

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 31, 2024

Thomas D. Johnston, PE
George T Rodriguez-Development Consultant
12800 San Juan Rd. SE
Albuquerque, NM 87123

**RE: Veterans Integration Center – Phase 2 – Two Story Bldg.
2701 Mulberry St. SE
Permanent Certificate of Occupancy - Accepted
Engineer's Stamp Date: 07/30/2025
Engineer's Certification Date: 07/31/2025
Hydrology File: M15D054
Case # HYDR-2025-00268**

Dear Mr. Johnston:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

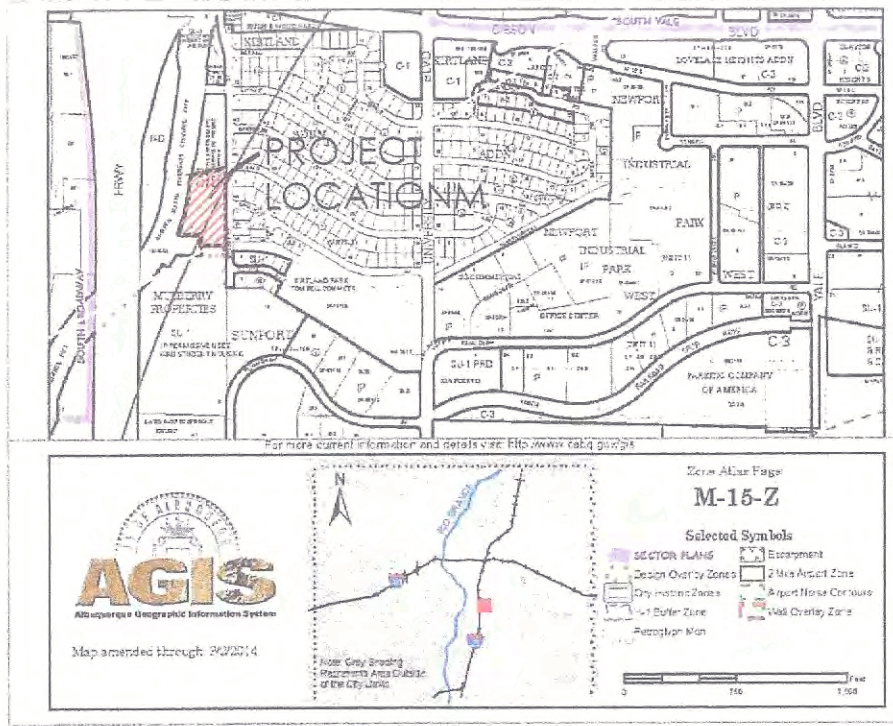
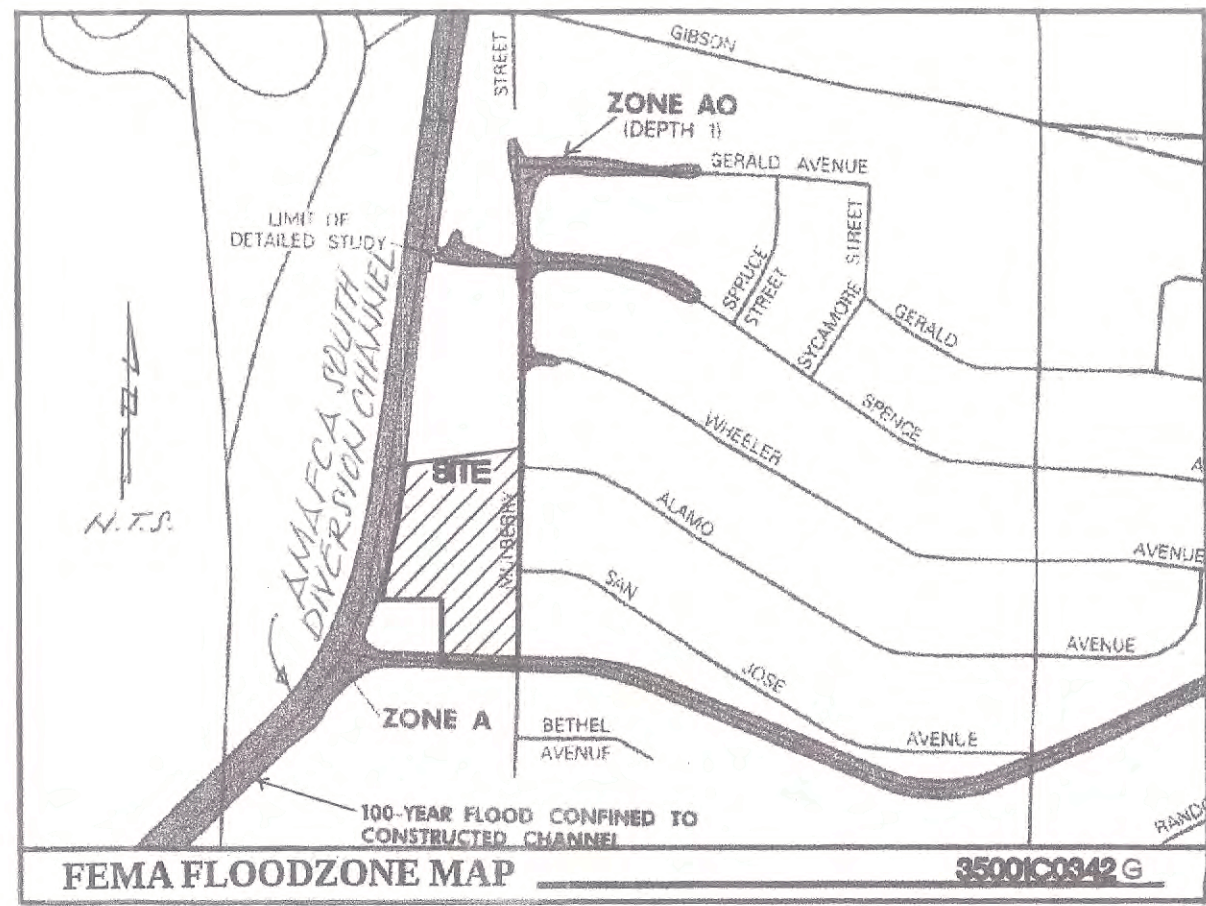
Based on the Engineer's Grading and Drainage Certification received 07/31/2024 and the site visit on 7/30/2024, this letter serves as an approval from Hydrology Section of the Engineer's Certification for a Permanent Certificate of Occupancy **for Phase 2 (Two Story Bldg)** to be issued by the Building and Safety Division **for the Veterans Integration Center located at 2701 Mulberry St. NE.**

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

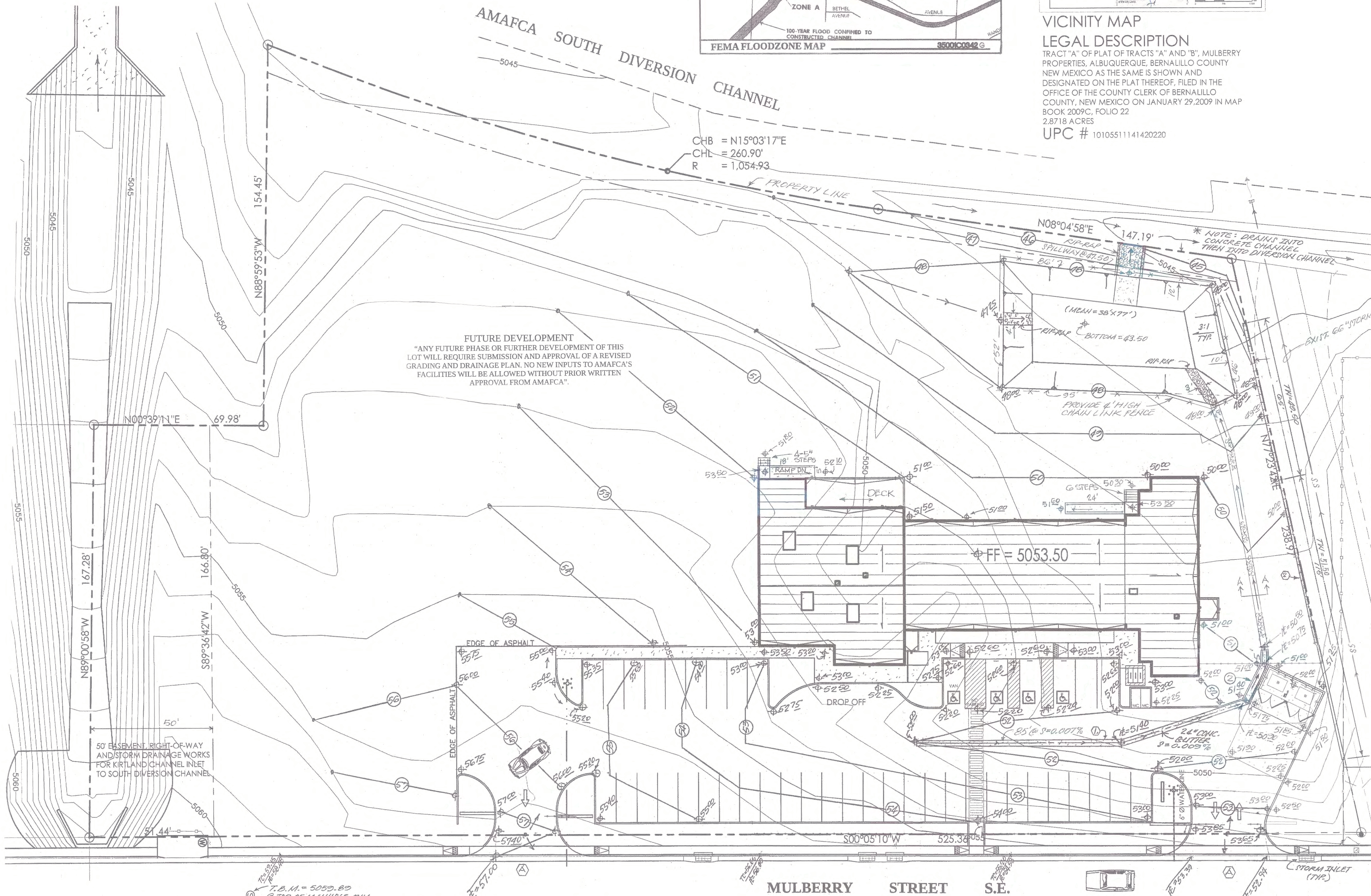
Sincerely,

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

NOTE : REFER TO SHEET ' C-1.01 ' FOR 100 YR.- 10 DAY
POND VOLUME CALCULATIONS AND DETAILS.

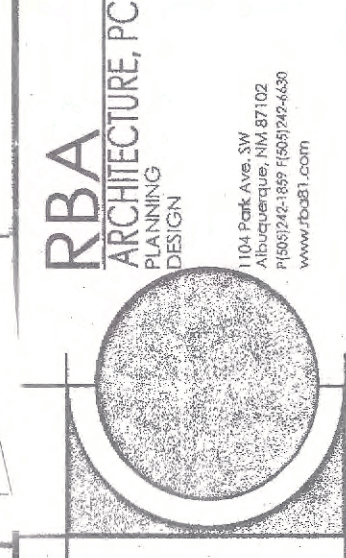


VICINITY MAP
LEGAL DESCRIPTION
TRACT "A" OF PLAT OF TRACTS "A" AND "B", MULBERRY
PROPERTIES, ALBUQUERQUE, BERNALILLO COUNTY
NEW MEXICO AS THE SAME IS SHOWN AND
DESIGNATED ON THE PLAT THEREOF, FILED IN THE
OFFICE OF THE COUNTY CLERK OF BERNALILLO
COUNTY, NEW MEXICO ON JANUARY 29, 2009 IN MAP
BOOK 2009C, FOLIO 22
2.8718 ACRES
UPC # 10105511141420220



VETERANS INTERGRATION CENTER
GRADING AND DRAINAGE PLAN
2701 MULBERRY STREET S.E.
ALBUQUERQUE, NM
PROJECT #2171

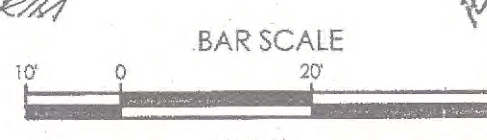
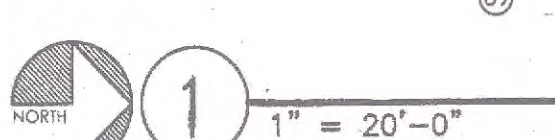
REVISION DATE
1-26-2023
3-17-23
THOMAS D. JOHNSON
NEW MEXICO
17158
REGISTERED PROFESSIONAL ENGINEER
1-25-2023



DATE
01-05-2023

SHEET NUMBER
C-1.0

GEORGE T. RODRIGUEZ
LAND USE, DEVELOPMENT AND
REDEVELOPMENT CONSULTANT
ALBUQUERQUE, NEW MEXICO
(505)610-0593



NOTE : REFER TO SHEET C-1.01 FOR DRAINAGE
NARRATIVE, CALCULATIONS, GENERAL
NOTES, AND DETAILS.

PROVIDE NEW CURB CUT - DRIVEPAD PER C.O.A.
STD. DWG. NO. 2425-A.
REMOVE EXISTING SIDEWALK, DRIVEPAD, CURB
AND GUTTER AND PROVIDE NEW AS SHOWN HEREON.

GRADING AND DRAINAGE PLAN
JANUARY - 2023

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- 2) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- 3) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES:

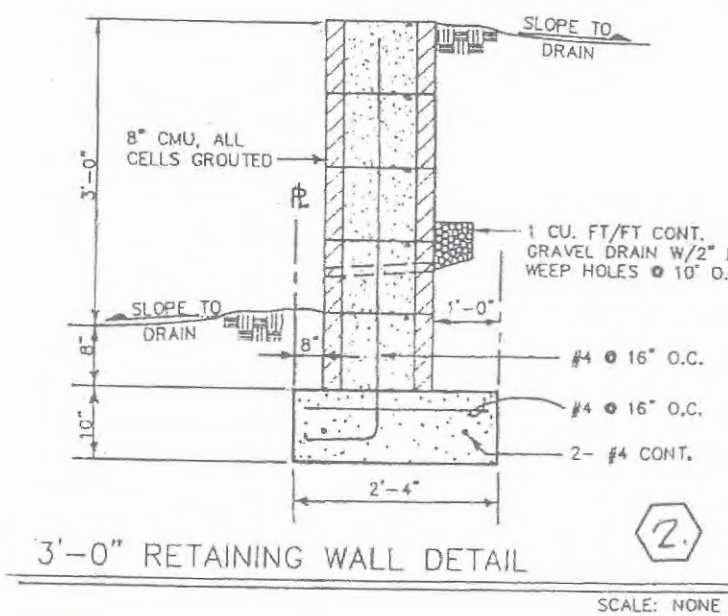
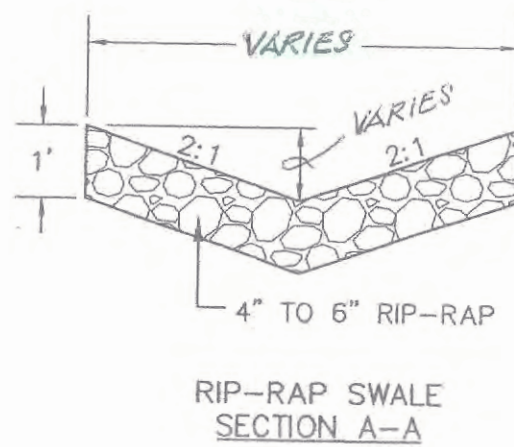
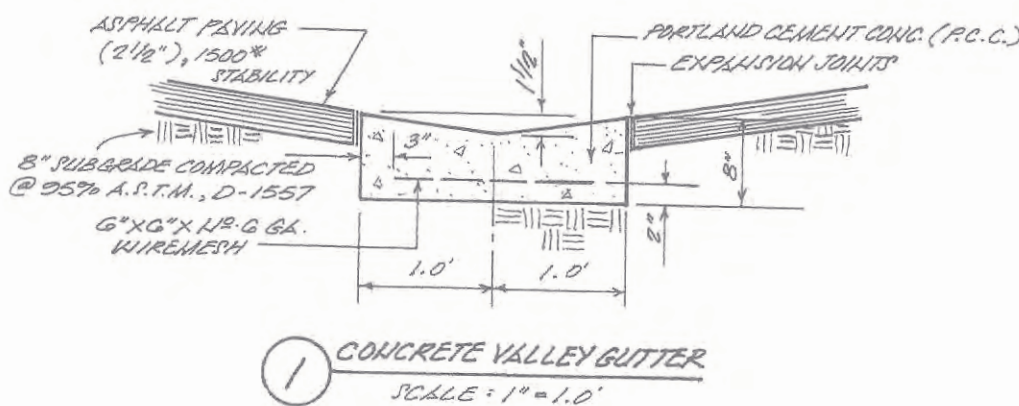
- 1) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- 2) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND:

TOP OF CURB ELEVATION = $TC = 57.65$
CURB FLOWLINE ELEVATION = $FE = 57.00$
EXISTING SPOT ELEVATION = 5055
EXISTING CONTOUR ELEVATION = 5055
PROPOSED SPOT ELEVATION = 5540
PROPOSED CONTOUR ELEVATION = 53
PROPOSED OR EXISTING CONCRETE SURFACE = \square
EXISTING FENCE LINE = \square

GENERAL NOTES:

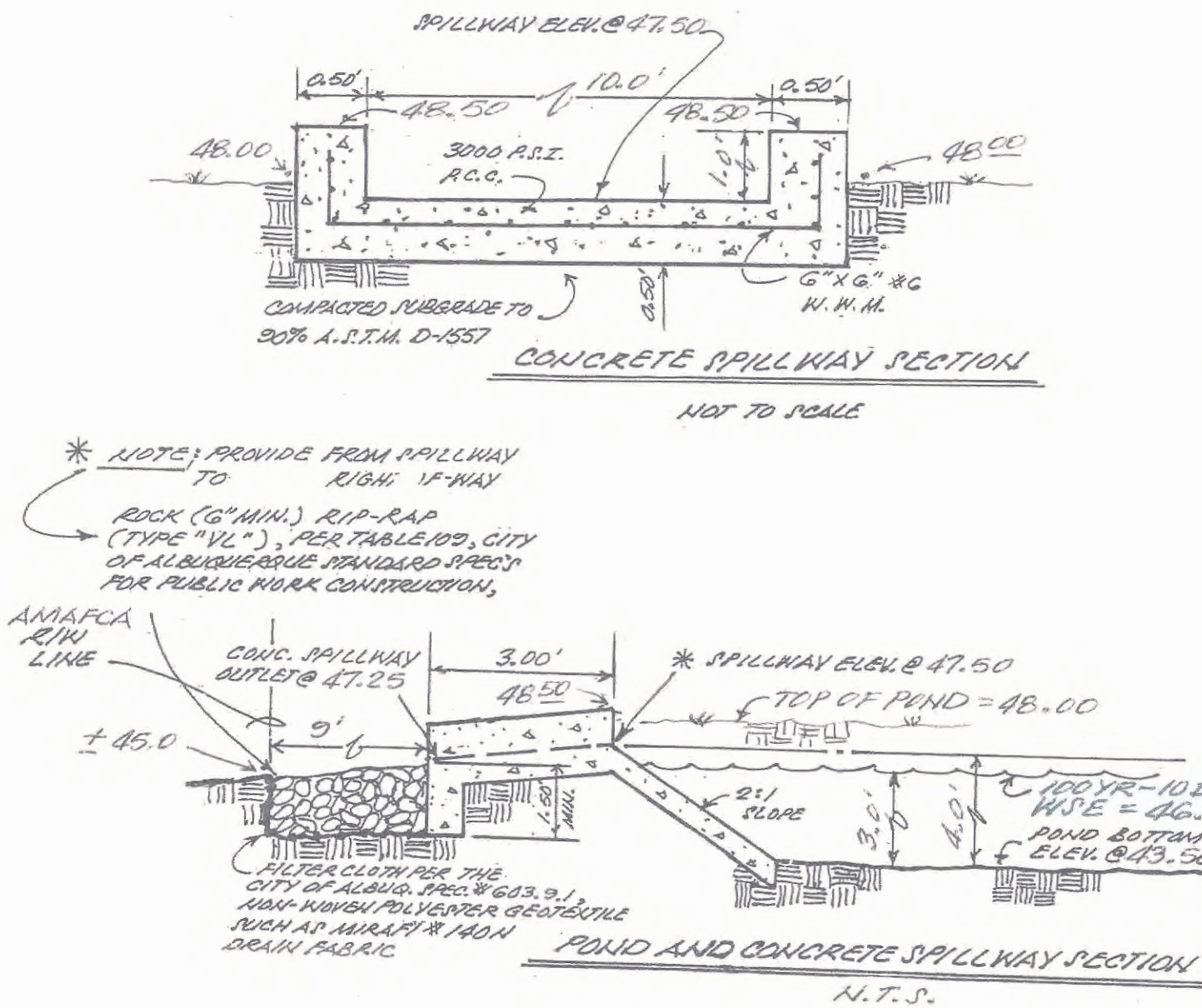
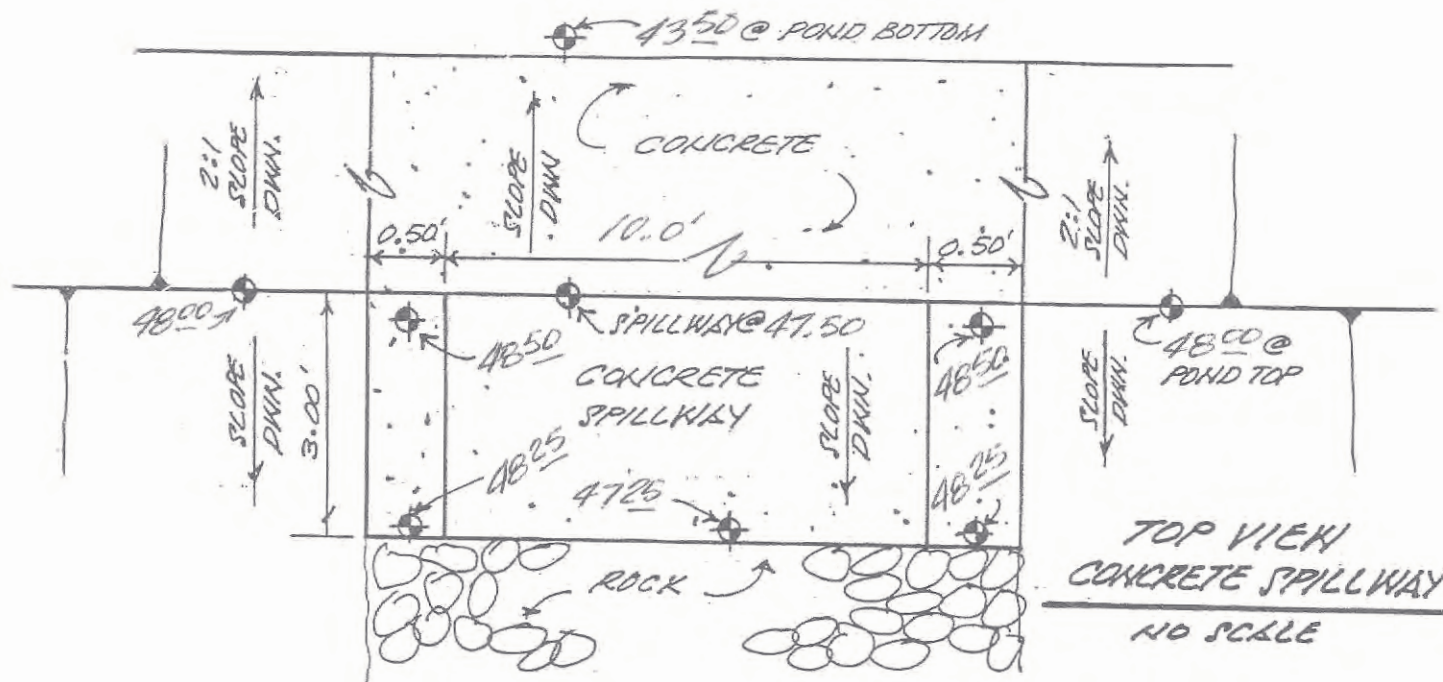
- 1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.



GENERAL NOTES:

1. ALL WALLS ARE TO HAVE 12" CMU PLASTERS @ 12"-0" O.C. PLACE NO. 4'S IN EACH CELL. FILL ALL CELLS WITH CONCRETE.
2. ALL CONCRETE IS TO BE 3000 PSI.
3. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM D 1557 FOR A DEPTH OF 12". MOISTURE CONTENT IS TO BE $\pm 2.0\%$.
4. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
5. ALL BARS ARE TO BE GRADE 60, ASTM B615.

GEORGE T. RODRIGUEZ
LAND USE, DEVELOPMENT AND
REDEVELOPMENT CONSULTANT
ALBUQUERQUE, NEW MEXICO
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Section 6-2(A)(5) Peak Discharge Rate for Small Watersheds

The peak discharge rate is given in TABLE 6.2.4 for small watersheds, less than or equal to 40 acres, where the time of concentration is assumed to be 12 minutes.

Zone	Land Treatment			
	A	B	C	D
100-YEAR PEAK DISCHARGE (CFS/ACRE)				
1	1.54	2.16	2.87	4.12
2	1.21	2.36	3.05	4.34
3	1.84	2.49	3.17	4.49
4	2.09	2.73	3.41	4.78

The 6-hour excess precipitation, E, by zone and treatment is summarized in TABLE 6.2.13.

Zone	Land Treatment			
	A	B	C	D
100-YEAR EXCESS PARTICIPATION, E (IN)				
1	0.55	0.73	0.95	2.24
2	0.62	0.80	1.03	2.33
3	0.67	0.86	1.09	2.58
4	0.76	0.95	1.20	3.34

NOTES:

BUILDING PAD COMPACTION TO BE PER SOILS ENGINEER'S TEST RESULTS AND RECOMMENDATIONS.

CONTRACTOR TO PROVIDE ROOF GUTTERS AND DOWNSPOUTS (AS SHOWN) WITH SPLASH BOXES TO DISSIPATE DRAIN FLOW ENERGY.

CONTRACTOR TO PROVIDE POSITIVE DRAINAGE (2% MIN.) AWAY FROM STRUCTURE.

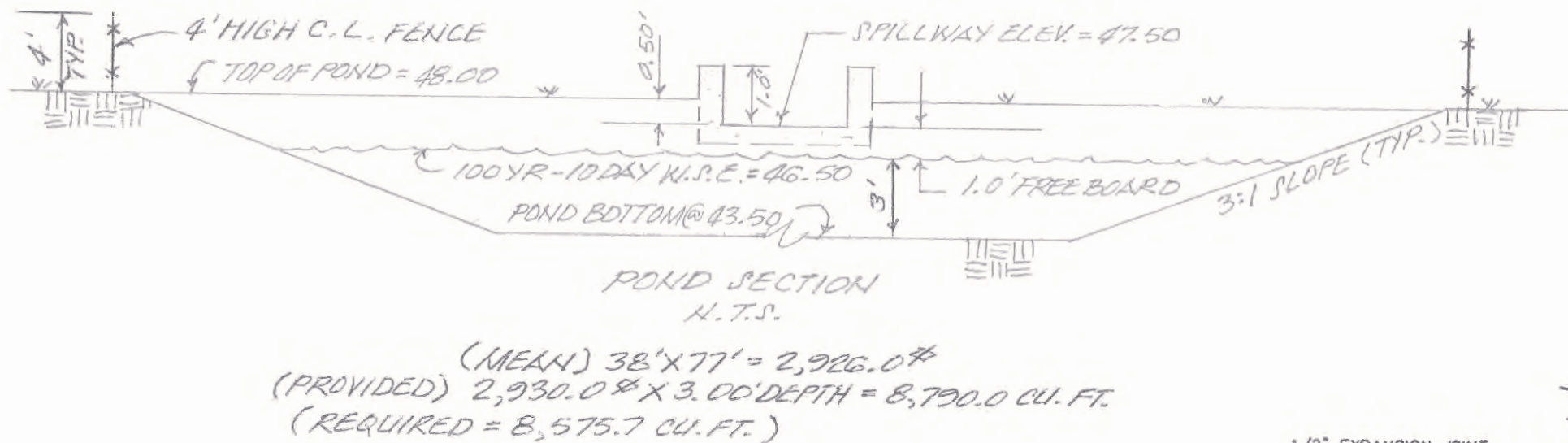
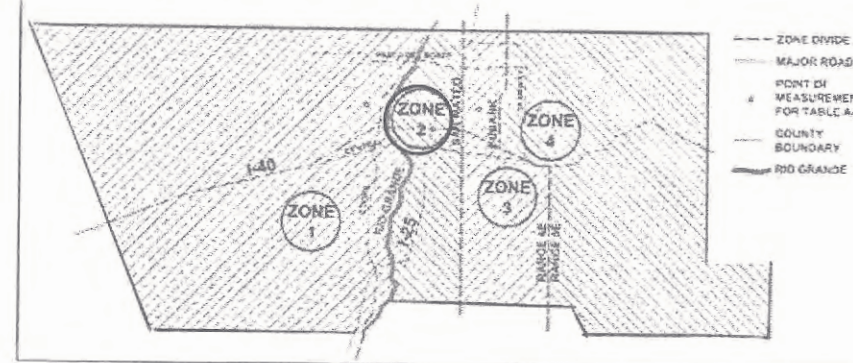
PROJECT T.B.M.: AS SHOWN ON THE PLAN HEREON.

*** PAD CERTIFICATION IS REQUIRED PRIOR TO BUILDING PERMIT RELEASE.

*** ENGINEER'S CERTIFICATION IS REQUIRED FOR "CERTIFICATE OF OCCUPANCY" RELEASE.

TABLE 6.2.7 Precipitation Zones	
Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40 and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40 and East of the East boundary of Range 4 East, South of Interstate 40
Not including the Cibola National Forest	

FIGURE 6.2.3 Precipitation Zones



NOTE: PROVIDE MINIMUM 4.0' HIGH CHAIN LINK FENCE (OR EQUAL) AROUND POND PERIMETER WITH LOCKED GATE ACCESS FOR MAINTENANCE.

DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF MULBERRY STREET S.E. EAST OF INTERSTATE HIGHWAY 25 AND SOUTH OF GIBSON BOULEVARD S.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (ZONE ATLAS 'M-15-Z').

THE SUBJECT SITE, 1.) IS TO HAVE A VETERANS INTEGRATION CENTER BUILDING AND ASSOCIATED IMPROVEMENTS CONSTRUCTED THEREON, (THIS GRADING AND DRAINAGE PLAN WAS PREPARED TO SUPPORT A BUILDING PERMIT APPLICATION FOR SAID PROPOSED DEVELOPMENT, 2.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 3.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 4.) IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (DESIGNATED ZONE 'X', REFERENCE FEMA PANEL NO. 35001C0342G, EFFECTIVE 09-26-2008), 5.) IS ADJACENT TO THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY SOUTH DIVERSION CHANNEL, 6.) IS TO PROVIDE A RETENTION POND FOR THE DEVELOPED 100 YR. - 10 DAY STORM VOLUME.

PER THE DEVELOPMENT PROCESS MANUAL FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, HYDROLOGY, CHAPTER 6, ARTICLE 6-2(a), EFFECTIVE DATE: JUNE 8, 2020.

SITE AREA = 2.90 ACRES (TOTAL)

NOTE: CALCULATIONS SHOWN HEREON ARE FOR "PHASE ONE (1) DEVELOPMENT", BEING A 1.23 ACRE PORTION OF THE 2.90 ACRE SITE.

PRECIPITATION ZONE: TWO (2)

"LAND TREATMENT METHOD" FOR CALCULATION OF "Qp"

PRECIPITATION: 100-YR./6 HR. = 2.29 IN.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A 0.62 IN.	1.71 CFS/AC.
TREATMENT B 0.80 IN.	2.36 CFS/AC.
TREATMENT C 1.03 IN.	3.05 CFS/AC.
TREATMENT D 2.33 IN.	4.34 CFS/AC.

EXISTING CONDITIONS:

AREA

TREATMENT A 1.23 AC.

TREATMENT B 0.00 AC.

TREATMENT C 0.00 AC.

TREATMENT D 0.00 AC.

PROPOSED CONDITIONS:

AREA

0.00 AC.

0.00 AC.

0.48 AC.

0.75 AC.

EXISTING EXCESS PRECIPITATION:

WEIGHTED 'E' = $(0.62 \times 1.23) + (0.80 \times 0.00) + (1.03 \times 0.00) + (2.33 \times 0.00) / 1.23 = 0.62$ IN.
V100-360 = $(0.62 \times 0.00) / 12 = 0.05167$ AC. FT. = 2,251.0 CU. FT.

EXISTING PEAK DISCHARGE:

Q-100 = $(1.71 \times 1.23) + (2.36 \times 0.00) + (3.05 \times 0.00) + (4.34 \times 0.00) = 2.10$ CFS

PROPOSED EXCESS PRECIPITATION:

WEIGHTED 'E' = $(0.62 \times 0.00) + (0.80 \times 0.00) + (1.03 \times 0.48) + (2.33 \times 0.75) / 1.23 = 1.82$ IN.
V100-360 = $(1.82 \times 0.75) / 12 = 0.11375$ AC. FT. = 4,955.0 CU. FT.

PROPOSED PEAK DISCHARGE:

Q-100 = $(1.71 \times 0.00) + (2.36 \times 0.00) + (3.05 \times 0.48) + (4.34 \times 0.75) = 4.72$ CFS

INCREASE: V100-360 = 2,704.0 CU. FT. Q-100 = 2.62

*** 100-YR./10-DAY STORM VOLUME CALCULATION:

V10-DAYS = $V360 + AD \times (P-10 \text{ DAYS} - P-360) / 12$ IN. FT.

V10-DAYS = $0.11375 \times 0.75 \times (3.62 - 2.29) / 12$ IN. FT. = 0.19687 AC. FT. = 8,575.7 CU. FT.

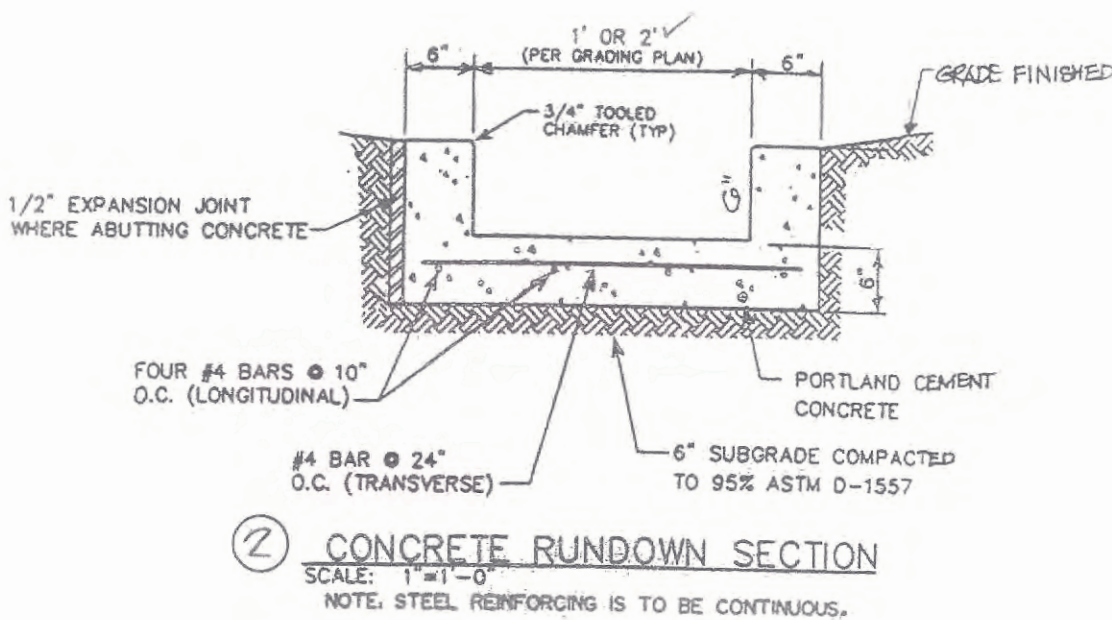
POND SPILLWAY - WEIR SIZE CALCULATION:

Q = 4.72 CFS BREADTH = 3.0' VALUE OF "C" = 2.63 "H" = 0.50'

VALUE OF "C" = 2.63 (INTERPOLATED FROM TABLE 5.3, BOOK OF HYDRAULICS, SECTION 5, BRATER & KING, 6th EDITION, 1976).

$$L = \frac{Q}{(2.63) (H^{1.5})} = \frac{4.72}{(2.63) (0.50^{1.5})} = 5.09' \text{ (USE } 10.0' \text{)}$$

NOTE: PROVIDED LENGTH "L" = 10.0'



VETERANS INTERGATION CENTER
GRADING AND DRAINAGE PLAN
2701 MULBERRY STREET S.E.
ALBUQUERQUE, NM
PROJECT #2171

REVISION DATE
1-20-2023
3-17-23
DESIGNED BY: THOMAS D. JOHNSTON, P.E.
NEW MEXICO
17158
PROFESSIONAL ENGINEER
1-25-2023
RBA ARCHITECTURE, PC
ARCHITECTURE, PC
DESIGN
DATE
01-05-2023
SHEET NUMBER
C-1.01