

Civil Exhibits

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STANDARD DRAWING LEGEND

FOR ENTIRE PLAN SET
(NOT TO SCALE)

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE	EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE			OVERHEAD WIRE	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE			UNDERGROUND TELEPHONE LINE	
	EASEMENT LINE			UNDERGROUND CABLE LINE	
	SETBACK LINE			STORM SEWER	
				SANITARY SEWER MAIN	
	CONCRETE CURB & GUTTER			HYDRANT	
				SANITARY MANHOLE	
				STORM MANHOLE	
				WATER METER	
	UTILITY POLE WITH LIGHT			WATER VALVE	
	POLE LIGHT			GAS VALVE	
	TRAFFIC LIGHT			GAS METER	
	UTILITY POLE			TYPICAL END SECTION	
	TYPICAL LIGHT			HEADWALL OR ENDWALL	
	ACORN LIGHT			YARD INLET	
	TYPICAL SIGN			CURB INLET	
	PARKING COUNTS			CLEAN OUT	
	CONTOUR LINE			ELECTRIC MANHOLE	
	SPOT ELEVATIONS			TELEPHONE MANHOLE	
				ELECTRIC PEDESTAL	
	SANITARY LABEL			MONITORING WELL	
	STORM LABEL			TEST PIT	
	SANITARY SEWER LATERAL			BENCHMARK	
	UNDERGROUND WATER LINE			BORING	
	UNDERGROUND ELECTRIC LINE			SIDEWALK	
	UNDERGROUND GAS LINE				

GENERAL NOTES

1. THIS PLAN IS BASED ON THE FOLLOWING DOCUMENTS AND INFORMATION:

A) BOUNDARY & TOPOGRAPHIC SURVEY ENTITLED, "SS132214-OVERALL.pdf" PREPARED BY BOHLER ENGINEERING 03/14/14, FILE NO. SS132214.

B) ARCHITECTURAL CAD FILES ENTITLED, "TGP_BLM_Ground Plan.dwg," "TGP_BLM_PLN_Garage.dwg," "TGP_BLM_Roof Plan.dwg," AND "TGP_BLM_Zoning.dwg," PREPARED BY TORTI GALLAS, RECEIVED 09/13/16.

C) LANDSCAPE CAD FILES ENTITLED, "2016.09.12_Background.dwg" PREPARED BY STUDIO 39, RECEIVED 09/13/16.

2. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARK OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES.

PROJECT NARRATIVE

BLOCK 7 IS ONE OF THE EIGHT PROPOSED BLOCKS OF THE BROOKLAND MANOR PUD. BLOCK 7 IS BORDERED BY BRENTWOOD AVENUE NE TO THE WEST, SARATOGA AVENUE NE TO THE NORTH, 14TH STREET NE TO THE EAST AND A 16' PUBLIC ALLEY TO THE SOUTH. IN EXISTING CONDITIONS, THERE ARE THREE BUILDINGS AND SITE FEATURES THAT WILL BE REMOVED BEFORE CONSTRUCTION. THE BLOCK WILL BE DIVIDED INTO TWO LOTS. LOT A IS 57,511 SF AND LOT B IS 56,974 SF. THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A SENIOR LIVING APARTMENT ON LOT B AND A RESIDENTIAL APARTMENT ON LOT A. A PROPOSED STORM MAIN IS PROPOSED WITHIN SARATOGA AVENUE. THE PROPOSED LATERALS WILL CONNECT TO EXISTING UTILITY MAINS AND THE PROPOSED STORM MAIN. PROPOSED BMPS WILL BE INSTALLED TO MEET DOEE STORMWATER MANAGEMENT REQUIREMENTS AND GAR.

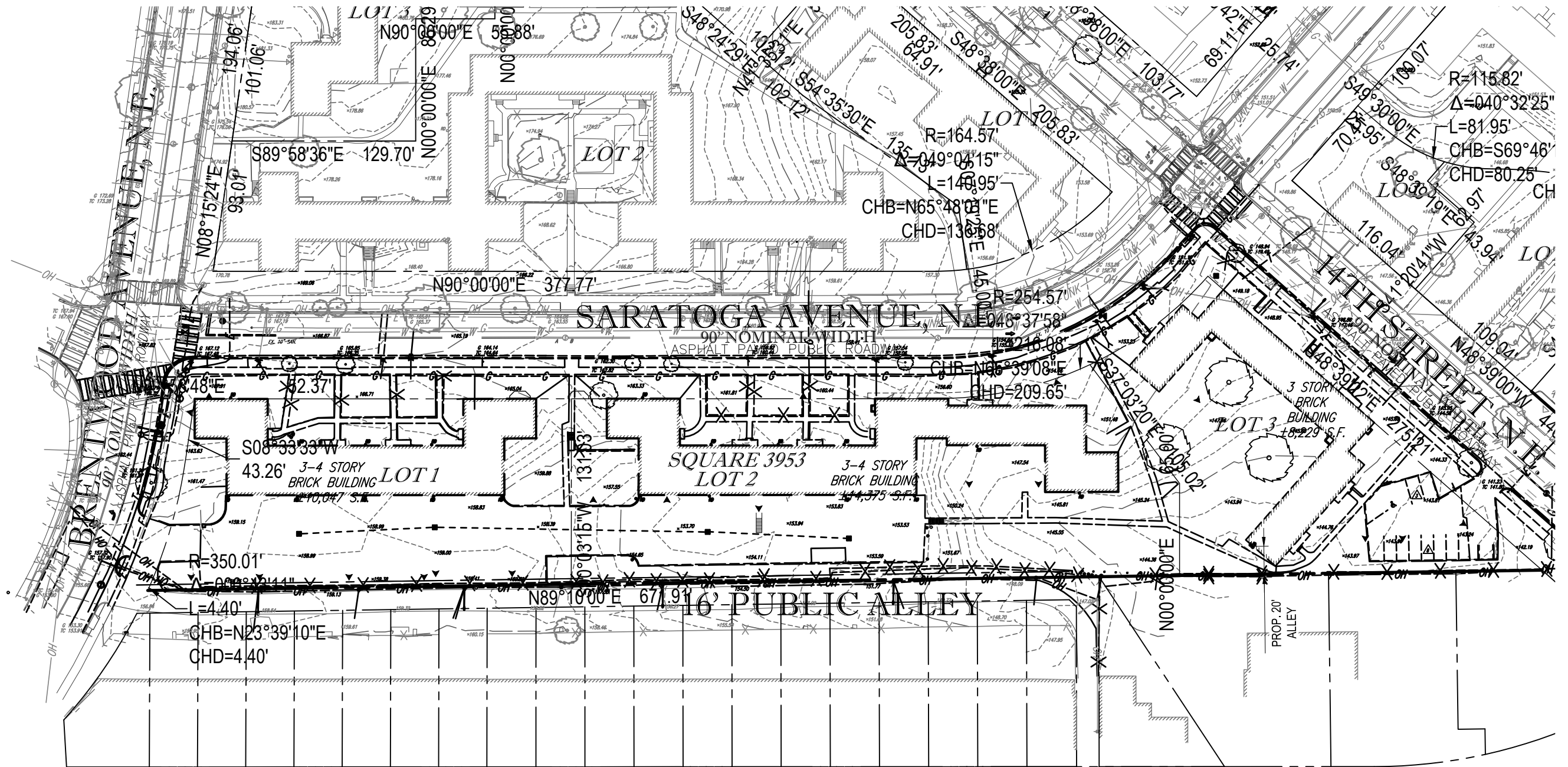
SHEET INDEX

SHEET TITLE	SHEET NUMBER	
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EROSION AND SEDIMENT CONTROL PLAN	C-201	
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STORMWATER MANAGEMENT NARRATIVE	C-303	C-403
GREEN AREA RATIO SCORESHEET	C-304	C-404
CIRCULATION PLAN	C-500	

OWNER / DEVELOPER

MID-CITY FINANCIAL CORPORATION
7200 WISCONSIN AVENUE, SUITE 903
BETHESDA, MD 20814
C/O MICHAEL S. MEERS

<p>PROJECT NAME: RIA BLOCK 7</p> <p style="text-align: right;">RIA BLOCK 7, WASHINGTON, DC 20018</p>	<p>SHEET TITLE: GENERAL NOTES AND LEGEND</p> <p style="text-align: right;">C-100</p>				
<p>BOHLER DC</p> <p><small>1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">SCALE: N/A</td> <td style="width: 25%;">DATE: 09/22/2016</td> <td style="width: 25%;">CAD ID: PU0</td> <td style="width: 25%;">PROJECT NUMBER: DC1322141</td> </tr> </table>	SCALE: N/A	DATE: 09/22/2016	CAD ID: PU0	PROJECT NUMBER: DC1322141
SCALE: N/A	DATE: 09/22/2016	CAD ID: PU0	PROJECT NUMBER: DC1322141		

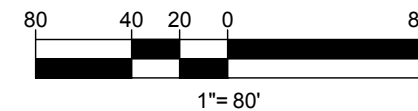


DEMOLITION PLAN NARRATIVE

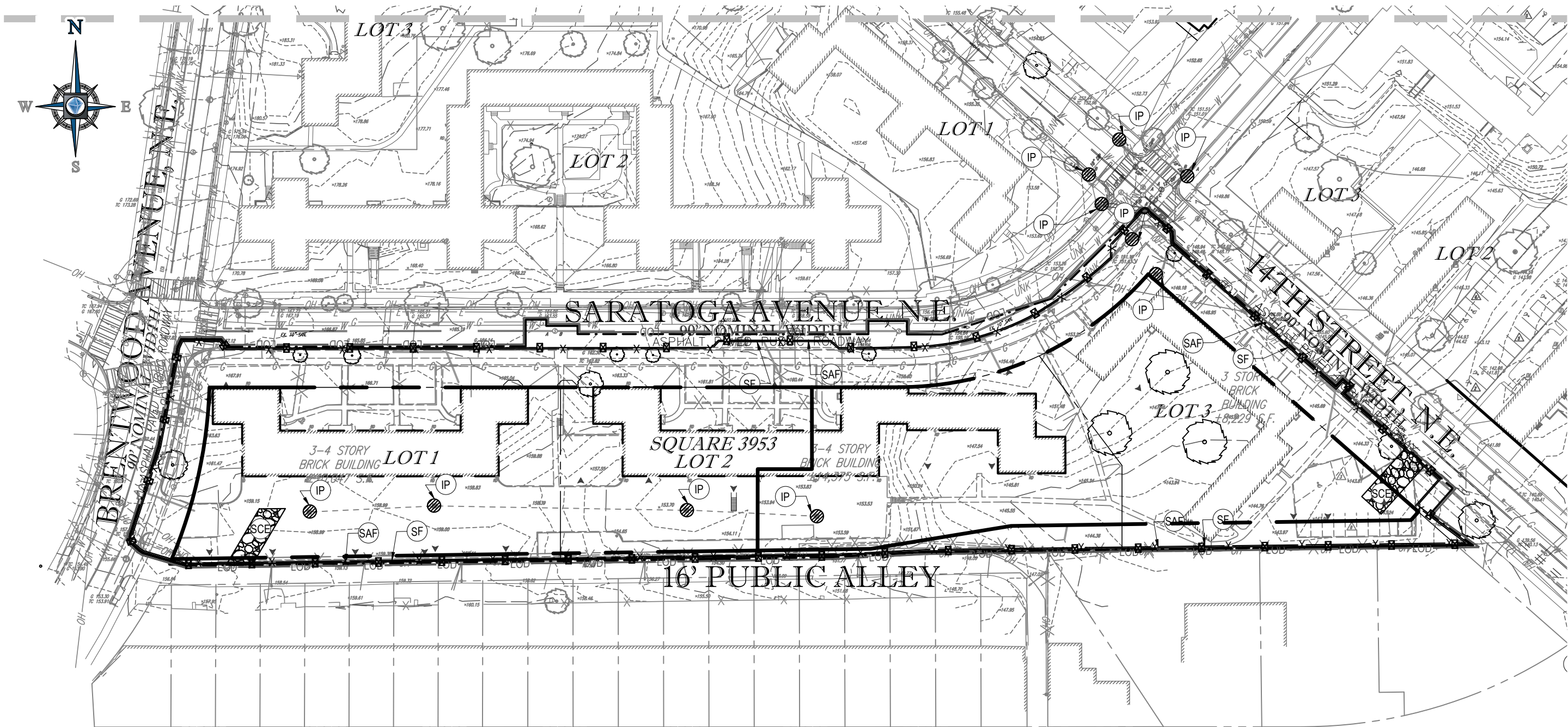
THE EXISTING SITE IS BORDERED BY BRENTWOOD AVENUE NE TO THE WEST; A 16' PUBLIC ALLEY TO THE SOUTH; 14TH STREET NE TO THE EAST; AND SARATOGA AVENUE NE TO THE NORTH. THE SITE IS MADE UP OF SEVERAL MULTI-STORY APARTMENT BUILDINGS RANGING IN HEIGHT. THE PROPOSED PROJECT REQUIRES DEMOLITION OF EXISTING SITE FEATURES INCLUDING THE EXISTING BUILDINGS, EXISTING PARKING LOT, AND ON-SITE UTILITIES PRIOR TO THE CONSTRUCTION.

LEGEND

- LOD LOD PROP LIMITS OF DISTURBANCE
- PROPERTY LINE
- SAW CUT



PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
BOHLER DC	SHEET TITLE: EXISTING CONDITIONS AND DEMOLITION PLAN C-200
1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701	SCALE: 1"=80' DATE: 09/22/2016 CAD ID: PU0 PROJECT NUMBER: DC1322141



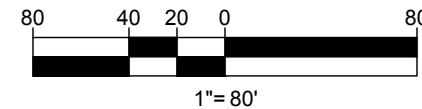
NOTE:


- SOME IMPACT TO ADJACENT PROPERTIES IS ANTICIPATED FROM REMOVING THE SOIL IN THOSE AREAS AND FROM THE WORK TO BE CONDUCTED WITHIN THE RIGHT-OF-WAY. SHEETING AND SHORING WILL BE INSTALLED AT THE REQUIRED LOCATIONS AS NEEDED.

STANDARD SYMBOLS

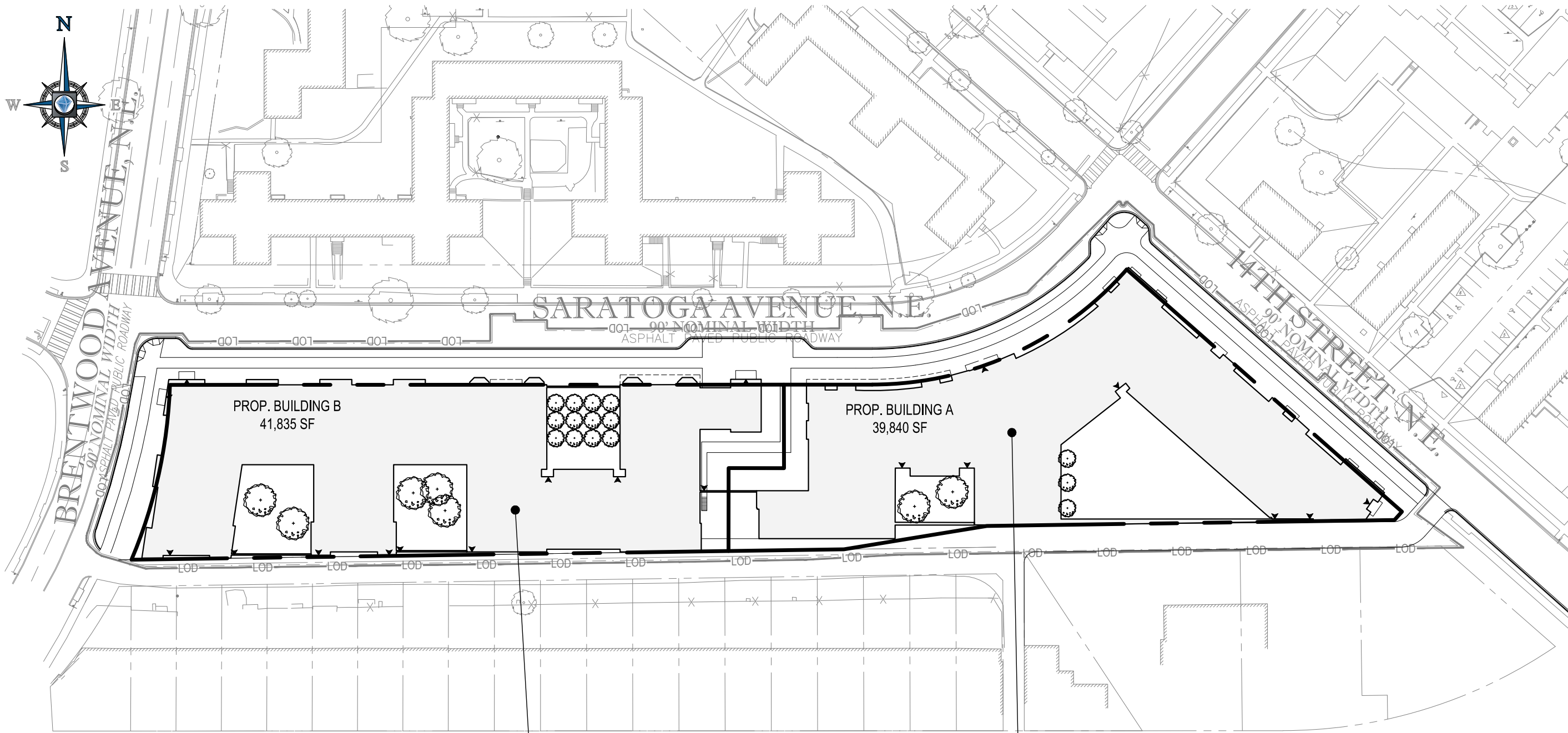
FOR EROSION AND SEDIMENT CONTROL PRACTICES

TITLE	KEY	SYMBOL
STABILIZED STONE CONSTRUCTION ENTRANCE	(SCE)	
SILT FENCE	(SF)	
SAFETY FENCE	(SAF)	
INLET PROTECTION	(IP)	



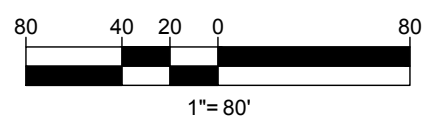
PROJECT NAME:		RIA BLOCK 7	
		RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER DC		SHEET TITLE:	
		EROSION AND SEDIMENT CONTROL PLAN C-201	
SCALE:	DATE:	CAD ID:	PROJECT NUMBER:
1"=80'	09/22/2016	PU0	DC1322141


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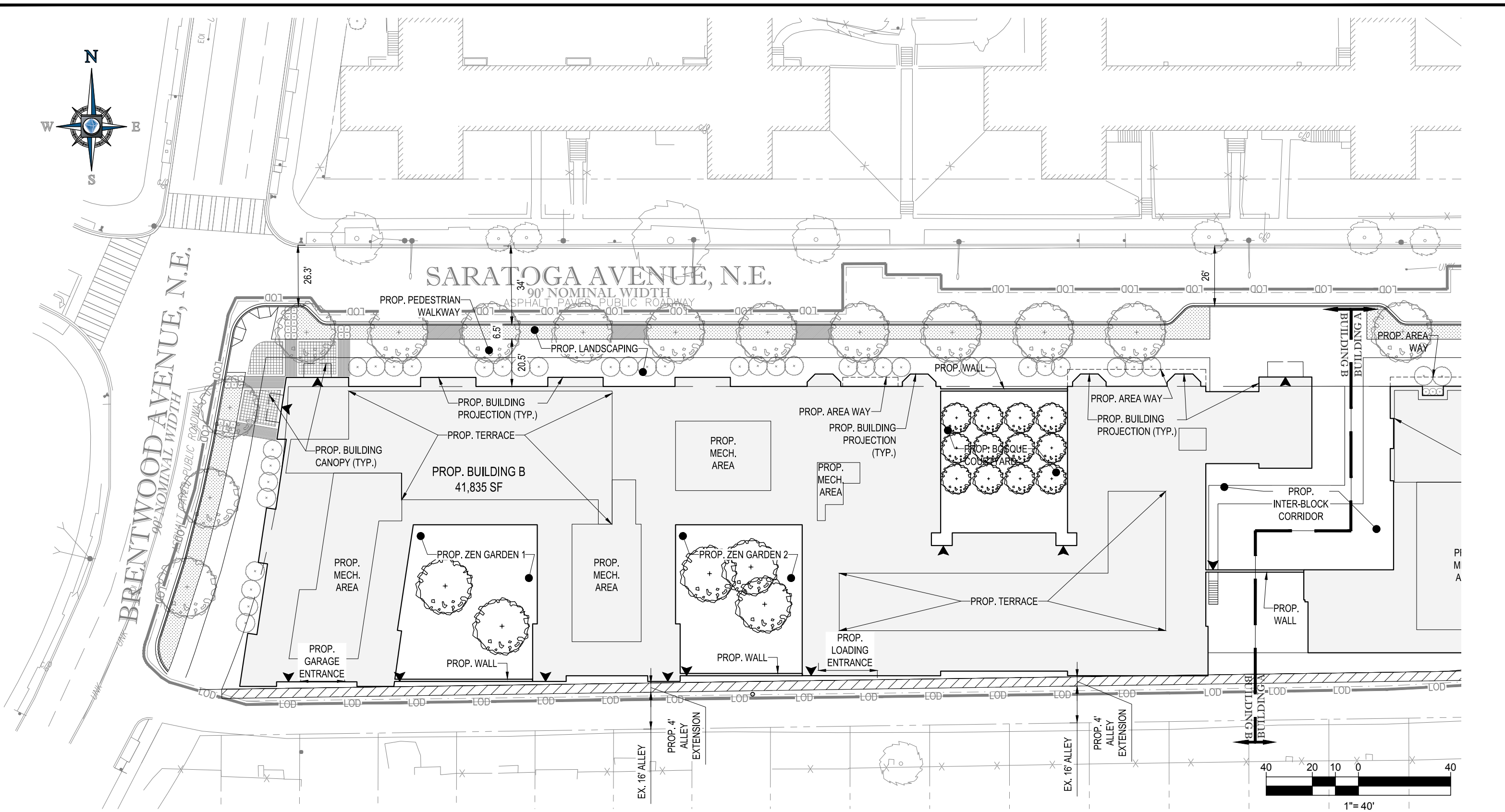


SEE SHEETS 300-304 FOR DETAILS AND PLANS OF THE BUILDING B SITE

SEE SHEETS 400-404 FOR DETAILS AND PLANS OF THE BUILDING A SITE



PROJECT NAME:		RIA BLOCK 7	
		RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER TM DC	SHEET TITLE:		
	SITE LOCATION C-202		
1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701	SCALE: 1"=80'	DATE: 09/22/2016	CAD ID: PU0
			PROJECT NUMBER: DC1322141



SITE PLAN NARRATIVE

THE PROJECT PROPOSES ONE (1) SENIOR LIVING APARTMENT BUILDING WITH UNDERGROUND PARKING. THERE WILL BE THREE (3) COURTYARDS AND ONE (1) INTER-BLOCK CORRIDOR BETWEEN THE PROPOSED PROJECT SITE AND ADJACENT PROJECT. THE LOADING ENTRANCE WILL BE ALONG THE ALLEY. THE EXISTING CURBS ALONG BRENTWOOD AVENUE NE AND SARATOGA AVENUE NE WILL BE REPLACED. PROPOSED CURBS AND SIDEWALKS WILL TIE INTO THE EXISTING STREETSCAPE AT THE LIMITS OF DISTURBANCE.

- BLOCK 7 (BUILDING B)
 - LOT AREA = 57,514 SF
 - USE: RESIDENTIAL
 - 200 UNITS

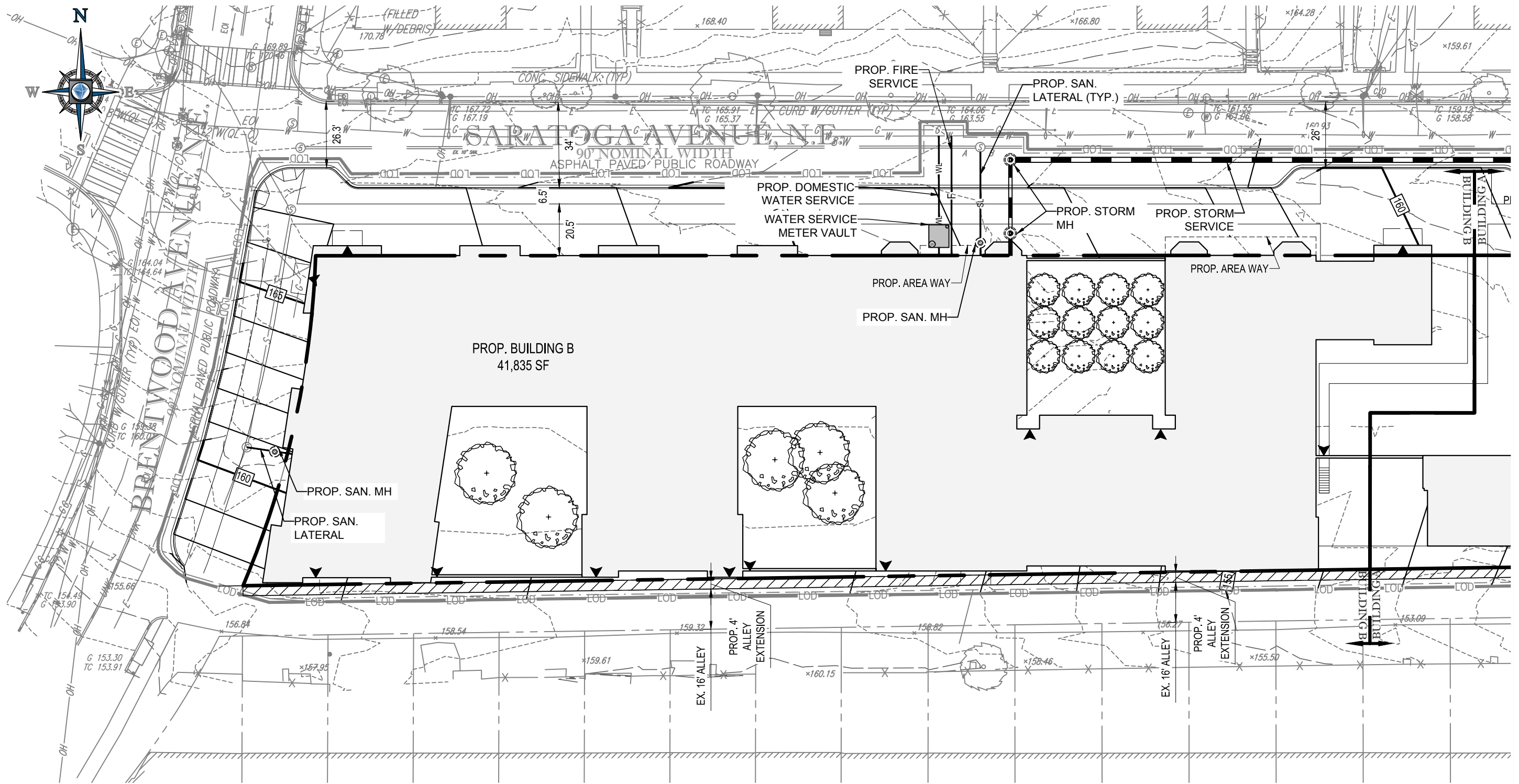
LEGEND:



NOTE:

1. FINAL LANDSCAPE PLAN IS TO BE PROVIDED BY OTHERS.

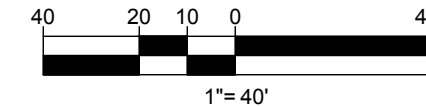
PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018		SHEET TITLE: BUILDING B SITE/STREETSCAPE PLAN C-300	
 BOHLER DC	1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701	SCALE: 1"=40'	DATE: 09/22/2016
CAD ID: PU0		PROJECT NUMBER: DC1322141	




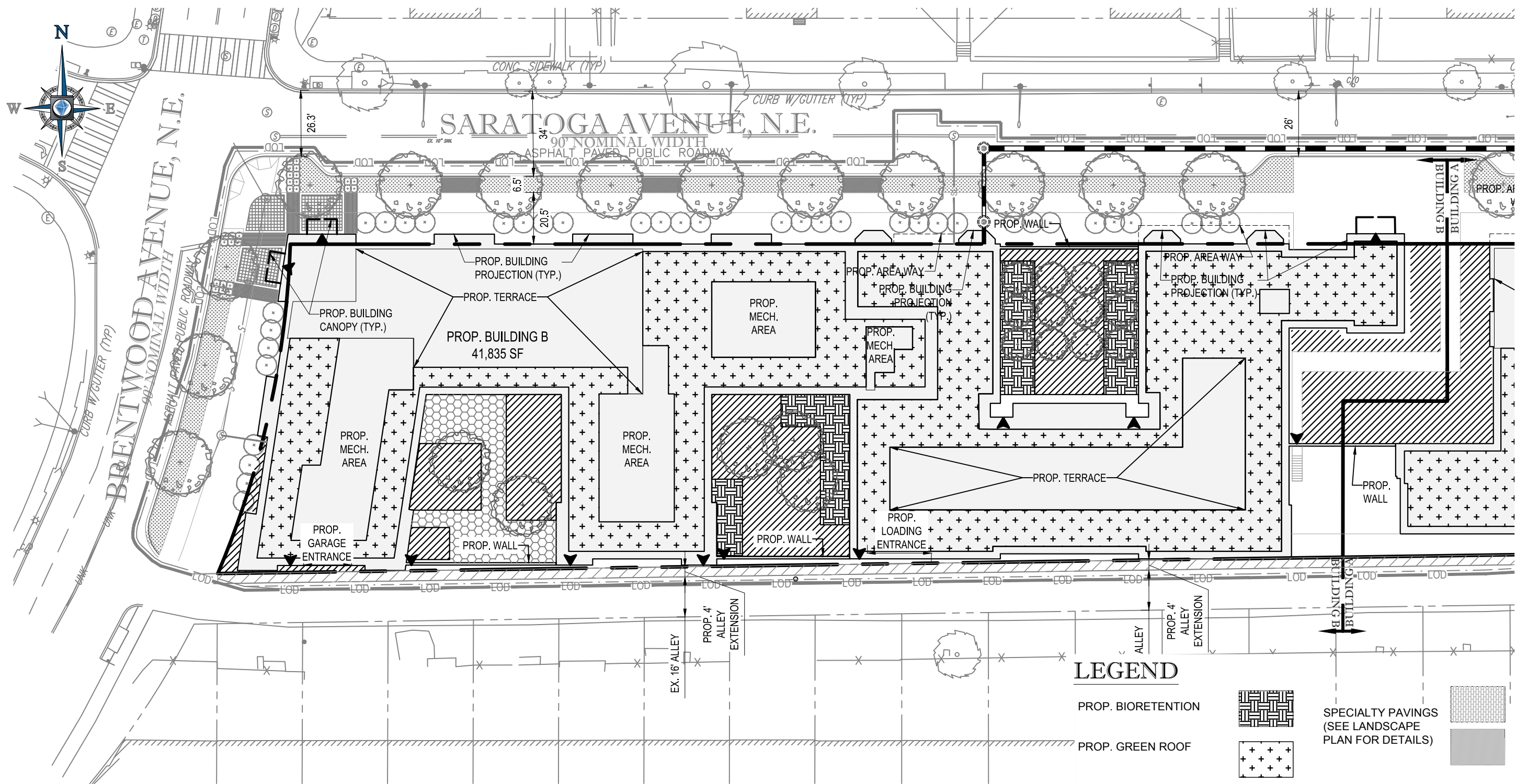
GRADING AND UTILITY NARRATIVE

THE PROPOSED BUILDING B WILL HAVE TWO (2) SANITARY LATERALS, ONE (1) WATER LATERAL, ONE (1) FIRE LATERAL AND ONE (1) STORM LATERAL. THE PROPOSED SANITARY, WATER, AND FIRE LATERALS WILL CONNECT TO EXISTING UTILITIES WITHIN BRENTWOOD AVENUE NE AND SARATOGA AVENUE NE. THE PROPOSED STORM LATERAL WILL CONNECT TO A PROPOSED STORM MAIN WITHIN SARATOGA AVENUE. UPGRADES TO THE EXISTING SANITARY AND WATER MAINS ARE PART OF THE PHASE I PUD AND WILL BE PROPOSED AT A LATER DATE. ANY UPGRADES TO THE EXISTING SANITARY, WATER, AND STORM SYSTEM ARE STILL TO BE DETERMINED BY DC WATER IF NEEDED.

THE PROPOSED CONTOURS WILL TIE INTO THE EXISTING ROAD GRADES. ALL SIDEWALKS WILL BE ADA COMPLIANT.

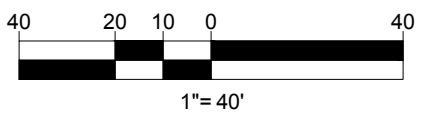


PROJECT NAME:		RIA BLOCK 7	
		RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER DC		SHEET TITLE:	
		BUILDING B GRADING AND UTILITY PLAN C-301	
SCALE:	DATE:	CAD ID:	PROJECT NUMBER:
1"=40'	09/22/2016	PU0	DC1322141



LEGEND

PROP. BIORETENTION		SPECIALTY PAVINGS (SEE LANDSCAPE PLAN FOR DETAILS)	
PROP. GREEN ROOF			
PROP. PERMEABLE PAVEMENT			
PROP. LANDSCAPE			



SWM/GAR PLAN NARRATIVE

THE PROPOSED OVERALL DEVELOPMENT WILL ADHERE TO THE MOST CURRENT (2013) DOEE STORMWATER MANAGEMENT GUIDEBOOK TO MEET THE MINIMUM REQUIREMENTS FOR STORMWATER MANAGEMENT. THIS PROJECT WILL TRIGGER THE MAJOR LAND DISTURBING ACTIVITY CATEGORY AND WILL BE REQUIRED TO RETAIN THE 1.2" STORM. THE TOTAL STORMWATER VOLUME (SWRV) REQUIRED FOR ONSITE RETENTION OF THE 1.2" STORM WILL BE APPROXIMATELY 4,834 CF.

THE ONSITE SWRV REQUIREMENTS WILL BE MET THROUGH A COMBINATION OF GREEN ROOFS, PERMEABLE PAVERS, AND BIORETENTION AREAS. SEE DETAILED CALCULATIONS (NEXT SHEET). THE PUBLIC SPACE AREAS WILL BE CALCULATED SEPARATELY AND WILL BE TREATED TO THE MAXIMUM EXTENT PRACTICABLE UTILIZING A COMBINATION OF PERMEABLE PAVERS, BIORETENTION TREE PITS, TREE PLANTINGS AND DEDICATED OPEN SPACE.

THE GAR REQUIREMENT IS 0.4. THE PROPOSED SITE PROVIDES A GAR OF 0.4. SEE GAR SPREADSHEET C-304.

NOTE:

AREAS AND/OR VOLUMES USED FOR GREEN AREA RATIO SCORING AND FOR STORMWATER MANAGEMENT RETENTION VOLUME COMPUTATIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE DUE TO SITE LAYOUT AND DESIGN CHANGES. ALL GAR SCORE AND STORMWATER MANAGEMENT STORAGE AREAS AND/OR VOLUMES ARE TO MEET CODE REQUIREMENTS IF THE DESIGN GEOMETRIES OR LAYOUT ARE MODIFIED.

PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018		SHEET TITLE: BUILDING B STORMWATER MANAGEMENT AND GREEN AREA RATIO C-302	
		SCALE: 1"=40'	DATE: 09/22/2016
1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701		CAD ID: SM0	PROJECT NUMBER: DC1322141

SWM NARRATIVE - BUILDING B:

I. SITE DESCRIPTION:

THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF BLOCK 7, AT THE SOUTHEAST CORNER OF SARATOGA AVENUE NE AND BRENTWOOD AVENUE NE. FOR THE PURPOSES OF THIS PUD, THE STORMWATER MANAGEMENT FOR BUILDING B HAS BEEN DESIGNED AND DETAILED FOR THE PRIVATE SPACE BUILDING B IMPACTS ONLY. THE TOTAL SITE AREA (57,514 SF) WILL BE DISTURBED.

DISTURBANCE WITHIN THE PUBLIC RIGHT-OF-WAY IS NOT INCLUDED IN THIS PUD AND WILL BE DESIGNED TO TREAT THE MAXIMUM EXTENT PRACTICABLE AT A FUTURE DATE.

II. METHODOLOGY:

THE CURRENT DOEE STORMWATER REGULATIONS WERE UTILIZED TO CALCULATE THE REQUIRED STORMWATER RETENTION VOLUMES.

ON-SITE SWRV REQUIREMENT (BUILDING B ONLY):

$$SWRV = \frac{[P \times (RvI \times \%I) + (RvC \times \%C) + (RvN \times \%N) \times SA]}{12}$$

$$SWRV = \frac{[1.2 \times [(0.95 \times 1.0) + (0.25 \times 0.0) \times 57,514]}{12}$$

= 4,834 CF

III. STORMWATER RETENTION VOLUME:

ON-SITE STORMWATER RETENTION WILL BE PROVIDED THROUGH THE IMPLEMENTATION OF GREEN ROOF, PERMEABLE PAVEMENT, AND BIORETENTION. THE RETENTION VALUES OF THE PROPOSED BMPS ARE CALCULATED AS FOLLOWS:

GREEN ROOF:

$$MAX\ SWRV = \frac{[1.7 \times [(0.95 \times 1.0) + (0.25 \times 0.0) \times SA]}{12}$$

$$SA = 20,950\ SF$$

$$SWRV\ PROVIDED = \frac{[1.7 \times [(0.95 \times 1.0) + (0.25 \times 0.0) \times 20,950]}{12}$$

$$= 2,820\ CF$$

PERMEABLE PAVEMENT:

THE PROPOSED PERMEABLE PAVER AREAS RECEIVE A RETENTION VALUE OF 4.5 CUBIC FEET PER 100 SQUARE FEET OF PRACTICE AREA. BASED ON AN AREA OF 2,725 SQUARE FEET, THE PROPOSED PERMEABLE PAVEMENT VOLUME HAS BEEN CALCULATED AS FOLLOWS:

$$SWRV\ PROVIDED = 4.5\ CF / 100\ SF \times 2,725\ SF = 123\ CF$$

BIORETENTION:

THE PROPOSED BIORETENTION PLANTERS WILL HAVE AN UNDERDRAIN, BUT NO INFILTRATION SUMP, SO IT HAS BEEN CALCULATED AS STANDARD BIORETENTION. THE PROPOSED RETENTION VOLUME IS CALCULATED AS FOLLOWS:

$$MAX\ SWRV = \frac{[1.7 \times [(0.95 \times 1.0) + (0.25 \times 0.0) \times SA]}{12}$$

$$SWRV = 0.6 \times STORAGE\ VOLUME\ (SV)$$

$$SV = SAm(Dm \times Nm) + SA_g(Dg \times Ng) + (SA_p \times Dp)$$

SEE BMP CALCULATIONS TABLE (THIS SHEET).

$$SWRV = 3,148\ CF$$

THE PROPOSED BMPS PROVIDE A TOTAL SWRV OF 6,091 CF. THIS EXCEEDS THE REQUIREMENT OF 4,782 CF.

IV. STORMWATER DETENTION VOLUME:

THE PROPOSED BMPS PROVIDE 11,152 CF OF STORAGE, REDUCING THE CURVE NUMBER OF A 2-YEAR STORM TO 54.

V. PUBLIC RIGHT-OF-WAY

PUBLIC RIGHT-OF-WAY STORMWATER RETENTION WILL BE PROVIDED TO THE MAXIMUM EXTENT PRACTICABLE.

VI. ON-SITE STORM SEWER NETWORK:

STORMWATER THAT IS NOT RETAINED WITHIN THE BMPS WILL FLOW THROUGH THE PROPOSED STORM LATERAL THAT CONNECTS TO THE PROPOSED STORM MAIN IN SARATOGA AVENUE, WHICH CONNECTS TO THE EXISTING STORM DRAIN IN 14TH STREET NE.

VII. SUMMARY:

ON-SITE RUNOFF FROM THE PROPOSED DEVELOPMENT IS STORED IN THE PROPOSED BMP AREAS. STORM EVENTS IN EXCESS OF 1.2" WILL BE CONVEYED TO A PROPOSED STORM SEWER LATERAL, WHICH CONNECTS INTO THE PROPOSED PUBLIC STORM SEWER WITHIN SARATOGA AVENUE NE. THE TOTAL RETENTION AND DETENTION VOLUMES PROVIDED BY THE BMPS MEET THE DOEE REQUIREMENTS.

BMP CALCULATIONS:

GREEN ROOF

GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	EX. IMP (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRV	SWRV PROVIDED	NOTES
1	20,950	20,950	20,950	20,950	4	1	Level 2	3684	2820	2820	
TOTAL								3,684	2,820	2,820	

MEDIA RETENTION VALUE	0.49
DRAINAGE LAYER RETENTION VALUE	0.15

BIORETENTION

FACILITY	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRV (CF)	Max SWRV	SWRV PROVIDED
Zen Garden 2 - West Bio	324	324	3,124	3,124	1	1	3	1	697	418	420	418
Zen Garden 2 - East Bio	798	798	7,698	7,698	1	1	3	1	1,716	1,029	1,036	1,029
Bosque Courtyard - West	732	732	6,317	6,317	1	1	3	1	1,574	944	850	850
Bosque Courtyard - East	732	732	6,317	6,317	1	1	3	1	1,574	944	850	850
TOTAL									5,560		3,157	3,148

PROJECT NAME:

RIA BLOCK 7
RIA BLOCK 7, WASHINGTON, DC 20018



BOHLER
DC

1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004
PHONE: (202) 524-5700 FAX: (202) 524-5701

SHEET TITLE:

BUILDING B
STORMWATER MANAGEMENT NARRATIVE
C-303

SCALE: N/A

DATE: 09/22/2016

CAD ID:

PROJECT NUMBER:

SM0

DC1322141



Address: BLOCK 7 - BUILDING B



Other / BZA Order: R-5-B; GAR Requirement = 0.4

Lot size (enter this value first) *

Green Area Ratio Scoresheet

Ward	Lot	Square	Zoning District
enter sq ft of lot		multiplier	
57,514		SCORE	0.400

Landscape Elements		Square Feet	Factor	Total
A Landscaped areas (select one of the following for each area)				
1	Landscaped areas with a soil depth of less than 24"	enter sq ft 9,003	0.3	2,700.9
2	Landscaped areas with a soil depth of 24" or greater	enter sq ft	0.6	-
3	Bioretention facilities	enter sq ft 2,586	0.4	1,034.4
B Plantings (credit for plants in landscaped areas from Section A)				
1	Groundcovers, or other plants less than 2' tall at maturity	enter sq ft 11,589	0.2	2,317.8
2	Plants, not including grasses, 2' or taller at maturity - calculated at 9 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants 0	0.3	-
3	Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	enter number of trees 0	0.5	-
4	Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	enter number of trees 20	0.6	3,000.0
5	Tree canopy for preservation of existing tree 6" to 12" diameter or larger or equivalent - calculated at 250 sq ft per tree	enter number of trees 0	0.7	-
6	Tree canopy for preservation of existing tree 12" to 18" diameter or larger or equivalent - calculated at 600 sq ft per tree	enter number of trees 0	0.7	-
7	Tree canopy for preservation of all existing trees 18" to 24" diameter or equivalent - calculated at 1300 sq ft per tree	enter number of trees 0	0.7	-
8	Tree canopy for preservation of all existing trees 24" diameter or larger or equivalent - calculated at 2000 sq ft per tree	enter number of trees 0	0.8	-
9	Vegetated wall, plantings on a vertical surface	enter sq ft 0	0.6	-
C Vegetated or "green" roofs				
1	Over at least 2" and less than 8" of growth medium	enter sq ft 20,950	0.6	12,570.0
2	Over at least 8" of growth medium	enter sq ft	0.8	-
D Permeable Paving***				
1	Permeable paving over at least 6" and less than 24" of soil or gravel	enter sq ft 0	0.4	-
2	Permeable paving over at least 24" of soil or gravel	enter sq ft 2,725	0.5	1,362.5

E Other				
1	Enhanced tree growth systems***	enter sq ft 0	0.4	-
2	Renewable energy generation	enter sq ft 0	0.5	-
3	Approved water features	enter sq ft 0	0.2	-
		sub-total of sq ft = 51,853		
H Bonuses				
1	Native plant species	enter sq ft 200	0.1	20.0
2	Landscaping in food cultivation	enter sq ft 0	0.1	-
3	Harvested stormwater irrigation	enter sq ft 0	0.1	-
		Green Area Ratio numerator = 23,006		
*** Permeable paving and structural soil together may not qualify for more than one third of the Green Area Ratio score.				Total square footage of all permeable paving and enhanced tree growth
				1,363

NOTE:

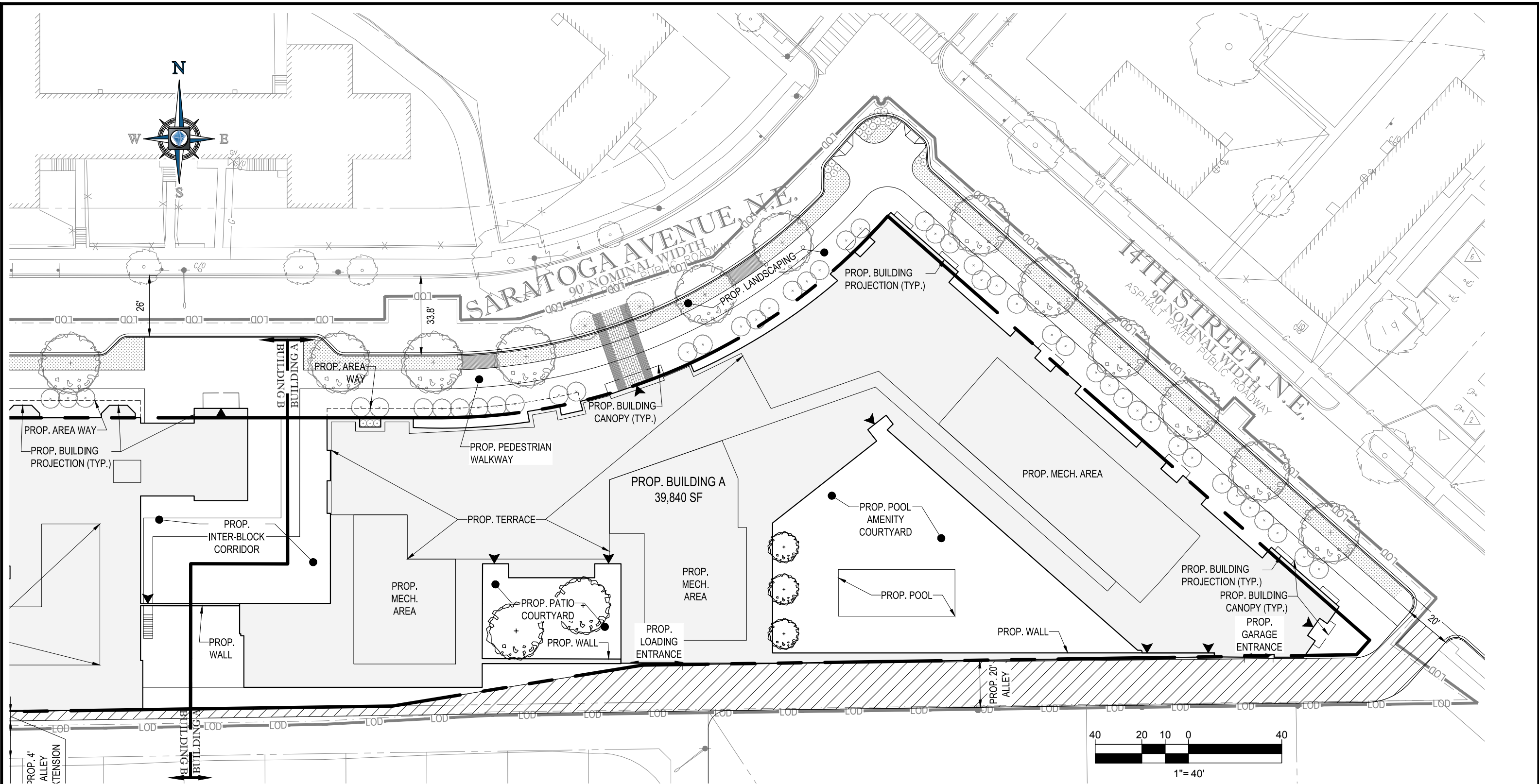
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PROJECT NAME:		RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
SHEET TITLE:		BUILDING B GREEN AREA RATIO SCORE SHEET C-304	
SCALE:	DATE:	CAD ID:	PROJECT NUMBER:
N/A	09/22/2016	SM0	DC1322141



BOHLER DC

1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004
PHONE: (202) 524-5700 FAX: (202) 524-5701



SITE PLAN NARRATIVE

THE PROJECT PROPOSES ONE (1) RESIDENTIAL APARTMENT BUILDING WITH UNDERGROUND PARKING. THERE WILL BE ONE (1) COURTYARD, ONE (1) POOL AMENITY COURTYARD, AND ONE (1) INTER-BLOCK CORRIDOR BETWEEN THE PROPOSED PROJECT SITE AND ADJACENT PROJECT. THE LOADING ENTRANCE WILL BE ALONG THE ALLEY. THE EXISTING CURBS ALONG SARATOGA AVENUE NE AND 14TH STREET NE WILL BE REPLACED. PROPOSED CURBS AND SIDEWALKS WILL TIE INTO THE EXISTING STREETSCAPE AT THE LIMITS OF DISTURBANCE.

- BLOCK 7 (BUILDING A)
 - LOT AREA = 56,970 SF
 - USE: RESIDENTIAL
 - 130 UNITS

LEGEND:



NOTE:

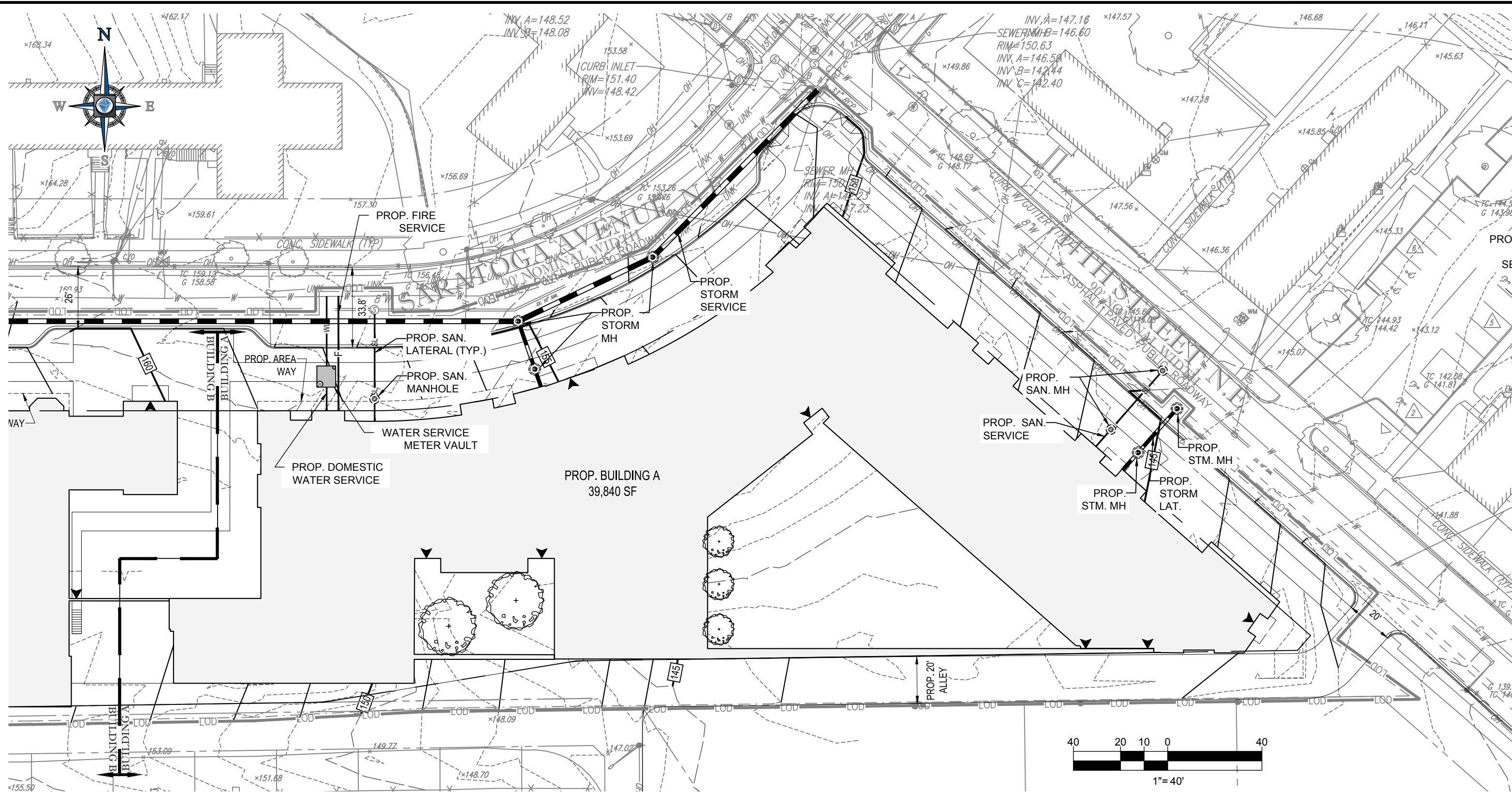
1. FINAL LANDSCAPE PLAN IS TO BE PROVIDED BY OTHERS.

PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
SHEET TITLE: BUILDING A SITE/STREETSCAPE PLAN C-400	
SCALE: 1"=40'	DATE: 09/22/2016
CAD ID: PU0	PROJECT NUMBER: DC1322141



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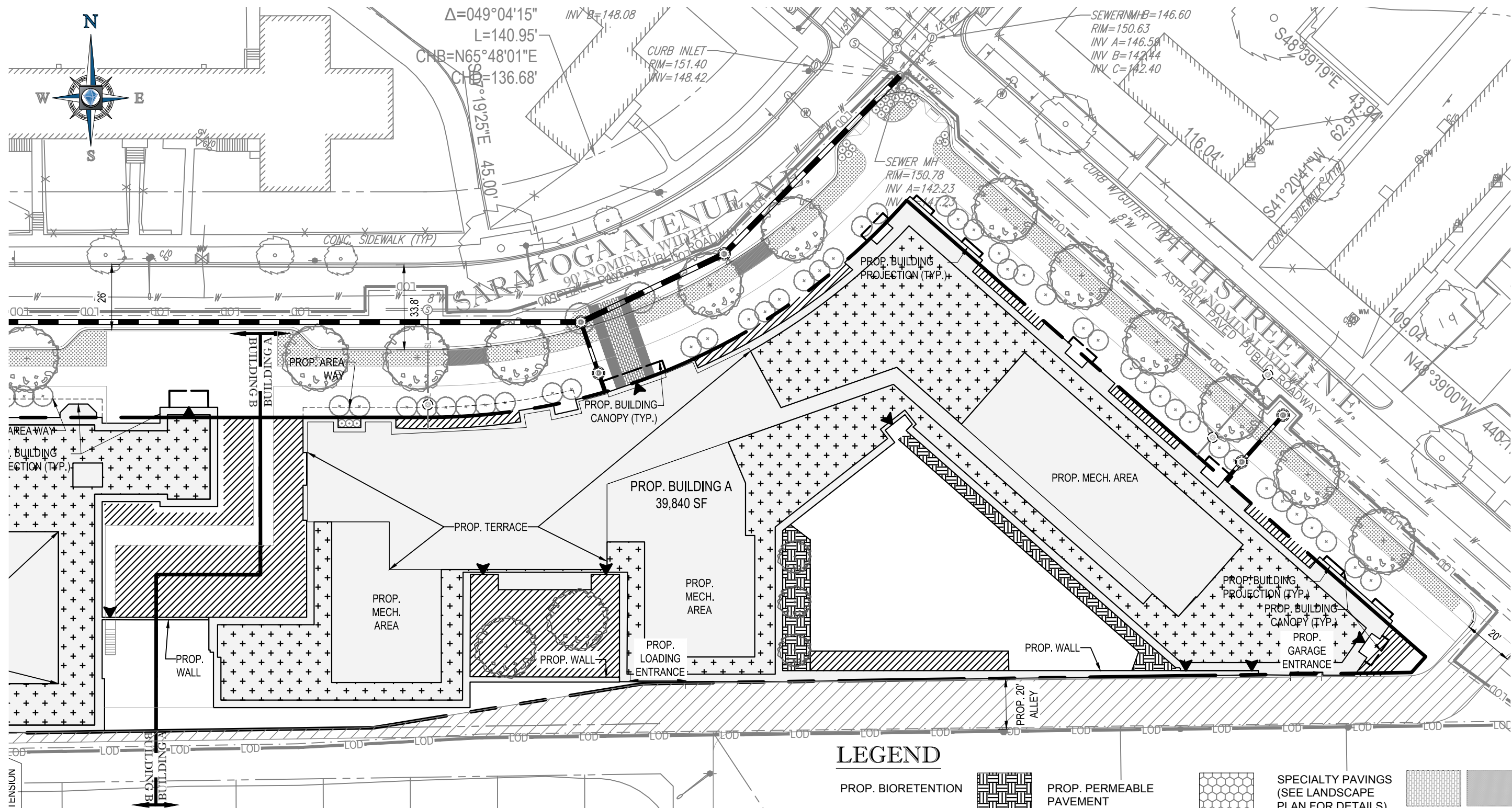
GRADING AND UTILITY NARRATIVE

THE PROPOSED BUILDING A WILL HAVE TWO (2) SANITARY LATERALS, ONE (1) WATER LATERAL, ONE (1) FIRE LATERAL AND TWO (2) STORM LATERALS. THE PROPOSED SANITARY, WATER, AND FIRE LATERALS WILL CONNECT TO EXISTING UTILITIES WITHIN SARATOGA AVENUE NE AND 14TH STREET NE. ONE OF THE PROPOSED STORM LATERALS WILL CONNECT TO A PROPOSED STORM MAIN WITHIN SARATOGA AVENUE NE. THE SECOND PROPOSED STORM LATERAL WILL CONNECT TO THE EXISTING STORM MAIN IN 14TH STREET NE. UPGRADES TO THE EXISTING SANITARY AND WATER MAINS ARE PART OF THE PHASE I PUD AND WILL BE PROPOSED AT A LATER DATE. ANY UPGRADES TO THE EXISTING SANITARY, WATER, AND STORM SYSTEM ARE STILL TO BE DETERMINED BY DC WATER IF NEEDED.

THE PROPOSED CONTOURS WILL TIE INTO THE EXISTING ROAD GRADES. ALL SIDEWALKS WILL BE ADA COMPLIANT.

PROJECT NAME:		RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER DC		SHEET TITLE:	
		BUILDING A GRADING AND UTILITY PLAN C-401	
SCALE:	DATE:	CAD ID:	PROJECT NUMBER:
1"=40'	09/22/2016	PU0	DC1322141

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PHONE: (202) 524-5700 FAX: (202) 524-5701



SWM/GAR PLAN NARRATIVE

THE PROPOSED OVERALL DEVELOPMENT WILL ADHERE TO THE MOST CURRENT (2013) DOEE STORMWATER MANAGEMENT GUIDEBOOK TO MEET THE MINIMUM REQUIREMENTS FOR STORMWATER MANAGEMENT. THIS PROJECT WILL TRIGGER THE MAJOR LAND DISTURBING ACTIVITY CATEGORY AND WILL BE REQUIRED TO RETAIN THE 1.2" STORM. THE TOTAL STORMWATER VOLUME (SWV) REQUIRED FOR ONSITE RETENTION OF THE 1.2" STORM WILL BE APPROXIMATELY 5,002 CF.

THE ONSITE SWV REQUIREMENTS WILL BE MET THROUGH A COMBINATION OF GREEN ROOFS, PERMEABLE PAVERS, AND BIORETENTION AREAS. SEE DETAILED CALCULATIONS ON THE NEXT SHEET. THE PUBLIC SPACE AREAS WILL BE CALCULATED SEPARATELY AND WILL BE TREATED TO THE MAXIMUM EXTENT PRACTICABLE UTILIZING A COMBINATION OF PERMEABLE PAVERS, BIORETENTION TREE PITS, TREE PLANTINGS AND DEDICATED OPEN SPACE.

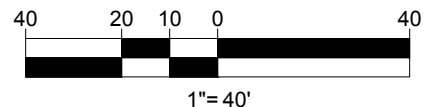
THE GAR REQUIREMENT IS 0.4. THE PROPOSED SITE PROVIDES A GAR OF 0.4. SEE GAR SPREADSHEET C-404.

NOTE:

AREAS AND/OR VOLUMES USED FOR GREEN AREA RATIO SCORING AND FOR STORMWATER MANAGEMENT RETENTION VOLUME COMPUTATIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE DUE TO SITE LAYOUT AND DESIGN CHANGES. ALL GAR SCORE AND STORMWATER MANAGEMENT STORAGE AREAS AND/OR VOLUMES ARE TO MEET CODE REQUIREMENTS IF THE DESIGN GEOMETRIES OR LAYOUT ARE MODIFIED.

LEGEND

- PROP. BIORETENTION
- PROP. GREEN ROOF
- PROP. PERMEABLE PAVEMENT
- PROP. LANDSCAPE
- SPECIALTY PAVINGS (SEE LANDSCAPE PLAN FOR DETAILS)



PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
BOHLER DC <small>1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701</small>	
SHEET TITLE: BUILDING A STORMWATER MANAGEMENT AND GREEN AREA RATIO C-402	
SCALE: 1"=40'	DATE: 09/22/2016
CAD ID: SM0	PROJECT NUMBER: DC1322141

SWM NARRATIVE - BUILDING A:

I. SITE DESCRIPTION:

THE SUBJECT SITE IS LOCATED ON THE EAST SIDE OF BLOCK 7, AT THE SOUTHWEST CORNER OF SARATOGA AVENUE NE AND 14TH STREET, NE. FOR THE PURPOSES OF THIS PUD, THE STORMWATER MANAGEMENT FOR BUILDING A HAS BEEN DESIGNED AND DETAILED FOR THE PRIVATE SPACE BUILDING A IMPACTS ONLY. THE TOTAL SITE AREA (56,970 SF) WILL BE DISTURBED.

DISTURBANCE WITHIN THE PUBLIC RIGHT-OF-WAY IS NOT INCLUDED IN THIS PUD AND WILL BE DESIGNED TO TREAT THE MAXIMUM EXTENT PRACTICABLE AT A FUTURE DATE.

II. METHODOLOGY:

THE CURRENT DOEE STORMWATER REGULATIONS WERE UTILIZED TO CALCULATE THE REQUIRED STORMWATER RETENTION VOLUMES.

ON-SITE SWRv REQUIREMENT (BUILDING A ONLY):

$$SWRv = \frac{[P \times ((RvI \times \%I) + (RvC \times \%C) + (RvN \times \%N) \times SA)]}{12}$$

$$SWRv = \frac{[1.2 \times ((0.95 \times 1.0) + (0.25 \times 0.0) \times 56,970)]}{12}$$

= 5,002 CF

III. STORMWATER RETENTION VOLUME:

ON-SITE STORMWATER RETENTION WILL BE PROVIDED THROUGH THE IMPLEMENTATION OF GREEN ROOF, PERMEABLE PAVEMENT, AND BIORETENTION. THE RETENTION VALUES OF THE PROPOSED BMPS ARE CALCULATED AS FOLLOWS:

GREEN ROOF:

$$MAX\ SWRv = \frac{[1.7 \times ((0.95 \times 1.0) + (0.25 \times 0.0) \times SA)]}{12}$$

$$SA = 23,700\ SF$$

$$SWRv\ PROVIDED = \frac{[1.7 \times ((0.95 \times 1.0) + (0.25 \times 0.0) \times 23,700)]}{12}$$

$$= 3,190\ CF$$

PERMEABLE PAVEMENT:

THE PROPOSED PERMEABLE PAVER AREAS RECEIVE A RETENTION VALUE OF 4.5 CUBIC FEET PER 100 SQUARE FEET OF PRACTICE AREA. BASED ON AN AREA OF 2,489 SQUARE FEET, THE PROPOSED PERMEABLE PAVEMENT VOLUME HAS BEEN CALCULATED AS FOLLOWS:

$$SWRv\ PROVIDED = 4.5\ CF / 100\ SF \times 2,489\ SF = 112\ CF$$

BIORETENTION:

THE PROPOSED BIORETENTION PLANTERS WILL HAVE AN UNDERDRAIN, BUT NO INFILTRATION SUMP, SO IT HAS BEEN CALCULATED AS STANDARD BIORETENTION. THE PROPOSED RETENTION VOLUME IS CALCULATED AS FOLLOWS:

$$MAX\ SWRv = \frac{[1.7 \times ((0.95 \times 1.0) + (0.25 \times 0.0) \times SA)]}{12}$$

$$SWRv = 0.6 \times STORAGE\ VOLUME\ (SV)$$

$$SV = SAm(Dm \times Nm) + SAg(Dg \times Ng)] + (SAp \times Dp)$$

SEE BMP CALCULATIONS TABLE (THIS SHEET).

$$SWRv = 2,112\ CF$$

THE PROPOSED BMPS PROVIDE AN SWRv OF 5,414 CF. THIS EXCEEDS THE REQUIREMENT OF 5,053 CF.

IV. STORMWATER DETENTION VOLUME:

THE PROPOSED BMPS PROVIDE 9,428 CF OF STORAGE, REDUCING THE CURVE NUMBER OF A 2-YEAR STORM TO 68.

V. PUBLIC RIGHT-OF-WAY

PUBLIC RIGHT-OF-WAY STORMWATER RETENTION WILL BE PROVIDED TO THE MAXIMUM EXTENT PRACTICABLE.

VI. ON-SITE STORM SEWER NETWORK:

STORMWATER THAT IS NOT RETAINED WITHIN THE BMPS WILL FLOW THROUGH ONE OF TWO PROPOSED STORM LATERALS. ONE PROPOSED STORM LATERAL CONNECTS TO THE EXISTING STORM MAIN IN 14TH STREET NE. THE OTHER PROPOSED STORM LATERAL CONNECTS TO THE PROPOSED MAIN IN SARATOGA AVENUE, WHICH CONNECTS TO THE EXISTING STORM DRAIN IN 14TH STREET NE.

VII. SUMMARY:

ON-SITE RUNOFF FROM THE PROPOSED DEVELOPMENT IS STORED IN THE PROPOSED BMP AREAS. STORM EVENTS IN EXCESS OF 1.2" WILL BE CONVEYED TO A PROPOSED STORM SEWER LATERAL, WHICH CONNECTS INTO THE PROPOSED PUBLIC STORM SEWER WITHIN SARATOGA AVENUE NE. THE TOTAL RETENTION AND DETENTION VOLUMES PROVIDED BY THE BMPS MEET THE DOEE REQUIREMENTS.

BMP CALCULATIONS:


GREEN ROOF

GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	EX. IMP (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRv	SWRv PROVIDED	NOTES
1	23,700	23,700	23,700	23,700	4	1	Roof	4167	3190	3190	
TOTAL								4,167	3,190	3,190	

MEDIA RETENTION VALUE	0.49
DRAINAGE LAYER RETENTION VALUE	0.15

BIORETENTION

FACILITY	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
Pool Amenity Courtyard	1,328	1,328	17,306	17,306	1	1	5	1	3,519	2,112	2,329	2,112
TOTAL									3,519	2,329	2,112	

PROJECT NAME:		RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER DC	SHEET TITLE: BUILDING A STORMWATER MANAGEMENT NARRATIVE C-403		
	SCALE: N/A	DATE: 09/22/2016	CAD ID: SMO
1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701			



Address: **BLOCK 7 - BUILDING A**

Other / BZA Order: **R-5-B; GAR Requirement = 0.4**

Lot size (enter this value first) * **56,970**

Green Area Ratio Scoresheet

Ward	Lot	Square	Zoning District


enter sq ft of lot **56,970** multiplier SCORE **0.403**

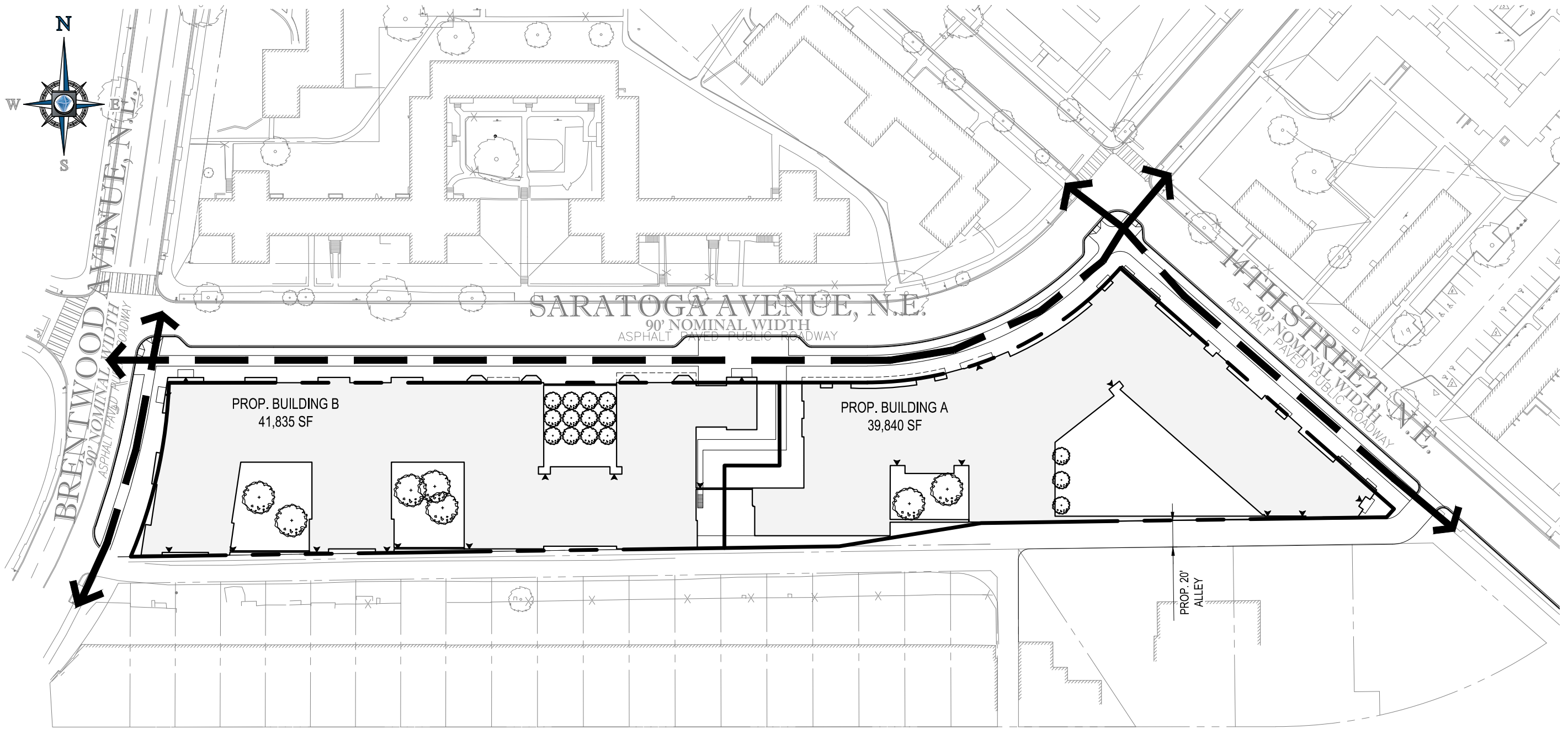
Landscape Elements	Square Feet	Factor	Total
A Landscaped areas (select one of the following for each area)			
1 Landscaped areas with a soil depth of less than 24"	enter sq ft 0	0.3	-
2 Landscaped areas with a soil depth of 24" or greater	enter sq ft 5,860	0.6	3,516.0
3 Bioretention facilities	enter sq ft 1,328	0.4	531.2
B Plantings (credit for plants in landscaped areas from Section A)			
1 Groundcovers, or other plants less than 2' tall at maturity	enter sq ft 7,188	0.2	1,437.6
2 Plants, not including grasses, 2' or taller at maturity - calculated at 9 sq ft per plant (typically planted no closer than 18" on center)	enter number of plants 0 0	0.3	-
3 Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	enter number of trees 6 300	0.5	150.0
4 Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	enter number of trees 2 500	0.6	300.0
5 Tree canopy for preservation of existing tree 6" to 12" diameter or larger or equivalent - calculated at 250 sq ft per tree	enter number of trees 0 0	0.7	-
6 Tree canopy for preservation of existing tree 12" to 18" diameter or larger or equivalent - calculated at 600 sq ft per tree	enter number of trees 0 0	0.7	-
7 Tree canopy for preservation of all existing trees 18" to 24" diameter or equivalent - calculated at 1300 sq ft per tree	enter number of trees 0 0	0.7	-
8 Tree canopy for preservation of all existing trees 24" diameter or larger or equivalent - calculated at 2000 sq ft per tree	enter number of trees 0 0	0.8	-
9 Vegetated wall, plantings on a vertical surface	enter sq ft 0	0.6	-
C Vegetated or "green" roofs			
1 Over at least 2" and less than 8" of growth medium	enter sq ft 23,700	0.6	14,220.0
2 Over at least 8" of growth medium	enter sq ft 0	0.8	-
D Permeable Paving***			
1 Permeable paving over at least 6" and less than 24" of soil or gravel	enter sq ft 0	0.4	-
2 Permeable paving over at least 24" of soil or gravel	enter sq ft 2,489	0.5	1,244.5

E Other			
1 Enhanced tree growth systems***	enter sq ft 0	0.4	-
2 Renewable energy generation	enter sq ft 0	0.5	-
3 Approved water features	enter sq ft 0	0.2	-
sub-total of sq ft = 41,365			
H Bonuses			
1 Native plant species	enter sq ft 15,800	0.1	1,580.0
2 Landscaping in food cultivation	enter sq ft 0	0.1	-
3 Harvested stormwater irrigation	enter sq ft 0	0.1	-
			Green Area Ratio numerator = 22,979
*** Permeable paving and structural soil together may not qualify for more than one third of the Green Area Ratio score.			Total square footage of all permeable paving and enhanced tree growth 1,245

NOTE:

AREAS AND/OR VOLUMES USED FOR GREEN AREA RATIO SCORING AND FOR STORMWATER MANAGEMENT RETENTION VOLUME COMPUTATIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE DUE TO SITE LAYOUT AND DESIGN CHANGES. ALL GAR SCORE AND STORMWATER MANAGEMENT STORAGE AREAS AND/OR VOLUMES ARE TO MEET CODE REQUIREMENTS IF THE DESIGN GEOMETRIES OR LAYOUT ARE MODIFIED.

PROJECT NAME: RIA BLOCK 7 RIA BLOCK 7, WASHINGTON, DC 20018	
 BOHLER DC 1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004 PHONE: (202) 524-5700 FAX: (202) 524-5701	SHEET TITLE: BUILDING A GREEN AREA RATIO SCORE SHEET C-404
	SCALE: N/A DATE: 09/22/2016 CAD ID: SM0 PROJECT NUMBER: DC1322141



PROP. BUILDING B
41,835 SF

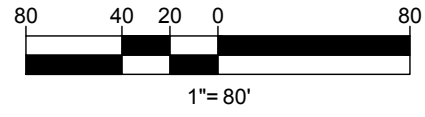
PROP. BUILDING A
39,840 SF

SARATOGA AVENUE, N.E.
90' NOMINAL WIDTH
ASPHALT PAVED PUBLIC ROADWAY

BRENTWOOD AVENUE, N.E.
90' NOMINAL WIDTH
ASPHALT PAVED ROADWAY

14TH STREET, N.E.
90' NOMINAL WIDTH
ASPHALT PAVED PUBLIC ROADWAY

PROP. 20'
ALLEY



LEGEND:



PEDESTRIAN CIRCULATION

PROJECT NAME: **RIA BLOCK 7**
RIA BLOCK 7, WASHINGTON, DC 20018



BOHLER
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1331 PENNSYLVANIA AVE., NW, STE. 1250 WASHINGTON, DC 20004
PHONE: (202) 524-5700 FAX: (202) 524-5701

SHEET TITLE:
SITE CIRCULATION
C-500

SCALE: 1"=80' DATE: 09/22/2016 CAD ID: PU0 PROJECT NUMBER: DC1322141