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.

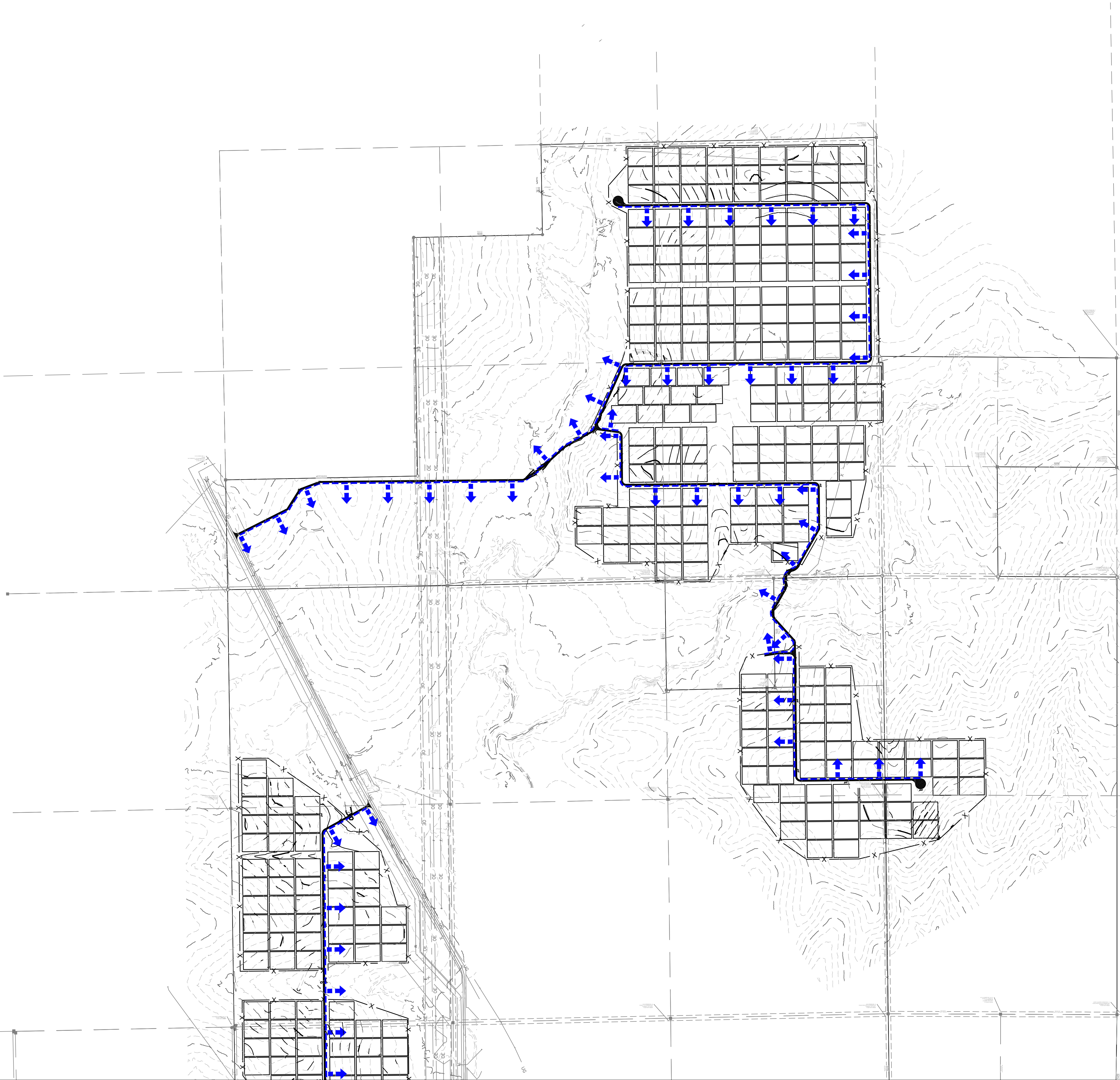*Runoff reduction exhibits provided*

Attachments:

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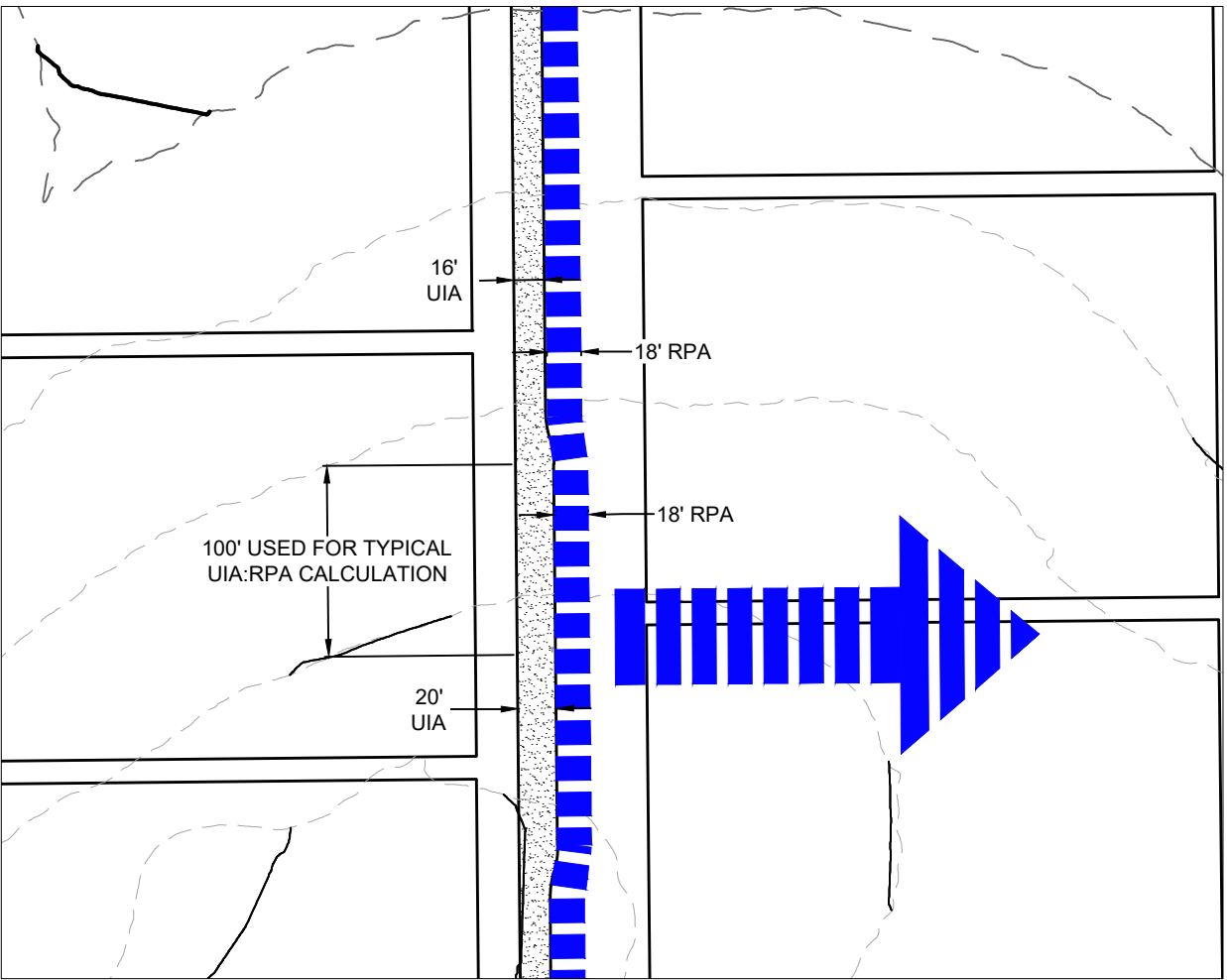Maintenance and Access Agreement

Review Engineer JR / CP

EPC Project File No. PPR-22-008

August 2016

LEGEND

- - - - RECEIVING PERVIOUS AREA (RPA) (18FT WIDE)

◀ FLOW DIRECTION

C

0 50'

1 inch = 50 ft.

16' UIA

18' RPA

18' RPA

100' USED FOR TYPICAL UIA:RPA CALCULATION

20' UIA

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.

RUNOFF REDUCTION

PIKE SOLAR

DATE: 07/15/22

CREATED BY: TP

JOB NO. 20-194

SHEET 1

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_6 = 0.43 inches (for Watersheds Outside of the Denver Region, Figure 3-1 in USDCI

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 (ft²)	--	--	--	--	--		
UIA (ft²)	2,000	4,338	42,000	9,318	2,202		
RPA (ft²)	1,800	4,329	32,809	8,173	3,470		
SPA (ft²)	--	--	--	--	--		
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 (ft²)	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 (ft³)	0	0	0	0	0		
Runoff Reduction (ft³)	83	181	1750	388	92		

CALCULATED WQCV RESULTS

Area ID	Typ.	O&M	Substation 1	Substation 2	Substation 3		
WQCV (ft³)	83	181	1750	388	92		
WQCV Reduction (ft³)	83	181	1750	388	92		
WQCV Reduction (%)	100%	100%	100%	100%	100%		
Untreated WQCV (ft³)	0	0	0	0	0		

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

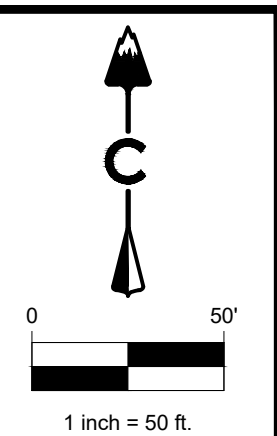| Downstream Design Point ID	Typ.	O&M	SUB				
DCIA (ft²)	0	0	0				
UIA (ft²)	2,000	4,338	53,520				
RPA (ft²)	1,800	4,329	44,451				
SPA (ft²)	0	0	0				
Total Area (ft²)	3,800	8,667	97,971				
Total Impervious Area (ft²)	2,000	4,338	53,520				
WQCV (ft³)	83	181	2,230				
WQCV Reduction (ft³)	83	181	2,230				
WQCV Reduction (%)	100%	100%	100%				
Untreated WQCV (ft³)	0	0	0				

LEGEND

— — — DRAINAGE WAY

← ← FLOW DIRECTION

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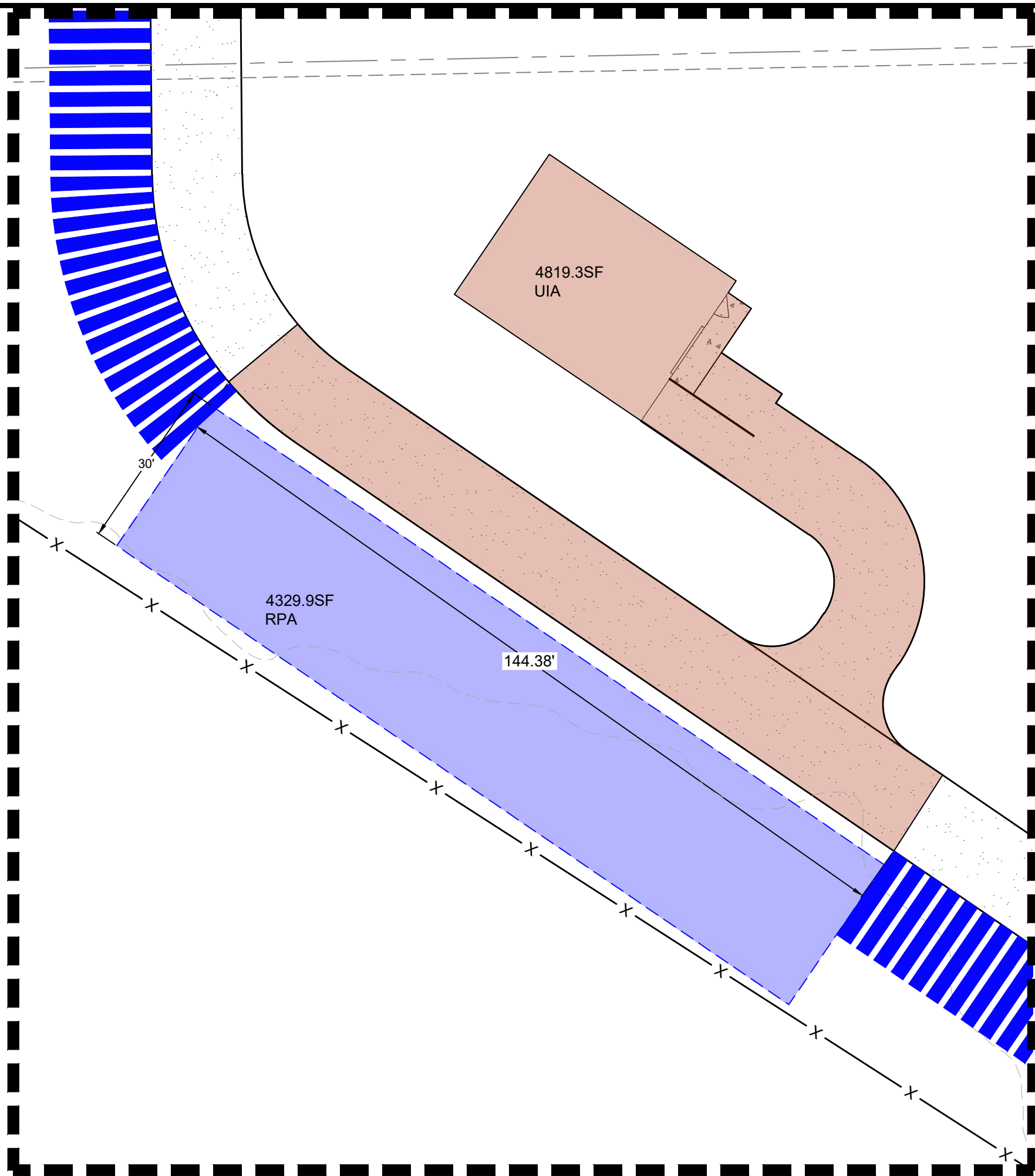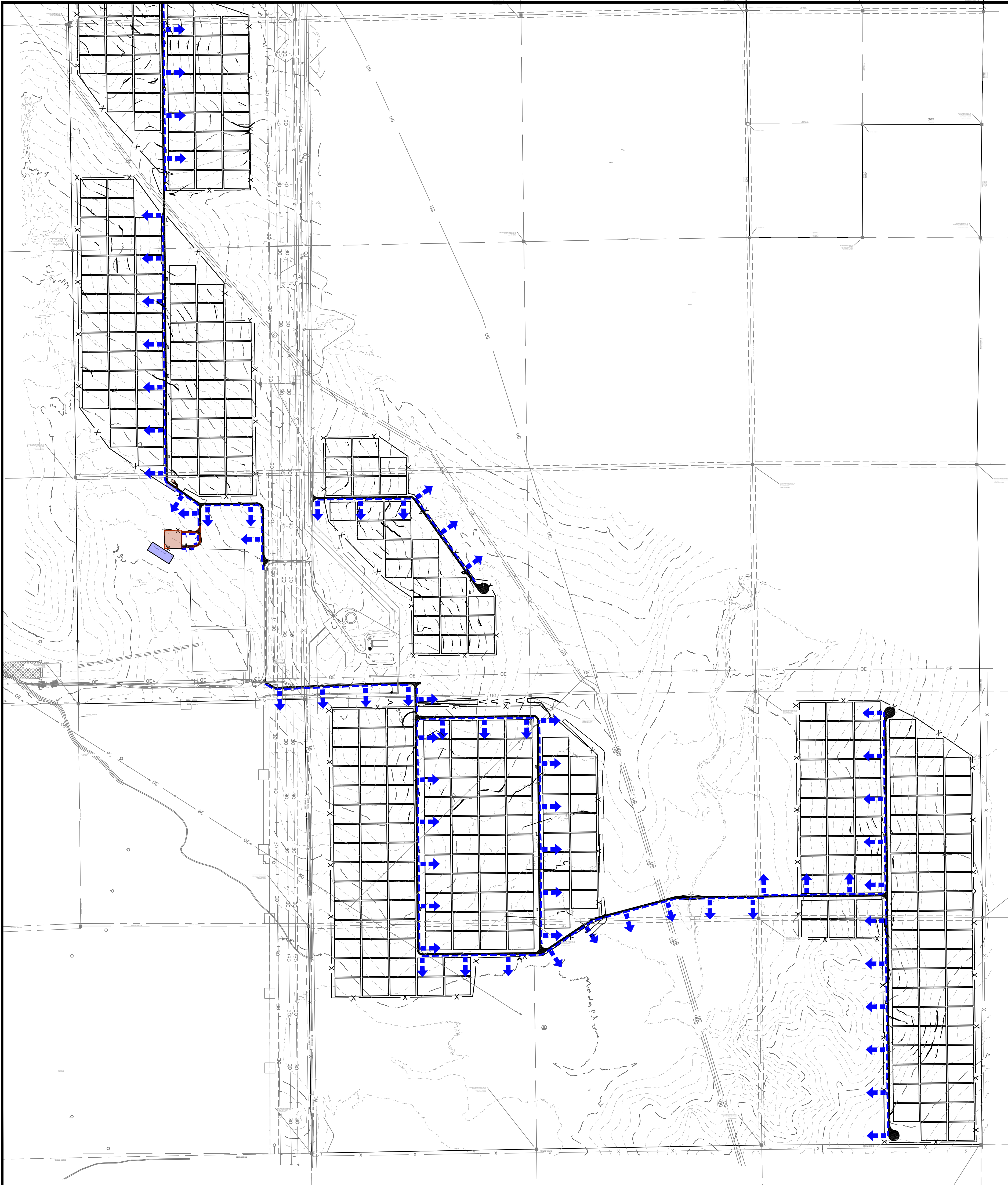
OPERATIONS AND MAINTENANCE

SCALE: 1"=20'

4819.3SF
UIA

4329.9SF
RPA

144.38'

30

SUBSTATION

SCALE: 1"=60'

SUBSTATION 2 UIA
9317.7SF

SUBSTATION 1 UIA
42000.0SF

SUBSTATION 2 RPA
326.9LF
25FT WIDE

SUBSTATION 3 UIA
2201.7SF

SUBSTATION 3 RPA
138.8LF
25FT WIDE

SUBSTATION 1 RPA
32808.6SF

110'

298.26'

C

0   50'

1 inch = 50 ft.

RUNOFF REDUCTION

PIKE SOLAR

DATE: 09/11/21

CREATED BY: TP

JOB NO.
20-194

SHEET
2