

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

May 15, 2017

Verlyn A. Miller, P.E.  
Mark Goodwin & Associates  
PO Box 90606  
Albuquerque, NM, 87199

**RE: Family Dollar Store / 4<sup>th</sup> St. NW**  
**Grading Plan and Drainage Report**  
**Stamp Date: 4/28/17**  
**Hydrology File: H14D107**

Dear Mr. Miller:

PO Box 1293

Based upon the information provided in your re-submittal received 4/28/2017, the Grading Plan and Drainage Report is approved for Building Permit.

Albuquerque

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

New Mexico 87103

Sincerely,

*Renee C. Brissette*

[www.cabq.gov](http://www.cabq.gov)

Reneé C. Brissette, P.E.  
Senior Engineer, Hydrology  
Planning Department



# City of Albuquerque

Planning Department  
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: FAMILY DOLLAR STORE / 4TH STREET Building Permit #: \_\_\_\_\_ City Drainage #: \_\_\_\_\_  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
Legal Description: TRACTS 'A-1' AND 'A-2' OF THE WHITE CITY - GLEN HAVEN ADDITION TO THE COA  
City Address: 2801 4TH STREET, ALBUQUERQUE, NM  
Engineering Firm: MILLER ENGINEERING CONSULTANTS INC Contact: JEFFERY A. LUCERO  
Address: 3500 COMANCHE NE, BLDG. F, ALBUQUERQUE, NM 87107  
Phone#: 505-888-7500 Fax#: 505-888-3800 E-mail: JLUCERO@MEC.NM.COM  
Owner: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Architect: CLINT WILSEY - CG ARCHITECT, L.L.C. Contact: CLINT WILSEY  
Address: 2041 S. PLAZA STREET NW, ALBUQUERQUE, NM 87104  
Phone#: 505-280-0043 Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Check all that Apply:

### DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

### TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ DRAINAGE MASTER PLAN  
☐ DRAINAGE REPORT  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)  
☐ OTHER (SPECIFY) \_\_\_\_\_

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY  
☐ PRELIMINARY PLAT APPROVAL  
☐ SITE PLAN FOR SUB'D APPROVAL  
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE  
☐ FOUNDATION PERMIT APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ SO-19 APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ GRADING/ PAD CERTIFICATION  
☐ WORK ORDER APPROVAL  
☐ CLOMR/LOMR  
☐ PRE-DESIGN MEETING  
☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: 4/28/17

By: [Signature]

COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_



April 24, 2017

City of Albuquerque  
Planning Department  
Development and Building Services  
P.O. Box 1293  
Albuquerque, NM 87103

**Attn: Reneé C. Brisette, P.E., Senior Engineer, Hydrology Planning Dept.**

**RE: Family Dollar Store/4<sup>th</sup> St. NW  
Grading Plan and Drainage Report  
Stamp Date: 4/6/17  
Hydrology File: H14D107**

Dear Ms. Brisette,

This letter is in response to your comments by letter dated April 18, 2017. The comments have been addressed as follows:

Sheet C-100:

1. Under the existing conditions, it is mentioned that the site is part of an existing master plan. It would have been helpful if you had provided the master drainage plan for information only. That being said, it appears that the proposed water harvest basin 1 on the master drainage plan is bigger and a different shape than what was built as shown on C-101. Please clarify that the volume required and shown in the master drainage plan is being provided for in the as-built basin.

*An incorrect base drawing was used to illustrate existing conditions and topography on the first submittal. The new drawing illustrates a pond that is representative of the current as-built conditions. The volume calculations have also been verified.*

2. Since basin "A" is part of basin "2" of the master drainage plan, it is confusing when trying to compare these two basins since you do not include the exiting impervious from the existing adjacent tract in the drainage calculations. Please provide this existing drainage information. A note under the drainage data will suffice.

*A new Basin D has been added to show the existing runoff calculations from the Advanced Auto parking lot. Basins A and D combined are comparable to Basin 2 of the Master Plan.*

Sheet C-101:

3. Please provide the flowlines for all the proposed concrete channels at both ends (the roof drain and the outfall).

*Spot elevations have been provided at both ends of the concrete channels.*

4. Please provide the toe elevations for the proposed rip rap rundown.

*Spot elevations have been provided at the toe of the rip rap rundowns.*

5. Under Keyed Notes #18, the invert elevation is stated as 60.0. However, the exiting harvest area has a top elevation of 66.0 and the pond is 3.5 depth, so shouldn't the invert elevation be shown as 62.5 instead of 60.0?

*Spot elevations have been provided for the top of pond elevation and the bottom of the pond elevation based on the as-built survey. Keyed note #18 has been updated to reflect this information.*

6. Under Keyed Notes, there are two #18s. Please renumber the last five numbers and also change the corresponding numbers on the plan.

*This has been corrected.*

7. Please provide the flowline elevation of the start of the proposed valley gutter.

*A spot elevation has been provided at this location.*

8. Please provide the existing flowline elevation of the existing concrete channel where the proposed valley gutter will connect.

*A spot elevation has been provided at this location.*

9. Please provide the TC & TA for the corner of the proposed parking near the existing concrete rundown.

*A spot elevation has been provided at this location.*

10. It appears that the above proposed parking corner is over the existing concrete rundown. If this parking spot is needed, then the existing concrete rundown will have to be replaced or relocated to avoid the construction conflict. Please clarify.

*The site plan has been modified.*



11. Please provide the top and bottom elevation on the shown contours of the existing water harvest basin.

*Spot elevations have been provided for the top of pond elevation and the bottom of pond elevation.*

Sheet C-501:

12. It appears that Detail A3-Earthened Swale Detail is not used in this project. Please either just remove it or place a "X" over the detail.

*This detail has been removed from Sheet C-501.*

If you have any questions or need any additional information, please feel free to contact our office.

**MILLER ENGINEERING CONSULTANTS, INC.**

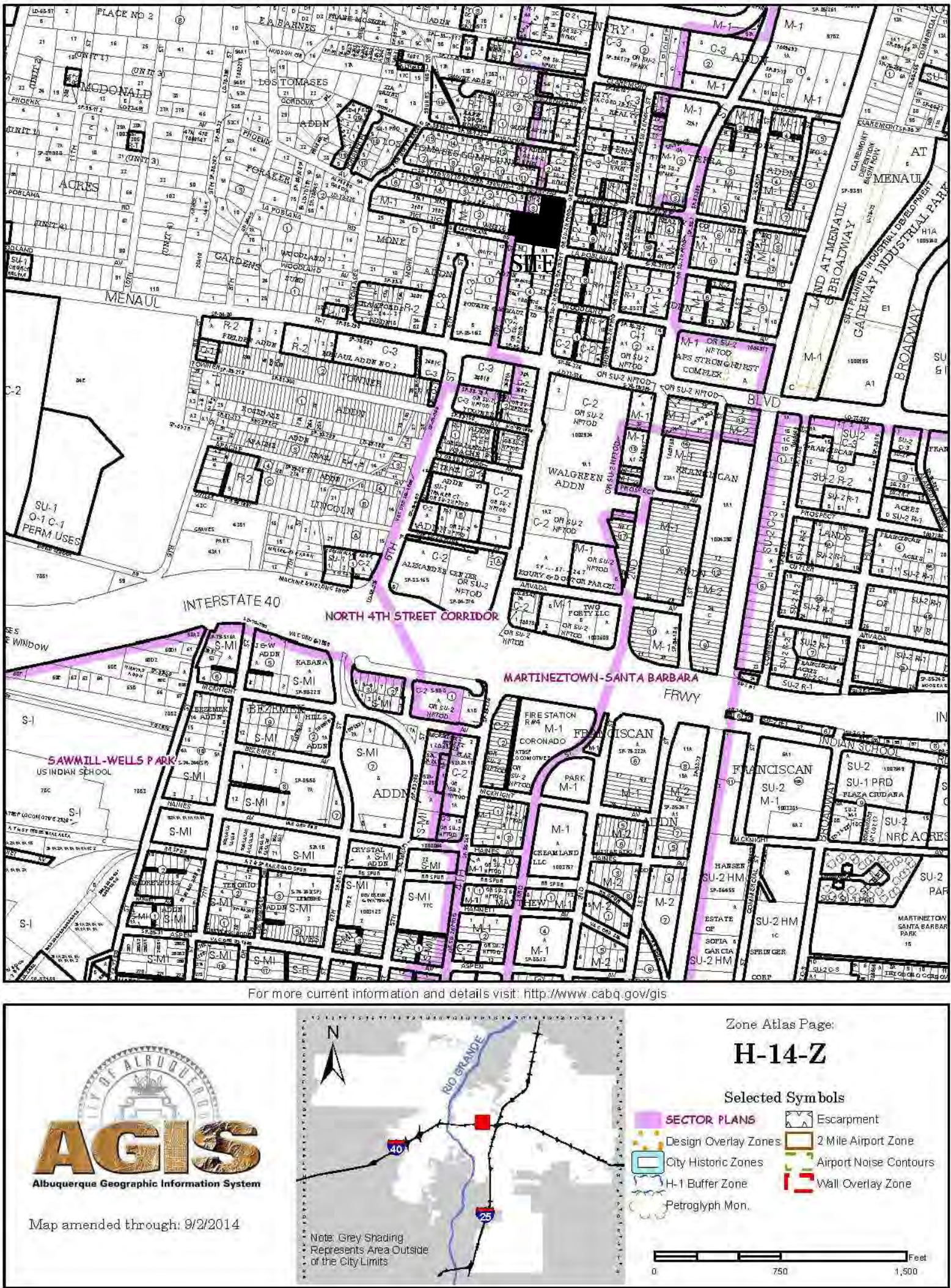


Verlyn A. Miller, P.E.  
President

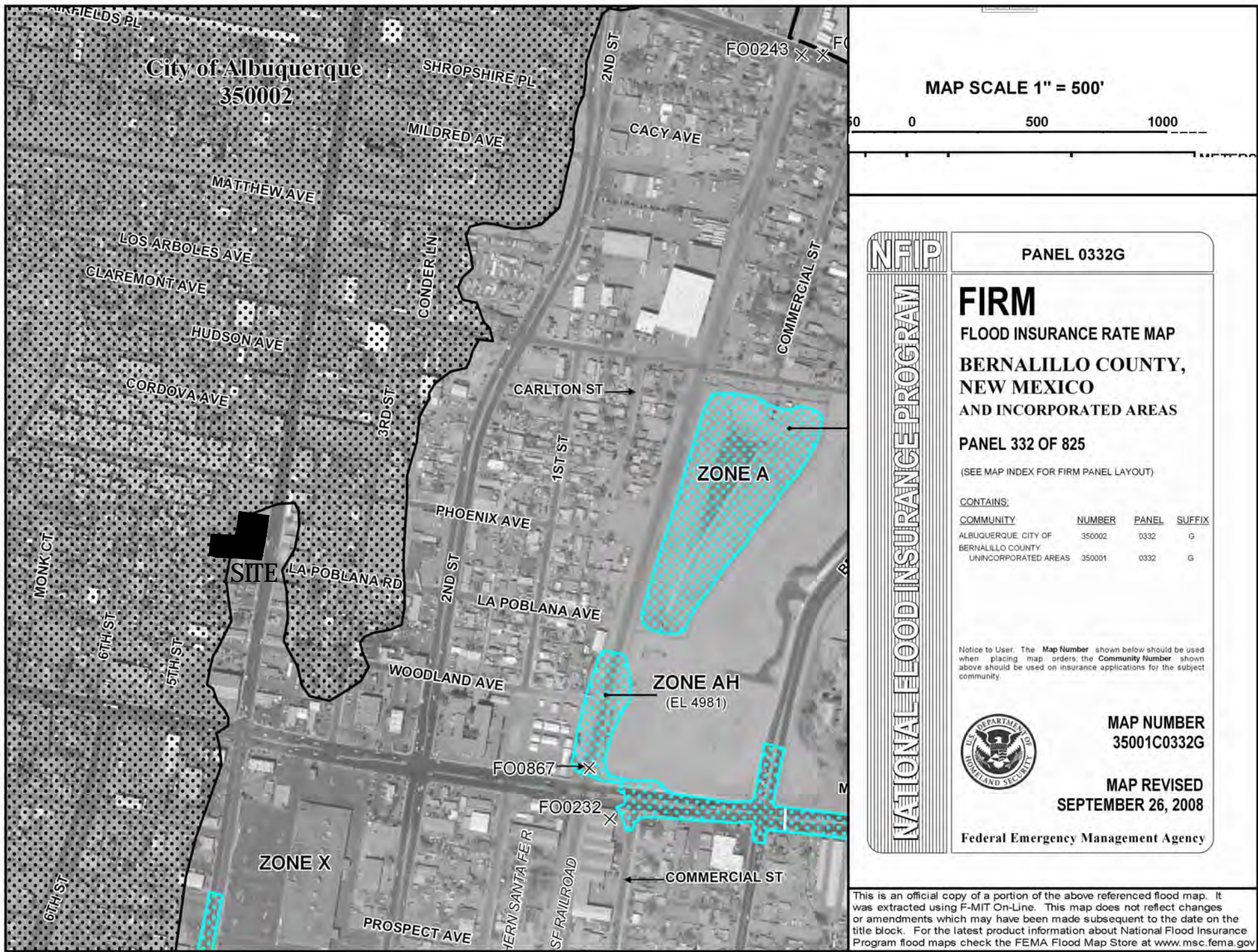
VAM:vam  
Enclosures

cc: File





C1 VICINITY MAP  
ZONE ATLAS MAP H-17-C



A1 FLOOD ZONE MAP  
FLOOD ZONE MAP: 35001C0332H

### SITE LOCATION

THE SITE FOR THE PROPOSED SITE FOR THE FAMILY DOLLAR STORE PROJECT IS AN APPROXIMATE 1-ACRE SITE LOCATED ON 4TH STREET NORTH OF MENAUL BOULEVARD. THE SITE IS BOUND ON THE SOUTH SIDE BY THE NEWLY CONSTRUCTED ADVANCED AUTO PARTS STORE, ON THE NORTH SIDE BY PHOENIX AVENUE, AND ON THE EAST SIDE BY 4TH STREET.

### EXISTING ON SITE CONDITIONS

THE SITE IS CURRENTLY UNDEVELOPED AND CONSISTS OF NATIVE DIRT WITH SPARSE VEGETATION. HISTORICALLY, THE SITE CONTAINED AN OLD CAR WASH FACILITY AND ASSOCIATED PARKING. THE CAR WASH AND OTHER IMPROVEMENTS ON THE SITE WERE DEMOLISHED APPROXIMATELY 2-YEARS AGO TO MAKE WAY FOR FUTURE DEVELOPMENT. THE SITE MAY BE ACCESSED VIA 4TH STREET ON THE EAST SIDE OF THE SITE. A DRAINAGE EVALUATION OF THIS PROPERTY WAS COMPLETED AS A PART OF A DRAINAGE MASTER PLAN SUBMITTED TO THE CITY OF ALBUQUERQUE (H14D041) WITH THE ADVANCED AUTO PROJECT LOCATED IMMEDIATELY SOUTH OF THE SITE.

### PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT WILL BE A FAMILY DOLLAR STORE WITH A PROPOSED 8320 SQUARE FOOT COMMERCIAL BUILDING, ASSOCIATED PARKING, AND OTHER RELATED IMPROVEMENTS. THE PROPOSED DEVELOPMENT WILL BE GRADED AND DRAINED IN ACCORDANCE WITH THE APPROVED MASTER PLAN FOR THIS SITE, WHICH WAS APPROVED BY THE CITY OF ALBUQUERQUE ON SEPTEMBER 21, 2015. THE PROPOSED PARKING LOT AREA WILL BE GRADED TO DRAIN INTO THE EXISTING WATER HARVEST FEATURE LOCATED WEST OF THE PROJECT SITE. RUNOFF FROM THE PROPOSED BUILDING WILL DISCHARGE TO THE NORTH SIDE OF THE BUILDING THROUGH FOUR ROOF DRAINS AND INTO A PROPOSED WATER HARVEST AREA LOCATED NORTH OF THE BUILDING. THE EXISTING AND PROPOSED DRAINAGE CALCULATIONS FOR THIS PROJECT ARE SUMMARIZED IN THE TABLES PROVIDED BELOW.

### OFFSITE FLOWS

THERE ARE NO SIGNIFICANT OFFSITE FLOWS THAT DISCHARGE THROUGH THIS SITE.

### CONCLUSION

ALL GRADING AND DRAINAGE IMPROVEMENTS FOR THIS PROJECT ARE DESIGNED IN ACCORDANCE WITH THE ASSUMPTIONS STATED IN THE APPROVED DRAINAGE MASTER PLAN FOR THIS SITE. RUNOFF FROM THE PARKING LOT AREA WILL DISCHARGE WEST INTO THE EXISTING WATER HARVEST AREA WHILE RUNOFF FROM THE PROPOSED BUILDING WILL DISCHARGE NORTH INTO A PROPOSED WATER HARVEST AREA.

THE PROPOSED LAND TREATMENTS AND ANTICIPATED RUNOFF FROM THIS SITE WHEN DEVELOP IS LESS THAN THAT SPECIFIED IN THE APPROVED WATER PLAN. THE FIRST FLUSH REQUIREMENT FOR THIS DEVELOPMENT IS ESTIMATED AT 775 CUBIC FEET. THE EXISTING WATER HARVEST AREA LOCATED WEST OF THE SITE AND THE PROPOSED WATER HARVEST AREA LOCATED NORTH OF THE BUILDING WILL PROVIDE ADEQUATE STORAGE TO SATISFY THE FIRST FLUSH REQUIREMENTS AND TO ALLEVIATE IMPACTS TO DOWNSTREAM PROPERTIES. THE WEST WATER HARVEST AREA IS DESIGNED FOR THE 100-YEAR, 10-DAY VOLUME WHILE THE NORTH WATER HARVEST AREA IS DESIGNED FOR THE 100 YEAR, 24 HOUR VOLUME. THE VOLUME OF THE EXISTING WATER HARVEST AREA IS ESTIMATED AT 0.420 ACRE FEET. THE VOLUME PROVIDED FOR THE NORTH WATER HARVEST AREAS IS ESTIMATED AT 0.069 ACRE FEET.

### GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY WAYJOHN SURVEYING, INC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- ACS STA A-438 BENCH MARK THE TOP OF A STAINLESS STEEL ROD SET BENEATH A 5-1/2" NGS ACCESS COVER STAMPED "A-438 1984" SET FLUSH WITH THE GROUND, LOCATED IN THE NORTHWEST QUADRANT OF MENAUL BOULEVARD AND THE A.T. & S.F. RAILROAD TRACKS INTERSECTION. ELEV. 4975.35 (NAVD 1988)  
  
TBM FOUND 1/2" REBAR WITH CAP "LS 11463" ELEV. 4965.21
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- APPROX. HALF OF SUBJECT PROPERTY IS LOCATED WITHIN ZONE X (SOUTH EASTERN 3/4 OF 4TH STREET FRONTAGE). THE REMAINING WESTERN AND NORTHERN PORTION OF THE PROPERTY IS LOCATED IN ZONE X (500 YEAR) DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLANE ACCORDING TO THE FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO AND UNINCORPORATED AREAS PER MAP NO 35001C 0332G.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

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

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACK FILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24 - HOUR BASIS.

## DRAINAGE DATA

Precipitation Zone 2 - 100-year Storm      P(360) =      2.33 in      P(1440) =      2.75 in										
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)	V(100-10 day) (af)
		A	B	C	D					
Existing Conditions										
Site	1.029	0.000	0.000	1.029	0.000	1.130	0.097	0.097	3.231	0.097
Total	1.029							0.097	3.231	0.097
Proposed Conditions										
A	0.560	0.000	0.000	0.120	0.440	1.91	0.089	0.104	2.445	0.148
B	0.440	0.000	0.000	0.240	0.200	1.58	0.058	0.065	1.694	0.085
C	0.029	0.000	0.000	0.018	0.011	1.51	0.004	0.004	0.108	0.005
Total	1.029							0.172	4.247	0.237
D	0.470	0.000	0.000	0.045	0.425	2.03	0.079	0.093	2.139	0.136

Precipitation Zone 2 - 10-year Storm      P(360) =      1.52 in      P(1440) =      1.8 in									
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)
		A	B	C	D				
Existing Conditions									
Site	1.029	0.000	0.000	1.029	0.000	1.130	0.097	0.097	3.231
Total	1.029						0.097	3.231	
Proposed Conditions									
A	0.560	0.000	0.000	0.120	0.440	1.164	0.054	0.064	1.587
B	0.440	0.000	0.000	0.240	0.200	0.893	0.033	0.037	1.038
C	0.029	0.000	0.000	0.018	0.011	0.831	0.002	0.002	0.065
Total	1.029						0.104	2.691	
D	0.470	0.000	0.000	0.045	0.425	1.261	0.049	0.059	1.411

## WATER HARVEST VOLUMES

WATER HARVEST AREA 2 proposed					
Pond Rating Table					
Side Slope	3:1				
Depth (ft)	Area (sq ft)	Volume (ac-ft)	Cum Volume (ac-ft)		
66.5	5767	0.132	0.000		
67	6230	0.143	0.069		
67.5	6710	0.154	0.074	0.143	spillway top of pond

Architect:  
Clint Wilsey  
clint.wilsey@gmail.com  
505 280-0043

DRAWN BY: CJW

ISSUE: PERMIT SET

FAMILY DOLLAR  
STORE

2801 4th St. NW  
Albuquerque, NM

DATE: 3/1/17

SHEET TITLE:  
GRADING AND  
DRAINAGE REPORT

C-100





#### LEGEND:

• 38.00	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)
• FG	
• MATCH (95.19)	MATCH EXISTING ELEVATIONS
TCON	TOP OF CONCRETE
FL	FLOW LINE, CURB
INV	INVERT
FG	FINISH GRADE
TBC	TOP OF BASE COURSE
TC	TOP OF CURB
TG	TOP OF GRATE
TA	TOP OF ASPHALT
BP	BOTTOM OF POND
TP	TOP OF POND
→	FLOW ARROW
==	GRADE BREAK-HIGH POINT
---	SWALE
SD	STORM DRAIN LINE
— 5895 —	PROPOSED MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
--- 5895 ---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
Ⓐ	DRAINAGE BASIN DESIGNATION

#### KEYED NOTES:

- NEW 6" WIDE RIP RAP RUNDOWN. SEE DETAIL SHEET C-501.
- EXISTING SIDEWALK TO REMAIN.
- 15'x45' AREA OF EXISTING PAVEMENT TO BE REMOVED AND REPLACED AS REQUIRED TO ACHIEVE GRADING AT NEW CONCRETE VALLEY GUTTER. SEE DETAIL SHEET C-501 FOR HEAVY DUTY HOT MIX ASPHALT SECTION.
- REMOVE EXISTING CURB AND GUTTER AND REPLACE WITH NEW 36" VALLEY GUTTER. MATCH ELEVATION OF EXISTING PAVEMENT ALONG SOUTH SIDE. SEE DETAIL SHEET C-501.
- NEW 24" WIDE CONCRETE CHANNEL. SEE DETAIL SHEET C-501.
- CONNECT NEW CONCRETE VALLEY GUTTER TO EXISTING RUNDOWN AT POND.
- NEW 4" WIDE RIP RAP RUNDOWN. SEE DETAIL SHEET C-501.
- TRASH ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW STANDARD CURB AND GUTTER. SEE DETAIL SHEET C-501.
- NEW HOT MIX ASPHALT (HMA) PAVING. ALL PARKING SPACES WILL CONSIST OF LIGHT DUTY HOT MIX ASPHALT PAVING. ALL OTHER AREAS SHALL CONSIST OF HEAVY DUTY HOT MIX ASPHALT PAVING. SEE DETAIL SHEET C-501 FOR PAVING SECTIONS.
- NEW TYPE A HANDICAP RAMP, SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW THICKENED EDGE ON CONCRETE SIDEWALK. SEE ARCHITECTURAL PLANS FOR DETAIL.
- NEW BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- LANDSCAPE AREA. SEE ARCHITECTURAL PLANS FOR DETAILS.
- ROOF DRAIN LOCATION. DISCHARGE INTO NEW CONCRETE CHANNEL.
- NEW CONCRETE SIDEWALK/FLATWORK. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED HARVEST AREA. TOP=67.5, INV=66.5 REQUIRED. VOL=0.06 AF. PROVIDED VOL. @ 67=0.069 AF. SIDE SLOPE 3:1.
- EXISTING HARVEST AREA. TOP=66.5, INV=60.5 REQUIRED. VOL=0.285 AF. PROVIDED VOL. @ 64.5=0.314 AF. MAX WSEL=64.20.
- NEW EMERGENCY SPILLWAY TOP=67.5, CREST OF SPILLWAY =67.0. NEW 48" WIDE CONCRETE CHANNEL. SEE DETAIL SHEET C-501.
- MATCH EXISTING CURB AND GUTTER ELEVATION, AND SECTION, WITH NEW CURB AND GUTTER.
- NEW DOUBLE 24" WIDE SIDEWALK CULVERT AS PER C.O.A. DETAIL DRAWING NO. 2236. INV. (IN) = 66.75, INV (OUT) = 66.53 (EXISTING)
- 5' TRANSITION FROM 48" WIDE TO 57" WIDE CONCRETE CHANNEL AT DOUBLE SIDEWALK CULVERT.
- NEW HEAVY DUTY CONCRETE PAVING. SEE DETAIL SHEET C-501 FOR PAVING SECTION.

CONSULTANT:



OWNER:

ARCHITECT:

Architect:

Clint Wilsey  
clint.wilsey@gmail.com  
505 280-0043

DRAWN BY: CJW

ISSUE: PERMIT SET

**FAMILY DOLLAR  
STORE**

2801 4th St. NW  
Albuquerque, NM

DATE: 3/1/17

SHEET TITLE:  
**GRADING AND  
DRAINAGE PLAN**

**C-101**

**A1 GRADING AND DRAINAGE PLAN**  
SCALE: 1"=20'

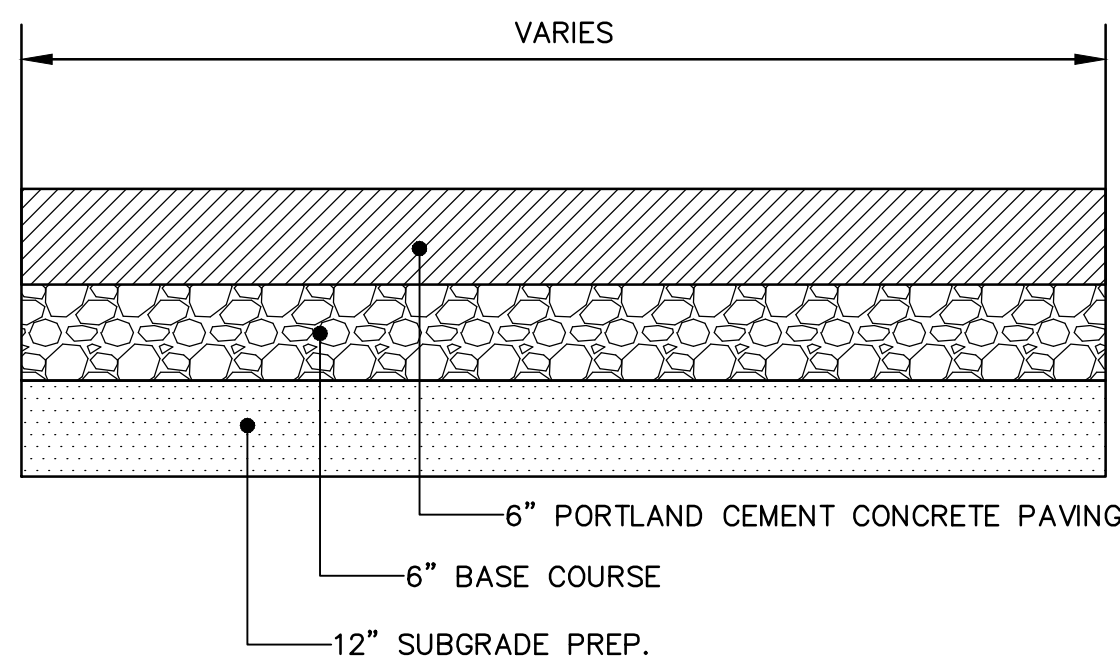
SCALE: 1"=20'  
CONTOUR INTERVAL=1'

**MEC** MILLER ENGINEERING CONSULTANTS  
Engineers • Planners  
3500 COMANCHE, NE  
ALBUQUERQUE, NM 87107  
(505) 888-7500  
(505) 888-3800 (FAX)  
WWW.MECNM.COM

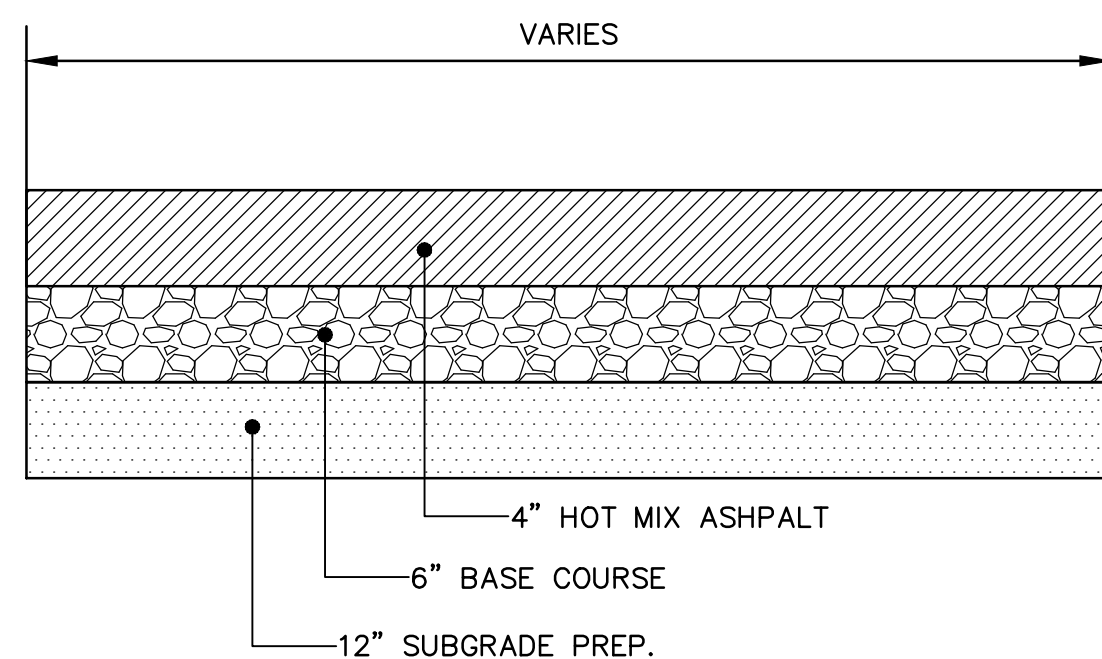


T:\Clients\Clint Wilsey Architect\Family Dollar 4th Street\Acad\Sheets\Grading & Drainage\_C-101\_042817.dwg, 4/28/2017 1:37:09 PM, DWG To PDF, pc3

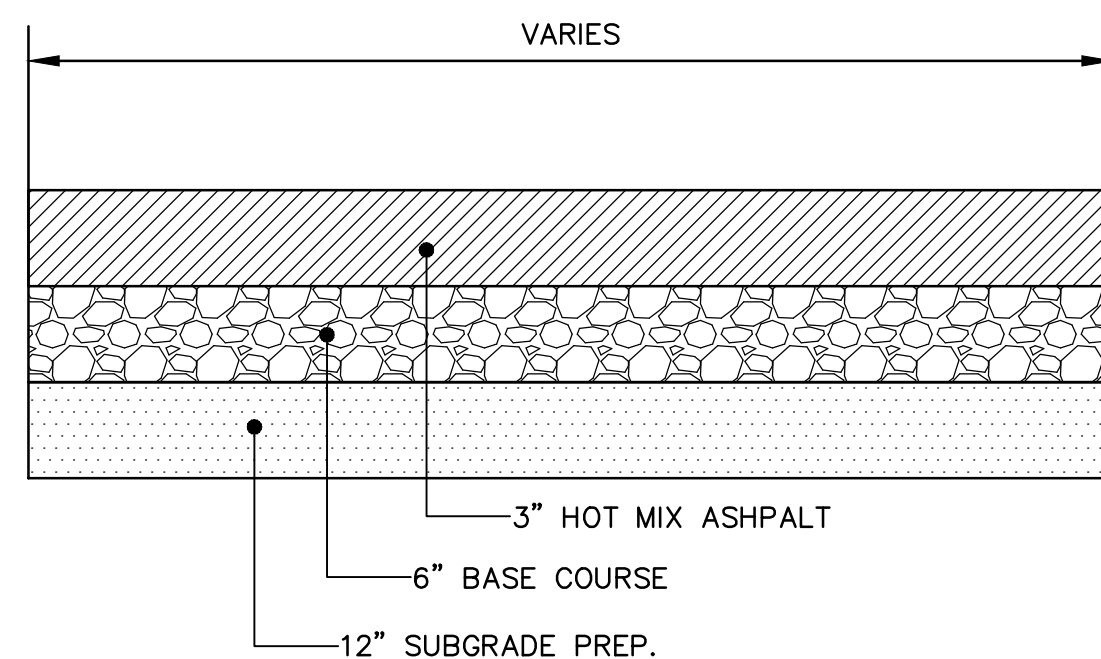
4/28/2017 1:37 PM



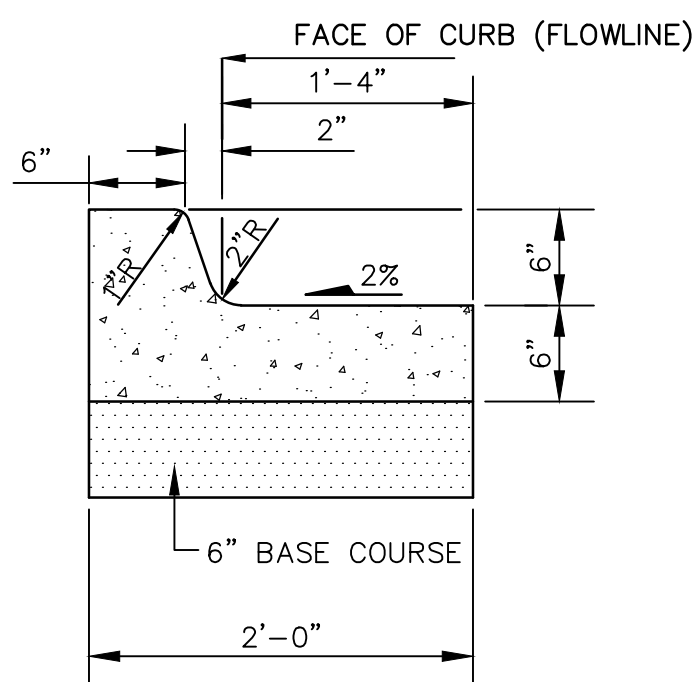
**C1** PORTLAND CEMENT CONCRETE PAVING SECTION  
SCALE: NOT TO SCALE  
NOTE: CONTRACTOR WILL PROVIDE A JOINT PATTERN LAYOUT TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.



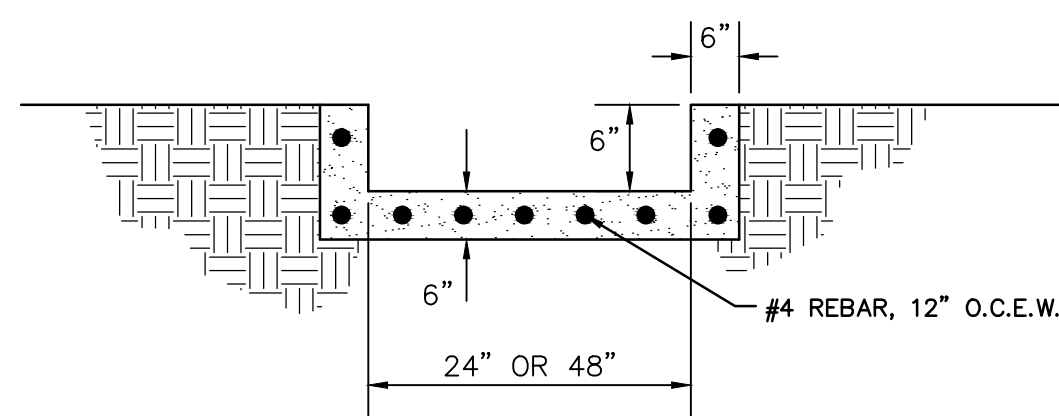
**C2** HEAVY DUTY HOT MIX ASPHALT PAVING SECTION  
SCALE: NOT TO SCALE



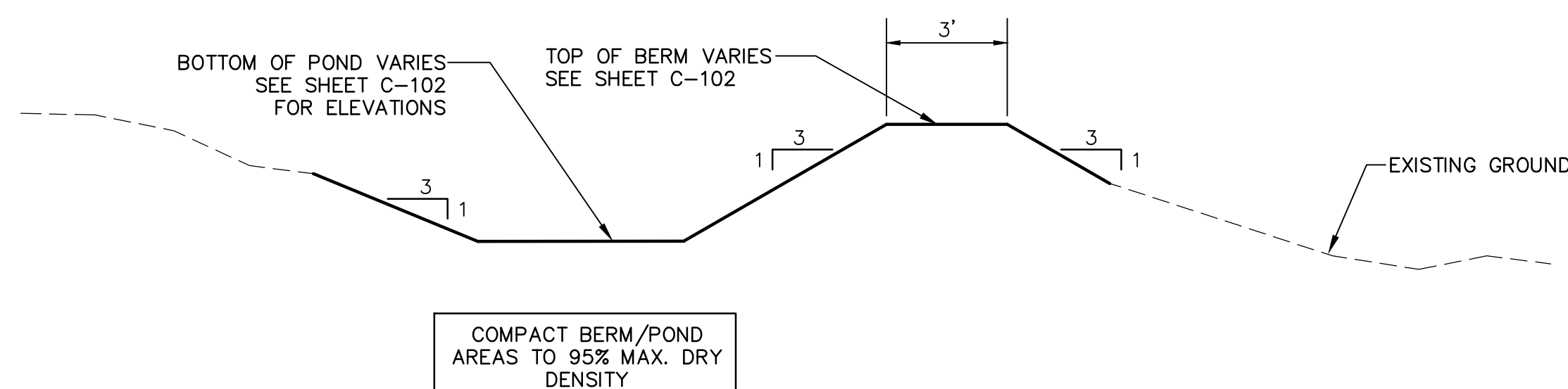
**C3** LIGHT DUTY HOT MIX ASPHALT PAVING SECTION  
SCALE: NOT TO SCALE



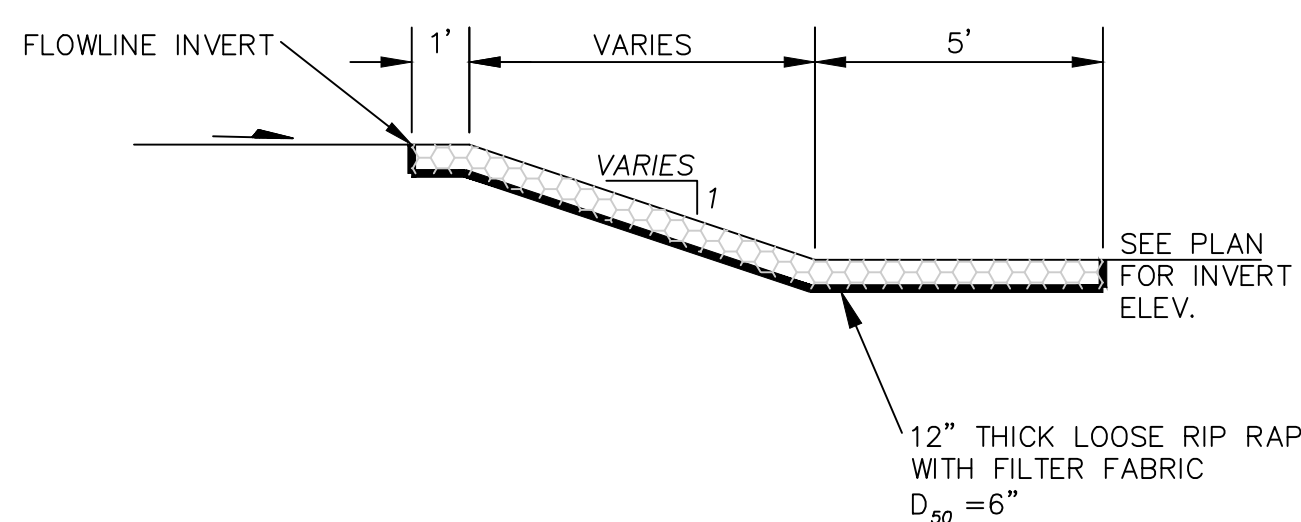
**B1** TYPICAL CURB AND GUTTER  
SCALE: NOT TO SCALE



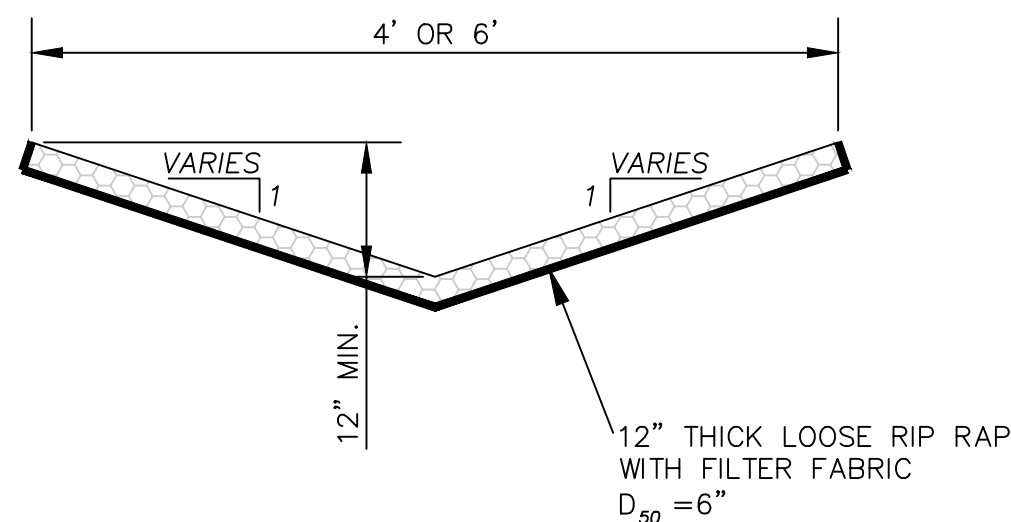
**B2** CONCRETE CHANNEL DETAIL  
SCALE: NOT TO SCALE



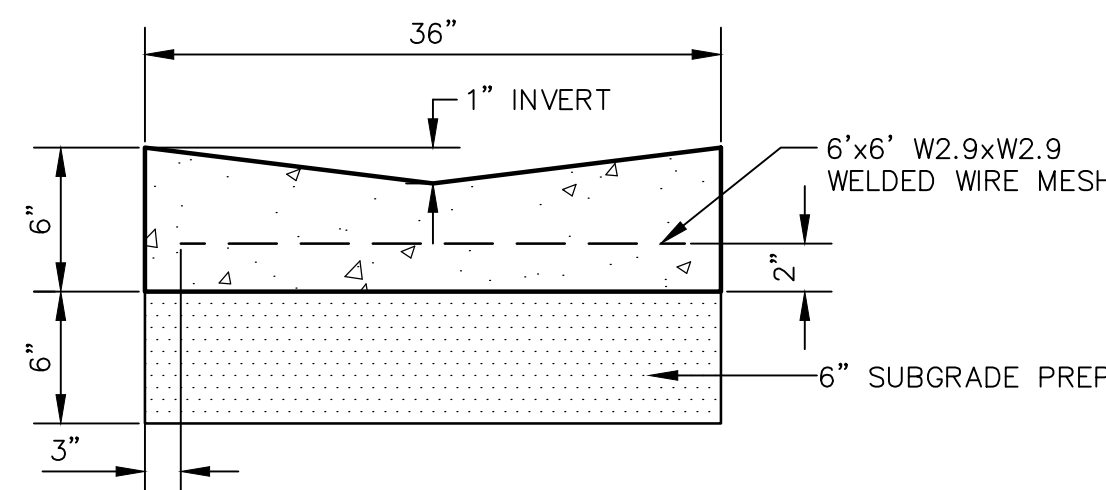
**B3** TYPICAL WATER HARVEST AREA DETAIL  
SCALE: NOT TO SCALE



**A1** RIP RAP RUNDOWN DETAIL TYPE "A"  
SCALE: NOT TO SCALE



SECTION



**A2** CONCRETE VALLEY GUTTER DETAIL  
SCALE: NOT TO SCALE

CONSULTANT:



OWNER:

ARCHITECT:

Architect:  
Clint Wilsey  
clint.wilsey@gmail.com  
505 280-0043

DRAWN BY: **CJW**

ISSUE: **PERMIT SET**

**FAMILY DOLLAR STORE**

2801 4th St. NW  
Albuquerque, NM

DATE: **3/1/17**

SHEET TITLE:  
**MISCELLANEOUS  
DETAILS**

**C-501**



MILLER ENGINEERING CONSULTANTS

Engineers • Planners

3500 COMANCHE, NE  
BUILDING 7  
ALBUQUERQUE, NM 87107  
(505) 888-7500  
(505) 888-3800 (FAX)  
WWW.MECNM.COM