

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 9, 2024

Verlyn Miller, P.E.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM 87107

**RE: Rio Grande Apartments
2211 Rio Grande Blvd. NW
Grading and Drainage Plans
Engineer's Stamp Date: 01/22/24
Hydrology File: H12D024**

Dear Mr. Miller:

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Based upon the information provided in your submittal received 02/02/2024, the Grading & Drainage Plans **are not** approved for Building Permit, Grading Permit and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

SHEET C-101

1. Please provide a legal Description of the property.
2. Existing Conditions. This site is in FEMA's Zone X Protected by Levee. (please fix note #9 of the General Notes as well) Also, the site is relatively flat and does not drain. There are also no railroad tracks anywhere near this site. Please fix the Existing Conditions.

EXISTING CONDITIONS

The existing site is estimated at 0.8 acres and is currently undeveloped but mostly disturbed by human activity.

The western portion of the site lies within a 100-year FEMA floodplain as indicated on the FEMA panel on this sheet. The site is not adversely impacted by offsite flows. The site currently slopes from east to west toward the railroad tracks.

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3. Proposed Conditions. Please remove all references to the County and change it to the City.
4. Please change the wordage of the water harvest ponds to retention ponds. Water harvest ponds are typically stormwater quality ponds.
5. Please provide the weir calculations, per DPM Article 6-16(A), for the curb cuts and sidewalk culverts. A coefficient of 2.7 is typically used for the weir equation $Q = CLH^{2/3}$.

PO Box 1293

SHEET C-102

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6. It is difficult to tell what is being installed since all the line work both existing and proposed is the same. Please change. Also the edge of roadway on Los Anayas Rd should only be a single line since there is no curb & gutter.
7. Please verify with Transportation. Along Los Anayas Road, this project will be responsible to install sidewalk along with curb & Gutter per the IDO.
8. Please remove Conceptual for the title of the Grading Plan.
9. Please provide a cross section for the retaining wall along the west property line showing proposed retaining walls, property/ROW lines, existing and proposed grades. In accordance with DPM, grading and wall construction near the property line may not endanger adjacent property or constrain its use. Please make sure that the footer for the wall stays within the project's property. Please provide this section on this Sheet.
10. Please move the cross section of the retention pond from Sheet C-501 to this Sheet. Also please refer to comments under Sheet C-501 for corrections to this cross section.
11. Key Note 8 should refer to City of Albuquerque standard detail No. 2236 – Sidewalk Culvert with Steel Plate Top.
12. Please provide invert information for the sidewalk culvert both at the retention pond and at the curb.

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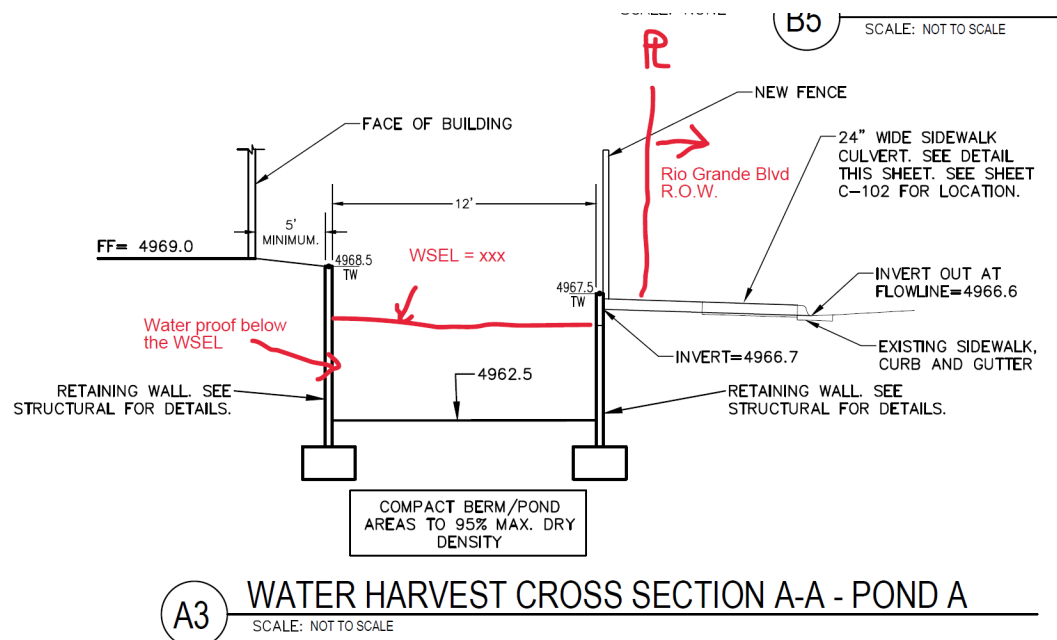


Mayor Timothy M. Keller

13. Please identify all underground utilities shown within the streets.

SHEET C-501

14. In the cross section, please showing property/ROW lines and add a note stating that the contractor shall waterproof the proposed retaining wall below the 100-yr 10 day water surface elevation of XXX per City standards. In accordance with DPM, grading and wall construction near the property line may not endanger adjacent property or constrain its use. Please make sure that the footer for the wall stays within the project's property. Also move this onto the Grading Plan per Comment #10.



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15. The remainder of the details on this sheet or either just standard City details, which don't need to be shown. Just call them out on the Grading Plan as per COA Standard Drawing XXXX.

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.

CITY OF ALBUQUERQUE

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Alan Varela, Director



Mayor Timothy M. Keller

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: _____ Hydrology File # _____

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

Applicant/Owner: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: PLAT (#of lots) _____ RESIDENCE
DFT SITE ADMIN SITE

RE-SUBMITTAL: YES NO

DEPARTMENT: TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

ENGINEER/ARCHITECT CERTIFICATION
PAD CERTIFICATION
CONCEPTUAL G&D PLAN
GRADING & DRAINAGE PLAN
DRAINAGE REPORT
DRAINAGE MASTER PLAN
CLOMR/LOMR
TRAFFIC CIRCULATION LAYOUT (TCL)
ADMINISTRATIVE
TRAFFIC CIRCULATION LAYOUT FOR DFT
APPROVAL
TRAFFIC IMPACT STUDY (TIS)
STREET LIGHT LAYOUT
OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

BUILDING PERMIT APPROVAL
CERTIFICATE OF OCCUPANCY
CONCEPTUAL TCL DFT APPROVAL
PRELIMINARY PLAT APPROVAL
FINAL PLAT APPROVAL
SITE PLAN FOR BLDG PERMIT DFT
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
OTHER (SPECIFY) _____

DATE SUBMITTED: _____

HYDROLOGY REPORT

SITE LOCATION

The proposed site is an approximate 0.8-acre site located at 2211 Rio Grande Boulevard NW. The site is bound on the north by an existing development, the west by an irrigation ditch, the south side by Los Anayas Road and the east side by Rio Grande Boulevard (see vicinity map this sheet).

EXISTING CONDITIONS

The existing site is estimated at 0.8 acres and is currently undeveloped but mostly disturbed by human activity.

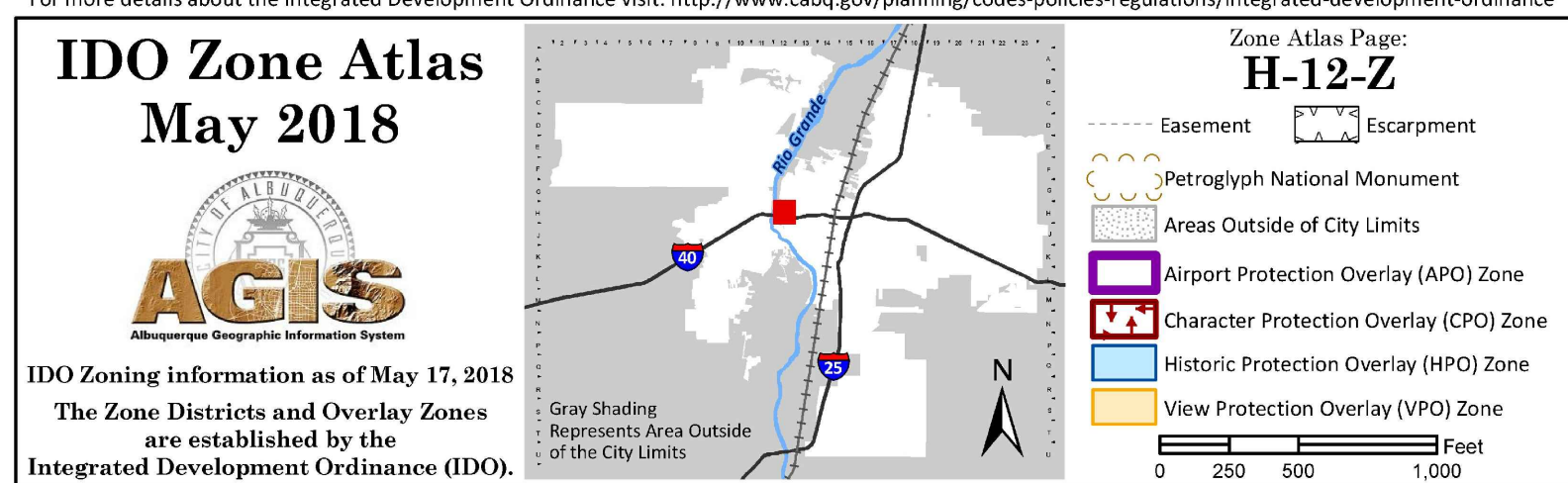
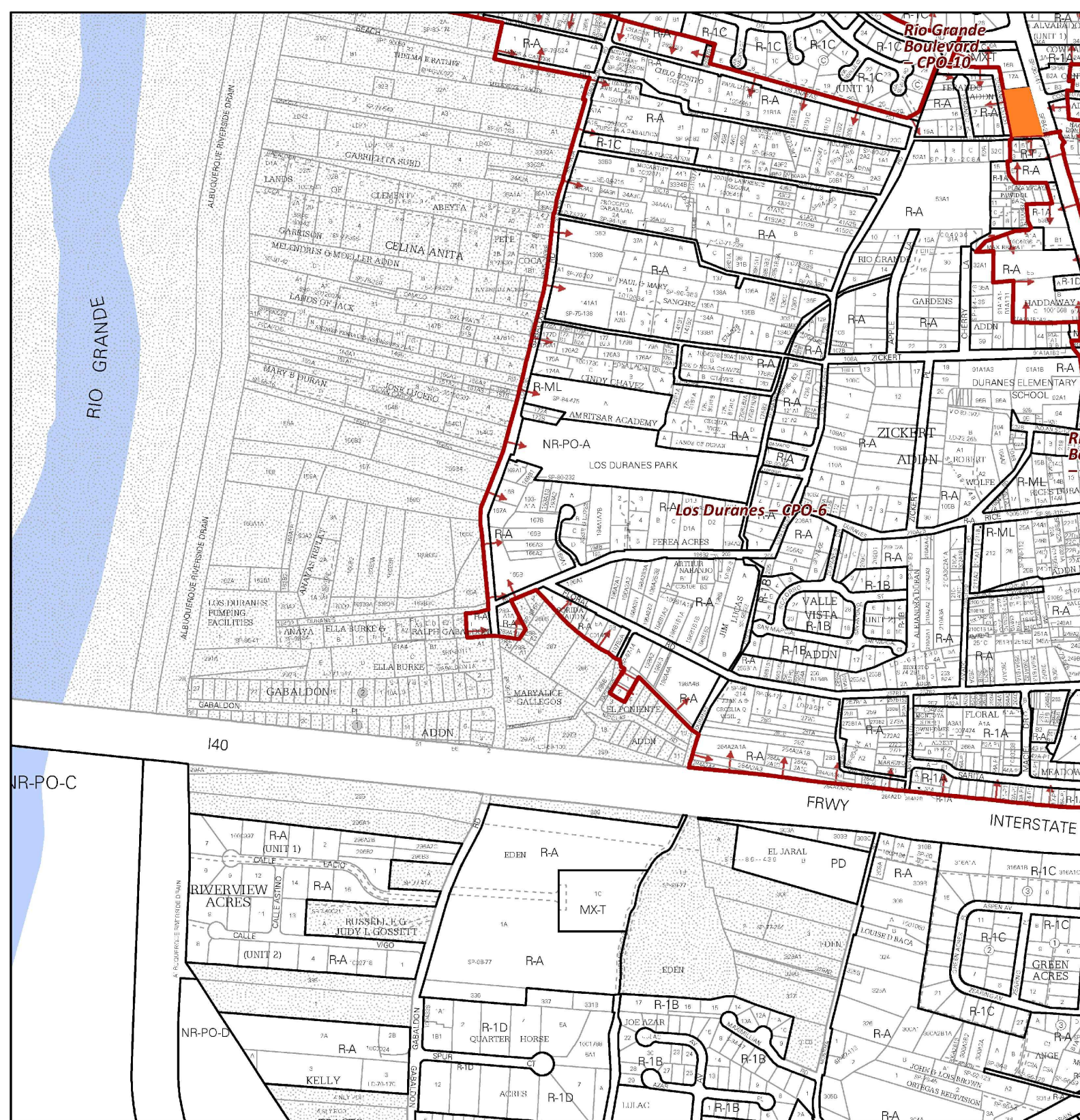
The western portion of the site lies within a 100-year FEMA floodplain as indicated on the FEMA panel on this sheet. The site is not adversely impacted by offsite flows. The site currently slopes from east to west toward the railroad tracks.

PROPOSED CONDITIONS

The proposed project will consist of a new multi-family commercial building, a new asphalt paved parking lot, and associated landscaping. The site under proposed conditions will have an impervious percentage of nearly 75%. Per the City's drainage ordinance, drainage from the site will need to be fully retained on the site for the 100-year, 10-day event. The proposed project will employ three storm water retention ponds on the site capable of retaining the 100-year, 10-day event. The site has been separated into three drainage basins, A, B and C. The drainage calculations for proposed conditions are indicated on this sheet.

CONCLUSIONS

When fully developed as indicated on the grading and drainage plan, the increased runoff from the site is estimated at 0.97 cfs and 0.072-acre feet during the 100-year, 24-hour event. Storm water from the site will be managed by collecting all site runoff in three retention pond area that has a capacity of 0.231 acre-feet volume requirement for 100% retention of the 100-year, 10-day event volume.



DPM HYDROLOGY CALCULATIONS

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)	V(100-10D) (af)	Q(100) (cfs)
		A	B	C	D					
Existing Conditions										
Site	0.800	0.000	0.000	0.800	0.000	1.13	0.075	0.075	0.075	2.512
Total	0.800							0.075	0.075	2.512
Proposed Conditions										
A	0.390	0.000	0.000	0.087	0.303	1.90	0.062	0.072	0.102	1.697
B	0.080	0.000	0.000	0.010	0.070	2.00	0.013	0.016	0.023	0.360
C	0.330	0.000	0.000	0.088	0.242	1.86	0.051	0.059	0.083	1.414
Total	0.800							0.147	0.208	3.471

FIRST FLUSH CALCULATIONS

$$\text{FIRST FLUSH} = (0.42/12'' * 26,790 \text{ SF}) = 938 \text{ CF}$$

POND RATING TABLE

WATER HARVEST AREA - A				
Pond Rating Table				
Side Slope			VERTICAL	
Elev. (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cum Volume (ac-ft)
62.5	1340	0.031	0	0
63.5	1340	0.031	0.031	0.031
64.5	1340	0.031	0.031	0.062
65.5	1340	0.031	0.031	0.092
66.5	1340	0.031	0.031	0.123

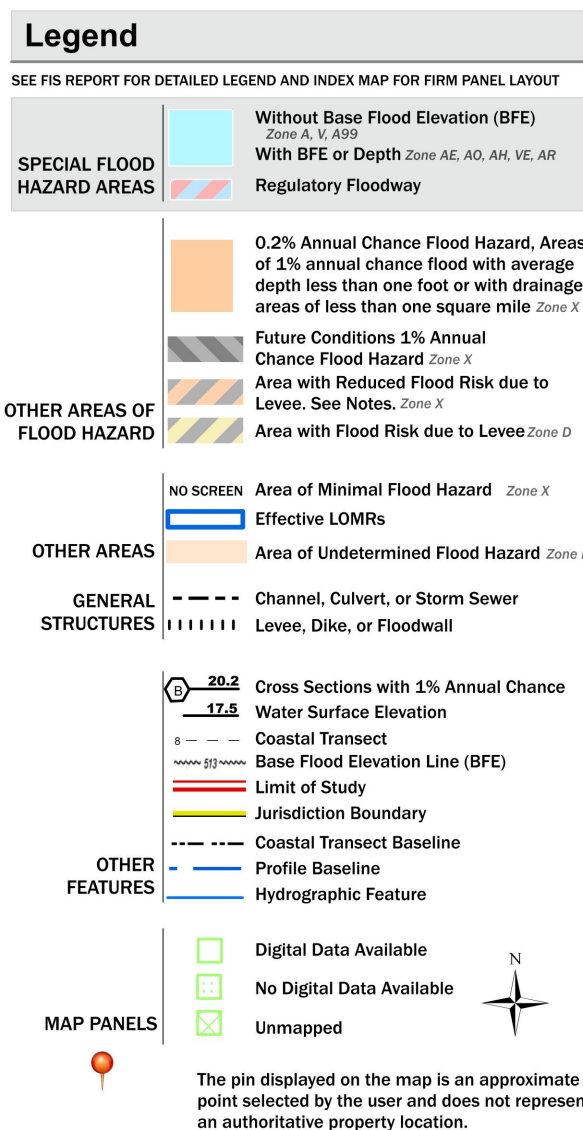
WATER HARVEST AREA - B				
Pond Rating Table				
Side Slope		2:1		
Elev.	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
65.25	84.64	0.002	0	0
66.25	174	0.004	0.003	0.003
67.25	292	0.007	0.005	0.008

WATER HARVEST AREA - C				
Pond Rating Table				
Side Slope		2:1		
Elev.	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
65	690	0.016	0	0
66	1132	0.026	0.021	0.021
67	1805	0.041	0.034	0.055
67.5	2145	0.049	0.045	0.100



FLOOD ZONE MAP

FLOOD ZONE MAP: 35001C0331H



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/13/2021 at 5:43 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

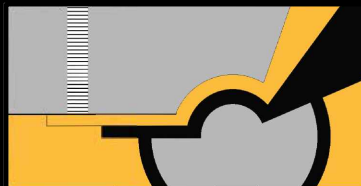
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



MILLER ENGINEERING CONSULTANTS

Engineers • Planners
3500 COMANCHE, NE
BUILDING F
ALBUQUERQUE, NM 87107
(505)888-7500
(505)888-3800 (FAX)

No	Revision	Item	Date



SCOTT C. ANDERSON
 & associates architects
 3419 4th St. NW, Ste. B
 Albuquerque, nm 87107
 scott@scottcandassociates.com
 505.401.7575

RIO GRANDE APARTMENTS

2211 RIO GRANDE BLVD. NW

ALBUQUERQUE, NM 87104

DRAWING TITLE

HYDROLOGY PLAN

SEAL

DESIGNED MEC	PROJECT NO
DRAWN MEC	SCALE NOTED
CHECKED VAM	DRAWING NO
REVIEWED	<div style="font-size: 48px; font-weight: bold; margin: 0;">C-101</div> <div style="margin-top: 10px;"> <div style="width: 100px; border-bottom: 1px solid black; display: inline-block;"></div> OF <div style="width: 100px; border-bottom: 1px solid black; display: inline-block;"></div> </div>
DATE 2/17/22	

T:\Clients\Scott Anderson\RIO GRANDE APARTMENTS\ACAD\SHEETS\01-11-2024\C-102-G & D-PLAN-01-11-2024.dwg, Layout1, 1/23/2024 1:56:47 PM, jjaquez, DWG To PDF.pc3, 1:1

Private Drainage Facilities within City
Right-of-Way Notice to Contractor
(Special Order 19 ~ "S0-19")

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
2. An excavation permit will be required before beginning any work within City Right-Of-Way.
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. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
5. 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.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
8. Work on arterial streets may be required on a 24-hour basis.
9. For excavation and barricading inspections, contact DMD

LEGEND:

- 38.00
FG PROPOSED SPOT ELEVATIONS (FINISHED GRADE)
- MATCH
(95.19) MATCH EXISTING ELEVATIONS
- TC ON 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
- ↗ FLOW ARROW
- ===== GRADE BREAK-HIGH POINT
- SWALE
- SD STORM DRAIN LINE
- SD EXISTING STORM DRAIN LINE
- ===== 5895 PROPOSED MAJOR CONTOUR
- 5895 PROPOSED MINOR CONTOUR
- 5895 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- W NEW WATER LINE
- S NEW SANITARY SEWER LINE
- W EXISTING WATER SERVICE LINE
- S EXISTING SANITARY SEWER LINE
- NEW DOUBLE CLEANOUT
- NEW WATER METER
- NEW FIRE HYDRANT
- NEW HEADER CURB
- A BASIN BOUNDARY DESIGNATION
- ROOF DRAIN
- NEW RETAINING WALL

KEYED NOTES:

- 1 NEW BUILDING, SEE ARCHITECTURAL PLANS FOR DETAILS.
- 2 PROPOSED FIRE HYDRANT.
- 3 EXISTING FIRE HYDRANT.
- 4 PROPERTY LINE.
- 5 PROPOSED HANDICAP RAMP. SEE ARCHITECTURAL SHEETS.
- 6 PROPOSED RETAINING WALL. SEE STRUCTURAL FOR CONSTRUCTION DETAILS.
- 7 PROPOSED WATER HARVEST PONDING AREA "A". TOP=4966.5, BOTTOM=4963.5. SEE DETAIL SHEET C-501 FOR CROSS SECTION.
- 8 PROPOSED 24" WIDE SIDEWALK CULVERT. SEE DETAIL SHEET C-501.
- 9 PROPOSED FENCE LINE.
- 10 PROPOSED RETAINING WALLS AT POND "A". SEE DETAIL SHEET C-501 FOR CROSS SECTION. SEE STRUCTURAL FOR CONSTRUCTION DETAILS.
- 11 STANDARD CURB AND GUTTER. SEE DETAIL SHEET C-501.
- 12 PROPOSED WATER HARVEST RETAINING POND "B". INV=65.5. 2:1 SLOPES.
- 13 PROPOSED 4' WIDE CONCRETE RUNDOWN WITH RIP-RAP PAD. SEE DETAIL SHEET C-501.
- 14 PROPOSED WATER HARVEST RETAINING POND "C". INV=65.0. 2:1 SLOPES.
- 15 PROPOSED 3' WIDE CONCRETE VALLEY GUTTER. S = 0.4% SLOPE. SEE DETAIL SHEET C-501.
- 16 PROPOSED TRASH ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- 17 PROPOSED DRIVEWAY AND VALLEY GUTTER. SEE COA STD. DETAILS #2425A AND #2420.
- 18 PROPOSED ADA PARALLEL RAMP. SEE COA STD. DETAIL #2426.
- 19 EDGE OF BUILDING ROOF OUTLINE.
- 20 PROPOSED ROOF DRAINS (TYP.). SEE ARCHITECTURAL SHEET A-107.
- 21 PROPOSED HEADER CURB. SEE DETAIL SHEET C-501.
- 22 6" PVC DRAIN PIPE (TYP.). CONNECT TO ROOF DRAIN AT BUILDING. 2% MIN. SLOPE TO POND.
- 23 PROPOSED LIGHT DUTY ASPHALT. SEE DETAIL SHEET C-501.

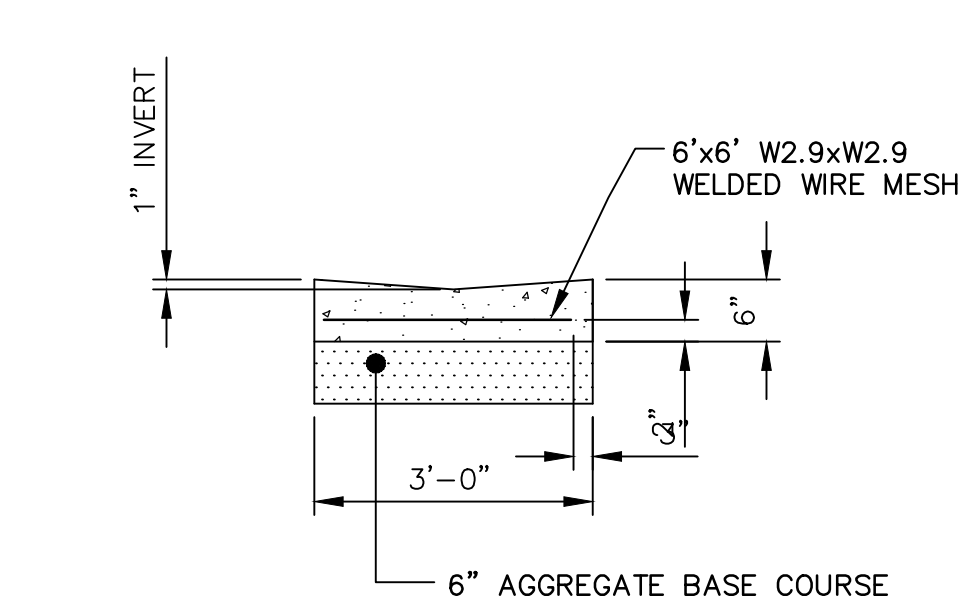
No	Revision	Item	Date
<div><div></div><div>SCOTT C. ANDERSON & associates architects 4419 4th St. NW, Ste. B Albuquerque, NM 87107 scott@scottcanderson.com 505.401.7575</div></div>			
RIO GRANDE APARTMENTS 2211 RIO GRANDE BLVD. NW ALBUQUERQUE, NM 87104			
DRAWING TITLE SITE GRADING AND DRAINAGE PLAN			
SEAL	DESIGNED	MEC	PROJECT NO.
	DRAWN	MEC	SCALE NOTED
	CHECKED	VAM	DRAWING NO.
	REVIEWED		
DATE		2/17/22	C-102 OF

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

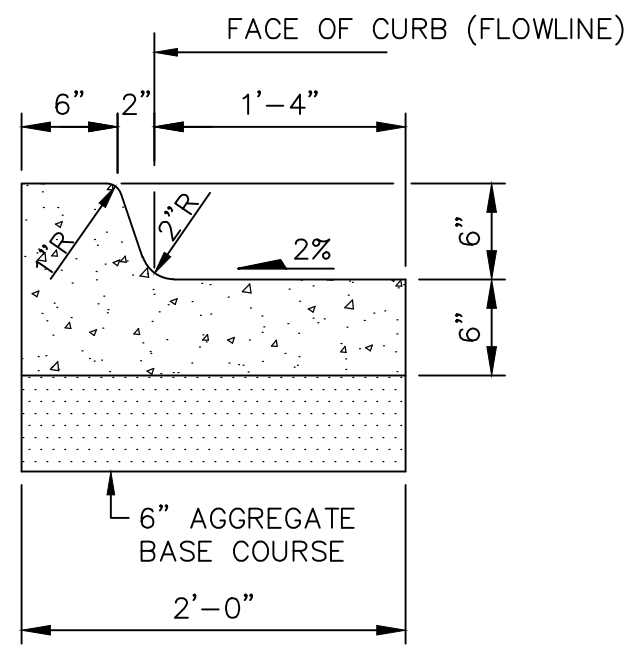
20 10 0 20 30 40
SCALE: 1"=20'
CONTOUR INTERVAL = 1/2'



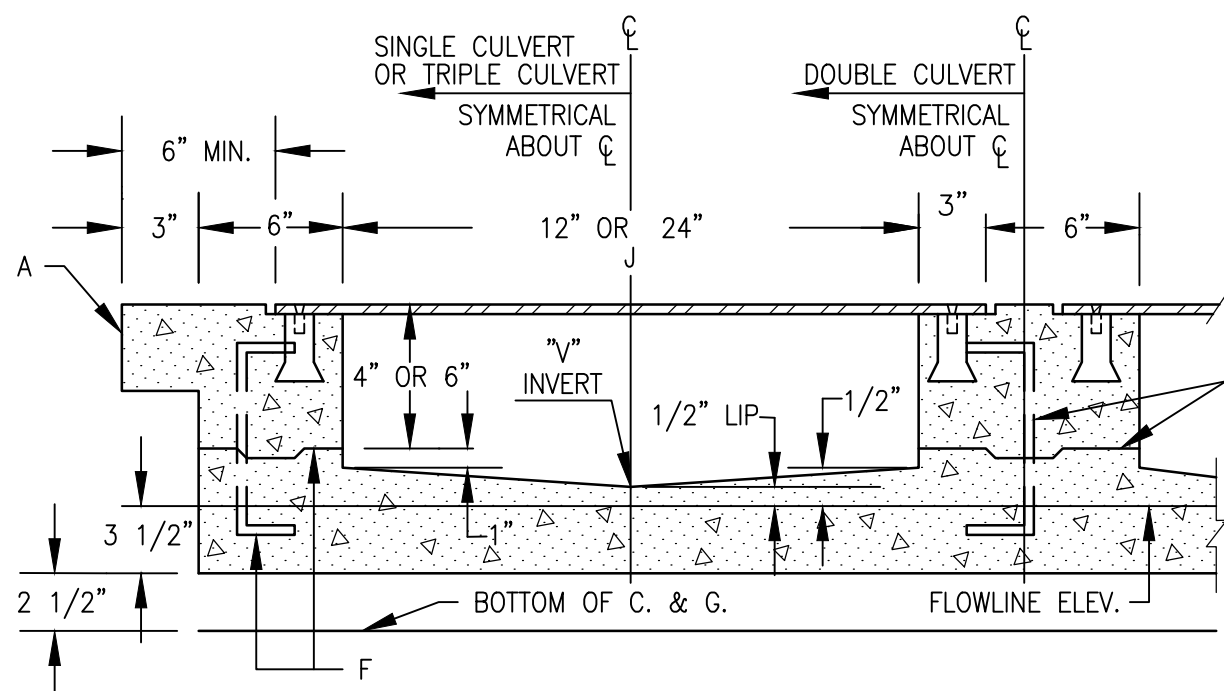
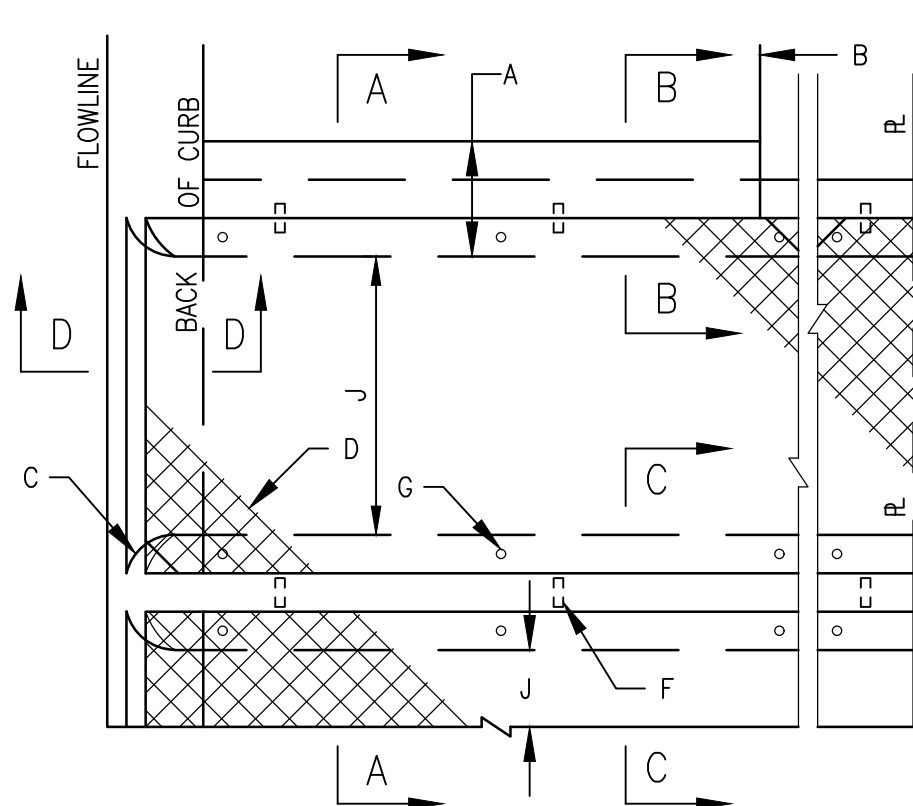
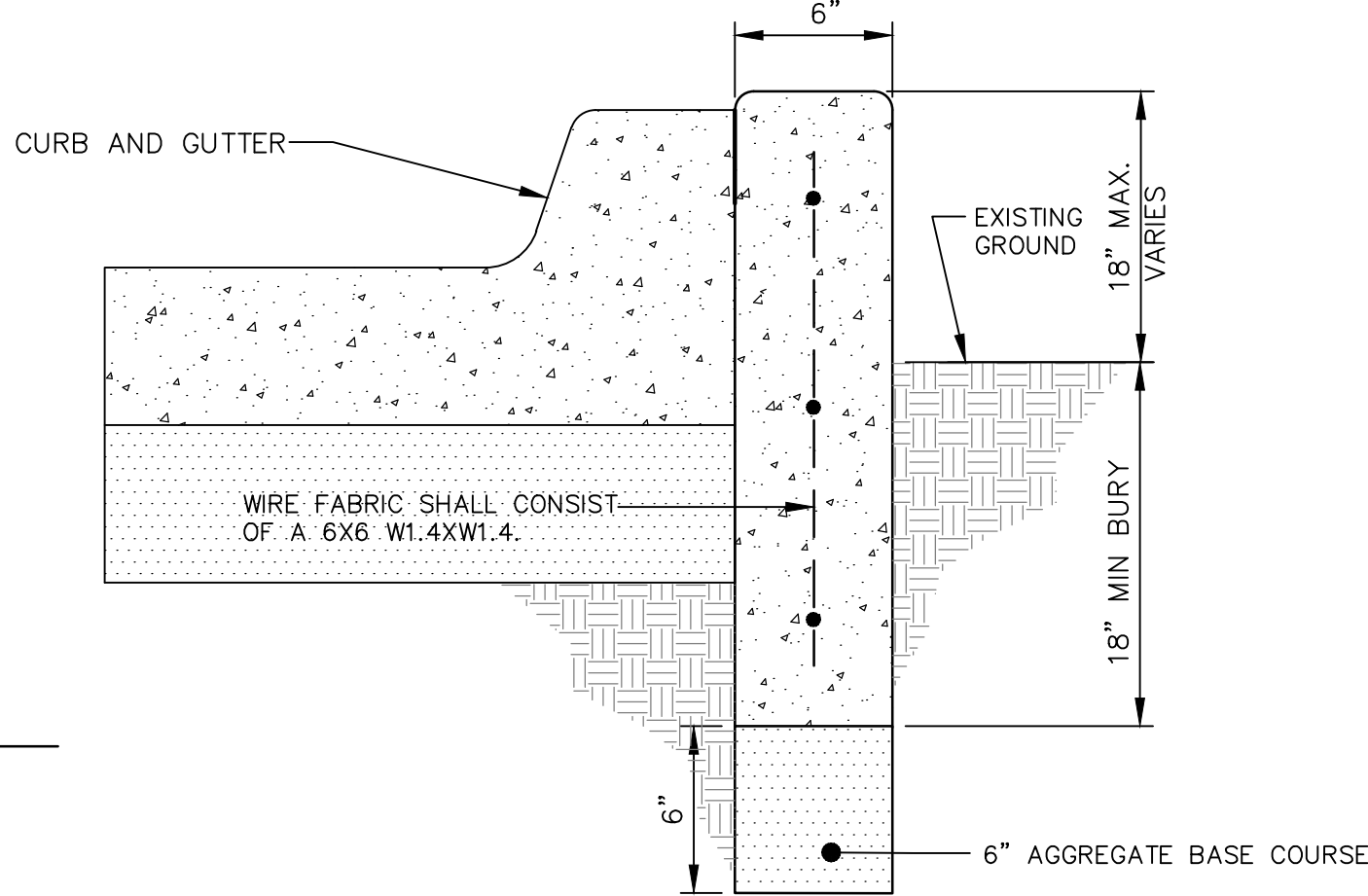
MEC MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
BUILDING 1
ALBUQUERQUE, NM 87107
(505) 888-7500
(505) 888-3800 (FAX)



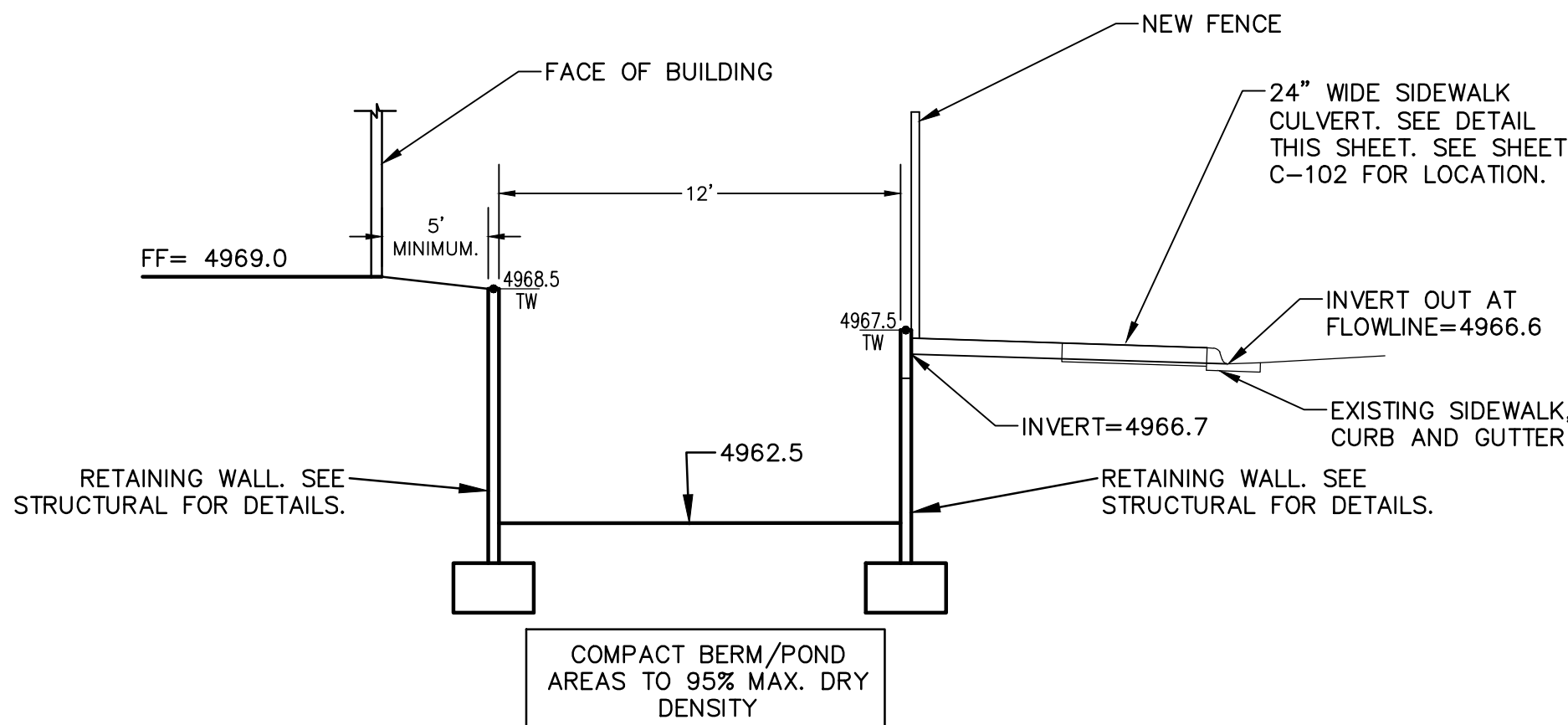
6"x36" CONCRETE VALLEY GUTTER DETAIL
SCALE: NONE



B5 TYPICAL CURB AND GUTTER SECTION
SCALE: NOT TO SCALE

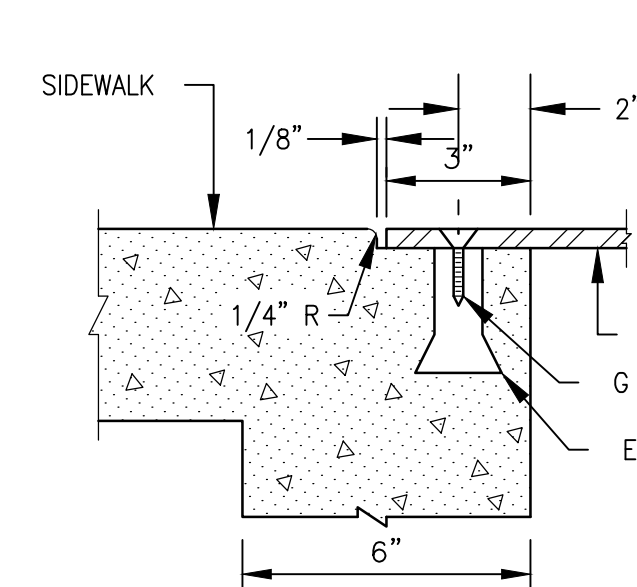
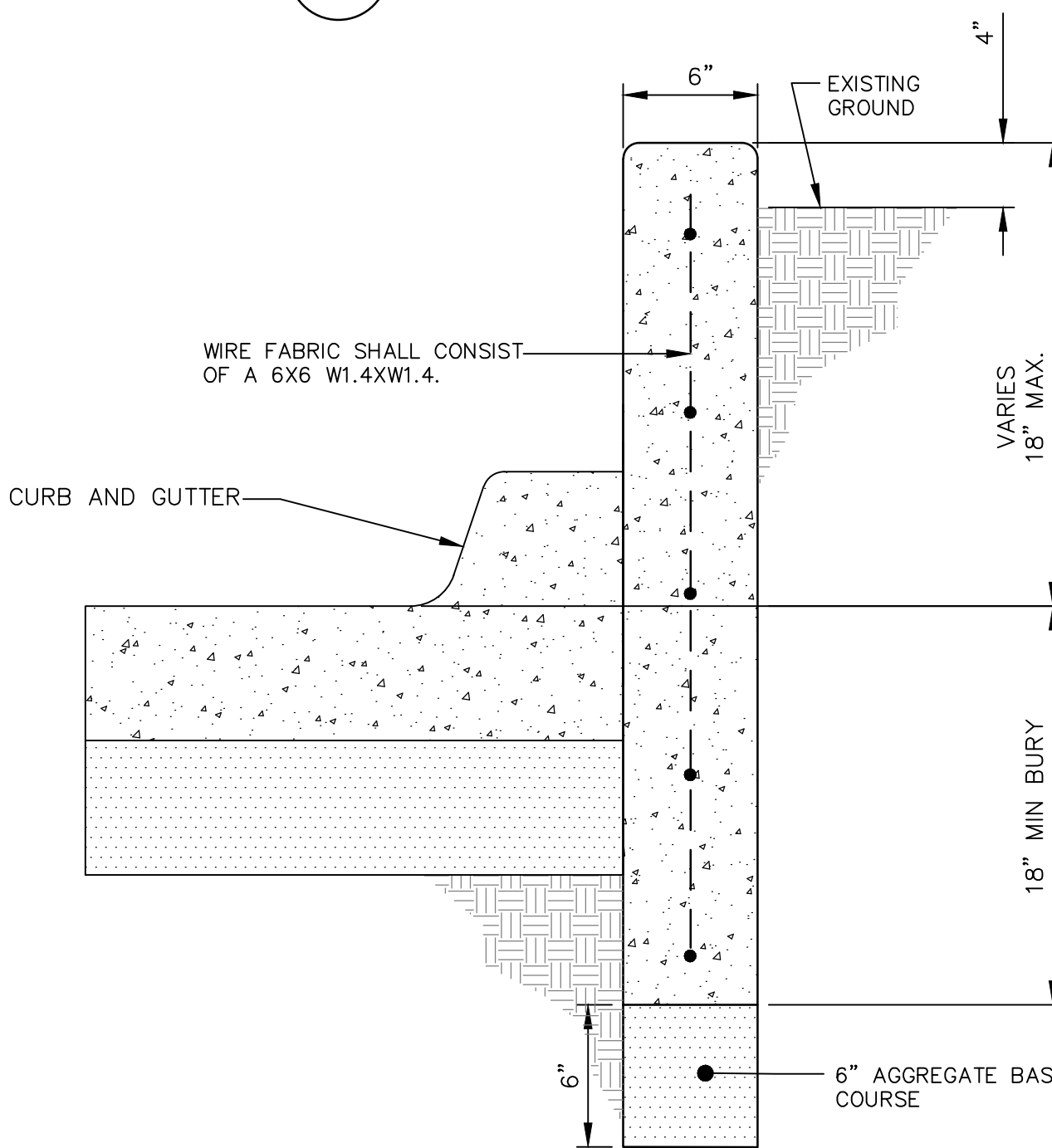


SECTION A-A

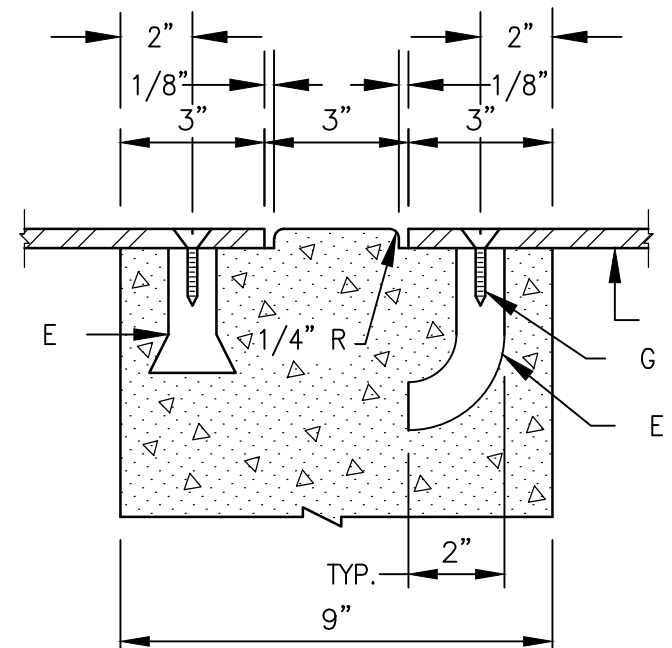


A3 WATER HARVEST CROSS SECTION A-A - POND A
SCALE: NOT TO SCALE

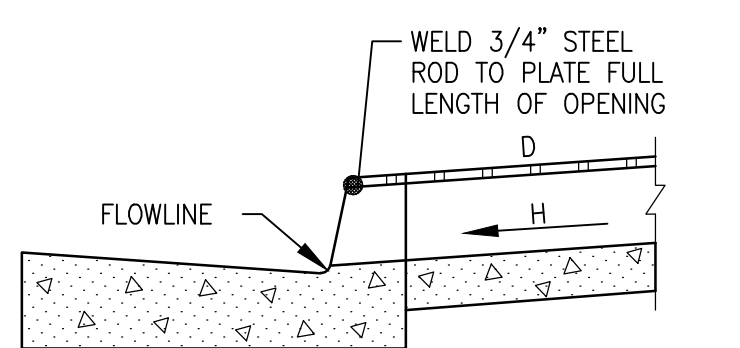
B3 HEADER CURB DETAIL - FILL
SCALE: NOT TO SCALE



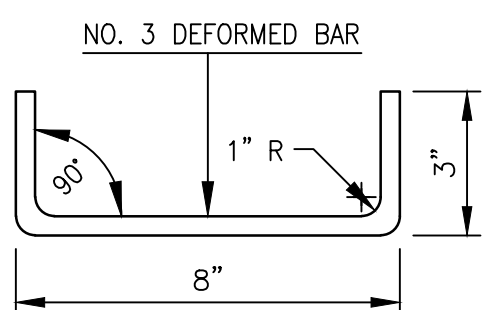
SECTION B-B



SECTION C-C



SECTION D-D



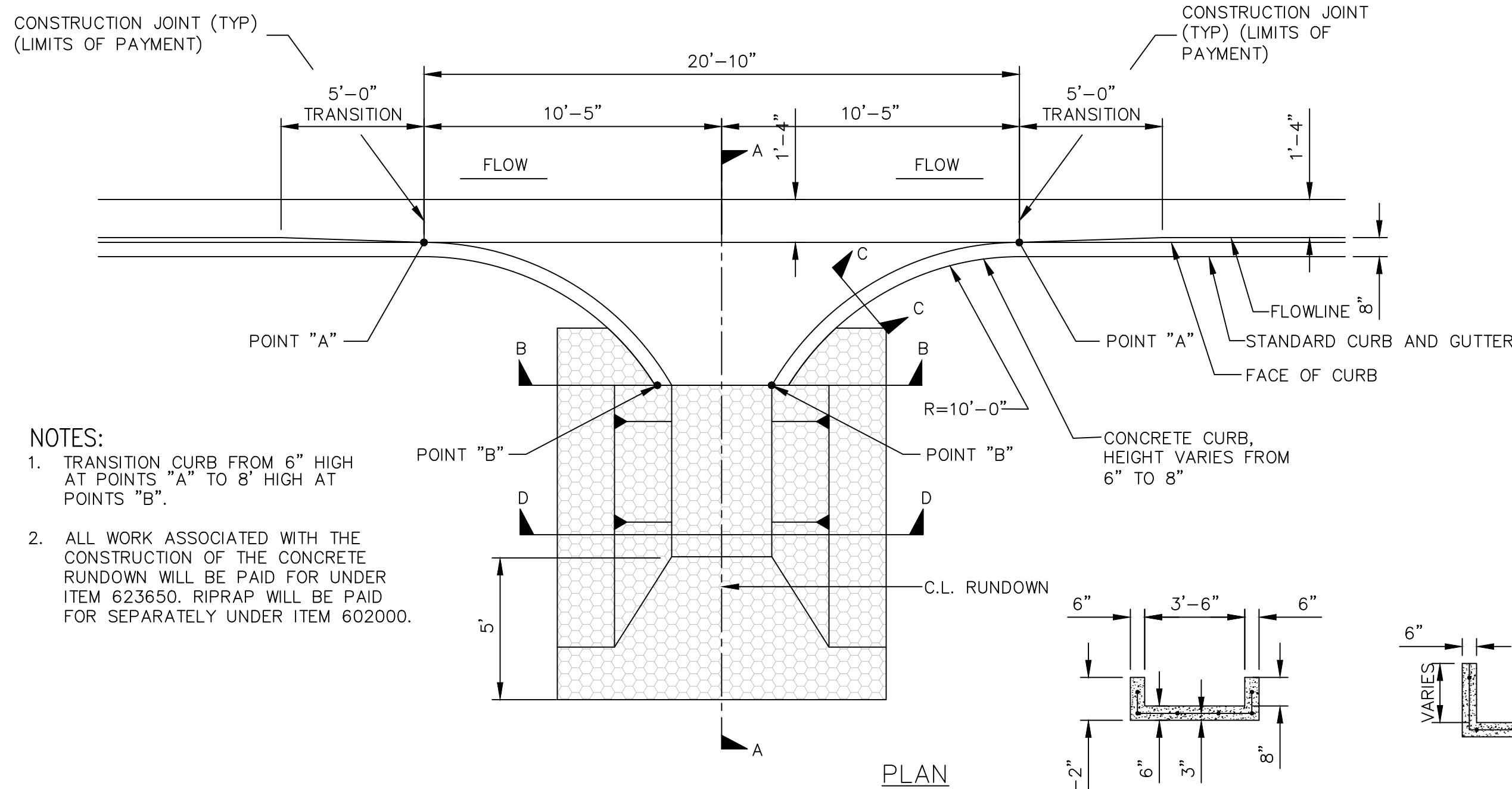
DOWEL DETAIL

GENERAL NOTES:

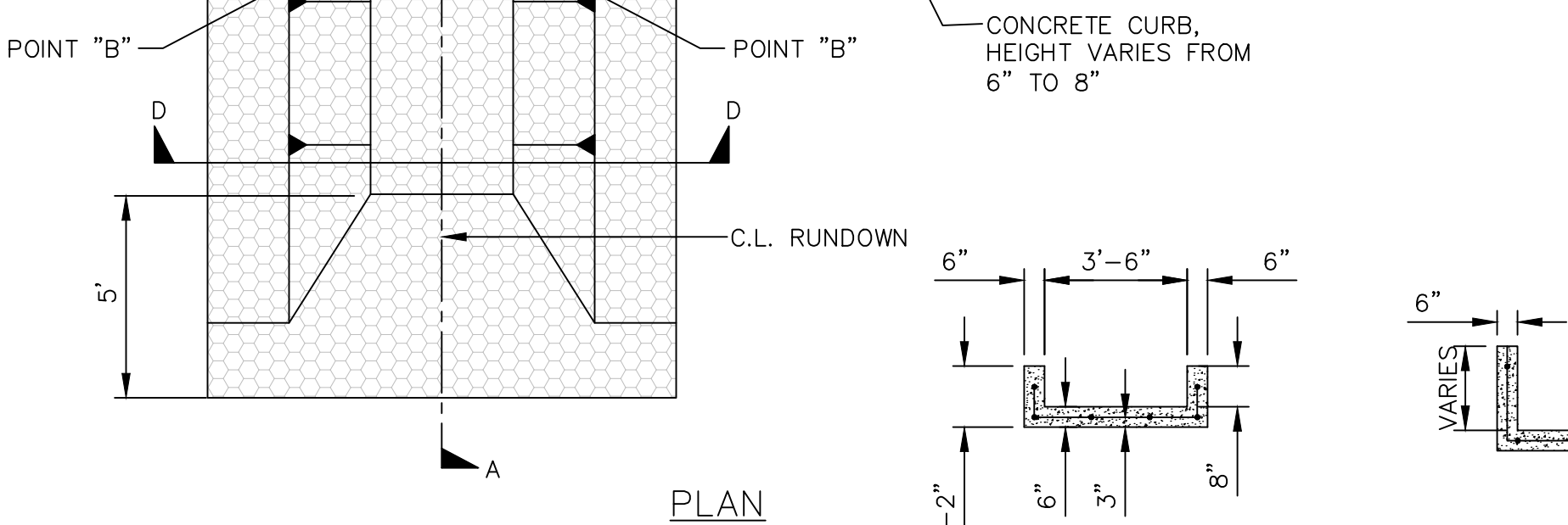
1. PLACING OF DRAIN THRU EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT ENTIRE SIDEWALK AND C & G STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED TO PARALLEL FLOWLINE AT OUTLET, UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONG. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H. MACHINE SCREW. ATTACH ANCHORS TO PLATE AND SECURE PLATE IN PLACE PRIOR TO POURING OF WALLS.
7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT W/ ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
8. ALL SIDEWALK CULVERTS SHALL EXTEND 12" BEYOND THE EDGE OF SIDEWALK TO ENSURE SIDEWALK SAFETY.

SIDEWALK CULVERT CONSTRUCTION NOTES:

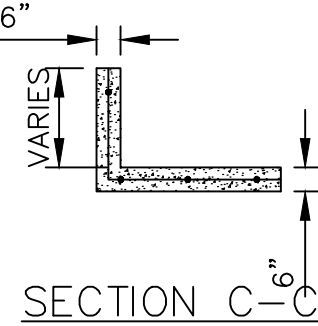
- A. MATCH NEAREST CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT.
- B. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
- C. 3" RADIUS (TYPICAL).
- D. 3/8" CHECKERED STEEL PLATE (PRINT PER NOTE 7, ABOVE. FOR SECURING PLATE USE 1" x 5" S.S. ROD ANCHOR, "RED HEAD MULTI-SEE II SRM-38 ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C., A MINIMUM OF 2 PER SIDE AND ONE WITH 6" OF EACH END.
- E. CONSTRUCTION JOINT IS OPTIONAL. IF USED, SPACE DOWELS AT 18" O.C. MAX., 1/2" MINIMUM FROM FACE OF CONCRETE.
- F. 3/4" - 16 X 1 1/4" COUNTERSUNK, F.H., STAINLESS STEEL MACHINE SCREW.
- G. SLOPE 1/2" PER FT. MIN
- H. DRAIN WIDTH PER PLAN (12", MIN., 24" MAX.).



- NOTES:
1. TRANSITION CURB FROM 6" HIGH AT POINTS "A" TO 8" HIGH AT POINTS "B".
 2. ALL WORK ASSOCIATED WITH THE CONSTRUCTION OF THE CONCRETE RUNDOWN WILL BE PAID FOR UNDER ITEM 623650. RIPRAP WILL BE PAID FOR SEPARATELY UNDER ITEM 602000.



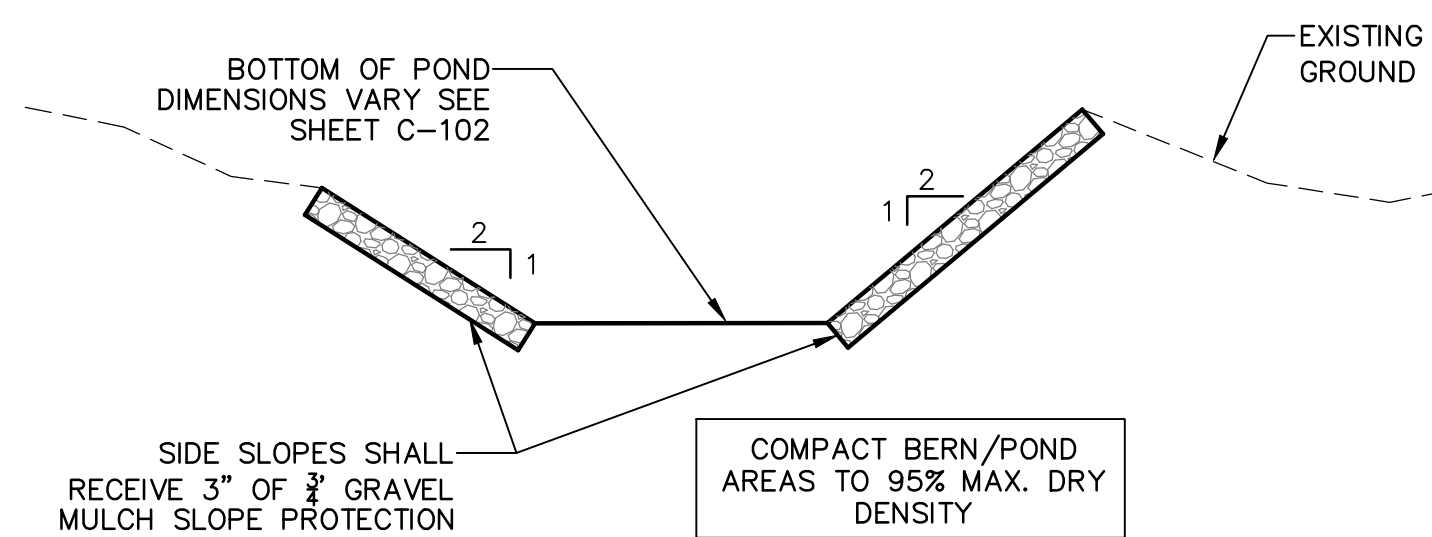
SECTION B-B



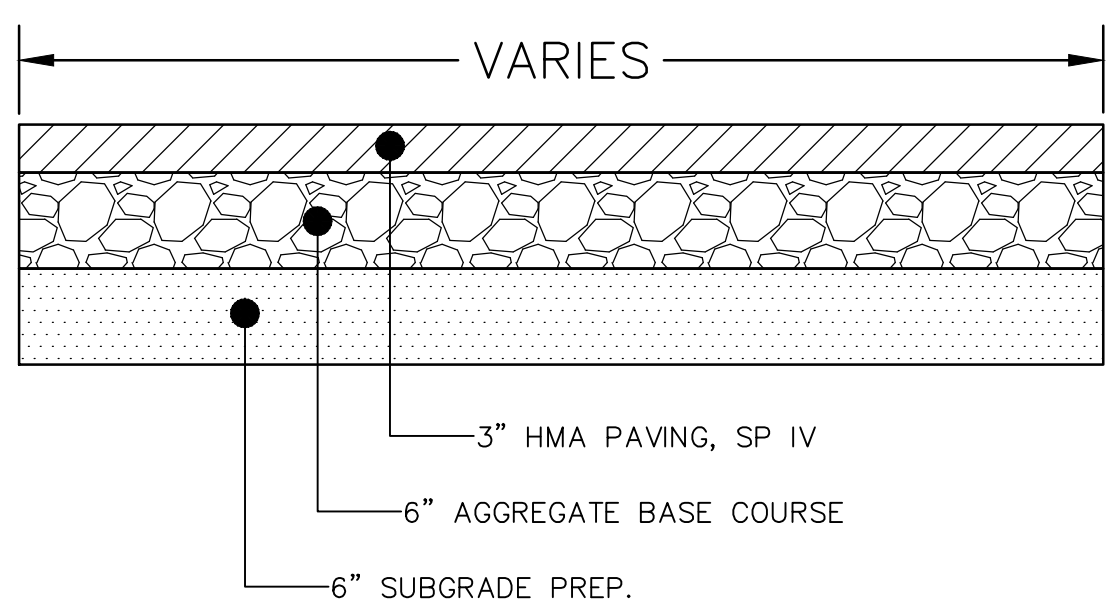
SECTION C-C

B3 HEADER CURB DETAIL - CUT
SCALE: NOT TO SCALE

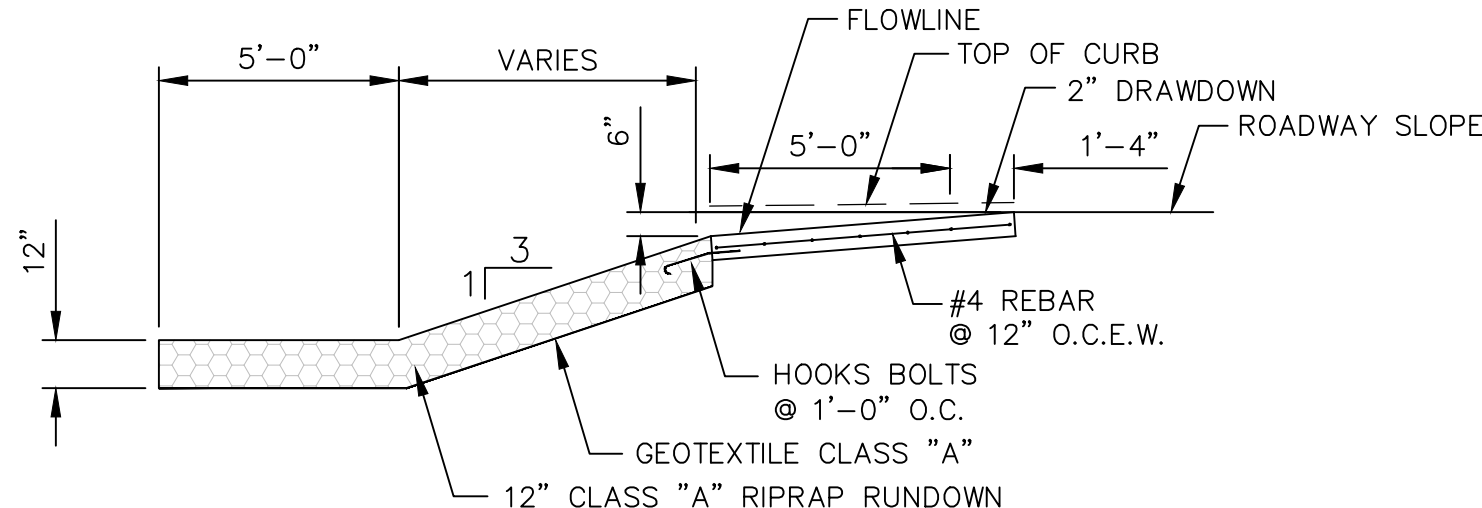
C3 SIDEWALK CULVERT DETAIL
SCALE: NOT TO SCALE



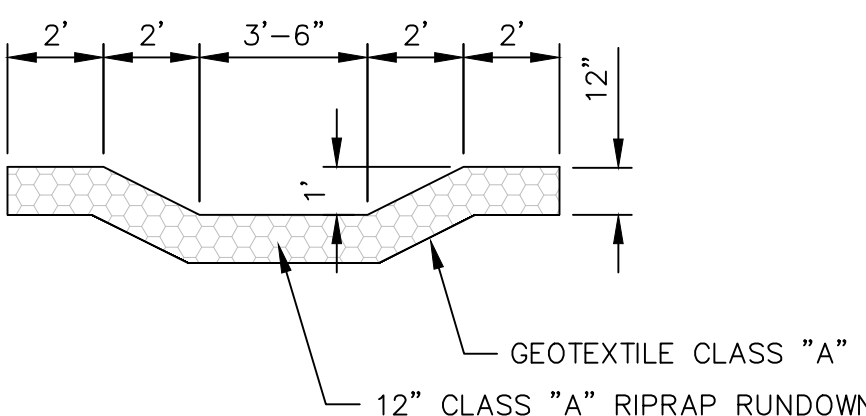
B2 TYPICAL WATER HARVEST AREA SECTION - POND B & C
SCALE: NOT TO SCALE



B1 TYPICAL LIGHT DUTY ASPHALT PAVING DETAIL
SCALE: NOT TO SCALE



SECTION A-A

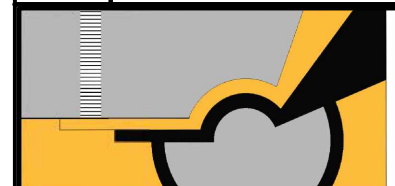


SECTION D-D

A1 CONCRETE RUNDOWN (TYPICAL)
SCALE: NOT TO SCALE



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No	Revision	Item	Date
 SCOTT C. ANDERSON & ASSOCIATES architects 4419 4th St. NW, Ste. B Albuquerque, NM 87107 scott@scottcanderson.com 505.401.7575			
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DRAWING TITLE MISCELLANEOUS DETAILS			
SEAL	DESIGNED	MEC	PROJECT NO.
	DRAWN	MEC	SCALE NOTED
	CHECKED	VAM	DRAWING NO.
	REVIEWED		
DATE 8/2/21		C-501 OF	