

June 1, 2026

El Paso County
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Re: **Legacy Church – Green Mountain Falls - PCM Certification Letter**
El Paso County, Colorado

To whom it may concern:

This letter serves as the certification for Legacy Church – Green Mountain Falls, El Paso County, CO project consistent with El Paso County Engineering Manual (“ECM”) Section 5.10.6.B, which states that Engineering Record Drawings shall be accompanied by a certification letter from the Engineer of Record which shall state that facilities constructed provide the required storage volume, meet the required release rates, the stage areas, elevations and outlet dimensions. Even though the as-built condition shows faster release rates for the WQCV compared to design levels, the ponds are generally constructed per the approved plans, have been operating effectively for multiple years, provide the required detention volumes and release at less than historic rates. Legacy Church consists of the following drainage facilities which are included in this certification:

- West Full Spectrum Detention Pond
- East Full Spectrum Detention Pond

Based upon this information and information gathered during periodic site visits to the site during significant/key phases of the infrastructure installation, *Kimley-Horn & Associates, Inc.* is of the opinion that the work performed under the County Permit, per Section 5.10.6.B of the ECM, have been constructed in general compliance with the approved Construction Plans as filed with the County dated January 31st, 2020 and approved by El Paso County on July 21st, 2020.

Statement Of Engineer In Responsible Charge:

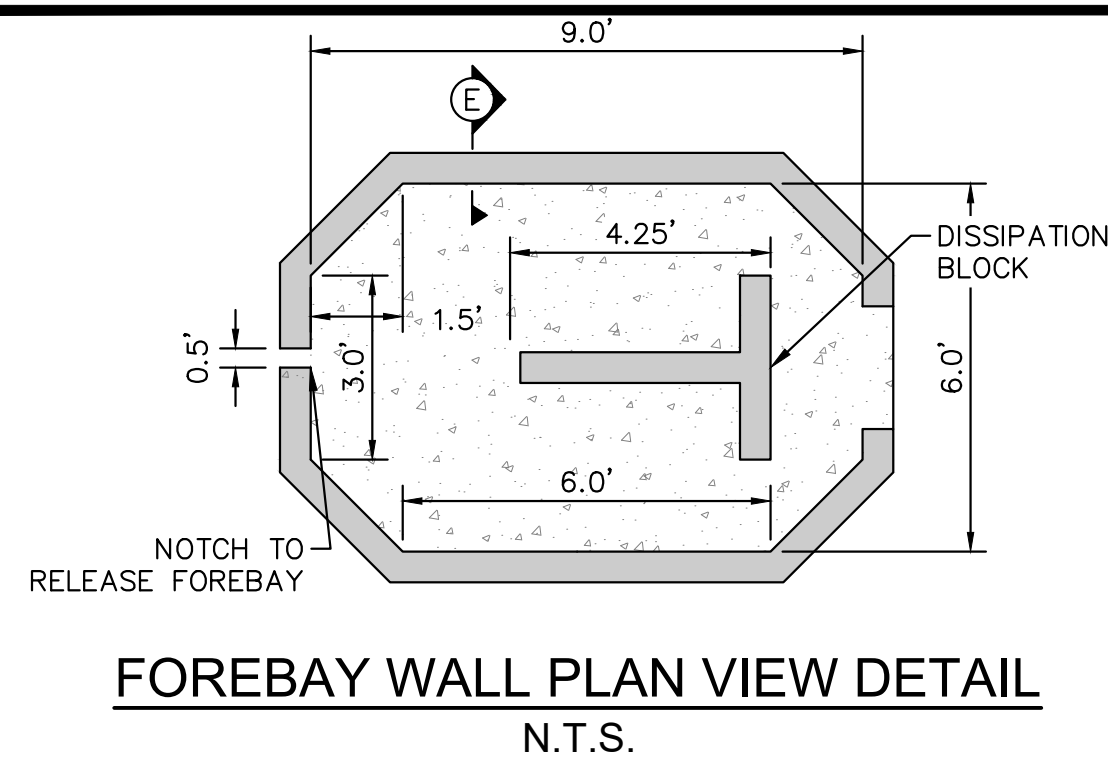
I, Eric Gunderson, a registered Professional Engineer in the State of Colorado, in accordance with Sections 5.2 and 5.3 of the Bylaws and Rules of the State Board of Registration for Professional Engineers and Professional Land Surveyors, do hereby certify that I or a person under my responsible charge periodically observed the construction of the above-mentioned project. Based on the on-site field observations and review of pertinent documentation, it is my professional opinion that the required infrastructure improvements have been installed and are in general compliance with the approved Construction Plans as filed with El Paso County.



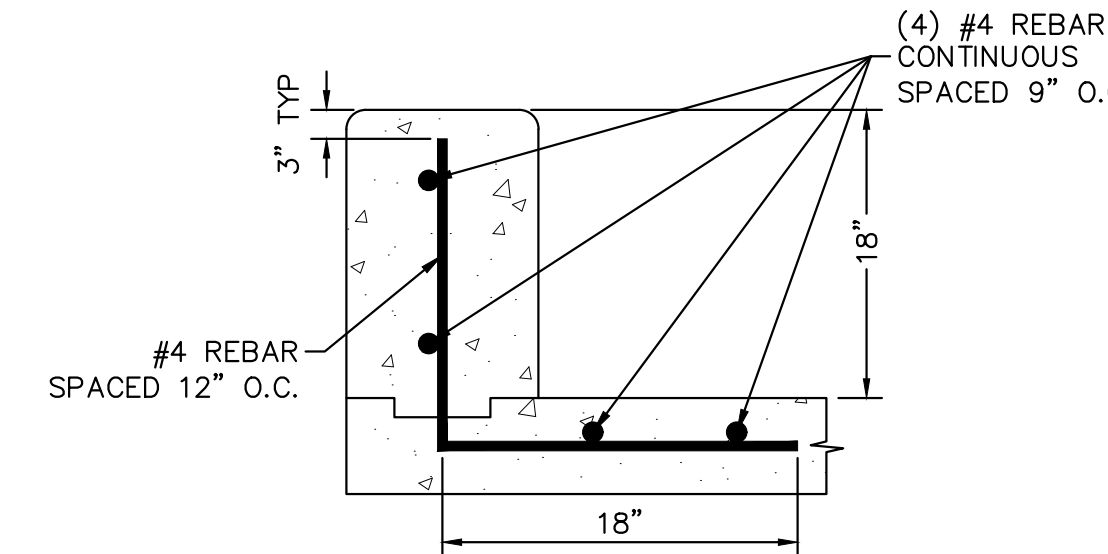
Eric Gunderson, P.E.
Colorado No. 49487

Revise the PCM Certification Letter to include the required statements listed in ECM Section 5.10.6.B (something similar is even required for Runoff Reduction):

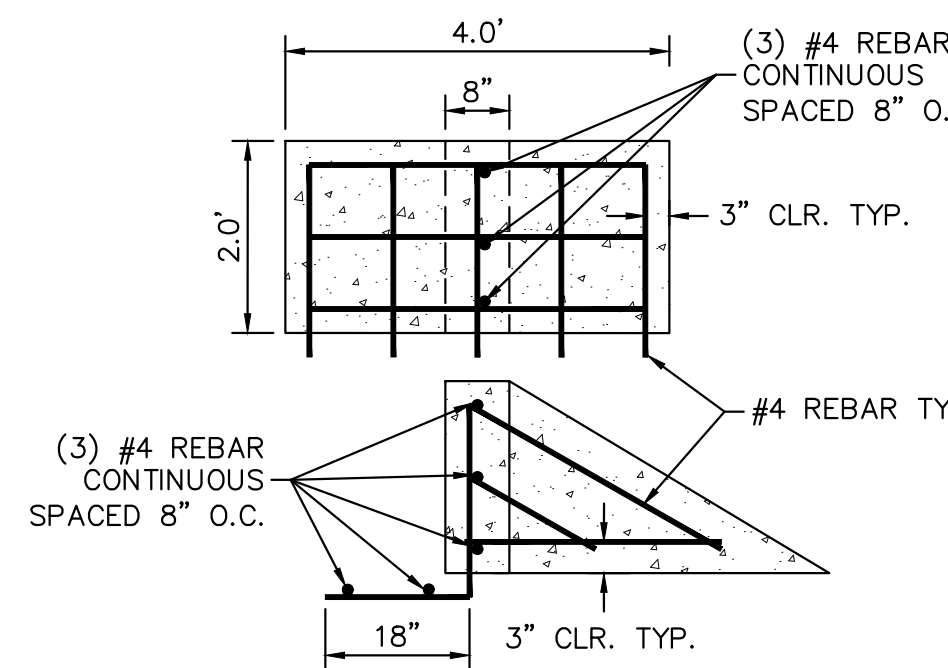
“The site and adjacent properties (as affected by work performed under the County permit) are stable with respect to settlement and subsidence, sloughing of cut and fill slopes, revegetation or other ground cover, and that the improvements (public improvements, common development improvements, site grading and paving) meet or exceed the minimum design requirements. The PCM(s) provide the required storage volume and meet the required release rates, stage areas, elevations, and outlet dimensions, as documented by the attached revised MHFD-Detention spreadsheet that shows the as-built conditions.”



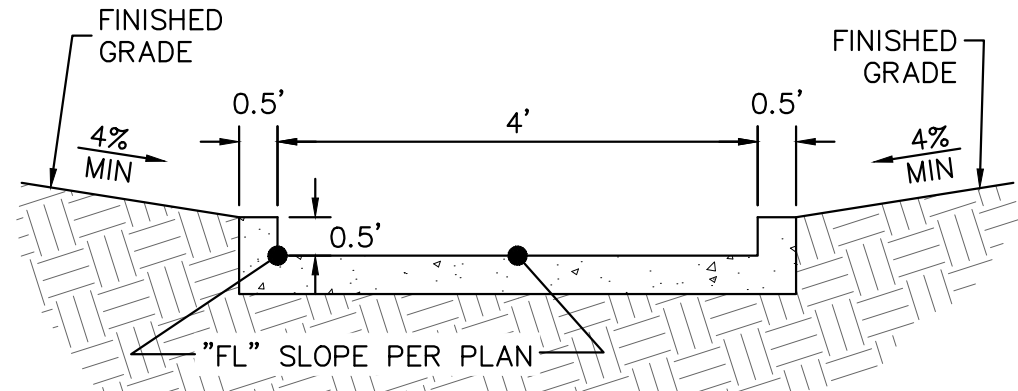
FOREBAY WALL PLAN VIEW DETAIL
N.T.S.



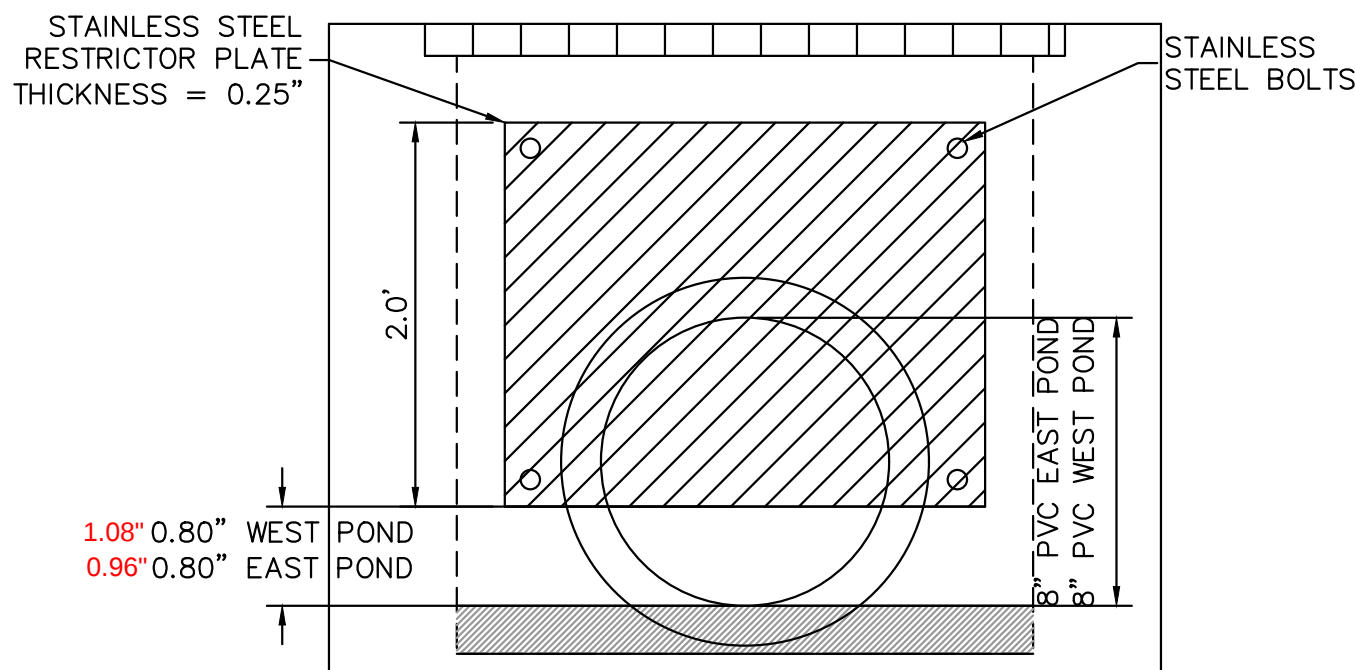
FOREBAY WALL SECTION E
N.T.S.



FOREBAY DISSIPATER DETAIL
N.T.S.

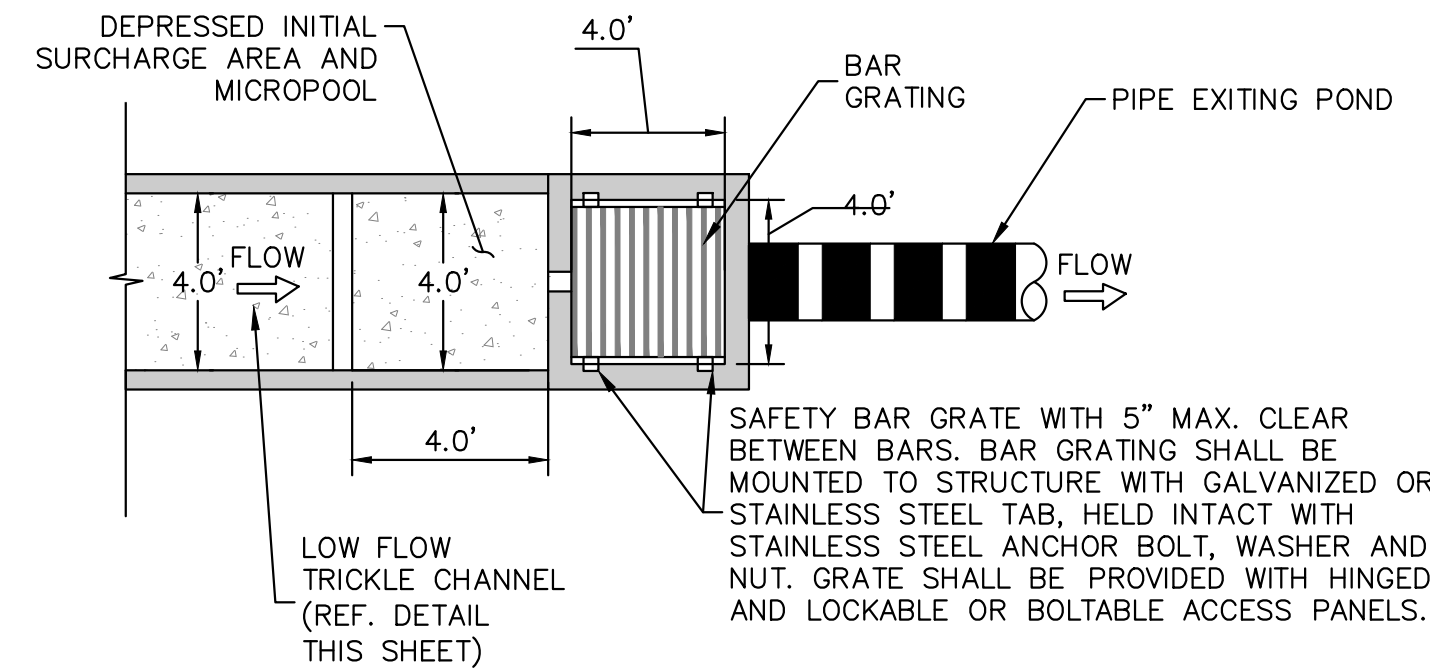


TRICKLE CHANNEL CROSS-SECTION DETAIL
N.T.S.

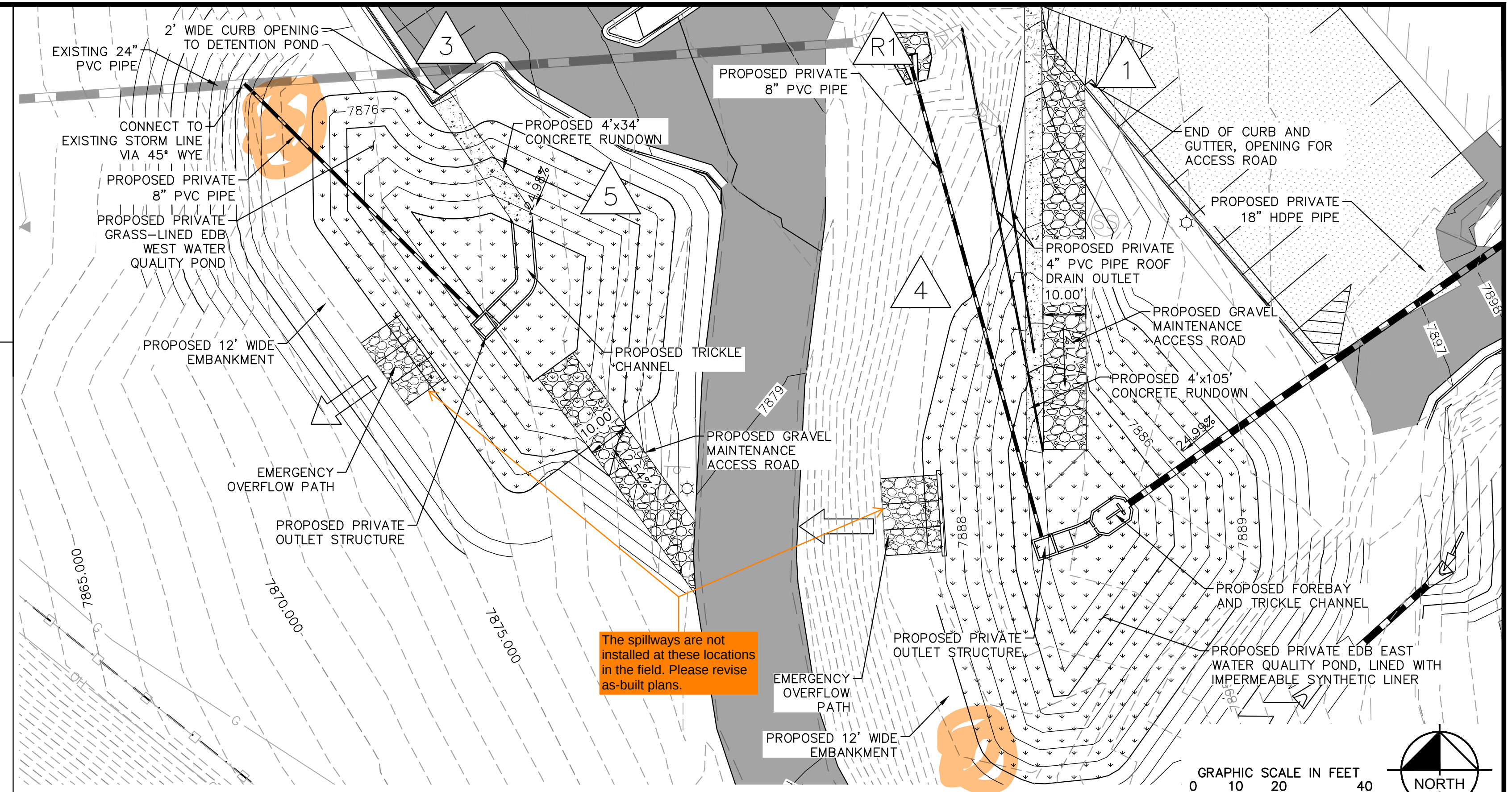


100-YEAR FLOW RESTRICTOR DETAIL
N.T.S.

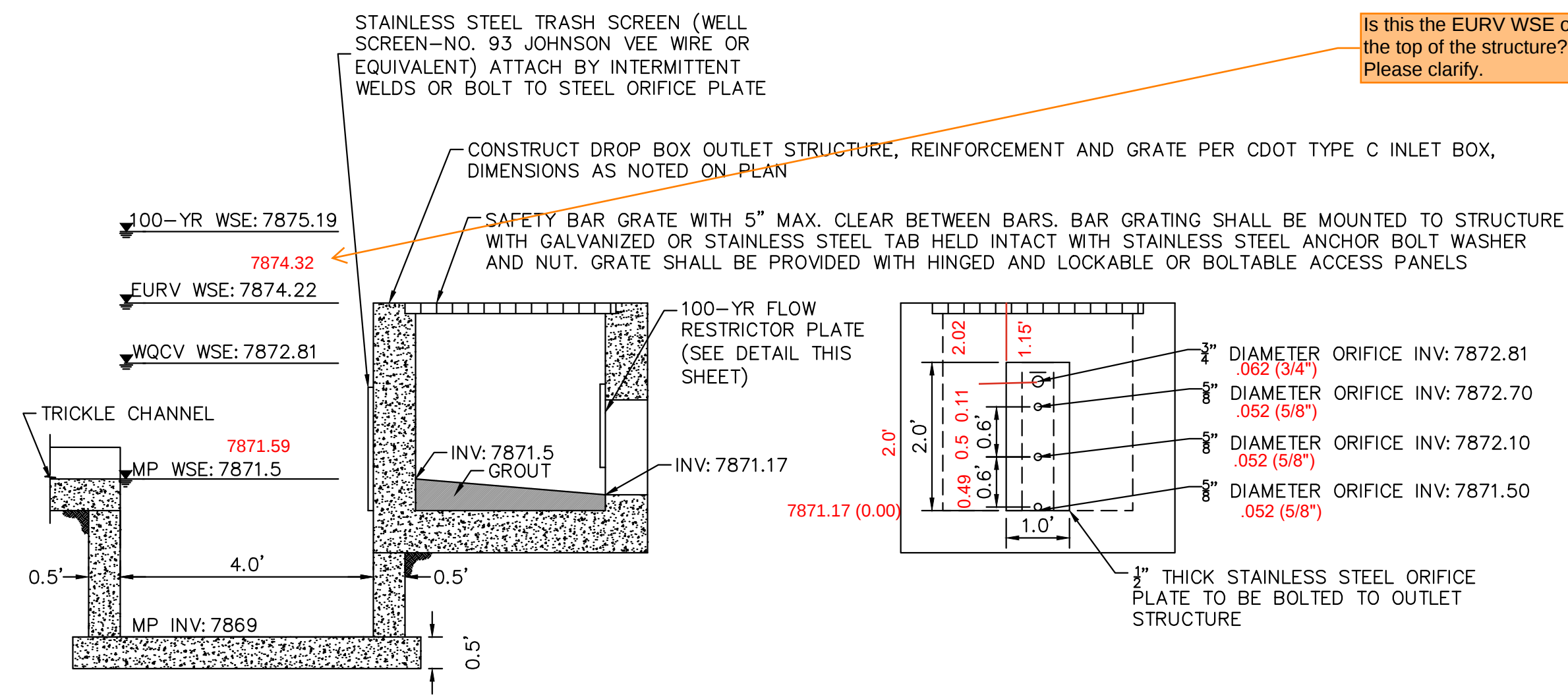
- LEGEND**
- — — — — PROPERTY LINE
 - XXXX — PROPOSED MAJOR CONTOUR
 - XXXX — PROPOSED MINOR CONTOUR
 - - - - - EXISTING MAJOR CONTOUR
 - - - - - EXISTING MINOR CONTOUR



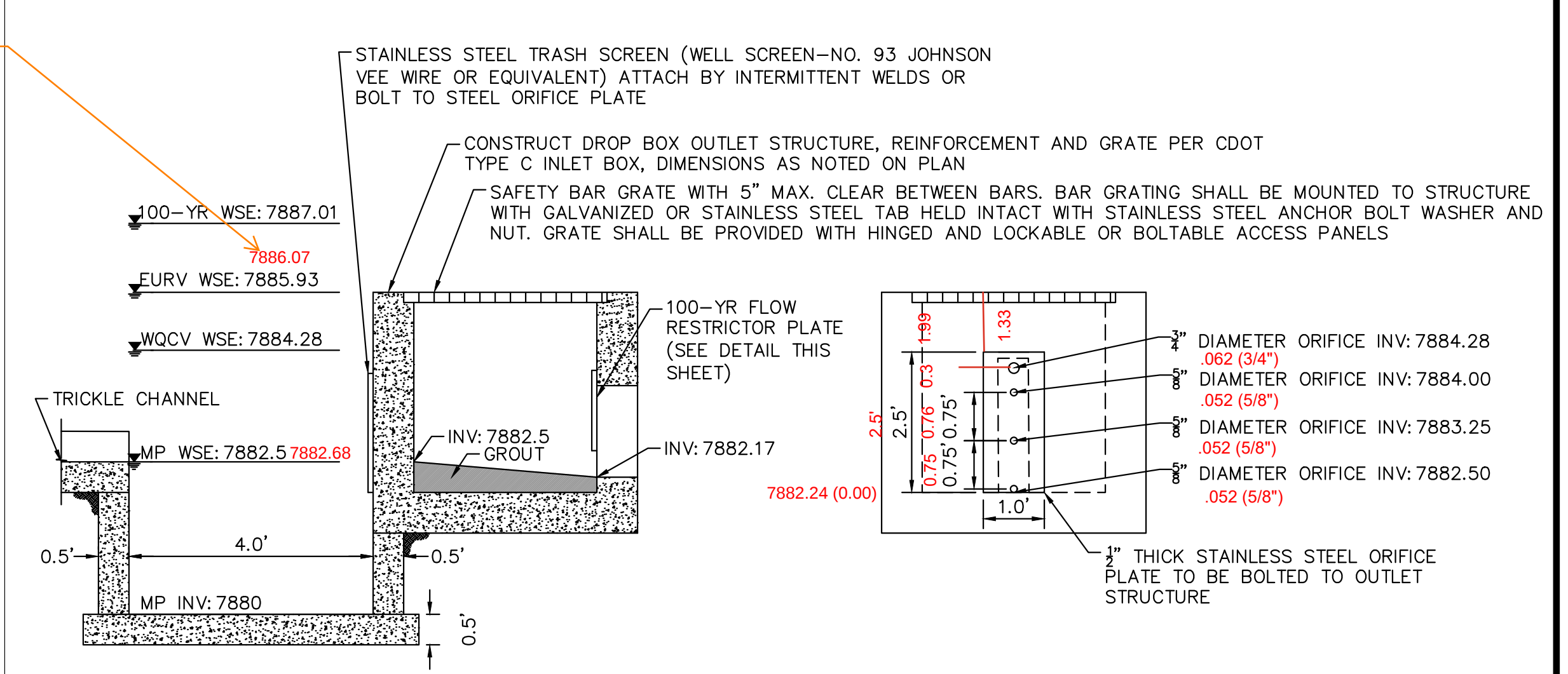
MICROPOOL DETAIL
N.T.S.



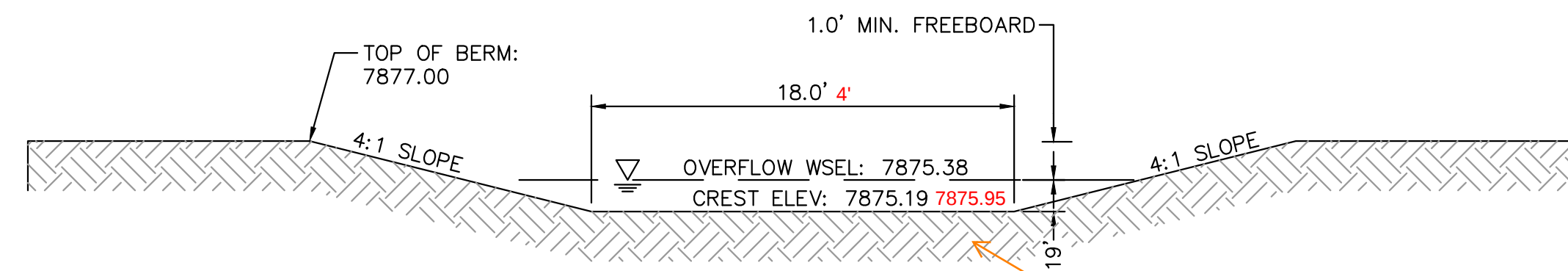
EXTENDED DETENTION PONDS



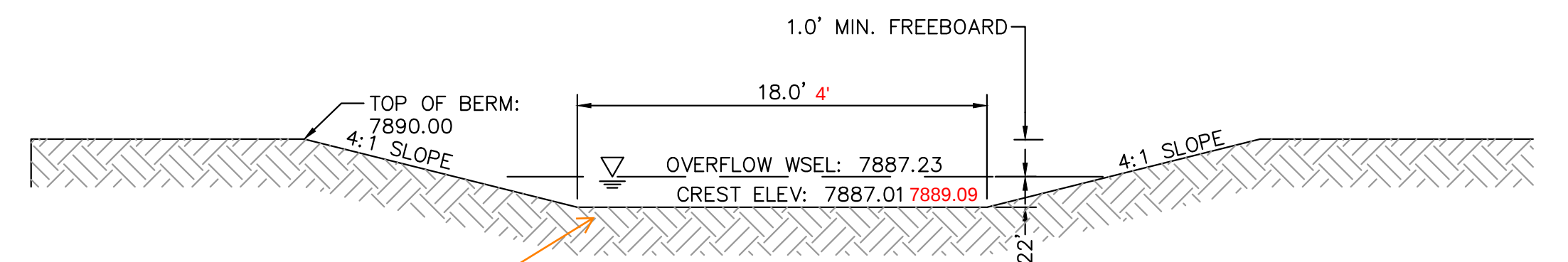
WEST POND OUTLET STRUCTURE PROFILE DETAIL
N.T.S.



EAST POND OUTLET STRUCTURE PROFILE DETAIL
N.T.S.



WEST POND EMERGENCY SPILLWAY
DETAIL (PROFILE VIEW)
N.T.S.



EAST POND EMERGENCY SPILLWAY
DETAIL (PROFILE VIEW)
N.T.S.

25164

TOPO - LEGACY CHURCH - AS BUILTS

JH

GREEN MOUNTAIN FALLS 6:10-12:45

NR TO CREATE LOC

STORED PTS 302 & 311, check #10,000 on #

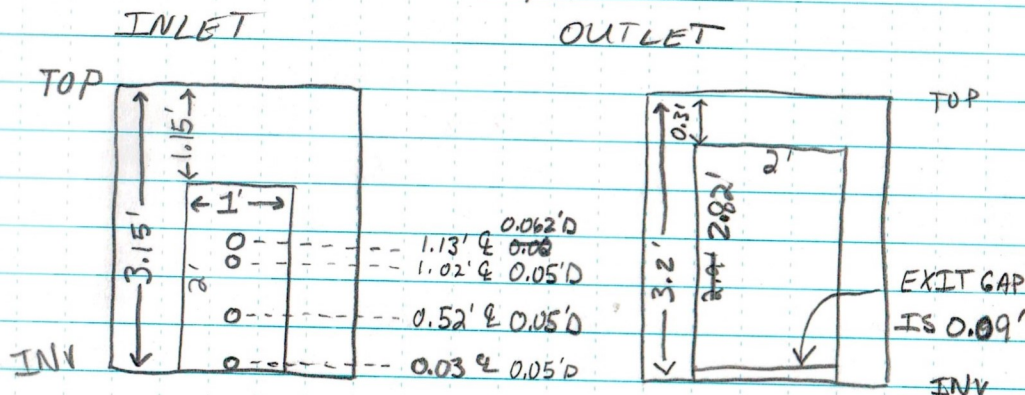
SET BASE PT #4000, created grid pt #400

BASE on #400 Hi: 2m

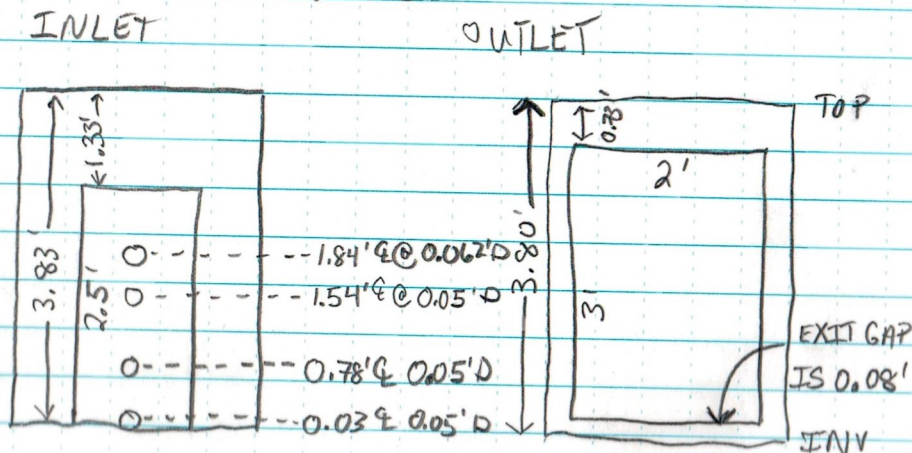
CHECK # 10,001 on # 302

AS BUILT TOPO, as instructed by Kimly - Horn, and
"Final Acceptance Punchlist" in Docs FOLDER

WEST POND STRUCTURE



EAST POND STRUCTURE



Project: Legacy Church - Green Mountain Falls - East Pond - As Built

Basin ID: _____

ZONE 3



Example Zone Configuration (Retention Pond)

Required Volume Calculation

Selected Runoff Type =	EDS	
Watershed Area =	1.77	acres
Watershed Slope =	454	ft
Watershed Slope =	0.660	percent
Watershed Imperviousness =	77.70%	percent
Percentage Hydrologic Soil Group A =	0.00%	percent
Percentage Hydrologic Soil Group B =	0.00%	percent
Percentage Hydrologic Soil Groups C =	100.00%	percent
Desired WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depth =	User Input	
Water Quality Capture Volume (WQCV) =	0.046	acre-feet
Excess Urban Runoff Volume (EURV) =	0.135	acre-feet
2-yr Runoff Volume (P1 = 1.19 in.) =	0.130	acre-feet
5-yr Runoff Volume (P1 = 1.51 in.) =	0.178	acre-feet
10-yr Runoff Volume (P1 = 1.75 in.) =	0.213	acre-feet
25-yr Runoff Volume (P1 = 2 in.) =	0.260	acre-feet
50-yr Runoff Volume (P1 = 2.25 in.) =	0.300	acre-feet
100-yr Runoff Volume (P1 = 2.52 in.) =	0.348	acre-feet
500-yr Runoff Volume (P1 = 0 in.) =	0.000	acre-feet
Approximate 2-yr Detention Volume =	0.122	acre-feet
Approximate 5-yr Detention Volume =	0.168	acre-feet
Approximate 10-yr Detention Volume =	0.192	acre-feet
Approximate 25-yr Detention Volume =	0.203	acre-feet
Approximate 50-yr Detention Volume =	0.208	acre-feet
Approximate 100-yr Detention Volume =	0.221	acre-feet

Optional User Override
1-hr Precipitation

1.19	inches
1.51	inches
1.75	inches
2.00	inches
2.25	inches
2.52	inches
	inches

Stage-Storage Calculation

Zone 1 Volume (MOCVA) = 0.046

Zone 2 Volume (EUVR - Zone 1)	=	0.088	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2)	=	0.097	acre-feet
Total Detention Basin Volume	=	0.221	acre-feet
Initial Surcharge Volume (SV)	=	user	ft ³
Total Available Surcharge Depth (ISD)	=	user	ft
Total Available Detention Depth (H_{max})	=	user	ft
Depth of Trickle Channel (H_{TC})	=	user	ft
Slope of Trickle Channel (S_{TC})	=	user	ft/ft
Slopes of Main Basin Sides (S_{main})	=	user	H+V
Basin Length-to-Width Ratio ($R_{L/W}$)	=	user	
Initial Surcharge Area (A_{ISD})	=	user	ft ²
Surcharge Volume Length (L_{SV})	=	user	ft
Surcharge Volume Width (W_{SV})	=	user	ft
Depth of Basin Floor ($H_{1,000}$)	=	user	ft
Length of Basin Floor ($L_{1,000}$)	=	user	ft
Width of Basin Floor ($W_{1,000}$)	=	user	ft
Area of Basin Floor ($A_{1,000}$)	=	user	ft ²
Volume of Basin Floor ($V_{1,000}$)	=	user	ft ³
Depth of Main Basin (H_{main})	=	user	ft
Length of Main Basin (L_{main})	=	user	ft
Width of Main Basin (W_{main})	=	user	ft
Area of Main Basin (A_{main})	=	user	ft ²
Volume of Main Basin (V_{main})	=	user	ft ³
Calculated Total Basin Volume (V_{total})	=	user	acre-feet

[illegible]

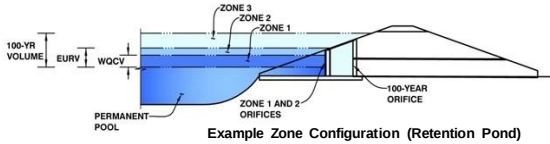
- ✓ = calcs match details in plans
✗ = calcs do not match details in plans

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)

Project: Legacy Church - Green Mountain Falls - East Pond

Basin ID: _____



Example Zone Configuration (Retention Pond)

	Stage (ft)	Zone Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	2.99	0.046	Orifice Plate
Zone 2 (EURV)	4.69	0.088	Circular Orifice
Zone 3 (100-year)	5.75	0.087	Weir&Pipe (Restrict)
		0.221	Total

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth = ft (distance below the filtration media surface)
Underdrain Orifice Diameter = inches

Calculated Parameters for Underdrain

Underdrain Orifice Area = ft²
Underdrain Orifice Centroid = feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Invert of Lowest Orifice = ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Orifice Plate = ft (relative to basin bottom at Stage = 0 ft)
Orifice Plate: Orifice Vertical Spacing = inches
Orifice Plate: Orifice Area per Row = ft²

Calculated Parameters for Plate

WQ Orifice Area per Row = ft²
Orifice Area per Row = ft²
Orifice Area per Row = ft²
Orifice Area per Row = ft²

The spreadsheet defines the centroid of the lowest orifice as stage=0 instead of the invert, so these values can be 0.00, 0.75, 1.51

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.03	0.78	1.54					
Orifice Area (sq. inches)	0.30	0.30	0.30					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

Zone 2 Circular ☒ Not Selected ☐
Invert of Vertical Orifice = ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Vertical Orifice = ft (relative to basin bottom at Stage = 0 ft)
Vertical Orifice Diameter = inches

Calculated Parameters for Vertical Orifice

Zone 2 Circular Not Selected
Vertical Orifice Area = ft²
Vertical Orifice Centroid = feet

User Input: Overflow Weir (Dropbox) and Grate (Flat or Sloped)

Zone 3 Weir ☒ Not Selected ☐
Overflow Weir Front Edge Height, H_o = ft (relative to basin bottom at Stage = 0 ft)
Overflow Weir Front Edge Length = feet
Overflow Weir Slope = H:V (enter zero for flat grate)
Horiz. Length of Weir Sides = feet
Overflow Grate Open Area % = %
Debris Clogging % = %

Calculated Parameters for Overflow Weir

Zone 3 Weir Not Selected
Height of Grate Upper Edge, H_g = feet
Overflow Weir Slope Length = feet
Grate Open Area / 100-yr Orifice Area = should be ≥ 4
Overflow Grate Open Area w/o Debris = ft²
Overflow Grate Open Area w/ Debris = ft²

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

Zone 3 Restrictor ☒ Not Selected ☐
Depth to Invert of Outlet Pipe = ft (distance below basin bottom at Stage = 0 ft)
Outlet Pipe Diameter = inches
Restrictor Plate Height Above Pipe Invert = inches

Confirm value

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

Zone 3 Restrictor Not Selected
Outlet Orifice Area = ft²
Outlet Orifice Centroid = feet
Half-Central Angle of Restrictor Plate on Pipe = radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage = ft (relative to basin bottom at Stage = 0 ft)
Spillway Crest Length = feet
Spillway End Slopes = H:V
Freeboard above Max Water Surface = feet

Calculated Parameters for Spillway

Spillway Design Flow Depth = feet
Stage at Top of Freeboard = feet
Basin Area at Top of Freeboard = acres

Routed Hydrograph Results

	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
Design Storm Return Period =	0.53	1.07	1.19	1.51	1.75	2.00	2.25	2.52	0.00
One-Hour Rainfall Depth (in) =	0.046	0.135	0.130	0.178	0.213	0.260	0.300	0.348	0.000
Calculated Runoff Volume (acre-ft) =									
OPTIONAL Override Runoff Volume (acre-ft) =									
Inflow Hydrograph Volume (acre-ft) =	0.046	0.135	0.129	0.177	0.212	0.260	0.299	0.347	#N/A
Predevelopment Unit Peak Flow, q (cfs/acre) =	0.00	0.00	0.01	0.13	0.34	0.80	1.05	1.37	0.00
Predevelopment Peak Q (cfs) =	0.0	0.0	0.0	0.2	0.6	1.4	1.9	2.4	0.0
Peak Inflow Q (cfs) =	0.8	2.4	2.3	3.1	3.7	4.6	5.2	6.1	#N/A
Peak Outflow Q (cfs) =	0.056	0.2	0.2	0.259	0.3	0.3	0.3	0.298	#N/A
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	1.2	0.4	0.2	0.2	0.1	#N/A
Structure Controlling Flow =	Vertical Orifice 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	#N/A
Max Velocity through Grate 1 (fps) =	N/A	0.01	0.01	0.0	0.0	0.0	0.0	0.0	#N/A
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#N/A
Time to Drain 97% of Inflow Volume (hours) =	17	22	22	23	23	25	26	27	#N/A
Time to Drain 99% of Inflow Volume (hours) =	19	25	25	26	27	28	30	31	#N/A
Maximum Ponding Depth (ft) =	2.77	4.30	4.21	4.87	5.27	5.77	6.14	6.53	#N/A
Area at Maximum Ponding Depth (acres) =	0.03	0.06	0.06	0.07	0.08	0.10	0.11	0.12	#N/A
Maximum Volume Stored (acre-ft) =	0.039	0.110	0.104	0.148	0.179	0.224	0.261	0.307	#N/A

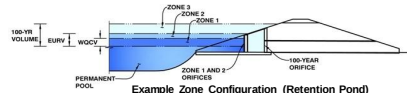
MHFD guidance states that WQCV should drain over a 40hr period. Please try to adjust this spreadsheet and then make subsequent changes in the field to get this value to 40hrs.

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

UD-Detention, Version 3.07 (February 2017)

Project: Legacy Church - Green Mountain Falls- West Pond - As Built

Basin ID: _____



Required Volume Calculation

Selected BMP Type =	EDB	
Watershed Area =	1.49	acres
Watershed Length =	445	ft
Watershed Slope =	0.080	ft/ft
Watershed Imperviousness =	74.10%	percent
Percentage Hydrologic Soil Group A =	0.00%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	100.0%	percent
Desired WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depth = User Input		
Water Quality Capture Volume (WQCV) =	0.037	acre-feet
Excess Urban Runoff Volume (EQRV) =	0.108	acre-feet
2-yr Runoff Volume (P1 = 1.19 in.) =	0.143	acre-feet
5-yr Runoff Volume (P1 = 1.57 in.) =	0.143	acre-feet
10-yr Runoff Volume (P1 = 1.75 in.) =	0.172	acre-feet
25-yr Runoff Volume (P1 = 2 in.) =	0.213	acre-feet
50-yr Runoff Volume (P1 = 2.25 in.) =	0.247	acre-feet
100-yr Runoff Volume (P1 = 2.52 in.) =	0.288	acre-feet
50-yr Runoff Volume (P1 = 0 in.) =	0.000	acre-feet
Approximate 2-yr Detention Volume =	0.097	acre-feet
Approximate 5-yr Detention Volume =	0.134	acre-feet
Approximate 10-yr Detention Volume =	0.154	acre-feet
Approximate 25-yr Detention Volume =	0.164	acre-feet
Approximate 50-yr Detention Volume =	0.168	acre-feet
Approximate 100-yr Detention Volume =	0.180	acre-feet

Optional User Override
1-hr Precipitation

1.19	inches
1.50	inches
1.75	inches
2.00	inches
2.25	inches
2.52	inches
	inches

Stage-Storage Calculation

Zone 1 Volume ($WQCV_1$)	0.037	acre-feet
Zone 2 Volume ($EURV - Zone 1$)	0.071	acre-feet
Zone 3 Volume ($0.100 - Zones 1 \& 2$)	0.072	acre-feet
Total Detention Basin Volume	0.180	acre-feet
Initial Surcharge Volume (ISV)	user	ft ³
Initial Surcharge Depth (ISD)	user	ft
Total Available Detention Depth (H_{det})	user	ft
Depth of Trickle Channel (H_{TC})	user	ft
Slope of Trickle Channel (S_{TC})	user	ft/ft
Slopes of Main Basin Sides (S_{main})	user	H:V
Basin Length-to-Width Ratio ($R_{L/W}$)	user	
Initial Surcharge Area (A_{IS})	user	ft ²
Surcharge Volume Length (L_{IS})	user	ft
Surcharge Volume Width (W_{IS})	user	ft
Depth of Basin Floor ($H_{1,CO}$)	user	ft
Length of Basin Floor ($L_{1,CO}$)	user	ft
Width of Basin Floor ($W_{1,CO}$)	user	ft
Area of Basin Floor ($A_{1,CO}$)	user	ft ²
Volume of Basin Floor ($V_{1,CO}$)	user	ft ³
Depth of Main Basin (H_{main})	user	ft
Length of Main Basin (L_{main})	user	ft
Width of Main Basin (W_{main})	user	ft
Area of Main Basin (A_{main})	user	ft ²
Volume of Main Basin (V_{main})	user	acre-feet
Calculated Total Basin Volume (V_{total})	user	acre-feet

[illegible]

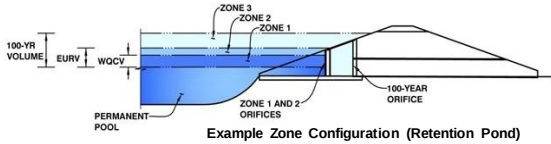
- ✓ = calcs match details in plans
✗ = calcs do not match details in plans

Detention Basin Outlet Structure Design

UD-Detention, Version 3.07 (February 2017)

Project: Legacy Church - Green Mountain Falls - West Pond

Basin ID: _____



Example Zone Configuration (Retention Pond)

	Stage (ft)	Zone Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	2.11	0.037	Orifice Plate
Zone 2 (EURV)	3.52	0.071	Circular Orifice
Zone 3 (100-year)	4.53	0.072	Weir&Pipe (Restrict)
		0.180	Total

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth = ft (distance below the filtration media surface)
Underdrain Orifice Diameter = inches

Calculated Parameters for Underdrain

Underdrain Orifice Area = ft²
Underdrain Orifice Centroid = feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Invert of Lowest Orifice = ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Orifice Plate = ft (relative to basin bottom at Stage = 0 ft)
Orifice Plate: Orifice Vertical Spacing = inches
Orifice Plate: Orifice Area per Row = ft²

Calculated Parameters for Plate

WQ Orifice Area per Row = ft²
Orifice Area per Row = ft²
Orifice Area per Row = ft²

The spreadsheet defines the centroid of the lowest orifice as stage=0 instead of the invert, so these values can be 0.00, 0.49, 0.99

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.03	0.52	1.02					
Orifice Area (sq. inches)	0.30	0.30	0.30					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

Zone 2 Circular ☒ Not Selected ☐
Invert of Vertical Orifice = ft (relative to basin bottom at Stage = 0 ft)
Depth at top of Zone using Vertical Orifice = ft (relative to basin bottom at Stage = 0 ft)
Vertical Orifice Diameter = inches

Calculated Parameters for Vertical Orifice

Zone 2 Circular ☒ Not Selected ☐
Vertical Orifice Area = ft²
Vertical Orifice Centroid = feet

User Input: Overflow Weir (Dropbox) and Grate (Flat or Sloped)

Zone 3 Weir ☒ Not Selected ☐
Overflow Weir Front Edge Height, H_o = ft (relative to basin bottom at Stage = 0 ft)
Overflow Weir Front Edge Length = feet
Overflow Weir Slope = H:V (enter zero for flat grate)
Horiz. Length of Weir Sides = feet
Overflow Grate Open Area % = %
Debris Clogging % = %

Calculated Parameters for Overflow Weir

Zone 3 Weir ☒ Not Selected ☐
Height of Grate Upper Edge, H₁ = feet
Over Flow Weir Slope Length = feet
Grate Open Area / 100-yr Orifice Area = should be ≥ 4
Overflow Grate Open Area w/o Debris = ft²
Overflow Grate Open Area w/ Debris = ft²

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

Zone 3 Restrictor ☒ Not Selected ☐
Depth to Invert of Outlet Pipe = ft (distance below basin bottom at Stage = 0 ft)
Outlet Pipe Diameter = inches
Restrictor Plate Height Above Pipe Invert = inches

Confirm value

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

Zone 3 Restrictor ☒ Not Selected ☐
Outlet Orifice Area = ft²
Outlet Orifice Centroid = feet
Half-Central Angle of Restrictor Plate on Pipe = radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage = ft (relative to basin bottom at Stage = 0 ft)
Spillway Crest Length = feet
Spillway End Slopes = H:V
Freeboard above Max Water Surface = feet

Calculated Parameters for Spillway

Spillway Design Flow Depth = feet
Stage at Top of Freeboard = feet
Basin Area at Top of Freeboard = acres

Routed Hydrograph Results

	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
Design Storm Return Period	0.53	1.07	1.19	1.50	1.75	2.00	2.25	2.52	0.00
One-Hour Rainfall Depth (in)	0.037	0.108	0.104	0.143	0.172	0.213	0.247	0.288	0.000
Calculated Runoff Volume (acre-ft)									
OPTIONAL Override Runoff Volume (acre-ft)									
Inflow Hydrograph Volume (acre-ft)	0.036	0.107	0.103	0.142	0.172	0.213	0.246	0.288	#N/A
Predevelopment Unit Peak Flow, q (cfs/acre)	0.00	0.00	0.01	0.12	0.32	0.76	1.00	1.31	0.00
Predevelopment Peak Q (cfs)	0.0	0.0	0.0	0.2	0.5	1.1	1.5	2.0	0.0
Peak Inflow Q (cfs)	0.6	1.8	1.7	2.4	2.8	3.5	4.1	4.7	#N/A
Peak Outflow Q (cfs)	0.049	0.254	0.250	0.269	0.281	0.296	0.456	1.410	#N/A
Ratio Peak Outflow to Predevelopment Q	N/A	N/A	N/A	1.5	0.6	0.3	0.3	0.7	#N/A
Structure Controlling Flow	Vertical Orifice 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Outlet Plate 1	Spillway	Spillway	#N/A
Max Velocity through Grate 1 (fps)	N/A	0.02	0.02	0.0	0.0	0.0	0.0	0.0	#N/A
Max Velocity through Grate 2 (fps)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#N/A
Time to Drain 97% of Inflow Volume (hours)	15	24	24	24	25	25	26	25	#N/A
Time to Drain 99% of Inflow Volume (hours)	16	26	26	27	28	29	29	29	#N/A
Maximum Ponding Depth (ft)	1.94	3.22	3.18	3.66	4.01	4.50	4.83	4.97	#N/A
Area at Maximum Ponding Depth (acres)	0.04	0.06	0.06	0.06	0.07	0.08	0.09	0.09	#N/A
Maximum Volume Stored (acre-ft)	0.030	0.090	0.088	0.116	0.141	0.177	0.206	0.217	#N/A

MHFD guidance states that WQCV should drain over a 40hr period. Please try to adjust this spreadsheet and then make subsequent changes in the field to give this value to 40hrs.

Ratio should be less than or equal to 1 for minor (5-yr) design storm.