



El Paso County MS4 Post Construction Detention / Water Quality Facility Documentation Form

This document **must be completed and submitted** with required attachments to the County for projects requiring a detention and/or a water quality facility. A separate completed form must be submitted for each facility.

Project name:

Owner name:

Location Address:

Latitude and Longitude:

Assessor's Parcel #: Section: Township: Range:

Expected Completion date:

Project acreage: Design Ponding Acres: Design Storm:

Design Engineer Email Address:

To ensure compliance with C.R.S. 37-92-602(8), the completed Stormwater Detention and Infiltration Design Data Sheet **must be attached**. The form can be found here: <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif#> (click on Download SDI Design Data Sheet)

List all permanent water quality control measure(s) (EDBs, rain gardens, etc):

For all projects for which the constrained redevelopment sites standard is applied, provide an explanation of why it is not practicable to meet the full design standards.

Attach Operations and Maintenance (O&M) Plan describing the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measure(s), including routine inspection frequencies and maintenance activities. If multiple, different water quality control measures are used at the same location, a separate O & M Plan must be provided for each facility.

[Note on SDP cover provided in lieu of O&M due to lack of required maintenance using Runoff Reduction Standard](#)

Attach Private Detention Basin / Stormwater Quality Best Management Practice Maintenance Agreement and Easement addressing maintenance of BMPs that shall be binding on all subsequent owners of the permanent BMPs.

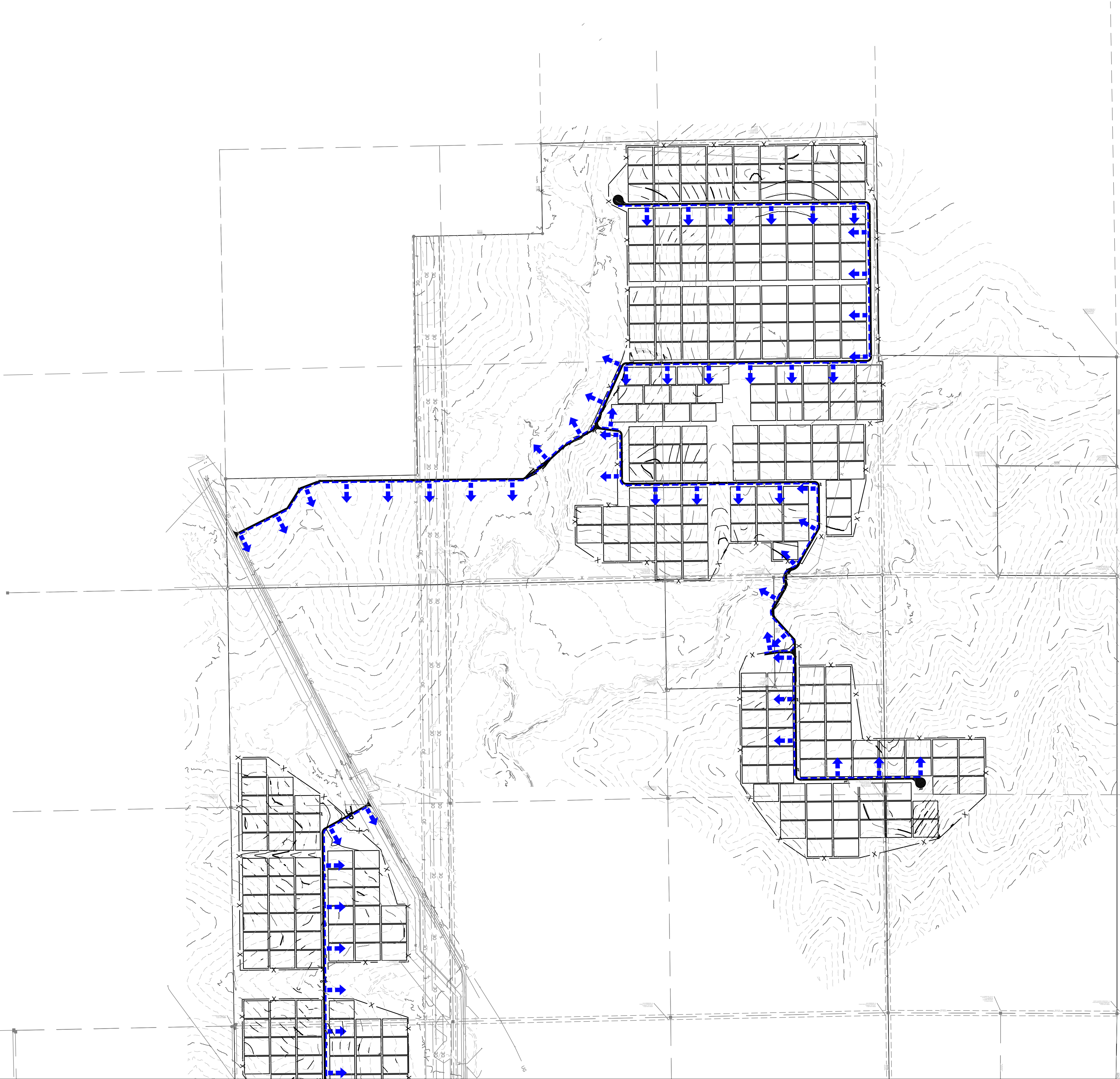
[Runoff reduction exhibits provided](#)

Attachments:

Stormwater Detention and Infiltration Design Data Sheet
O & M Plan
Maintenance and Access Agreement

Review Engineer

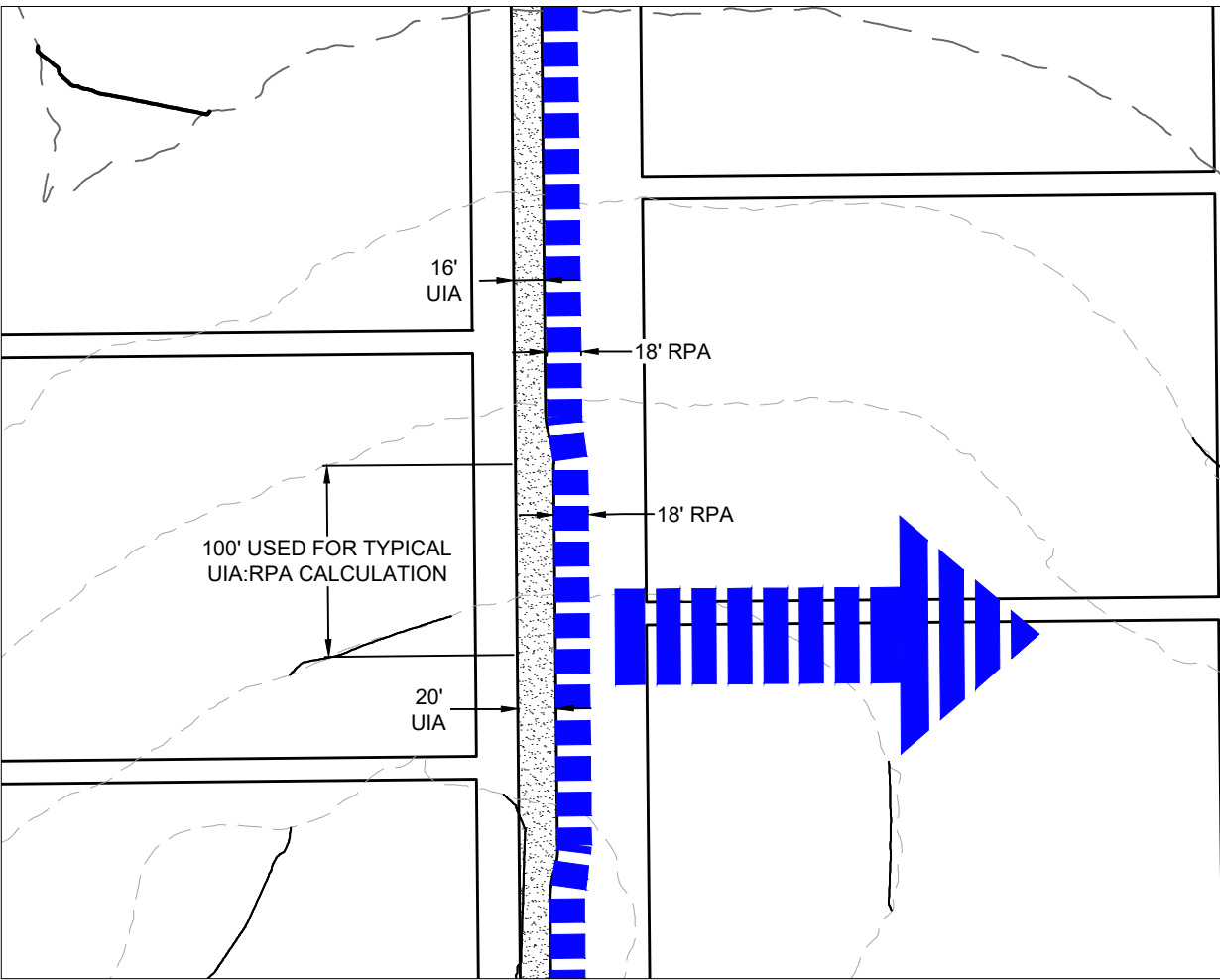
EPC Project File No.



LEGEND

RECEIVING PERVIOUS
AREA (RPA) (18FT WIDE)

FLOW DIRECTION



TYPICAL DETAIL

SCALE: 1"=100'

NOTES:

1. THE IDENTIFIED RECEIVING PERVIOUS AREA (RPA) ARE TO REMAIN PERVIOUS AND VEGETATED AFTER CONSTRUCTION IS COMPLETED.
2. AN 18' WIDE RECEIVING PERVIOUS AREA (RPA) WILL BE PROVIDED ADJACENT TO ALL ROADWAYS.

Design Procedure Form: Runoff Reduction

UD-BMP (Version 3.07, March 2018)

Sheet 1 of 1

Designer: Rob Hansen
Company: CORE Consultants
Date: July 17, 2022
Project: Pike Solar
Location: El Paso County

Clear Worksheet

SITE INFORMATION (User Input in Blue Cells)

WQCV Rainfall Depth 0.60 inches
Depth of Average Runoff Producing Storm, d_s = 0.43 inches (for Watersheds Outside of the Denver Region, Figure 3-1 in USDC)

Area Type	UIA/RPA	UIA/RPA	UIA/RPA	UIA/RPA	UIA/RPA			
Area ID	Typ	O&M	Substation 1	Substation 2	Substation 3			
Downstream Design Point ID	Typ	O&M	SUB	SUB	SUB			
Downstream BMP Type	None	None	None	None	None			
DCIA (ft ²)	--	--	--	--	--			
UIA (ft ²)	2,000	4,338	42,000	9,318	2,202			
RPA (ft ²)	1,800	4,329	32,809	8,173	3,470			
SPA (ft ²)	--	--	--	--	--			
HSG A (%)	0%	0%	0%	0%	0%			
HSG B (%)	0%	0%	0%	0%	0%			
HSG C/D (%)	100%	100%	100%	100%	100%			
Average Slope of RPA (ft/ft)	0.050	0.050	0.030	0.040	0.040			
UIA/RPA Interface Width (ft)	100.00	144.00	298.26	326.90	138.80			

CALCULATED RUNOFF RESULTS

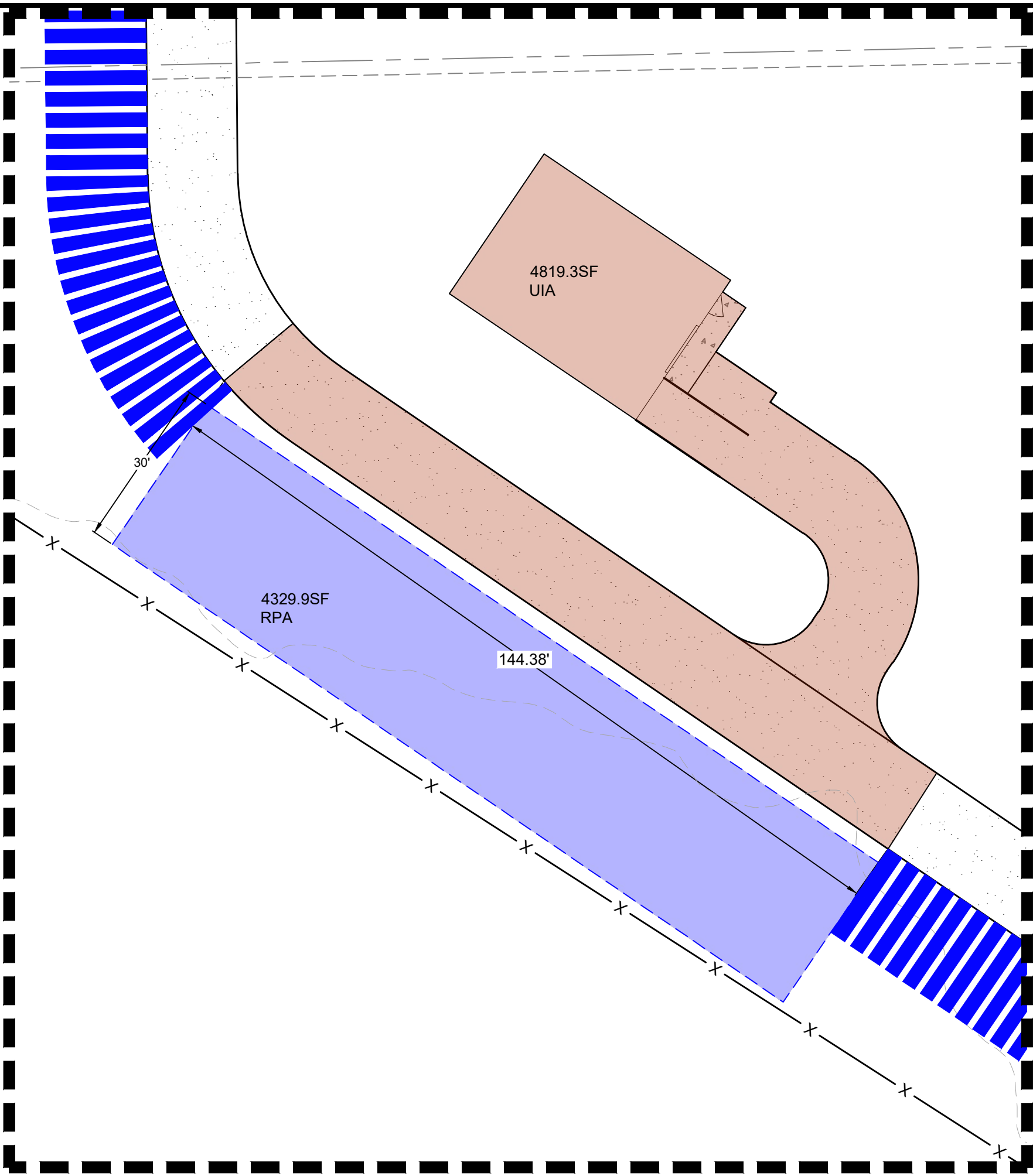
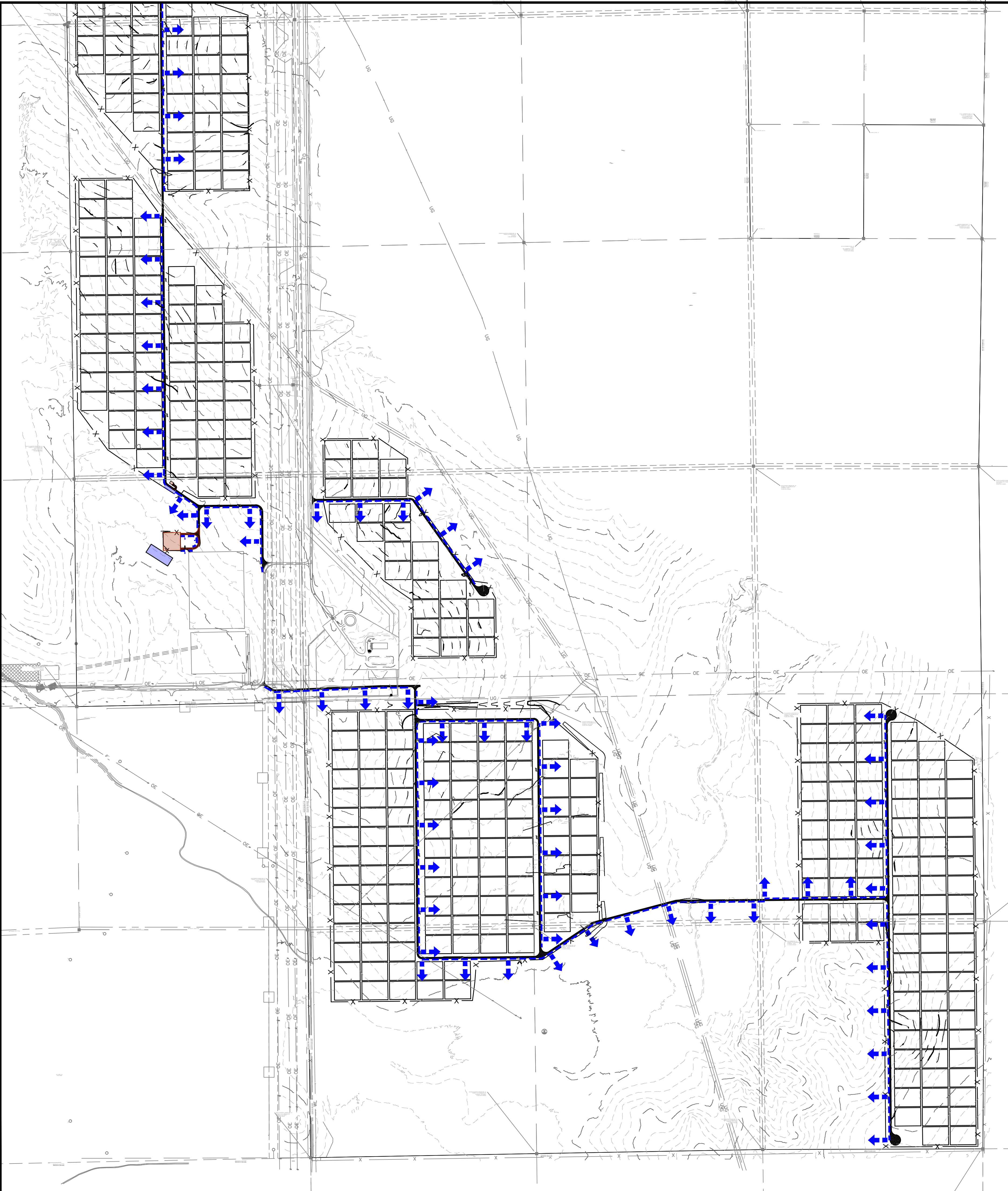
Area ID	Typ	O&M	Substation 1	Substation 2	Substation 3			
UIA/RPA Area (ft ²)	3,800	8,667	74,809	17,491	5,672			
L / W Ratio	0.38	0.42	0.84	0.16	0.29			
UIA / Area	0.5263	0.5005	0.5614	0.5327	0.3882			
Runoff (in)	0.00	0.00	0.00	0.00	0.00			
Runoff (ft ³)	0	0	0	0	0			
Runoff Reduction (ft ³)	83	181	1750	388	92			

CALCULATED WQCV RESULTS

Area ID	Typ	O&M	Substation 1	Substation 2	Substation 3			
WQCV (ft ³)	83	181	1750	388	92			
WQCV Reduction (ft ³)	83	181	1750	388	92			
WQCV Reduction (%)	100%	100%	100%	100%	100%			
Untreated WQCV (ft ³)	0	0	0	0	0			

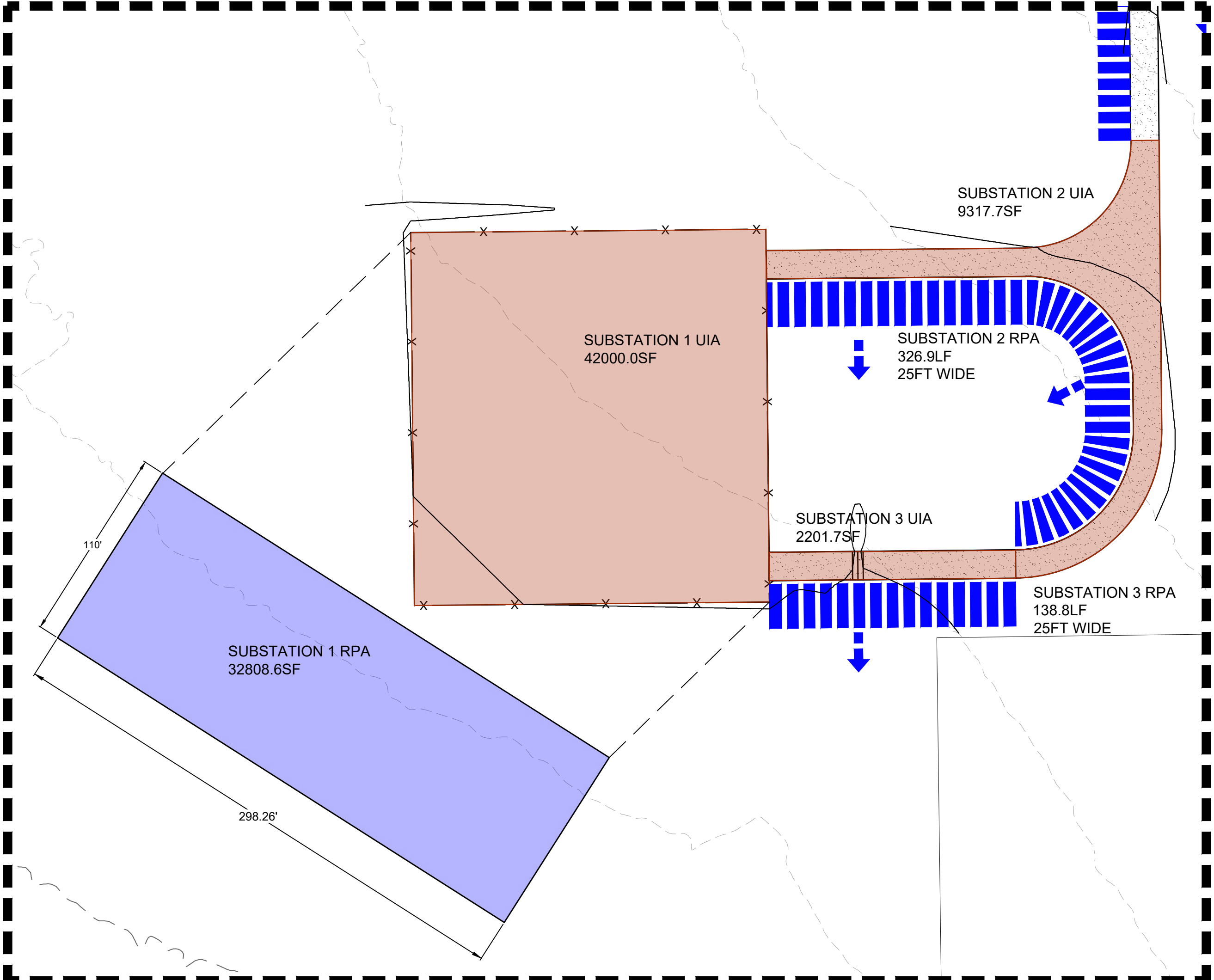
CALCULATED DESIGN POINT RESULTS (sums results from all columns with the same Downstream Design Point ID)

Downstream Design Point ID	Typ	O&M	SUB					
DCIA (ft ²)	0	0	0					
UIA (ft ²)	2,000	4,338	53,520					
RPA (ft ²)	1,800	4,329	44,451					
SPA (ft ²)	0	0	0					
Total Area (ft ²)	3,800	8,667	97,971					
Total Impervious Area (ft ²)	2,000	4,338	53,520					
WQCV (ft ³)	83	181	2,230					
WQCV Reduction (ft ³)	83	181	2,230					
WQCV Reduction (%)	100%	100%	100%					
Untreated WQCV (ft ³)	0	0	0					



OPERATIONS AND MAINTENANCE

SCALE: 1"=20'



SUBSTATION

SCALE: 1"=60'

LEGEND

- DRAINAGE WAY
- FLOW DIRECTION

- NOTES:
- THE IDENTIFIED RECEIVING PERVIOUS AREA (RPA) ARE TO REMAIN PERVIOUS AND VEGETATED AFTER CONSTRUCTION IS COMPLETED.
 - AN 18' WIDE RECEIVING PERVIOUS AREA (RPA) WILL BE PROVIDED ADJACENT TO ALL ROADWAYS.

LAND DEVELOPMENT

ENERGY

PUBLIC INFRASTRUCTURE

CORE

CORE CONSULTANTS, INC.
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DENVER, CO 80113
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LIVE@OURCORE.COM

RUNOFF REDUCTION

PIKE SOLAR

DATE: 09/11/21

CREATED BY: TP

JOB NO.
20-194

SHEET
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