

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

November 3, 2025

Fred Arfman, P.E.
Isaacson & Arfman, Inc.
128 Monroe St. NE
Albuquerque, NM 87108

**RE: Mack Recovery
2510 2nd Street SW
Grading and Drainage Plans
Engineer's Stamp Date: 10/28/25
Hydrology File: M14D042
Case # HYDR-2025-00303**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 10/28/2025, the Grading & Drainage Plan is approved for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

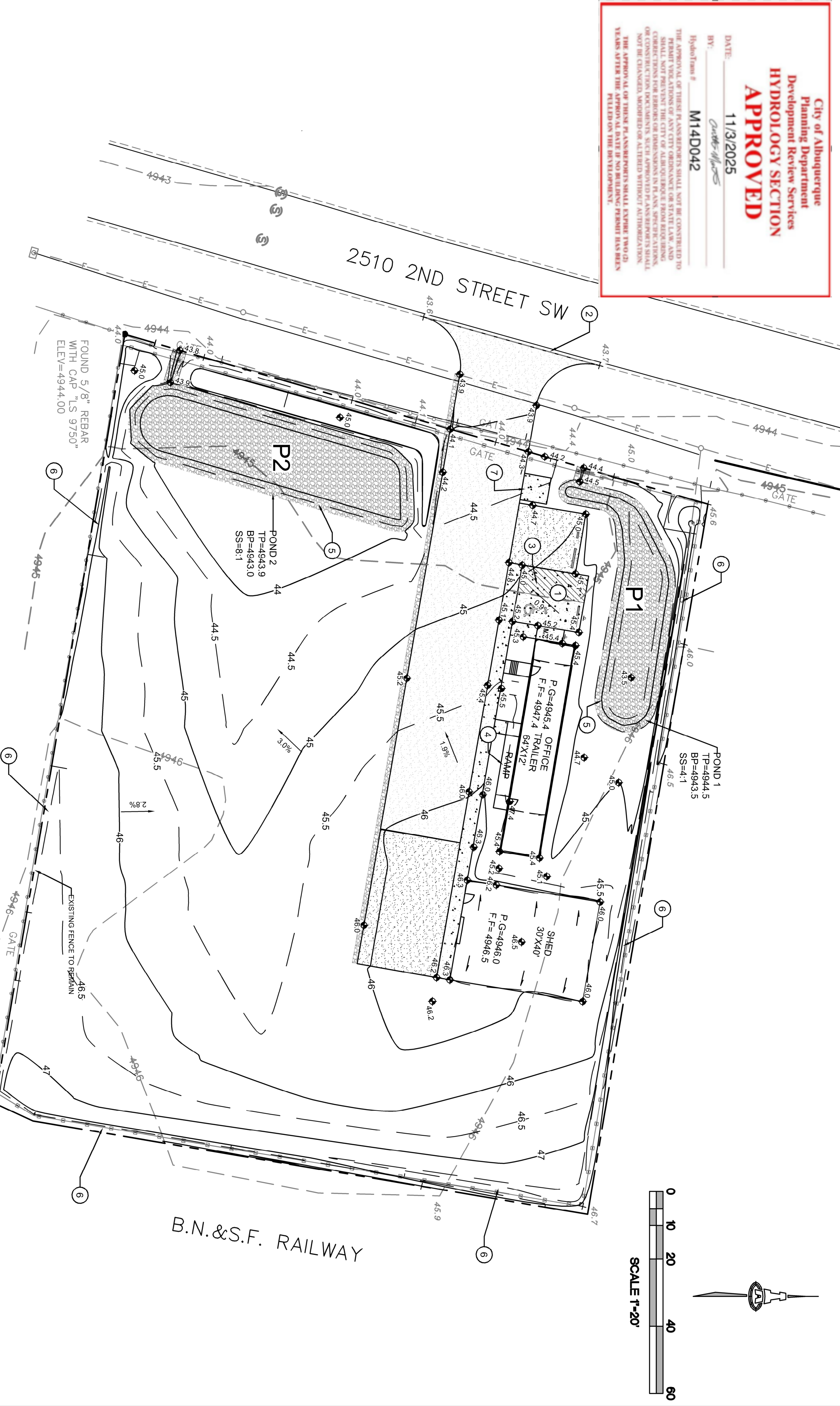
1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25.00 made out to "Bernalillo County" for the stormwater quality pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol. An Application for Covenant in ABQ-PLAN is also required to process the submittal.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services



POND 1 STAGE STORAGE TABLE

ELEV (sq. ft.)	DEPT H (ft)	AVG END INC. VOL. (cu. ft.)	TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
4,943.50	5.25	82	0.00	N/A	0.00
4,943.60	5.81	101	55.34	55.32	55.32
4,943.70	6.37	153	116.27	60.91	116.22
4,943.80	6.95	214	182.91	66.82	182.84
4,943.90	7.54	286	255.37	72.45	255.29
4,944.00	8.14	369	336.05	80.62	335.91
4,944.10	8.75	464	425.52	89.45	425.35
4,944.20	9.38	571	522.06	96.52	521.87
4,944.30	1,007	691	625.72	103.64	625.52
4,944.40	1,144	836	736.56	110.82	736.34
4,944.50	1,237	1,008	855.65	119.05	855.39

POND 2 RETENTION STORAGE TABLE

ELEV (sq. ft.)	DEPT H (ft)	AVG END INC. VOL. (cu. ft.)	TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
4,943.00	1.31	71	N/A	N/A	0.00
4,943.10	1.38	84	134.84	134.82	134.82
4,943.20	1.45	100	277.04	142.19	277.01
4,943.30	1.53	120	426.67	149.62	426.63
4,943.40	1.60	138	583.80	157.11	583.73
4,943.50	1.68	160	748.47	164.66	748.39
4,943.60	1.76	187	920.76	172.27	920.67
4,943.70	1.83	219	1100.73	179.95	1100.62
4,943.80	1.91	258	1288.43	187.69	1288.31
4,943.90	2.26	383	1497.27	208.60	1496.91

CALCULATIONS: 2764 Mack Recovery Vehicle Storage

Based on City of Albuquerque DMF Article 6.2 Hydrology dated June 26, 2020

100-YEAR CHOLUR CALCULATIONS

AREA OF SITE: 40190.52 SF = 0.92 ACRE

HISTORIC FLOWS: Treatment SF % Precip Zone 2

Area A	0	0%	Area A	0	0%
Area B	0	0%	Area B	0	0%
Area C	40190	100%	Area C	26927	67%
Area D	0	0%	Area D	13263	33%
Total Area	40190	100%	Total Area	40190	100%

EXCESS PRECIP: Precip Zone 2

E _a	0.62
E _b	0.80
E _c	1.03
E _p	2.33

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

Weighted E = $E_{aA} + E_{bA} + E_{cA} + E_{pA}$ = 1.46 m

On-Site Volume of Runoff: V₅₀₀ = 3450 CF Developed V₅₀₀ = 4886 CF

On-Site Peak Discharge Rate: Q_p = Q_{aA} + Q_{aB} + Q_{aC} + Q_{aD} = 43.560

Flow Precipitation Zone 2

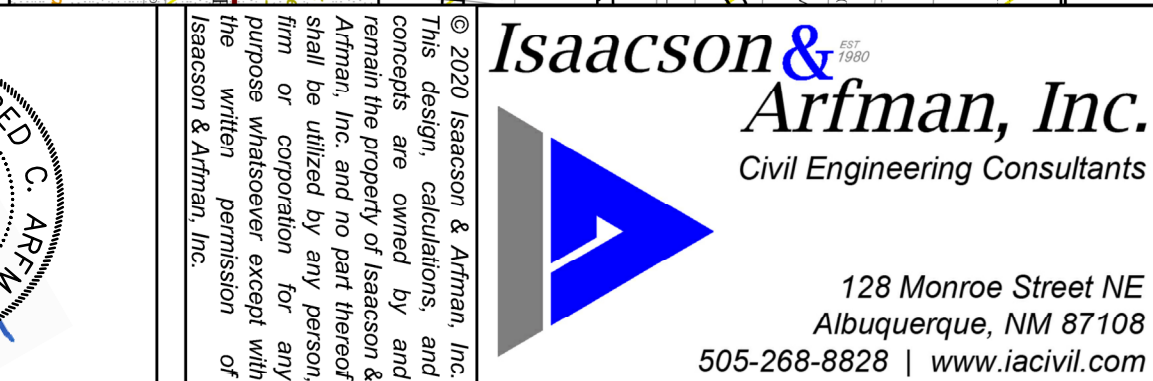
Q _{aA}	1.71	Q _{aC}	3.05
Q _{aB}	2.36	Q _{aD}	4.34
Historic Q _a	2.8	Developed Q _a	3.2

DRAINAGE CALCULATIONS

PER 6-5(C) THIS SITE WILL RETAIN THE FIRST 1/2" OF STORMWATER RUNOFF

Basin 1: 5/12 = 0.2 ACRE * 43860 CF/ACRE = 3683 CF
REQUIRED RETENTION: 368 CF
PROVIDED RETENTION (POND 1): 885.99 CF

Basin 2: 5/12 = 0.2 ACRE * 43860 CF/ACRE = 1906.8 CF
REQUIRED RETENTION: 1,906.8 CF
PROVIDED RETENTION (POND 2): 1,496.91 CF



- KEYED NOTES**
- PCC PAVING AT ELEVATIONS SHOWN
 - SMOOTH TRANSITION TO EXISTING PAVEMENT
 - ADA COMPLIANT PARKING SPACES AND ACCESS ASILE AT ELEVATIONS SHOWN
 - ADA COMPLIANT RAMP AT ELEVATIONS SHOWN
 - ANGULAR ROCK EROSION PROTECTION TO LIMITS HATCHED
 - 1" HIGH EARTHEN PERIMETER BERM
 - CONCRETE PAD FOR ROLLOUT REUSE BINS

GENERAL NOTES

- GRADES SHOWN ARE FINAL SURFACE GRADES (TOP OF CONCRETE, TOP OF LANDSCAPE MATERIAL, ETC.)
- ALL ANGULAR ROCK EROSION PROTECTION TO BE 2'-6" (4" AVG. DIA.) MATERIAL, UNLESS NOTED.
- ALL DRAINAGE IMPROVEMENTS SHOWN ON THE APPROVED GRADING AND DRAINAGE PLAN MUST BE COMPLETED BEFORE ANY ENGINEERS CERTIFICATION OF SUBSTANTIAL COMPLIANCE CAN BE ISSUED.

EROSION PROTECTION

- AVERAGE DIAMETER (Ø60) ANGULAR ROCK (VARY BETWEEN 2" AND 6" DIAMETER)
- PLACE US 138NN NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION
- INSTALL ALL EROSION PROTECTION FLUSH WITH ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.
- EROSION PROTECTION THICKNESS = 2 X Ø60
- SWALE INVERT TO BE DEPRESSED 1" PER FOOT OF WIDTH.
- INTEGRATE SWALE GRADING WITH NATURAL SURROUNDINGS.
- MEANDER SWALE CENTERLINE.

PROJECT INFORMATION

PROPERTY: THE PROPERTY IS A PREVIOUSLY DEVELOPED PROPERTY. THE OVERALL PROPERTY IS BOUNDED TO THE NORTH BY A DEVELOPED COMMERCIAL PROPERTY TO THE EAST BY RAILROAD TRACKS, TO THE SOUTH BY A DEVELOPED INDUSTRIAL PROPERTY, AND TO THE WEST BY A 2ND STREET SW. THE EXISTING SITE DRAINS WEST / NW OUT TO SECOND STREET.

PROPOSED IMPROVEMENTS: THE EXISTING CONDITION OF THE SITE HAS NO FIXED STRUCTURES ON SITE AND DRAINS OUT TO 2ND STREET. THE PROPOSED IMPROVEMENTS INCLUDE CONSTRUCTION OF AN OFFICE TRAILER, PRIVATE GARAGE PARKING, DRAINAGE INFRASTRUCTURE, AND LANDSCAPING.

LOT SIZE: 0.92 ACRE
STREET ADDRESS: 2510 2ND STREET SW
LEGAL: TR 1 PLAT OF TRACTS 1 & 2 LANDS OF B.N. & S.F. RAILWAY CO. COONT 0.9231 AC

BENCHMARK ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATIONS No. 12.MTD, HAVING AN ELEVATION OF 4941.92, NAVD 1983.

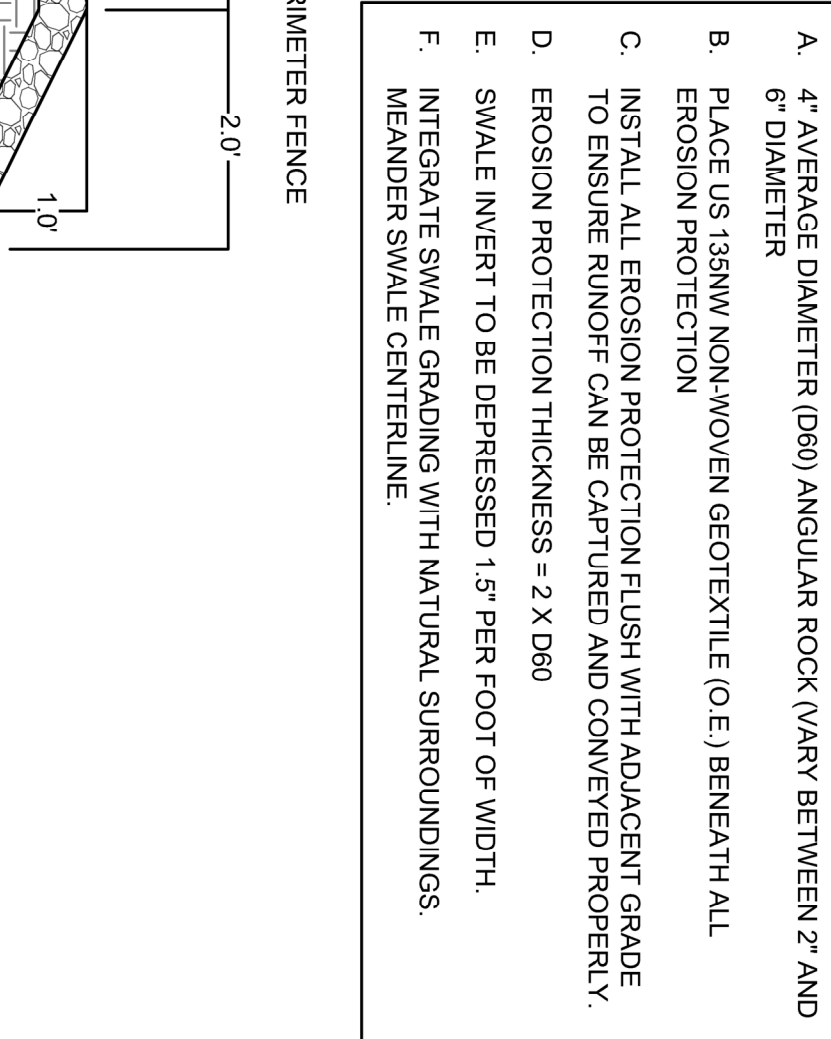
FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #5901003425 DATED 9/28/2008, THE SITE IS LOCATED WITHIN ZONE 'X'. DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN DUE TO LEVEE BREACHES. THESE AREAS ARE SHOWN AS SHADDED AREAS OUTSIDE OF THE 100-YEAR FLOODPLAIN EVENT DUE TO LEVEE OFFSITE FLOWS. MINOR OFFSITE FLOWS APPROACH THE SITE BUT A BERM MUST BE CONSTRUCTED TO NOT PERMIT FLOW TO ENTER THE SITE.

DRAINAGE PLAN CONCEPT: THE SITE PROVIDES TWO POND SIZES TO RETAIN THE FIRST 1/2" OF RUNOFF PER PART 6-5(C) OF THE CITY OF ALBUQUERQUE DPPL. STORMWATER IS DIRECTED TO THESE POND SIZES VIA SURFACE FLOW.



PERIMETER BERM

SCALE: N.T.S.



LEGEND

---	EXISTING CONTOUR
+	EXISTING SPOT ELEVATION
4.5	PROPOSED 1.0' CONTOUR
44.5	PROPOSED 0.5' CONTOUR
46.0	PROPOSED SPOT ELEVATION
→	FLOW DIRECTION
---	POND LIMITS/EROSION PROTECTION

ADA COMPLIANCE

SIDEWALK(S) AND RAMP(S): TARGET CROSS SLOPE = 1% TO 1.5%. GROSS SLOPE SHALL NOT EXCEED 2%.

ACCESSIBLE RAMP(S): TARGET LONGITUDINAL SLOPE = 7%. LONGITUDINAL SLOPE SHALL NOT EXCEED 12.1% (0.3%).

ACCESSIBLE PARKING: TARGET SLOPE = 1% TO 1.5%. SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

DESIGN DEVELOPMENT

PROJECT NUMBER: IA 2764

FILE: BK

DRAWN BY: FCA

CHECKED BY: FCA

DATE: 1

GRADING & DRAINAGE PLAN

SHEET NUMBER

CG-101

MACK RECOVERY

2510 SECOND ST. SW

ALBUQUERQUE, NM, 87102

Engineer

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