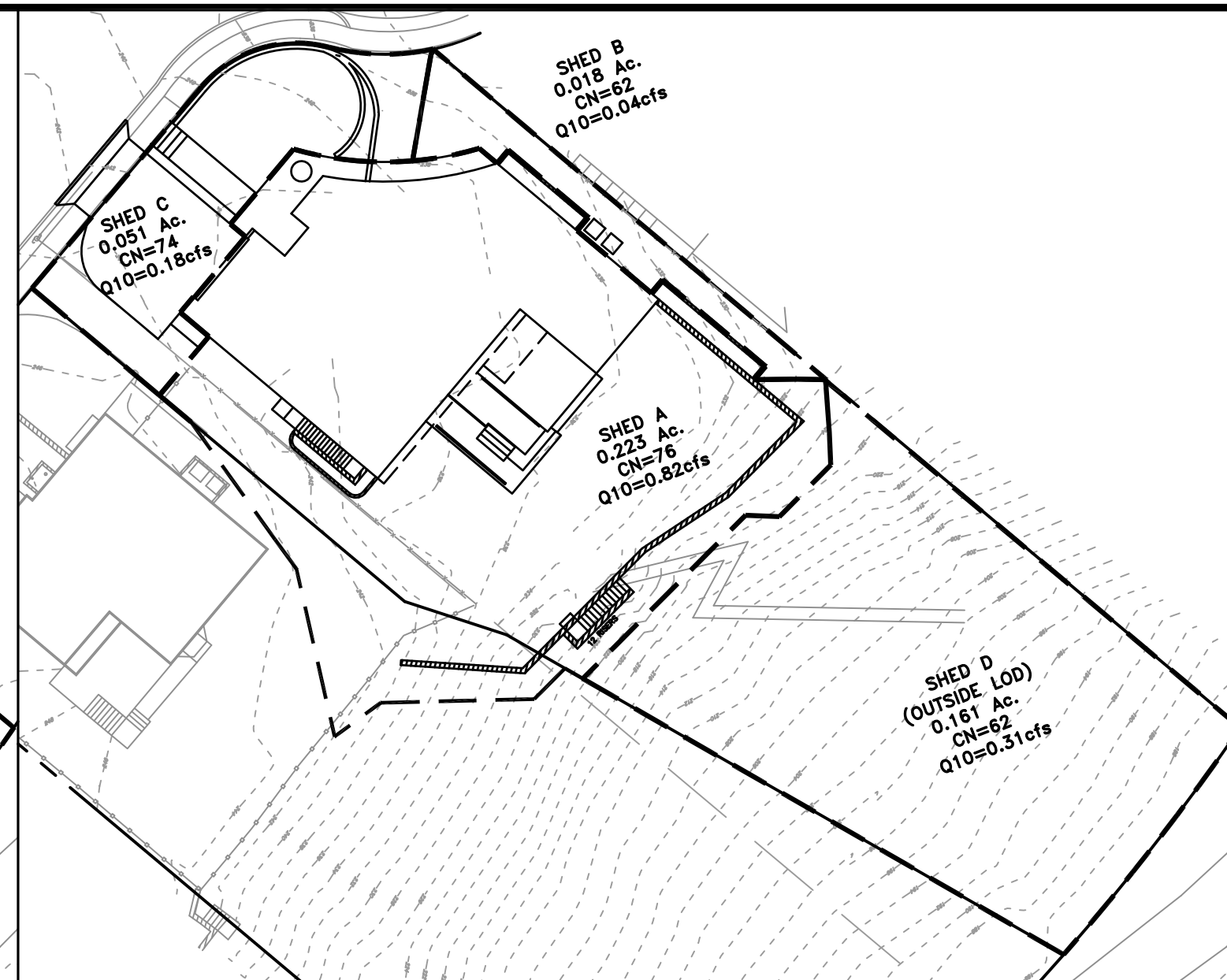
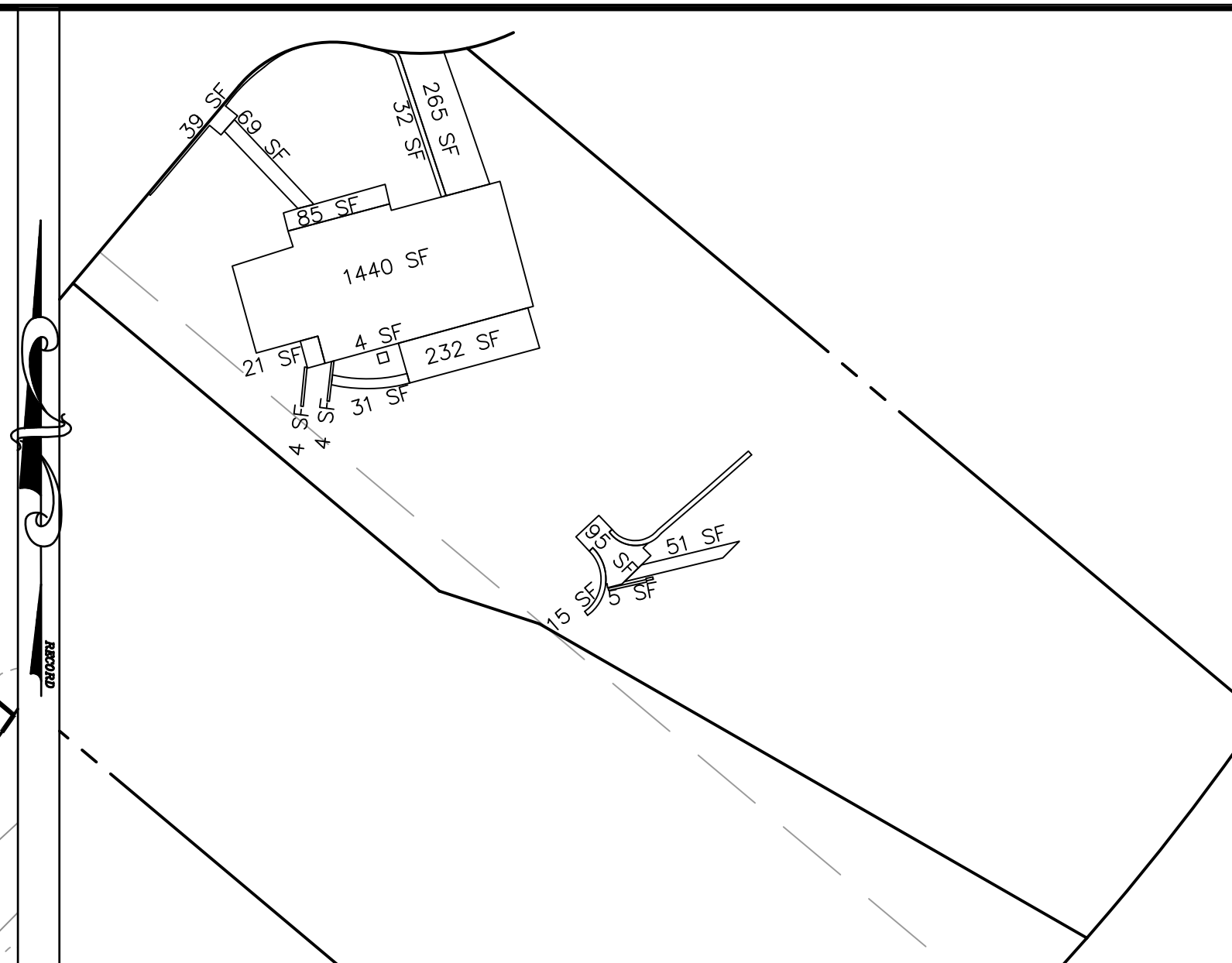


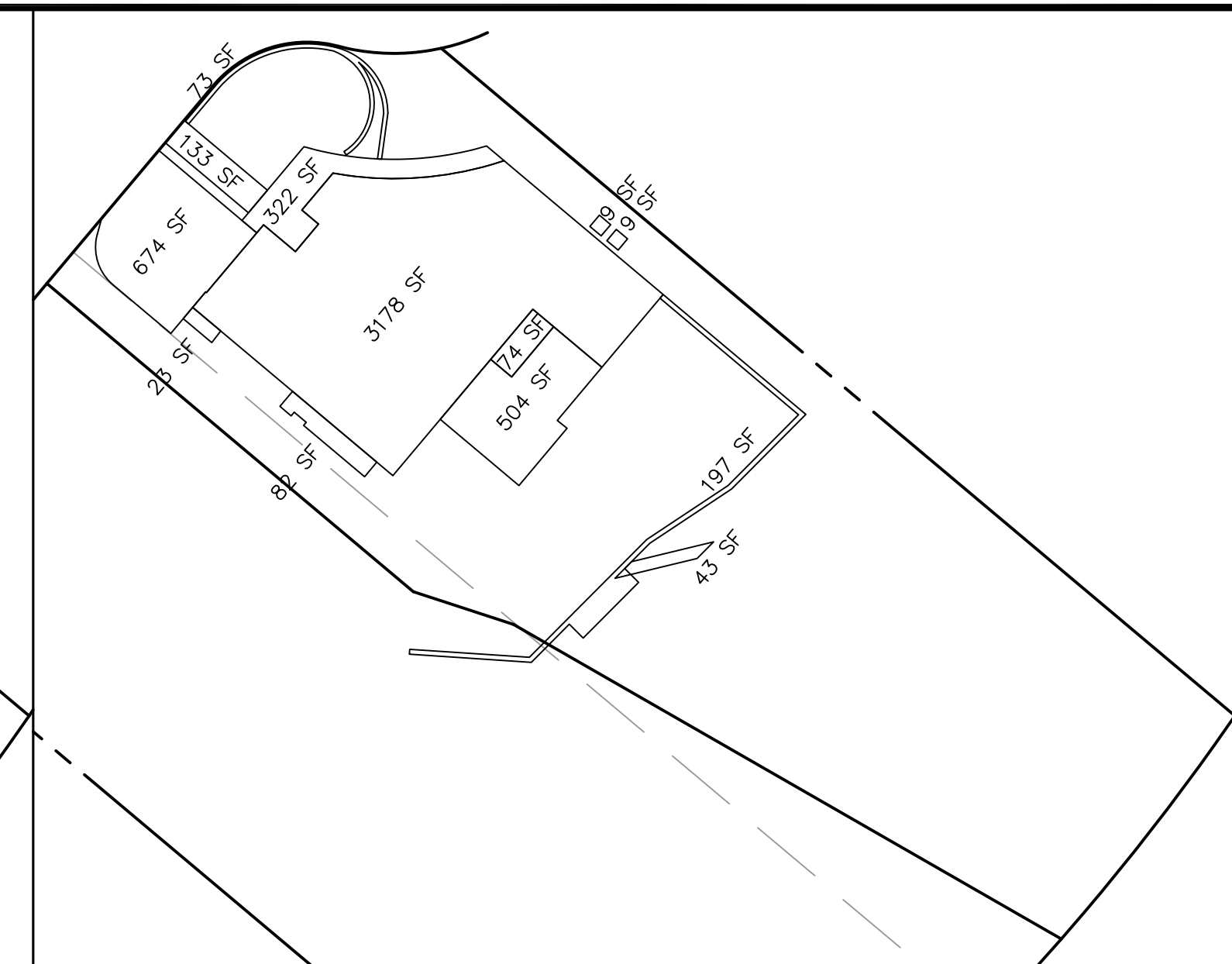
EXISTING DRAINAGE AREAS
SCALE 1" = 30'



PROPOSED DRAINAGE AREAS
SCALE 1" = 30'



EXIST IMPERVIOUS AREAS
SCALE 1" = 30'



PROPOSED IMPERVIOUS AREAS
SCALE 1" = 30'

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-A EXISTING
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.1604 ac
Peak Time	12.1000 hrs
Peak Flow	0.3830 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-A		0.1604	66	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-A, Row: 1

Composite Runoff Curve Number Calculator

Description	Area (ac)	Curve Number
IMPERVIOUS	0.0209	98
PERVIOUS	0.1394	61
Total Area	0.1604	66 <----- Weighted CN

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-B EXISTING
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.0717 ac
Peak Time	12.1000 hrs
Peak Flow	0.2259 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-B		0.0717	72	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-B, Row: 1

Composite Runoff Curve Number Calculator

Description	Area (ac)	Curve Number
IMPERVIOUS	0.0213	98
PERVIOUS	0.0505	61
Total Area	0.0717	72 <----- Weighted CN

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-C EXISTING
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.0599 ac
Peak Time	12.1000 hrs
Peak Flow	0.1686 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-C		0.0599	69	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-C, Row: 1

Composite Runoff Curve Number Calculator

Description	Area (ac)	Curve Number
IMPERVIOUS	0.0135	98
PERVIOUS	0.0464	61
Total Area	0.0599	69 <----- Weighted CN

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-A PROPOSED-VRRM
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.2226 ac
Peak Time	12.1000 hrs
Peak Flow	0.8236 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-A		0.2226	76	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-A, Row: 1

Composite Runoff Curve Number Calculator

Description	Area (ac)	Curve Number
IMPERVIOUS	0.1002	98
PERVIOUS	0.1224	61
Total Area	0.2226	78 <----- Weighted CN

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-B PROPOSED
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.0182 ac
Peak Time	12.1000 hrs
Peak Flow	0.0353 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-B		0.0182	62	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-B, Row: 1

Composite Runoff Curve Number Calculator

Description	Area (ac)	Curve Number
IMPERVIOUS	0.0004	98
PERVIOUS	0.0177	61
Total Area	0.0182	62 <----- Weighted CN

TR-55 Tabular Hydrograph Method
Input Summary

Description	SHED-C PROPOSED-VRRM
Rainfall Distribution	Type II
1a/P Interpolation	On
Total Area	0.0512 ac
Peak Time	12.1000 hrs
Peak Flow	0.1752 cfs

Given Input Data:

Subarea Description	D/S Subareas	Area (ac)	CN	Tc (hrs)	Tt (hrs)	Rainfall (in)
SHED-C		0.0512	74	0.0833	0.0000	4.8000

Support Data:
Subarea Name: SHED-C, Row: 1

Composite Runoff Curve Number Calculator

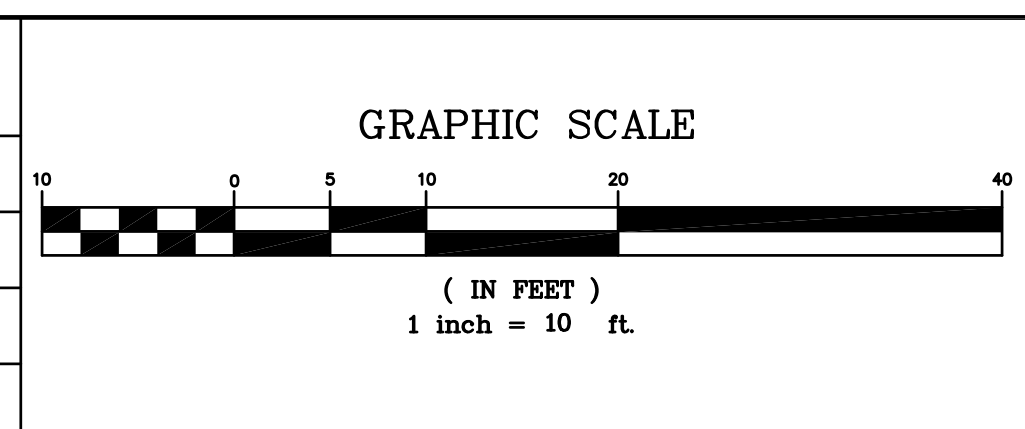
Description	Area (ac)	Curve Number
IMPERVIOUS	0.0210	98
PERVIOUS	0.0302	61
Total Area	0.0512	76 <----- Weighted CN

LEGEND FOR IMPERVIOUS AREAS

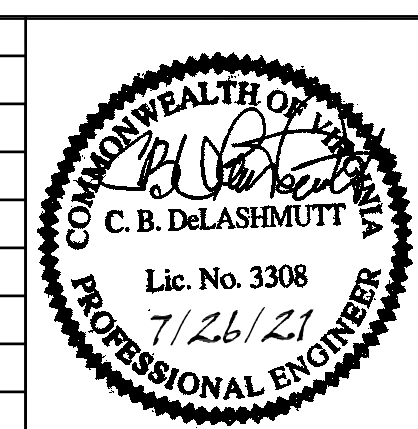
EXISTING CONDITION	PROPOSED CONDITION
1,440	3,574 SQ. FT.
265	674 SQ. FT.
722	1,063 SQ. FT.
2,610	5,451 SQ. FT.
15,977	13,136 SQ. FT.
-	- 18,587 SQ. FT.

STORMWATER NARRATIVE:
THE EXISTING SITE DRAINS BY SHEET FLOW OFF THE NORTHWESTERN SIDE OF THE PROPERTY ONTO THE NORTH UPLAND STREET RIGHT OF WAY, 0.17 CFS, OFF THE EASTERN SIDE OF THE SITE ONTO THE ADJACENT RESIDENTIAL LOT, 0.23 CFS AND OFF THE SOUTHEASTERN SIDE OF THE SITE ONTO COUNTY PROPERTY AND INTO DONALDSON RUN, 0.38 CFS. THE CURRENT TOTAL RUNOFF IS 0.78 CFS. THE PROPOSED RUNOFF IS SHEET FLOW OFF THE WESTERN SIDE OF PROPERTY ONTO THE NORTH HANCOCK STREET RIGHT OF WAY, 0.18 CFS, OFF THE EASTERN SIDE OF THE SITE ONTO THE ADJACENT RESIDENTIAL LOT, 0.04 CFS AND OFF THE SOUTHEASTERN SIDE OF THE SITE ONTO COUNTY PROPERTY AND INTO DONALDSON RUN, 0.82 CFS. THE TOTAL RUNOFF PROPOSED RUNOFF IS 1.04 CFS. THIS IS A 0.26 CFS INCREASE FROM BEFORE REDEVELOPMENT. THE PORTION OF THE PROPERTY OUTSIDE THE DISTURBED AREA HAS A RUNOFF OF 0.31 CFS INTO DONALDSON RUN WHICH WILL REMAIN UNCHANGED BY THE REDEVELOPMENT. THE POST DEVELOPED CONDITION SLIGHTLY INCREASES THE RUNOFF INTO THE PUBLIC RIGHT OF WAY AND INTO DONALDSON RUN BUT DECREASES THE RUNOFF ONTO ADJACENT RESIDENTIAL PROPERTIES. ALL RUNOFF LEAVES THE SITE BY SHEET FLOW DUE TO THE REDUCTION OF RUNOFF ONTO ADJACENT RESIDENTIAL PROPERTIES AND THE MINIMAL INCREASE IN RUNOFF ONTO PUBLIC RIGHT OF WAYS THE PROPOSED DEVELOPMENT SHOULD HAVE NO ADVERSE IMPACTS ON ADJACENT PROPERTY.

TAX MAP#:	
FIELD BOOK:	
DRAWING:	SETTINGS FILE:
JOB NO.: A20-114	FILE NO.:



NO.	DATE	DESCRIPTION	BY



DeLashmutt Associates Ltd.
CIVIL ENGINEERS & LAND SURVEYORS
1120 S. GEORGE MASON DR.
ARLINGTON, VIRGINIA 22204
(703) 486-8300

RUNOFF CALCULATIONS PLAN
LOT 11 SECTION 1
BROYHILL HILLS
D.B. 982 PG. 424
ARLINGTON COUNTY, VIRGINIA

SCALE: 1"=10'
DATE: JULY 2021
DRAWN BY: CMD
CHECKED BY:
SHEET 8 OF 17