2
FLOWLINE ELEV.	EX FL 16.2	FL 16.2
PAVING	---	---
DRAINAGE SWALE	---	---
DIRECTION OF FLOW	---	---
CONCRETE PAVEMENT	---	---
DRAINAGE BASIN DIVIDE	---	---

KEYED NOTES

- EXISTING CONCRETE CURB.
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING REFUSE ENCLOSURE
- EXISTING ASPHALT SWALE
- DIRECTION OF ROOF DRAINAGE
- EXISTING 24 INCH SIDEWALK CULVERT
- EXISTING LANDSCAPING
- CONSTRUCT NEW TYPE 'D' INLET PER COA STD DWG 2206
- REMOVE AND REPLACE CONCRETE PAVEMENT TO LIMITS SHOWN. TO PROVIDE POSITIVE DRAINAGE TO NEW INLET.
- REMOVE EXISTING CONCRETE CURB AND SIDEWALK. REPLACE WITH CURB AND GUTTER AND SIDEWALK TO LIMITS SHOWN.
- REMOVE AND REPLACE STEPS.
- INSTALL NEW 12 INCH PVC STORM DRAIN. CONNECT EXISTING DOWNSPOUTS TO NEW STORM DRAIN.
- CONSTRUCT NEW 15 INCH PVC STORM DRAIN.
- INSTALL NEW 15 INCH CMP END SECTION.
- INSTALL RIP RAP EROSION CONTROL PAD. SEE DETAIL 'B'.

PROJECT DATA

SITE MAPPING:
TOPOGRAPHIC AND IMPROVEMENT MAPPING
BY HARRIS SURVEYING, INC. MAY 2013

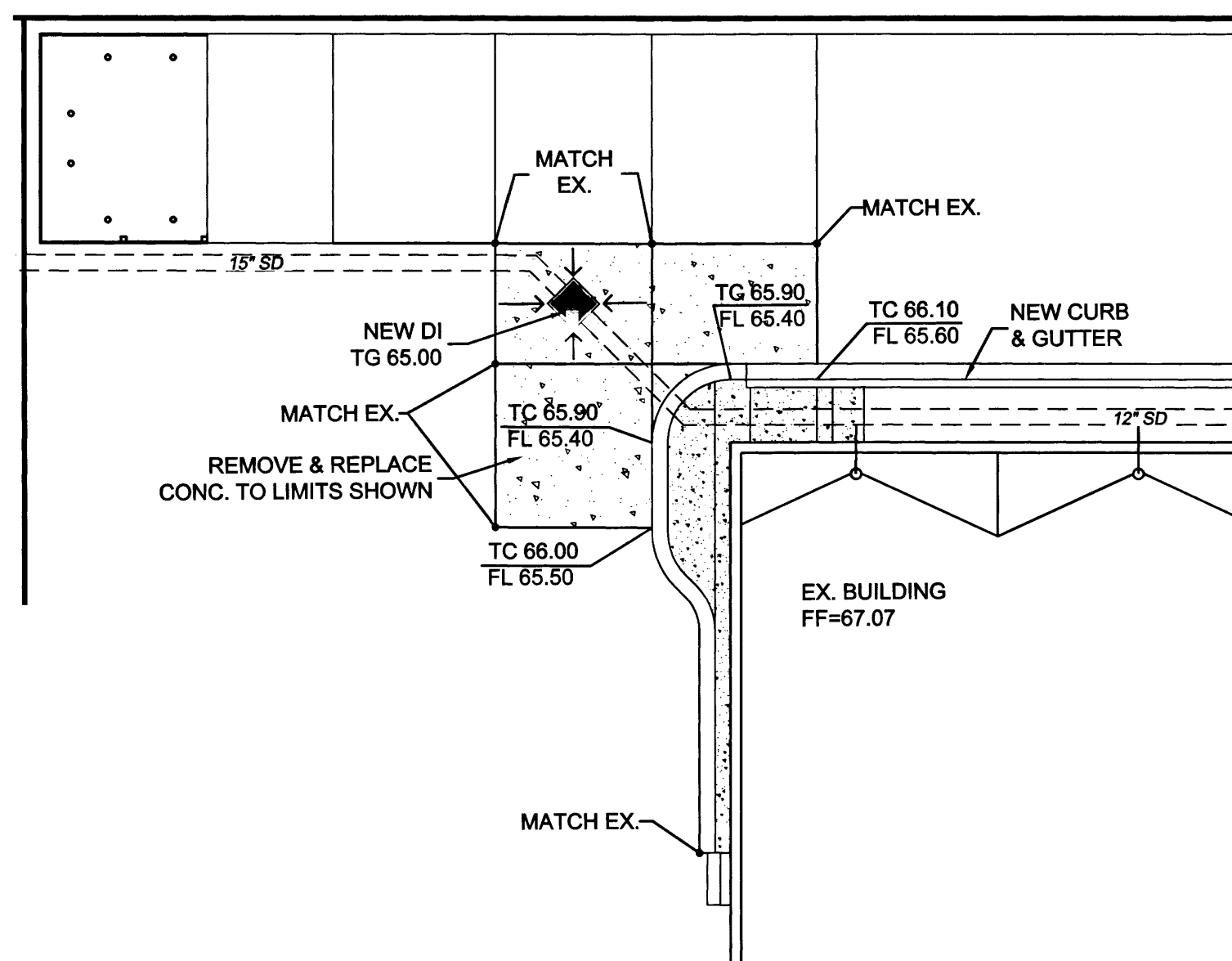
PROPERTY ADDRESS:
7101 JEFFERSON NE, ALBUQUERQUE, NEW MEXICO 87109

LEGAL DESCRIPTION:
LOTS 2A & 2B, INTERSTATE INDUSTRIAL, UNIT 3

PROJECT BENCHMARK:
BUILDING FINISHED FLOOR - ELEVATION=5067.07 FEET.

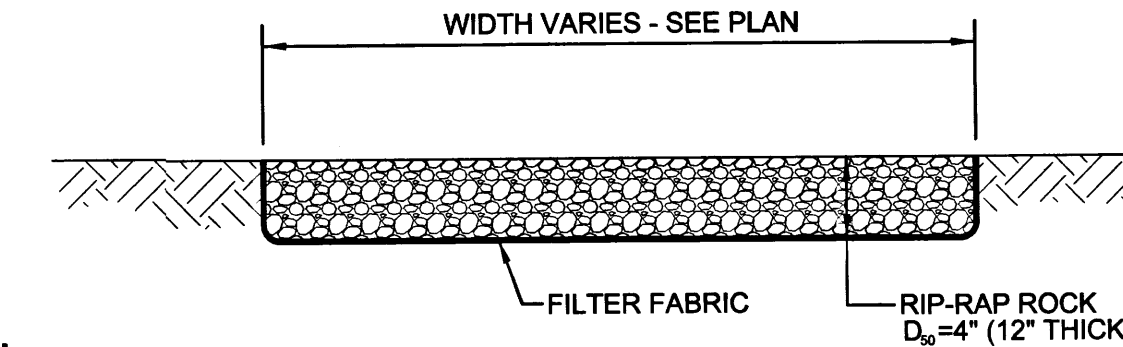


Benchmark Designation?



AREA DRAIN PLAN

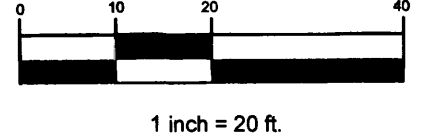
SCALE 1"=10'



EROSION CONTROL PAD

NTS

JEFFERSON ST. NE



PROJECT HYDROLOGY									
AHYMO									
ZONE:	2	Santa Fe Federal Credit Union							
P ₁ HOUR	2.35								
P ₁₀ DAY	3.95								
EXISTING									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	1.20	0.00	0.00	0.35	0.85	1.83	5.09	0.183	
A	0.61	0.00	0.00	0.08	0.53	1.99	2.74	0.101	
B	0.50	0.00	0.00	0.25	0.25	1.63	1.96	0.068	
C	0.09	0.00	0.00	0.02	0.07	1.90	0.39	0.014	
PROPOSED:									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	1.20	0.00	0.00	0.35	0.85	1.83	5.09	0.183	
A	0.61	0.00	0.00	0.08	0.53	1.99	2.74	0.101	
B	0.50	0.00	0.00	0.25	0.25	1.63	1.96	0.068	
C	0.09	0.00	0.00	0.02	0.07	1.90	0.39	0.014	

runoff from the site and contributing offsite areas drains to Ellison Street.

As shown by the AHYMO calculations, no additional runoff will be generated as a result of this project.

Since construction will disturb an area of less than 1.0 acres, a Storm Water Pollution Prevention Plan should not be required.

CALCULATIONS

The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

GRADING AND DRAINAGE PLAN

PURPOSE

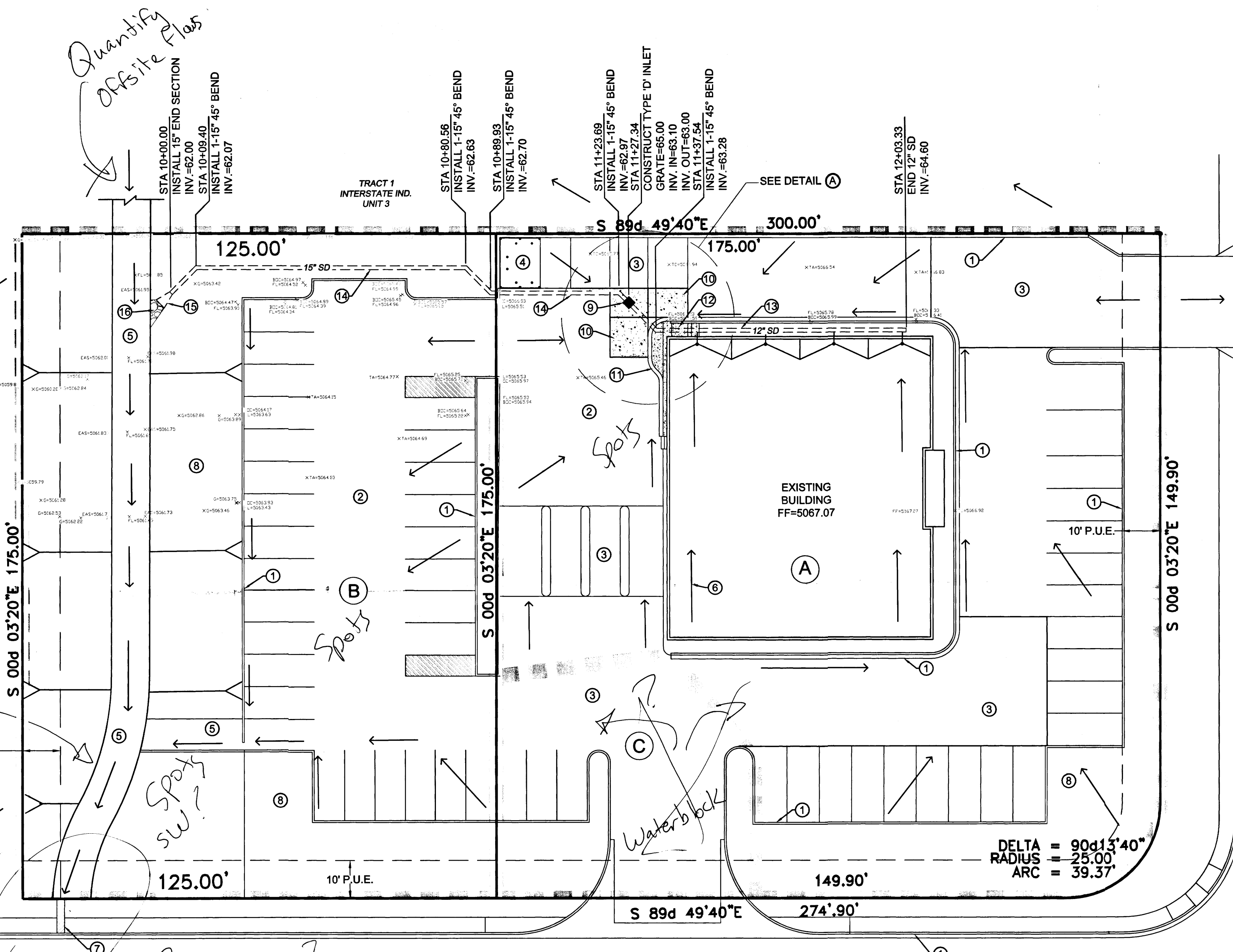
The purpose of this Plan is to present a limited drainage study identifying the drainage character of the site for the purpose of mitigating the ponding of excess runoff adjacent to the existing building located at 7101 Jefferson Street NE. Excess storm runoff presently ponds at the northwest building corner, resulting in settlement of the paving materials and cracking of the building exterior. This plan recommends the construction of an area drain and private storm drain to collect excess storm runoff and convey drainage flows to the existing paved drainage swale located along the west boundary of the site.

EXISTING CONDITIONS

The project site is presently fully developed. The property is owned and operated by Santa Fe Federal Credit Union. Site improvements consist of an existing 5,600 square foot building, and associated site improvements. The site is bounded on the east by Jefferson Street NE, and on the south by Ellison Street NE and north and west by developed light manufacturing properties. Site topography slopes from east to west approximately one-percent (1%).

PROPOSED IMPROVEMENTS

As shown by the Plan, the project consists of the construction of an area drain and private storm drain to collect excess storm runoff and convey drainage flows to the existing paved drainage swale located along the west boundary of the site. The storm drain will collect runoff from the existing building by connecting the roof drains directly to a new storm drain. An area drain will be constructed at the northwest corner of the building to collect excess runoff that presently ponds at that location. The storm drain will outfall at the existing paved drainage swale located along the west boundary of the site. All



ELLISON ST. NE

DRAINAGE PLAN NOTES

- BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are finished grade or top of pavement, unless noted otherwise.

Quantify off-site flows

is this asphalt channel extended all the way to the culvert?

invert? elev?

Extend culvert 2' past prop line track west

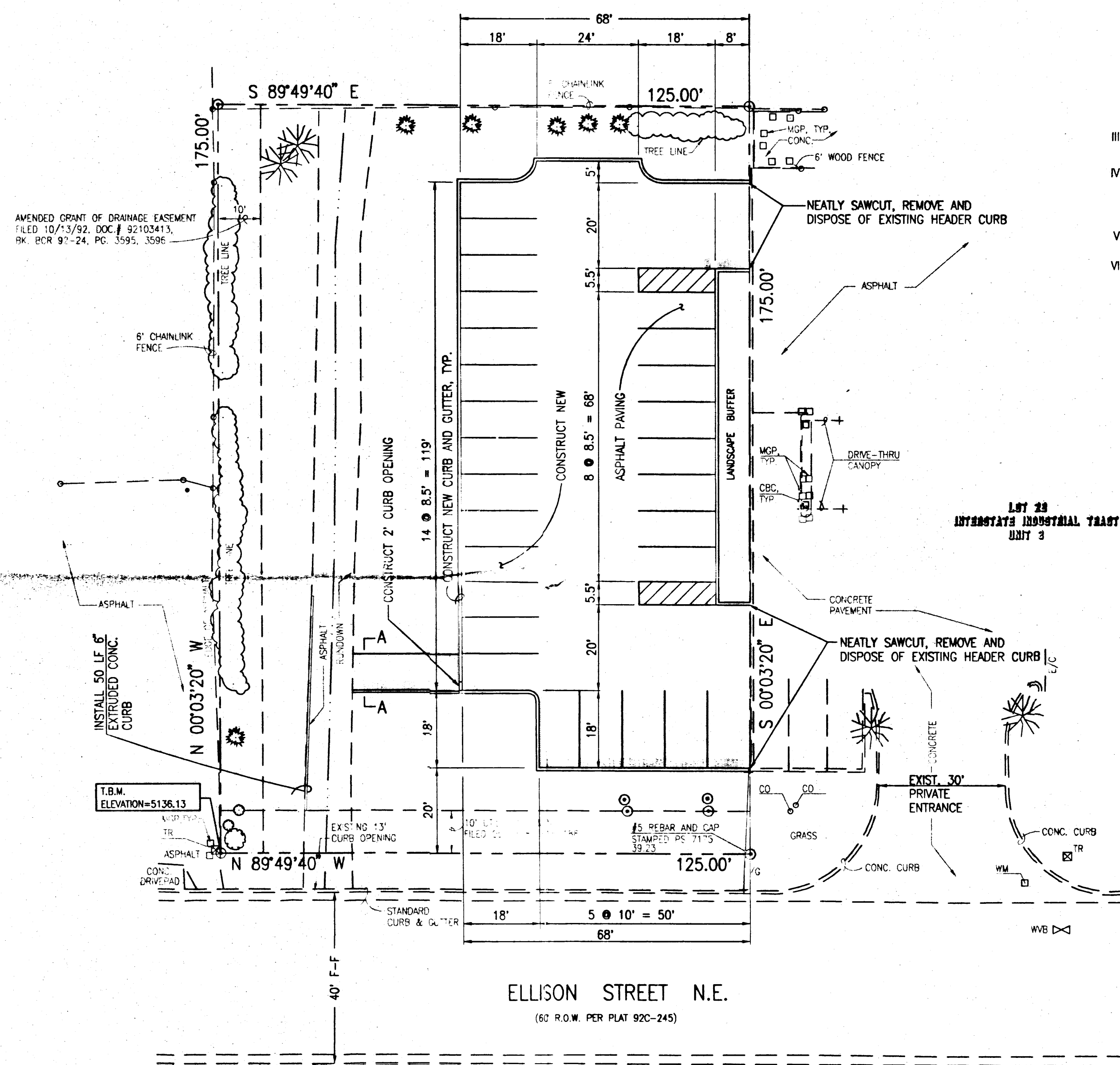
Detail

Total Q?

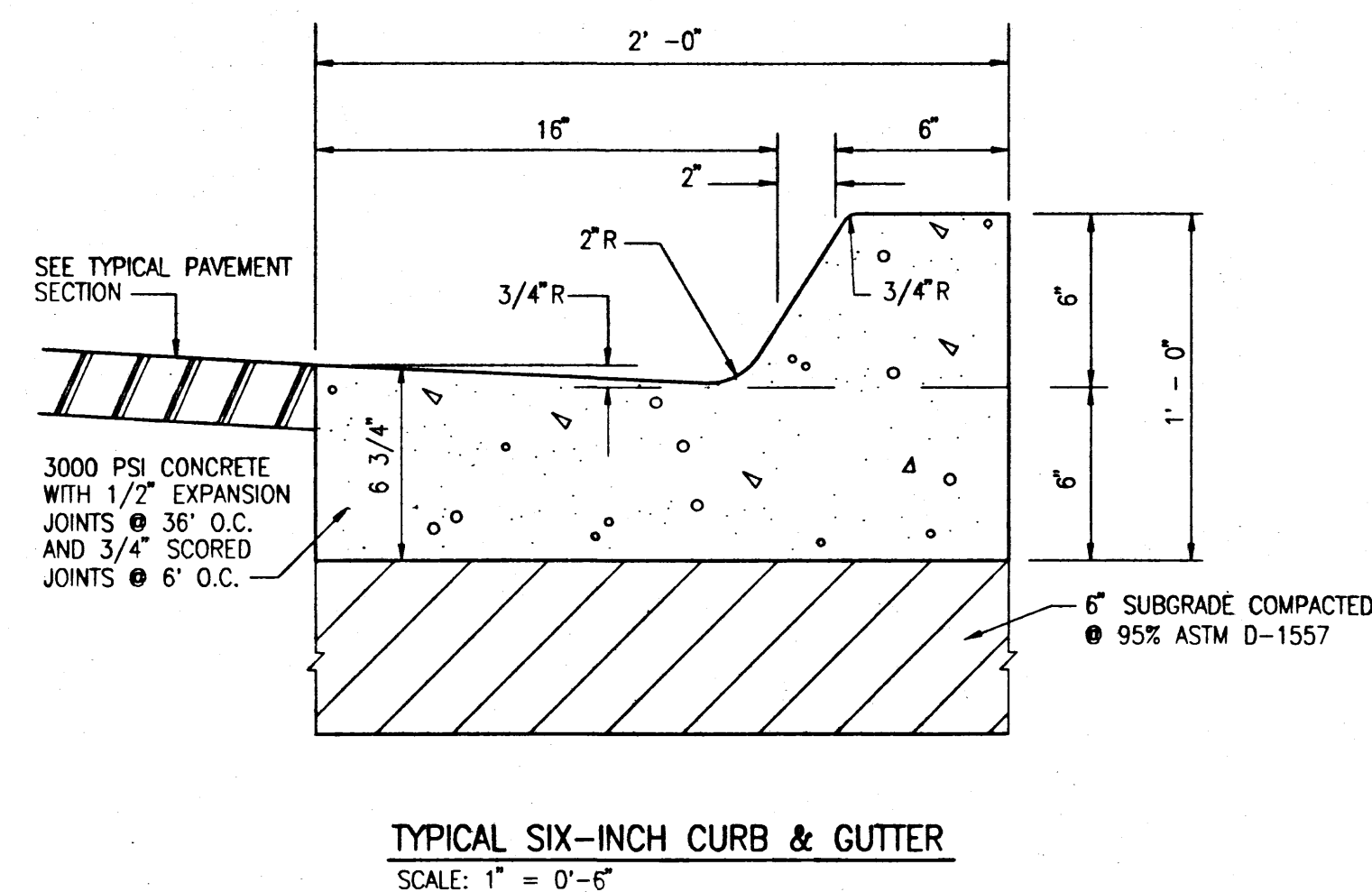
Flowline?





Water back

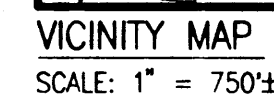
DELTA = 90d13'40"
RADIUS = 25.00'
ARC = 39.37'



D. THE LAYOUT OF THE 27 SPACE PARKING LOT CONFORMS WITH DPM CHAPTER 23, SECTION 7.




CBC	CONCRETE BUILDING COLUMN
CO	SANITARY SEWER CLEAN-OUT
E/C	EDGE OF CURB
E/G	EDGE OF GRASS
EA	EDGE OF ASPHALT
MGP	METAL GUARD POST
RD	ROOF DRAIN
SP	STEEL POLE
TR	TELEPHONE RISER
TYP.	TYPICAL
WM	WATER METER
WVB	WATER VALVE BOX
	EXISTING CONIFEROUS TREE
 (0.5")	EXISTING DECIDUOUS TREE (CALIPER DIMENSION)
	EXISTING SHRUB
	EXISTING SHRUB/TREE LINE



SCALE: 1" = 750'

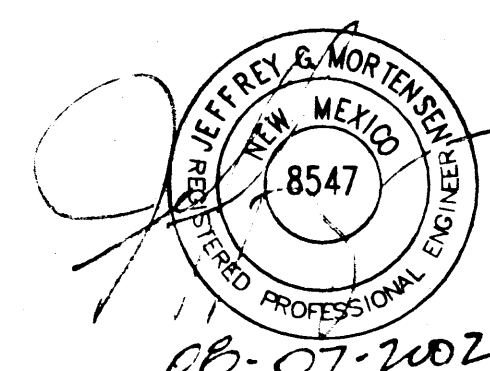
D-17

RECEIVED
AUG 08 2002



JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250
☐ FAX: 505 345-4254 ☐ Email: jmorten@swcp.com

DESIGNED BY	J.G.M.	NO.	DATE	BY	REVISIONS	JOB NO.	2002.037.2
DRAWN BY	S.G.H.					DATE	07-2002
APPROVED BY	J.G.M.					SHEET	1 OF 2



I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED ALONG THE NORTH I-25/JEFFERSON CORRIDOR REPRESENTS THE DEVELOPMENT OF AN INFILL SITE. AT PRESENT THE SITE IS UNDEVELOPED. IT IS PROPOSED TO GRADE AND PAVE THE LOT TO PROVIDE ADDITIONAL PARKING FOR THE ADJACENT LOT OCCUPIED BY THE SANTA FE FEDERAL CREDIT UNION LOCATED AT 7101 JEFFERSON NE. THIS PLAN PROVIDES FOR THE CIRCULATION OF VEHICLES BETWEEN THE TWO LOTS UNDER COMMON OWNERSHIP. THE PROPOSED GRADING OF THE NEW LOT WILL NOT, HOWEVER, CAUSE CROSS-LOT DRAINAGE.

THIS SUBMITTAL IS MADE IN SUPPORT OF A GRADING AND PAVING PERMIT APPROVAL FOR THE MODEST PARKING LOT EXPANSION.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE NORTH SIDE OF ELLISON STREET NE JUST WEST OF ITS INTERSECTION WITH JEFFERSON STREET NE. THE CURRENT LEGAL DESCRIPTION IS LOT 2A, INTERSTATE INDUSTRIAL TRACT, UNIT 3. THE EXISTING ADJACENT SITE IS LOT 2B, INTERSTATE INDUSTRIAL TRACT, UNIT 3. AS SHOWN BY PARCELS 136 AND 137 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 20, 1996, THIS SITE DOES NOT LIE WITHIN OR ADJACENT TO, NOR ADVERSELY IMPACTS A DESIGNATED FLOOD HAZARD ZONE.

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A MODEST PARKING LOT EXPANSION TO SERVE THE EXISTING SANTA FE FEDERAL CREDIT UNION LOCATED AT 7101 JEFFERSON NE. THE PARKING LOT EXPANSION IS INTENDED TO SERVE ONLY LOT 2B, THE ADJOINING FACILITY.

III. BACKGROUND DOCUMENTS & RESEARCH

RESEARCH WAS CONDUCTED AT THE CITY ENGINEER'S OFFICE REVEALING PRIOR DRAINAGE SUBMITTALS FOR THIS SITE. THOSE SUBMITTALS ARE TABULATED BELOW WITH THE SIGNIFICANCE OF EACH NOTED:

- A. SANTA FE FEDERAL CREDIT UNION (D17/D017) - GRADING AND DRAINAGE PLAN PREPARED BY ISAACSON & ARFMAN IN 1993 FOR BUILDING PERMIT. THIS SUBMITTAL IS FOR LOT 2B, INTERSTATE INDUSTRIAL TRACT, UNIT 3 THAT LIES IMMEDIATELY EAST OF THE SUBJECT PROJECT SITE. D17/D017 ESTABLISHES A PRECEDENT FOR THE FREE DISCHARGE OF DEVELOPED RUNOFF TO ELLISON NE FROM THOSE LOTS LYING ON THE NORTH SIDE OF THAT PUBLIC STREET.
- B. NORMAN WRIGHT BUILDING (D17/D051) - GRADING AND DRAINAGE PLAN PREPARED BY KEMPER-YAUGHN IN 1997 FOR BUILDING PERMIT. THIS SUBMITTAL IS FOR LOT 2, TRACT C, INTERSTATE INDUSTRIAL TRACT, UNIT 3 THAT LIES JUST 3 LOTS TO THE WEST OF THE SUBJECT PROJECT SITE. D17/D051 RECONFIRMS THE PRECEDENT FOR THE FREE DISCHARGE OF DEVELOPED RUNOFF TO ELLISON NE FROM THOSE LOTS LYING ON THE NORTH SIDE OF THAT PUBLIC STREET.

A SITE VISIT CONDUCTED ON AUGUST 07, 2002 CONFIRMED THAT OFFSITE FLOWS ARE RECEIVED FROM THE DEVELOPED LOT SITUATED TO THE NORTH OF THE SUBJECT PROPERTY. THE OFFSITE FLOWS ARE RECEIVED BY THE EXISTING ASPHALT PAVED RUNDOWN ILLUSTRATED ON THE GRADING PLAN.

REVIEW OF THE PLAT OF RECORD INDICATES THAT AN "AMENDED GRANT OF DRAINAGE EASEMENT", 10 FEET IN WIDTH, WAS GRANTED BY THAT PLAT (92C-245) ALONG THE WEST PROPERTY LINE OF LOT 2A. THE EASEMENT AS GRANTED BY THE REFERENCED PLAT DOES NOT COINCIDE WITH THE EXISTING ASPHALT PAVED RUNDOWN ILLUSTRATED ON THE GRADING PLAN. THE PRIOR PLAT (B18-188) THAT CREATED LOTS 1 AND 2 IDENTIFIES THAT LOT MEASURES APPROXIMATELY 0.86 ACRES. LOT 1 GENERATES OFFSITE FLOWS THAT IMPACT LOT 2A.

IV. EXISTING CONDITIONS

AT PRESENT, THE SITE IS UNDEVELOPED. EXISTING CONDITIONS ARE ILLUSTRATED BY THE GRADING PLAN. AT PRESENT, THE SITE DRAINS FROM EAST TO WEST AND FROM NORTH TO SOUTH. RUNOFF GENERATED BY THIS SITE DISCHARGES INTO ELLISON STREET NE VIA AN EXISTING ASPHALT PAVED DRAINAGE RUNDOWN OUTLETING THROUGH AN EXISTING CURB-CUT. THE EXISTING SITE TO THE EAST IS THE SANTA FE FEDERAL CREDIT UNION WHICH DOES NOT CONTRIBUTE OFFSITE FLOWS TO THIS SITE. OFFSITE FLOWS ARE RECEIVED BY THE ADJACENT LOT TO THE NORTH, LOT 1, MEASURING 0.86 ACRES. THE DISCHARGE FROM LOT 1, HOWEVER, DOES NOT COINCIDE WITH THE AMENDED GRANT OF DRAINAGE EASEMENT REFERENCED ABOVE.

V. DEVELOPED CONDITIONS

THE PROPOSED CONSTRUCTION CONSISTS OF A MODEST PARKING LOT EXPANSION TO SERVE THE EXISTING SANTA FE FEDERAL CREDIT UNION LOCATED AT 7101 JEFFERSON NE. THE PARKING LOT EXPANSION IS INTENDED TO SERVE ONLY LOT 2B, THE ADJOINING FACILITY. THE NEW PAVING WILL SLOPE FROM EAST TO WEST AND FROM NORTH TO SOUTH. DEVELOPED RUNOFF WILL EXIT THE PARKING LOT VIA A 2'-0" CURB OPENING. FROM THIS POINT, THE RUNOFF WILL BE CONVEYED TO THE EXISTING ASPHALT PAVED RUNDOWN VIA NEW ASPHALT PAVING CURBED TO EFFECTIVELY DIRECT FLOWS. AN EXTRUDED CONCRETE CURB IS PROPOSED FOR THE WEST EDGE OF THE EXISTING ASPHALT PAVED RUNDOWN TO PROVIDE BETTER CONTROL OF THE INTERSECTING FLOWS AND IMPROVED HYDRAULICS FOR THE OVERALL PRIVATE DRAINAGE FACILITY.

VI. GRADING PLAN

THE GRADING PLAN SHOWS 1.) EXISTING GRADES AND PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS 2.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS, 3.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 4.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE SITE TO THE EAST IS ALREADY DEVELOPED. THE PROPOSED PARKING LOT EXPANSION WILL CONNECT TO THE EXISTING ADJACENT SITE. THE PLAN FURTHER ILLUSTRATES THAT THE EXISTING DRAINAGE PATTERNS DESCRIBED IN THE SECTIONS ABOVE WILL NOT BE ALTERED AND THAT THE PROPOSED GRADING WILL NOT HAVE AN ADVERSE IMPACT ON DOWNSTREAM CONDITIONS. OFFSITE FLOWS WILL CONTINUE TO BE ACCEPTED AND CONVEYED THROUGH THE SITE.

VII. CALCULATIONS

CALCULATIONS ANALYZING THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT HAVE BEEN PREPARED FOR THIS PROJECT. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THE RESULTS PRESENTED HEREON, THERE WILL BE AN ALMOST NEGLIGIBLE INCREASE IN PEAK DISCHARGE AND RUNOFF VOLUME ASSOCIATED WITH THE PROPOSED CONSTRUCTION. HYDRAULIC ANALYSIS OF THE PROPOSED CURB OPENING HAS BEEN PERFORMED USING THE WEIR EQUATION AND DEMONSTRATES THAT THE PROPOSED WIDTH CAN PASS THE 100-YEAR DESIGN FLOW FOR THE ENTIRE SITE KEEPING IN MIND THAT ONLY A PORTION OF THAT DISCHARGE WILL ACTUALLY REACH THAT POINT. THIS PROVIDES A CONSERVATIVE EVALUATION OF THE CAPACITY OF THAT ONSITE OUTLET POINT.

VIII. CONCLUSION

THE FREE DISCHARGE OF RUNOFF FROM THIS SITE TO ELLISON NE IS APPROPRIATE DUE TO THE FOLLOWING FACTORS:

1. INSIGNIFICANT INCREASE IN RUNOFF VOLUME AND PEAK DISCHARGE
2. NO ADVERSE IMPACT ON DOWNSTREAM CAPACITY OR DOWNSTREAM PROPERTIES
3. PRECEDENT ESTABLISHED BY PRIOR SUBMITTALS FOR NEARBY AND ADJACENT SITES
4. DEVELOPMENT OF AN INFILL SITE WITH A LARGELY ALREADY DEVELOPED COMMERCIAL INFILL AREA
5. THE EXISTING DRAINAGE PATTERN (STATUS QUO) WILL NOT BE ALTERED AND HENCE MAINTAINED
6. THE PROPOSED DRAINAGE SCHEME IS CONSISTENT WITH THAT APPROVED FOR PREVIOUS SUBMITTALS ON THE SAME SIDE OF ELLISON NE
7. OFFSITE FLOWS WILL CONTINUE TO BE ACCEPTED AND CONVEYED THROUGH THE SITE VIA THE EXISTING ASPHALT PAVED RUNDOWN TO ELLISON NE DESPITE THE FACT THAT THIS PRIVATE DRAINAGE FACILITY DOES NOT LIE WITHIN THE AMENDED GRANT OF DRAINAGE EASEMENT PREVIOUSLY NOTED

ALL ONSITE IMPROVEMENTS ARE OWNED, OPERATED AND MAINTAINED BY THE SANTA FE FEDERAL CREDIT UNION. THE DOWNSTREAM STREETS AND STORM DRAINAGE SYSTEMS ARE OWNED, OPERATED AND MAINTAINED BY THE CITY PUBLIC WORKS DEPARTMENT.

CALCULATIONS

- I. PRECIPITATION ZONE = 2
II. $P_{6.100} = P_{360} = 2.35$
III. TOTAL AREA (A_T) = 21870 SF/ 0.50 AC
IV. EXISTING LAND TREATMENT (SITE)

TREATMENT	AREA (SF/AC)	%
C	20020/0.46	92
D	1860/0.04	08

V. DEVELOPED LAND TREATMENTS

TREATMENT	AREA (SF/AC)	%
A	660/0.01	02
B	11350/0.25	50
D	10530/0.24	48

VI. EXISTING CONDITION

A. LOT 2A

1. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [1.13(0.46) + 2.12(0.04)] / 0.50 = 1.21$ IN
 $V_{100,6-HR} = (E_w / 12) A_T$
 $V_{100,6-HR} = (1.21 / 12) 0.50 = 0.0504$ AC-FT = 2190 CF

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = 3.14(0.46) + 4.70(0.04) = 1.6$ CFS

B. OFFSITE FLOWS (LOT 1)

1. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [0.78(0.13) + 2.12(0.73)] / 0.50 = 1.92$ IN
 $V_{100,6-HR} = (E_w / 12) A_T$
 $V_{100,6-HR} = (1.92 / 12) 0.86 = 0.1374$ AC-FT = 5990 CF

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = 2.28(0.13) + 4.70(0.73) = 3.7$ CFS

VII. DEVELOPED CONDITION

A. LOT 2A

1. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [0.78(0.01) + 1.13(0.25) + 2.12(0.24)] / 0.50 = 1.60$ IN
 $V_{100,6-HR} = (E_w / 12) A_T$
 $V_{100,6-HR} = (1.60 / 12) 0.50 = 0.0666$ AC-FT = 2900 CF

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = 2.28(0.01) + 3.14(0.25) + 4.70(0.24) = 1.9$ CFS

3. CONCRETE RUNDOWN CAPACITY

- $Q = CLH^{3/2}$
WHERE:
C = 2.7
L = 2 FT
H = 0.5 FT
THEN:
 $Q = 1.9$ CFS = Q_{100}

B. OFFSITE FLOWS (LOT 1)

1. VOLUME
 $E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_w = [0.78(0.13) + 2.12(0.73)] / 0.50 = 1.92$ IN
 $V_{100,6-HR} = (E_w / 12) A_T$
 $V_{100,6-HR} = (1.92 / 12) 0.86 = 0.1374$ AC-FT = 5990 CF

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = 2.28(0.13) + 4.70(0.73) = 3.7$ CFS

- VIII. COMPARISON
 $\Delta V_{100} = 2900 - 2190 = 710$ CF (INCREASE)
 $\Delta Q_{100} = 1.9 - 1.6 = 0.3$ CFS (INCREASE)

CONSTRUCTION NOTES:

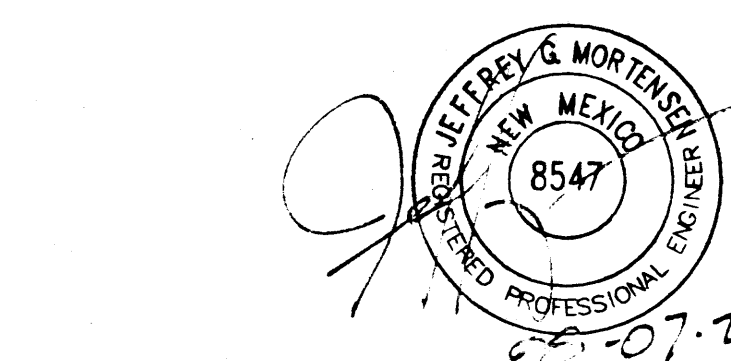
1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 280-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
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 PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. 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, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. 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.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.
4. ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEED ACCORDING TO C.O.A. SPECIFICATION 1012 "NATIVE GRASS SEEDING". THIS WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.

LEGEND

CBC	CONCRETE BUILDING COLUMN
CO	SANITARY SEWER CLEAN-OUT
E/C	EDGE OF CONCRETE
E/G	EDGE OF GRASS
EA	EDGE OF ASPHALT
FL	FLOWLINE
MGP	METAL GUARD POST
RD	ROAD DRAIN
SP	STEEL POLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TR	TELEPHONE RISER
TYP.	TYPICAL
WM	WATER METER
WVB	WATER VALVE BOX
+ 40.2	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
	EXISTING DECIDUOUS TREE (CALIPER DIMENSION)
	EXISTING SHRUB
	EXISTING SHRUB/TREE LINE
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED FLOWLINE
	HIGH POINT

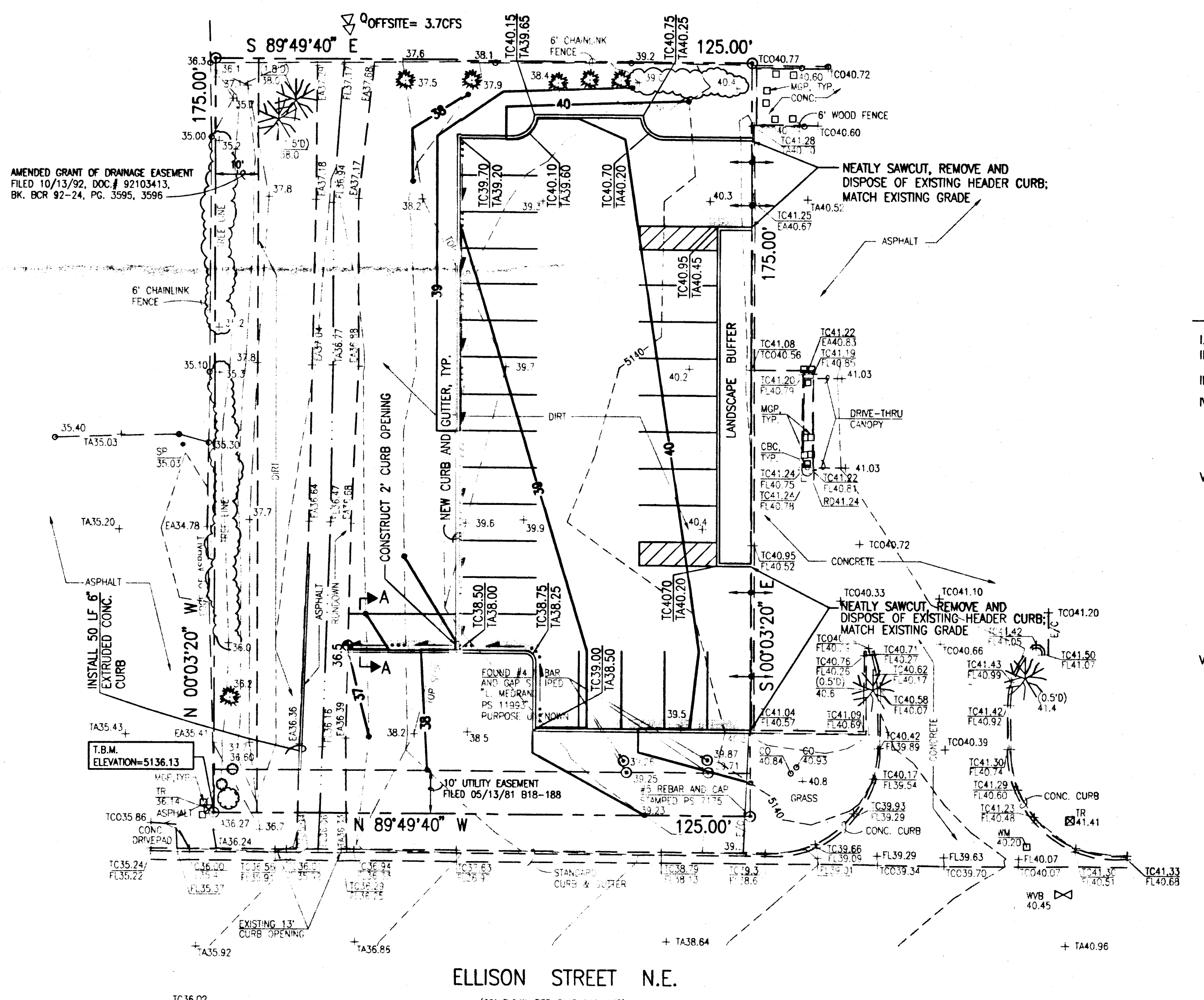
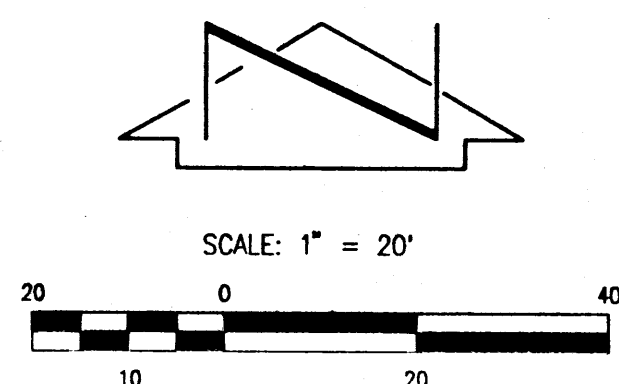


NO.	DATE	BY	REVISIONS	JOB NO.
				2002.037.3
				DATE 07-2002
				SHEET 2 OF 2

DESIGNED BY	J.G.M.
DRAWN BY	S.G.H.
APPROVED BY	J.G.M.

GRADING AND DRAINAGE PLAN PARKING LOT EXPANSION SANTA FE FEDERAL CREDIT UNION

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ELLISON STREET N.E.

(60' R.O.W. PER PLAT 92C-245)

