

**From:** [David Gorman](#)  
**To:** ["John.Hunyadi@state.co.us"](mailto:John.Hunyadi@state.co.us)  
**Cc:** ["donna.smith@state.co.us"](mailto:donna.smith@state.co.us); ["jessica.wodiuk@state.co.us"](mailto:jessica.wodiuk@state.co.us); ["doug.hollister@state.co.us"](mailto:doug.hollister@state.co.us)  
**Subject:** NOI - Sanctuary of Peace - full spectrum sand filter basins  
**Date:** Saturday, July 25, 2020 12:38:00 PM  
**Attachments:** [61087 NOI-pond A1.pdf](#)  
[61087 NOI-pond C1.pdf](#)  
[61087 NOI-pond C2.pdf](#)

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John,

We are providing the attached NOI packages for three non-jurisdictional storm detention/water quality ponds in northern El Paso County. These three proposed ponds are in connection with the Sanctuary of Peace residential community project on at State Highway 83 and Benet Lane. If there is anything else needed for this notification, please let me know. Thank you.

Dave

David R. Gorman, P.E.  
M.V.E., Inc.  
1903 Lelaray Street, Suite 200  
Colorado Springs, CO 80909  
(719) 635-5736  
[www.mvecivil.com](http://www.mvecivil.com)



**NON-JURISDICTIONAL WATER IMPOUNDMENT STRUCTURE<sup>1</sup>**

This notice is required per Section 37-87-125, C.R.S. (1998) and must be submitted to the Division Engineer's Office a minimum of 45 days prior to construction.

**OWNER INFORMATION**

Name: BENET HILL MONASTERY OF COLORADO SPRINGS Telephone/E-Mail: ( 719 ) 633-0655 /

Address: 3190 BENET LANE, COLORADO SPRINGS CO 80921-1509  
 Street / P.O. Box/ Rural Route City State Zip Code

Responsible Person: Vincent Crowder Telephone/E-Mail: ( 719 ) 633-0655 /

Address: 15760 COLORADO HIGHWAY 83, COLORADO SPRINGS, CO 80923  
 Street / P.O. Box/ Rural Route City State Zip Code

Contractor: TBD Telephone/E-Mail: ( ) /

**STRUCTURE INFORMATION**

Name of Dam: SANCTUARY OF PEACE - POND A1 Water Division: 2 Water District: 10

Location: (Provide Section, Township, Range, **and** GPS Point taken at crest of dam above streamline/outlet)

- Section: 27, Township: 11 S, Range: 66 W, 6th P.M.

- Northing 4,323,627 meters, Easting 519,958 meters (Datum should be UTM, NAD 83)

Dam Dimensions:

- Vertical Height<sup>2</sup>: 6.5 ft., Length: 60 ft., Crest Width: 4 ft., Slopes: U/S: 3 (H:1V), D/S 3 (H:1V)

Reservoir:

- Surface Area<sup>1</sup>: 0.066 acres, Capacity<sup>1</sup>: 0.137 acre-feet, Drainage Area\*: 1.85 acres

\*(If drainage area is unknown leave blank and a spillway size will be assigned):

Emergency Spillway: (See Table 1, Spillway Sizing Guidelines)

- Bottom Width: 20 ft., Side Slopes: 4 H:1V, Freeboard<sup>3</sup>: 1.5 ft

Outlet Conduit Type: HDPE pipe, Size: 12 inches, Location: \_\_\_\_\_

Stream Name or Water Source<sup>4</sup>: Site Proposed Water Use: No Use - Water Quality Treatment

Water Court Case or WDID : N/A  
 (Water District Identification Number)

Vincent Crowder 7.22.20  
 Signature of Owner Date

**Office Use Only**

**DIVISION ENGINEER'S REQUIREMENTS:** \_\_\_\_\_

**Dam I.D.** \_\_\_\_\_ Signature of Division Engineer Date

<sup>1</sup> A "Non-Jurisdictional Structure" is a dam creating a reservoir with a capacity of 100 acre-feet or less and a surface area of 20 acres or less and a vertical height (footnote 2) of 10 feet or less. Non-jurisdictional size dams are regulated and subject to the authority of the State Engineer consistent with sections 37-87-102 and 37-87-105 C.R.S.  
<sup>2</sup> "Vertical Height" is measured from the elevation of the lowest point of the natural surface of the ground or the invert of the outlet conduit (whichever is lower) where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam.  
<sup>3</sup> "Freeboard" is the vertical distance from the bottom of spillway to the crest of the dam. Minimum Freeboard is 3 feet.  
<sup>4</sup> If construction in reservoir intercepts groundwater, a well permit is required. (Well permit applications can be found at [www.water.state.co.us](http://www.water.state.co.us))



July 22, 2020

**Colorado Division of Water Resources**

Dam Safety Branch  
4255 Sinton Road  
Colorado Springs, CO 80907

Attn: Mr. John Hunyadi, P.E.  
Dam Safety Engineer

**Re: Statement of Hazard Classification – Sand Filter Basin A1  
Sanctuary of Peace Residential Community  
Project No. 61087**

Dear Mr. Hunyadi:

The Sanctuary of Peace Residential Community site is in El Paso County, Colorado and is located within the southwest one-quarter of the northeast one-quarter of Section 27, Township 11 South, Range 66 West of the 6th principal meridian in El Paso County, Colorado. The 3.7± acre site being developed is situated west of Highway 83 between Stagecoach Road and Hodgen Road, just south of Benet Lane and Benet Hill Monastery. The site is currently undeveloped pine forest. The El Paso County Assessor's Schedule Number for the site is 6127000063. The proposed site is being platted into 27 lots for 13 duplex residential structures and one community house plus large areas of open space. A Vicinity Map is attached. The proposed Sand Filter Basin for the Sanctuary of Peace Residential Community is one of three being proposed for this site and is located at the western edge of the development and collects runoff from the western developed portions of the site. The subject facility is a full spectrum sand filter basin. The developed area of the site is located in the Smith Creek Drainage Basin and Black Squirrel Creek Drainage Basin, with this facility discharging into the Smith Creek Drainage Basin.

The classification for this facility is **Low Hazard**. Loss of human life is not expected, and significant damage to structures and public facilities as defined for a "Significant Hazard" dam is not expected to result from failure of the dam.

The justification for the NPH classification is as follows:

- The jurisdictional height of the dam is small. The height of the embankment inside the ponding area is 3.0 feet. The jurisdictional height from the downstream embankment extent to the emergency spillway crest is 6.5 feet.
- The inflow rates into the pond is very small. The 100 year inflow rate is 7.3 cfs draining from a contributing watershed of 1.85 acres in area.
- The storage volume of the pond and impounded storm water volume is small (5,991 cubic feet or 0.137 acre feet).

**Engineers • Surveyors**  
**1903 Lelaray Street, Suite 200 • Colorado Springs, CO 80909 • Phone 719-635-5736**  
**Fax 719-635-5450 • e-mail mve@mvecivil.com**

Statement of Hazard Classification  
Sand Filter Basin A1, Sanctuary of Peace Residential Community  
July 22, 2020  
Page 2

- The topography of the property downstream of the facility and the emergency spillway will direct flows to be dispersed over open ground in the event of any failure.

Modeling and analysis of this insignificant facility is not necessary to determine the classification and is not performed. Please contact me if there are questions regarding this statement.

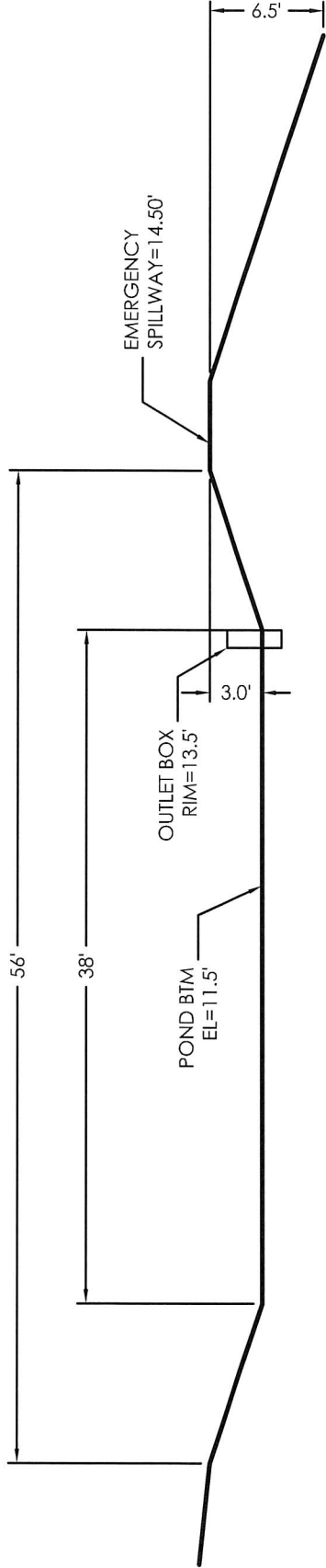
Very truly yours,

M.V.E., Inc.

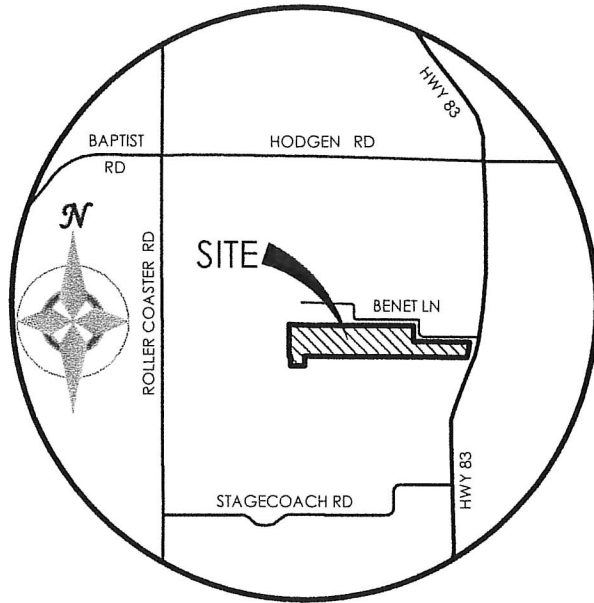


David R. Gorman, P.E.  
DRG:cwg

Z:\61087\Documents\Correspondance\61087-Dam Hazard Classification-A1.odt

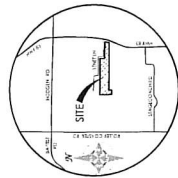


SANCTUARY OF PEACE  
 SAND FILTER BASIN POND A1 SECTION  
 SCALE = 1"=10'



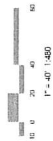
VICINITY MAP

NOT TO SCALE



VICINITY MAP  
NOT TO SCALE

BENCHMARK: MONUMENT SURVEY POINT 1000  
 MONUMENT SURVEY POINT 1000  
 MONUMENT SURVEY POINT 1000  
 MONUMENT SURVEY POINT 1000



**MVE, INC.**  
 ENGINEERS & SURVEYORS  
 1903 KERRY STREET, SUITE 207, KENNESAW, GA 30144  
 PHONE: 770.425.5736

REVISIONS

DESIGNED BY  
 CHECKED BY  
 DRAWN BY

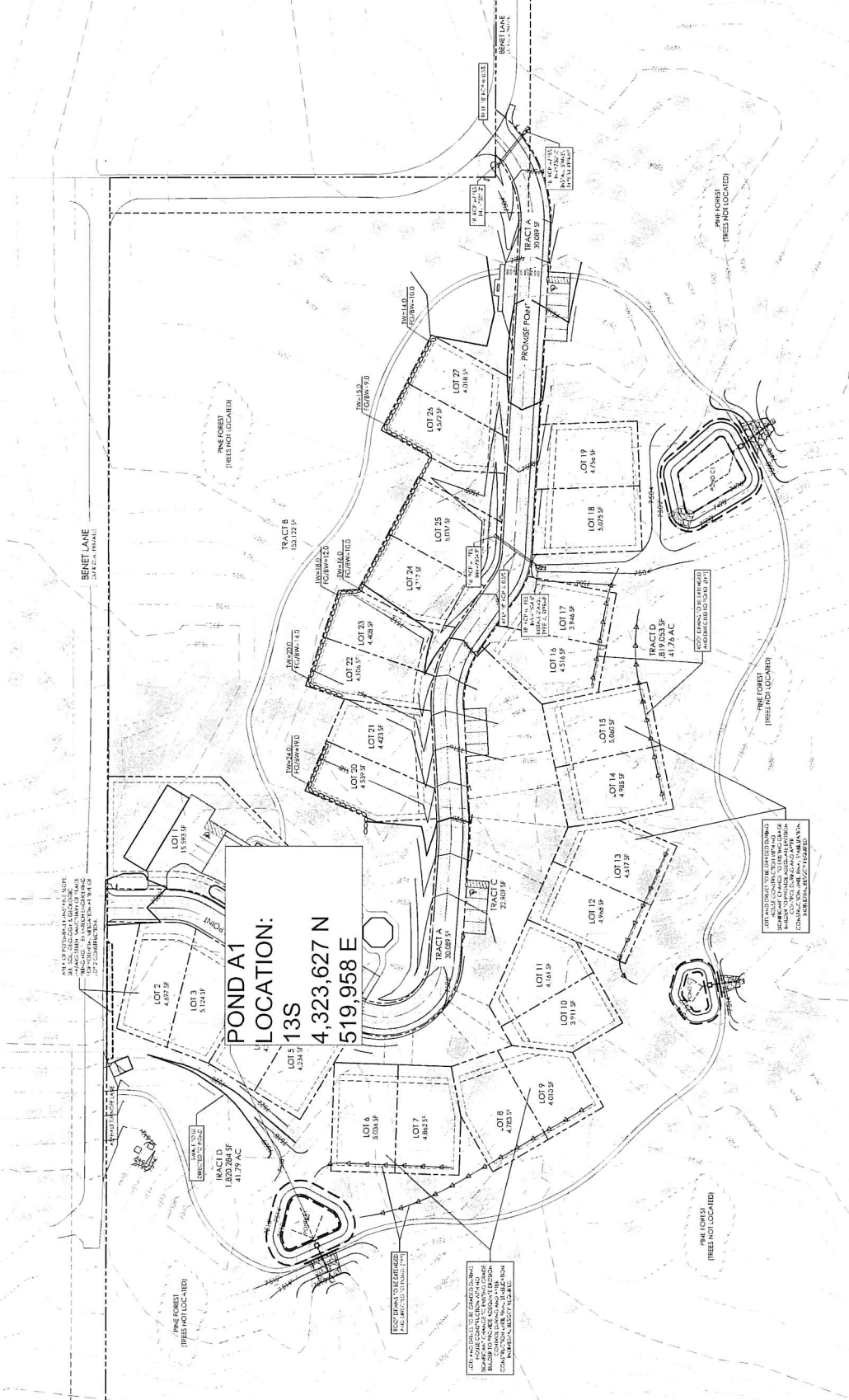
SANCTUARY OF PEACE  
 RESIDENTIAL COMMUNITY

GRADING & EROSION  
 CONTROL PLAN  
 GRADING PLAN

C-3  
 SHEET NO. 61087  
 MVE DRAWING: GEC-GP2

APRIL 28, 2020  
 SHEET 3 OF 10

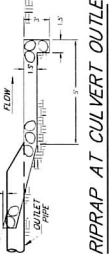
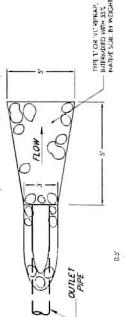
PUDSP-19-002



**POND A1**  
**LOCATION:**  
**13S**  
**4,323,627 N**  
**519,958 E**

LOT 19 AND LOT 20 ARE TO BE CONSIDERED AS ONE LOT FOR THE PURPOSES OF THE GRADING AND EROSION CONTROL PLAN. THE TOTAL AREA OF THESE LOTS IS 41.76 AC.

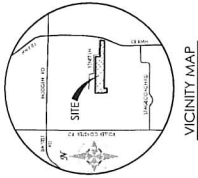
LOT 19 AND LOT 20 ARE TO BE CONSIDERED AS ONE LOT FOR THE PURPOSES OF THE GRADING AND EROSION CONTROL PLAN. THE TOTAL AREA OF THESE LOTS IS 41.76 AC.



RIPRAP AT CULVERT OUTLETS  
 NTS







VICINITY MAP  
NOT TO SCALE

REVISIONS:  
1. REVISED TO CORRECT DIMENSIONS AND MATERIALS  
2. REVISED TO CORRECT DIMENSIONS AND MATERIALS  
3. REVISED TO CORRECT DIMENSIONS AND MATERIALS  
4. REVISED TO CORRECT DIMENSIONS AND MATERIALS



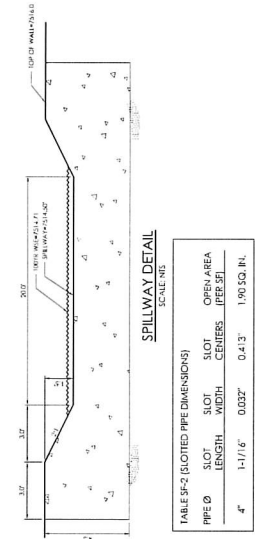
**MVE, INC.**  
ENGINEERS & SURVEYORS  
1003 WEST 50TH STREET, SUITE 200  
DENVER, COLORADO 80231  
TEL: 303.733.5736  
WWW.MVEINC.COM

DESIGNED BY  
CHECKED BY  
DATE  
PROJECT NO.

SANCTUARY OF PEACE  
RESIDENTIAL COMMUNITY  
GRADING & EROSION  
CONTROL PLAN  
POND PLAN (A1)

C-5  
DATE: 04/18/2020  
PROJECT: 61087  
DRAWING: GEC-PD1

APRIL 28, 2020  
SHEET 5 OF 10



SPILLWAY DETAIL  
SCALE: 1/8" = 1'-0"

TABLE 5-2 (SLOTTED PIPE DIMENSIONS)

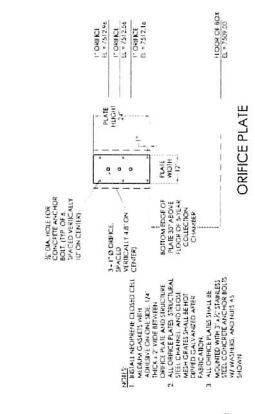
PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT CENTER-TO-CENTER	OPEN AREA PER FEET
4"	1'-11 1/2"	0.002"	0.4-1.3	1.90 SQ. IN.

SOIL MATERIAL GRADATION TABLE

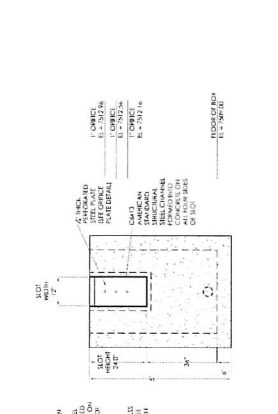
STANDARD TESTS	S-PASSING		F-150		F-75		F-42.5	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
NO. 10	100	100	100	100	100	100	100	100
NO. 20	100	100	100	100	100	100	100	100
NO. 40	100	100	100	100	100	100	100	100
NO. 60	100	100	100	100	100	100	100	100
NO. 100	100	100	100	100	100	100	100	100
NO. 200	100	100	100	100	100	100	100	100
NO. 425	100	100	100	100	100	100	100	100
NO. 600	100	100	100	100	100	100	100	100
NO. 840	100	100	100	100	100	100	100	100
NO. 1060	100	100	100	100	100	100	100	100
NO. 1320	100	100	100	100	100	100	100	100
NO. 1600	100	100	100	100	100	100	100	100
NO. 2000	100	100	100	100	100	100	100	100
NO. 2500	100	100	100	100	100	100	100	100
NO. 3000	100	100	100	100	100	100	100	100
NO. 3750	100	100	100	100	100	100	100	100
NO. 4500	100	100	100	100	100	100	100	100
NO. 5400	100	100	100	100	100	100	100	100
NO. 6400	100	100	100	100	100	100	100	100
NO. 7500	100	100	100	100	100	100	100	100
NO. 8700	100	100	100	100	100	100	100	100
NO. 10000	100	100	100	100	100	100	100	100

BASIN DATA TABLE

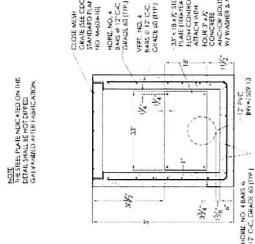
INLET	INLET	INLET	INLET	INLET	INLET	INLET	INLET	INLET	INLET
NO.	TYPE	DIAMETER	DEPTH	INLET	INLET	INLET	INLET	INLET	INLET
1	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
2	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
3	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
4	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
5	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
6	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
7	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
8	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
9	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
10	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
11	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
12	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
13	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
14	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
15	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
16	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
17	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
18	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
19	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
20	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
21	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
22	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
23	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
24	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
25	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
26	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
27	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
28	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
29	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
30	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
31	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
32	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
33	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
34	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
35	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
36	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
37	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
38	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
39	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
40	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
41	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
42	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
43	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
44	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
45	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
46	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
47	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
48	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
49	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"
50	18" DIA.	18"	18"	18"	18"	18"	18"	18"	18"



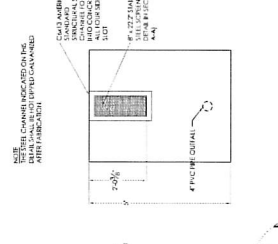
ORIFICE PLATE  
SCALE: 1/8" = 1'-0"



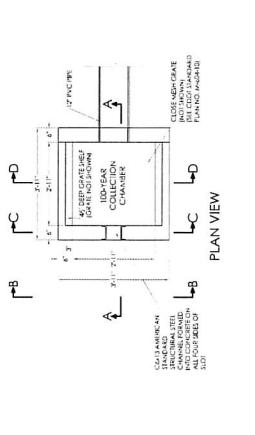
TYPICAL SAND FILTER BASIN DETAIL  
SCALE: 1/8" = 1'-0"



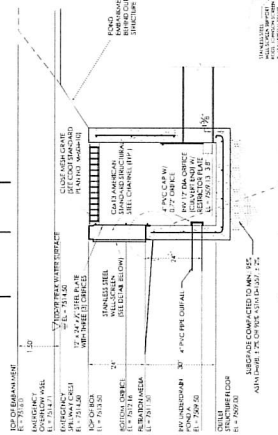
PLAN VIEW  
SCALE: 1/8" = 1'-0"



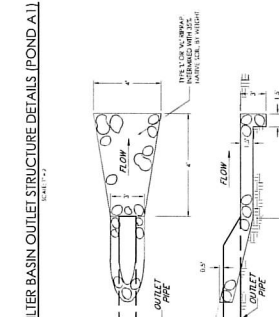
SECTION A-A  
SCALE: 1/8" = 1'-0"



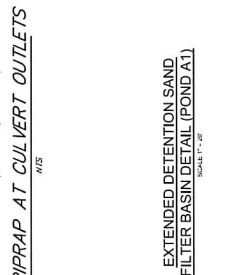
SECTION B-B  
SCALE: 1/8" = 1'-0"



SECTION C-C  
SCALE: 1/8" = 1'-0"

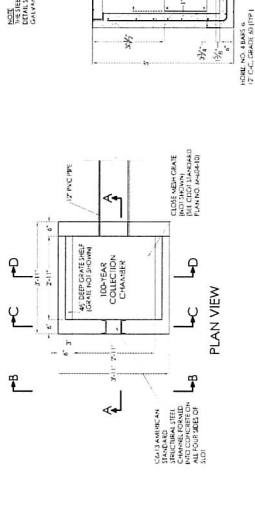


SAND FILTER BASIN OUTLET STRUCTURE DETAILS (POND A1)  
SCALE: 1/8" = 1'-0"

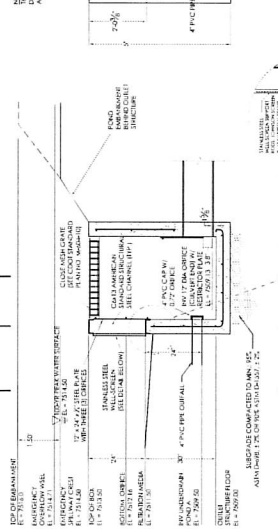


RIPRAP AT CULVERT OUTLETS  
SCALE: 1/8" = 1'-0"

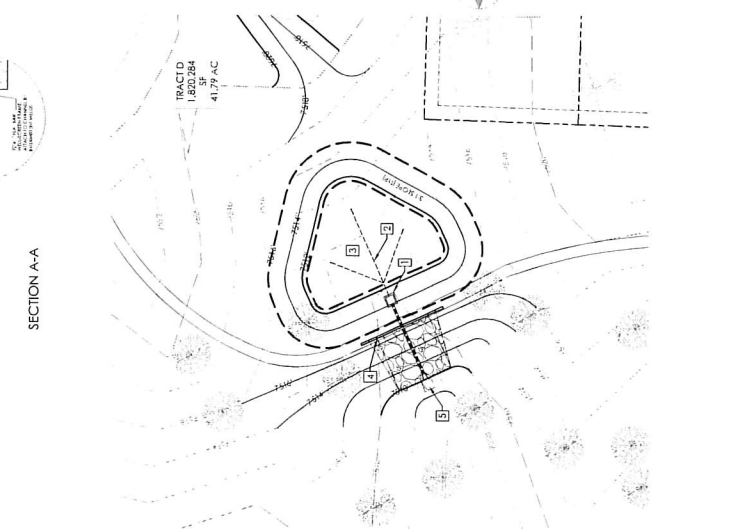
- NOTES:
- INSTALL OUTLET STRUCTURE (SEE CULVERT STRUCTURE DETAIL)
  - INSTALL 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
  - SAND FILTER (SEE DETAIL)
  - 2" WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
  - INSTALL 4" x 4" TYPE VULCORI SLOPP-RAP PAD



SECTION D-D  
SCALE: 1/8" = 1'-0"



SECTION E-E  
SCALE: 1/8" = 1'-0"



# Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name: Sanctuary of Peace - Pond A1**

**Facility Location & Jurisdiction: 15760 Colorado Highway 83, El Paso County, Colorado**

**User Input: Watershed Characteristics**

Watershed Slope = 0.073 ft/ft  
 Watershed Length = 317 ft  
 Watershed Area = 1.85 acres  
 Watershed Imperviousness = 35.7% percent  
 Percentage Hydrologic Soil Group A = 0.0% percent  
 Percentage Hydrologic Soil Group B = 100.0% percent  
 Percentage Hydrologic Soil Groups C/D = 0.0% percent

Location for 1-hr Rainfall Depths (use dropdown):

User Input

WQCV Treatment Method = Sand Filter

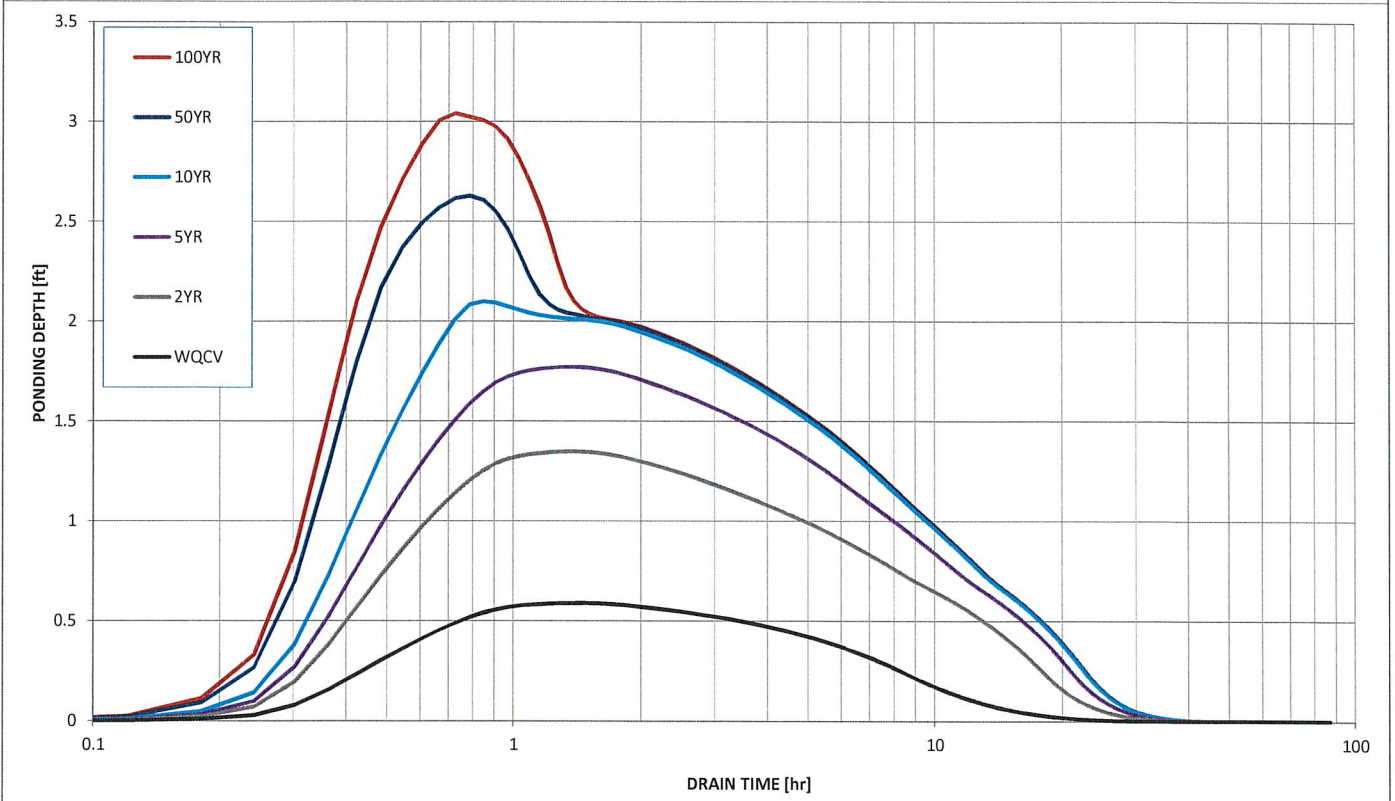
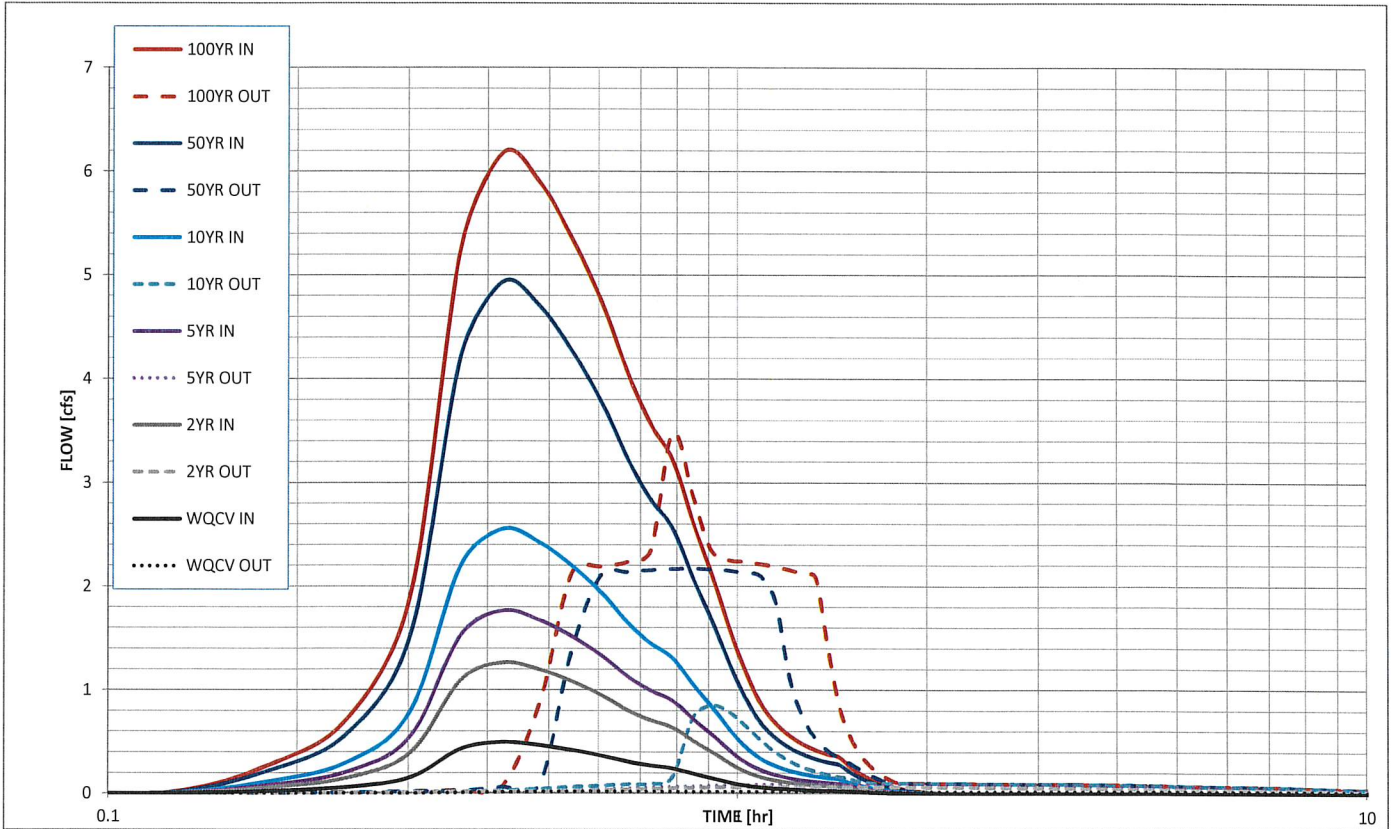
User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	1,222	0.00	0.00
0.25	1,331	0.25	0.02
0.50	1,448	0.50	0.02
0.66	1,531	0.66	0.02
0.75	1,571	0.75	0.03
1.00	1,697	1.00	0.04
1.25	1,829	1.25	0.06
1.50	1,965	1.50	0.07
1.75	2,105	1.75	0.09
1.81	2,145	1.81	0.09
2.00	2,250	2.00	0.10
2.25	2,405	2.25	2.07
2.50	2,559	2.50	2.14
2.75	2,717	2.75	2.20
3.00	2,880	3.00	2.26
3.25	3,048	3.25	9.96
3.50	3,220	3.50	24.43
3.75	3,396	3.75	43.74
4.00	3,577	4.00	67.28

After completing and printing this worksheet to a pdf, go to: <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif> create a new stormwater facility, and attach the pdf of this worksheet to that record.

**Routed Hydrograph Results**

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =	0.60	1.19	1.50	1.75	2.25	2.52	in
One-Hour Rainfall Depth =	0.021	0.054	0.075	0.110	0.213	0.268	acre-ft
Calculated Runoff Volume =							acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	19.1	24.6	26.2	26.1	23.3	22.3	hours
Time to Drain 97% of Inflow Volume =	23.8	29.3	31.0	30.9	28.1	27.2	hours
Time to Drain 99% of Inflow Volume =	0.59	1.35	1.77	2.10	2.63	3.04	ft
Maximum Ponding Depth =	0.03	0.04	0.05	0.05	0.06	0.07	acres
Maximum Poned Area =	0.018	0.048	0.067	0.083	0.114	0.140	acre-ft
Maximum Volume Stored =							

## Stormwater Detention and Infiltration Design Data Sheet





NON-JURISDICTIONAL WATER IMPOUNDMENT STRUCTURE<sup>1</sup>

This notice is required per Section 37-87-125, C.R.S. (1998) and must be submitted to the Division Engineer's Office a minimum of 45 days prior to construction.

OWNER INFORMATION

Name: BENET HILL MONASTERY OF COLORADO SPRINGS Telephone/E-Mail: (719) 633-0655 /

Address: 3190 BENET LANE, COLORADO SPRINGS CO 80921-1509
Street / P.O. Box/ Rural Route City State Zip Code

Responsible Person: Vincent Crowder Telephone/E-Mail: (719) 633-0655 /

Address: 15760 COLORADO HIGHWAY 83, COLORADO SPRINGS, CO 80923
Street / P.O. Box/ Rural Route City State Zip Code

Contractor: TBD Telephone/E-Mail: ( ) /

STRUCTURE INFORMATION

Name of Dam: SANCTUARY OF PEACE - POND C1 Water Division: 2 Water District: 10

Location: (Provide Section, Township, Range, and GPS Point taken at crest of dam above streamline/outlet)

- Section: 27, Township: 11 S, Range: 66 W, 6th P.M.

- Northing 4,323,521 meters, Easting 520,135 meters (Datum should be UTM, NAD 83)

Dam Dimensions:

- Vertical Height<sup>2</sup>: 6.0 ft., Length: 72 ft., Crest Width: 4 ft., Slopes: U/S: 3 (H:1V), D/S 3 (H:1V)

Reservoir:

- Surface Area<sup>1</sup>: 0.10 acres, Capacity<sup>1</sup>: 0.242 acre-feet, Drainage Area\*: 4.07 acres

\*(If drainage area is unknown leave blank and a spillway size will be assigned):

Emergency Spillway: (See Table 1, Spillway Sizing Guidelines)

- Bottom Width: 24 ft., Side Slopes: 4 H:1V, Freeboard<sup>3</sup>: 1.5 ft

Outlet Conduit Type: HDPE pipe, Size: 12 inches, Location:

Stream Name or Water Source<sup>4</sup>: Site Proposed Water Use: No Use - Water Quality Treatment

Water Court Case or WDID : N/A
(Water District Identification Number)

VINCENT CROWDER 7.22.20
Signature of Owner Date

Office Use Only

DIVISION ENGINEER'S REQUIREMENTS:

Dam I.D. Signature of Division Engineer Date

1 A "Non-Jurisdictional Structure" is a dam creating a reservoir with a capacity of 100 acre-feet or less and a surface area of 20 acres or less and a vertical height (footnote 2) of 10 feet or less. Non-jurisdictional size dams are regulated and subject to the authority of the State Engineer consistent with sections 37-87-102 and 37-87-105 C.R.S.
2 "Vertical Height" is measured from the elevation of the lowest point of the natural surface of the ground or the invert of the outlet conduit (whichever is lower) where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam.
3 "Freeboard" is the vertical distance from the bottom of spillway to the crest of the dam. Minimum Freeboard is 3 feet.
4 If construction in reservoir intercepts groundwater, a well permit is required. (Well permit applications can be found at www.water.state.co.us)



July 22, 2020

**Colorado Division of Water Resources**

Dam Safety Branch  
4255 Sinton Road  
Colorado Springs, CO 80907

Attn: Mr. John Hunyadi, P.E.  
Dam Safety Engineer

**Re: Statement of Hazard Classification – Sand Filter Basin C1  
Sanctuary of Peace Residential Community  
Project No. 61087**

Dear Mr. Hunyadi:

The Sanctuary of Peace Residential Community site is in El Paso County, Colorado and is located within the southwest one-quarter of the northeast one-quarter of Section 27, Township 11 South, Range 66 West of the 6th principal meridian in El Paso County, Colorado. The 3.7± acre site being developed is situated west of Highway 83 between Stagecoach Road and Hodgen Road, just south of Benet Lane and Benet Hill Monastery. The site is currently undeveloped pine forest. The El Paso County Assessor's Schedule Number for the site is 6127000063. The proposed site is being platted into 27 lots for 13 duplex residential structures and one community house plus large areas of open space. A Vicinity Map is attached. The proposed Sand Filter Basin for the Sanctuary of Peace Residential Community is one of three being proposed for this site and is located at the southeast edge of the development and collects runoff from the eastern developed portions of the site. The subject facility is a full spectrum sand filter basin. The developed area of the site is located in the Smith Creek Drainage Basin and Black Squirrel Creek Drainage Basin, with this facility discharging into the Black Squirrel Creek Drainage Basin.

The classification for this facility is **Low Hazard**. Loss of human life is not expected, and significant damage to structures and public facilities as defined for a "Significant Hazard" dam is not expected to result from failure of the dam.

The justification for the NPH classification is as follows:

- The jurisdictional height of the dam is small. The height of the embankment inside the ponding area is 3.5 feet.. The jurisdictional height from the downstream embankment extent to the emergency spillway crest is 6.0 feet.
- The inflow rates into the pond are small. The 100 year inflow rate is 12.5 cfs draining from a contributing watershed of 5.68 acres in area.
- The storage volume of the pond and impounded storm water volume is small (10,563 cubic feet or 0.242 acre feet).

**Engineers • Surveyors**  
**1903 Lelaray Street, Suite 200 • Colorado Springs, CO 80909 • Phone 719-635-5736**  
**Fax 719-635-5450 • e-mail [mve@mvecivil.com](mailto:mve@mvecivil.com)**

Statement of Hazard Classification  
Sand Filter Basin C1, Sanctuary of Peace Residential Community  
July 22, 2020  
Page 2

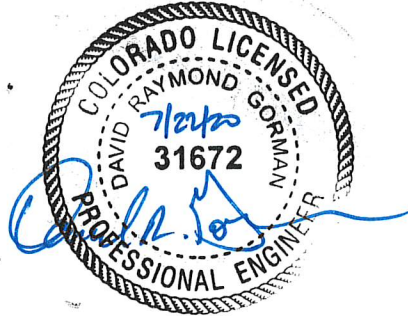
- The topography of the property downstream of the facility and the emergency spillway will direct flows to be dispersed over open ground in the event of any failure.

Modeling and analysis of this insignificant facility is not necessary to determine the classification and is not performed. Please contact me if there are questions regarding this statement.

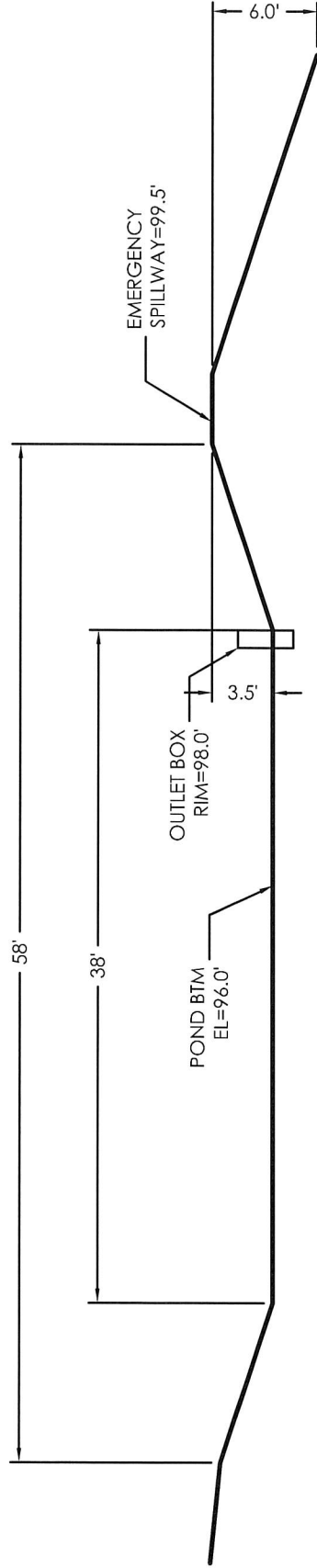
Very truly yours,

M.V.E., Inc.

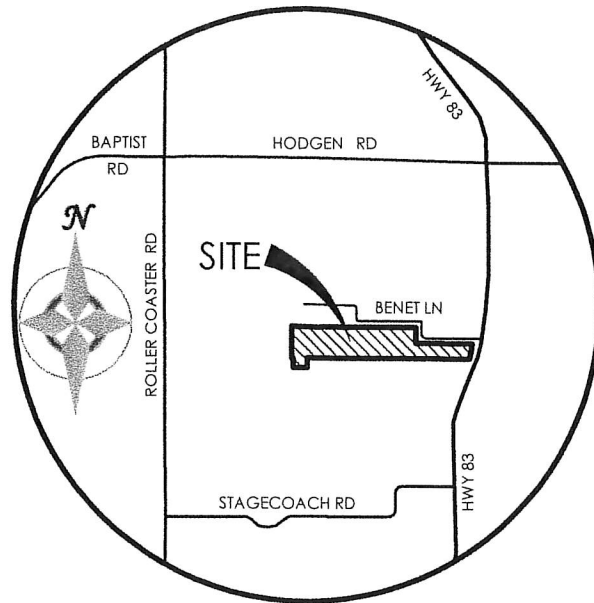
David R. Gorman, P.E.  
DRG:cwg



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SANCTUARY OF PEACE  
 SAND FILTER BASIN POND C1 SECTION  
 SCALE = 1"=10'



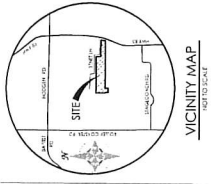
VICINITY MAP

NOT TO SCALE









**VICINITY MAP**  
SCALE: 1" = 1/4" = 1/2" = 1/4"



**MVE, INC.**  
ENGINEERS SURVEYORS  
1001 BERRY STREET, SUITE 500  
DALLAS, TEXAS 75202  
PHONE: 214.750.5738  
FAX: 214.750.5739

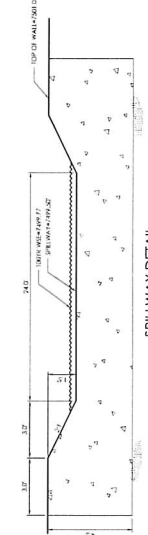
REVISIONS:

DESIGNED BY  
CHECKED BY  
DATE

**SANCTUARY OF PEACE  
RESIDENTIAL COMMUNITY**  
**GRADING & EROSION  
CONTROL PLAN**  
**POND PLAN (C1)**

**C-6**  
PROJECT: 61087  
DATE: 04/28/2020  
DRAWING: C-6C-PD2

APRIL 28, 2020  
SHEET 6 OF 10



**SPILLWAY DETAIL**  
SCALE: 1" = 1/8" = 1/4" = 1/2"

**TABLE SP-2 (SLOTTED PIPE DIMENSIONS)**

PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT CENTER TO CENTER	ORIFICE AREA (SQ. FT.)
4"	1-1/8"	0.032"	0-4/3"	1.93 SQ. IN.

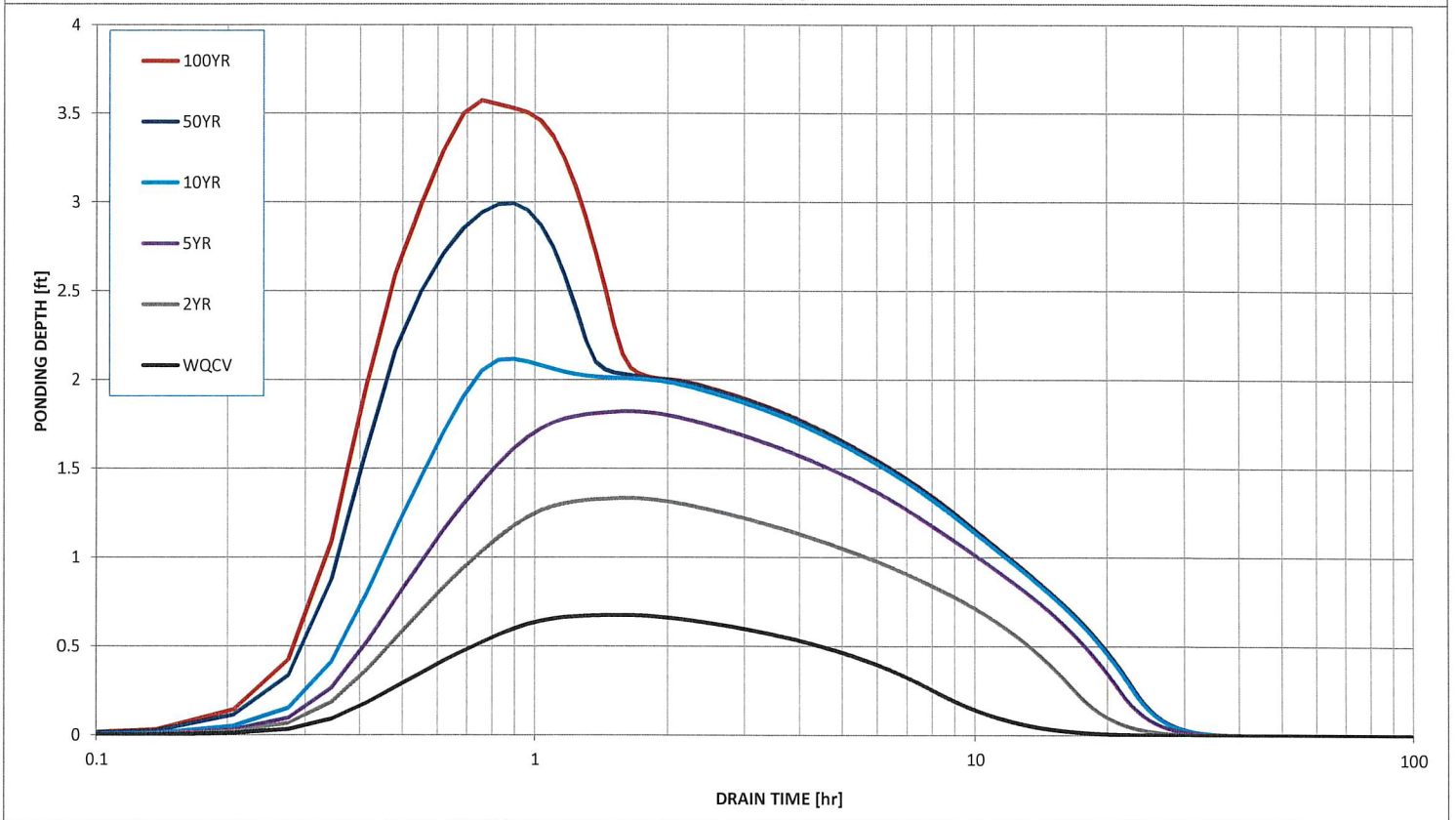
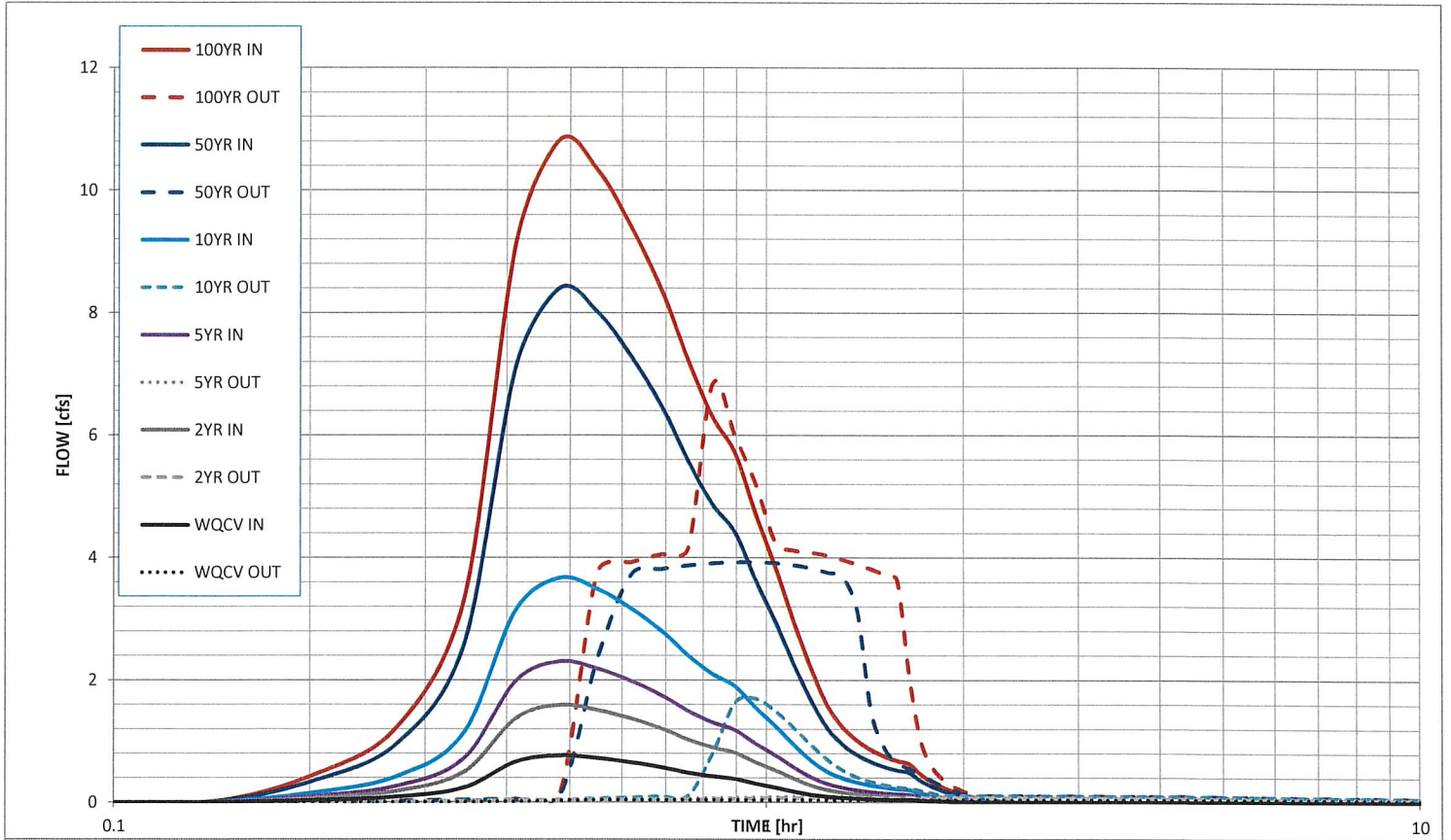
**HAND FILTER SPECIFICATIONS, NOTES:**  
1. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625").  
2. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625").  
3. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625").  
4. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625").  
5. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).  
6. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).  
7. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).  
8. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).  
9. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).  
10. FILTERS SHALL BE MADE OF 100% POLYPROPYLENE (PP) WITH A MESH SIZE OF 1/16" (0.0625%).

**SOIL MATERIAL GRADATION TABLE**

STANDARD	GRAVEL	SAND	SILT	CLAY	FLUIDITY
NO. 10	100	0	0	0	0
NO. 20	100	0	0	0	0
NO. 40	100	0	0	0	0
NO. 60	100	0	0	0	0
NO. 80	100	0	0	0	0
NO. 100	100	0	0	0	0
NO. 200	100	0	0	0	0
NO. 425	100	0	0	0	0
NO. 600	100	0	0	0	0
NO. 850	100	0	0	0	0
NO. 1060	100	0	0	0	0
NO. 1490	100	0	0	0	0
NO. 2000	100	0	0	0	0
NO. 2800	100	0	0	0	0
NO. 3750	100	0	0	0	0
NO. 4750	100	0	0	0	0
NO. 6000	100	0	0	0	0
NO. 7500	100	0	0	0	0
NO. 9500	100	0	0	0	0
NO. 12000	100	0	0	0	0
NO. 15000	100	0	0	0	0
NO. 19000	100	0	0	0	0
NO. 24000	100	0	0	0	0
NO. 30000	100	0	0	0	0
NO. 37500	100	0	0	0	0
NO. 47500	100	0	0	0	0
NO. 60000	100	0	0	0	0
NO. 75000	100	0	0	0	0
NO. 95000	100	0	0	0	0
NO. 120000	100	0	0	0	0
NO. 150000	100	0	0	0	0
NO. 190000	100	0	0	0	0
NO. 240000	100	0	0	0	0
NO. 300000	100	0	0	0	0
NO. 375000	100	0	0	0	0
NO. 475000	100	0	0	0	0
NO. 600000	100	0	0	0	0
NO. 750000	100	0	0	0	0
NO. 950000	100	0	0	0	0
NO. 1200000	100	0	0	0	0
NO. 1500000	100	0	0	0	0
NO. 1900000	100	0	0	0	0
NO. 2400000	100	0	0	0	0
NO. 3000000	100	0	0	0	0
NO. 3750000	100	0	0	0	0
NO. 4750000	100	0	0	0	0
NO. 6000000	100	0	0	0	0
NO. 7500000	100	0	0	0	0
NO. 9500000	100	0	0	0	0
NO. 12000000	100	0	0	0	0
NO. 15000000	100	0	0	0	0
NO. 19000000	100	0	0	0	0
NO. 24000000	100	0	0	0	0
NO. 30000000	100	0	0	0	0
NO. 37500000	100	0	0	0	0
NO. 47500000	100	0	0	0	0
NO. 60000000	100	0	0	0	0
NO. 75000000	100	0	0	0	0
NO. 95000000	100	0	0	0	0
NO. 120000000	100	0	0	0	0
NO. 150000000	100	0	0	0	0
NO. 190000000	100	0	0	0	0
NO. 240000000	100	0	0	0	0
NO. 300000000	100	0	0	0	0
NO. 375000000	100	0	0	0	0
NO. 475000000	100	0	0	0	0
NO. 600000000	100	0	0	0	0
NO. 750000000	100	0	0	0	0
NO. 950000000	100	0	0	0	0
NO. 1200000000	100	0	0	0	0
NO. 1500000000	100	0	0	0	0
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NO. 3750000000	100	0	0	0	0
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NO. 24000000000	100	0	0	0	0
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NO. 47500000000	100	0	0	0	0
NO. 60000000000	100	0	0	0	0
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NO. 950000000000	100	0	0	0	0
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NO. 1900000000000	100	0	0	0	0
NO. 2400000000000	100	0	0	0	0
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NO. 3750000000000	100	0	0	0	0
NO. 4750000000000	100	0	0	0	0
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NO. 7500000000000	100	0	0	0	0
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NO. 95000000000000	100	0	0	0	0
NO. 120000000000000	100	0	0	0	0
NO. 150000000000000	100	0	0	0	0
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NO. 240000000000000	100	0	0	0	0
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NO. 375000000000000	100	0	0	0	0
NO. 475000000000000	100	0	0	0	0
NO. 600000000000000	100	0	0	0	0
NO. 750000000000000	100	0	0	0	0
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NO. 75000000000000000	100	0	0	0	0
NO. 95000000000000000	100	0	0	0	0
NO. 120000000000000000	100	0	0	0	0
NO. 150000000000000000	100	0	0	0	0
NO. 190000000000000000	100	0	0	0	0
NO. 240000000000000000	100	0	0	0	0
NO. 300000000000000000	100	0	0	0	0
NO. 375000000000000000	100	0	0	0	0
NO. 475000000000000000	100	0	0	0	0
NO. 600000000000000000	100	0	0	0	0
NO. 750000000000000000	100	0	0	0	0
NO. 950000000000000000	100	0	0	0	0
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NO. 3750000000000000000	100	0	0	0	0
NO. 4750000000000000000	100	0	0	0	0
NO. 6000000000000000000	100	0	0	0	0
NO. 7500000000000000000	100	0	0	0	0
NO. 9500000000000000000	100	0	0	0	0



# Stormwater Detention and Infiltration Design Data Sheet





**NON-JURISDICTIONAL WATER IMPOUNDMENT STRUCTURE<sup>1</sup>**

This notice is required per Section 37-87-125, C.R.S. (1998) and must be submitted to the Division Engineer's Office a minimum of 45 days prior to construction.

**OWNER INFORMATION**

Name: BENET HILL MONASTERY OF COLORADO SPRINGS Telephone/E-Mail: ( 719 ) 633-0655 /

Address: 3190 BENET LANE, COLORADO SPRINGS CO 80921-1509  
 Street / P.O. Box/ Rural Route City State Zip Code

Responsible Person: Vincent Crowder Telephone/E-Mail: ( 719 ) 633-0655 /

Address: 15760 COLORADO HIGHWAY 83, COLORADO SPRINGS, CO 80923  
 Street / P.O. Box/ Rural Route City State Zip Code

Contractor: TBD Telephone/E-Mail: ( ) /

**STRUCTURE INFORMATION**

Name of Dam: SANCTUARY OF PEACE - POND C2 Water Division: 2 Water District: 10

Location: (Provide Section, Township, Range, **and** GPS Point taken at crest of dam above streamline/outlet)

- Section: 27, Township: 11 S, Range: 66 W, 6th P.M.

- Northing 4,323,531 meters, Easting 520,004 meters (Datum should be UTM, NAD 83)

Dam Dimensions:

- Vertical Height<sup>2</sup>: 4.5 ft., Length: 54 ft., Crest Width: 4 ft., Slopes: U/S: 3 (H:1V), D/S 3 (H:1V)

Reservoir:

- Surface Area<sup>1</sup>: 0.029 acres, Capacity<sup>1</sup>: 0.041 acre-feet, Drainage Area\*: 0.66 acres

\*(If drainage area is unknown leave blank and a spillway size will be assigned):

Emergency Spillway: (See Table 1, Spillway Sizing Guidelines)

- Bottom Width: 10 ft., Side Slopes: 4 H:1V, Freeboard<sup>3</sup>: 1.5 ft

Outlet Conduit Type: HDPE pipe, Size: 12 inches, Location: \_\_\_\_\_

Stream Name or Water Source<sup>4</sup>: Site Proposed Water Use: No Use - Water Quality Treatment

Water Court Case **or** WDID : N/A  
 (Water District Identification Number)

Vincent Crowder 7.22.20  
 Signature of Owner Date

**Office Use Only**

**DIVISION ENGINEER'S REQUIREMENTS:** \_\_\_\_\_

**Dam I.D.** \_\_\_\_\_ Signature of Division Engineer Date

<sup>1</sup> A "Non-Jurisdictional Structure" is a dam creating a reservoir with a capacity of 100 acre-feet or less and a surface area of 20 acres or less and a vertical height (footnote 2) of 10 feet or less. Non-jurisdictional size dams are regulated and subject to the authority of the State Engineer consistent with sections 37-87-102 and 37-87-105 C.R.S.  
<sup>2</sup> "Vertical Height" is measured from the elevation of the lowest point of the natural surface of the ground or the invert of the outlet conduit (whichever is lower) where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam.  
<sup>3</sup> "Freeboard" is the vertical distance from the bottom of spillway to the crest of the dam. Minimum Freeboard is 3 feet.  
<sup>4</sup> If construction in reservoir intercepts groundwater, a well permit is required. (Well permit applications can be found at [www.water.state.co.us](http://www.water.state.co.us))



July 22, 2020

**Colorado Division of Water Resources**

Dam Safety Branch  
4255 Sinton Road  
Colorado Springs, CO 80907

Attn: Mr. John Hunyadi, P.E.  
Dam Safety Engineer

**Re: Statement of Hazard Classification – Sand Filter Basin C2  
Sanctuary of Peace Residential Community  
Project No. 61087**

Dear Mr. Hunyadi:

The Sanctuary of Peace Residential Community site is in El Paso County, Colorado and is located within the southwest one-quarter of the northeast one-quarter of Section 27, Township 11 South, Range 66 West of the 6th principal meridian in El Paso County, Colorado. The 3.7± acre site being developed is situated west of Highway 83 between Stagecoach Road and Hodgen Road, just south of Benet Lane and Benet Hill Monastery. The site is currently undeveloped pine forest. The El Paso County Assessor's Schedule Number for the site is 6127000063. The proposed site is being platted into 27 lots for 13 duplex residential structures and one community house plus large areas of open space. A Vicinity Map is attached. The proposed Sand Filter Basin for the Sanctuary of Peace Residential Community is one of three being proposed for this site and is located at the south central edge of the development and collects runoff from the central developed portions of the site. The subject facility is a full spectrum sand filter basin. The developed area of the site is located in the Smith Creek Drainage Basin and Black Squirrel Creek Drainage Basin, with this facility discharging into the Black Squirrel Creek Drainage Basin.

The classification for this facility is **Low Hazard**. Loss of human life is not expected, and significant damage to structures and public facilities as defined for a "Significant Hazard" dam is not expected to result from failure of the dam.

The justification for the NPH classification is as follows:

- The jurisdictional height of the dam is small. The height of the embankment inside the ponding area is 2.0 feet. The jurisdictional height from the downstream embankment extent to the emergency spillway crest is 4.5 feet.
- The inflow rates into the pond are very small. The 100 year inflow rate is 2.4 cfs draining from a contributing watershed of 0.66 acres in area.
- The storage volume of the pond and impounded storm water volume is small (1,783 cubic feet or 0.041 acre feet).

*Engineers • Surveyors*  
**1903 Lelaray Street, Suite 200 • Colorado Springs, CO 80909 • Phone 719-635-5736**  
**Fax 719-635-5450 • e-mail [mve@mvecivil.com](mailto:mve@mvecivil.com)**

Statement of Hazard Classification  
Sand Filter Basin C2, Sanctuary of Peace Residential Community  
July 22, 2020  
Page 2

- The topography of the property downstream of the facility and the emergency spillway will direct flows to be dispersed over open ground in the event of any failure.

Modeling and analysis of this insignificant facility is not necessary to determine the classification and is not performed. Please contact me if there are questions regarding this statement.

Very truly yours,

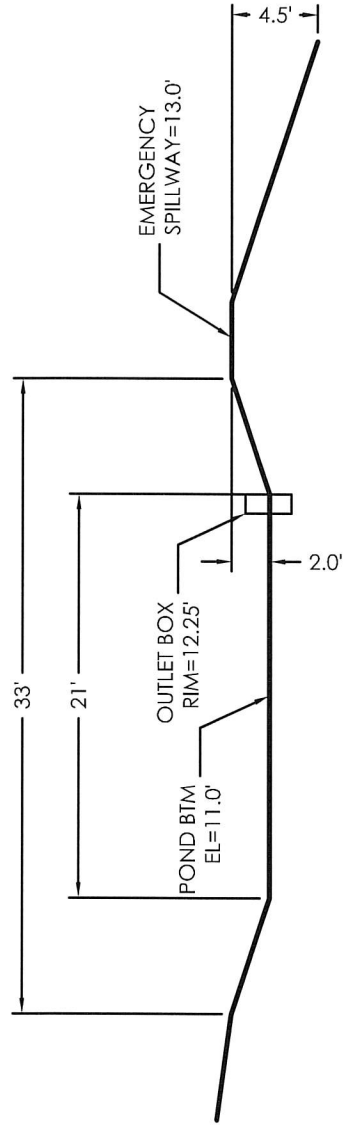
M.V.E., Inc.



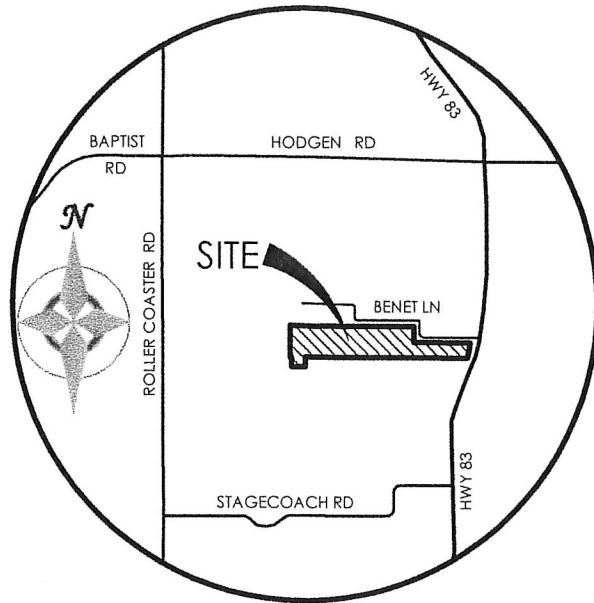
David R. Gorman, P.E.  
DRG:cwg

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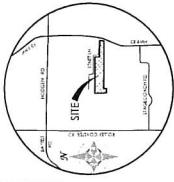


SANCTUARY OF PEACE  
 SAND FILTER BASIN POND C2 SECTION  
 SCALE = 1"=10'



VICINITY MAP

NOT TO SCALE



BENCHMARK:  
 POINT PROPERTY CORNER SOUTHWEST CORNER OF BURET LANE  
 MONUMENTAL BR. 1/4 SECTION 10, T12N, R10E, S12E



**MVE, INC.**  
 ENGINEERS & SURVEYORS  
 10033 Beverly Street, Suite 300, Los Angeles, CA 90049 710.915.5736

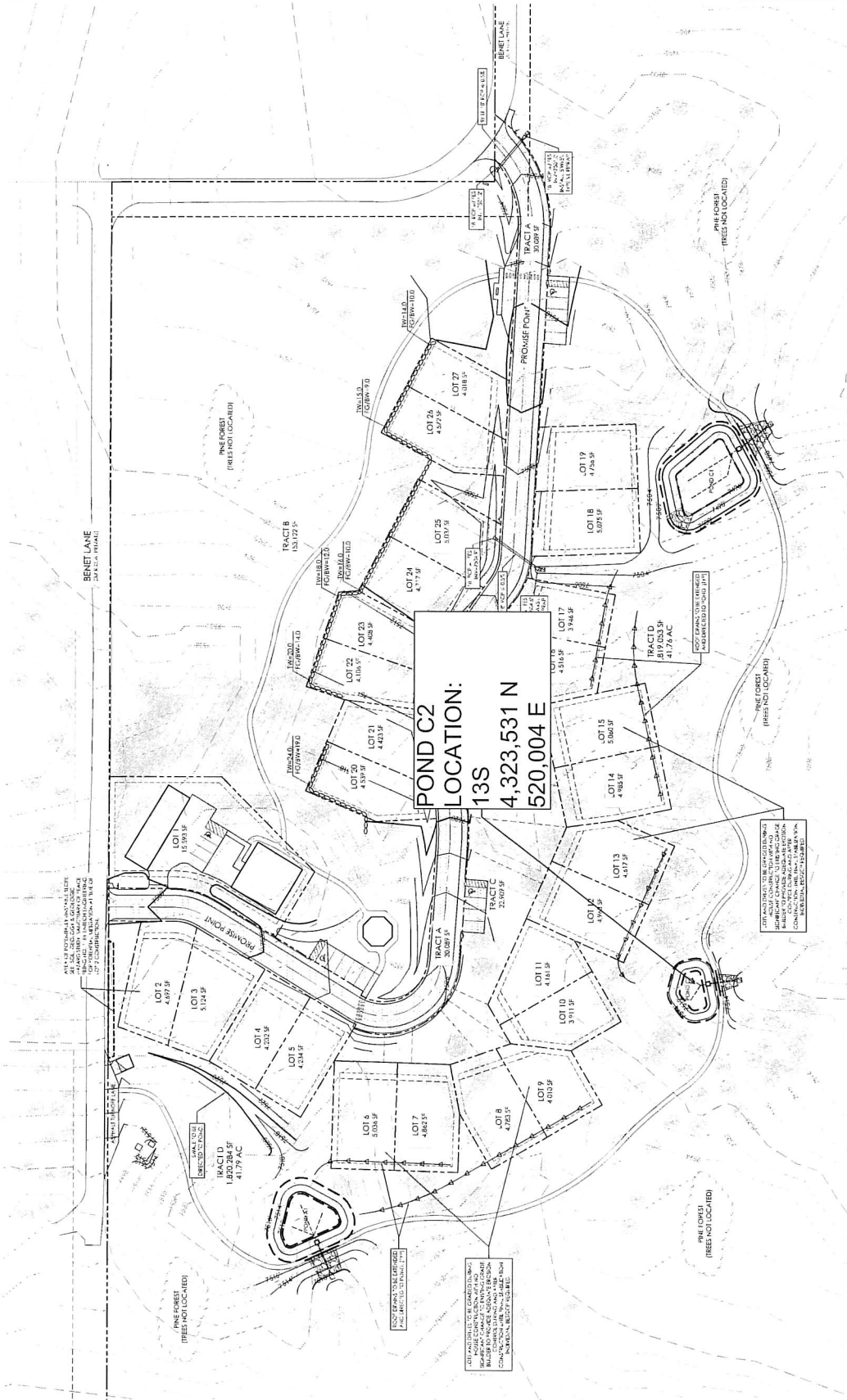
DESIGNED BY  
 CHECKED BY  
 APPROVED BY

**SANCTUARY OF PEACE**  
 RESIDENTIAL COMMUNITY  
 GRADING & EROSION  
 CONTROL PLAN  
 GRADING PLAN

**C-3**  
 SHEET PROJECT: 61087  
 NAME: SANCTUARY OF PEACE  
 DATE: 04/28/2020

APRIL 28, 2020  
 SHEET 3 OF 10

PUDSP-19-002



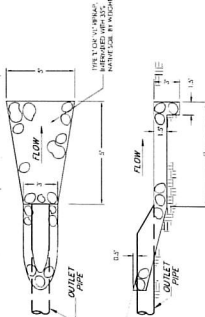
**POND C2**  
 LOCATION:  
 13S  
 4,323,531 N  
 520,004 E

ANY LOT PROPOSED TO BE LOCATED IN THESE AREAS SHALL BE CONSIDERED TO BE IN A PINE FOREST. THE LOCATION OF PINE TREES SHALL BE INDICATED BY A DOTTED LINE WITH A 'P' AT THE END OF THE LINE. THE LOCATION OF PINE TREES SHALL BE INDICATED BY A DOTTED LINE WITH A 'P' AT THE END OF THE LINE.

LOT 10 AND LOT 11 ARE PROPOSED TO BE LOCATED IN A PINE FOREST. THE LOCATION OF PINE TREES SHALL BE INDICATED BY A DOTTED LINE WITH A 'P' AT THE END OF THE LINE. THE LOCATION OF PINE TREES SHALL BE INDICATED BY A DOTTED LINE WITH A 'P' AT THE END OF THE LINE.

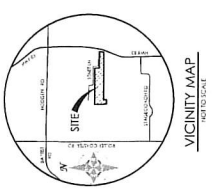
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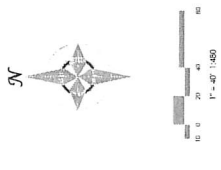
**RIPRAP AT CULVERT OUTLETS**  
 MTS





**VICINITY MAP**  
SCALE: 1" = 1/4" MI

SECTION: 2000  
PROJECT: 2000  
DATE: 11/15/18

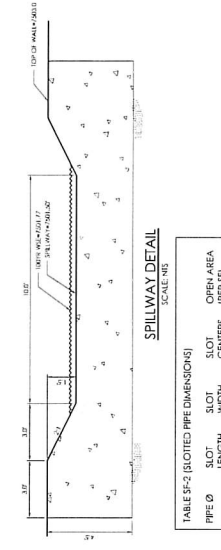


DESIGNED BY  
CHECKED BY  
APPROVED BY  
DATE: 11/15/18

**SANCTUARY OF PEACE  
RESIDENTIAL COMMUNITY**  
**GRADING & EROSION  
CONTROL PLAN**  
**POND PLAN (C2)**

**C-7**  
DATE: 11/15/18  
PROJECT: 2000

APRIL 28, 2020  
SHEET 7 OF 10



**SPILLWAY DETAIL**  
SCALE: 1" = 1' 0"

**TABLE SF-2 (SLOTTED PIPE DIMENSIONS)**

PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT SPACING	OPEN AREA (PERCENT)
4"	1-1/8"	0.032"	0.413"	1.90 SQ. IN.

**SAND FILTER SPECIFICATIONS - NOTES**

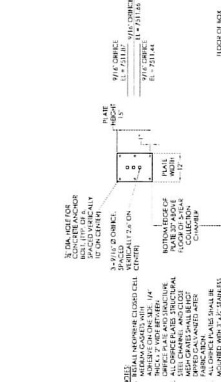
1. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
2. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
3. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
4. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
5. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
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8. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
9. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.
10. FILTER MEDIA SHALL BE WASHED AND SCREENED TO REMOVE ALL FINE MATERIAL.

**SOIL MATERIAL GRADATION TABLE**

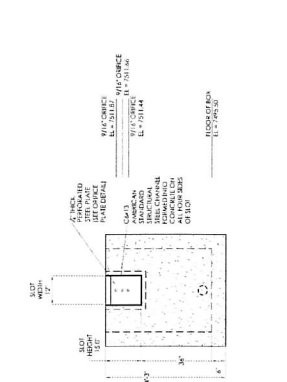
STANDARD	GRAVEL	SAND	SILT	CLAY	FLUIDITY
NO. 10	100	100	100	100	100
NO. 20	100	100	100	100	100
NO. 40	100	100	100	100	100
NO. 60	100	100	100	100	100
NO. 100	100	100	100	100	100
NO. 200	100	100	100	100	100
NO. 425	100	100	100	100	100
NO. 850	100	100	100	100	100
NO. 1750	100	100	100	100	100
NO. 3540	100	100	100	100	100

**BAIR DATA TABLE**

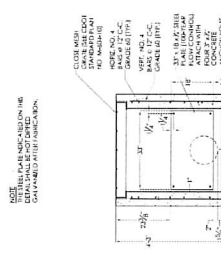
PROJECT	SANITARY	INDUSTRIAL	STORM	RECYCLED	RESTRICTOR	RY-OUT	RY-OUT	RY-OUT
	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)	DIAMETER (IN)
1	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"



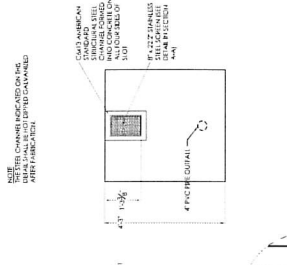
**ORIFICE PLATE**  
SCALE: 1" = 1' 0"



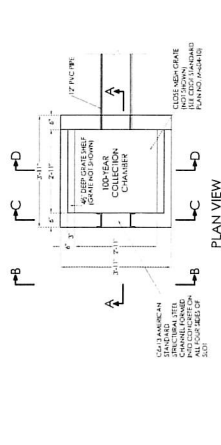
**SECTION C-C**



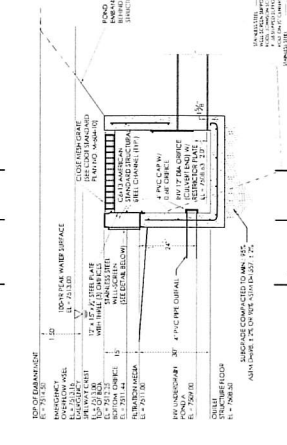
**SECTION D-D**



**SECTION B-B**

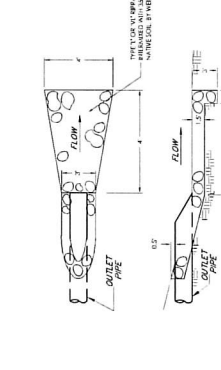


**PLAN VIEW**

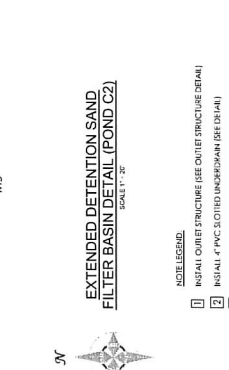


**SECTION A-A**

**SAND FILTER BASIN OUTLET STRUCTURE DETAILS (POND C2)**



**RIPRAP AT CULVERT OUTLETS**  
SCALE: 1" = 1' 0"



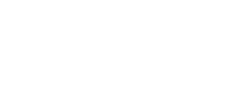
**EXTENDED DETENTION SAND FILTER BASIN DETAIL (POND C2)**  
SCALE: 1" = 1' 0"

- NOTES:**
1. BASIN OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
  2. BASIN 4" PVC SLOTTED UNDERDRAIN (SEE DETAIL)
  3. SAND FILTER (SEE DETAIL)
  4. 20" WIDE EMERGENCY SPILLWAY (SEE SPILLWAY DETAIL)
  5. INSTALL 4" x 4" TYPE V. OR. SOIL RIP-RAP PAD



**VICINITY MAP**  
SCALE: 1" = 1/4" MI

SECTION: 2000  
PROJECT: 2000  
DATE: 11/15/18



DESIGNED BY  
CHECKED BY  
APPROVED BY  
DATE: 11/15/18

**SANCTUARY OF PEACE  
RESIDENTIAL COMMUNITY**  
**GRADING & EROSION  
CONTROL PLAN**  
**POND PLAN (C2)**

**C-7**  
DATE: 11/15/18  
PROJECT: 2000

APRIL 28, 2020  
SHEET 7 OF 10

# Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name:** Sanctuary of Peace - Pond C2

**Facility Location & Jurisdiction:** 15760 Colorado Highway 83, El Paso County, Colorado

**User Input: Watershed Characteristics**

Watershed Slope = 0.063 ft/ft  
 Watershed Length = 189 ft  
 Watershed Area = 0.66 acres  
 Watershed Imperviousness = 26.7% percent  
 Percentage Hydrologic Soil Group A = 0.0% percent  
 Percentage Hydrologic Soil Group B = 100.0% percent  
 Percentage Hydrologic Soil Groups C/D = 0.0% percent

Location for 1-hr Rainfall Depths (use dropdown):

User Input ▼

WQCV Treatment Method = Sand Filter ▼

User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	546	0.00	0.00
0.25	619	0.25	0.01
0.44	684	0.44	0.01
0.50	700	0.50	0.01
0.75	786	0.75	0.01
1.00	876	1.00	0.02
1.09	913	1.09	0.02
1.25	970	1.25	0.03
1.50	1,069	1.50	0.76
1.75	1,173	1.75	0.79
2.00	1,280	2.00	0.82
2.25	1,397	2.25	4.74
2.50	1,515	2.50	12.32
2.75	1,636	2.75	22.72
3.00	1,762	3.00	35.72
3.25	1,893	3.25	51.25
3.50	2,028	3.50	69.30

After completing and printing this worksheet to a pdf, go to:  
<https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>  
 create a new stormwater facility, and  
 attach the pdf of this worksheet to that record.

**Routed Hydrograph Results**

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.006	0.014	0.020	0.031	0.069	0.089	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.006	0.013	0.019	0.031	0.068	0.088	acre-ft
Time to Drain 97% of Inflow Volume =	14.8	20.3	<b>22.8</b>	23.3	20.3	19.4	hours
Time to Drain 99% of Inflow Volume =	19.0	24.6	27.0	27.6	24.6	<b>23.7</b>	hours
Maximum Ponding Depth =	0.34	0.77	1.03	1.32	1.72	2.02	ft
Maximum Poned Area =	0.01	0.02	0.02	0.02	0.03	<b>0.03</b>	acres
Maximum Volume Stored =	0.005	0.012	0.017	0.023	0.033	0.041	acre-ft

# Stormwater Detention and Infiltration Design Data Sheet

