

IFB #617-12

Project Name and Location
**Ft Myer Heights
Playground
Reconstruction**

1400 N. Fort Myer Drive
Arlington, VA

Sheet Title
**Stormwater
Management
Plan - Pre / Post
Development
Conditions**

Approvals	Date
<i>D. Welch</i> Department Director	2/27/12
<i>A. D. M.</i> Park Development Division Chief	2/21/12
<i>B. J. M.</i> Design Unit Supervisor	2/21/12

Revisions	Date


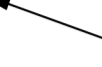

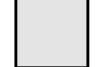



Designed: AW
Drawn: AW
Checked: BG

Filename: SWMP.dwg
Plotted: May 09, 2012

Scale: AS SHOWN
Date: DATE

ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES			
FT MYER HEIGHTS PLAYGROUND RECONSTRUCTION STORMWATER MANAGEMENT - PRE / POST DEVELOPMENT ARLINGTON COUNTY PROJECT / BY-RIGHT			
SCALE: AS SHOWN	DESIGNED:	CHECKED:	
SUBMITTED DATE:	APPROVED DATE:	APPROVED DATE:	
	CHIEF TRANSP. PLANNING BUREAU	CHIEF TRANSP. ENGINEERING BUREAU	
APPROVED DATE:	APPROVED DATE:	APPROVED DATE:	
CHIEF WATER, SEWER, & STR. BUREAU	CHIEF ENGINEERING BUREAU	DIRECTOR OF ENV. SERVICES	
		SHEET L8.0	CONTRACT H-SHEET 8 OF 14

LEGEND

-  IMPERVIOUS AREA
-  DRAINAGE ARROW
-  DRAINAGE AREA BOUNDARY
-  PUBLIC SIDEWALK EASEMENT
-  --110-- EXISTING MAJOR CONTOUR
-  --109-- EXISTING MINOR CONTOUR
-  - - - - - PROPERTY LINE

NOTES

- RUNOFF FROM PROPOSED WORK SHALL NOT HAVE AN ADVERSE IMPACT ON ADJACENT PROPERTIES.
- REFER TO EROSION & SEDIMENT CONTROL SHEET FOR STORMWATER MANAGEMENT NARRATIVE.
 - TIME OF CONCENTRATIONS DETERMINED USING THE "SEELYE CHART."
 - DUE TO THE USE OF BEST MANAGEMENT PRACTICES AND PERMEABLE PAVING MATERIALS, CHANGE IN THE STORMWATER AND DRAINAGE CHARACTERISTICS OF THE SITE WILL BE MINIMAL.

EXISTING / PROPOSED DRAINAGE

TIME OF CONCENTRATION DETERMINED USING THE "SEELYE CHART".

- (A)** AREA A (0.48 AC) - DRAINS TO EXISTING CATCH BASIN
 TIME OF CONCENTRATION (TC): 5 MINS.
 INTENSITY (10 YR.) AT TC: 6.79 IN/HR
 POST DEVELOPMENT RUNOFF: Q = CIA

Q(A) = 0.00 x 6.79 IN/HR x 0.00 AC = 0.00 CFS

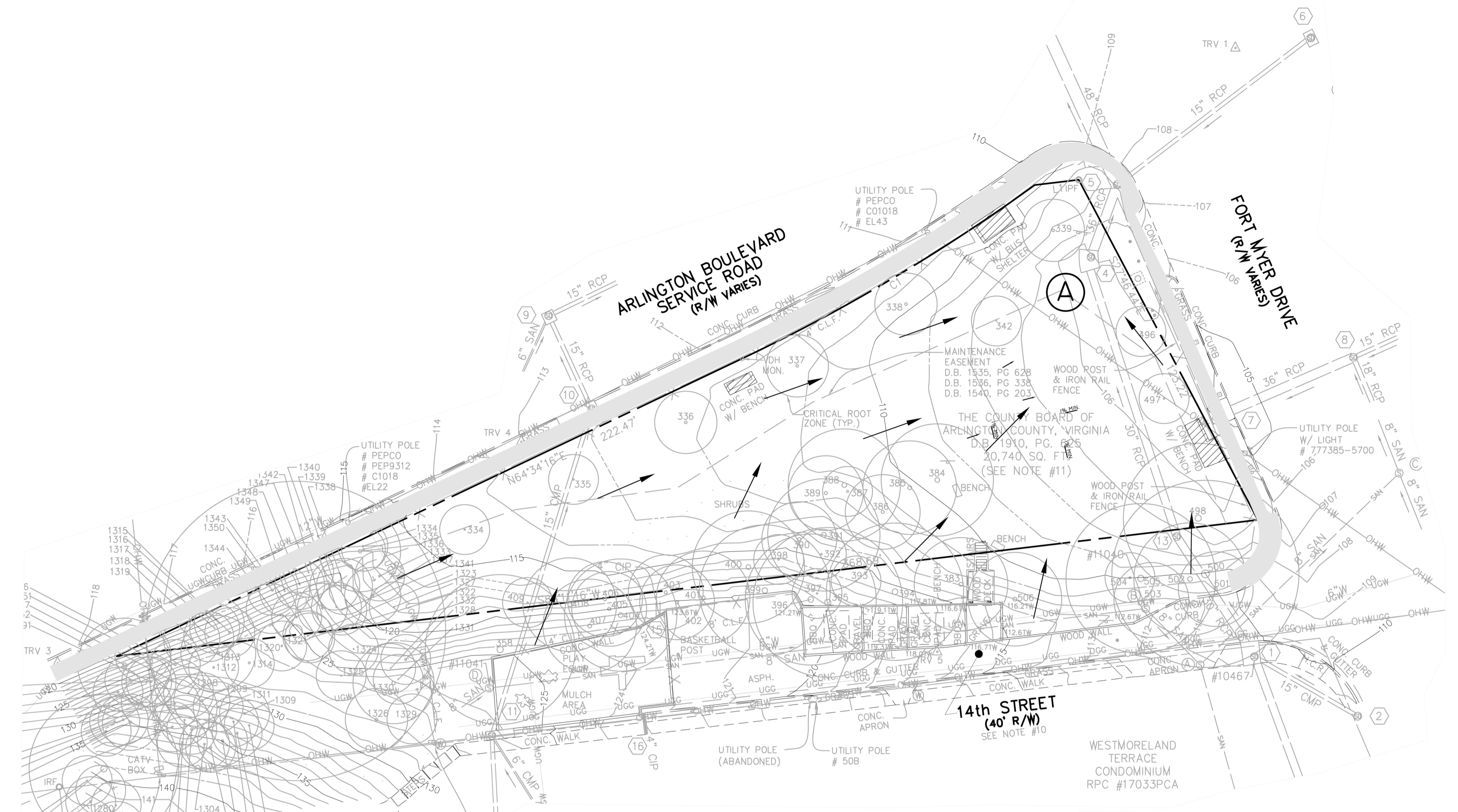
	AREA	C VALUE	PRODUCT
IMPERVIOUS AREA:	0.005 AC	0.90	0.0045
PERVIOUS AREA:	0.475 AC	0.30	0.1425
TOTAL AREA:	0.48 AC		0.15
WEIGHTED "C" VALUE:		0.31	

PRE-DEVELOPMENT:
Q = CIA Q = 0.31 x 6.79 x 0.48 AC = 1.01 CFS

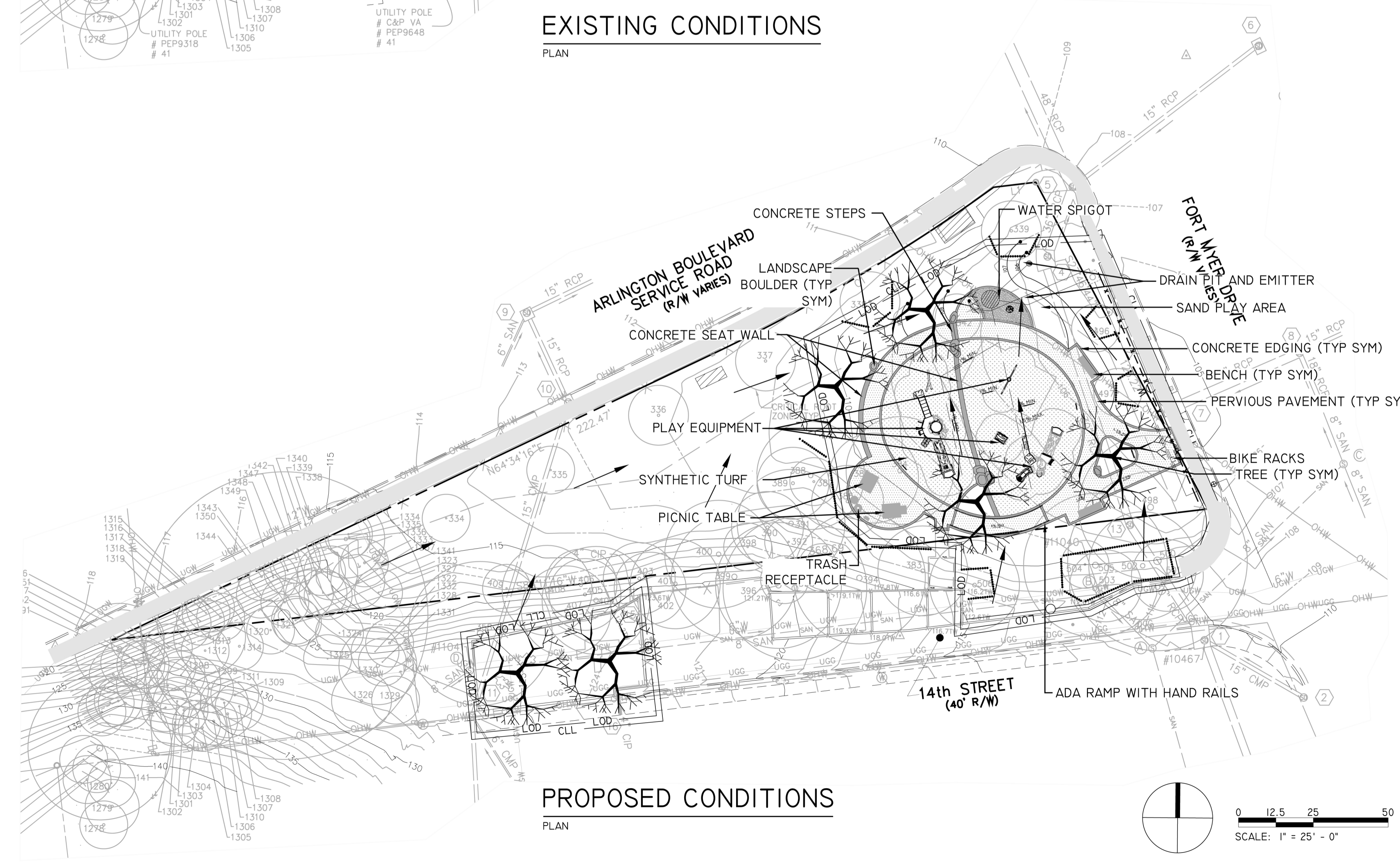
	AREA	C VALUE	PRODUCT
IMPERVIOUS AREA:	0.014 AC	0.90	0.013
PERVIOUS AREA:	0.466 AC	0.30	0.139
TOTAL AREA:	0.48 AC		0.15
WEIGHTED "C" VALUE:		0.31	

POST-DEVELOPMENT:
Q = 0.31 x 6.79 x 0.48 AC = 1.01 CFS

CONCLUSION:
CHANGE IN RUN-OFF = (POST) 1.01 CFS - (PRE) 1.01 CFS = 0.00 CFS



EXISTING CONDITIONS
PLAN



PROPOSED CONDITIONS
PLAN

