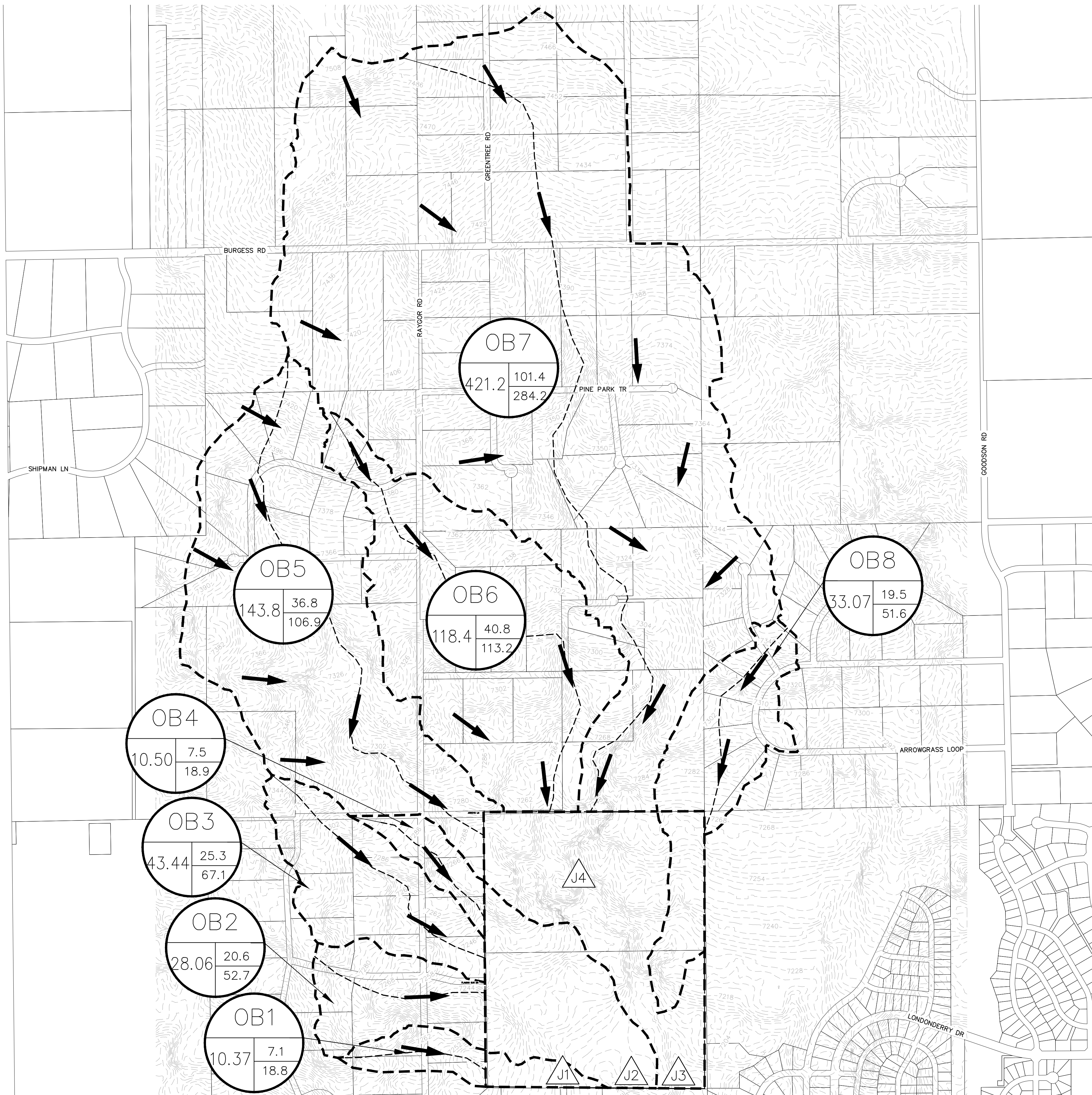


APPENDIX A: FIGURES

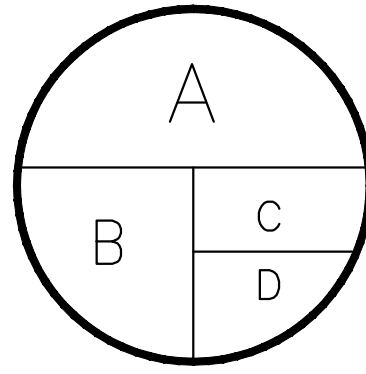
- Existing Conditions Drainage Map (Excerpt from PDR)
- Proposed Conditions Drainage Map (Excerpt from PDR)
- Proposed Conditions Drainage Map (Revised)
- Overview Map - PBMP Tributary Areas (Revised)
- Overall Drainage Improvements Exhibit (Revised)
- Stream Improvement Details

Appendix E Drainage Maps Excerpts from PDR (Existing Conditions and Proposed Conditions)



LEGEND

— — — DRAINAGE BASIN AREAS



A - HEC-HMS BASINS
B - BASIN ACREAGE
C - 5-YR RUNOFF
D - 100-YR RUNOFF



DESIGN POINT

EXISTING CONTOURS

PROPERTY BOUNDARY

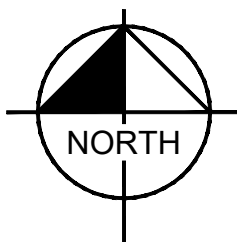


FLOW ARROW


FLOW PATH

PARCEL LINE

HEC-HMS - EXISTING RUNOFF TABLE						
DESIGN POINT	BASIN DESIGNATION	BASIN AREA (ACRES)	DIRECT 5-YR RUNOFF (CFS)	DIRECT 100-YR RUNOFF (CFS)	CUMULATIVE DIRECT 5-YR RUNOFF (CFS)	CUMULATIVE DIRECT 100-YR RUNOFF (CFS)
J1	B1	5.55	3.0	8.5	-	-
	OB1	10.37	7.1	18.8	10.1	27.3
	B2	41.43	15.4	48.5	-	-
	OB2	28.06	20.6	52.7	-	-
J2	OB3	43.44	25.3	67.1	-	-
	OB4	10.50	7.5	18.9	67.5	183.8
	OB5	143.82	36.8	106.9	-	-
	OB6	118.40	40.8	113.2	-	-
J4	OB7	421.43	101.4	284.2	169.2	478.0
	B3	59.54	36.4	110.0	-	-
	B4	14.68	5.4	18.2	-	-
	OB8	33.07	19.5	51.6	183.1	515.5



GRAPHIC SCALE IN FEET



A horizontal graphic scale bar with four segments. The top segment is white and labeled '0' at the left end and '250' at the right end. The second segment is black and labeled '500' at its right end. The third segment is white and labeled '1000' at its right end. The bottom segment is black.

EAGLEVIEW

EL PASO COUNTY, COLORADO
PRE DEVELOPMENT DRAINAGE MAP

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1

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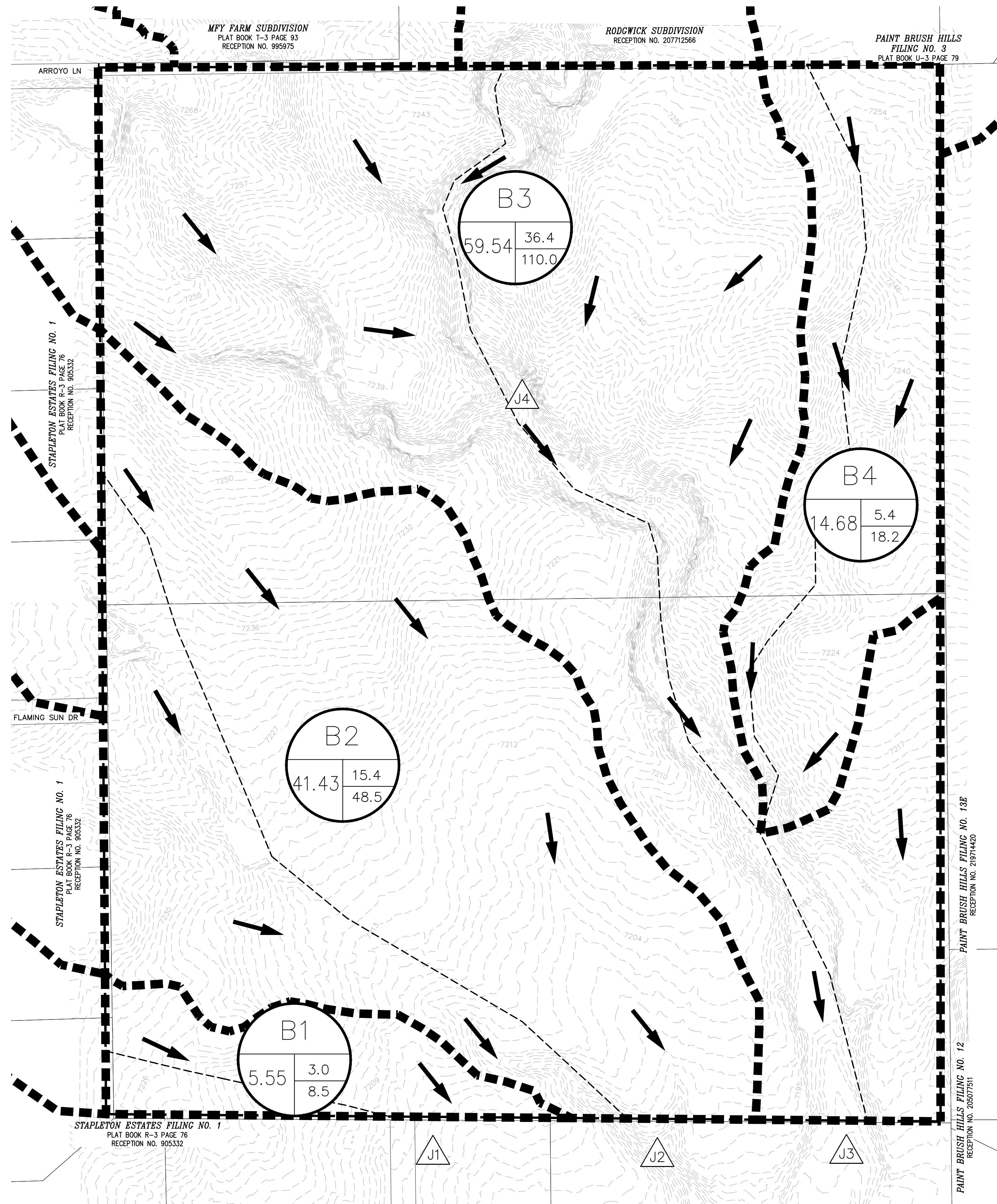
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CHECKED BY: KK
DATE: 04/08/2022

NO.

REVISION

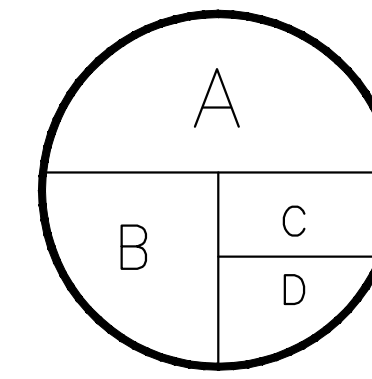
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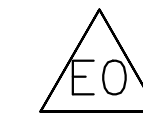


LEGEND

— — — DRAINAGE BASIN AREAS



A — HEC—HMS BASINS
B — BASIN ACREAGE
C — 5—YR RUNOFF
D — 100—YR RUNOFF



DESIGN POINT

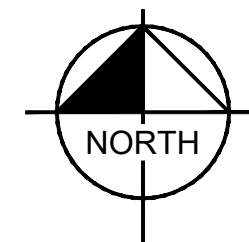
EXISTING CONTOURS

PROPERTY BOUNDARY

FLOW ARROW

FLOW PATH

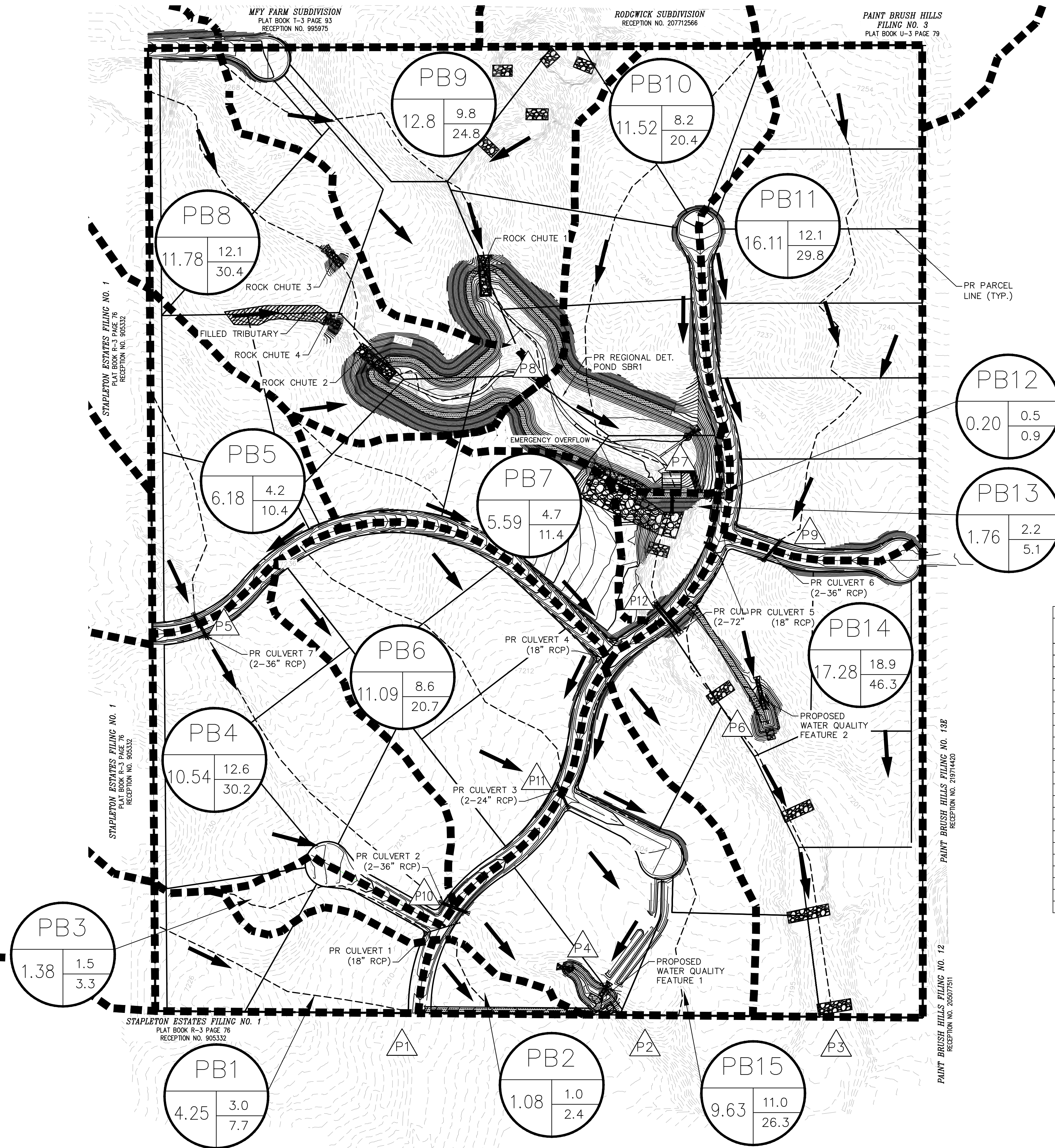
HEC-HMS - EXISTING RUNOFF TABLE						
DESIGN POINT	BASIN DESIGNATION	BASIN AREA (ACRES)	DIRECT 5-YR RUNOFF (CFS)	DIRECT 100-YR RUNOFF (CFS)	CUMULATIVE DIRECT 5-YR RUNOFF (CFS)	CUMULATIVE DIRECT 100-YR RUNOFF (CFS)
	B1	5.55	3.0	8.5	-	-
J1	OB1	10.37	7.1	18.8	10.1	27.3
	B2	41.43	15.4	48.5	-	-
	OB2	28.06	20.6	52.7	-	-
	OB3	43.44	25.3	67.1	-	-
J2	OB4	10.50	7.5	18.9	67.5	183.8
	OB5	143.82	36.8	106.9	-	-
	OB6	118.40	40.8	113.2	-	-
J4	OB7	421.43	101.4	284.2	169.2	478.0
	B3	59.54	36.4	110.0	-	-
	B4	14.68	5.4	18.2	-	-
J3	OB8	33.07	19.5	51.6	183.1	515.5



GRAPHIC SCALE IN FEET

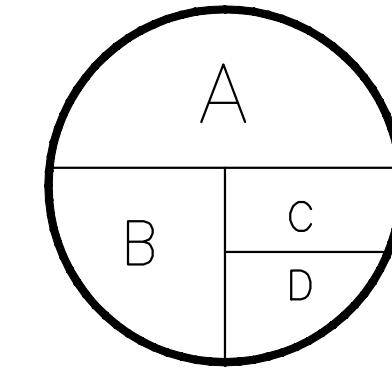
0 75 150 300

A horizontal line with vertical tick marks at 0, 75, 150, and 300 feet. The line is divided into three equal segments of 75 feet each. The first segment (0-75) is white, the second (75-150) is black, and the third (150-300) is white.

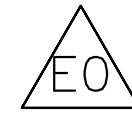


LEGEND

— — — DRAINAGE BASIN AREAS



A - HEC-HMS BASINS
B - BASIN ACREAGE
C - 5-YR RUNOFF
D - 100-YR RUNOFF



DESIGN POINT

EXISTING CONTOURS

PROPOSED CONTOURS

PROPERTY BOUNDARY

FLOW ARROW

FLOW PATH

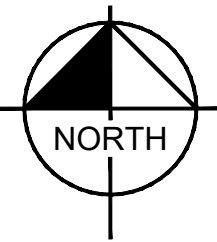
DROP STRUCTURE

HEC-HMS - DEVELOPED RUNOFF BASIN TABLE			
BASIN DESIGNATION	BASIN AREA (ACRES)	DIRECT 5-YR RUNOFF (CFS)	DIRECT 100-YR RUNOFF (CFS)
OB1	10.37	7.1	18.8
OB2	28.06	20.6	52.7
OB3	43.44	25.3	67.1
OB4	10.50	7.5	18.9
OB5	143.82	36.8	106.9
OB6	118.40	42.1	114.9
OB7	421.43	101.4	284.3
OB8	33.07	19.0	51.0
PB1	4.25	3.0	7.7
PB2	1.08	1.0	2.4
PB3	1.38	1.5	3.3
PB4	10.54	12.6	30.2
PB5	6.18	4.2	10.4
PB6	11.09	8.6	20.7
PB7	5.59	4.7	11.4
PB8	11.78	12.1	30.4
PB9	12.80	9.8	24.8
PB10	11.52	8.2	20.4
PB11	16.11	12.1	29.8
PB12	0.20	0.5	0.9
PB13	1.76	2.2	5.1
PB14	17.28	18.9	46.3
PB15	9.63	11.0	26.3

HEC-HMS - DEVELOPED RUNOFF DESIGN POINT TABLE				
DESIGN POINT	TRIBUTARY BASINS	TRIBUTARY AREA (ACRES)	CUMULATIVE 5-YR FLOW (CFS)	CUMULATIVE 100-YR FLOW (CFS)
P1	OB1, PB1	14.62	10.1	26.4
P2	OB2, OB3, OB4, PB3, PB4, PB5, PB6, PB7, PB15	126.42	74.1	189.1
P3	OB5, OB6, OB7, OB8, PB8, PB9, PB10, PB11, PB12, PB13, PB14	787.97	131.8	437.7
P4	OB2, OB3, OB4, PB3, PB4, PB5, PB6, PB7	116.79	72.2	184.6
P5 (CULVERT 7)	OB3, OB4, PB5	60.12	36.8	95.9
P6	OB8, PB11, PB12	49.38	29.9	78.5
P7 (POND SR1)	OB5, OB6, OB7, PB8, PB9, PB10	719.49	131.7	420.1
P8	OB5, OB6, OB7, PB8, PB9, PB10	707.97	173.4	486.7
P9 (CULVERT 6)	OB8, PB11	49.18	29.8	78.4
P10 (CULVERT 2)	OB2, OB3, OB4, PB4, PB5	98.72	57.9	150.1
P11 (CULVERT 3)	PB6, PB7	16.68	13.2	31.9
P12 (CULVERT 8)	OB5, OB6, OB7, PB8, PB9, PB10, PB13	721.28	137.9	420.3

NOTES:

1. LOCATION OF DROP STRUCTURES IS APPROXIMATE AND WILL BE FINALIZED IN THE FINAL DRAINAGE REPORT.



GRAPHIC SCALE IN FEET

0 75 150 300

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CHECKED BY: KK
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EAGLEVIEW
EL PASO COUNTY, COLORADO
POST DEVELOPMENT DRAINAGE MAP

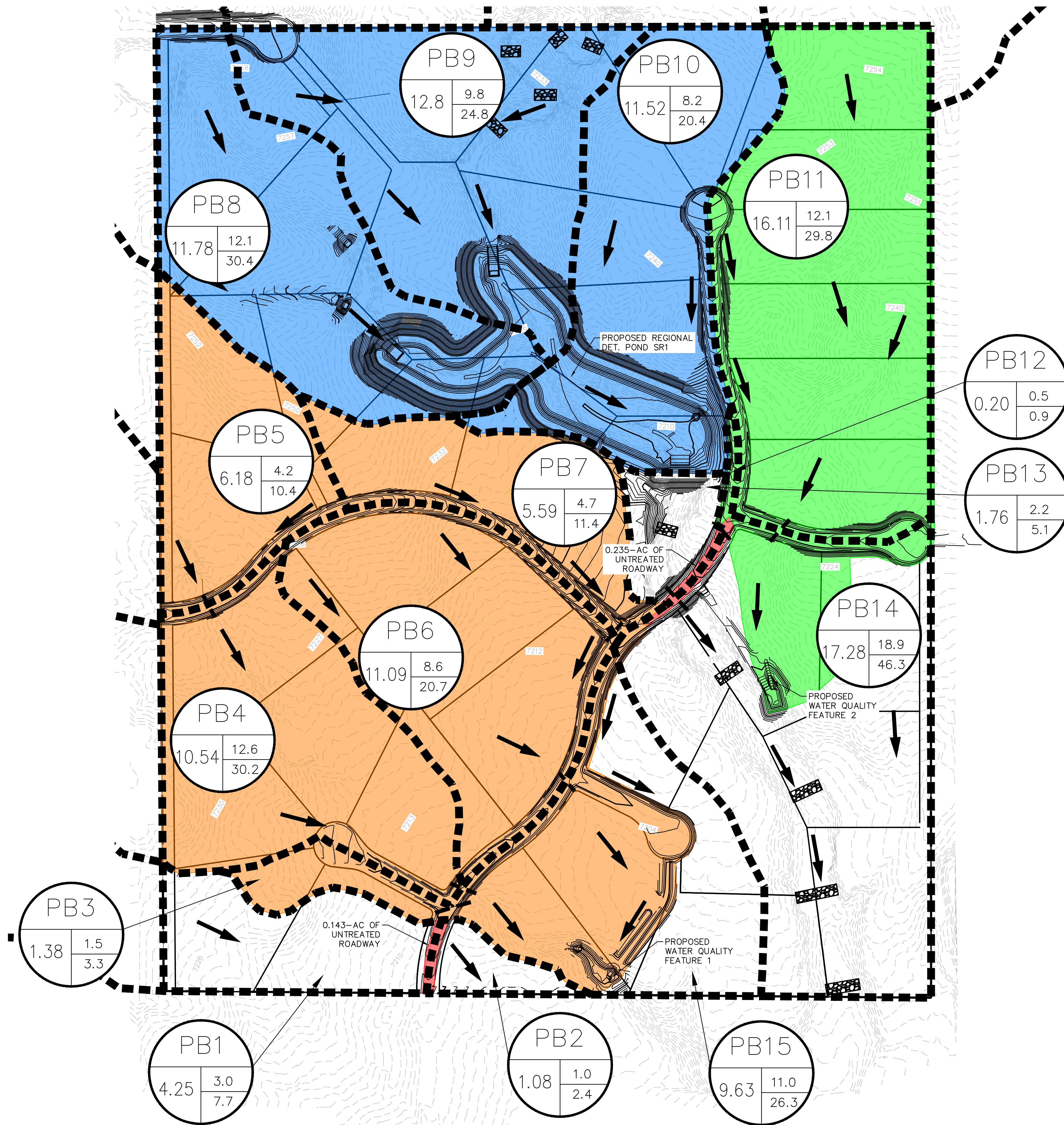
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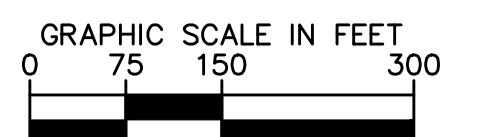
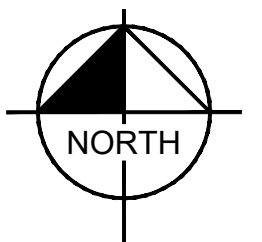
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LEGEND

- DRAINAGE BASIN AREAS
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPERTY BOUNDARY
- FLOW ARROW
- FLOW PATH
- AREA TRIBUTARY TO SR1
- AREA TRIBUTARY TO WQF1
- AREA TRIBUTARY TO WQF2
- ROADWAY AREA NOT TREATED

- NOTES:
- NON-ROADWAY AREAS NOT TREATED BY A PBMP ARE EXCLUDED BASED ON ECM APP I.7.1.B.5.
 - ROADWAY AREA NOT TREATED BY A PBMP TOTALS 0.39 ACRES AND IS EXCLUDED BASED ON ECM APP I.7.1.C.1.



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EAGLEVIEW
EL PASO COUNTY, COLORADO
OVERVIEW MAP - PBMP TRIBUTARY AREAS

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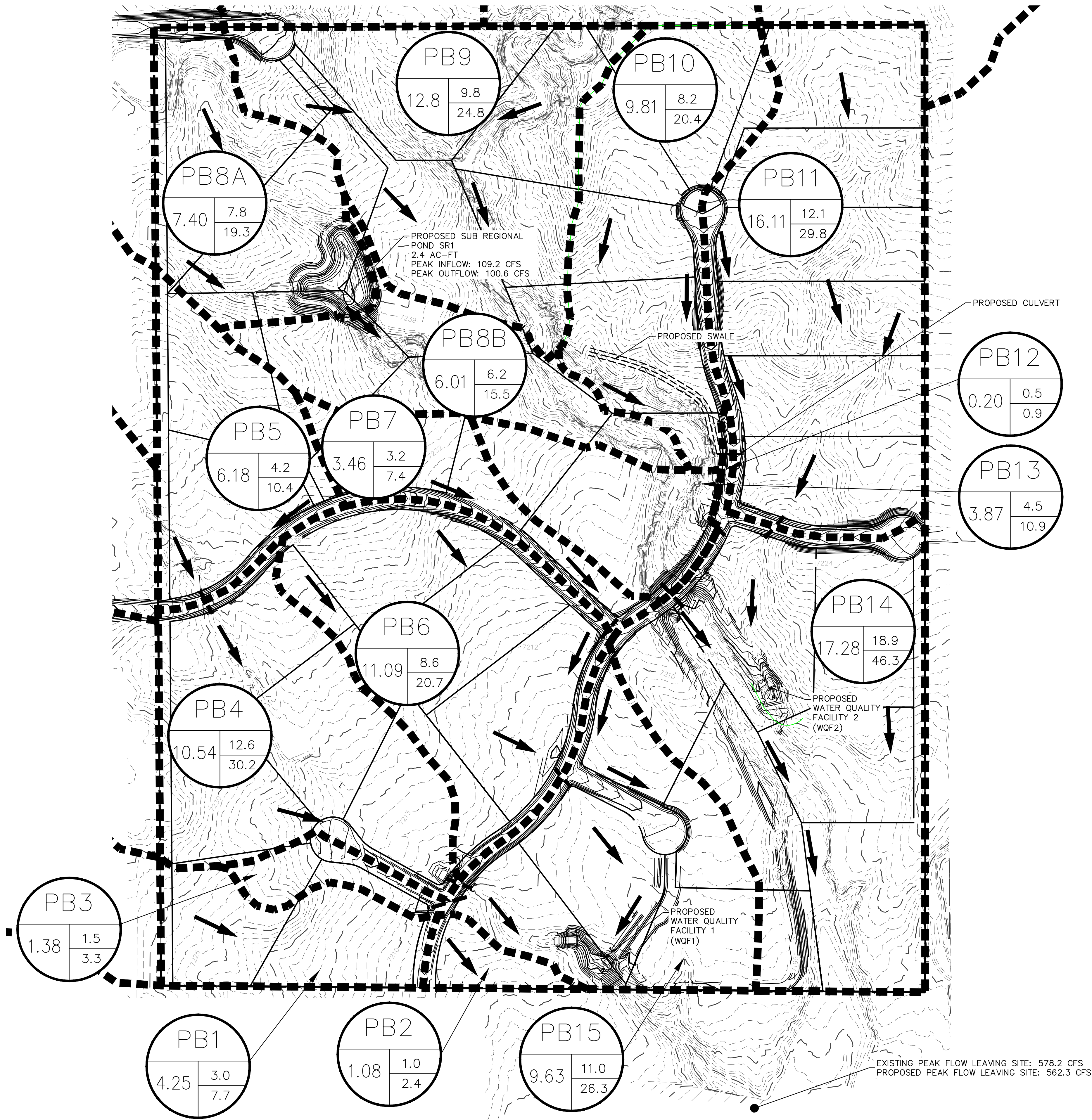
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SHEET

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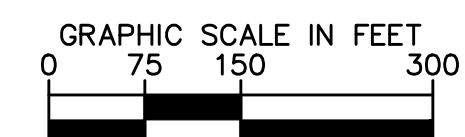
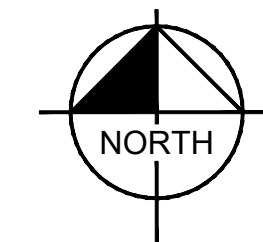
Proposed Conditions Drainage Map (Revised)

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LEGEND

- DRAINAGE BASIN AREAS
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - PROPERTY BOUNDARY
 - FLOW ARROW
 - FLOW PATH
- A - HEC-HMS BASINS
B - BASIN ACREAGE
C - 5-YR RUNOFF
D - 100-YR RUNOFF



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EAGLEVIEW
EL PASO COUNTY, COLORADO
PROPOSED CONDITIONS DRAINAGE MAP

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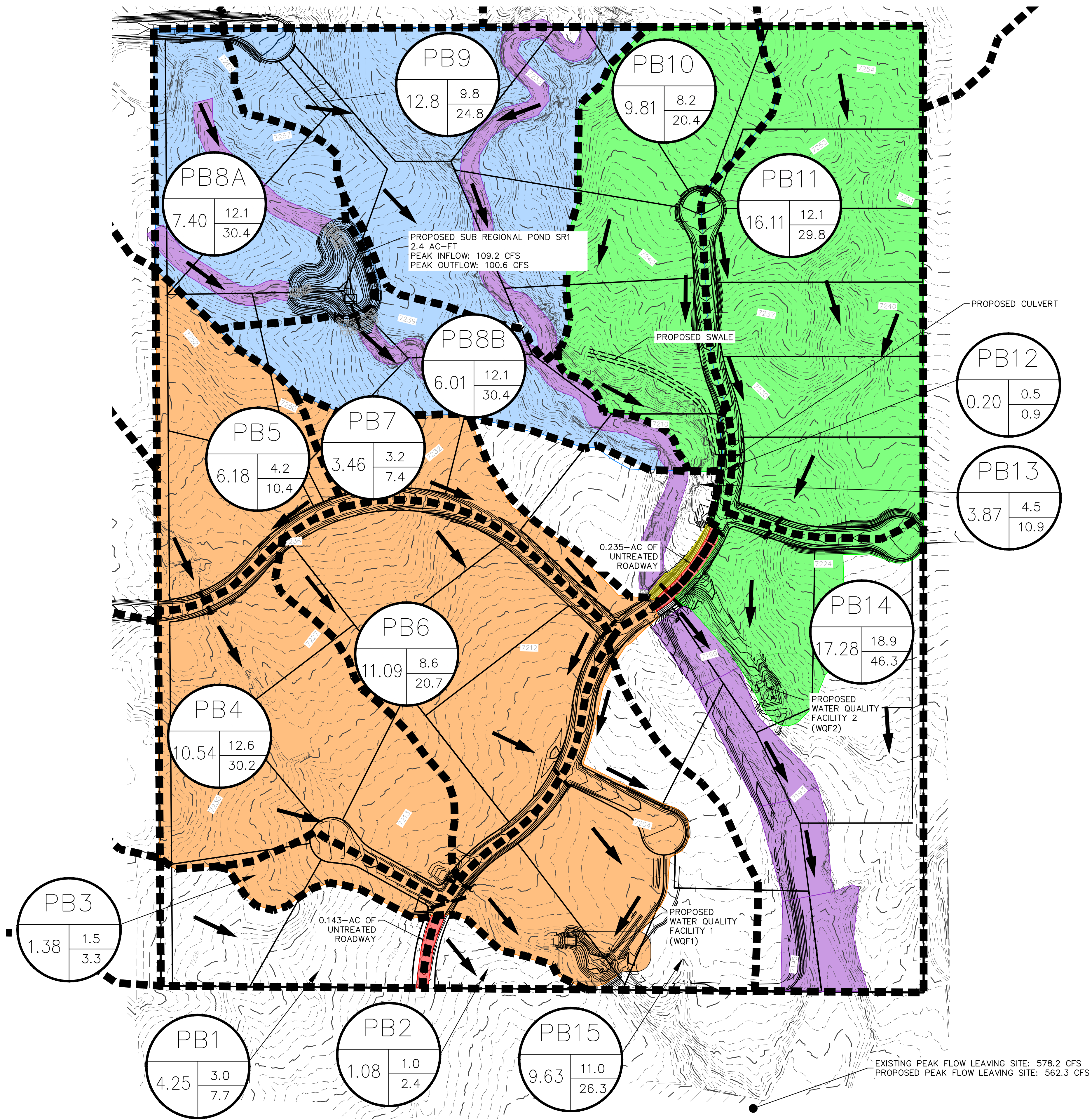
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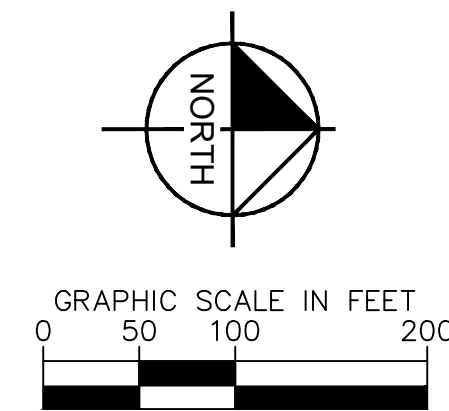
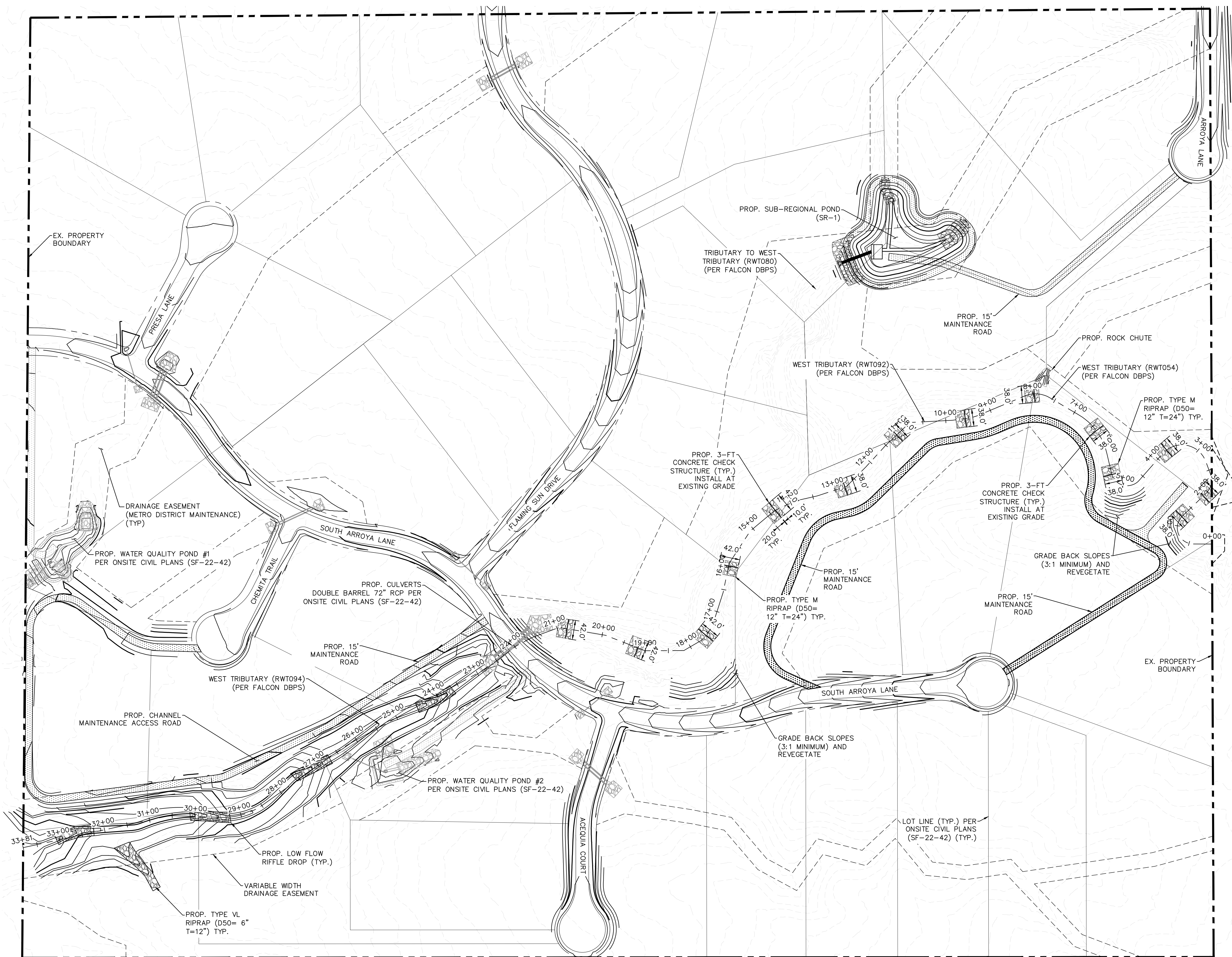
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Overview Map - PBMP Tributary Areas (Revised)

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Overall Drainage Improvements Exhibit (Revised)

[illegible]

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2 North Nevada Avenue Suite 900
Colorado Springs, Colorado 80903 (719) 453-0180

DESIGNED BY: DCM
DRAWN BY: DCM
CHECKED BY: BAH
DATE: 10/12/2023









EAGLEVIEW
EL PASO COUNTY, COLORADO
CONSTRUCTION DOCUMENTS
OVERALL DRAINAGE IMPROVEMENTS

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SHEET
1

- LEGEND**

	EXISTING PROPERTY BOUNDARY
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED RIPRAP
	PROPOSED STORM PIPE
	STORM PIPE PER ONSITE CIVIL PLANS

- NOTES:
1. PROPOSED CONCRETE CHECK STRUCTURES SHALL SPAN THE WIDTH OF THE LOW FLOW CHANNEL AND EXTEND 10-FT INTO EACH BANK.
 2. ADDITIONAL EROSION CONTROL MEASURES TO BE IMPLEMENTED AS NECESSARY BASED ON THE RESULTS OF DETAILED CHANNEL ANALYSIS WHICH WILL BE COMPLETED AS A PART OF FINAL DESIGN.

Typical Stream Improvement Details

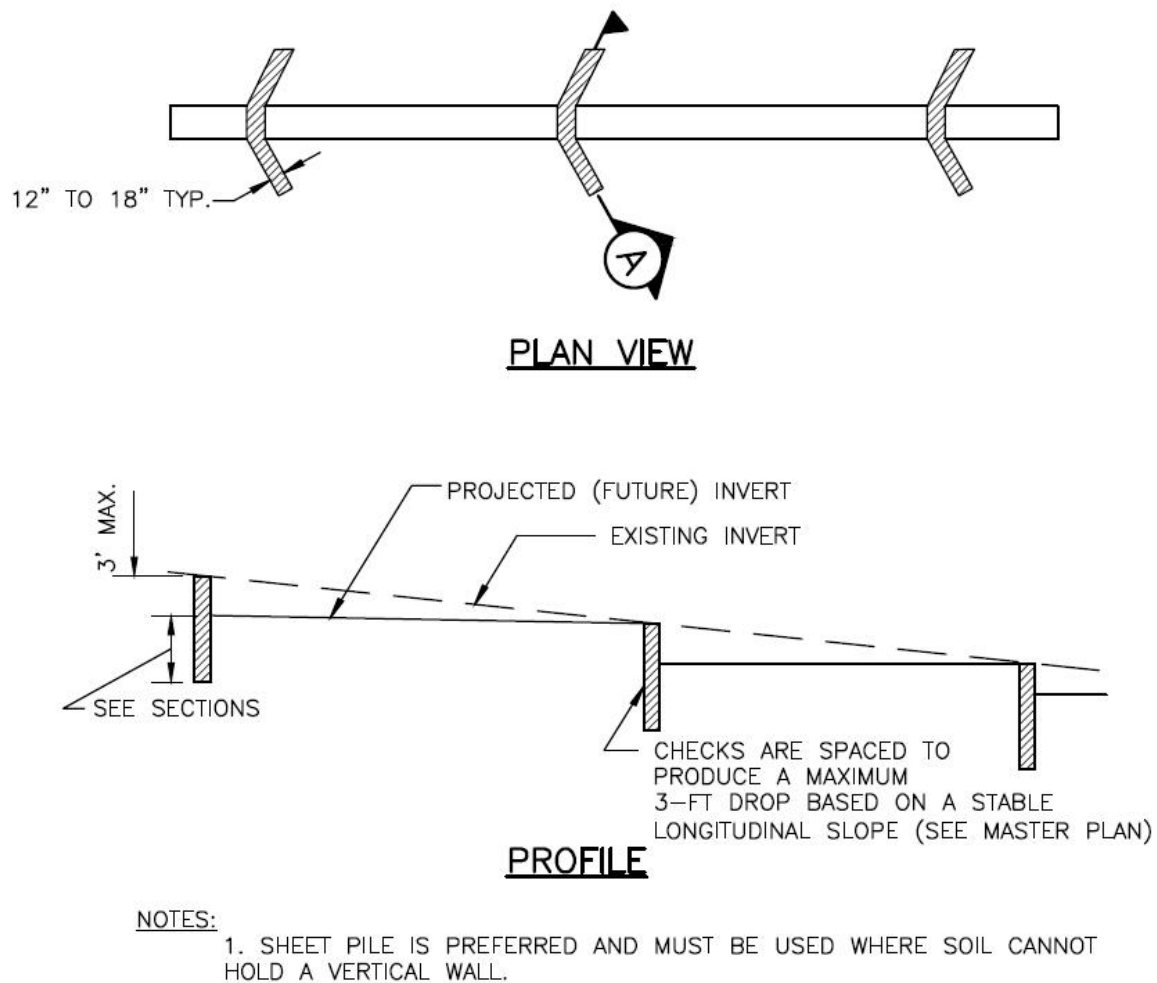
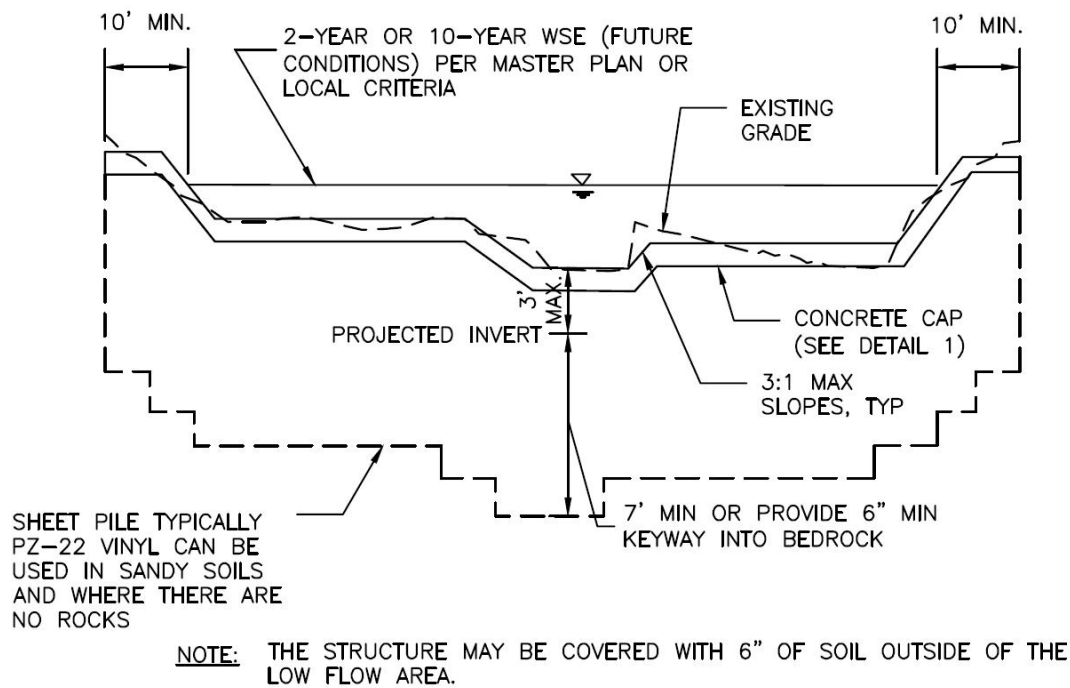
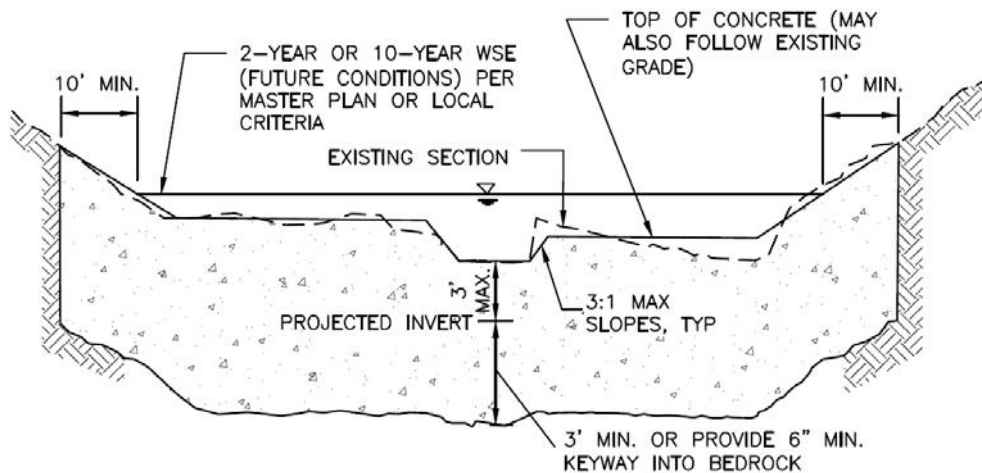


Figure 9-26. Check structure details (Part 1 of 3)



SECTION A1 SHEET PILE CHECK



- NOTES:**
1. TRENCH IN UNDISTURBED SOIL. FORM TOP 6" OF CHECK. DO NOT OVER EXCAVATE TO FORM WALLS OR CONSTRUCT A FOOTING.
 2. THE STRUCTURE MAY BE COVERED WITH 6" OF SOIL OUTSIDE OF THE LOW FLOW AREA.
 3. VIBRATE CONCRETE INTO TRENCH.

SECTION A2 CONCRETE CHECK

Figure 9-27. Check structure details (Part 2 of 3)

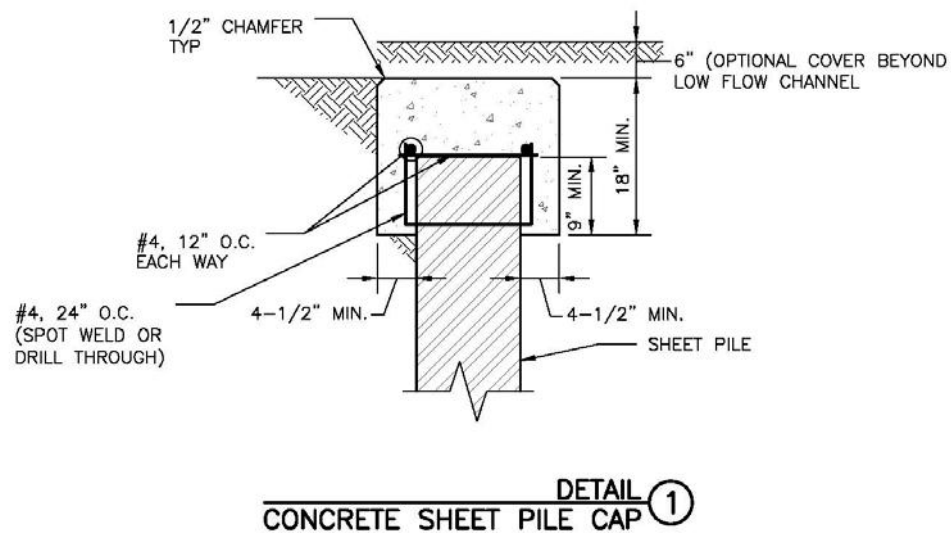
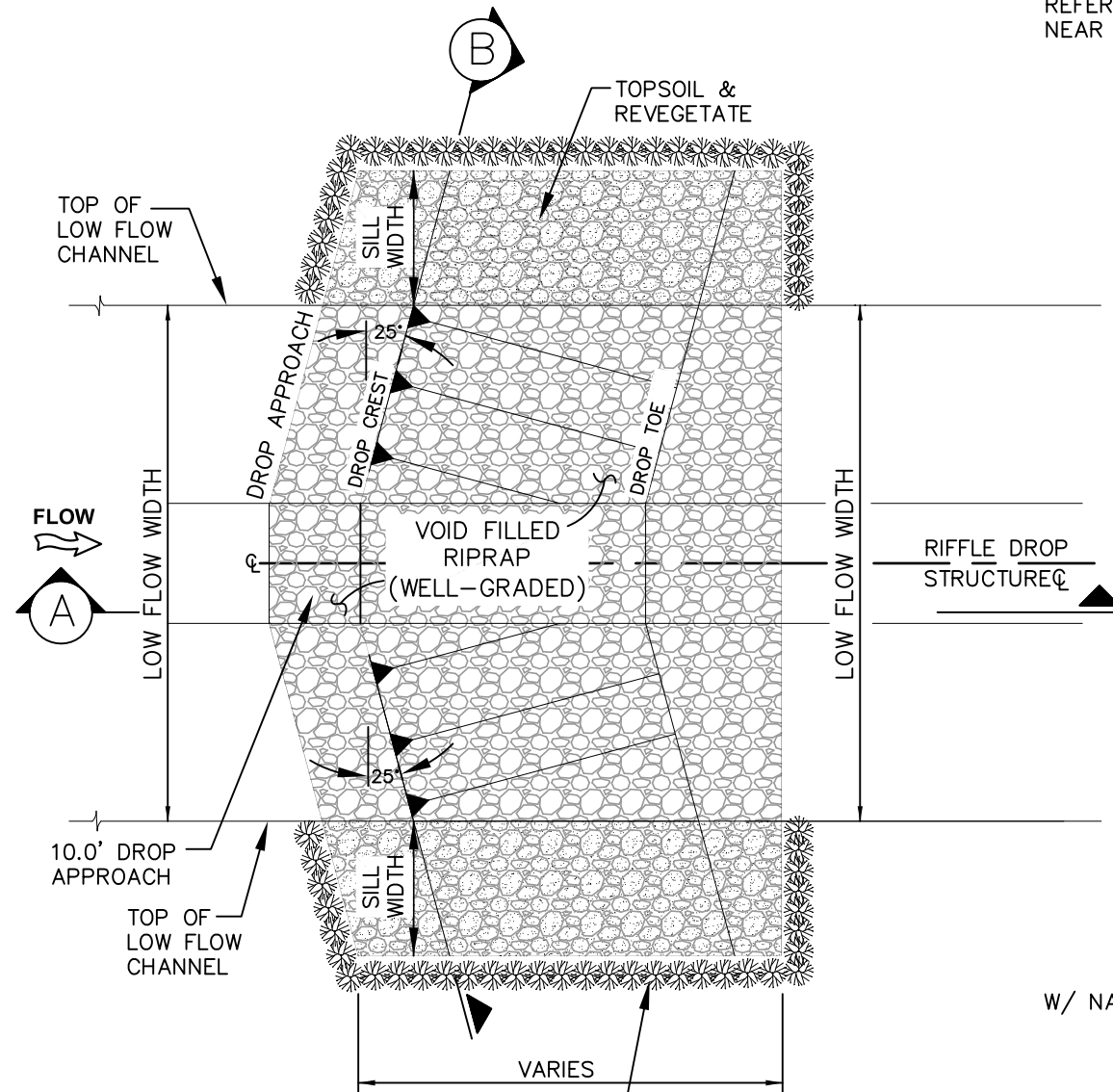


Figure 9-28. Check structure details (Part 3 of 3)

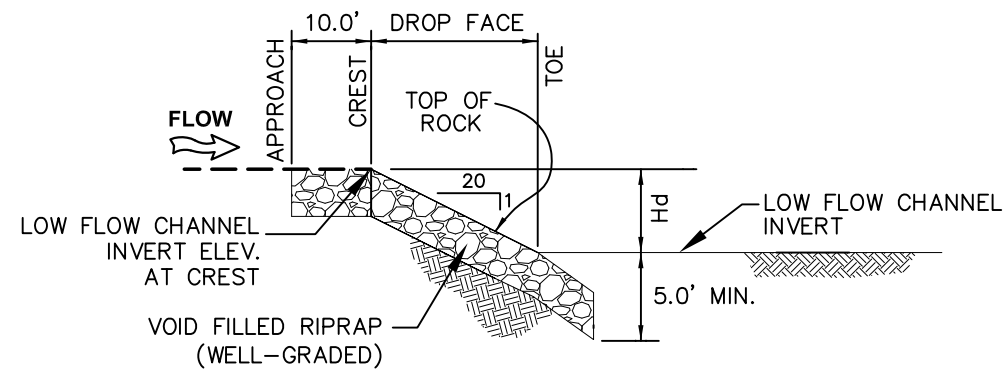


IF ACCESS OR AVAILABILITY PRECLUDES *
LIVE WILLOW TRANSPLANTS, PLACE
CONTINUOUS LAYER OF WILLOW STAKES
VERTICALLY IN SILL TRENCH
PRIOR TO BACKFILL

RIFFLE DROP STRUCTURE PLAN

NTS

NOTE:
REFER TO EROSION CONTROL BLANKET DETAIL FOR BLANKET INSTALLATION
NEAR STRUCTURES.



RIFFLE DROP STRUCTURE PROFILE

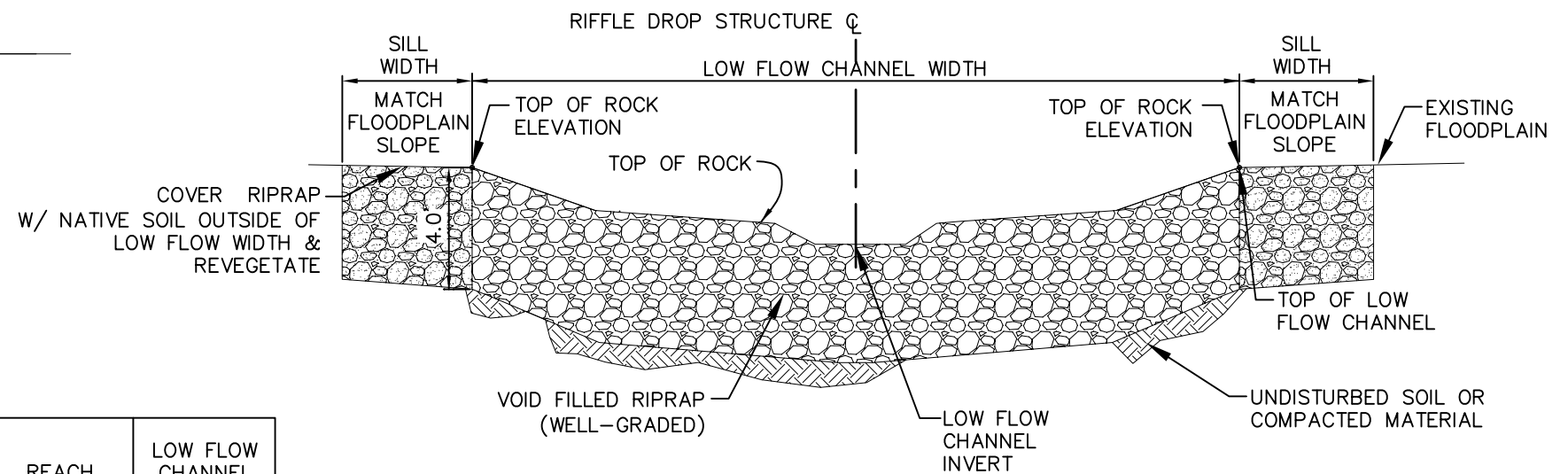
NTS

A



CONSTRUCTED RIFFLE DROP STRUCTURE

NOTE:
REFER TO EROSION CONTROL
BLANKET DETAIL FOR
BLANKET INSTALLATION.



RIFFLE DROP STRUCTURE SECTION

NTS

B

REACH	LOW FLOW CHANNEL WIDTH (FT)
RET120	29
RET154	22
RWT150	18
RWT210	30

TYPICAL RIFFLE DROP STRUCTURE FOR USE IN NATURAL CHANNEL DESIGN REACHES

NOT FOR CONSTRUCTION



NAME: S:\10.122.003 (Falcon DBPS)\DWG\XSEC-RCVANE-RDSehibit.dwg
PCP: Matrix.ctb
PLOT DATE: Tue Jun 18, 2013 1:49pm



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Colorado Springs, CO 80920
Phone 719-575-0100
Fax 719-575-0208