

LEGEND

- APPARENT PROPERTY BOUNDARY
- PROPOSED MAJOR CONTOUR FROM G&D PLAN
- PROPOSED MINOR CONTOUR FROM G&D PLAN
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- POND CONTOUR
- BLDG. BUILDING
- BASIN
- LIMITS OF DISTURBANCE
- DIRT BERM
- RIP RAP

Weir Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Jul 12 2024

Pond No. 1 Spillway

Trapezoidal Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 4.00	Q (cfs)	= 5.699
Total Depth (ft)	= 0.50	Area (sqft)	= 2.75
Side Slope (z:1)	= 3.00	Velocity (ft/s)	= 2.07
		Top Width (ft)	= 7.00
Calculations			
Weir Coeff. Cw	= 3.10		
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		

Weir Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Jul 12 2024

Pond No. 2 Spillway

Trapezoidal Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 18.00	Q (cfs)	= 21.04
Total Depth (ft)	= 0.50	Area (sqft)	= 9.75
Side Slope (z:1)	= 3.00	Velocity (ft/s)	= 2.16
		Top Width (ft)	= 21.00
Calculations			
Weir Coeff. Cw	= 3.10		
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		

BASIN 101_{100YR-6HR} = 5.0 CFS
SPILLWAY SIZE REQUIRED TO CONVEY 5.0 CFS IS 6" BY 4"
BASIN 102_{100YR-6HR} = 17.9 CFS
SPILLWAY SIZE REQUIRED TO CONVEY 17.9 CFS IS 6" BY 18"

100-YEAR, 6-HR DISCHARGE RATES OBTAIN FROM APPROVED GRADING AND DRAINAGE PLAN WITH ENGINEER SEAL NO. 11814 DATED 2/22/2024.

100-YEAR PEAK DISCHARGE

GIVEN:
Area_{BASIN 100} = 1.31 acres
Area_{BASIN 101} = 4.72 sq.ft.
SOLUTION:
Basin 100 Required Volume = 1.31 ac. x 3,600 cu.ft./ac. = 4,716 cu.ft.
Basin 101 Required Volume = 4.72 ac. x 3,600 cu.ft./ac. = 16,992 cu.ft.
CONCLUSION:
Design volume of Pond No. 1 is greater than the required volume from Basin 100.
Design volume of Pond No. 2 is greater than the required volume from Basin 101.

REQUIRED SWPP POND VOLUME

SWPP POND No. 1 Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	Volume (ac)	Cumulative Vol. (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5122	696	0.016	0	0.000	0
5123	1287	0.030	0.023	0.023	992
5124	1934	0.044	0.037	0.060	2602
5125	2638	0.061	0.052	0.112	4888
5125.5	3011	0.069	0.032	0.145	6300

SWPP POND No. 2 Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	Volume (ac)	Cumulative Vol. (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5117	2162	0.050	0	0.000	0
5118	3853	0.088	0.069	0.069	3008
5119	5599	0.129	0.108	0.178	7734
5120	7403	0.170	0.149	0.327	14235
5120.5	8326	0.191	0.090	0.417	18167
5121	9262	0.213	0.101	0.518	22564

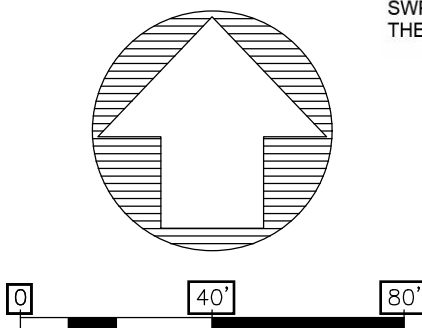
STAGE-STORAGE SWPP POND VOLUME

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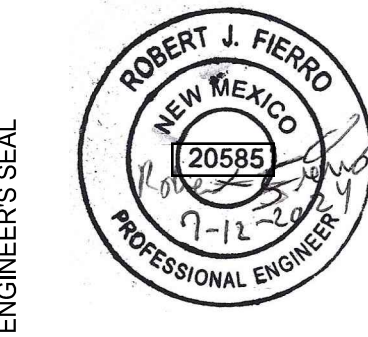
STAGE-STORAGE SWPP POND VOLUME

ENGINEER'S CERTIFICATION
I, ROBERT J. FIERRO, NMPE 20585, HEREBY CERTIFY THAT THE SWPP DESIGN HAS BEEN PERFORMED UNDER MY REVIEW AND IS THE REPRESENTATIVE OF SITE CONDITIONS.



P:\PROJECTS\2024\24012\CADD\SHEETS\HYDROLOGY\24012-GRADING.dwg 7/12/2024 3:43:27 PM

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D&B BLUEWATER
UNSER BLVD N.W.
ALBUQUERQUE, NM

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 24012
DESIGNED BY: RJF
DRAWN BY: JB
CHECKED BY: RJF
DATE: JULY 2024

SHEET TITLE

EROSION SEDIMENT CONTROL PLAN

SHEET NO:

LANDSCAPE NOTES:

THE INSTALLED LANDSCAPING IS TO COMPLY WITH THE CITY OF ALBUQUERQUE WATER CONSERVATION ORDINANCES. THE CITY OF ALBUQUERQUE WATER CONSERVATION ORDINANCES REQUIRE THAT ALL LANDSCAPING BE DESIGNED TO BE FULLY MAINTAINABLE AND SOD IS LESS THAN 20% OF THE TOTAL LANDSCAPE AREA. THIS DESIGN IS BASED ON PROVIDING 75% LIVE PLANT COVERAGE OF LANDSCAPED BUFFER AREAS WHEN PLANTINGS ARE FULLY MAINTAINED. LANDSCAPING SHALL BE COMPLETED WITHIN 60 DAYS OF BUILDING OCCUPANCY. LANDSCAPE MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. ALL PLANT MATERIALS WHICH DO NOT SURVIVE SHALL BE REPLACED WITHIN 60 DAYS.

IRRIGATION SYSTEM SPECS:

AN EXISTING AUTOMATIC IRRIGATION SYSTEM SHALL BE EXTENDED TO INCLUDE THE NEW BUFFER AREAS ON THE WEST SIDE. TREES & SHRUBS: TO RECEIVE FIVE 1.0 GPM DRIP EMITTERS SHRUBS TO RECEIVE ONE 1.0 GPM DRIP TYPE EMITTER. EMITTERS SHALL BE SPACED AT 10' ON-TREE SPACING AS ADJUSTED FOR INDIVIDUAL PLANT REQUIREMENTS. SOD: POP UP SPRAY HEADS #/ FLOW RATE ADJUSTED TO 1/2" INCH/ WEEK

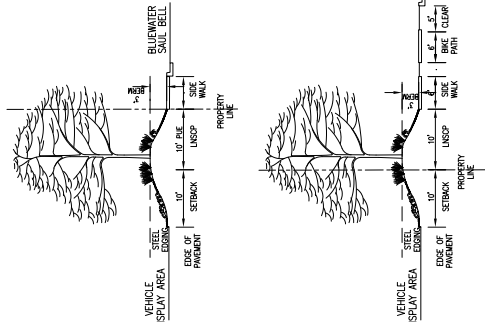
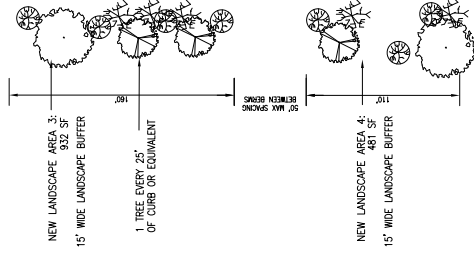
LANDSCAPE REQUIREMENTS:

NET LOT AREA - 18%
NET LOT AREA VEGETATIVE COVERAGE - 75%
NET LOT AREA TURF GRASS - 20%
STREET TREES:
1 EACH / 25' LF OF CURB, 50' MAX SEPARATION
PERIMETER TREES:
1 EACH / 750' LF OF PROPERTY LINE
CUSTOMER PARKING AREA: 10 TO PARKING STALLS
EACH FOR EXPOSED TO VEHICLES
100' MAX. DISTANCE TO VEHICLES
PLANT MATERIAL SIZES:
TREES - 2" CALIPER @ 2' ABOVE GROUND
SHRUBS AND GROUND COVERS - 18" GAL CONTAINERS
SOD - 18" GAL CONTAINERS
THE REMAINDER IN 1 GAL CONTAINERS

LANDSCAPE CALCULATIONS:

REQUIRED LANDSCAPE AREA	19,009.6 SQ FT
BRUSH LOT AREA	17,544.8 SQ FT
NET LOT AREA	17,544.8 SQ FT
REQUIRED AREA:	2,632 SQ FT
LANDSCAPE PROVIDED	
EXISTING LANDSCAPE AREA 1:	472 SQ FT
NEW SHRUBS SUB AREA 1A:	190 SQ FT
EXISTING LANDSCAPE AREA 2:	332 SQ FT
NEW LANDSCAPE AREA 3:	481 SQ FT
NEW LANDSCAPE AREA 4:	2,362 SQ FT
TOTAL PROVIDED:	3,437 SQ FT
EXISTING HIGH WATER TURF AREA	470 SQ FT
PROVIDED IN AREA 1:	

STREET EDGE PLANTING



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ESC Plan Standard Notes (2023-06-16)

1. All Erosion and Sediment Control (ESC) work on these plans, except as otherwise stated or provided hereon shall be permitted, constructed, inspected, and maintained in accordance with:
 - a. The City Ordinance § 14-5-2-11, the ESC Ordinance,
 - b. The EPA's 2022 Construction General Permit (CGP), and
 - c. The City Of Albuquerque Construction BMP Manual.
2. All BMP's must be installed prior to beginning any earth moving activities except as specified hereon in the Phasing Plan. Construction of earthen BMP's such as sediment traps, sediment basins, and diversion berms shall be completed and inspected prior to any other construction or earthwork. Self-inspection is required after installation of the BMPs and prior to beginning construction.
3. Self-inspections - In accordance with City Ordinance § 14-5-2-11(C)(1), "at a minimum a routine self-inspection is required to review the project for compliance with the Construction General Permit once every 14 days and after any precipitation event of 1/4 inch or greater until the site construction has been completed and the site determined as stabilized by the city. Reports of these inspections shall be kept by the person or entity authorized to direct the construction activities on the site and made available upon request.
4. Corrective action reports must be kept by the person or entity authorized to direct the construction activities on the site and made available upon request.
5. Final Stabilization and Notice of Termination (NOT) - In accordance with City Ordinance § 14-5-2-11(C)(1), self-inspections must continue until the site is "determined as stabilized by the city." The property owner/operator is responsible for determining when the "Conditions for Terminating CGP Coverage" per CGP Part 8.2 are satisfied and then for filing their Notice of Termination (NOT) with the EPA. Each operator may terminate CGP coverage only if one or more of the conditions in Part 8.2.1, 8.2.2, or 8.2.3 has occurred. After filing the NOT with the EPA, the property owner is responsible for requesting a Determination of Stabilization from the City.
6. When doing work in the City right-of-way (e.g. sidewalk, drive pads, utilities, etc.) prevent dirt from getting into the street. If dirt is present in the street, the street should be swept daily or prior to a rain event or contractor induced water event (e.g. curb cut or water test).
7. When installing utilities behind the curb, the excavated dirt should not be placed in the street.
8. When cutting the street for utilities the dirt shall be placed on the uphill side of the street cut and the area swept after the work is complete. A wattle or mulch sock may be placed at the toe of the excavated dirt pile if site constraints do not allow placing the excavated dirt on the uphill side of the street cut.
9. ESC Plans must show longitudinal street slope and street names. On streets where the longitudinal slope is steeper than 2.5%, wattles/mulch socks or j-hood silt fence shall be shown in the front yard swale or on the side of the street.