

INTERIOR PLAN LAYOUTS ARE CONCEPTUAL AND FOR ILLUSTRATIVE PURPOSES; FINAL LAYOUTS MAY VARY.



REPRESENTATIVE REAR ELEVATION

LOT #6
18' UNIT
ELEV. #1

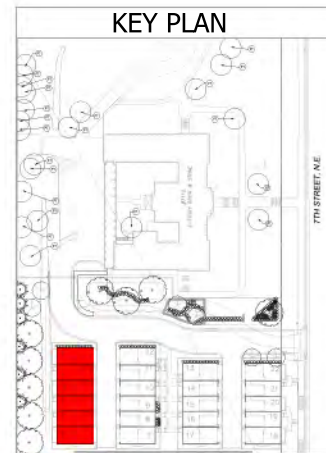
LOT #5
16' UNIT
ELEV. #2

LOT #4
16' I.Z. UNIT
ELEV. #3

LOT #3
16' UNIT
ELEV. #1

LOT #2
16' UNIT
ELEV. #2

LOT #1
18' UNIT
ELEV. #1



SIDE ELEVATION

LOT #1
18' UNIT
ELEV. #1



FRONT ELEVATION

LOT #1
18' UNIT
ELEV. #1

LOT #2
16' UNIT
ELEV. #2

LOT #3
16' UNIT
ELEV. #1

LOT #4
16' I.Z. UNIT
ELEV. #3

LOT #5
16' UNIT
ELEV. #2

LOT #6
18' UNIT
ELEV. #1



SIDE ELEVATION

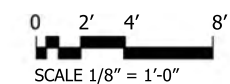
LOT #6
18' UNIT
ELEV. #1

STRIP ELEVATIONS

BROOKLAND TOWNHOMES
Washington, DC

A.800

MADISON HOMES



11/22/16
MHI.009A.00D



8521 Leesburg Pike Suite 700 Vienna, VA 22182
P: 571.830.1800 | F: 571.830.1801 | www.lessarddesign.com

© 2016 Lessard Design Inc. expressly reserves its common law copyright and other property rights in these plans. These plans are not to be changed or copied in any form or matter whatsoever, nor are they to be assigned to any third party without the express written permission and consent of Lessard Design, Inc.



SIDE ELEVATION

LOT #13
18' UNIT
ELEV. #1



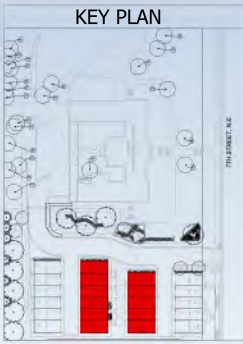
FRONT ELEVATION

LOT #13 18' UNIT ELEV. #1	LOT #14 16' UNIT ELEV. #2	LOT #15 16' UNIT ELEV. #1a	LOT #16 16' I.Z. UNIT ELEV. #3	LOT #17 18' UNIT ELEV. #1
---------------------------------	---------------------------------	----------------------------------	--------------------------------------	---------------------------------



SIDE ELEVATION

LOT #17
18' UNIT
ELEV. #1



SIDE ELEVATION

LOT #7
18' UNIT
ELEV. #1



FRONT ELEVATION

LOT #7 18' UNIT ELEV. #1	LOT #8 16' UNIT ELEV. #2	LOT #9 16' I.Z. UNIT ELEV. #3	LOT #10 16' UNIT ELEV. #1a	LOT #11 16' UNIT ELEV. #2	LOT #12 18' UNIT ELEV. #1
--------------------------------	--------------------------------	-------------------------------------	----------------------------------	---------------------------------	---------------------------------



SIDE ELEVATION

LOT #12
18' UNIT
ELEV. #1

STRIP ELEVATIONS

BROOKLAND TOWNHOMES
Washington, DC

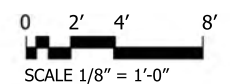
A.801



8521 Leesburg Pike Suite 700 Vienna, VA 22182
P: 571.830.1800 | F: 571.830.1801 | www.lessarddesign.com

© 2016 Lessard Design Inc. expressly reserves its common law copyright and other property rights in these plans. These plans are not to be changed or copied in any form or matter whatsoever, nor are they to be assigned to any third party without the express written permission and consent of Lessard Design, Inc.

MADISON HOMES



11/22/16
MHI.009A.00D



SIDE ELEVATION

LOT #18
18' UNIT
ELEV. #1



FRONT ELEVATION

LOT #18
18' UNIT
ELEV. #1

LOT #19
16' UNIT
ELEV. #3

LOT #20
16' UNIT
ELEV. #1

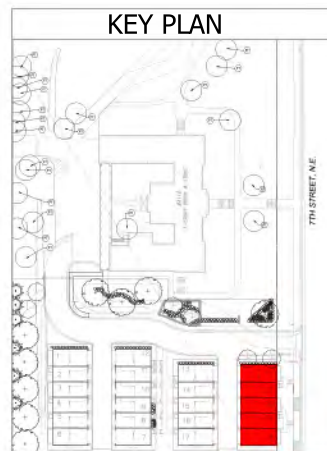
LOT #21
16' UNIT
ELEV. #2

LOT #22
18' UNIT
ELEV. #1



SIDE ELEVATION

LOT #22
18' UNIT
ELEV. #1



KEY PLAN



8521 Leesburg Pike Suite 700 Vienna, VA 22182
P: 571.830.1800 | F: 571.830.1801 | www.lessarddesign.com

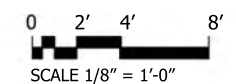
© 2016 Lessard Design Inc. expressly reserves its common law copyright and other property rights in these plans. These plans are not to be changed or copied in any form or matter whatsoever, nor are they to be assigned to any third party without the express written permission and consent of Lessard Design, Inc.

STRIP ELEVATIONS

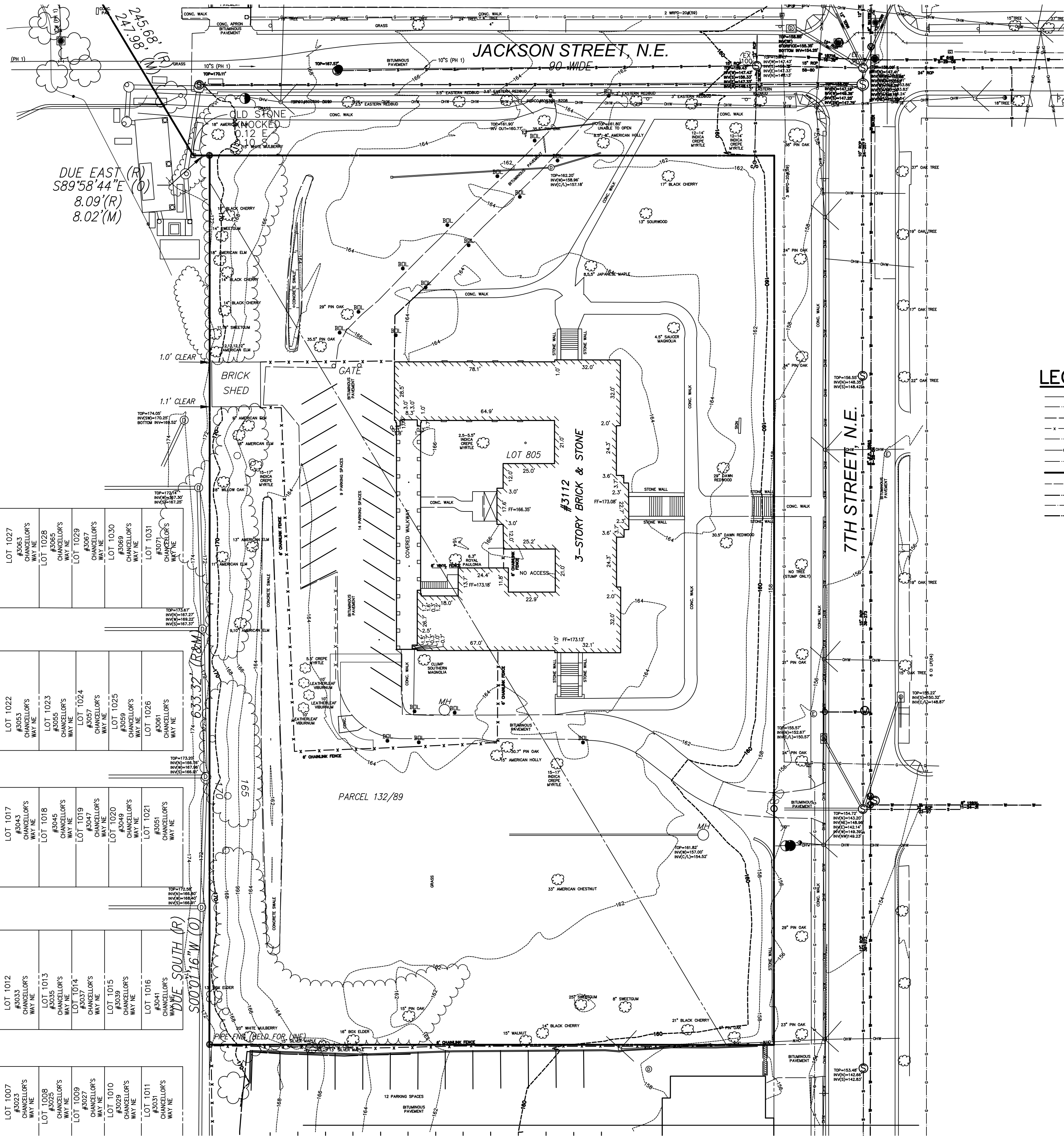
BROOKLAND TOWNHOMES
Washington, DC

MADISON HOMES

A.802

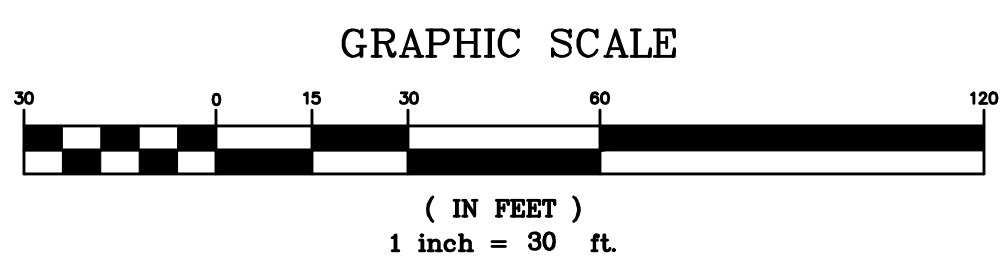


11/22/16
MHI.009A.00D



LEGEND

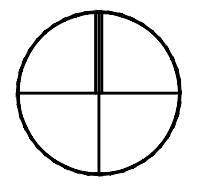
---	CABLE TELEVISION CONDUIT	⊕	SANITARY CLEANOUT	⊠	CONCRETE
---	ELECTRICAL CONDUIT	⊞	STORM DRAIN MANHOLE	⊞	C&G CURB AND GUTTER
---	EDGE OF PAVEMENT	⊞	ELECTRICAL JUNCTION BOX	⊞	BLDG. BUILDING
---	FENCE LINE	⊞	ELECTRICAL MANHOLE	⊞	STRY. STORY
---	NATURAL GAS CONDUIT	⊞	FIRE DEPARTMENT CONNECTION	⊞	TRV. ELECTRICAL TRANSFORMER
---	OVERHEAD WIRES	⊞	FIRE HYDRANT	⊞	ASPH. ASPHALT
---	TELEPHONE/COMMUNICATIONS CONDUIT	⊞	GAS MANHOLE	⊞	ESMT. EASEMENT
---	PROPERTY LINES	⊞	GUY POLE	⊞	RCP. REINFORCED CONCRETE PIPE
---	PUBLIC UTILITIES EASEMENTS	⊞	GAS VALVE	⊞	CMP. CORRUGATED METAL PIPE
---	SANITARY SEWER CONDUIT	⊞	LIGHT POLE	⊞	BRL. BUILDING RESTRICTION LINE
---	STORM DRAIN CONDUIT	⊞	PHONE PEDESTAL	⊞	R/W. RIGHT-OF-WAY
---	WATER CONDUIT	⊞	UTILITY POLE	⊞	



8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



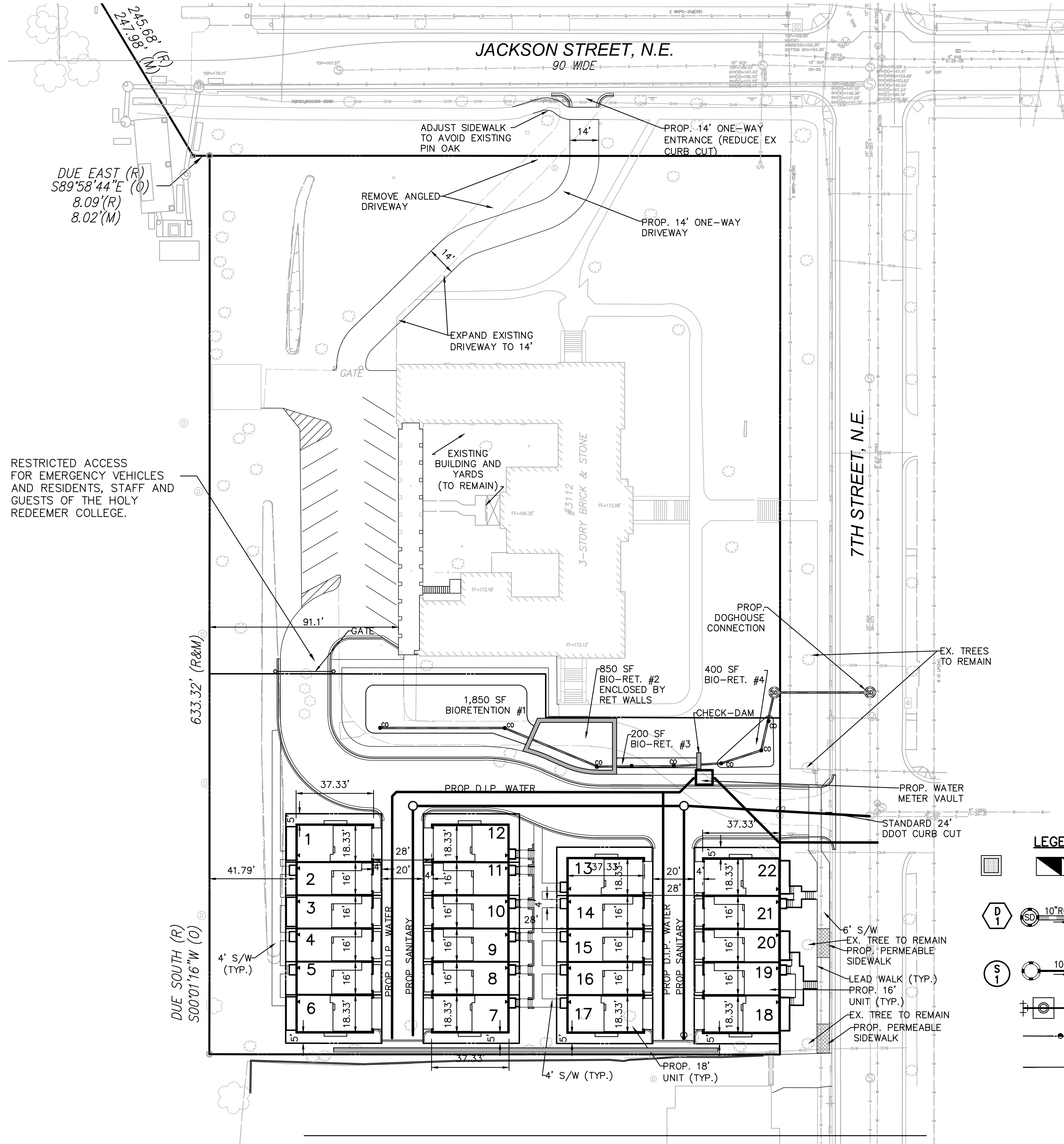
EXISTING CONDITIONS PLAN



22 November 2016

C.01

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



RESTRICTED ACCESS FOR EMERGENCY VEHICLES AND RESIDENTS, STAFF AND GUESTS OF THE HOLY REDEEMER COLLEGE.

LEGEND:

	PROPOSED STORM CATCH BASINS		PROPOSED FIRE HYDRANT		PAVEMENT RESTORATION
	PROPOSED STORM DRAIN		PROPOSED MECHANICAL CAP		ABANDONED UTILITIES
	PROPOSED SANITARY SEWER		TEST PIT		REMOVED UTILITIES
	PROPOSED DIP WATER MAIN & VALVE		EXISTING CONTOUR LINE		ABANDONED UTILITIES UNDER SEPARATE CONTRACT
	PROPOSED SMALL WATER SERVICE CONNECTION (W-80.01)		PROPOSED CONTOUR LINE	SEWER LABEL LEGEND:	

SEWER LABEL LEGEND:
 CO CLEAN OUT
 OW OBSERVATION WELL
 OF OVERFLOW/OUTFALL

WATER LABEL LEGEND:
 CR CROSS
 GV GATE VALVE
 HB HORIZONTAL BEND
 SL SLEEVE
 T TEE
 FH FIRE HYDRANT
 PC POINT OF CURVATURE
 PT POINT OF TANGENT

GRAPHIC SCALE
 (IN FEET)
 1 inch = 30 ft.



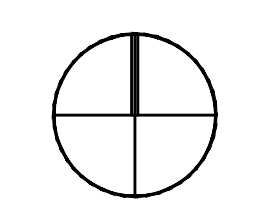
8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



SITE AND UTILITY PLAN

4910 MASSACHUSETTS AVE. NW, SUITE 214
 WASHINGTON, DC 20016
 202.244.4140

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



22 November 2016

C.02

Unit/Lot #	Type/Name	Floors	Height (FT)	Measuring Point Elevation	FFE	Unit Length (FT)	Unit Width (FT)	Unit Footprint Area (SF)	Porch Area (SF)	Deck Area (Optional) (SF)	Bay Area (SF)	Unit Footprint Area With Porch Deck Bays (SF)	Total Unit SF (Gross Floor Area or GFA) With Porch Deck Bay Areas	Lot Length (FT)	Lot Width (FT)	Lot Area (SF)	Lot Occupancy (Unit Fprint w/ Porch Deck Bays Area as % of Unit Lot Area)	FAR (Floor Area Ratio)	Use	Side Yard Required (FT)	Side Yard Provided (FT)	Rear Yard Required (FT)	Rear Yard Provided (FT)	Front Yard Provided (FT)	Parking Spaces												
1	18' End	3.5	43.24	65.21	66.43	37.33	18.33	684.26	76.80	71.88	18.33	851.27	2,703.30	46.33	23.33	1,080.88	78.76%	2.50	Residential	8.00	3.33	15.00	0.00	5.00	2												
2	16' Int	3.5	43.10	65.35	66.43	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
3	16' Int	3.5	43.45	65.67	67.10	37.33	16.00	597.28	67.29	51.02		715.59	2,376.02	46.33	16.00	741.28	80.57%	3.21	Residential	NA	NA	15.00	0.46	5.00	1												
4	16' IZ	3.5	43.10	66.02	67.10	37.33	16.00	597.28		51.02		648.30	2,301.02	46.33	16.00	741.28	80.57%	3.10	Residential	NA	NA	15.00	0.46	5.00	1												
5	16' Int	3.5	43.29	66.50	67.77	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
6	18' End	3.5	43.44	66.35	67.77	37.33	18.33	684.26	76.80	71.88	18.33	851.27	2,703.30	46.33	23.33	1,080.88	63.31%	2.50	Residential	8.00	3.33	15.00	0.00	5.00	2												
7	18' End	3.5	45.94	62.89	66.81	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	46.33	23.33	1,080.88	63.31%	2.43	Residential	8.00	3.33	15.00	0.00	5.00	2												
8	16' Int	3.5	45.82	62.55	66.35	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
9	16' IZ	3.5	46.10	62.27	66.35	37.33	16.00	597.28		51.02		648.30	2,301.02	46.33	16.00	741.28	80.57%	3.10	Residential	NA	NA	15.00	0.46	5.00	1												
10	16' Int	3.5	46.42	61.95	66.35	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
11	16' Int	3.5	45.87	61.83	65.68	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
12	18' End	3.5	46.20	61.50	65.68	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	46.33	23.33	1,080.88	63.31%	2.43	Residential	8.00	3.33	15.00	0.00	5.00	2												
13	18' End	3.5	43.01	61.83	62.82	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	46.33	23.33	1,080.88	63.31%	2.43	Residential	8.00	3.33	15.00	0.00	5.00	2												
14	16' Int	3.5	42.89	61.95	62.82	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
15	16' Int	3.5	42.57	62.27	62.82	37.33	16.00	597.28		51.02		648.30	2,308.73	46.33	16.00	741.28	80.57%	3.11	Residential	NA	NA	15.00	0.46	5.00	1												
16	16' IZ	3.5	42.96	62.55	63.49	37.33	16.00	597.28		51.02		648.30	2,301.02	46.33	16.00	741.28	80.57%	3.10	Residential	NA	NA	15.00	0.46	5.00	1												
17	18' End	3.5	42.62	62.89	63.49	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	41.33	23.33	964.23	70.96%	2.72	Residential	8.00	3.33	15.00	0.00	5.00	2												
18	18' End	3.5	47.61	56.00	61.59	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	41.33	23.33	964.23	70.96%	2.72	Residential	8.00	3.33	15.70	0.00	0.00	2												
19	16' Int	3.5	47.61	56.00	61.59	37.33	16.00	597.28		51.02		648.30	2,308.73	41.33	16.00	661.28	90.32%	3.49	Residential	NA	NA	15.70	0.46	0.00	1												
20	16' Int	3.5	46.94	56.00	60.92	37.33	16.00	597.28		51.02		648.30	2,308.73	41.33	16.00	661.28	90.32%	3.49	Residential	NA	NA	15.00	0.46	0.00	1												
21	16' Int	3.5	46.94	56.00	60.92	37.33	16.00	597.28		51.02		648.30	2,308.73	41.33	16.00	661.28	90.32%	3.49	Residential	NA	NA	15.00	0.46	0.00	1												
22	18' End	3.5	46.27	56.00	60.25	37.33	18.33	684.26		71.88	18.33	774.47	2,626.50	41.33	23.33	964.23	70.96%	2.72	Residential	8.00	3.33	15.00	0.00	0.00	2												
Common Area																								29,069.05													
Townhouse Total								13,835.99				15,492.84	53,531.98						47,504.05	29.13%	1.13								30								
Private Road & Alley																																					
Overall South Lot																				15,492.84	53,531.98							36,539.05		1.47							
Holy Redeemer Bldg												10,078.00			10,078.00	30,092.00								Religious													
Existing Shed												517.00			517.00	517.00								Religious													
HR Total												10,595.00			10,595.00	30,609.00																					
Grand Total																								26,087.84	84,140.98												

SITE TABULATIONS

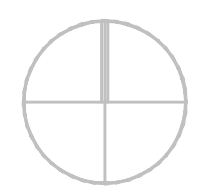


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
WASHINGTON, DC 20016
202.244.4140

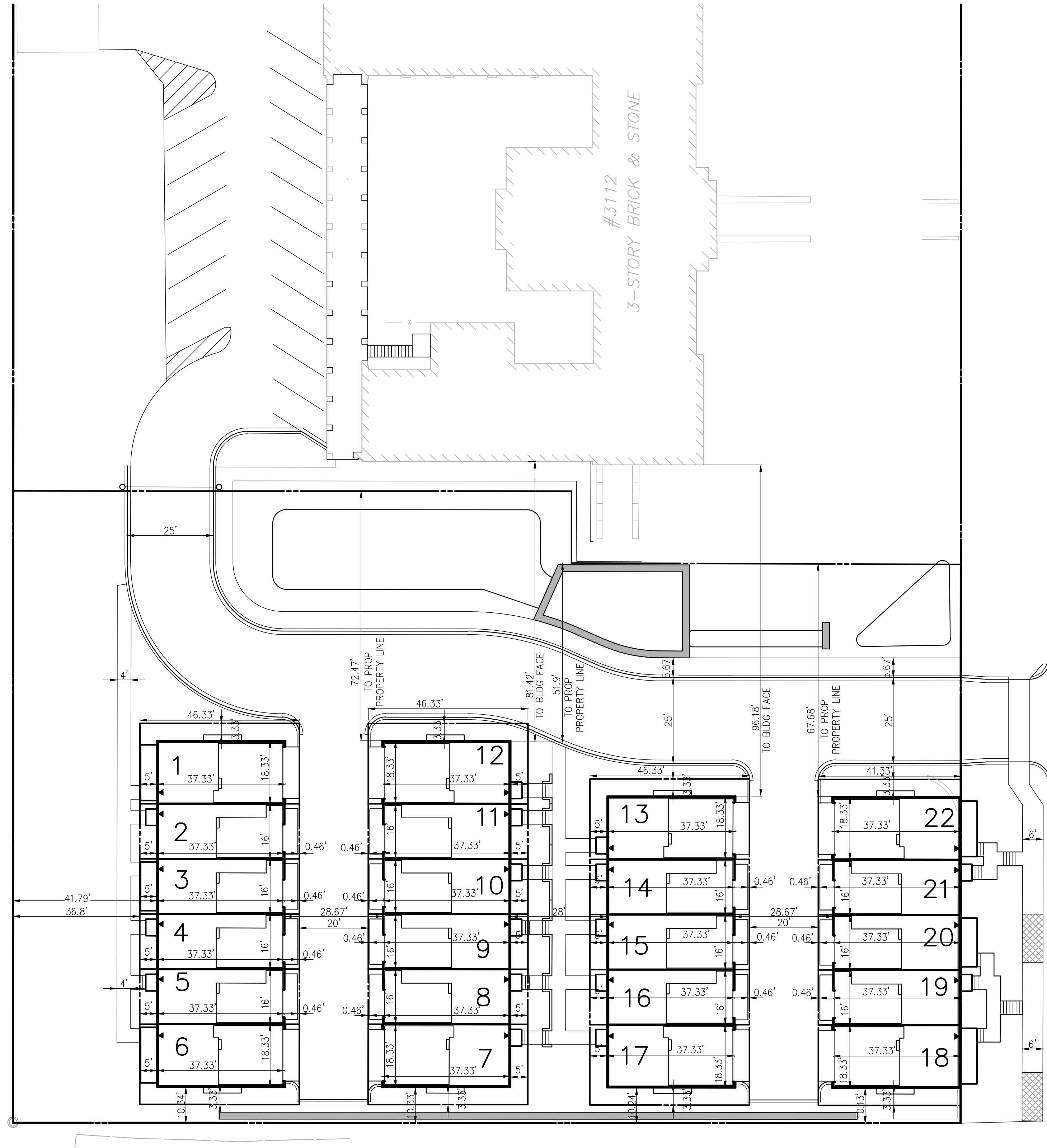
SITE TABULATIONS



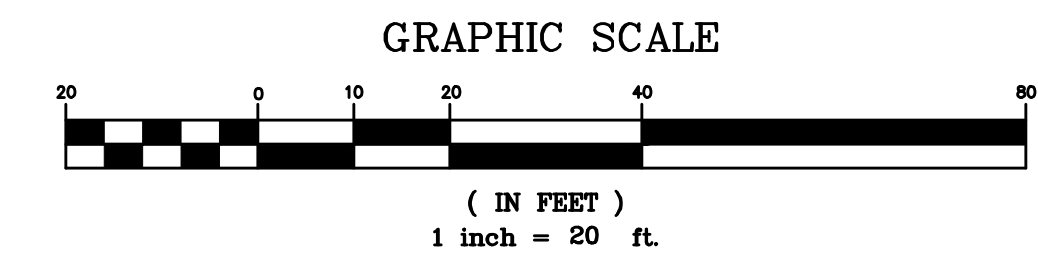
C.02A

22 November 2016

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



7TH STREET, N.E.



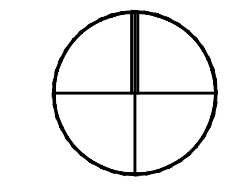
8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
 WASHINGTON, DC 20016
 202.244.4140

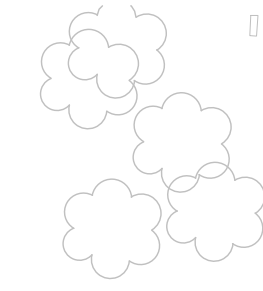
LOT LAYOUT PLAN

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



22 November 2016

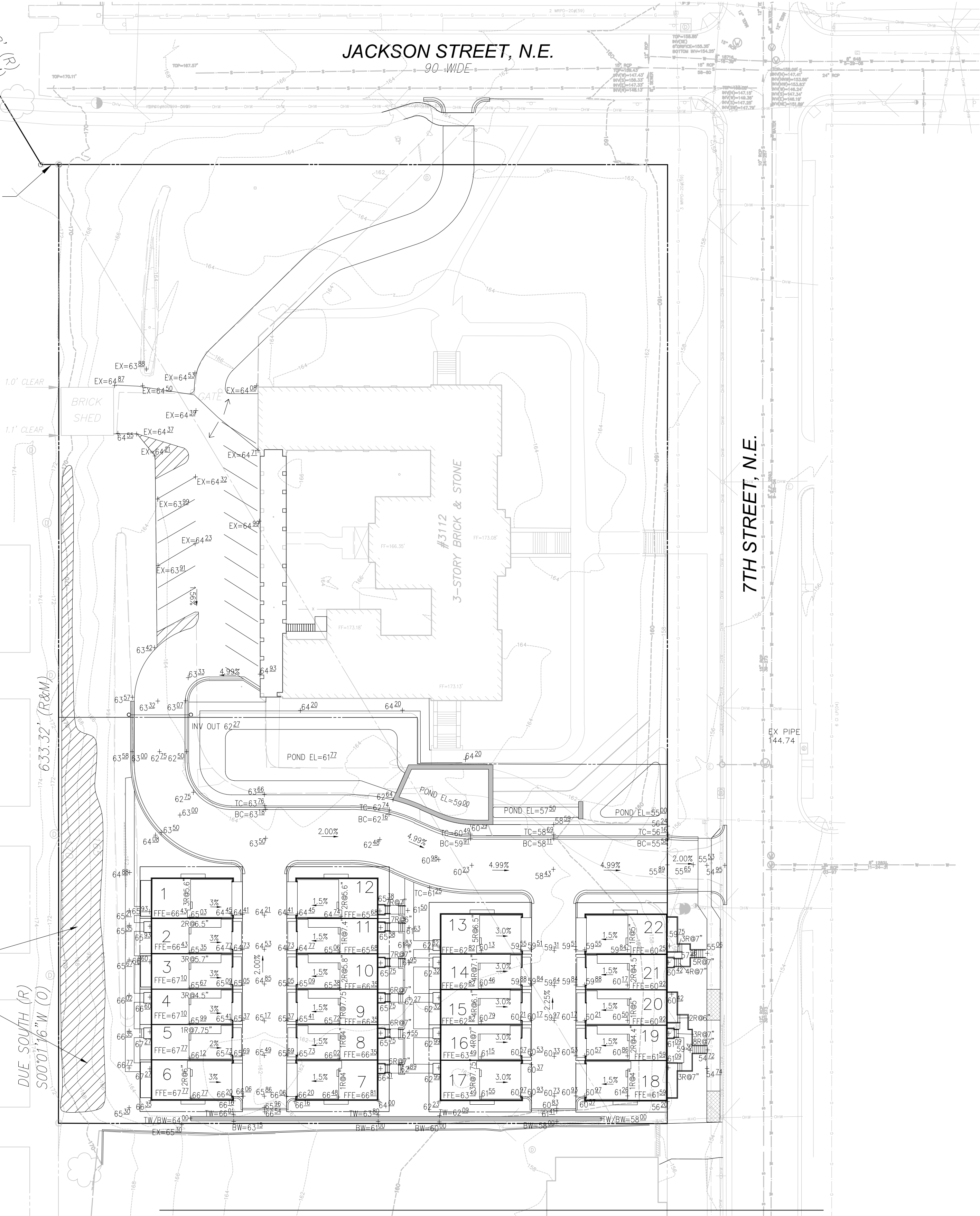
C.02B



JACKSON STREET, N.E.
90' WIDE

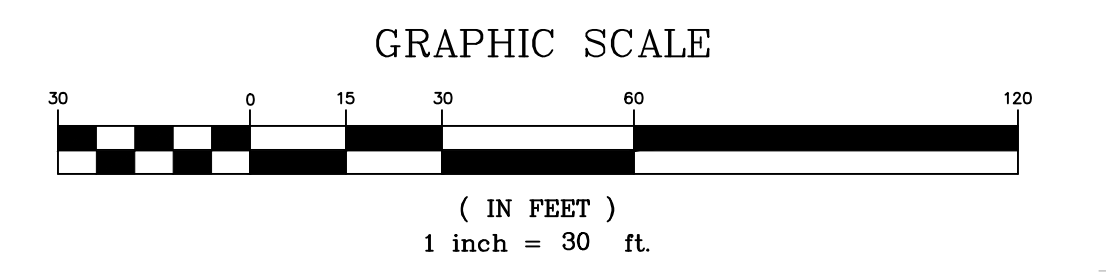
DUE EAST (R)
S89°58'44"E (O)
8.09'(R)
8.02'(M)

7TH STREET, N.E.



EX. GRADES
GREATER THAN 15%
(HATCHED AREA)
TO REMAIN

DUE SOUTH (R)
S00°01'16"W (O)
633.32' (R&M)

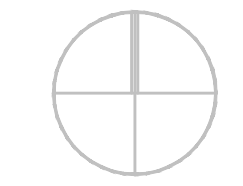


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
WASHINGTON, DC 20016
202.244.4140

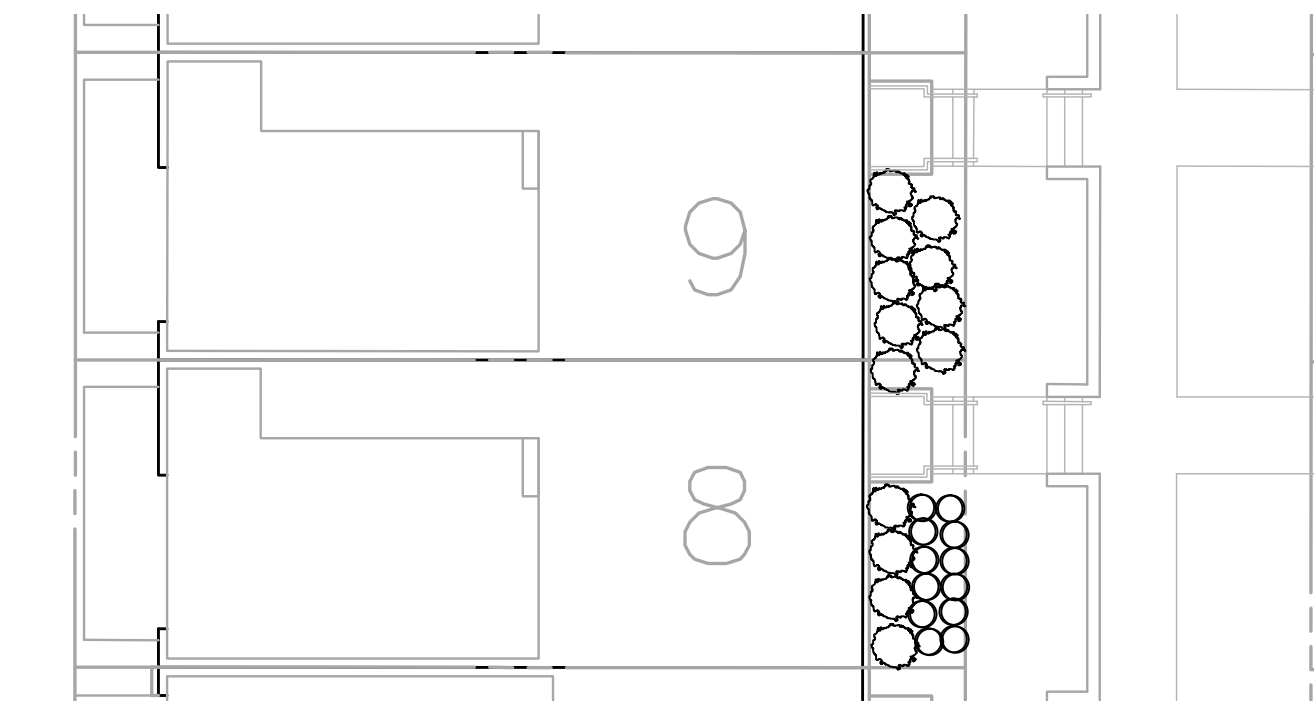
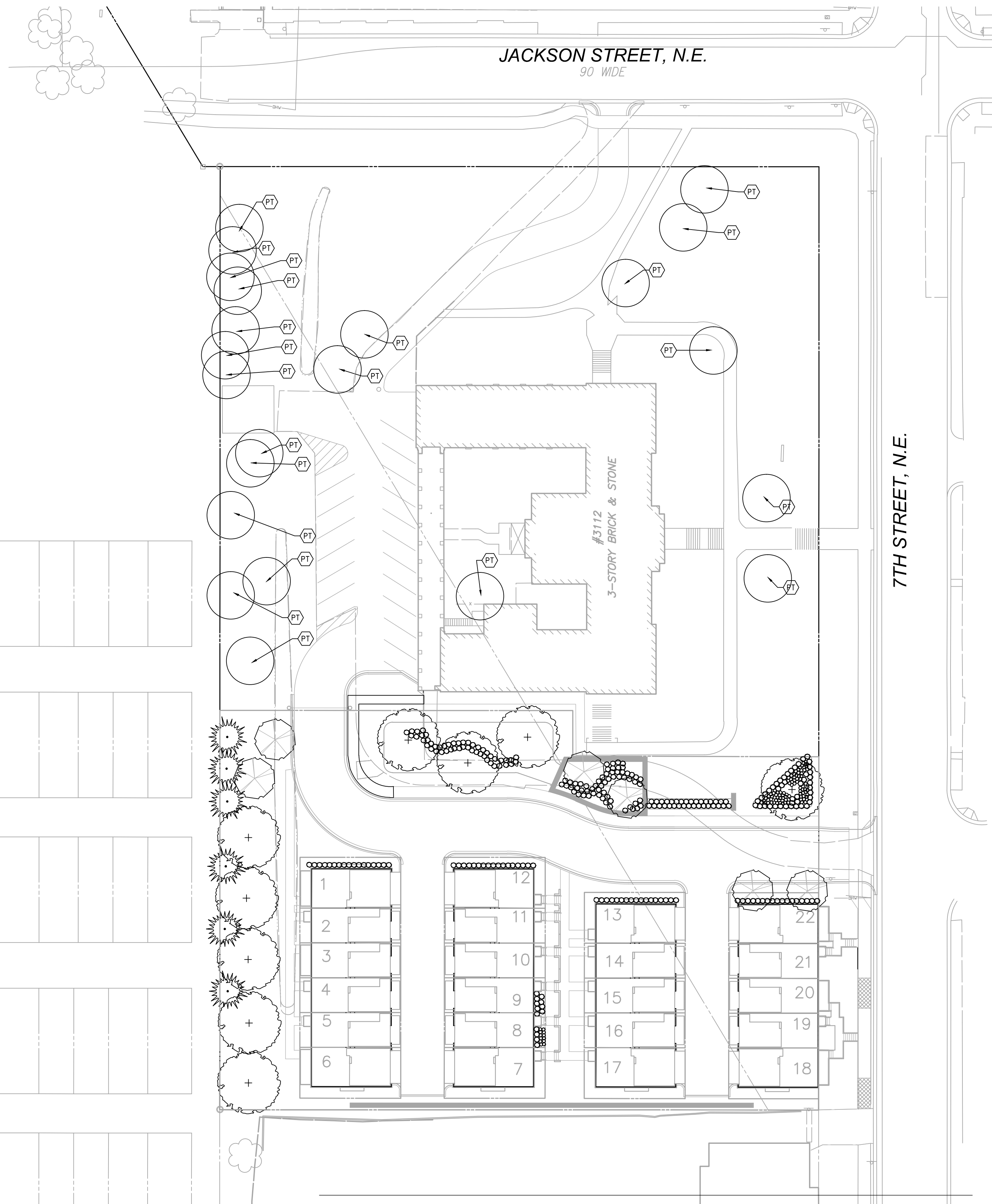
GRADING PLAN



22 November 2016

C.03

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



TYPICAL UNIT LANDSCAPE PLAN

GREEN AREA RATIO SUMMARY

GREEN AREA RATIO REQUIRED: 0.40
 GREEN AREA RATIO PROVIDED: 0.40

LEGEND

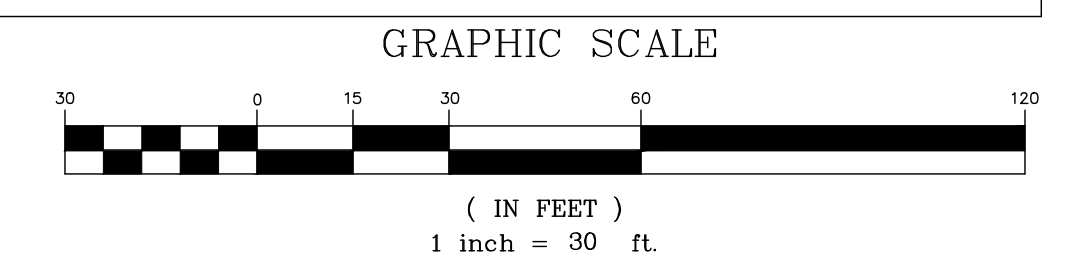
PRESERVED TREE

SYMBOL	TREE TYPE	SAMPLE SPECIES
	SHADE TREE	ACER RUBRUM – RED MAPLE, LIQUIDAMBAR STYRACIFLUA – SWEETGUM, NYSSA SYLVATICA – BLACK GUM, QUERCUS PHELLOS – WILLOW OAK, QUERCUS RUBRA – RED OAK, TILIA AMERICANA – BASSWOOD
	EVERGREEN TREE	ILEX OPACA – AMERICAN HOLLY, PINUS RIGIDA – PITCH PINE, PINUS STROBUS – WHITE PINE, PINUS TAEDA – LOBLOLLY PINE
	UNDER STORY TREE	AMELANCHIER CANADENSIS – SERVICEBERRY, BETULA NIGRA – RIVER BIRCH, CAPINUS CAROLINIANA – AMERICAN HORNBEAM, CERCIS CANADENSIS – EASTERN REDBUD,
	SHRUBS	ARONIA ARBUTIFOLIA – CHOKEBERRY, CORNUS AMOMUM – SILKY DOGWOOD, ILEX VERTICILLATA – WINTERBERRY, KALMIA LATIFOLIA – MOUNTAIN LAUREL, LINDERA BENZOIN – SPICEBUSH, VIBURNUM DENTATUM – ARROWOOD VIBURNUM

THE SPECIES LISTED ABOVE ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE A LISTING OF POTENTIAL SPECIES PLANNED FOR THE SITE. IT IS NOT INTENDED TO BE THE FINAL PLANT LIST AS OTHER SPECIES MAY BE BETTER SUITED FOR THE FINAL DESIGN INTENT AND SITUATION.

Green Area Ratio Worksheet			
Landscaping Element	Score	Weight	Total
A Landscaped areas (select one of the following for each area)			
1 Landscaped areas with a soil depth of less than 24"	0.3		
2 Landscaped areas with a soil depth of 24" or greater	0.6		93,376.8
B Irrigation facilities	0.4		1,320.0
C Plantings (credits for plants in landscaped areas from Section A)			
1 Groundcover, or other plants less than 2' tall at maturity	0.2		3,880.0
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)	0.3		
3 Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	0.5		
4 Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	0.6		
5 Tree canopy for preservation of existing tree 6" to 12" diameter or larger or equivalent - calculated at 250 sq ft per tree	0.7		875.0
6 Tree canopy for preservation of existing tree 12" to 18" diameter or larger or equivalent - calculated at 500 sq ft per tree	0.7		4,820.0
7 Tree canopy for preservation of existing tree 18" to 24" diameter or larger or equivalent - calculated at 1,000 sq ft per tree	0.7		3,640.0
8 Tree canopy for preservation of existing tree 24" diameter or larger or equivalent - calculated at 2,000 sq ft per tree	0.8		
9 Vegetated wall, plantings on a vertical surface	0.4		
D Vegetated or "green" roofs			
1 Over at least 2" and less than 8" of growth medium	0.6		
2 Over at least 8" of growth medium	0.8		
E Permeable Paving***			
1 Permeable paving over at least 6" and less than 24" of soil or gravel	0.4		
2 Permeable paving over at least 24" of soil or gravel	0.5		
F Other			
1 Enhanced tree growth systems***	0.4		
2 Renewable energy generation	0.5		
3 Approved water features	0.2		
H Bonuses			
1 Native plant species	0.1		
2 Landscaping in food cultivation	0.1		
3 Harvested stormwater irrigation	0.1		
TOTAL			42.82

GAR WORKSHEET

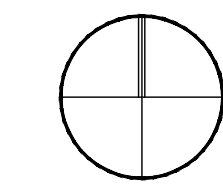


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
 WASHINGTON, DC 20016
 202.244.4140

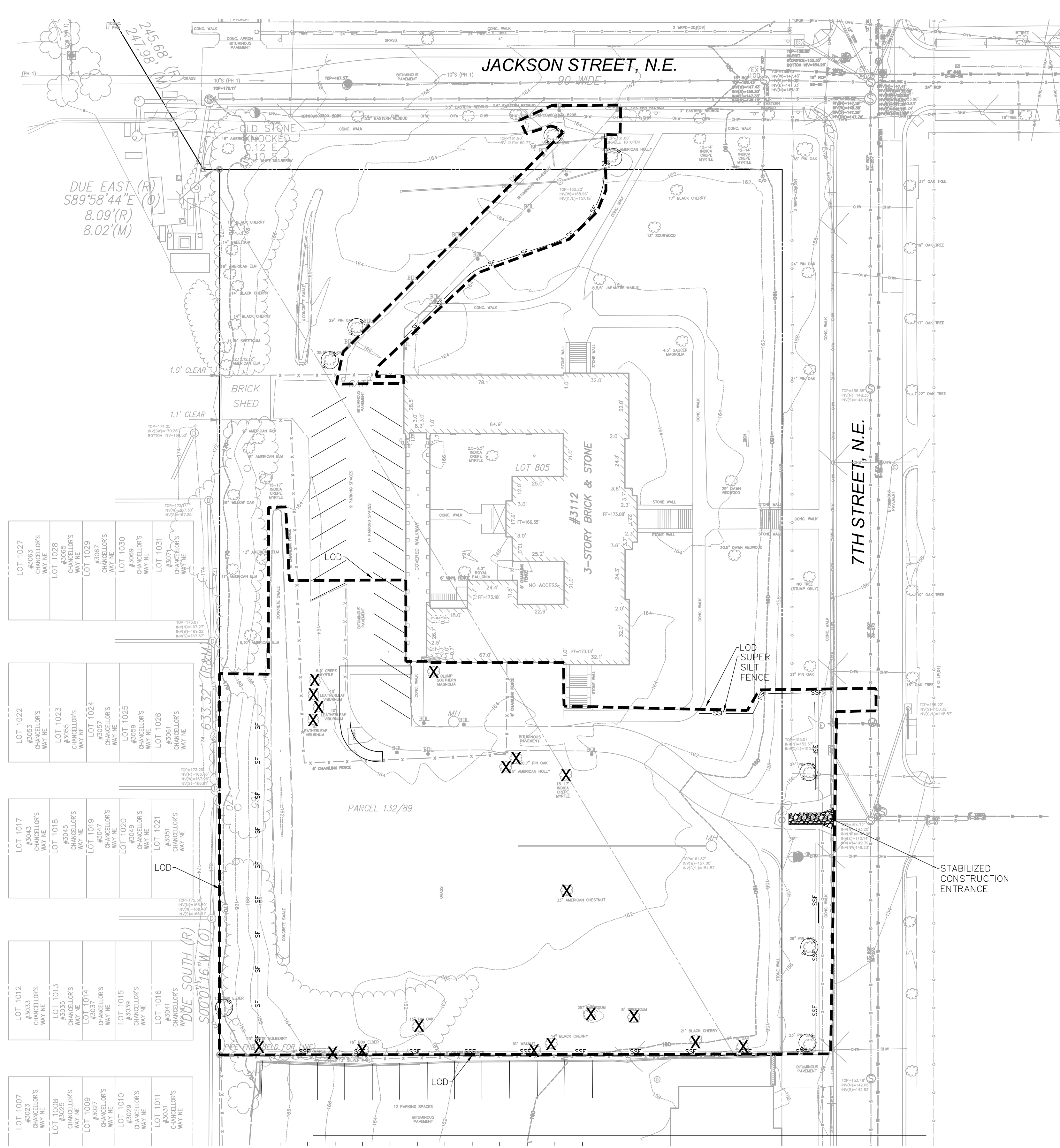
LANDSCAPING PLAN




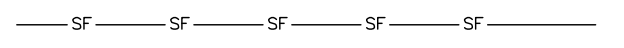
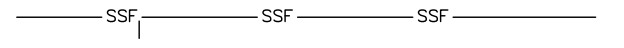


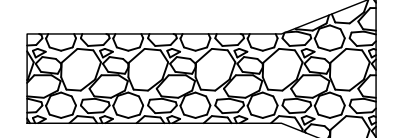
22 November 2016

C.04

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



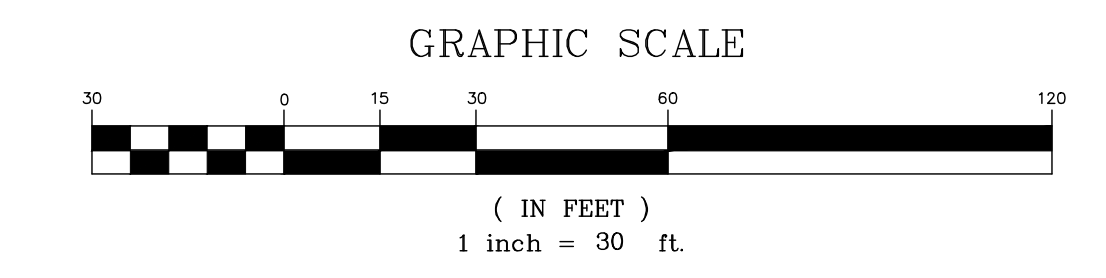
LEGEND:

-  LIMITS OF DISTURBANCE
-  SILT FENCE
-  SUPER SILT FENCE
-  TREE PROTECTION
-  EX TREE SHALL BE REMOVED
-  STABILIZED CONSTRUCTION ENTRANCE

SITE STABILIZATION NOTE

FOLLOWING INITIAL LAND DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR INTERIM STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (3:1); AND FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THE REQUIREMENTS OF THIS PARAGRAPH DO NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE BEING USED FOR MATERIAL STORAGE OTHER THAN STOCKPILING, OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

THIS SHEET IS FOR SEDIMENT AND EROSION CONTROL ONLY

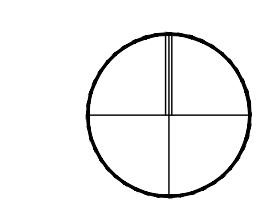


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



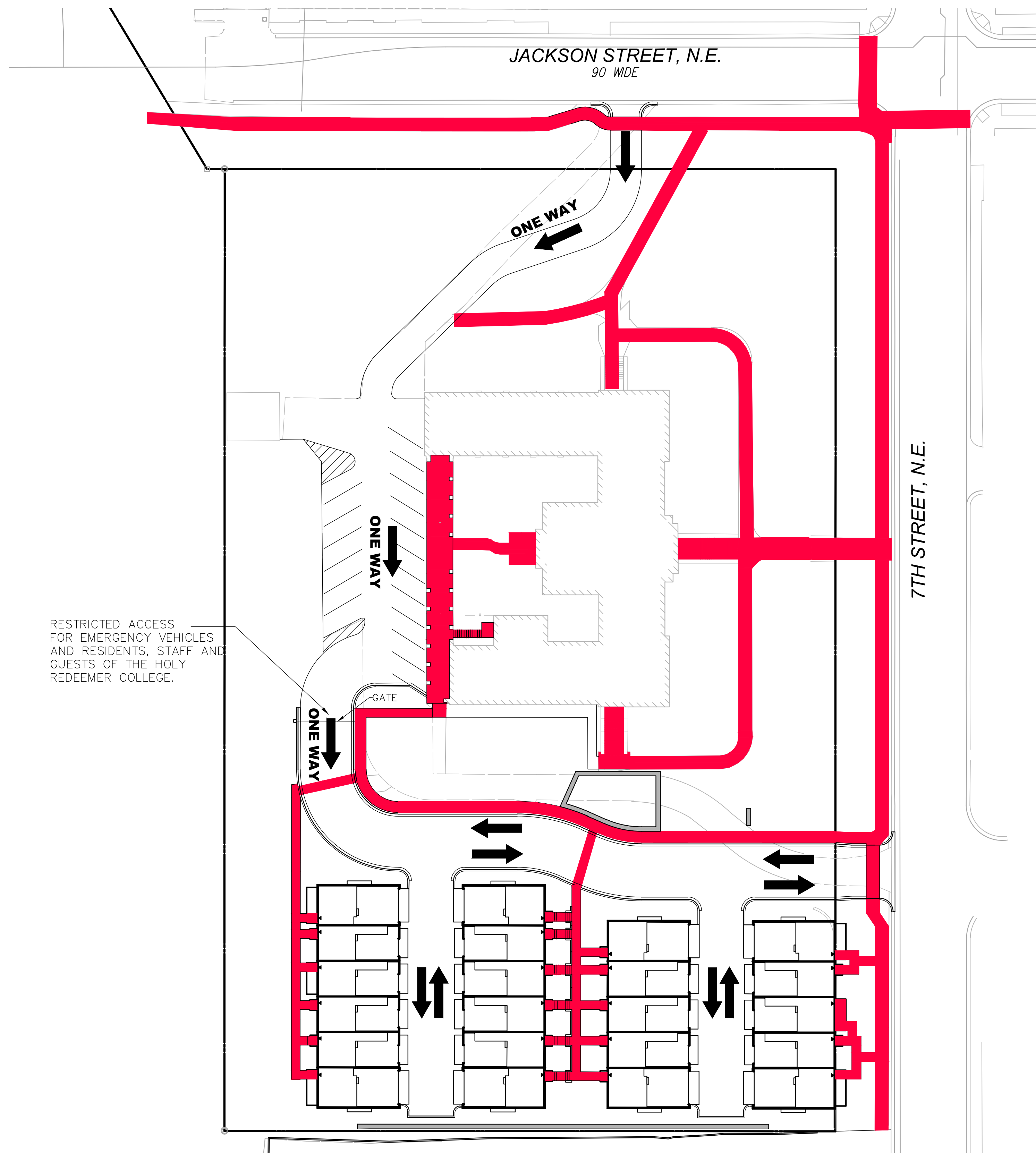
4910 MASSACHUSETTS AVE. NW, SUITE 214
 WASHINGTON, DC 20016
 202.244.4140

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

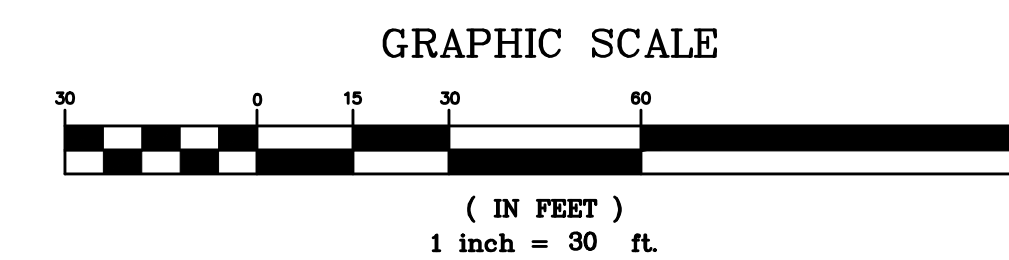


22 November 2016

C.05



SITE CIRCULATION LEGEND	
PEDESTRIAN CIRCULATION	
FLOW ARROWS	OR

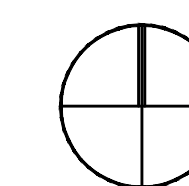


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
 P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
 WASHINGTON, DC 20016
 202.244.4140

CIRCULATION PLAN



22 November 2016

C.06

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

District of Columbia General Retention Compliance Calculator
Site Drainage Area 2

Indicate Post-Development Land Cover For SDA 2	Major Land Disturbing	Major Substantial Improvement	Major Land Disturbing	Major Substantial Improvement
Cover Type	Area (square feet)	Area (square feet)	Land Cover Summary	
Natural Cover	19,324	0	% Natural Cover	94%
Compacted Cover	16,324	0	% Compacted Cover	28%
Impervious Cover	34,710	0	% Impervious Cover	66%
Vehicular Access Areas* (BMP)	3,300	0	Site Rv	0.70
Drainage Area Total	57,758	0		

Rv Coefficients	Rv
Natural Cover	0.00
Compacted Cover	0.25
Impervious Cover	0.95

Stormwater Retention Volume, SWRV (cubic feet)	4,019
Stormwater Retention Volume, SWRV (gallons)	30,962
Vehicular Access Volume (cubic feet)	652

AWQD Only	NA
Water Quality Treatment Volume, WQTV (cubic feet)	NA
Water Quality Treatment Volume, WQTV (gallons)	NA

*Vehicular Access areas should be included within the Impervious Cover Category

BMPs	Pervious Cover Draining to BMP		Impervious Cover Draining to BMP		Vehicular Access Area Draining to BMP		Maximum Retention Volume Received by BMP (cubic feet)	Description of Retention Value	% Retention Value	Maximum Retention Volume Received from Upstream BMPs (cubic feet)	Maximum Retention Volume To BMP (cubic feet)	Surface Area of BMP (square feet)	Storage Volume Provided by BMP (cubic feet)	Retention Value (cubic feet)	Potential Retention Volume Remaining (cubic feet)	Additional Treatment Volume (cubic feet)	Downstream BMP	Vehicular Access Volume Addressed?
	Area (square feet)	Type of Cover	Area (square feet)	Type of Cover	Area (square feet)	Volume (cubic feet)												
G1-2 Green Roof		Natural Cover	0	Impervious Cover	0	0	0	Subtract 100% of the Sv - the volume stored in the green roof filter media and storage layers.	100%	0	0	N/A	0	0	0	0	N/A	N/A
R1 Rainwater Harvesting		Compacted Cover	0	Impervious Cover	0	0	0	Subtract 100% of the Sv - the available storage in the system (based on catchment storage and reuse rate).	100%	0	0	N/A	0	0	0	0	N/A	N/A
D1 Simple Disconnection to a Pervious Area		Natural Cover		Impervious Cover	0	0	0	Reduce volume conveyed to grass area by 2.0 cu. ft. per 100 sq. ft. of pervious area.	N/A	0	0	N/A	N/A	0	0	0	N/A	N/A
D2 Simple Disconnection to a Conservation Area		Compacted Cover		Impervious Cover	0	0	0	Reduce volume conveyed to conservation area by 6.0 cu. ft. per 100 sq. ft. of conservation area.	N/A	0	0	N/A	N/A	0	0	0	N/A	N/A
D3 Simple Disconnection to Amended Soils		Natural Cover		Impervious Cover	0	0	0	Reduce volume conveyed to filter path by 4.0 cu. ft. per 100 sq. ft. of filter area.	N/A	0	0	N/A	N/A	0	0	0	N/A	N/A
P1-3 Permeable Pavement - Enhanced		Compacted Cover		Impervious Cover	0	0	0	Subtract 100% of the Sv - the volume stored in the permeable pavement reservoir layer.	100%	0	0	N/A	0	0	0	0	N/A	N/A
P1-3 Permeable Pavement - Standard		Natural Cover	0	Impervious Cover	0	0	0	Reduce volume conveyed through permeable pavement by 4.5 cu. ft. per 100 sq. ft. of permeable pavement.	N/A	0	0	0	0	0	0	0	N/A	N/A
B1-5 Bioretention - Enhanced		Compacted Cover	0	Impervious Cover	0	0	0	Subtract 100% of the Sv - the calculated storage volume for the BMP.	100%	0	0	N/A	0	0	0	0	N/A	N/A
B1-5 Bioretention - Standard	3,424	Natural Cover	34,710	Impervious Cover	11,826	552	5,694	Subtract 80% of the Sv - the calculated storage volume for the BMP.	80%	0	5,694	N/A	7,559	4,535	1,159	1,159	N/A	N/A
F1-4 Stormwater Filtering Systems	16,324	Compacted Cover	3,300	Impervious Cover	0	0	0	No retention credit.	0%	0	0	N/A	0	0	0	0	N/A	N/A
H1-2 Stormwater Infiltration		Natural Cover		Impervious Cover	0	0	0	Subtract 100% of the Sv - the calculated storage volume for the BMP.	100%	0	0	N/A	0	0	0	0	N/A	N/A
S1-3 Storage		Compacted Cover		Impervious Cover	0	0	0	No retention credit.	0%	0	0	N/A	0	0	0	0	N/A	N/A
P1-3 Stormwater Ponds		Natural Cover		Impervious Cover	0	0	0	Subtract 10% of the Sv - the calculated storage volume for the practice.	10%	0	0	N/A	0	0	0	0	N/A	N/A
W1-2 Wetlands		Compacted Cover		Impervious Cover	0	0	0	Subtract 10% of the Sv - the calculated storage volume for the BMP.	10%	0	0	N/A	0	0	0	0	N/A	N/A
O1 Grass Channel		Natural Cover		Impervious Cover	0	0	0	Reduce volume (Sv) conveyed through grass channel by 10%.	10%	0	0	N/A	0	0	0	0	N/A	N/A
O1 Grass Channel with Amended Soils		Compacted Cover		Impervious Cover	0	0	0	Reduce volume (Sv) conveyed through grass channel by 30%.	30%	0	0	N/A	0	0	0	0	N/A	N/A
O2 Dry Swale		Natural Cover		Impervious Cover	0	0	0	Subtract 60% of the Sv - the calculated storage volume for the BMP.	60%	0	0	N/A	0	0	0	0	N/A	N/A
O3 Wet Swale		Compacted Cover		Impervious Cover	0	0	0	Subtract 10% of the Sv - the calculated storage volume for the BMP.	10%	0	0	N/A	0	0	0	0	N/A	N/A
PP1 Proprietary Practice		Natural Cover		Impervious Cover	0	0	0	Subtract a variable % of the Sv depending on the BMP.	0%	0	0	N/A	0	0	0	0	N/A	N/A
TP1 Tree Preservation	0			Number of Trees Preserved			N/A	20 of credit per tree	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A
TP2 Tree Planting	3			Number of Trees Planted			N/A	10 of credit per tree	N/A	N/A	N/A	N/A	N/A	50	N/A	N/A	N/A	N/A
Totals	19,793		38,010		11,826	5,694								4,895				1,159

Retention Volume Remaining (cubic feet)	0	Volume Remaining to Treat 50% of the SWRV (cubic feet)	0
Retention Volume Remaining (gallons)	0	Volume Remaining to Treat 50% of the SWRV (gallons)	0
50% of SWRV Retained?	Yes	Volume Remaining to Treat WQTV (cubic feet)	N/A
Runoff from Vehicular Access Areas Sufficiently Retained or Treated?	N/A	Volume Remaining to Treat WQTV (gallons)	N/A
Treatment Required?	No		
Minimum Requirements for Drainage Area Met?	Yes		

Congratulations!! You have exceeded the required SWRV by 4230 gallons which may be able to be used to generate SRCs.

District of Columbia General Retention Compliance Calculator
Channel and Flood Protection Calculations

Target Rainfall Event (in)	2-year storm	15-year storm	100-year storm
	3.20	5.20	8.37

SDA 1 (square feet)	0
Storage Volume Provided By BMPs (cf)	0
Storage Volume Provided By BMPs (gallons)	0

SDA 2 (square feet)	57,758
Storage Volume Provided By BMPs (cf)	7,608
Storage Volume Provided By BMPs (gallons)	56,904

Land Area	SDA 2		Soils		
	Natural Cover	Area (sf)	3424.0	Weighted CN	S
Compacted Cover	Area (sf)	16324.0			
	Area (sf)	38010.0			
Impervious Cover and BMPs	Area (sf)	38010.0			
	Area (sf)	98			
			2-year storm	15-year storm	100-year storm
			2.13	4.02	7.12
			0.55	2.44	5.64
			64	73	76

Site Drainage Area 2

Natural Cover (square feet)	3,424
Compacted Cover (square feet)	16,324
Impervious Cover (square feet)	34,710
BMP (square feet)	3,300
Total Area (square feet)	57,758

SWRV (cubic feet)	4,019
WQTV (cubic feet)	NA

Volume Retained (cubic feet)	4,585
Retention Volume Remaining (cubic feet)	0
Retention Volume Remaining (gallons)	0
At least 50% of SWRV Retained?	Yes
Vehicular Access Areas Volume Addressed?	N/A
Treatment Required?	No
Volume Treated (cubic feet)	1,159
Volume Remaining to Treat 50% of the SWRV (cubic feet)	0
Volume Remaining to Treat 50% of the SWRV (gallons)	0
Volume Remaining to Treat WQTV (cubic feet)	N/A
Volume Remaining to Treat WQTV (gallons)	N/A

Overall Site Compliance

Total Volume Retained On Site (cubic feet)	4,585
At least 50% of SWRV for the Site Retained?	Yes
Site Retention Volume Remaining (cubic feet)	0
Site Retention Volume Remaining (gallons)	0
Total Volume Treated (cubic feet)	1,159
Site Treatment Volume Remaining (cubic feet)	0
Site Treatment Volume Remaining (gallons)	0
Excess Volume That May be Eligible for SRCs (gallons)	4,230
Required Off-Site Retention Volume (OffV) (gallons)*	0

*OffV must be achieved on an ongoing basis through use of in lieu fee or Stormwater Retention Credits (SRCs)

SWM COMPUTATIONS

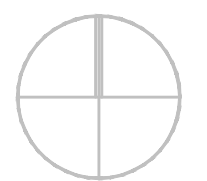


8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM



4910 MASSACHUSETTS AVE. NW, SUITE 214
WASHINGTON, DC 20016
202.244.4140

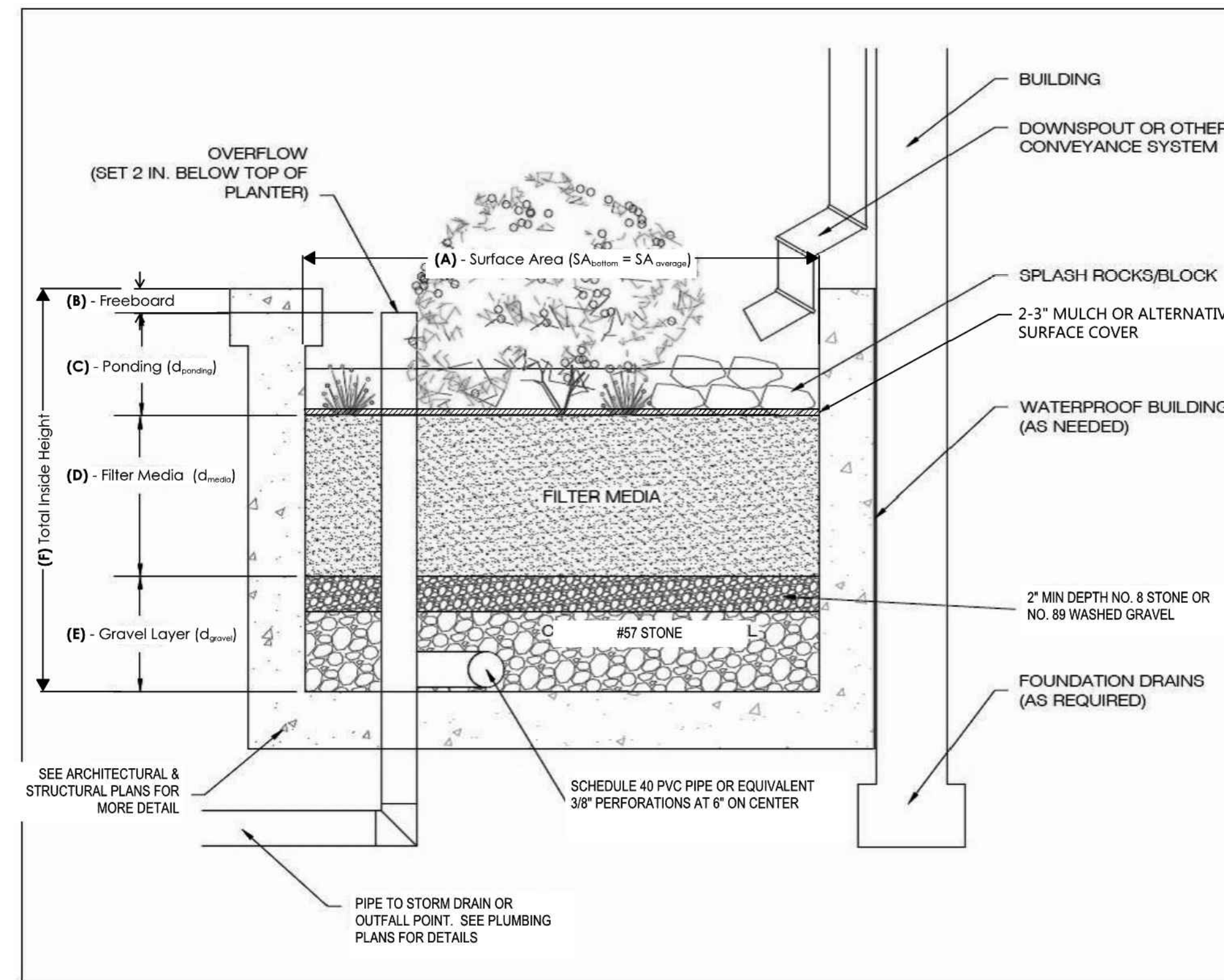
SWM COMPUTATIONS



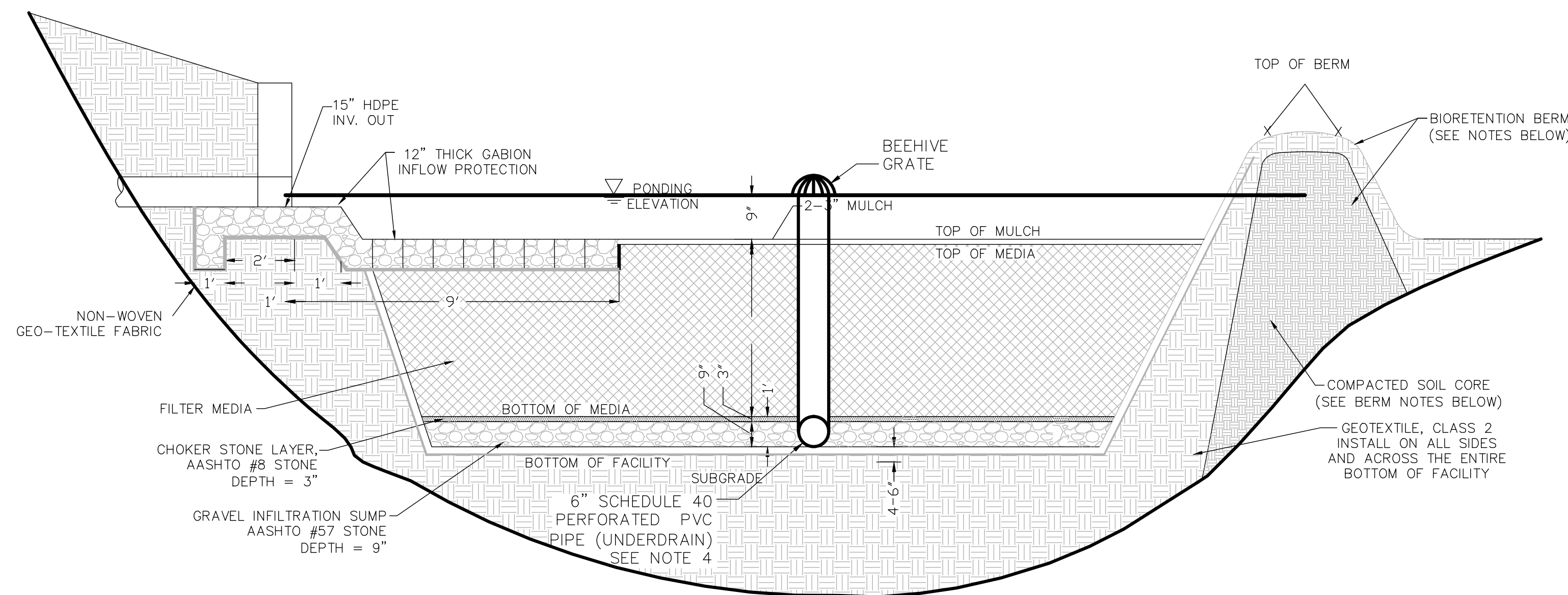
C.07

22 November 2016

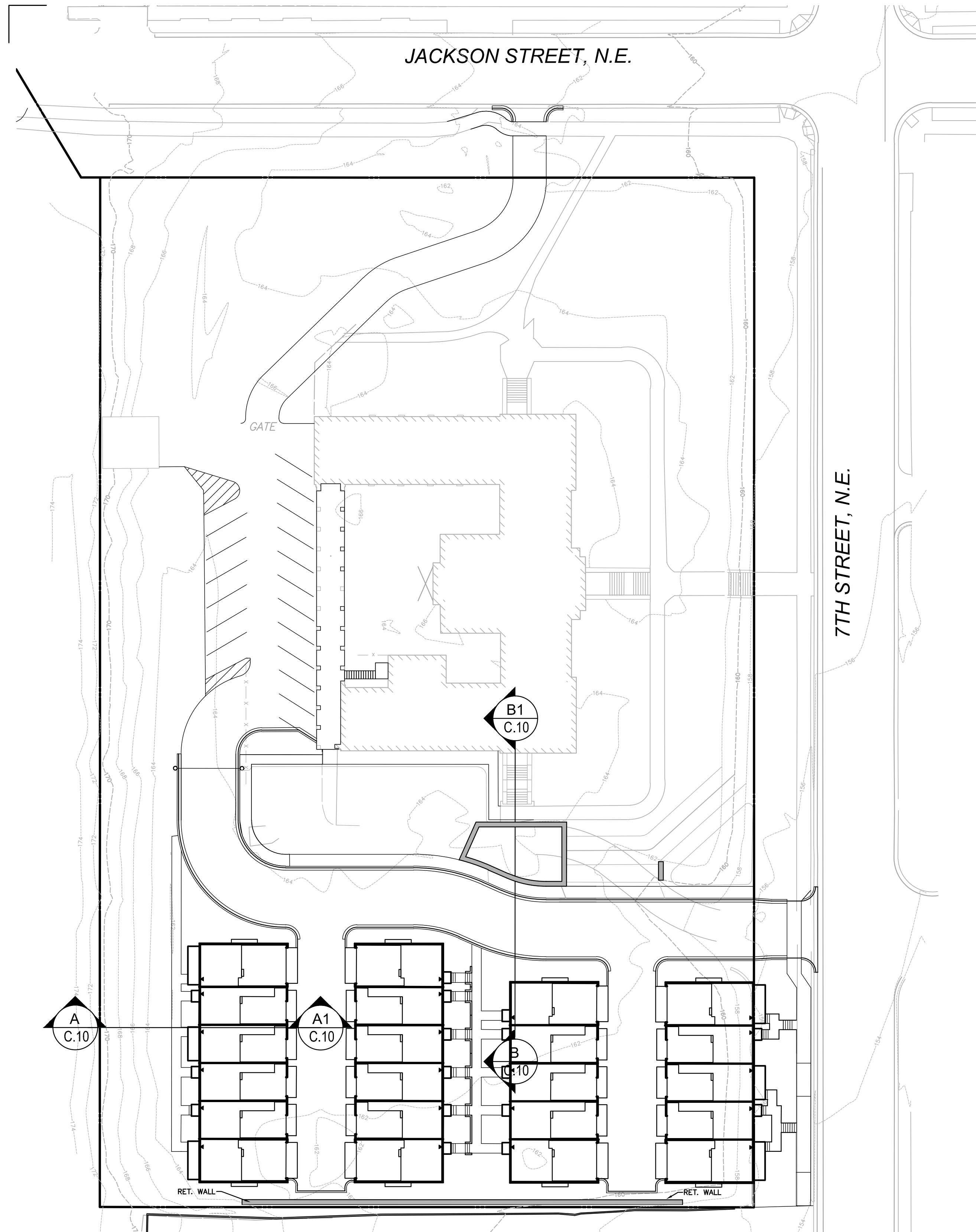
©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.



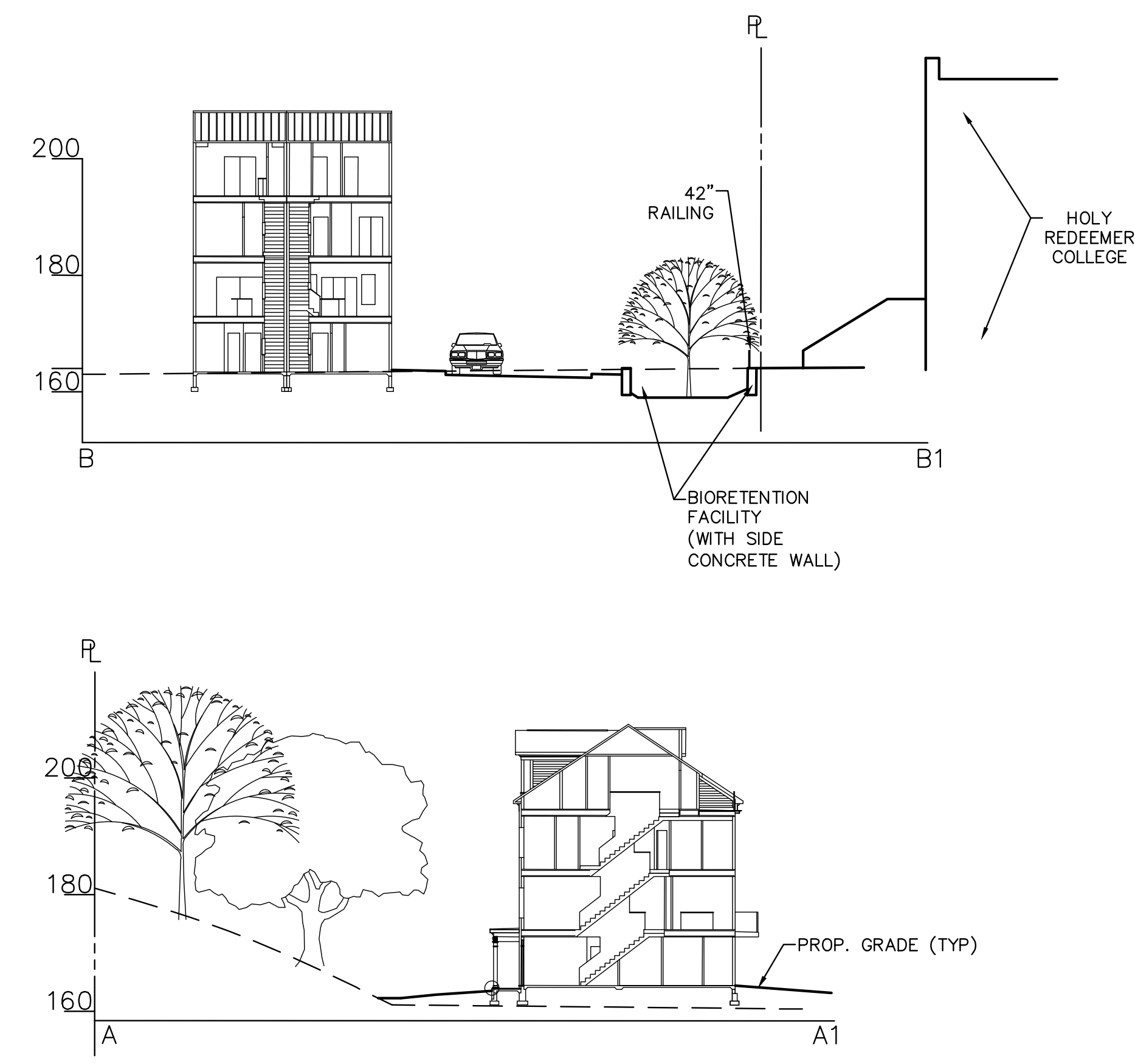
**BIORETENTION FACILITY DETAIL
WITH CONCRETE WALLS**



BIORETENTION FACILITY DETAIL



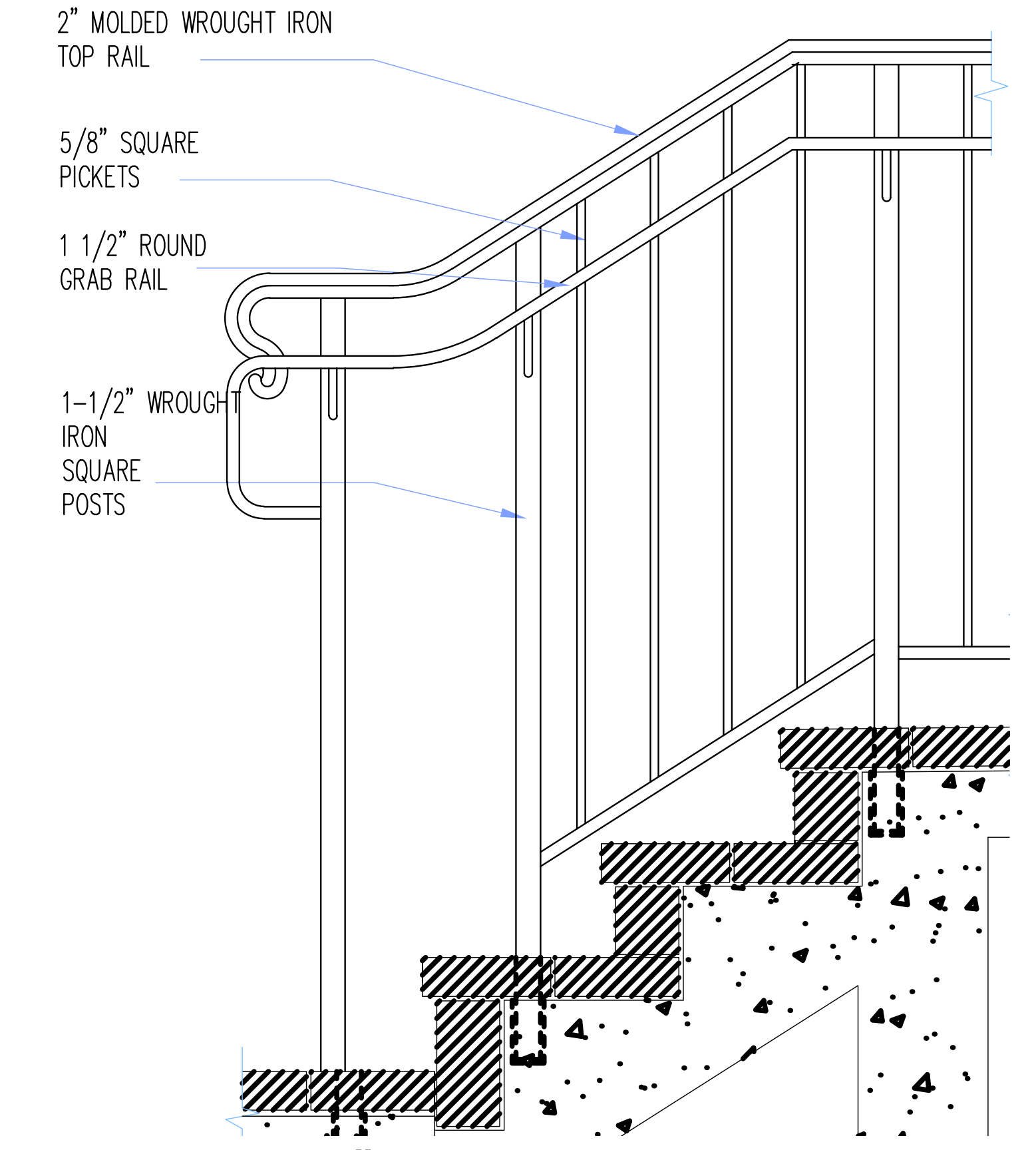
SITE SECTION PLAN



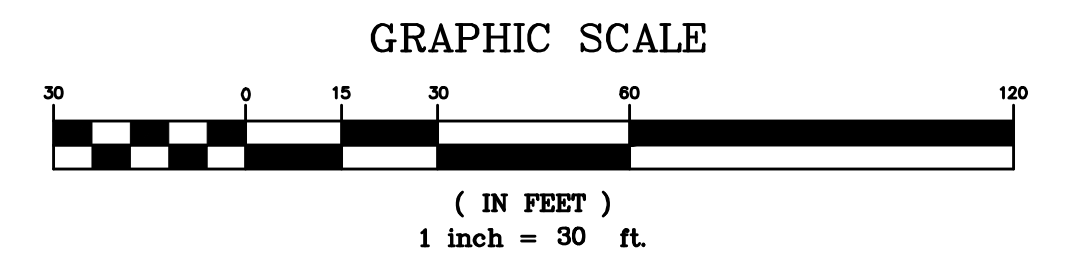
SITE SECTIONS



RETAINING WALL
STONE VENEER EXAMPLE



SCHEMATIC 42" RAILING FOR RETAINING WALLS EXAMPLE/DETAIL (NOT TO SCALE)



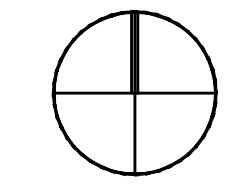
8521 LEESBURG PIKE, SUITE 700 | VIENNA, VA 22182
P: 571.830.1800 | F: 571.830.1801 | WWW.LESSARDDDESIGN.COM

©2014 LESSARD DESIGN INC EXPRESSLY RESERVES ITS COMMONLAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.


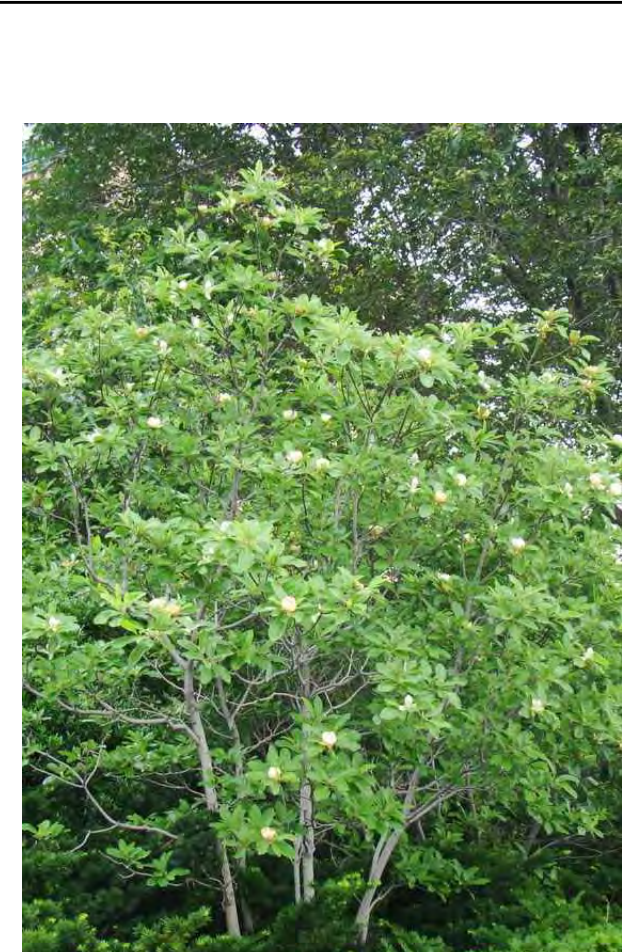







4910 MASSACHUSETTS AVE. NW, SUITE 214
WASHINGTON, DC 20016
202.244.4140

SITE SECTIONS



22 November 2016

						
RED MAPLE	SWEETGUM	BLACK GUM	WILLOW OAK	RED OAK	BASSWOOD	RIVER BIRCH
						
SERVICEBERRY	AMERICAN HORNBEAM	REDBUD	SWEETBAY MAGNOLIA	AMERICAN HOLLY	PITCH PINE	WHITE PINE
						
CHOKEBERRY	SILKY DOGWOOD	MOUNTAIN LAUREL	SPICEBUSH	ARROWOOD VIBURNUM	CATAWBA RHODODENDRON	NINEBARK

	
NEW ENGLAND ASTER	GOLDENROD GOLDEN FLEECE
	
INDIANGRASS	LIRIOPE (LILYTURF) EV. GIANT
	
TUSSOCK SEDGE	VIRGINIA BLUEBELLS