

F.I.R.M. MAP PAN-136 & 137
NOT TO SCALE



VICINITY MAP D-17-Z
NOT TO SCALE

EXISTING ON-SITE CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE NORTH SIDE OF HAWKINS ST. NE JUST WEST OF JEFFERSON BLVD. THE CURRENT LEGAL DESCRIPTION IS LOTS 3 & 4, INTERSTATE INDUSTRIAL TRACT, UNIT 5. AS SHOWN BY PANELS 136 & 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 NOR ADVERSELY IMPACT A DESIGNATED FLOOD HAZARD ZONE (ZONE A). THE PROJECT SITE IS DEVELOPED AND CONSISTS OF PMBP AND CONCRETE PAVING THROUGHOUT 95% OF THE SITE. THE PROJECT SITE SLOPES IN A SOUTHERLY DIRECTION AT APPROXIMATELY 1%. THE TOTAL AREA OF THE SITE IS 1.90 ACRES. THE LAND TREATMENTS ARE CATEGORIZED AS:
A=0%, B=0%, C=0% AND D=100%.
OFFSITE FLOWS FLOW WESTERLY ALONG HAWKINS ST. LOCATED SOUTH OF THE PROPERTY. ALL SITE FLOWS DISCHARGE TO HAWKINS ST. ALONG THE SOUTH OF THE PROPERTY.

PROJECT DESCRIPTION

THE PROPOSED PROJECT WILL INCLUDE PARKING LOT RESURFACING AND DRAINAGE IMPROVEMENTS TO THE WEST SIDE OF THE PROPERTY CONSISTING OF APPROXIMATELY .30 ACRES. THE NEW SURFACE AND IMPROVEMENTS ARE BEING CONSTRUCTED TO HELP ALLEVIATE PONDING WHICH IS OCCURRING AT THE SOUTHWEST CORNER OF THE PROPERTY. THE EXISTING PARKING LOT AND LOADING AREA WILL BE REPAVED, AND IMPROVEMENTS WILL CONSIST OF A NEW HEADER CURB ALONG THE WEST SIDE OF THE PROPERTY, AND NEW ASPHALT PAVED SURFACE WITH CONCRETE VALLEY GUTTER AS REQUIRED TO PROVIDE POSITIVE DRAINAGE IN PAVED AREAS. THE PARKING LOT AREA AS WELL AS RUNOFF FROM THE EXISTING BUILDING WILL DRAIN SOUTH TO HAWKINS STREET THROUGH A NEW CONCRETE CHANNEL AND A REPLACEMENT OF TWO EXISTING SIDEWALK CULVERTS LOCATED AT THE SOUTHWEST CORNER OF THE PROPERTY.

STORMWATER ROUTING

AS PREVIOUSLY MENTIONED, ALL SITE RUNOFF DISCHARGES TO HAWKINS STREET, WHICH IS LOCATED SOUTH OF THE PROPERTY, THEN FLOWS WESTERLY ALONG HAWKINS STREET. NO NEW CALCULATIONS HAVE BEEN PERFORMED BECAUSE THERE WILL BE NO NET INCREASE IN IMPERVIOUS AREA: THERE WILL BE NO INCREASE IN RUNOFF ASSOCIATED WITH THE PROPOSED IMPROVEMENTS.

CONCLUSION

THERE IS NO INCREASE IMPERVIOUS AREA AS A RESULT OF THIS PROJECT. THE REPAVING OF THE PARKING LOT WILL HELP TO PROMOTE POSITIVE DRAINAGE TO THE DESIGNATED OUTFALL LOCATION. THE CONSTRUCTION OF THE NEW CONCRETE CHANNEL SECTION WILL ALLEVIATE SCOUR PROBLEMS, ELIMINATE EXCESSIVE MAINTENANCE AND WILL HELP TO KEEP THE EXISTING TRANSFORMER PAD FROM BEING UNDERMINED. THE EXISTING SIDEWALK CULVERTS HAVE SETTLED OVER TIME AND AS A RESULT HAVE AN ADVERSE SLOPE. THE RECONSTRUCTION OF THE TWO SIDEWALK CULVERTS WILL PROVIDE POSITIVE DRAINAGE TO HAWKINS STREET.

SPECIAL ORDER 19 DRAINAGE FACILITIES WITHIN THE CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR

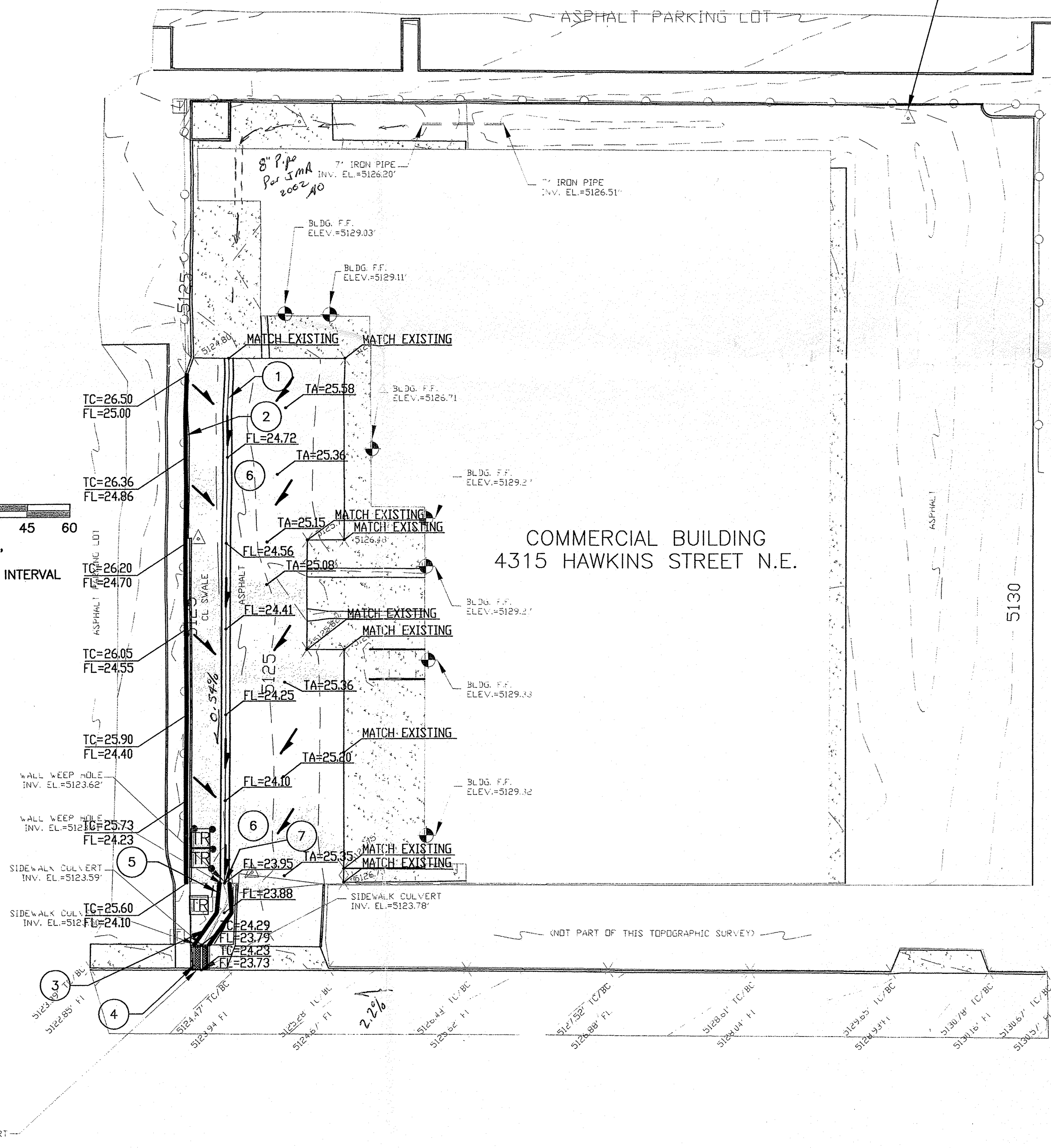
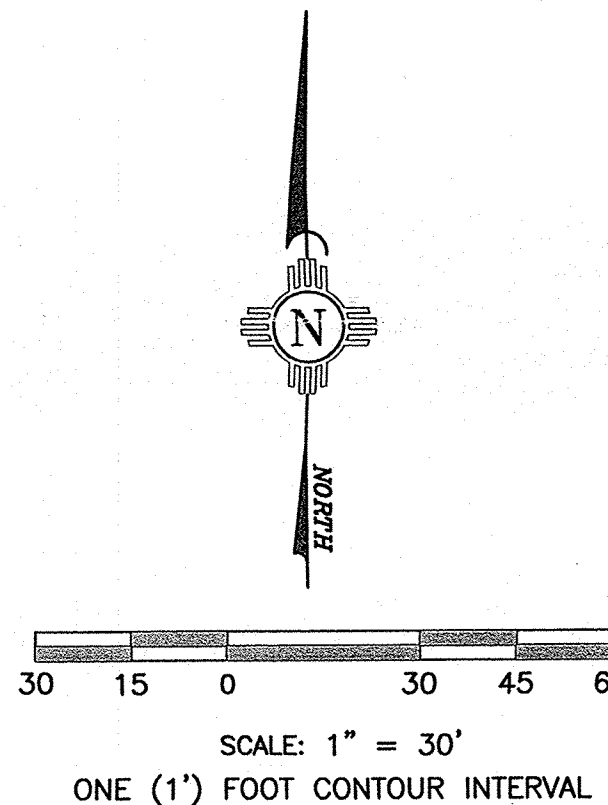
- 1) AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 2) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 3) THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATION SERVICE, NEW MEXICO ONE CALL 260-1990, FOR THE LOCATION OF EXISTING UTILITIES.
- 4) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE 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) BACK FILL COMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
- 6) MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- 7) WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24 - HOUR BASIS.

GENERAL NOTES:

1. AS OF MARCH 10, 2003, THE USPA REQUIRES NPDES PERMIT COVERAGE FOR STORM WATER DISCHARGES FROM CONSTRUCTION PROJECTS (COMMON PLANS OF DEVELOPMENT) THAT WILL RESULT IN THE DISTURBANCE (OR RE-DISTURBANCE) OF ONE OR MORE ACRES, INCLUDING EXPANSIONS OF TOTAL LAND AREA. THE DEVELOPER SHOULD BE MADE AWARE THAT THE USEPA REQUIRES THAT ALL "OPERATORS" (SEE FEDERAL REGISTER/VOL. 63, NO. 128 / MONDAY, JULY 6, 1999 PG 36509) OBTAIN NPDES PERMIT COVERAGE FOR CONSTRUCTION PROJECTS. GENERALLY THIS MEANS THAT AT LEAST TWO PARTIES WILL REQUIRE PERMIT COVERAGE. THE OWNER/DEVELOPER OF THIS CONSTRUCTION PROJECT WHO HAS OPERATIONAL CONTROL OVER THE PROJECT SPECIFICATIONS, THE GENERAL CONTRACTOR WHO HAS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE SITE, WHICH ARE NECESSARY TO ENSURE COMPLIANCE WITH THE STORM WATER POLLUTION PLAN AND OTHER CONDITIONS, AND POSSIBLY OTHER "OPERATORS" THAT WILL REQUIRE APPROPRIATE NPDES PERMIT COVERAGE FOR THIS PROJECT.
2. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO ANY GRADING OR CONSTRUCTION.
4. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
5. BACKFILL AND COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
7. PROJECT BENCHMARK: 5/8" REBAR WITH ALUMINUM CAP, STAMPED "CP 100", LOCATED AT THE NORTHEAST CORNER OF THE EXISTING MISSION LINEN BUILDING. ELEVATION = 5127.53 FEET (NGVD 1929)
8. ALL EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS HAS BEEN PROVIDED BY MISSION LINEN. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
9. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
10. ALL PAVEMENT, BASE COURSE AND SUBGRADE PREPARATION DESIGNS SHALL BE PROVIDED BY THE SOILS ENGINEER FOR THIS PROJECT.

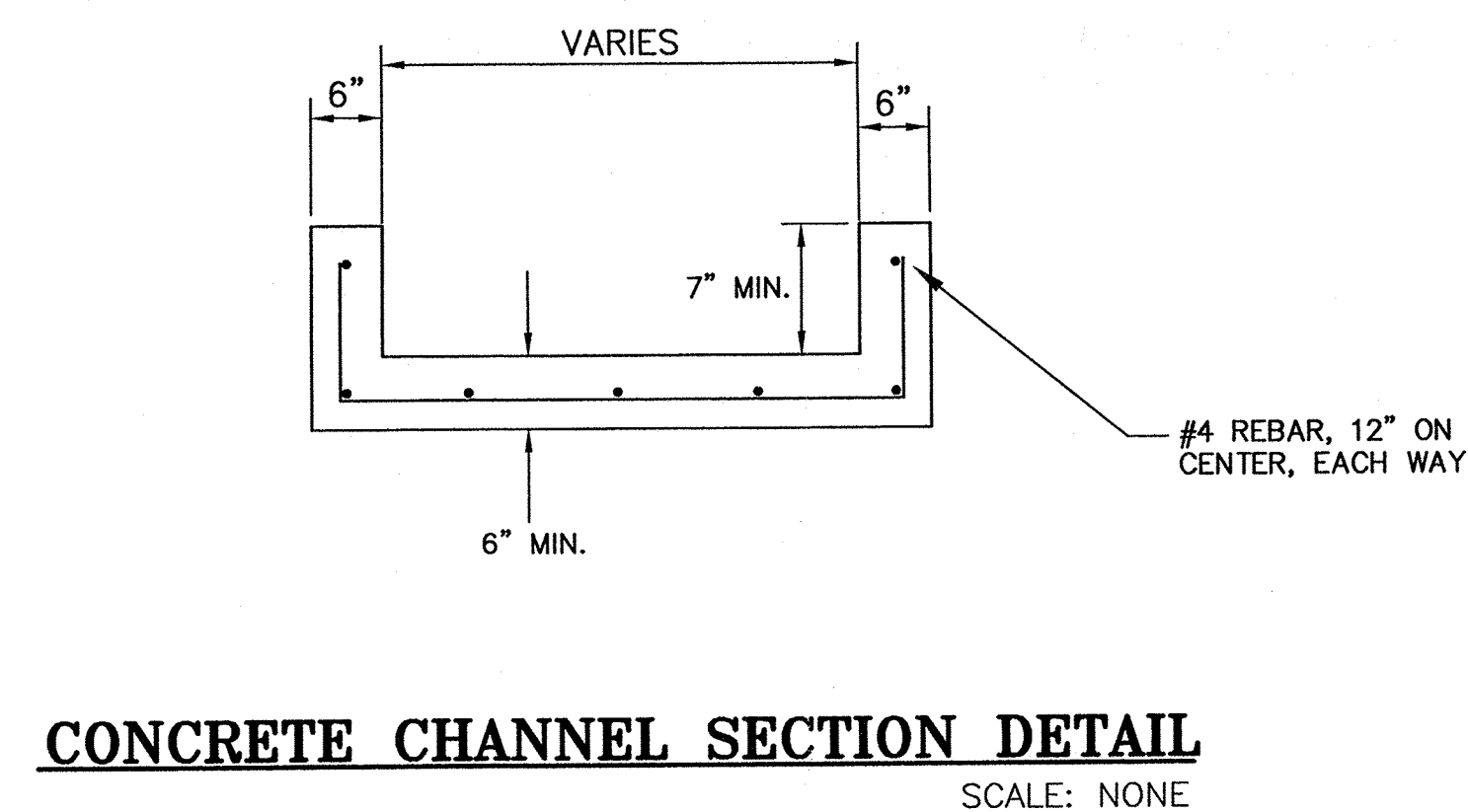
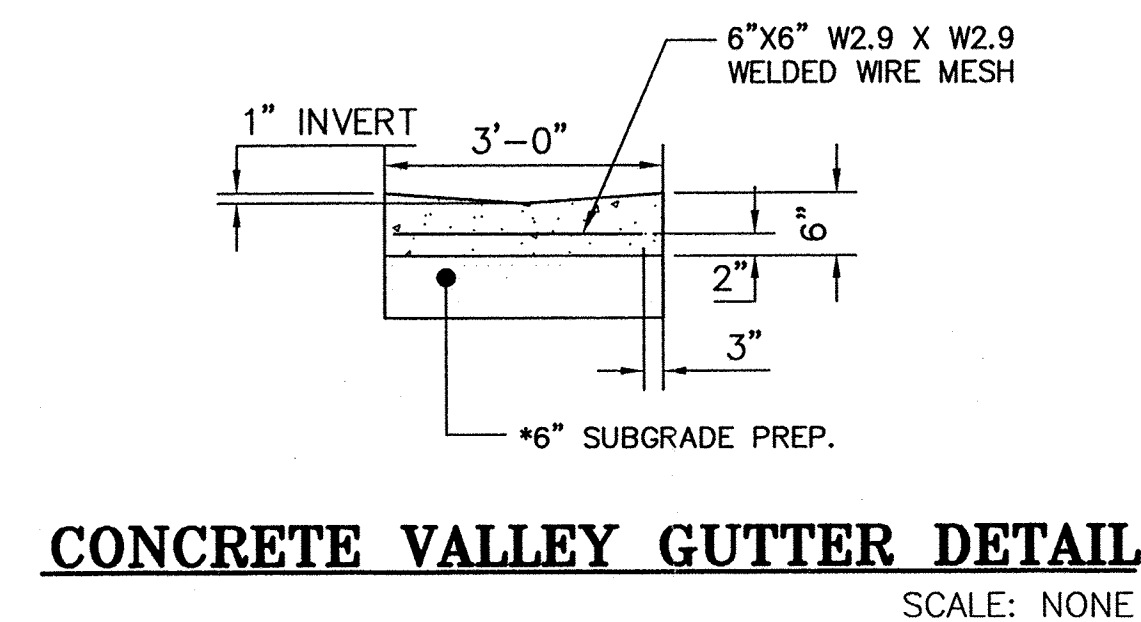
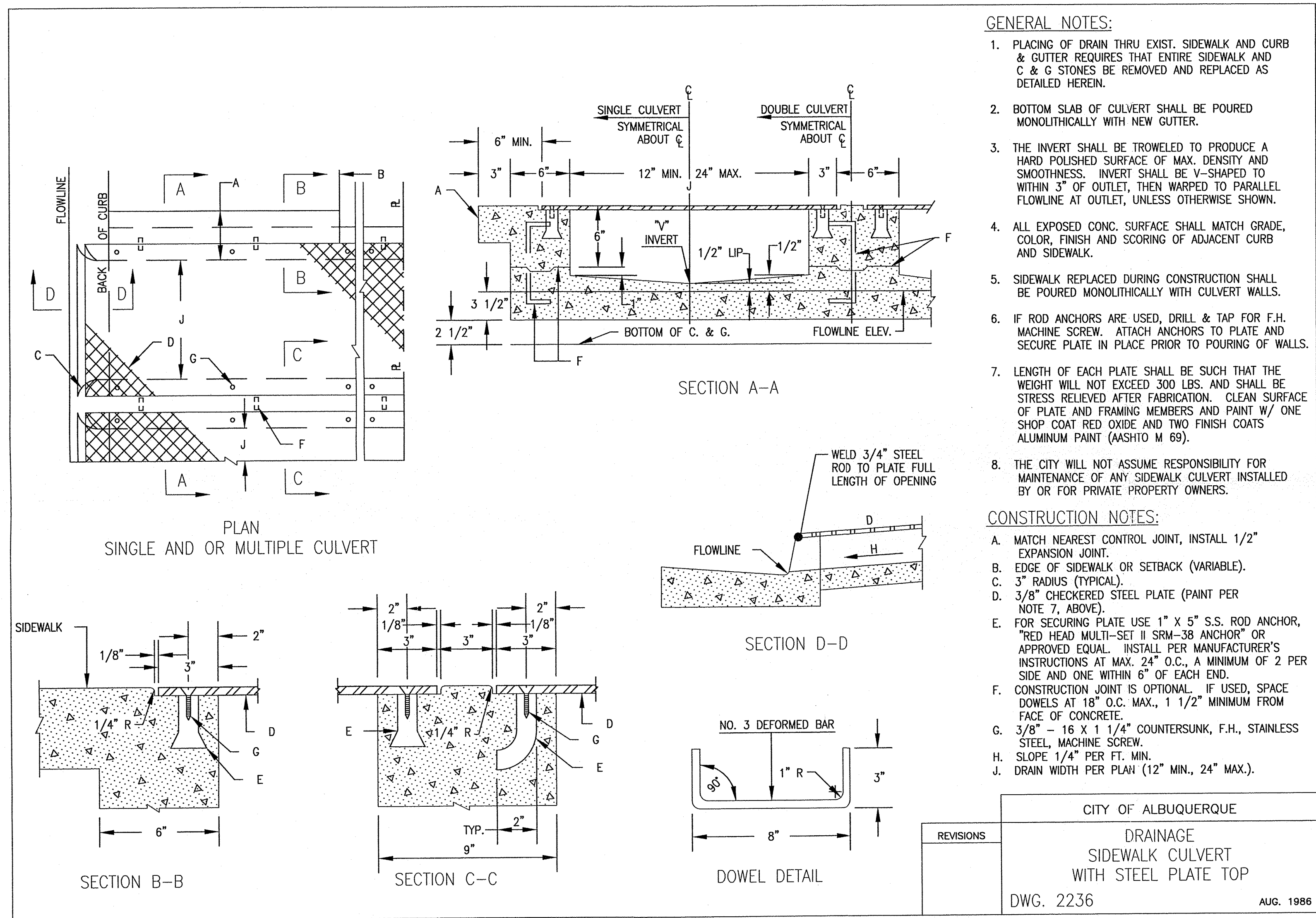
KEYED NOTES:

1. 36" WIDE CONCRETE VALLEY GUTTER, COA STD 2415A, LENGTH=184 LF SEE DETAIL ON SHEET C-2.
2. CONCRETE DEPRESSED CURB AND GUTTER PER COA STD DWG 2415A.
3. CONCRETE CHANNEL, WIDTH VARIES, 15 LF. SEE DETAIL ON SHEET C-2.
4. 2'-2" WIDE OPENING, SIDEWALK CULVERTS PER COA STD DWG 2236 WITH A STEEL PLATE.
5. 10' TRANSITION FROM 3' WIDE CONCRETE CHANNEL TO 4'-9" WIDE CONCRETE CHANNEL TO MATCH SIDEWALK CULVERT OPENING.
6. NEW PAVEMENT, BASE COURSE, AND SUBGRADE PREPARATION AS DESIGNED BY OWNER'S GEOTECHNICAL ENGINEER FOR THIS PROJECT.
7. ADJUST OPENING IN WALL AS REQUIRED TO ACCOMMODATE NEW GRADES OF AND WIDTH OF CONCRETE VALLEY GUTTER. OWNER AND CONTRACTOR TO CONSULT OWNER'S STRUCTURAL ENGINEER PRIOR TO MODIFICATIONS TO WALL OPENING.



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MAY 16 2008
HYDROLOGY
SECTION

MILLER ENGINEERING CONSULTANTS Engineers • Planners		3500 COMANCHE BLVD. NE ALBUQUERQUE, NM 87107 (505) 888-7500 (505) 888-3800 (FAX)	
DESIGNED	JAL	JOB #	08-012
DRAWN	JAL	FILE	
CHECKED	VAM	DATE	MAY 2008
ENGINEERS STAMP			
NEW MEXICO			
BERNALILLO COUNTY			
MISSION LINEN SUPPLY			
GRADING AND DRAINAGE PLAN			
REVISION DESCRIPTION			
DATE			
MARK			
SHEET		C-1	



RECEIVED
MAY 16 2008
HYDROLOGY
SECTION

MILLER ENGINEERING CONSULTANTS Engineers • Planners		3500 COMANCHE BLVD. NE ALBUQUERQUE, NM 87107 (505) 888-7500 (505) 888-3600 (FAX)	
DESIGNED	JAL	JOB #	08-012
DRAWN	JAL	FILE	
CHECKED	VAM	DATE	MAY 2008
NEW MEXICO BERNALILLO COUNTY MISSION LINEN SUPPLY MISCELLANEOUS DETAILS REVISION DESCRIPTION DATE MARK SHEET C-2			

ENGINEER'S CERTIFICATION FOR 1997 LOADING DOCK

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE MISSION UNIFORM DOCK HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE 1997 APPROVED PLAN. IT IS BASED UPON THIS EVALUATION OF AS-CONSTRUCTED CONDITIONS THAT ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY IS HEREBY RECOMMENDED. THE AS-BUILT INFORMATION HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE AS-BUILT INFORMATION IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE DOCK AND RELATED IMPROVEMENTS. THIS CERTIFICATION DOES NOT ADDRESS NOR EVALUATE ADA ACCESSIBILITY ISSUES OR COMPLIANCE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547
DATE 10-25-2000
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
8547

ENGINEER'S DRAINAGE CERTIFICATION FOR 2000 CANOPY ADDITION

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM JEFF MORTENSEN & ASSOCIATES, INC., HEREBY CERTIFY THAT THIS PROJECT (MISSION LINEN & UNIFORM CANOPY ADDITION) HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN UPDATE DATED 10-25-2000. THE RECORD INFORMATION, OBTAINED BY VISUAL OBSERVATION AND EDITED ONTO THE ORIGINAL DESIGN DOCUMENT, HAS BEEN PERSONALLY OBTAINED BY ME ON 01-21-2002 AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE CANOPY ADDITION PROJECT. THOSE RELYING UPON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547
DATE 01-24-2002
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
8547

6 ENGINEER'S DRAINAGE CERTIFICATION FOR 2002 MECHANICAL ENCLOSURE ADDITION

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM JEFF MORTENSEN & ASSOCIATES, INC., HEREBY CERTIFY THAT THIS PROJECT (MISSION LINEN & UNIFORM MECHANICAL ENCLOSURE ADDITION) HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN UPDATE DATED 01-24-2002. THE RECORD INFORMATION, OBTAINED BY VISUAL OBSERVATION AND EDITED ONTO THE ORIGINAL DESIGN DOCUMENT, HAS BEEN PERSONALLY OBTAINED BY ME ON 06-19-2002 AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE CANOPY ADDITION PROJECT. THOSE RELYING UPON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547
DATE 06-20-2002
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
8547

DRAINAGE PLAN(2000)

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE LOWER NORTHEAST HEIGHTS ALONG THE JEFFERSON CORRIDOR, REPRESENTS A MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA. THE DRAINAGE CONCEPT WILL BE TO CONTINUE TO FOLLOW AND HONOR THE DRAINAGE PATTERN OF THE SITE.

THIS SUBMITTAL IS MADE IN SUPPORT OF A BUILDING PERMIT FOR A CANOPY ADDITION OVER THE EXISTING LOADING DOCK IDENTIFIED ON THE 1997 PLAN TO WHICH THIS IS AN UPDATE.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE NORTH SIDE OF HAWKINS NE JUST WEST OF JEFFERSON NE. THE CURRENT LEGAL DESCRIPTION IS LOTS 3 & 4, INTERSTATE INDUSTRIAL TRACT, UNIT 5. AS SHOWN BY PANELS 136 & 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 NOR ADVERSELY IMPACT A DESIGNATED FLOOD HAZARD ZONE (ZONE A). AS STATED ABOVE, THIS PROJECT INVOLVES THE CONSTRUCTION OF A CANOPY OVER A PORTION OF THE SITE WHICH CURRENTLY EXISTS AS A CONCRETE LOADING DOCK; NO ADDITIONAL IMPERVIOUS AREA IS PROPOSED. LASTLY, THE ROOF DRAINAGE OF THE CANOPY WILL NOT ADVERSELY IMPACT THE EXISTING DRAINAGE PATTERN OF THE SITE.

III. BACKGROUND DOCUMENTS

REVIEW OF HYDROLOGY DEVELOPMENT DIVISION RECORDS INDICATES NO PREVIOUSLY SUBMITTED AND/OR APPROVED DRAINAGE SUBMITTALS FOR THIS SITE WITH THE EXCEPTION OF THE PLAN BEING UPDATED BY THIS SUBMITTAL.

IV. GRADING PLAN

THE GRADING PLAN SHOWS 1.) AS-BUILT GRADES INDICATED BY SPOT ELEVATIONS AT CRITICAL LOCATIONS, 2.) AS-DESIGNED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 3.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS, 4.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE MAJORITY OF THE SITE IS ALREADY DEVELOPED. THE PROPOSED CONSTRUCTION AFFECTS ONLY A SMALL PORTION OF THE SITE. THIS PLAN FURTHER ILLUSTRATES THE EXISTING DRAINAGE PATTERNS DESCRIBED IN THE PREVIOUS (1997) SUBMITTAL TO WHICH THIS IS AN UPDATE.

V11. CALCULATIONS

THE CALCULATIONS WHICH APPEAR HEREON ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. 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 THESE CALCULATIONS, THERE WAS A NEGLIGIBLE INCREASE IN RUNOFF ASSOCIATED WITH THE 1997 DOCK CONSTRUCTION. THERE WILL BE NO INCREASE IN RUNOFF ASSOCIATED WITH THE PROPOSED CANOPY CONSTRUCTION.

V. CONCLUSION

THE CONTINUED DISCHARGE OF RUNOFF FROM THIS SITE TO HAWKINS NE IS APPROPRIATE DUE TO FOLLOWING FACTORS:

1. MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA
2. NO INCREASE IN DEVELOPED RUNOFF
3. PRESERVATION OF EXISTING SITE HYDROLOGY
4. NO IMPACT ON DOWNSTREAM FLOOD ZONES

DRAINAGE PLAN UPDATE (2002)

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE LOWER NORTHEAST HEIGHTS ALONG THE JEFFERSON CORRIDOR, REPRESENTS A MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA. THE DRAINAGE CONCEPT WILL BE TO CONTINUE TO FOLLOW AND HONOR THE DRAINAGE PATTERN OF THE SITE.

THIS SUBMITTAL IS MADE IN SUPPORT OF A BUILDING PERMIT FOR A MECHANICAL EQUIPMENT ENCLOSURE ADDITION OVER AN AREA OF EXISTING PAVING JUST SOUTH OF THE LOADING DOCK IDENTIFIED ON THE 1997 AND 2000 PLANS TO WHICH THIS IS AN UPDATE.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE NORTH SIDE OF HAWKINS NE JUST WEST OF JEFFERSON NE. THE CURRENT LEGAL DESCRIPTION IS LOTS 3 & 4, INTERSTATE INDUSTRIAL TRACT, UNIT 5. AS SHOWN BY PANELS 136 & 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 NOR ADVERSELY IMPACT A DESIGNATED FLOOD HAZARD ZONE (ZONE A). AS STATED ABOVE, THIS PROJECT INVOLVES THE CONSTRUCTION OF A MECHANICAL EQUIPMENT ENCLOSURE ADDITION ON A PORTION OF THE SITE THAT CURRENTLY EXISTS AS PAVING; NO ADDITIONAL IMPERVIOUS AREA IS PROPOSED. LASTLY, THE ROOF DRAINAGE OF THE ADDITION WILL NOT ADVERSELY IMPACT NOR CONFLICT WITH THE EXISTING DRAINAGE PATTERN OF THE SITE.

III. BACKGROUND DOCUMENTS

REVIEW OF HYDROLOGY DEVELOPMENT DIVISION RECORDS INDICATES NO PREVIOUSLY SUBMITTED AND/OR APPROVED DRAINAGE SUBMITTALS FOR THIS SITE WITH THE EXCEPTION OF THE PLANS BEING UPDATED BY THIS SUBMITTAL.

IV. GRADING PLAN

THE GRADING PLAN SHOWS THE LOCATION OF THE PROPOSED MECHANICAL EQUIPMENT ENCLOSURE ADDITION SUPERIMPOSED ONTO THE PREVIOUSLY APPROVED PLAN(S). AS SHOWN BY THIS PLAN, THE MAJORITY OF THE SITE IS ALREADY DEVELOPED WITH THE PROPOSED ADDITION SITUATED AT THE NORTHWEST CORNER OF THE SITE. JUST SOUTH OF THE 1997 DOCK AND 2000 CANOPY, THE PROPOSED CONSTRUCTION AFFECTS ONLY A SMALL PORTION OF THE SITE THAT IS ALREADY PAVED. THIS PLAN FURTHER ILLUSTRATES THE EXISTING DRAINAGE PATTERNS DESCRIBED IN THE PREVIOUS SUBMITTALS TO WHICH THIS IS AN UPDATE.

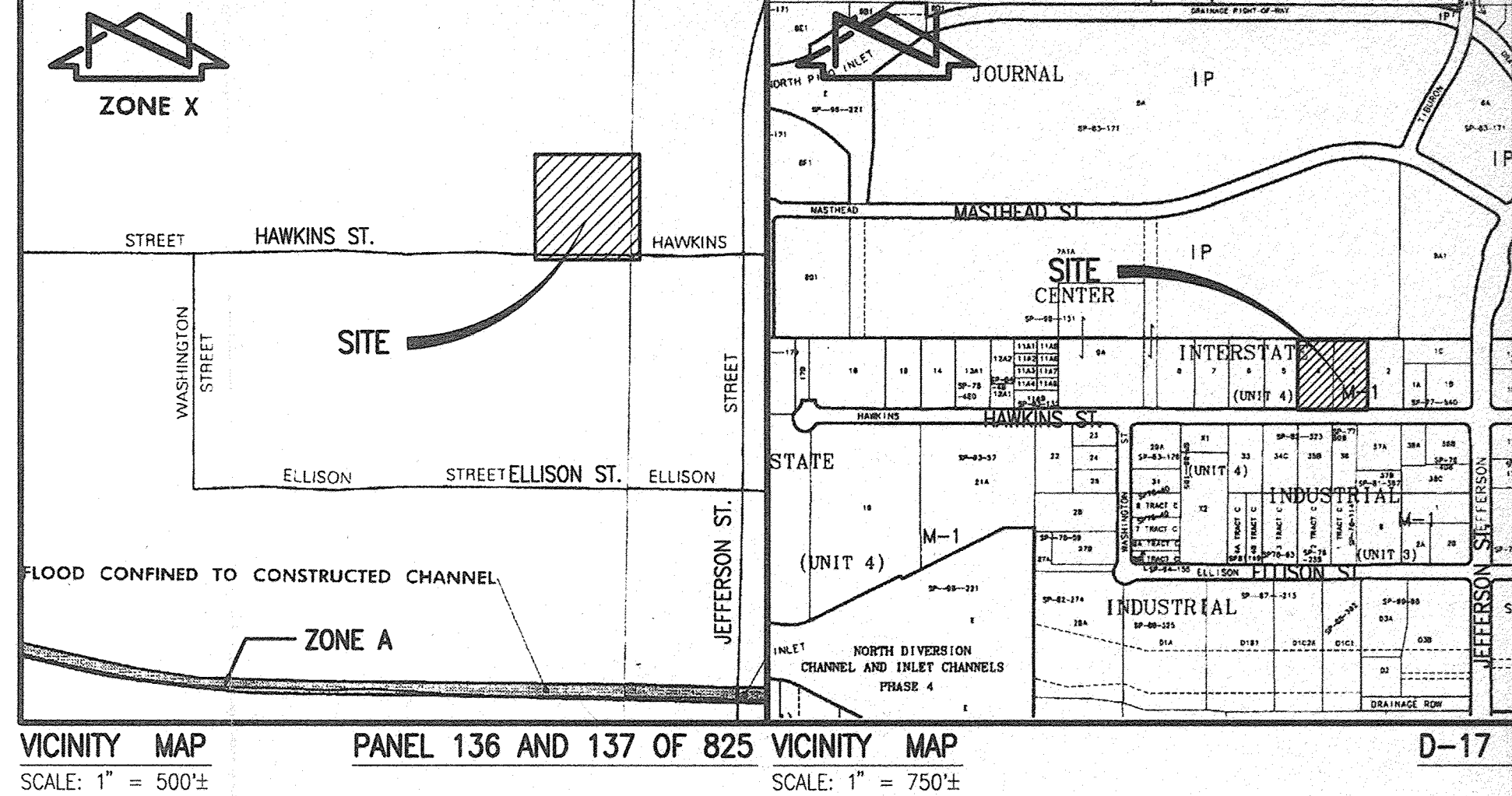
V11. CALCULATIONS

THE CALCULATIONS WHICH APPEAR HEREON ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT AS PREVIOUSLY SUBMITTED. NO NEW CALCULATIONS HAVE BEEN PERFORMED BECAUSE THERE WILL BE NO NET INCREASE IN IMPERVIOUS AREA; THERE WILL BE NO INCREASE IN RUNOFF ASSOCIATED WITH THE PROPOSED MECHANICAL EQUIPMENT ENCLOSURE ADDITION CONSTRUCTION.

V. CONCLUSION

THE CONTINUED DISCHARGE OF RUNOFF FROM THIS SITE TO HAWKINS NE IS APPROPRIATE DUE TO FOLLOWING FACTORS:

1. MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA
2. NO INCREASE IN DEVELOPED RUNOFF
3. PRESERVATION OF EXISTING SITE HYDROLOGY
4. NO IMPACT ON DOWNSTREAM FLOOD ZONES



LEGAL DESCRIPTION

LOTS 3 AND 4, INTERSTATE INDUSTRIAL TRACT, UNIT 5.

PROJECT BENCHMARK

ACS STA "9-D-17"
ELEVATION = 5124.40 FT. (M.S.L.D.-1929)

T.B.M.

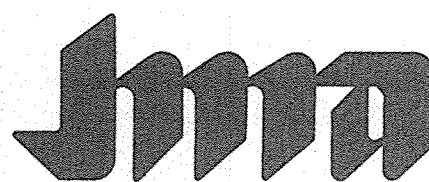
RIM ELEVATION OF SANITARY SEWER MANHOLE IN HAWKINS STREET N.E. OPPOSITE CENTER OF SITE.
ELEVATION = 5126.42 FT. (M.S.L.D.-1929)

LEGEND

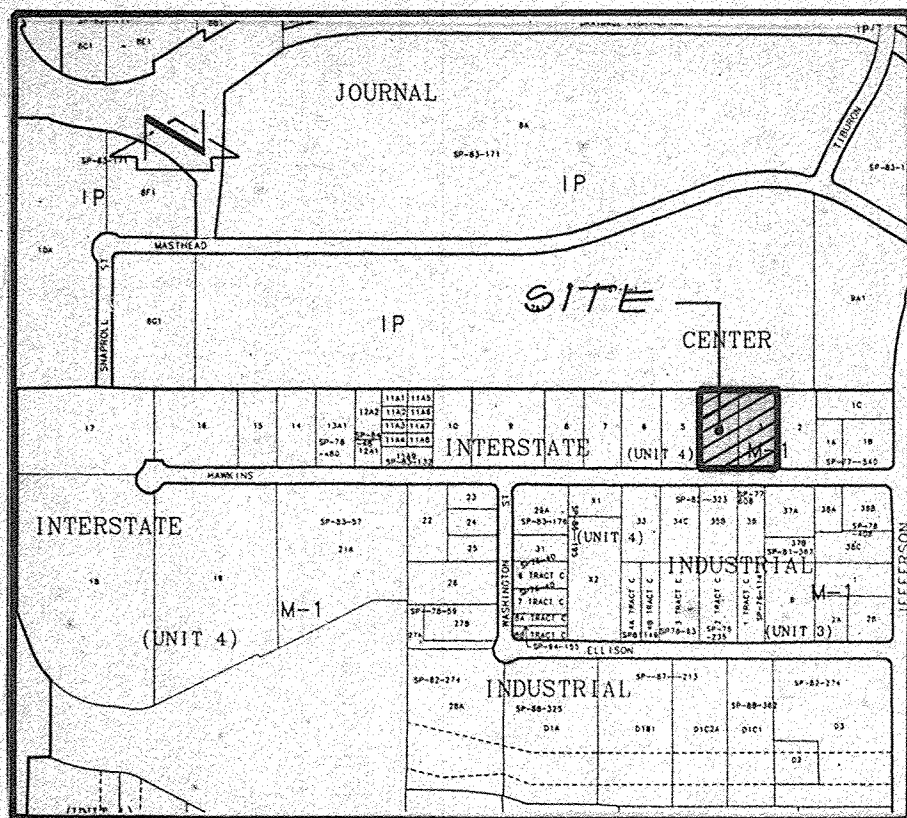
+61.84	EXISTING SPOT ELEVATION
TA	TOP OF ASPHALT
TC	TOP OF CURB
FL	FLOW LINE
TSW	TOP OF SIDEWALK
TV	TOP OF WALL
TOC	TOP OF CONCRETE
SP	STEEL PLATE
TG	TOP OF GRATE
C.O.	CLEAN OUT
P.P.	POWER POLE
F.F.	FINISH FLOOR
NG	NATURAL GRADE
	EXISTING CONTOUR
	CONFIDENTIAL TREE
	DECIDUOUS TREE
	YUCCA
	SHRUB, TREE
	SHRUB, ROW OF
	PROPOSED SPOT ELEVATION
	FLOW DIRECTION
	FLOWLINE
	PROPOSED CONTOUR
	NEW ASPHALT
	NEW CONCRETE

DRAINAGE CERTIFICATION AND DRAINAGE PLAN UPDATE
MISSION LINEN AND UNIFORM

DESIGNED BY	J.G.M.	NO.	01/02	DATE	01/02	BY	J.G.M.	REVISIONS	JOB NO.	11034
DRAWN BY	J.L.P.R.	NO.	01/02	DATE	01/02	BY	J.G.M.	DRAINAGE CERTIFICATION FOR CANOPY	DATE	01/2002
APPROVED BY	J.G.M.	NO.	06/02	DATE	06/02	BY	J.G.M.	DRAINAGE PLAN MECHANICAL EQUIPMENT ENCLOSURE ADDITION	SHEET	1 OF 3
		NO.		DATE		BY		DRAINAGE CERT FOR MECH EQUIP ENCL ADDN		



JEFF MORTENSEN & ASSOCIATES, INC.
500-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX 505 345-4254 Email jma@comp.com



LEGAL DESCRIPTION
LOTS 3 & 4, INTERSTATE INDUSTRIAL TRACT, UNIT 5.
STREET ADDRESS
4315 HAWKINS N.E.
PROJECT BENCHMARK:
ACS STA. 10+00.00
ELEVATION = 5124.40 FT. (M.S.L.D.)
T.B.M.

LEGEND
+ 25.23 = AS-BUILT ELEV.
+ 26.50 = DESIGNED GRADE
- 5125 = EXIST. CONTOUR
+ 25.9 = AS-BUILT ELEV.
+ 27.30 = AS-BUILT ELEV.

VICINITY MAP
SCALE: 1" = 750' ±
D-17

Construction Notes:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990 (Albuquerque Area), 1-800-321-ALERT (2537) (Statewide), for location of existing utilities.
- 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.
- 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.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- 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.
- 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:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
- 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.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

JMA #11032

CALCULATIONS

Site Characteristics

- Precipitation Zone = 2
- $P_{2.35} = P_{360} = 2.35$
- Total Area (A_T) = 88,730 sf; 2.04
- Existing Land Treatment

Treatment	Area (sf/ac)	%
B	5,020/0.12	6
C	950/0.02	1
D	82,760/1.90	93

Developed Land Treatment

Treatment	Area (sf/ac)	%
B	5,020/0.12	6
D	83,710/1.92	94

Existing Condition

1. Volume

$$E_w = (E_{A_1} + E_{A_2} + E_{A_3} + E_{A_4}) / A_T$$
$$E_w = (0.78)(0.12) + (1.13)(0.02) + (2.12)(1.90) / 2.04 = 2.03"$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (2.03 / 12) 2.04 = 0.3454 \text{ ac.ft.}; 15,040 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_1 + Q_{PB} A_2 + Q_{PC} A_3 + Q_{PD} A_4$$
$$Q_p = Q_{100} = (2.28)(0.12) + (3.14)(0.02) + (4.70)(1.90) = 9.3 \text{ cfs}$$

Developed Condition

1. Volume

$$E_w = (E_{A_1} + E_{A_2} + E_{A_3} + E_{A_4}) / A_T$$
$$E_w = (0.78)(0.12) + (2.12)(1.92) / 2.04 = 2.04"$$
$$V_{100} = (E_w / 12) A_T$$
$$V_{100} = (2.04 / 12) 2.04 = 0.3470 \text{ ac.ft.}; 15,120 \text{ cf}$$

2. Peak Discharge

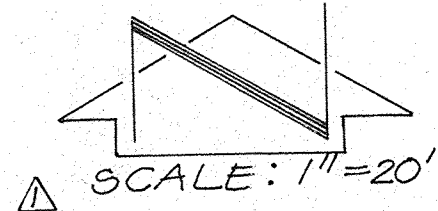
$$Q_p = Q_{PA} A_1 + Q_{PB} A_2 + Q_{PC} A_3 + Q_{PD} A_4$$
$$Q_p = Q_{100} = (2.28)(0.12) + (4.70)(1.92) = 9.3 \text{ cfs}$$

Comparison

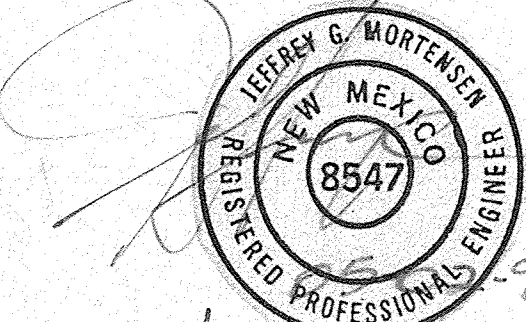
- $\Delta V_{100} = 15,120 - 15,040 = 80 \text{ cf}; 0.0016 \text{ ac.ft. (increase)}$
- $\Delta Q_{100} = \text{No Change}$

NOTE:
SEE SHEET 1 FOR
DRAINAGE PLAN UPDATE
& 1997. DOCK CERTIFICATION.

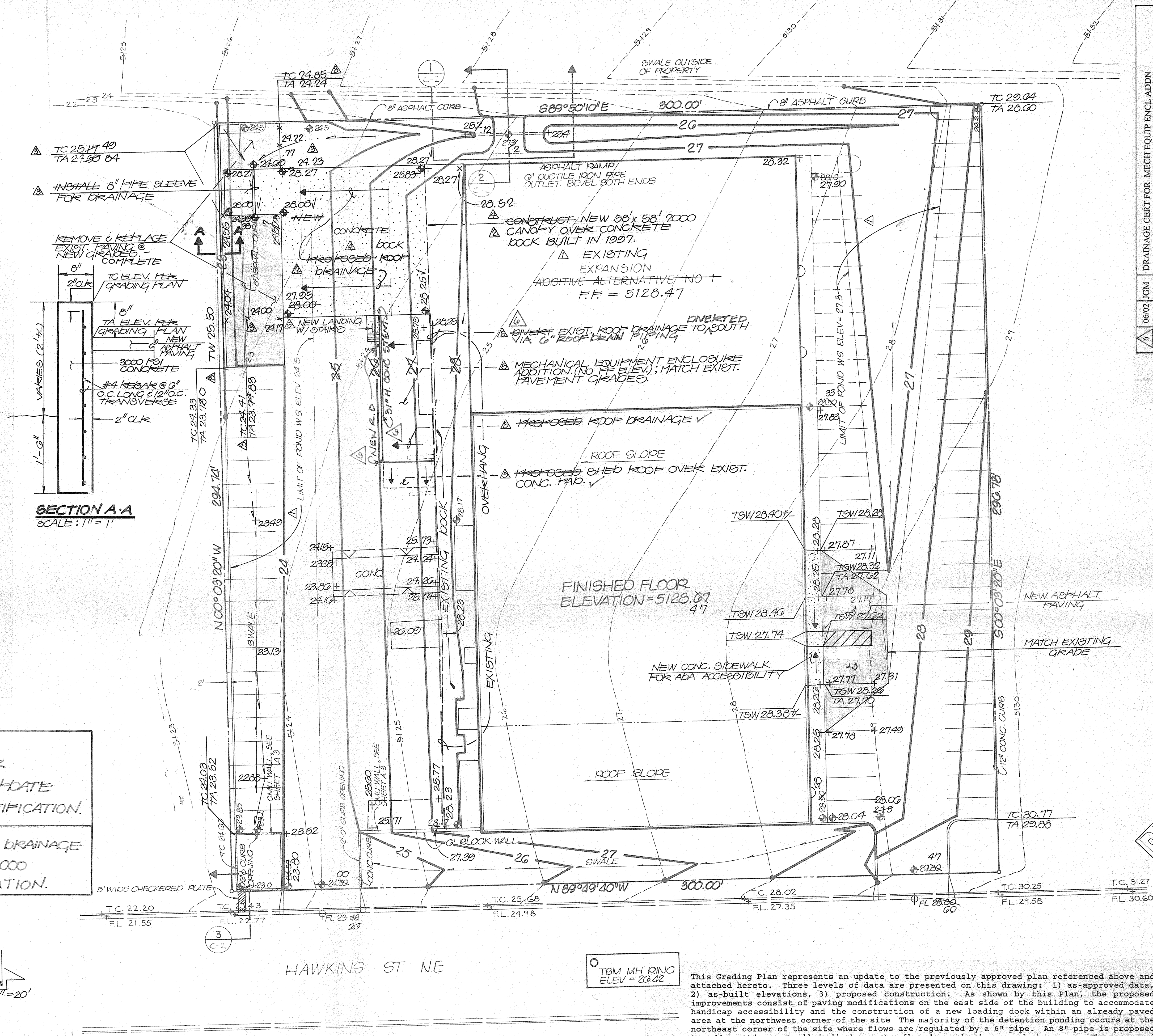
NOTE:
SEE SHEET 1 FOR DRAINAGE
PLAN UPDATE & 2000
CANOPY CERTIFICATION.



SCALE: 1" = 20'



01-24-2002 05-30-97
10-23-2000



The following items concerning the Mission Uniform Drainage Plan are contained hereon:
1. Vicinity Map 2. Grading Plan 3. Calculations 4. 1981 Plan of Record

As shown by the Vicinity Map, the site is located on the north side of Hawkins Street N.E., just west of its intersection with Jefferson Street N.E. At present, the site is developed. Much of the surrounding area is also developed, making this a modification to an existing site within an infill area. Although the original plan was prepared and approved utilizing detention ponding, many of the surrounding sites, which have developed more recently, utilize free discharge.

As indicated by Panels 136 and 137 of 825 of the National Flood Insurance Program Flood Insurance Rate Maps published by F.E.M.A. for the Bernalillo County, New Mexico, and Incorporated Areas, dated September 20, 1996, this site does not lie within a designated flood hazard zone. Further review does not reveal the presence of any associated downstream flooding. The project site is located upstream of the AMAPCA North Diversion Channel. A public drainage rundown is constructed at the west end of Hawkins Street N.E. which conveys flows to the North Diversion Channel. This existing facility represents the outfall for this site.

This Grading Plan represents an update to the previously approved plan referenced above and attached hereto. Three levels of data are presented on this drawing: 1) as-approved data, 2) as-built elevations, 3) proposed construction. As shown by this Plan, the proposed improvements consist of paving modifications on the east side of the building to accommodate handicap accessibility and the construction of a new loading dock within an already paved area at the northwest corner of the site. The majority of the detention ponding occurs at the northeast corner of the site where flows are regulated by a 6" pipe. An 8" pipe is proposed to allow this controlled discharge to flow beneath the new dock area. The proposed construction will not alter the existing pattern of onsite runoff whereby developed flows are routed around the north end of the building to the west parking lot. From this point, runoff flows in a southerly direction to discharge to Hawkins Street N.E. The majority of these flows discharge through an existing wall opening through an existing landscaped area and into the street via two 24" sidewalk culverts. As shown by the as-built elevations, overflow runoff will exit via the existing driveway at the southwest corner of the site.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. 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 these calculations, the proposed improvements will not result in an increase in runoff generated by this site. Because this is an existing site which is surrounded by developed properties, offsite flows do not exist and hence are not a concern. Existing pond capacity has not been evaluated due to the fact that free discharge is the current trend in this watershed area and any overflow runoff will exit the site via the existing driveway at the southwest corner of the site. Furthermore, the proposed improvements will not increase the runoff generated by the site, hence existing conditions will not be adversely affected.

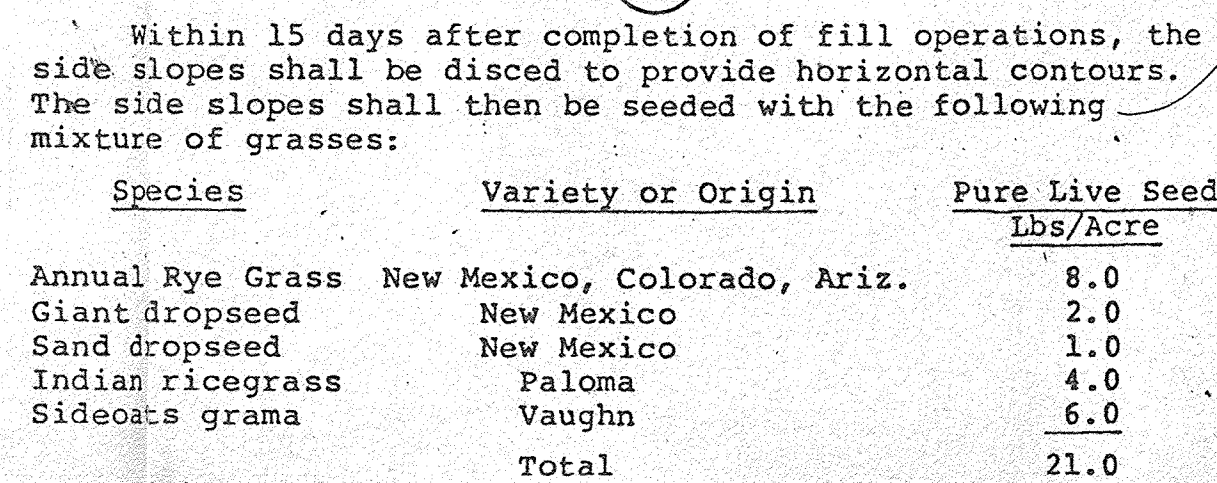
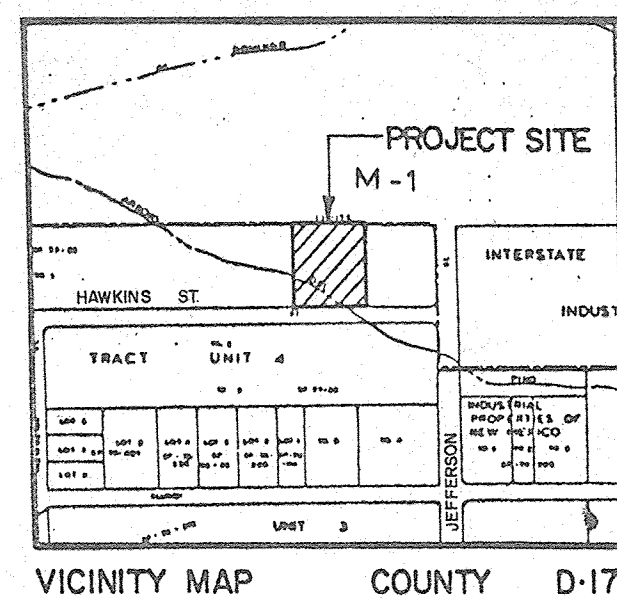
DRAINAGE CERT FOR MECH EQUIP ENCL ADDN		REVISIONS	
NO.	DATE	BY	REVISIONS
1	06/02	JGM	EXPAND LEGEND, NORTH ARROW & SCALE.
2	07/07	JGM	BUILDING EXPANSION & FLOOD LIMITS.
3	10/08	JGM	UPDATE PLAN FOR CANOPY ADDITION.
4	10/08	JGM	AS-BUILT 1997 ROCK WORK.
5	01/02	JGM	DRAINAGE CERTIFICATION FOR CANOPY.
6	02/02	JGM	MECH. EQUIP. ENCLOSURE ADDITION.

DESIGNED BY		JGM	
DRAWN BY		JMA	
APPROVED BY		JGM	

GRADING AND DRAINAGE PLAN
MISSION UNIFORM

DATE: JUN 21 2002
HYDROLOGY SECTION

JOB NO. 11033
DATE 04-1997
SHEET 2 OF 3



1. Vicinity Map
2. Flood Hazard Map
3. Grading Plan
4. Calculations

The land basically slopes from southeast to northwest. The land to the east is higher than the project site. The land to the north is higher than the project site, but has been graded to slope away from the project site. Hawkins Street on the south is approximately parallel with the site, while the land to the west is lower than the site; therefore, any flows that could enter the site would flow east. At the time the site was undeveloped, the east, but not the west, side of the subdivision is completed, all waters will be cut off from the east and diverted into Hawkins. If any runoff should occur at the present time, it would drain into the parking lot and be routed through the pond system; therefore, offsite drainage is not a problem. The project does not have a complain, (2) does not have an adjacent to a natural or artificial water course and (3) has no drainage easements on the property.

Two (2) ponds will be constructed on the site to detain the flows. One pond will be constructed in the eastern parking lot and along the northern side of a future building extension. The pond will be asphalt lined since it is a parking lot, and will drain into the western parking lot in the ponding area through a controlled outlet. An asphalt berm will be constructed to act as a dam and spillway to regulate high flows. The ponding area in the western parking lot will drain into Hawkins at the southwest corner of the project site.

The Grading Plan shows (1) existing contours at 1'0" intervals, (2) proposed grades indicated by spot elevations and contours, (3) swales, (4) continuity between proposed and existing elevations, (5) that all runoff will be conveyed into ponds before leaving the site, (6) that retaining walls will not be required and (7) that erosion will not result from construction or upland runoff.

CALCULATIONS

Area of Parcel = 88,800 sf = 2.04 ac±
Pervious Area = 6,200 sf = 0.14 ac±
Impervious Area = 82,600 sf = 1.90 ac±
Composite $C_N = 79(\frac{.14}{2.04}) + 98(\frac{1.90}{2.04}) = 97$

From Plate 4 Farmington percent ponding = 58%

$$\text{Required Pond Volume} = (0.58)(88,800)2.5 \div 12 = 10,730 \text{ cf}$$

Runoff - East Parking Lot = $75 \times 297 \times 2.5/12 = 4,641$ cf

Pond Volume - East Parking Lot = $\frac{1.5+15.0}{2}(400)1 + \frac{15+17}{2}(400)0.3 = 5,220 \text{ cf}$

$$Q_5 \text{ (East Parking Lot)} = 0.40(5.4)0.51 = 1.1 \text{ cfs}$$
$$\text{Orifice} = 19.636 \text{ k} \cdot d^2 \sqrt{h} = 19.636 (0.61) \cdot d^2 \sqrt{1.3} \div (7.5 \times 60) = 1.1$$

$d = 6.02''$ use 6" ductile iron pipe

Pond Volume - West Side = $24 \times 200 \times 0.5 + 12 \times 100 \times 0.25 + 36 \times 200 \times 0.5 = 6,400 \text{ cf}$

Total Pond Volume = 6,400 + 5,220 = 11,620 cf

$$Q_F \text{ (Entire Site)} = 0.40(5.4)2.04 = 4.41 \text{ cfs}$$
$$\text{Orifice} = 4.4 = 19.636(0.61) d^2 \sqrt{1.2 \div (7.5 \times 60)}$$

Orifice = 4.4 = 19.636(0.61) d $\sqrt{1.2/(7.5 \times 10^6)}$
d = 12.28" = 124 sq. in. use 8"x60"

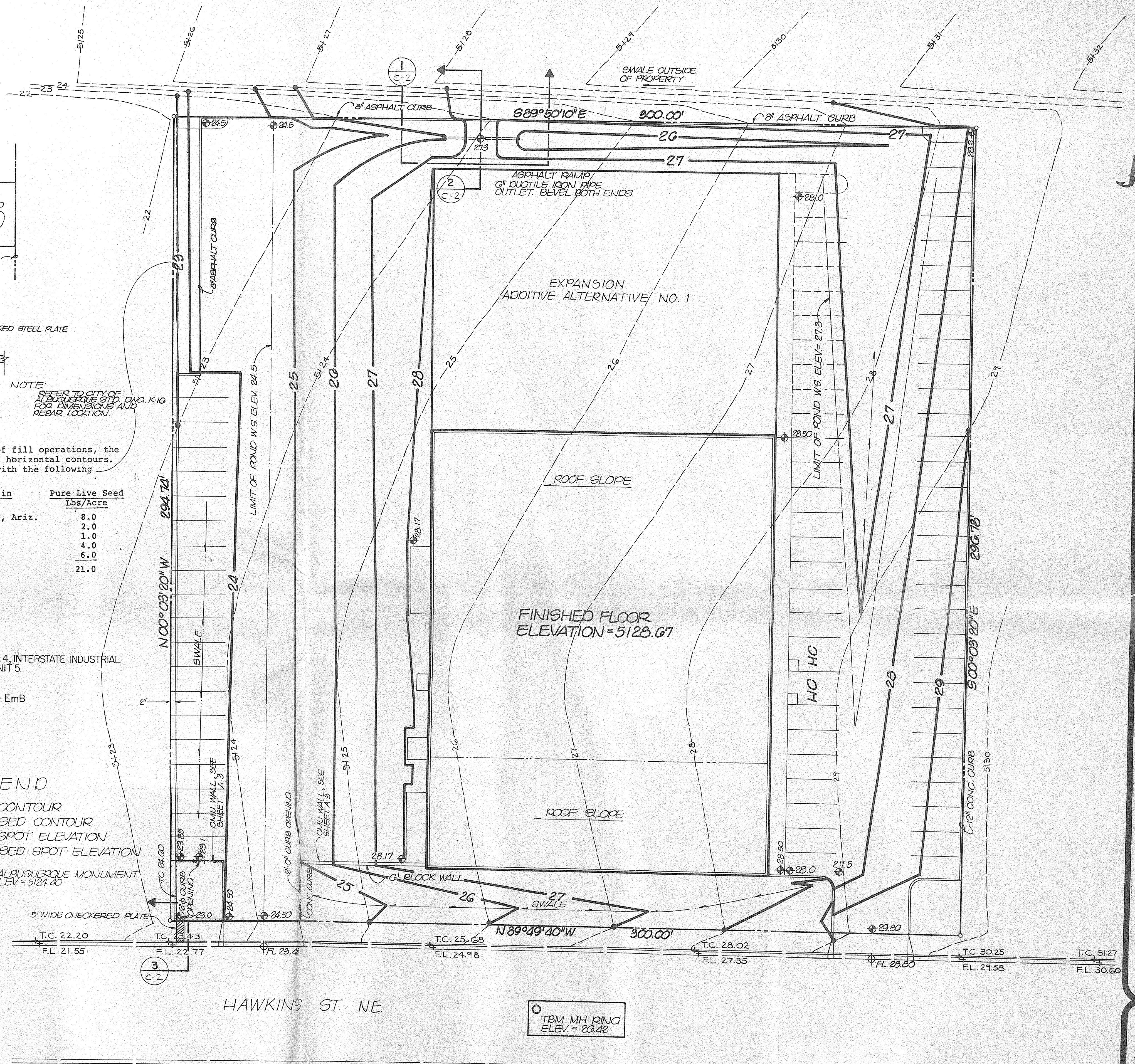
d = 12.28" = 474 sq. in. use 8"x60" sidewalk box opening.

LEGAL
LOTS 3 & 4, INTERSTATE INDUSTRIAL
TRACT, UNIT 5.

SOILS
EMBUDO - EmB

LEGEND

EXIST. CONTOUR
PROPOSED CONTOUR
EXIST. SPOT ELEVATION
PROPOSED SPOT ELEVATION
CITY OF ALBUQUERQUE MONUMENT
9-D-17 ELEV. = 5124.40



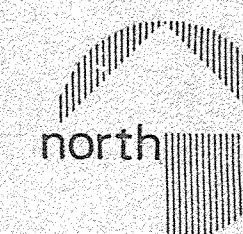
RECORD DRAWING

FOR INFORMATION ONLY

SITE GRADING PLAN

SCALE 1" : 20'

JOB No. 1-1032



VOGT & BYRNES, P.A.
ARCHITECTS - ENGINEERS

A WAREHOUSE FOR
PONCA
WHOLESALE MERCANTILE COMPANY
ALBUQUERQUE, NEW MEXICO

Job No **8108**
Dwn By **TTM**
App By **TTM**
Date **10-26-81**
REVISED **5-19-82**

AS APPROVED

C • 2
3 OF 3
3 of 18

RECEIVED
JUN 21 2002
HYDROLOGY SECTION