NOTE: SITE AND LANDSCAPE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO CIVIL FOR SITE PLAN AND CIVIL INFORMATION.
REFER TO LANDSCAPE FOR LANDSCAPE, TREES AND STREETSCAPE INFORMATION.

ROSELAND
A MACK-CALI COMPANY

PERSPECTIVE RENDERING

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

COMMONWEALTH OF VIRGINIA
JEREMY RAOUL SIMON
REGISTERED ARCHITECT
OCT 23 2019

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

A.501

BUILDING USES / SF	GARAGE / BUILDING FLOOR			
USE	B1 CH7&8	GR1 CH7&8	R2 CH7&8	TOTAL SF
GARAGE PARKING	30,557	0	0	**30,557**
STORAGE	* 153	* 0	* 0	**153**
UTILITY ROOMS/IT CLOSETS/FCC	* 145	* 0	* 0	**145**
TRASH COLLECTION	* 225	* 0	* 0	**225**
RESIDENTIAL UNITS & CIRCULATION	* 443	* 22,225	* 22,176	**44,844**
LOBBY / AMENITIES	* 0	* 0	* 0	**0**
TOTAL BUILDING AREAS	**31,523**	**22,225**	**22,176**	**75,924**

*** AREAS COUNTED TOWARDS GFA**

OVERALL BUILDING GFA + SF	GARAGE / BUILDING FLOOR			
	B1 CH7&8	GR1 CH7&8	R2 CH7&8	TOTAL GFA + SF
FLOOR ELEVATION	35.5'-44.0'	46.0'-57.0'	57.25'-68.25'	
RESIDENTIAL GFA	966	22,225	22,176	**45,367**
GROSS PARKING AREA (SF)	30,557	0	0	**30,557**
TOTAL GFA + SF				**75,924**

UNITS TYPES			BUILDING FLOOR		
TYPE	BEDROOMS	AREA	B1	GR1	TOTAL UNITS
T-1	3BR, 2.5 BA	2,112 NSF	0	17	17
T-2	3BR, 2.5 BA	2,144 NSF	0	2	2
T-3	3BR, 2.5 BA	2,112 NSF	0	1	1
T-4	3BR, 2.5 BA	2,144 NSF	0	1	1
TOTAL UNITS PER FLOOR			**0**	**21**	**21**

BIKE PARKING					
	REQUIRED			PROVIDED	
TYPES	UNITS	RATIO	SPACES	SPACES	LOCATION
RESIDENTIAL	21	1 / 2.5 UNITS	9	21	IN PRIVATE GARAGE
VISITOR	21	1 / 50 UNITS	1	1	AT FERN STREET
TOTAL SPACES			**10**	**22**	

PROPOSED NEW BUILDING GARAGE PARKING SPACES	BUILDING FLOOR		
TYPE	GARAGE B1 CH7	GARAGE B1 CH8	TOTAL
FULL/STANDARD PARKING	20	63	83
COMPACT PARKING	2	1	3
*ADA/HANDICAP PARKING	1	1	2
*ADA VAN/HANDICAP PARKING	1	1	2
TOTAL PARKING SPACES	**24**	**66**	**90**

* NOTE: PER IBC, AT LEAST 2% OF THE PS SHOULD BE ACCESSIBLE PS AND FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PS, AT LEAST ONE SHALL BE A VAN-ACCESSIBLE PS.
HC PS REQUIRED :-
CH 7 = 24 PS X 2% = 1 PS (1 VAN ACCESSIBLE)
CH 8 = 66 PS X 2% = 2 PS (1 HC AND 1 VAN ACCESSIBLE)
HC PS PROVIDED :-
CH 7 = 2 PS (1 HC AND 1 VAN ACCESSIBLE)
CH 8 = 2 PS (1 HC AND 1 VAN ACCESSIBLE)

COMMONWEALTH OF VIRGINIA
JEFFREY RAOUL SIMON
012342
ARCHITECT
OCT 23 2019

ROSELAND
A MACK-CALI COMPANY

TABULATIONS

PLANNING COMMISSION RESUBMISSION

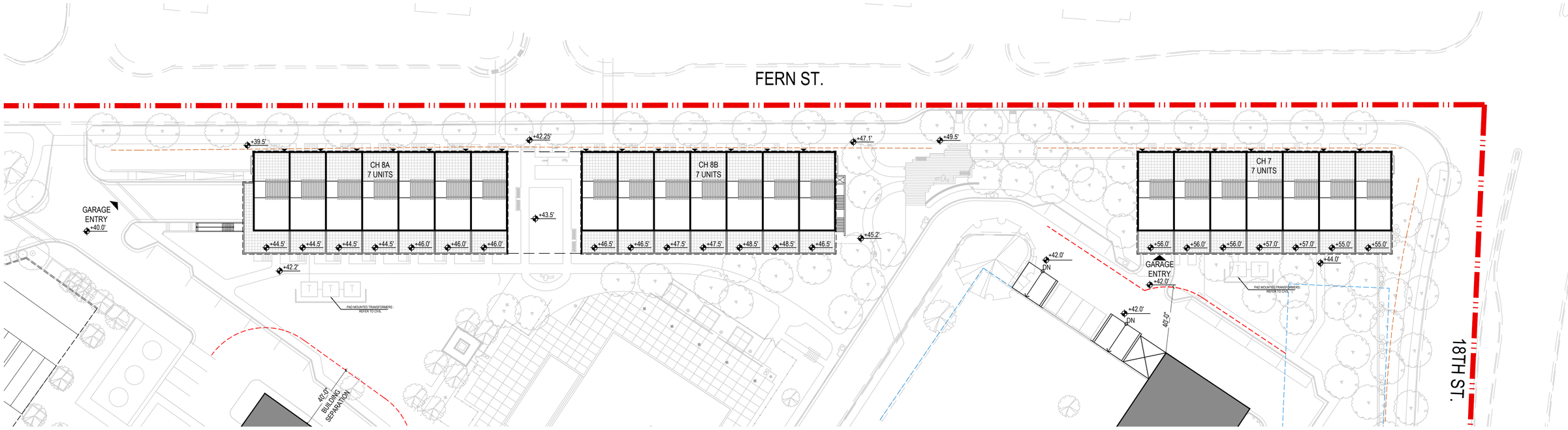
©2019 LESSARD DESIGN INC. EXPRESSLY RESERVES ITS COMMON-LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA
RSL.063B

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

A.502



NOTE: SEE LANDSCAPE DRAWING FOR LANDSCAPE DESIGN AND LAYOUT INFORMATION.
SEE CIVIL DRAWING FOR CIVIL AND SITE INFORMATION.
REFER TO LANDSCAPE FOR ROOF TERRACE PLANNING.

ROSELAND
A MACK-CALI COMPANY

SITE PLAN

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

COMMONWEALTH OF VIRGINIA
JEFFREY RAOUL SIMON
ARCHITECT
NOV 25 2019

PLANNING BOARD RESUBMISSION 2
NOV 25, 2019
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

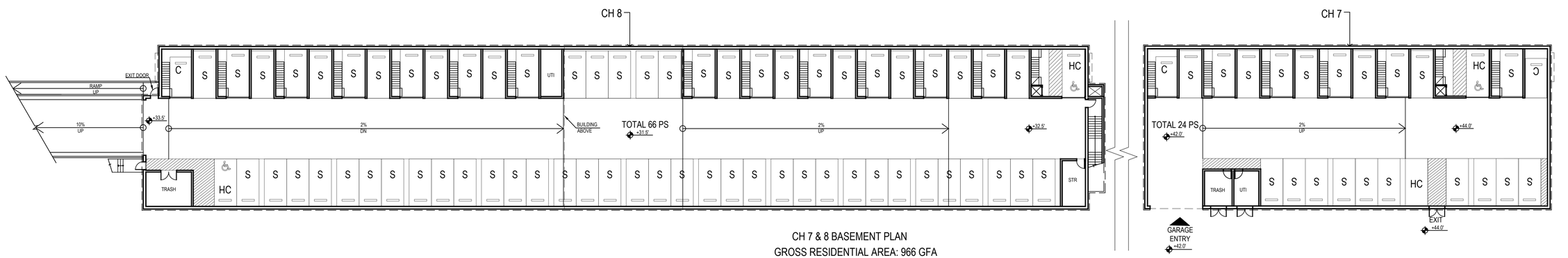
CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

A.503

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

0' 15' 30' 60'
SCALE: 1" = 30' (@ 22"x34")

GARAGE B1 PARKING COUNT	
STANDARD SPACES	83
COMPACT SPACES	03
HANDICAP SPACES	04
TOTAL PARKING SPACES	90

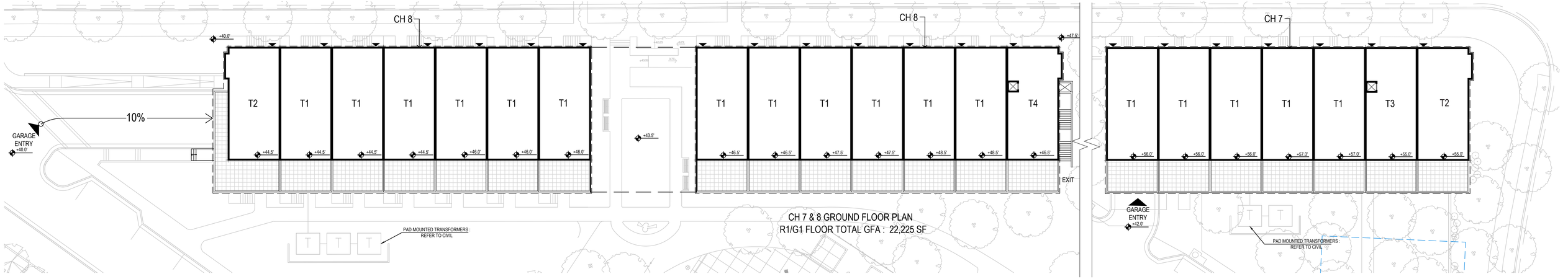


CH 7 & 8 BASEMENT PLAN

GROSS RESIDENTIAL AREA: 966 GFA

GROSS PARKING AREA: 30,557 SF

GARAGE B1 TOTAL GFA+SF = 31,523 SF



CH 7 & 8 GROUND FLOOR PLAN

R1/G1 FLOOR TOTAL GFA : 22,225 SF

NOTE: SEE LANDSCAPE DRAWING FOR LANDSCAPE DESIGN AND LAYOUT INFORMATION.
SEE CIVIL DRAWING FOR CIVIL AND SITE INFORMATION.
REFER TO LANDSCAPE FOR ROOF TERRACE PLANNING.

COMMONWEALTH OF VIRGINIA
JEFFREY RAOUL SIMON
NOV 25 2019

PLANNING BOARD RESUBMISSION 2
NOV 25, 2019
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

ROSELAND
A MACK-CALI COMPANY

FLOOR PLANS

PLANNING COMMISSION RESUBMISSION

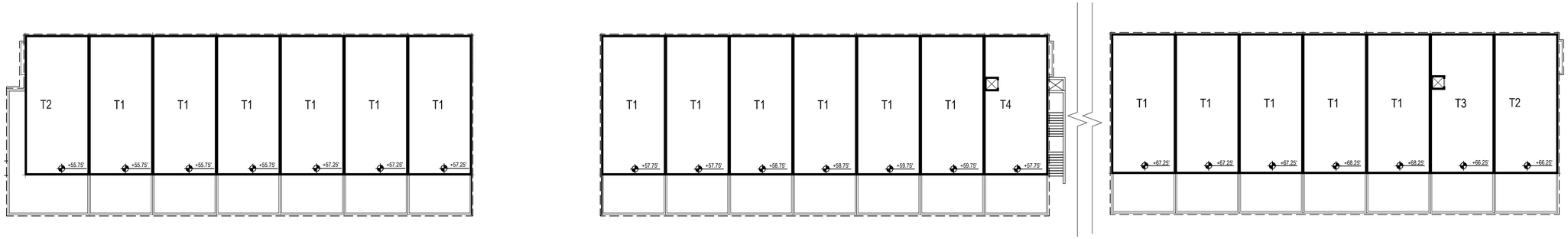
©2019 LESSARD DESIGN INC. EXPRESSLY RESERVES ITS COMMON-LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

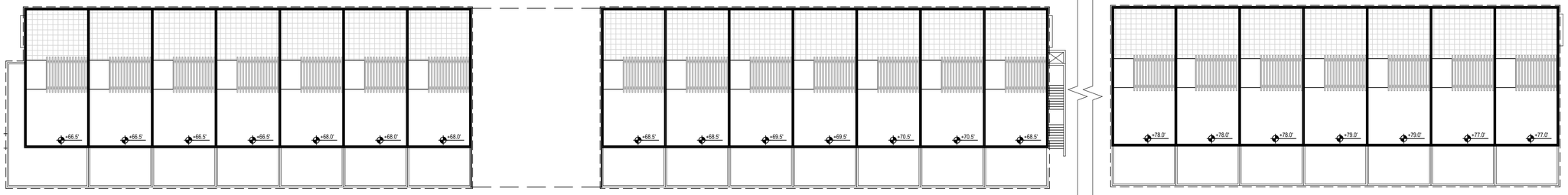
lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

0' 15' 30' 60'
SCALE: 1" = 30' (@ 22"x34")

A.504



CH 7 & 8 SECOND FLOOR PLAN
R2 FLOOR TOTAL GFA : 22,176 SF



CH 7 & 8 ROOF PLAN

NOTE: SEE LANDSCAPE DRAWING FOR LANDSCAPE DESIGN AND LAYOUT INFORMATION.
SEE CIVIL DRAWING FOR CIVIL AND SITE INFORMATION.
REFER TO LANDSCAPE FOR ROOF TERRACE PLANNING.

ROSELAND
A MACK-CALI COMPANY

FLOOR PLANS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

COMMONWEALTH OF VIRGINIA
JEREMY RAOUL SIMON
ARCHITECT
OCT 23 2019

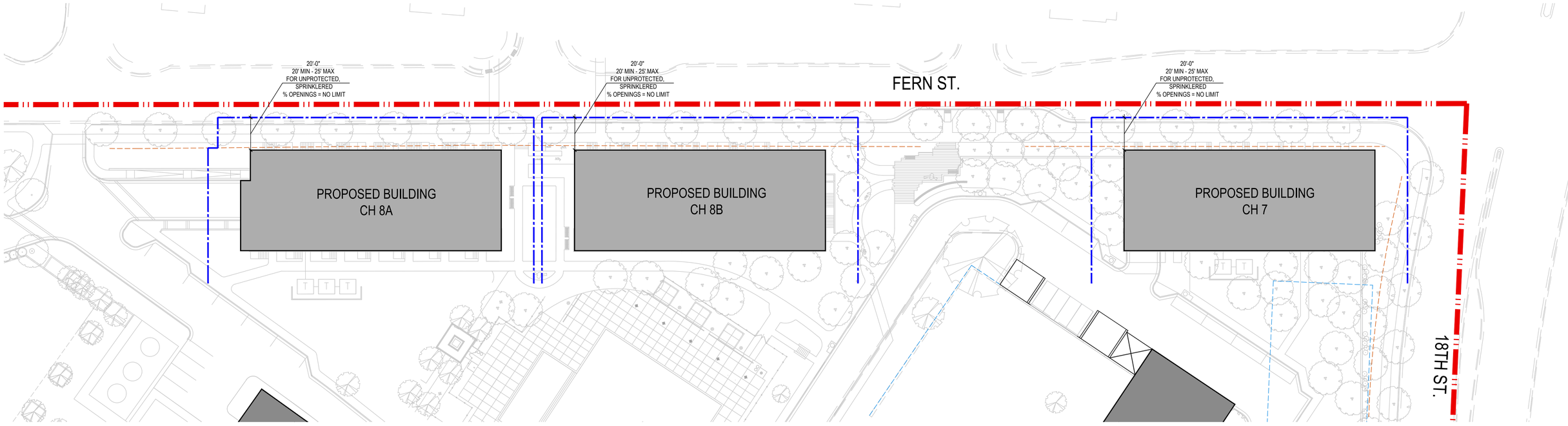
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA
RSL.063B

A.505

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

0' 15' 30' 60'
SCALE: 1" = 30' (@ 22"x34")



NOTE: SEE LANDSCAPE DRAWING FOR LANDSCAPE DESIGN AND LAYOUT INFORMATION.
SEE CIVIL DRAWING FOR CIVIL AND SITE INFORMATION.
REFER TO LANDSCAPE FOR ROOF TERRACE PLANNING.

ROSELAND
A MACK-CALI COMPANY

PROTECTIVE OPENINGS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

COMMONWEALTH OF VIRGINIA
JEREMY RAOUL SIMON
ARCHITECT
NOV 25 2019

PLANNING BOARD RESUBMISSION 2
NOV 25, 2019
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

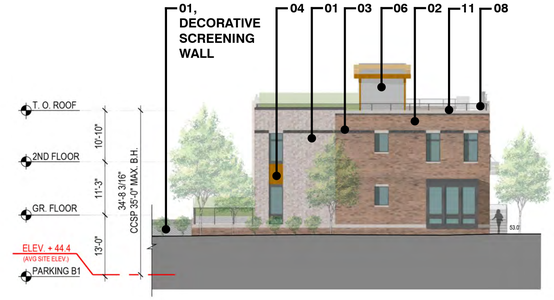
CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

A.506

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

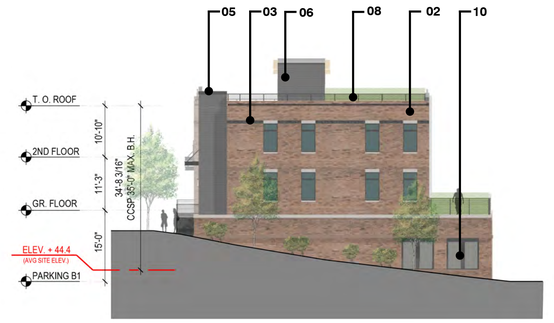
0' 15' 30' 60'
SCALE: 1" = 30' (@ 22"x34")

BUILDING ELEVATION 1



BUILDING ELEVATION 2

BUILDING ELEVATION 3



BUILDING ELEVATION 4

MATERIAL LEGEND

01	BRICK- LIGHT
02	BRICK- BROWN
03	BRICK- DARK ACCENT
04	METAL PANEL- WOOD
05	METAL PANEL- DARK
06	CORRUGATED METAL- MEDIUM
07	WOOD COMPOSITE
08	METAL RAILING
09	ALUMINUM WINDOWS & ACCENT COLOR
10	PERFORATED METAL
11	ARCHITECTURAL STONE BEIGE

NOTE:

1. PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR TO BE SUBSTITUTED WITH EQUIVALENT, COMPATIBLE OPTIONS

2. REFER TO LANDSCAPE FOR TREE LOCATION AND LANDSCAPE INFORMATION. LANDSCAPE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

3. MECH PLUMBING & LAUNDRY VENTS IN REAR FACADE TO BE COORDINATED

COMPLIANCE NOTES PER THE ARLINGTON COUNTY ZONING ORDINANCE

A BUILDING HEIGHT IS THE VERTICAL DISTANCE FROM GRADE TO THE HIGHEST POINT OF THE ROOF SURFACE

B PENTHOUSES OR ROOF STRUCTURES FOR THE HOUSING OF ELEVATORS, STAIRWAYS, TANKS, VENTILATING FANS OR SIMILAR EQUIPMENT REQUIRED TO OPERATE AND MAINTAIN THE BUILDING, AND FIRE OR PARAPET WALLS, SKYLIGHTS, RADIO TOWERS, STEEPLES, FLAGPOLES , CHIMENYES, SMOKESTACKS OR SIMILAR STRUCTURES MAY BE ERECTED ABOVE THE HEIGHT LIMITS. SUCH STRUCTURES SHALL NOT EXCEED 23'.

C VISUAL CLEARANCE - SIGHT TRIANGLE TO BE UNOBSTRUCTED BETWEEN 3' AND 10'

COMPLIANCE NOTES PER CRYSTAL CITY SECTOR PLAN GUIDELINES

D IN THE CENTRAL ZONE LOCATED BETWEEN THE DISTANCES OF 130' FROM EADS ST. AND 85' OF FERN STR., THE MAX. BUILDING HEIGHT IS 60' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

E WITHIN 130' OF EADS ST. THE MAX. BUILDING HEIGHT IS 110' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

F PODIUM TO ENGAGE RBL

G DISTINCTIVE BUILDING TOPS

H BASE FRONTAGE AND GROUND FLOOR TO BE PEDESTRIAN FRIENDLY AND APPEAR TO HAVE A GREATER HEIGHT

I RESIDENTIAL LOBBY ENTRANCE SHOULD FRONT ONTO THE STREET AND BE AT GRADE

J RESIDENTIAL LOBBY ENTRANCE SHOULD HAVE A CLEAR HEIGHT OF 12'

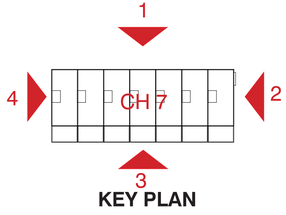
K OPPORTUNITIES FOR GROUND FLOOR RESIDENTIAL UNITS WITH INDIVIDUAL STREET ENTRANCES

L GROUND FLOOR UNITS ALONG THE RBL TO BE ELEVATED TYPICALLY ON AVERAGE OF 24" ABOVE THE EXTERIOR GRADE

M BUILDING FRONTAGE ELEMENTS SUCH AS BALCONIES AND SHADING ELEMENTS MAY ENCROACH THE RBL UP TO 6'

N ALL HANDICAP RAMPS SHOULD BE INTERNAL TO BUILDINGS.

NOTE:
REFER TO SHEET A.106 FOR PROTECTIVE OPENINGS INFORMATION.



KEY PLAN

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

ROSELAND
A MACK-CALI COMPANY

CH 7 BUILDING ELEVATIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

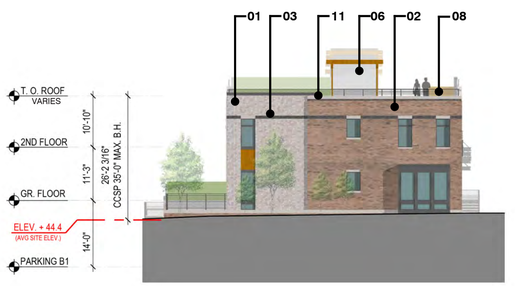
CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

0' 8' 16' 32'
SCALE: 1/16"= 1'-0" (@ 22"x34")

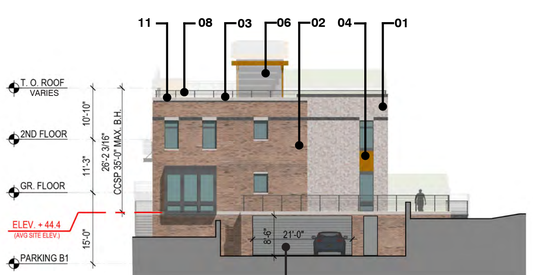
A.507

BUILDING ELEVATION 1



BUILDING ELEVATION 2

BUILDING ELEVATION 3



BUILDING ELEVATION 4

MATERIAL LEGEND

01	BRICK- LIGHT
02	BRICK- BROWN
03	BRICK- DARK ACCENT
04	METAL PANEL- WOOD
05	METAL PANEL- DARK
06	CORRUGATED METAL- MEDIUM
07	WOOD COMPOSITE
08	METAL RAILING
09	ALUMINUM WINDOWS & ACCENT COLOR
10	PERFORATED METAL
11	ARCHITECTURAL STONE BEIGE

NOTE:

1. PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR TO BE SUBSTITUTED WITH EQUIVALENT, COMPATIBLE OPTIONS

2. REFER TO LANDSCAPE FOR TREE LOCATION AND LANDSCAPE INFORMATION. LANDSCAPE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

3. MECH PLUMBING & LAUNDRY VENTS IN REAR FACADE TO BE COORDINATED

COMPLIANCE NOTES PER THE ARLINGTON COUNTY ZONING ORDINANCE

A BUILDING HEIGHT IS THE VERTICAL DISTANCE FROM GRADE TO THE HIGHEST POINT OF THE ROOF SURFACE

B PENTHOUSES OR ROOF STRUCTURES FOR THE HOUSING OF ELEVATORS, STAIRWAYS, TANKS, VENTILATING FANS OR SIMILAR EQUIPMENT REQUIRED TO OPERATE AND MAINTAIN THE BUILDING, AND FIRE OR PARAPET WALLS, SKYLIGHTS, RADIO TOWERS, STEEPLES, FLAGPOLES , CHIMENYES, SMOKESTACKS OR SIMILAR STRUCTURES MAY BE ERECTED ABOVE THE HEIGHT LIMITS. SUCH STRUCTURES SHALL NOT EXCEED 23'.

C VISUAL CLEARANCE - SIGHT TRIANGLE TO BE UNOBSTRUCTED BETWEEN 3' AND 10'

COMPLIANCE NOTES PER CRYSTAL CITY SECTOR PLAN GUIDELINES

D IN THE CENTRAL ZONE LOCATED BETWEEN THE DISTANCES OF 130' FROM EADS ST. AND 85' OF FERN STR., THE MAX. BUILDING HEIGHT IS 60' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

E WITHIN 130' OF EADS ST. THE MAX. BUILDING HEIGHT IS 110' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

F PODIUM TO ENGAGE RBL

G DISTINCTIVE BUILDING TOPS

H BASE FRONTAGE AND GROUND FLOOR TO BE PEDESTRIAN FRIENDLY AND APPEAR TO HAVE A GREATER HEIGHT

I RESIDENTIAL LOBBY ENTRANCE SHOULD FRONT ONTO THE STREET AND BE AT GRADE

J RESIDENTIAL LOBBY ENTRANCE SHOULD HAVE A CLEAR HEIGHT OF 12'

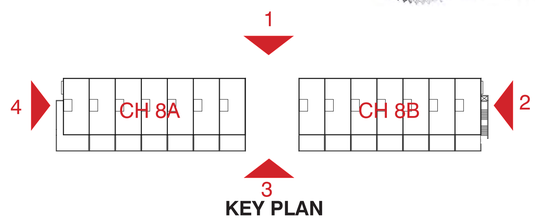
K OPPORTUNITIES FOR GROUND FLOOR RESIDENTIAL UNITS WITH INDIVIDUAL STREET ENTRANCES

L GROUND FLOOR UNITS ALONG THE RBL TO BE ELEVATED TYPICALLY ON AVERAGE OF 24" ABOVE THE EXTERIOR GRADE

M BUILDING FRONTAGE ELEMENTS SUCH AS BALCONIES AND SHADING ELEMENTS MAY ENCROACH THE RBL UP TO 6'

N ALL HANDICAP RAMPS SHOULD BE INTERNAL TO BUILDINGS.

NOTE:
REFER TO SHEET A.106 FOR PROTECTIVE OPENINGS INFORMATION.



KEY PLAN

ROSELAND
A MACK-CALI COMPANY

CH 8 BUILDING ELEVATIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

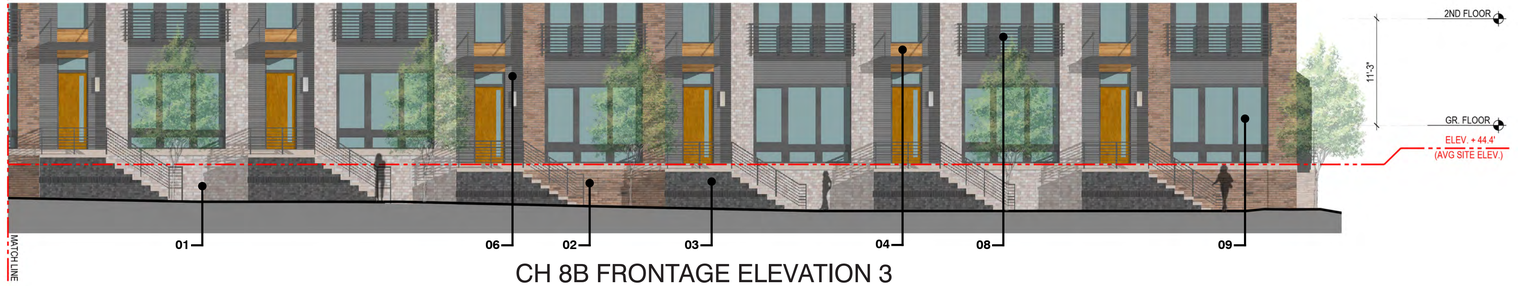
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

A.508

0' 8' 16' 32'
SCALE: 1/16" = 1'-0" (@ 22"x34")

CH7 FRONTAGE ELEVATION 1

CH 8A FRONTAGE ELEVATION 2



CH 8B FRONTAGE ELEVATION 3

MATERIAL LEGEND

01	BRICK- LIGHT
02	BRICK- BROWN
03	BRICK- DARK ACCENT
04	METAL PANEL- WOOD
05	METAL PANEL- DARK
06	CORRUGATED METAL- MEDIUM
07	WOOD COMPOSITE
08	METAL RAILING
09	ALUMINUM WINDOWS & ACCENT COLOR
10	PERFORATED METAL
11	ARCHITECTURAL STONE BEIGE

NOTE:

1. PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR TO BE SUBSTITUTED WITH EQUIVALENT, COMPATIBLE OPTIONS

2. REFER TO LANDSCAPE FOR TREE LOCATION AND LANDSCAPE INFORMATION. LANDSCAPE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

3. MECH PLUMBING & LAUNDRY VENTS IN REAR FACADE TO BE COORDINATED

COMPLIANCE NOTES PER THE ARLINGTON COUNTY ZONING ORDINANCE

A BUILDING HEIGHT IS THE VERTICAL DISTANCE FROM GRADE TO THE HIGHEST POINT OF THE ROOF SURFACE

B PENTHOUSES OR ROOF STRUCTURES FOR THE HOUSING OF ELEVATORS, STAIRWAYS, TANKS, VENTILATING FANS OR SIMILAR EQUIPMENT REQUIRED TO OPERATE AND MAINTAIN THE BUILDING, AND FIRE OR PARAPET WALLS, SKYLIGHTS, RADIO TOWERS, STEEPLES, FLAGPOLES , CHIMENYES, SMOKESTACKS OR SIMILAR STRUCTURES MAY BE ERECTED ABOVE THE HEIGHT LIMITS. SUCH STRUCTURES SHALL NOT EXCEED 23'.

C VISUAL CLEARANCE - SIGHT TRIANGLE TO BE UNOBSTRUCTED BETWEEN 3' AND 10'

COMPLIANCE NOTES PER CRYSTAL CITY SECTOR PLAN GUIDELINES

D IN THE CENTRAL ZONE LOCATED BETWEEN THE DISTANCES OF 130' FROM EADS ST. AND 85' OF FERN STR., THE MAX. BUILDING HEIGHT IS 60' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

E WITHIN 130' OF EADS ST. THE MAX. BUILDING HEIGHT IS 110' (PER BUILDING HEIGHTS MAP FIGURE 3.8.5)

F PODIUM TO ENGAGE RBL

G DISTINCTIVE BUILDING TOPS

H BASE FRONTAGE AND GROUND FLOOR TO BE PEDESTRIAN FRIENDLY AND APPEAR TO HAVE A GREATER HEIGHT

I RESIDENTIAL LOBBY ENTRANCE SHOULD FRONT ONTO THE STREET AND BE AT GRADE

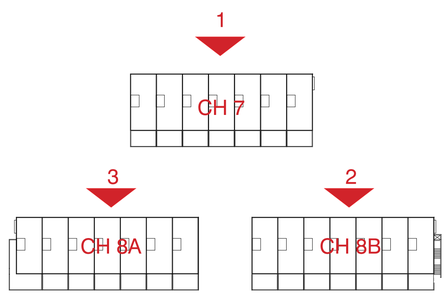
J RESIDENTIAL LOBBY ENTRANCE SHOULD HAVE A CLEAR HEIGHT OF 12'

K OPPORTUNITIES FOR GROUND FLOOR RESIDENTIAL UNITS WITH INDIVIDUAL STREET ENTRANCES

L GROUND FLOOR UNITS ALONG THE RBL TO BE ELEVATED TYPICALLY ON AVERAGE OF 24" ABOVE THE EXTERIOR GRADE

M BUILDING FRONTAGE ELEMENTS SUCH AS BALCONIES AND SHADING ELEMENTS MAY ENCROACH THE RBL UP TO 6'

N ALL HANDICAP RAMPS SHOULD BE INTERNAL TO BUILDINGS.



KEY PLAN

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

ROSELAND
A MACK-CALI COMPANY

FRONTAGE ELEVATIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F: 571.830.1801
LESSARDDESIGN.COM

0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")

A.509

01

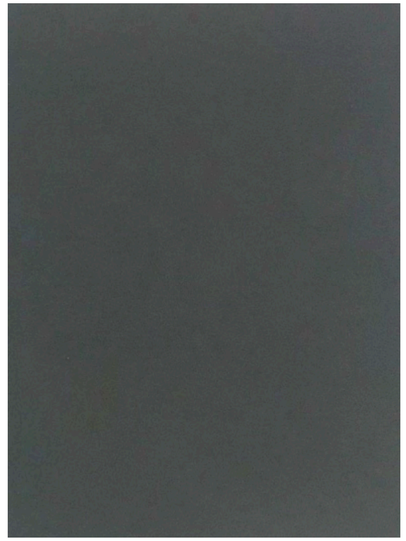
BRICK - LIGHT
INTERSTATE BRICK
ASH L-4

02

BRICK - BROWN
GLEN-GERY
CHATEAU BROWN

04

METAL PANEL - WOOD
REYNOBOND
OAK



05

METAL PANEL - DARK
ALUCOBOND
GRAPHITE MICA

06

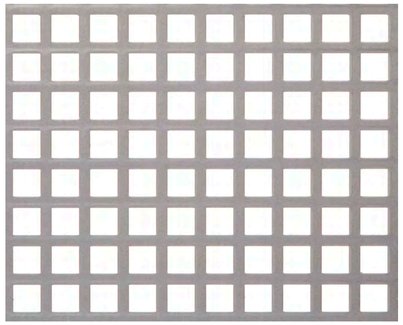
CORRUGATED METAL
CENTRIA
PEWTER

03

BRICK - ACCENT
YANKEE HILL
DARK IRONSPOT VELOUR

03

BRICK - ACCENT
YANKEE HILL
DARK IRONSPOT VELOUR



10

PERFORATED METAL

11

ARCHITECTURAL STONE
BEIGE

07

WOOD COMPOSITE
TREX
TIKI TORCH

08

METAL RAILING

09

ALUMINUM WINDOWS & ACCENT COLOR
COLOR TO MATCH
SW 7674 PEPPERCORN

COMMONWEALTH OF VIRGINIA
JEREMY RAOUL SIMON
No. 016292
ARCHITECT
OCT 23 2019

*NOTE: PRODUCTS AND MANUFACTURERS LISTED ARE SUBJECT TO CHANGE AND/OR TO BE SUBSTITUTED WITH EQUIVALENT AND COMPATIBLE OPTIONS.

ROSELAND
A MACK-CALI COMPANY

MATERIAL BOARD

PLANNING COMMISSION RESUBMISSION

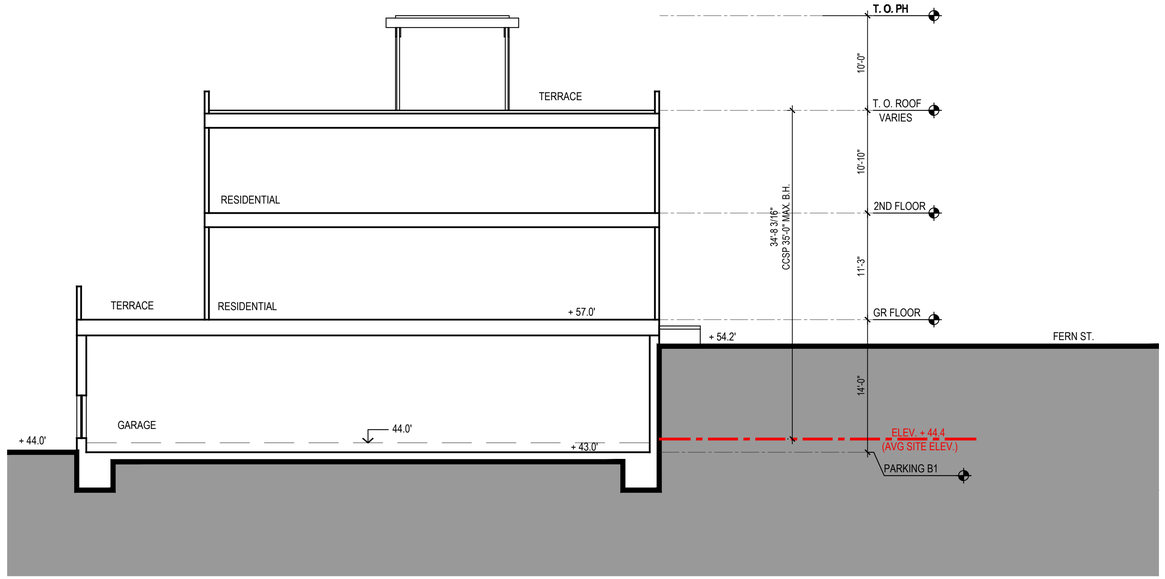
©2019 LESSARD DESIGN INC. EXPRESSLY RESERVES ITS COMMON-LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

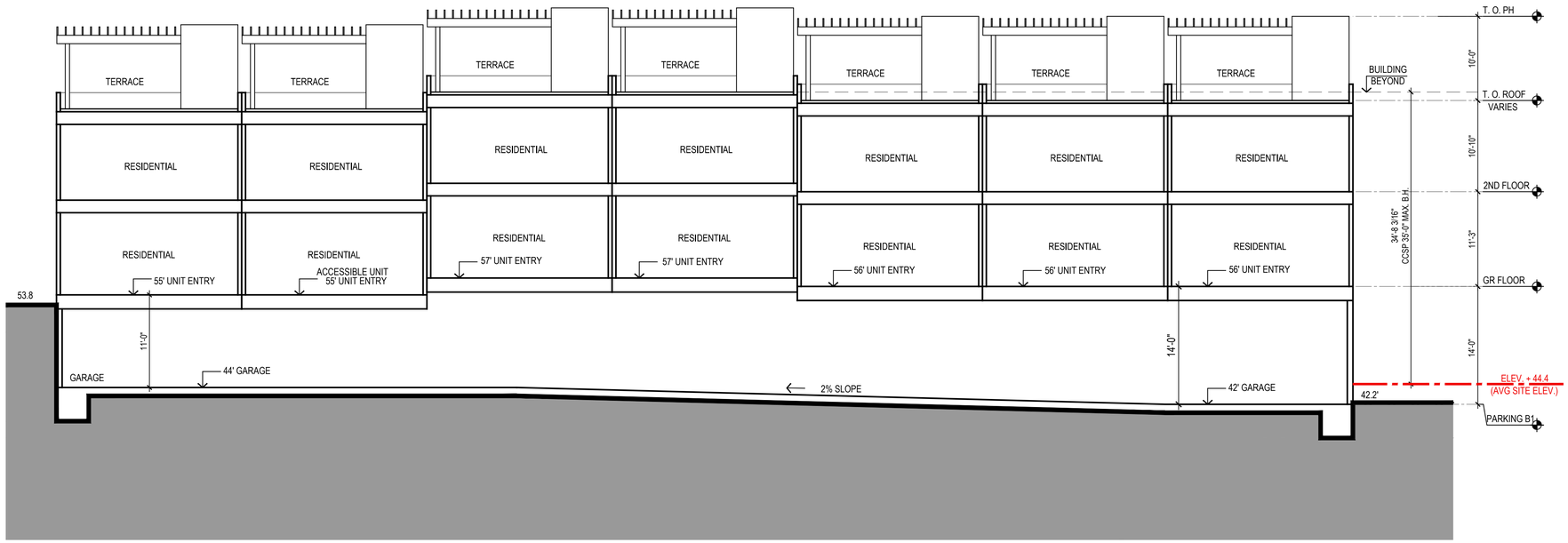
CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

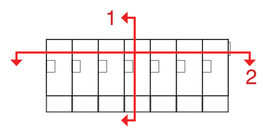
A.510



BUILDING SECTION 1



BUILDING SECTION 2



KEY PLAN

NOTE:
ROOF ELEVATION FOR EXISTING BUILDING ARE APPROXIATE. REFER TO CIVIL DRAWING FOR EXISTING BUILDING HEIGHTS AND ROOF ELEVATION

ROSELAND
A MACK-CALI COMPANY

CH 7 BUILDING SECTIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

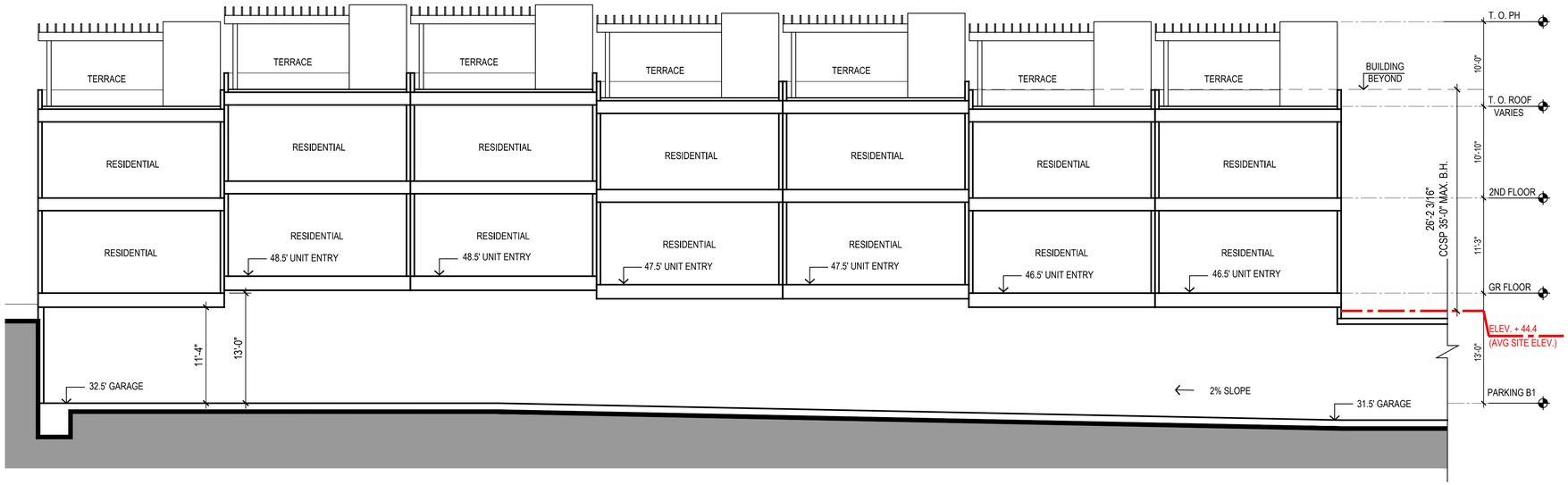
CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

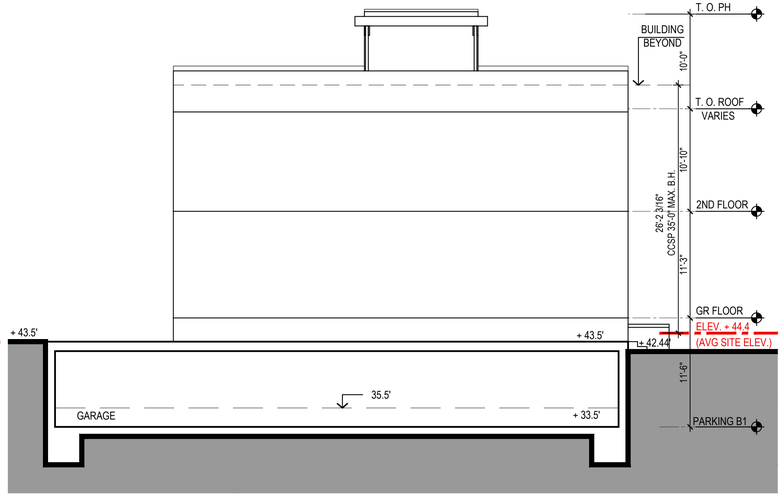
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

A.511

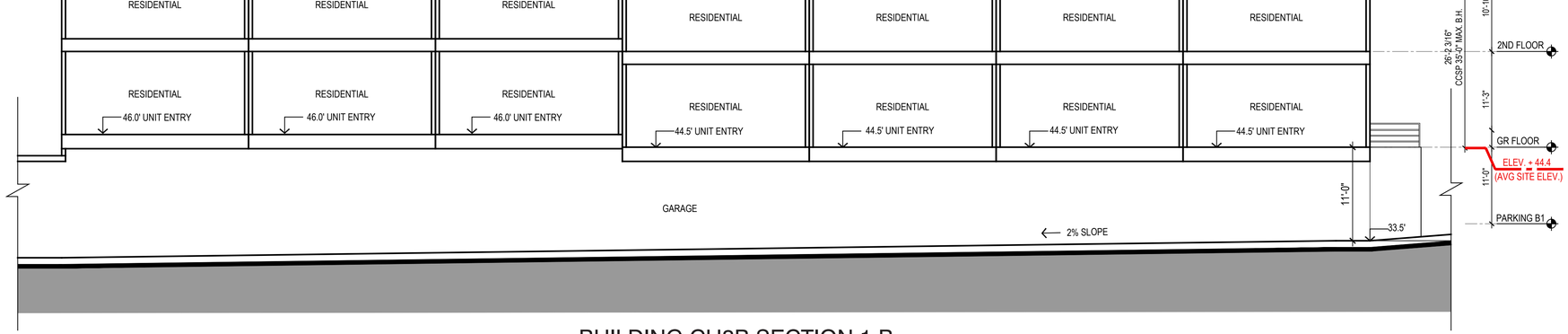
0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")



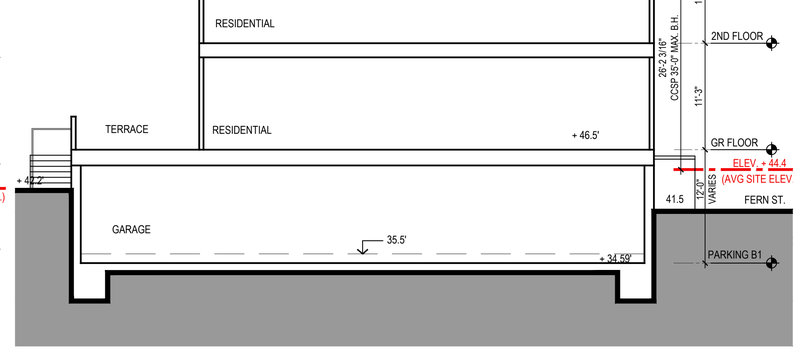
BUILDING CH8A SECTION 1 A



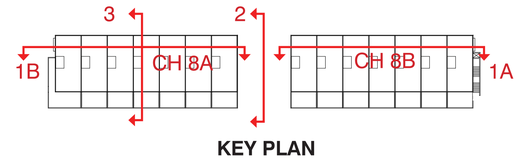
BUILDING SECTION 2



BUILDING CH8B SECTION 1 B



BUILDING SECTION 3



KEY PLAN

COMMONWEALTH OF VIRGINIA
JEFFREY RAOUL SIMON
042322
ARCHITECT
OCT 23 2019

NOTE:
ROOF ELEVATION FOR EXISTING BUILDING ARE APPROXIATE. REFER TO CIVIL DRAWING FOR EXISTING BUILDING HEIGHTS AND ROOF ELEVATION

ROSELAND
A MACK-CALI COMPANY

CH 8 BUILDING SECTIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

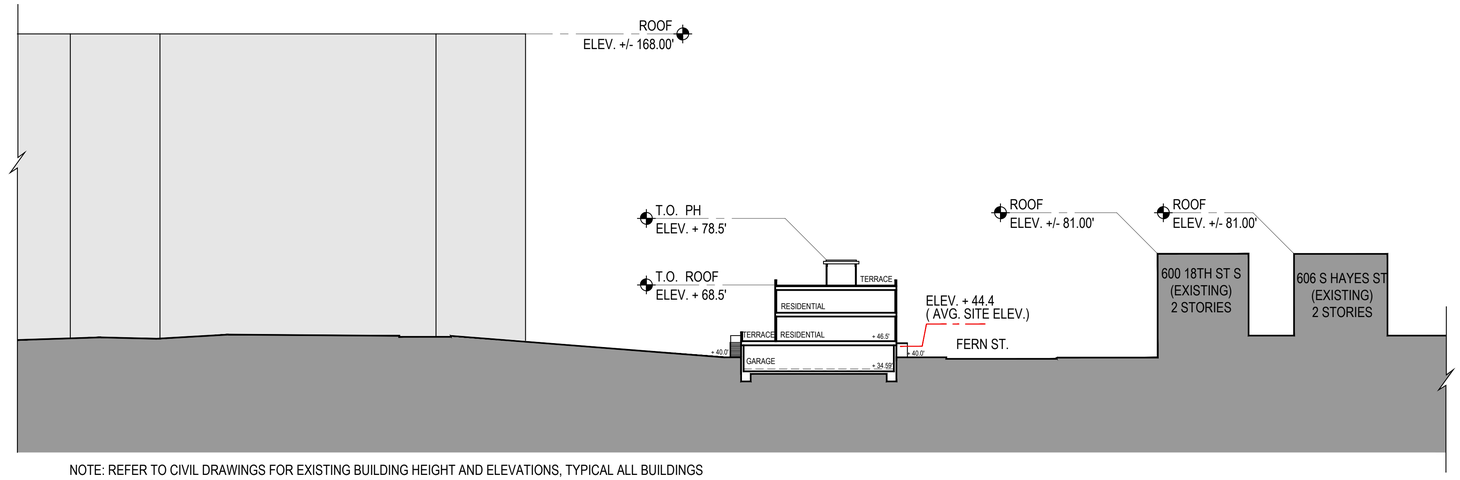
PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 23, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

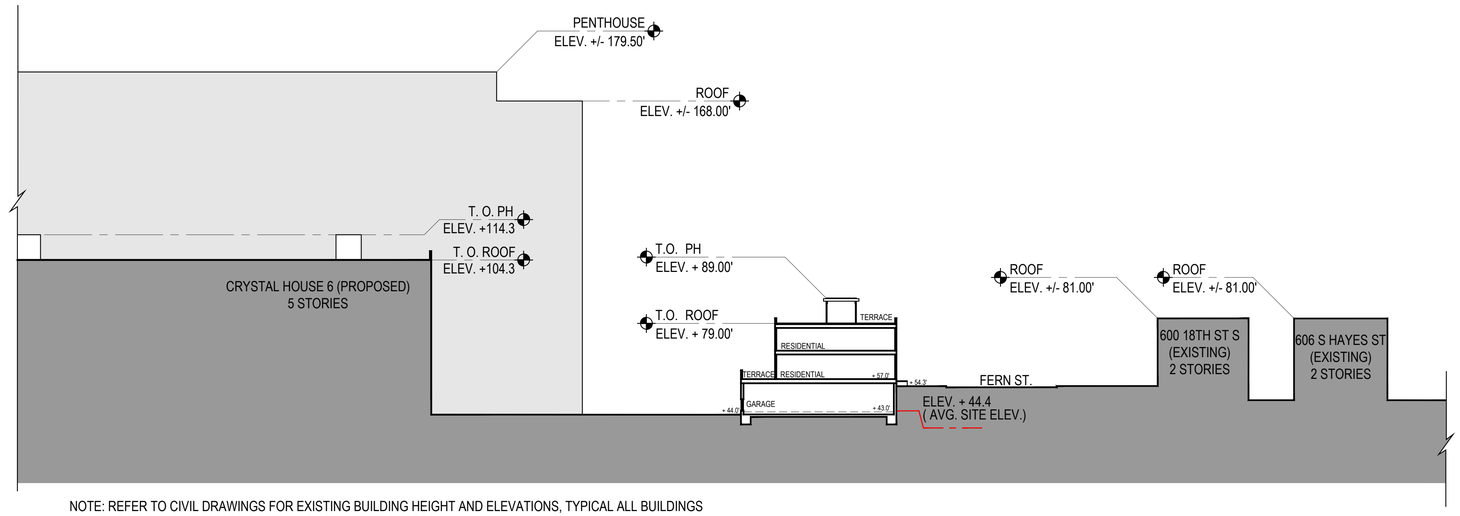
A.512

0' 4' 8' 16'
SCALE: 1/8" = 1'-0" (@ 22"x34")



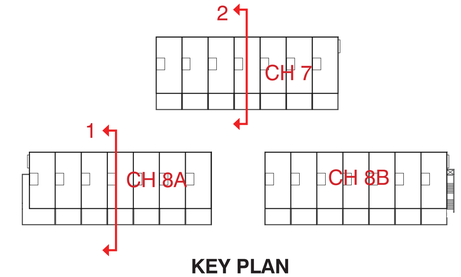
NOTE: REFER TO CIVIL DRAWINGS FOR EXISTING BUILDING HEIGHT AND ELEVATIONS, TYPICAL ALL BUILDINGS
BUILDING HEIGHTS OF EXISTING BUILDING ARE APPROXIMATED.

COMPARATIVE SECTION 1



NOTE: REFER TO CIVIL DRAWINGS FOR EXISTING BUILDING HEIGHT AND ELEVATIONS, TYPICAL ALL BUILDINGS
BUILDING HEIGHTS OF EXISTING BUILDING ARE APPROXIMATED.

COMPARATIVE SECTION 2



KEY PLAN

NOTE:
ROOF ELEVATION FOR EXISTING BUILDING ARE APPROXIATE. REFER TO
CIVIL DRAWING FOR EXISTING BUILDING HEIGHTS AND ROOF ELEVATION

ROSELAND
A MACK-CALI COMPANY

COMPARATIVE SECTIONS

PLANNING COMMISSION RESUBMISSION

©2019 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 OTHER FORM OR MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF LESSARD DESIGN INC.

COMMONWEALTH OF VIRGINIA
JEREMY RAOUL SIMON
No. 012242
ARCHITECT
OCT 23 2019

PLANNING COMMISSION RESUBMISSION
OCT 23, 2019
PLANNING BOARD SUBMISSION
SEPT 10, 2019
FINAL SUBMISSION
MAR 05, 2019
2ND PRELIMINARY SUB.
JAN 29, 2019
1ST PRELIMINARY SUB.
OCT 19, 2018
RSL.063B

CRYSTAL HOUSE 7 & 8
ARLINGTON, VA

lessard DESIGN
8521 LEESBURG PIKE SUIT 700
VIENNA, VA 22182
P: 571.830.1800
F:571.830.1801
LESSARDDESIGN.COM

A.513

0' 15' 30' 60'
SCALE: 1" = 30' (@ 22"x34")

LANDSCAPE ARCHITECTURE

DRAWING LIST:

L0.00 - OVERALL SITE ILLUSTRATIVE
L1.00 - OVERALL SITE EXHIBIT
L1.01 - SITE LANDSCAPE PLAN
L1.01A - SITE LANDSCAPE PLAN
L1.01B - SITE LANDSCAPE PLAN
L1.01C - SITE LANDSCAPE PLAN
L1.02 - COURTYARD LANDSCAPE PLAN
L1.03 - PARK LANDSCAPE PLAN

L2.00 ROOF TERRACE LANDSCAPE PLAN

L3.01 - HARDSCAPE DETAILS
L3.02 - HARDSCAPE DETAILS
L3.03 - PLANTING DETAILS
L3.04 - PLANTING SPECS
L3.05 - PLANTING SPECS

L4.00 - PARK DESIGN
L4.01 - PARK DESIGN
L4.02 - PARK DESIGN
L4.03 - PARK DESIGN

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

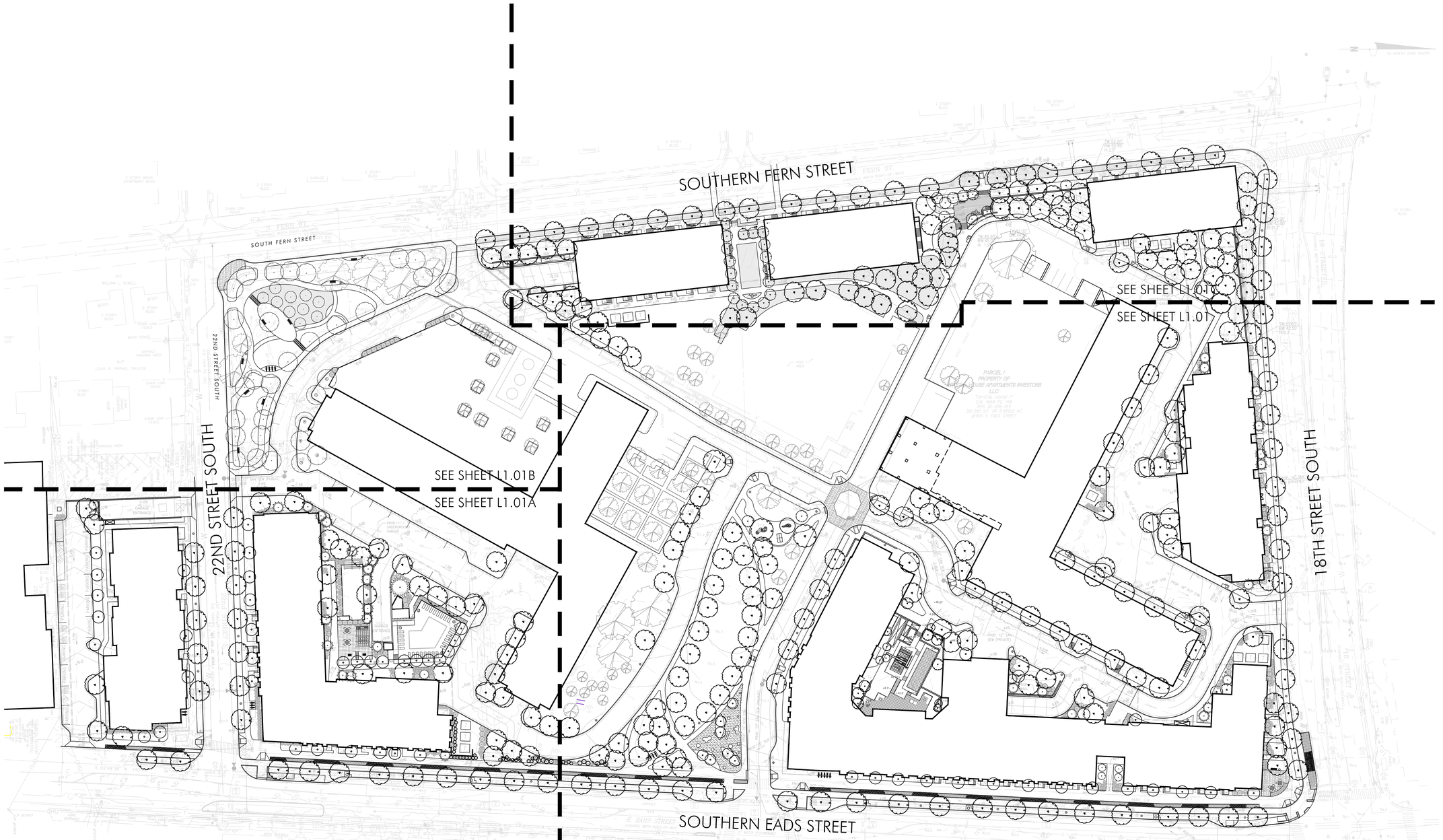
ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 50'-0"

OVERALL SITE ILLUSTRATIVE

L0.00



CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST-4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 50'-0"

OVERALL LANDSCAPE PLAN

L1.00

LEGEND

- CANOPY TREE
- ORNAMENTAL TREE
- *EXISTING TREE TO REMAIN
- TURF/LAWN
- SHRUBS/PERENNIALS/ GROUNDCOVER

*NOTE: EXISTING TREES TO REMAIN SHOWN IN THE PARK ON THE LANDSCAPE PLANS ARE NOT SHOWN AS PRESERVED IN THE TREE PRESERVATION PLAN AND NOT FACTORED INTO THE CANOPY COVERAGE CALCULATIONS. THESE TREES ARE INTENDED TO BE PRESERVED, ALTHOUGH BECAUSE 25 TO 30% OF THE CRITICAL ROOT ZONES COULD BE IMPACTED, THEY CANNOT BE SHOWN AS ABSOLUTELY BEING PRESERVED. SOME OF THE ROOT STRUCTURES ARE UNDER EXISTING PAVING AND MINOR GRADING WILL BE NEEDED. FURTHER ANALYSIS WILL BE NEEDED TO DETERMINE THE FEASIBILITY OF PRESERVING THESE TREES DURING DESIGN DEVELOPMENT.

SEE SHEET L1.01C

PARCEL I
PROPERTY OF
CRYSTAL HOUSE APARTMENTS INVESTORS LLC
"CRYSTAL HOUSE I"
D.B. 4668 PG. 168
RPC. 36-018-014
391,585 S.F. OR 8.98955 AC.
#1900 S. EADS STREET

BUILDING
(EXISTING TO REMAIN)

PARK
(APPROX. 31,456 SF)

01 | PA
*EXISTING TREE TO REMAIN TYP.
05 | QS
01 | BN
CROSSWALK SPECIAL PAVING
01 | BN
01 | CP
07 | LS
02 | TC
05 | GT
02 | QS
03 | PA
CONCRETE PAVING TYP.
TURF, TYP.
STREET LIGHT, TYP.
PROPOSED SANITARY SEWER LINE
01 | QS
21 | QS
04 | PA
03 | PA
01 | MV
500 CF OF SOIL PROVIDED
EAST-END SEATING AREA
500 CF OF SOIL PROVIDED
06 | LN
600 CF OF SOIL PROVIDED
03 | QS
05 | QS
PLANT BED TYP.
2000 CF OF SOIL PROVIDED
(3) BIKE RACK, 6 SPACES
CROSSWALK, TYP.
14 | QS
LIMIT OF DISTURBANCE LINE
LIMITS OF PROPOSED UNDERGROUND GARAGE
CROSSWALK TYP.
08 | NS
3900 CF OF SOIL PROVIDED
01 | BN
CONCRETE PAVING TYP.
01 | LN
02 | BN
03 | QS
01 | HV
01 | LN
03 | HV
2400 CF OF SOIL PROVIDED
03 | TC
01 | TC
2325 CF OF SOIL PROVIDED
500 CF OF SOIL PROVIDED
02 | LN
STREET LIGHT, TYP
3800 CF OF SOIL PROVIDED
01 | HV
03 | LS
CROSSWALK TYP.
01 | HV
02 | LS
1900 CF OF SOIL PROVIDED
01 | HV
02 | HV
04 | LS
1000 CF OF SOIL PROVIDED
750 CF OF SOIL PROVIDED
500 CF OF SOIL PROVIDED
600 CF OF SOIL PROVIDED
BENCH
SPECIAL PAVING @ PLAZA
01 | AC
(5) BIKE RACK, 9 SPACES
02 | LN
1500 CF OF SOIL PROVIDED
01 | AC
450 CF OF SOIL PROVIDED
01 | CF
01 | AC
01 | CF
01 | AC
01 | CF
01 | AC
01 | CF
04 | BN
01 | AC
01 | AC
01 | CF
500 CF OF SOIL PROVIDED
01 | CF
450 CF OF SOIL PROVIDED
01 | CF
01 | AC
PLANT BED TYP.
2600 CF OF SOIL PROVIDED
CONCRETE PAVING TYP.
TREE LAWN TYP.
BIKE LANE
100 CF OF SOIL PROVIDED
STREET LIGHT, TYP.
PROPOSED STORM WATER LINE
1245 CF OF SOIL PROVIDED
CAFE SEATING
PROPOSED WATER LINE
BUS STOP
03 | NS
960 CF OF SOIL PROVIDED
700 CF OF SOIL PROVIDED
RETAINING WALL
542 CF OF SOIL PROVIDED
05 | LS
06 | LS
700 CF OF SOIL PROVIDED
250 CF OF SOIL PROVIDED
250 CF OF SOIL PROVIDED
950 CF OF SOIL PROVIDED
13 | GT
04 | LS
01 | LS
413 CF OF SOIL PROVIDED
01 | LS
388 CF OF SOIL PROVIDED
02 | PA
2250 CF OF SOIL PROVIDED
01 | NS
06 | NS

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 25'-0"

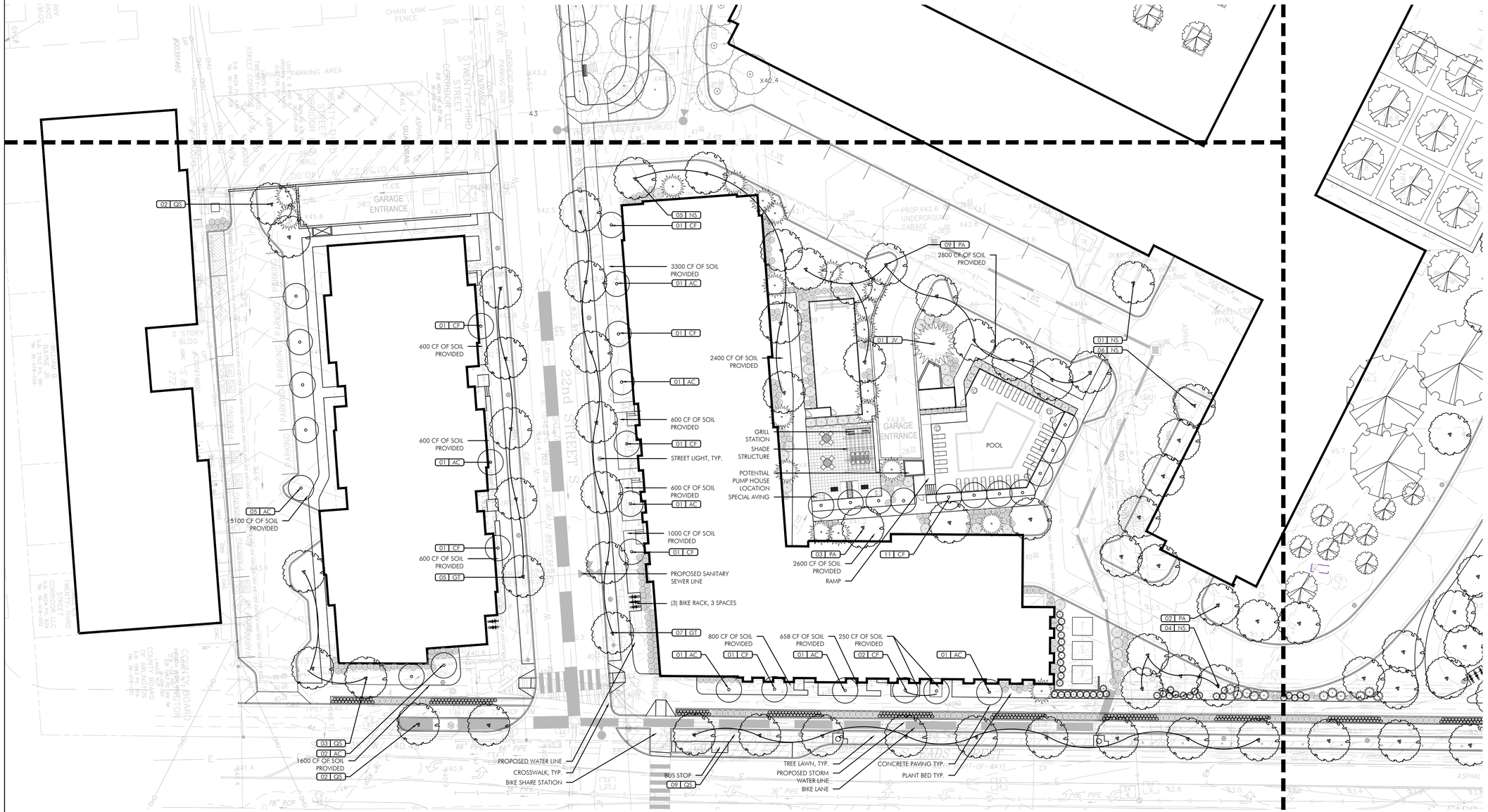
SITE
LANDSCAPE
PLAN

L1.01

LEGEND

- CANOPY TREE
- ORNAMENTAL TREE
- *EXISTING TREE TO REMAIN
- TURF/LAWN
- SHRUBS/PERENNIALS/ GROUNDCOVER

*NOTE: EXISTING TREES TO REMAIN SHOWN IN THE PARK ON THE LANDSCAPE PLANS ARE NOT SHOWN AS PRESERVED IN THE TREE PRESERVATION PLAN AND NOT FACTORED INTO THE CANOPY COVERAGE CALCULATIONS. THESE TREES ARE INTENDED TO BE PRESERVED, ALTHOUGH BECAUSE 25 TO 30% OF THE CRITICAL ROOT ZONES COULD BE IMPACTED, THEY CANNOT BE SHOWN AS ABSOLUTELY BEING PRESERVED. SOME OF THE ROOT STRUCTURES ARE UNDER EXISTING PAVING AND MINOR GRADING WILL BE NEEDED. FURTHER ANALYSIS WILL BE NEEDED TO DETERMINE THE FEASIBILITY OF PRESERVING THESE TREES DURING DESIGN DEVELOPMENT.



CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR

NORTH

SCALE
1" = 25'-0"

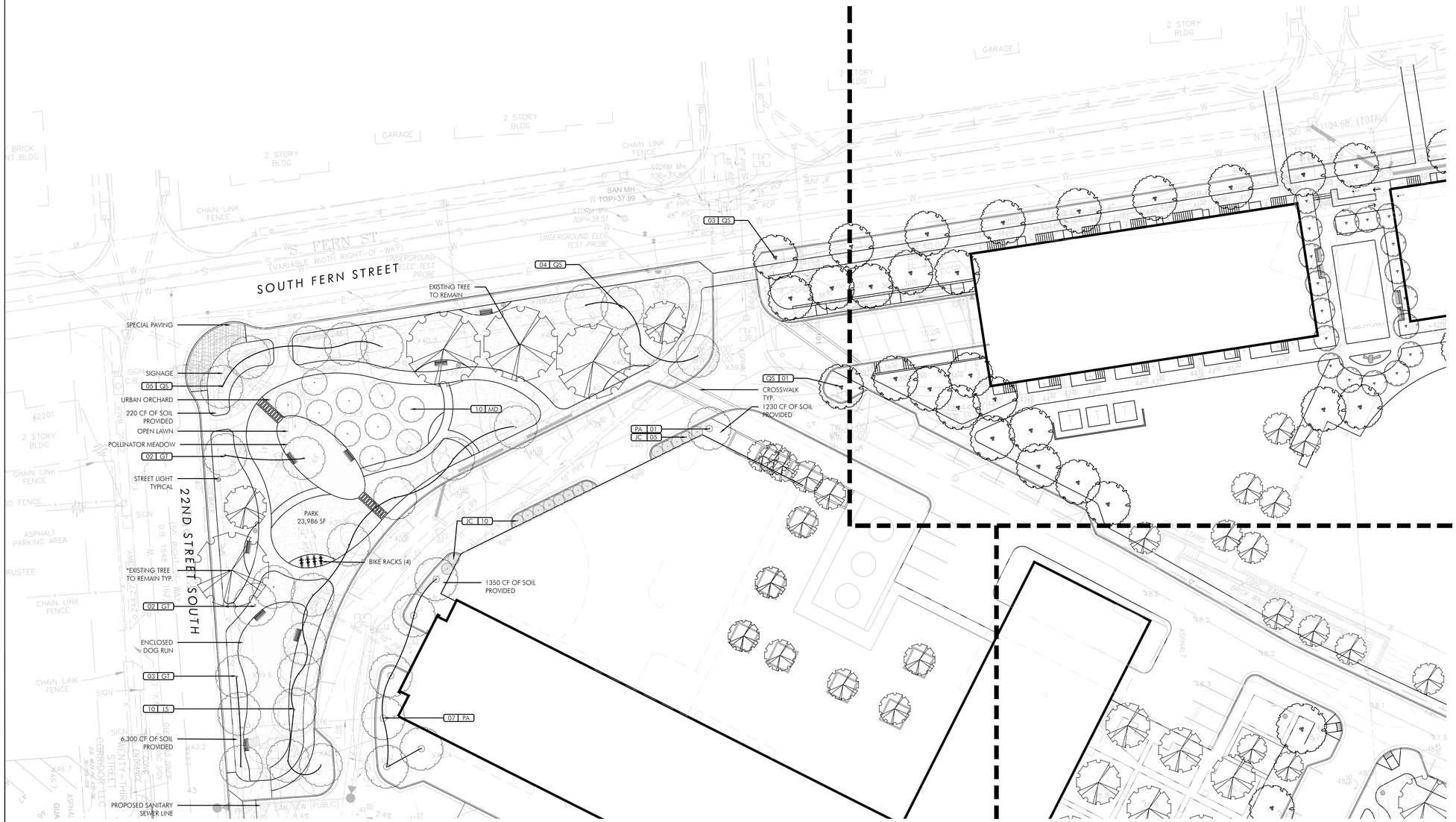
SITE LANDSCAPE PLAN

L1.01A

LEGEND

- CANOPY TREE
- ORNAMENTAL TREE
- *EXISTING TREE TO REMAIN
- TURF/LAWN
- SHRUBS/PERENNIALS/ GROUNDCOVER

*NOTE: EXISTING TREES TO REMAIN SHOWN IN THE PARK ON THE LANDSCAPE PLANS ARE NOT SHOWN AS PRESERVED IN THE TREE PRESERVATION PLAN AND NOT FACTORED INTO THE CANOPY COVERAGE CALCULATIONS. THESE TREES ARE INTENDED TO BE PRESERVED, ALTHOUGH BECAUSE 25 TO 30% OF THE CRITICAL ROOT ZONES COULD BE IMPACTED, THEY CANNOT BE SHOWN AS ABSOLUTELY BEING PRESERVED. SOME OF THE ROOT STRUCTURES ARE UNDER EXISTING PAVING AND MINOR GRADING WILL BE NEEDED. FURTHER ANALYSIS WILL BE NEEDED TO DETERMINE THE FEASIBILITY OF PRESERVING THESE TREES DURING DESIGN DEVELOPMENT.



CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 25'-0"

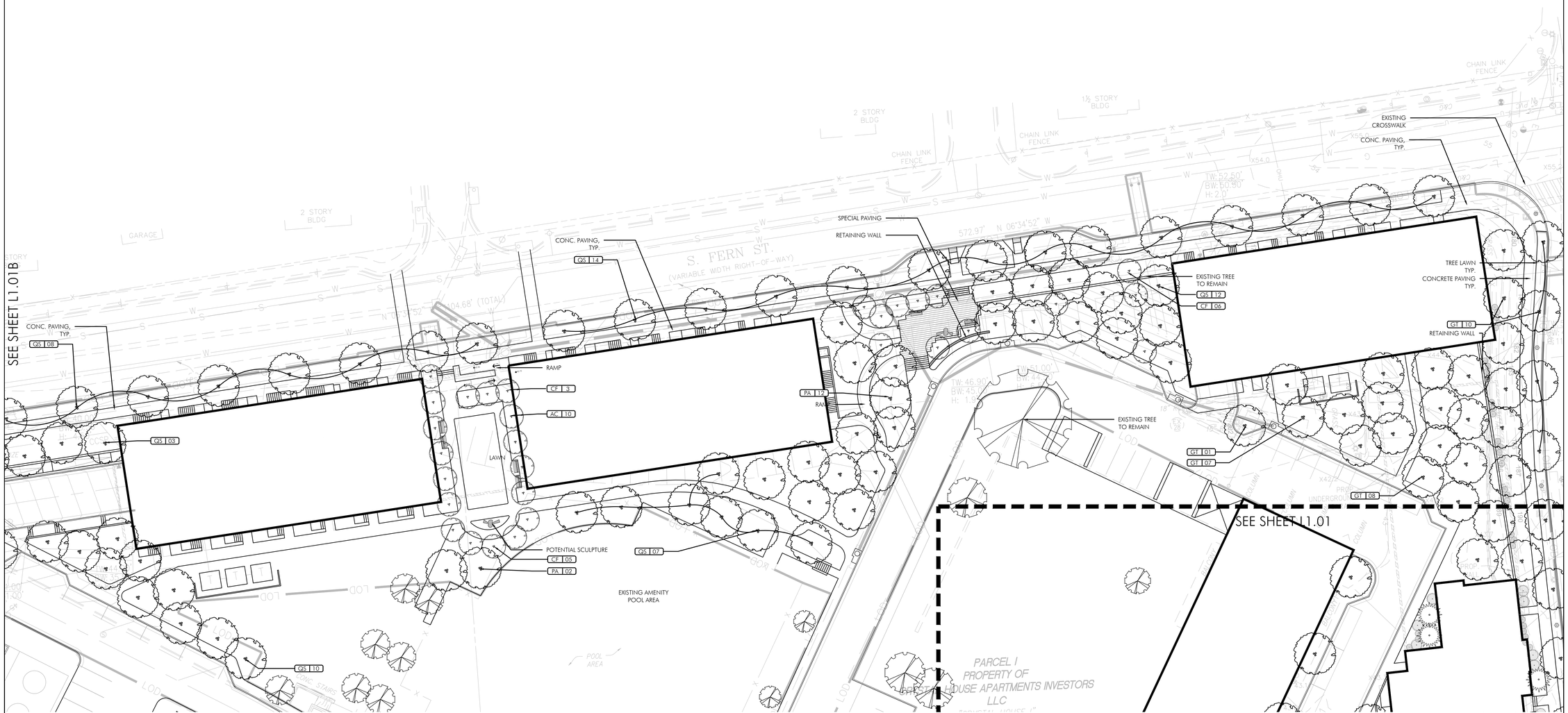
SITE LANDSCAPE PLAN

L1.01B

LEGEND

- CANOPY TREE
- ORNAMENTAL TREE
- *EXISTING TREE TO REMAIN
- TURF/LAWN
- SHRUBS/PERENNIALS/ GROUNDCOVER

*NOTE: EXISTING TREES TO REMAIN SHOWN IN THE PARK ON THE LANDSCAPE PLANS ARE NOT SHOWN AS PRESERVED IN THE TREE PRESERVATION PLAN AND NOT FACTORED INTO THE CANOPY COVERAGE CALCULATIONS. THESE TREES ARE INTENDED TO BE PRESERVED, ALTHOUGH BECAUSE 25 TO 30% OF THE CRITICAL ROOT ZONES COULD BE IMPACTED, THEY CANNOT BE SHOWN AS ABSOLUTELY BEING PRESERVED. SOME OF THE ROOT STRUCTURES ARE UNDER EXISTING PAVING AND MINOR GRADING WILL BE NEEDED. FURTHER ANALYSIS WILL BE NEEDED TO DETERMINE THE FEASIBILITY OF PRESERVING THESE TREES DURING DESIGN DEVELOPMENT.



CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

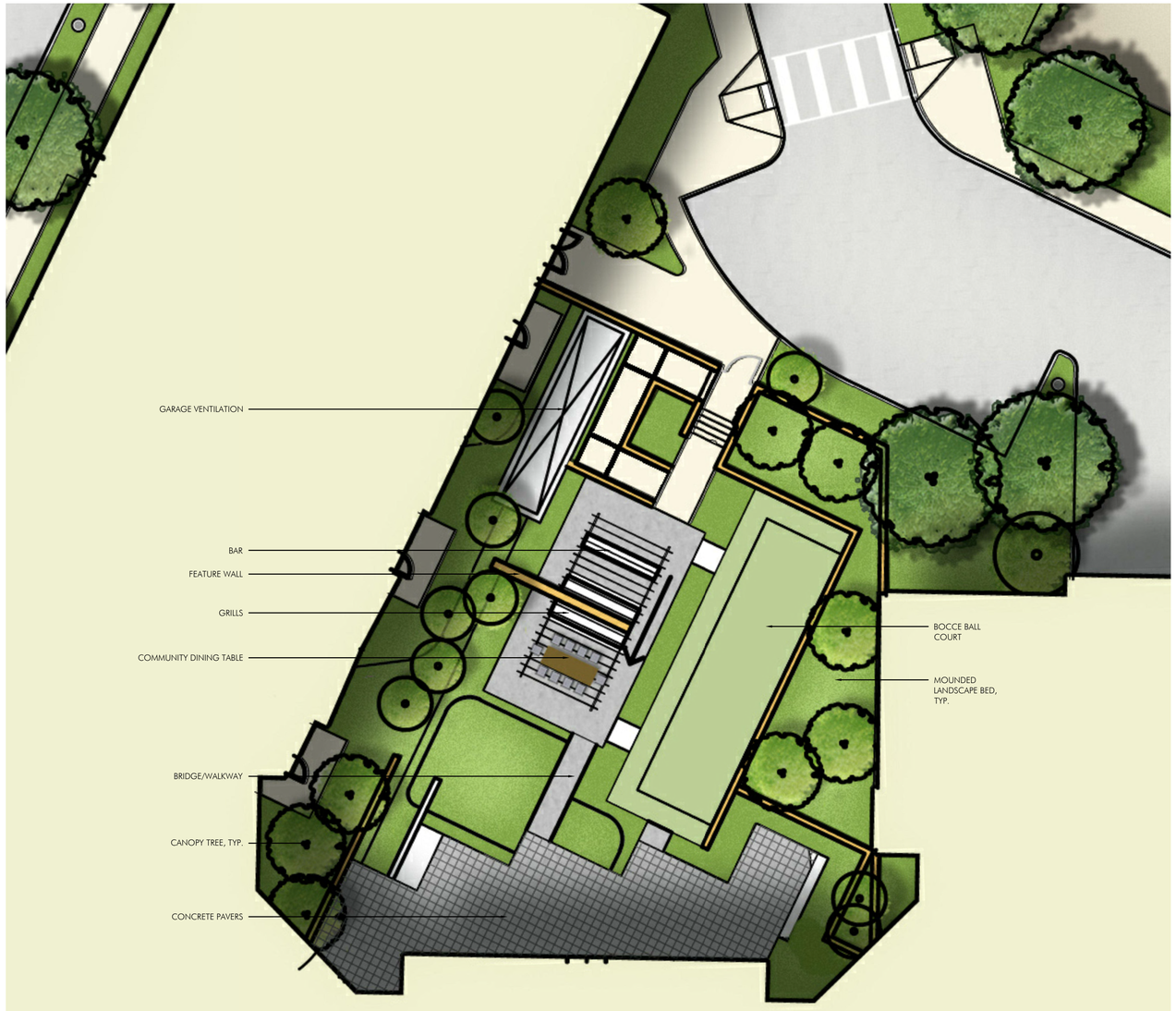
ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 25'-0"

SITE LANDSCAPE PLAN

L1.01C



BUIL

PRECEDENT IMAGES ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY.

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

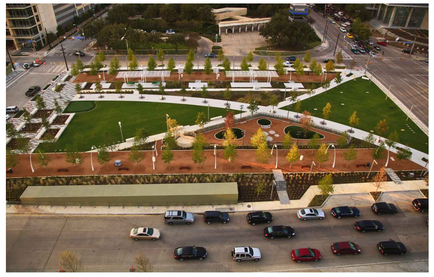
DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 10'-0"

COURTYARD LANDSCAPE PLAN

L1.02

SOUTH EADS STREET



CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

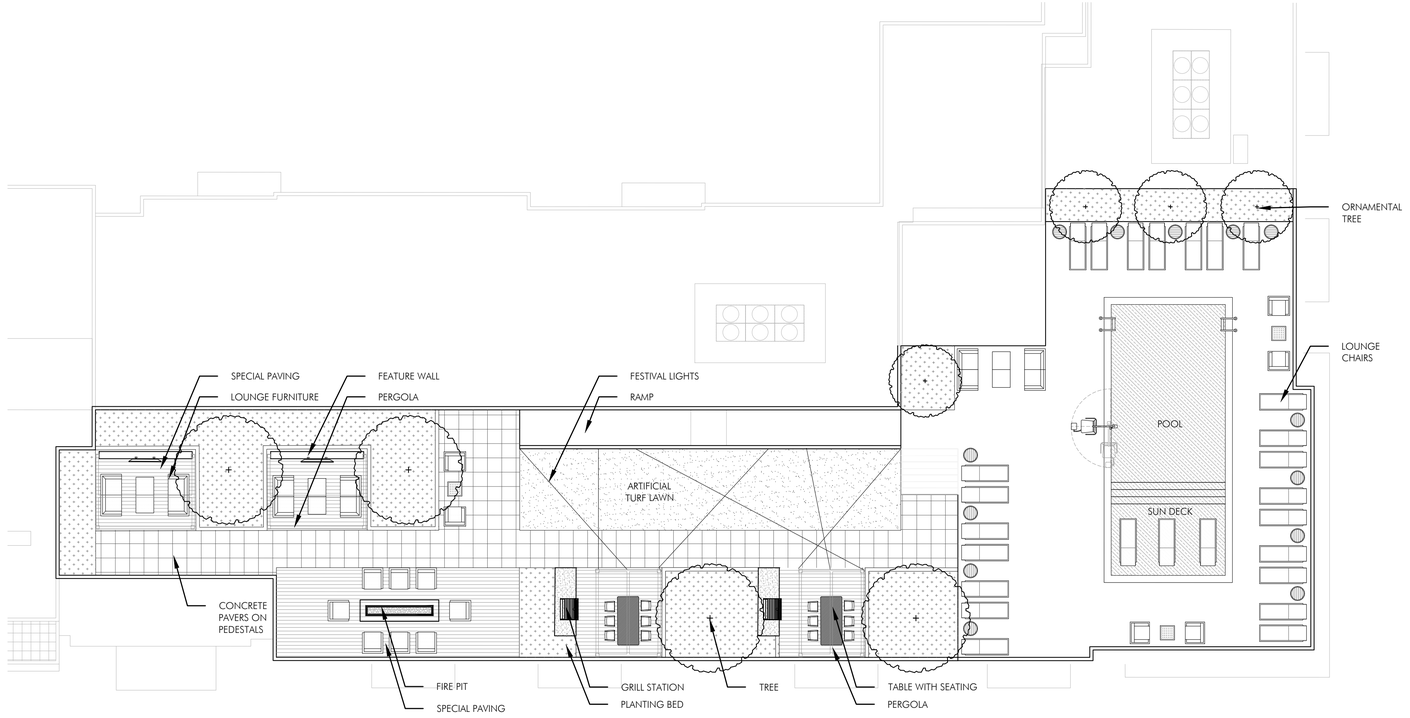
ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
1" = 20'-0"

PARK LANDSCAPE PLAN

L1.03



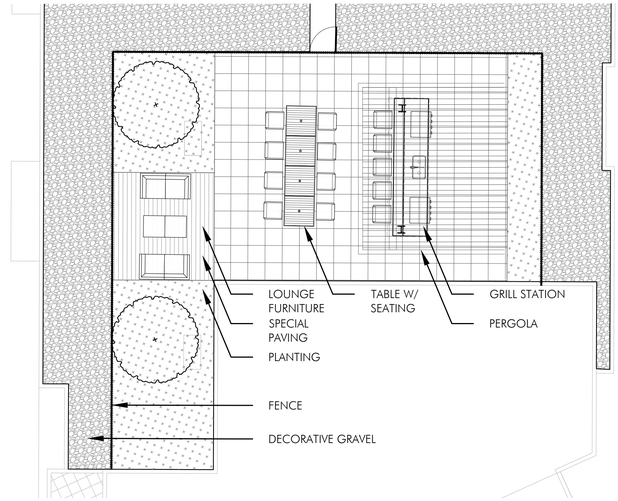
01 CRYSTAL HOUSES 3 ROOF TERRACE

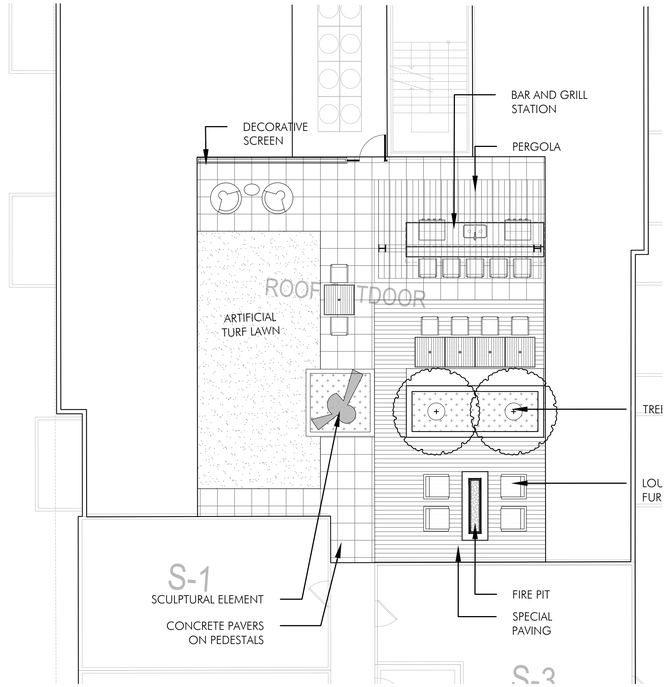
SCALE: 1" = 10'-0"

LEGEND

- CANOPY TREE
- ORNAMENTAL TREE
- *EXISTING TREE TO REMAIN
- TURF/LAWN
- SHRUBS/PERENNIALS/ GROUNDCOVER

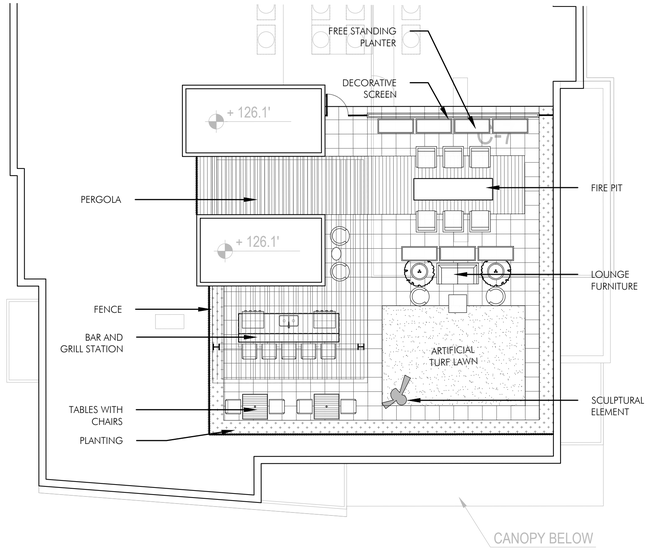
*NOTE: THE DESIGN LAYOUT OF THE AMENITY TERRACE IS CONCEPTUAL AND SUBJECT TO CHANGE PER THE COORDINATION WITH INTERIOR DESIGN, AND STORM WATER MANAGEMENT REQUIREMENTS.





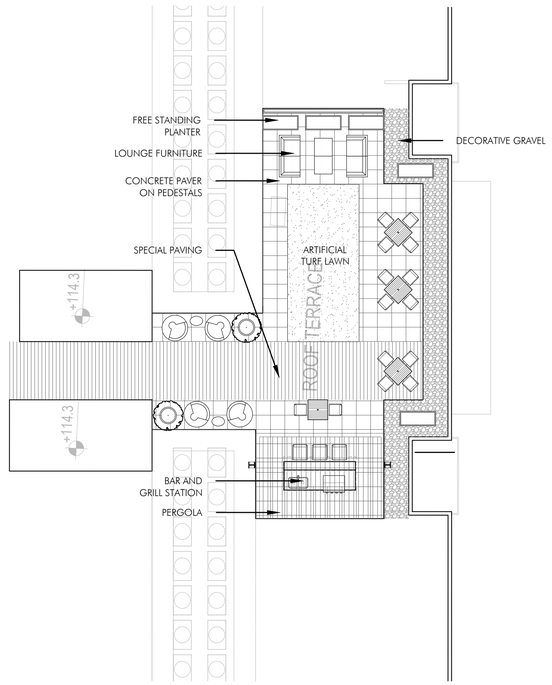
02 CRYSTAL HOUSE 4 ROOF TERRACE

SCALE: 1" = 10'-0"



03 CRYSTAL HOUSE 5 ROOF TERRACE

SCALE: 1" = 10'-0"



04 CRYSTAL HOUSE 6 ROOF TERRACE

SCALE: 1" = 10'-0"

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

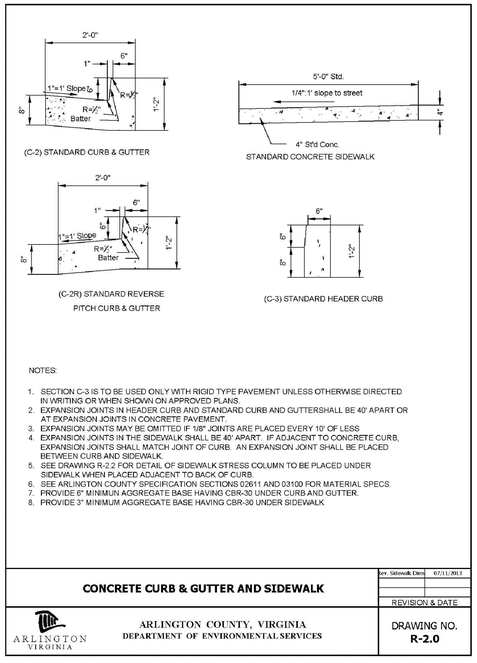
DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR

NORTH

SCALE
AS SHOWN

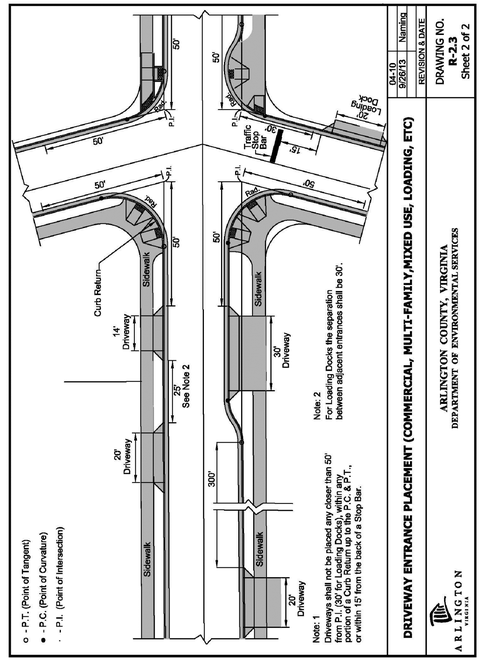
ROOF TERRACE LANDSCAPE PLAN

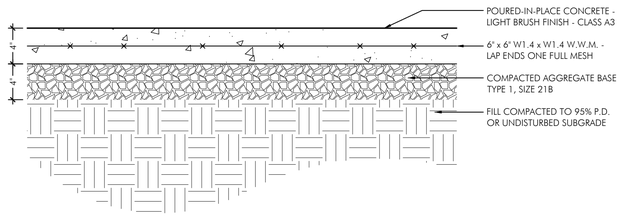
L2.00



01 ARLINGTON COUNTY STANDARD

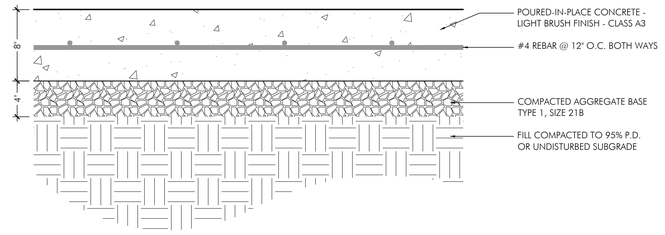
SCALE : NTS


50'
50'
50'



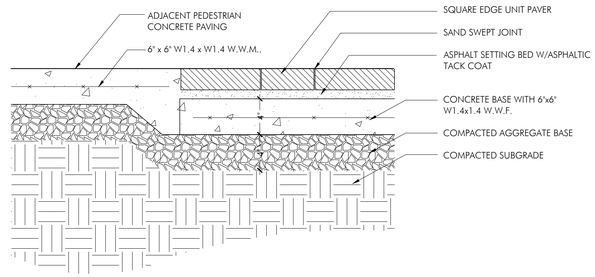
01 CONCRETE PAVING - PEDESTRIAN

SCALE : 1 1/2"=1'-0"



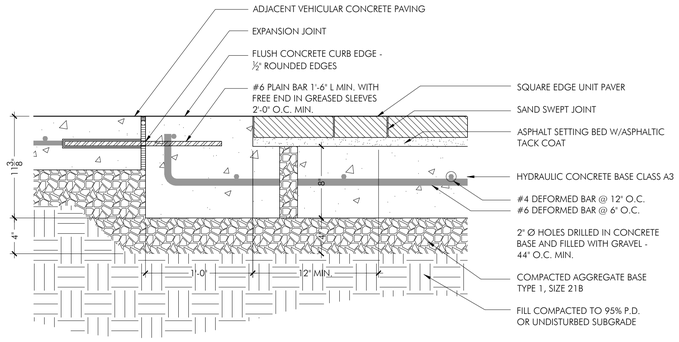
02 CONCRETE PAVING - VEHICULAR

SCALE : 1 1/2"=1'-0"



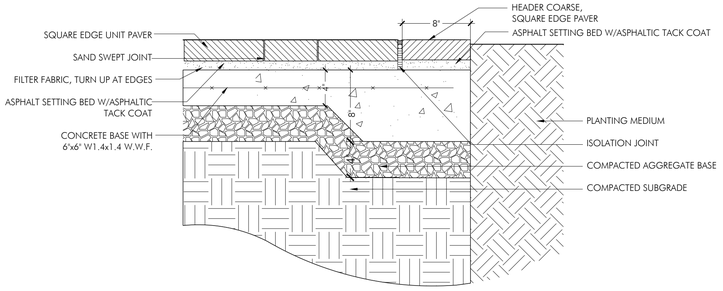
03 UNIT PAVERS - PEDESTRIAN

SCALE : 1 1/2"=1'-0"



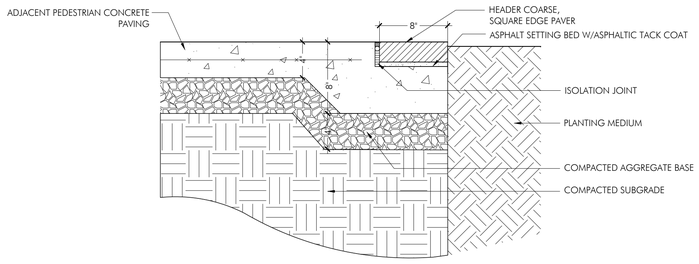
04 UNIT PAVERS - VEHICULAR

SCALE : 1 1/2"=1'-0"



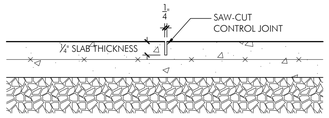
05 UNIT PAVERS AT PLANT BED

SCALE : 1 1/2"=1'-0"



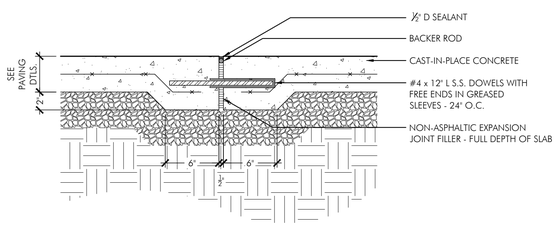
06 CONC. SIDEWALK AT PLANT BED

SCALE : 1 1/2"=1'-0"



07 CONCRETE PAVING JOINTS

SCALE : 1 1/2"=1'-0"



08 ADJOINING CONCRETE

SCALE : 1 1/2"=1'-0"

Model # PLAINWELL

Manufacturer: LANDSCAPE FORMS
Color: Black Powdercoat

09 TRASH RECEPTACLE

SCALE : NTS

Model # R53BANNATRD150SE
ARLINGTON COUNTY STANDARD
Manufacturer: HADCO

10 STREET LIGHT

SCALE : NTS

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

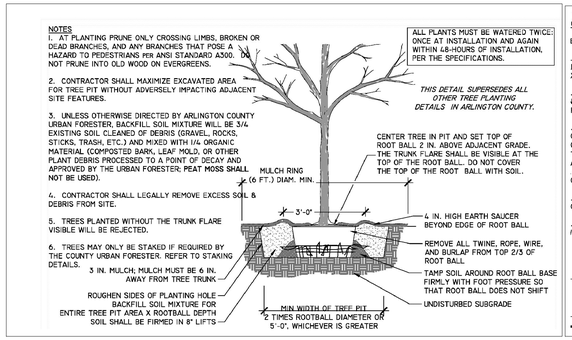
ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE
AS NOTED

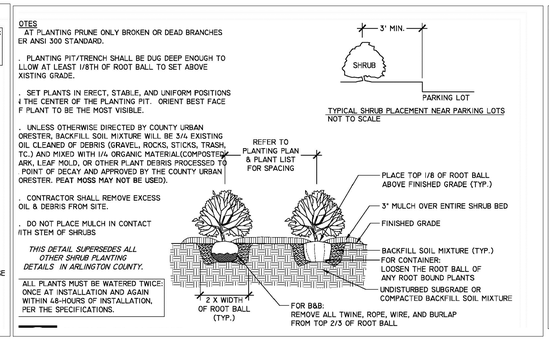
HARDSCAPE DETAILS

L3.02



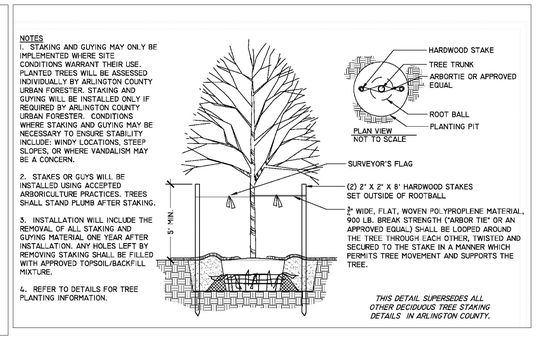
01 GENERAL STANDARDS FOR TREE PLANTING

SCALE : NTS



02 SHRUB AND GROUNDCOVER PLANTING DETAILS

SCALE : NTS



03 TREE STAKING DETAIL

SCALE : NTS

CANOPY COVERAGE SUMMARY

Site Area = 738,319 Sq. Ft.

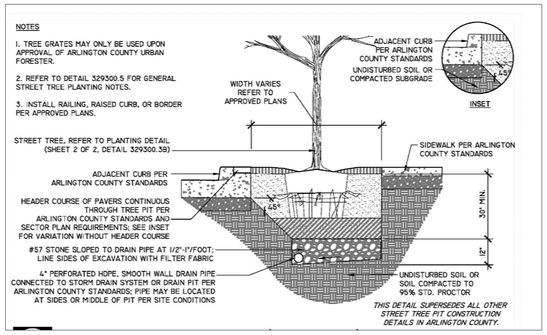
Landscape Coverage Required: (10% of Site Area) = 73,831 Sq. Ft.

Credit For Trees To Be Preserved: = 15,483 Sq. Ft.

Total Landscape Coverage Provided: (18.79%) = 138,741 Sq. Ft.

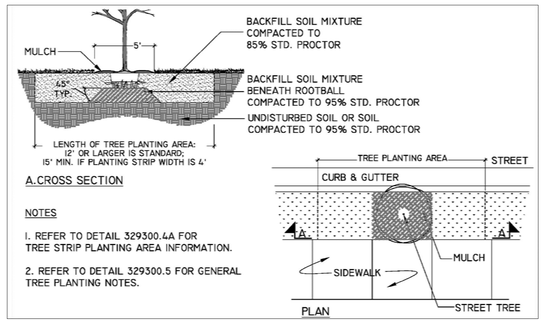
Total Tree Replacements Required: 359

Total Tree Replacements Provided: 374



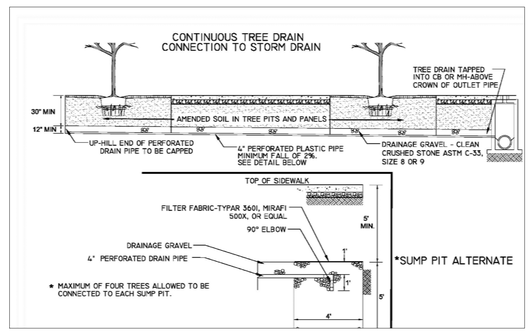
04 STREET TREE PLANTING DETAIL

SCALE : NTS



05 STREET TREE PLANTING DETAIL

SCALE : NTS



06 TREE PIT DRAINAGE DETAIL

SCALE : NTS

CRYSTAL HOUSE III - ROOF TERRACES
Potential Planting Plan

QTY. Total	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS
Ornamental Trees						
TBD	AC	*Amelanchier canadensis*	Serviceberry	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
TBD	CF	*Cornus florida*	Flowering Dogwood	7-10' ht.	B&B	single stem; symmetrical, full branching
TBD	HV	*Hamamelis virginiana*	Common Witchhazel	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
TBD	LN	*Lagerstroemia indica 'Natchez'*	Natchez Crape Myrtle	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
TBD	MV	*Magnolia virginiana*	Sweetbay Magnolia	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
Deciduous Shrubs						
TBD	IG	*Ilex glabra 'Nigra'*	Compact Inkberry	30-36" ht.	Cont.	full branching to ground
TBD	RD	*Rhododendron 'Delaware Valley White'*	White Azalea	24-30" ht.	Cont.	full branching;
TBD	PL	*Prunus laurocerasus 'Otto Luykens'*	Otto Luykens Cherry Laurel	24-30" ht.	B&B	full branching;
TBD	VR	*Viburnum x rhytidophylloides 'Alleghany'*	Allegheny Viburnum	36-42" ht.	B&B	full branching;
Evergreen Shrubs						
TBD	CS	*Cornus sericea*	Red Twig Dogwood	30-36" ht.	Cont.	full branching;
TBD	IV	*Ilex verticillata 'Cacapon' & 'Jackson'*	Winterberry (female and male)	4-5 ht.	Cont.	full branching; plant 1 male per 4 females
TBD	JS	*Juniperus scopulorum 'Gray Gleam'*	Gray Gleam Juniper	5-6 ft. ht.	B&B	full branching; matched symmetrical specimens
TBD	MP	*Morella pensylvanica*	Northern Bayberry	30-36" ht.	Cont.	full branching
TBD	VDE	*Viburnum dentatum*	Arrowwood Viburnum	36-42" ht.	Cont.	full branching;
Ornamental Grasses						
TBD	CAK	*Calamagrostis acutiflora 'Karl Foerster'*	Feather Reed Grass	2 gal.	Cont.	24" o.c.
TBD	CLA	*Chasmanthium latifolium*	Northern Sea Oats	1 gal.	Cont.	24" o.c.
TBD	DCG	*Deschampsia cespitosa 'Goldschleier'*	Tufted Hair Grass	1 gal.	Cont.	18" o.c.
TBD	NTE	*Nassella tenuissima*	Mexican Feather Grass	2 gal.	Cont.	18" o.c.
TBD	PNW	*Panicum virgatum 'Northwind'*	Northwind Switchgrass	2 gal.	Cont.	24" o.c.
Ground Covers						
TBD	ANN	*Annuals*	Seasonal Annuals	2 1/4"	Cont.	8" o.c.
TBD	HCA	*Hypericum calycinum*	St. John's Wort	2 1/4"	PP	12" o.c.
TBD	PST	*Phlox stolonifera 'Blue Ridge'*	Blue Creeping Phlox	1 qt.	Cont.	18" o.c.
TBD	TCO	*Tiarella cordifolia 'Oakleaf'*	Oakleaf Foamflower	1 qt.	Cont.	18" o.c.
Lawn						
TBD		*Sodded Lawn (per sq. yd.)*				

POTENTIAL ROOF PLANTING SCHEDULE

SCALE : NTS

CRYSTAL HOUSE III - PARCEL I
Preliminary Planting Plan

QTY. Total	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS	NATIVE	CANOPY SIZE	TREE CANOPY COVETAGE AFTER 20 YEARS: 20 year coverage (sf)	Native to Region	Coverage bonus (sf)	Total canopy coverage
Canopy Trees												
33	LS	*Liquidambar styraciflua 'Hapdell'*	Sweetgum Happidaze	3-3 1/2" cal.	B&B	single leader; full branching	Native	Medium	250	X	312.5	10,312.50
19	PA	*Platanus x acerifolia 'Exclamation'*	London Planetree	2 1/2" cal.	B&B	single leader; full branching		Medium-Large	250			4,750.00
54	QS	*Quercus stellata*	Post Oak	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	16,875.00
6	TC	*Tilia cordata 'Greenspire'*	Greenspire Littleleaf Linden	2 1/2" cal.	B&B	single leader; full branching		Medium	175			1,050.00
44	GT	*Gleditsia triacanthos 'Moraine'*	Moraine Honey Locust	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	13,750.00
18	NS	*Nyssa sylvatica*	Black Tupelo	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	5,625.00
Ornamental Trees												
17	AC	*Amelanchier canadensis*	Serviceberry	7-10' ht.	B&B	multistem - 3 stems minimum; full branching	Native	Medium	175	X	218.75	3,718.75
8	BN	*Betula nigra*	River Birch	7-10' ht.	B&B	multistem - 3 stems minimum; full branching	Native	Medium	175	X	218.75	1,750.00
20	CF	*Cornus florida 'Daybreak'*	Flowering Dogwood	7-10' ht.	B&B	single stem; symmetrical, full branching	Native	Medium	175	X	218.75	4,375.00
9	HV	*Hamamelis virginiana*	Common Witchhazel	7-10' ht.	B&B	multistem - 3 stems minimum; full branching	Native	Small-Medium	110	X	137.5	1,237.50
6	LN	*Lagerstroemia indica 'Natchez'*	Natchez Crape Myrtle	7-10' ht.	B&B	multistem - 3 stems minimum; full branching		Small-Medium	110			660.00
									TOTAL (sf)			64,104

PARCEL I - TREE CANOPY CALCULATION

SCALE : NTS

CRYSTAL HOUSE III - PARCEL II NORTH
Preliminary Planting Plan

QTY. Total	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS	NATIVE	CANOPY SIZE	TREE CANOPY COVETAGE AFTER 20 YEARS: 20 year coverage (sf)	Native to Region	Coverage bonus (sf)	Total canopy coverage
Canopy Trees												
10	LS	*Liquidambar styraciflua 'Hapdell'*	Sweetgum Happidaze	3-3 1/2" cal.	B&B	single leader; full branching	Native	Medium	250	X	312.5	3,125.00
30	PA	*Platanus x acerifolia 'Exclamation'*	London Planetree	2 1/2" cal.	B&B	single leader; full branching		Medium-Large	250			7,500.00
76	QS	*Quercus stellata*	Post Oak	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	23,750.00
14	GT	*Gleditsia triacanthos 'Moraine'*	Moraine Honey Locust	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	4,375.00
16	NS	*Nyssa sylvatica*	Black Tupelo	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	5,000.00
Evergreen Trees												
15	JC	*Juniperus chinensis 'Hetzii Columnaris'*	Green Colimnar Juniper	6 - 8' ht.	B&B	specimen; heavy; symmetrical	Native	Small-Medium	110	X	137.5	2062.5
Ornamental Trees												
6	AC	*Amelanchier canadensis*	Serviceberry	7-10 ht.	B&B	multistem - 3 stems minimum; full branching	Native	Medium	175	X	218.75	1,312.50
1	BN	*Betula nigra*	River Birch	7-10' ht.	B&B	multistem - 3 stems minimum; full branching	Native	Medium	175	X	218.75	218.75
18	CF	*Cornus florida 'Daybreak'*	Flowering Dogwood	7-10' ht.	B&B	single stem; symmetrical, full branching	Native	Medium	175	X	218.75	3,937.50
6	LN	*Lagerstroemia indica 'Natchez'*	Natchez Crape Myrtle	7-10' ht.	B&B	multistem - 3 stems minimum; full branching		Small-Medium	110			660.00
1	MV	*Magnolia virginiana*	Sweetbay Magnolia	7-10' ht.	B&B	multistem - 3 stems minimum; full branching		Medium	175			175.00
10	MD	*Malus domestica 'Cripps Pink'*	Pink Lady Apple Tree	6 - 8' ht.	B&B	single stem; symmetrical, full branching		Small-Medium	110			1,100.00
									TOTAL (sf)			53,216

PARCEL II NORTH - TREE CANOPY CALCULATION

SCALE : NTS

CRYSTAL HOUSE III - PARCEL II SOUTH
Preliminary Planting Plan

QTY. Total	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS	NATIVE	CANOPY SIZE	TREE CANOPY COVETAGE AFTER 20 YEARS: 20 year coverage (sf)	Native to Region	Coverage bonus (sf)	Total canopy coverage
Canopy Trees												
7	QS	*Quercus stellata*	Post Oak	2 1/2" cal.	B&B	single leader; full branching	Native	Medium-Large	250	X	312.5	2,187.50
5	GT	*Gleditsia triacanthos 'Moraine'*	Moraine Honey Locust	2 1/2" cal.	B&B	single leader; full branching			250	X	312.5	1,562.50
Ornamental Trees												
8	AC	*Amelanchier canadensis*	Serviceberry	7-10' ht.	B&B	multistem - 3 stems minimum; full branching	Native	Medium	175	X	218.75	1,750.00
2	CF	*Cornus florida 'Daybreak'*	Flowering Dogwood	7-10' ht.	B&B	single stem; symmetrical, full branching	Native	Medium	175	X	218.75	437.50
									TOTAL (sf)			5,938

PARCEL II SOUTH - TREE CANOPY CALCULATION

SCALE : NTS

CRYSTAL HOUSE III - MASTER PLANT SCHEDULE
Preliminary Planting Plan

QTY. Total	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS
Canopy Trees						
43	LS	*Liquidambar styraciflua 'Hapdell'*	Sweetgum Happidaze	3-3 1/2" cal.	B&B	single leader; full branching
49	PA	*Platanus x acerifolia 'Exclamation'*	London Planetree	2 1/2" cal.	B&B	single leader; full branching
137	QS	*Quercus stellata*	Post Oak	2 1/2" cal.	B&B	single leader; full branching
6	TC	*Tilia cordata 'Greenspire'*	Greenspire Littleleaf Linden	2 1/2" cal.	B&B	single leader; full branching
63	GT	*Gleditsia triacanthos 'Moraine'*	Moraine Honey Locust	2 1/2" cal.	B&B	single leader; full branching
34	NS	*Nyssa sylvatica*	Black Tupelo	2 1/2" cal.	B&B	single leader; full branching
332						
Evergreen Trees						
1	JV	*Juniperus virginiana 'Cupressifolia'*	Hillspire Juniper	6 - 8' ht.	B&B	specimen; heavy; symmetrical
15	JC	*Juniperus chinensis 'Hetzii Columnaris'*	Green Colimnar Juniper	6 - 8' ht.	B&B	specimen; heavy; symmetrical
Ornamental Trees						
31	AC	*Amelanchier canadensis*	Serviceberry	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
9	BN	*Betula nigra*	River Birch	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
40	CF	*Cornus florida 'Daybreak'*	Flowering Dogwood	7-10' ht.	B&B	single stem; symmetrical, full branching
9	HV	*Hamamelis virginiana*	Common Witchhazel	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
12	LN	*Lagerstroemia indica 'Natchez'*	Natchez Crape Myrtle	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
1	MV	*Magnolia virginiana*	Sweetbay Magnolia	7-10' ht.	B&B	multistem - 3 stems minimum; full branching
10	MD	*Malus domestica 'Cripps Pink'*	Pink Lady Apple Tree	6 - 8' ht.	B&B	single stem; symmetrical, full branching
128						
Deciduous Shrubs						
TBD	IG	*Ilex glabra 'Nigra'*	Compact Inkberry	30-36" ht.	Cont.	full branching to ground
TBD	RD	*Rhododendron 'Delaware Valley White'*	White Azalea	24-30" ht.	Cont.	full branching;
TBD	PL	*Prunus laurocerasus 'Otto Luykens'*	Otto Luykens Cherry Laurel	24-30" ht.	B&B	full branching;
TBD	VR	*Viburnum x rhytidophylloides 'Alleghany'*	Allegheny Viburnum	36-42" ht.	B&B	full branching;
Evergreen Shrubs						
TBD	CS	*Cornus sericea*	Red Twig Dogwood	30-36" ht.	Cont.	full branching;
TBD	HQ	*Hydrangea quercifolia 'Alice'*	Oakleaf Hydrangea	4-5' ht.	Cont.	full branching;
TBD	IV	*Ilex verticillata 'Cacapon' & 'Jackson'*	Winterberry (female and male)	4-5' ht.	Cont.	full branching; plant 1 male per 4 females
TBD	IT	*Itea virginica 'Henry's Garnet'*	Virginia Sweetspire	24-30" ht.	Cont.	full branching;
TBD	JS	*Juniperus scopulorum 'Gray Gleam'*	Gray Gleam Juniper	5-6 ft. ht.	B&B	full branching; matched symmetrical specimens
TBD	MP	*Morella pensylvanica*	Northern Bayberry	30-36" ht.	Cont.	full branching
TBD	VDE	*Viburnum dentatum*	Arrowwood Viburnum	36-42" ht.	Cont.	full branching;
Ornamental Grasses						
TBD	CAK	*Calamagrostis acutiflora 'Karl Foerster'*	Feather Reed Grass	2 gal.	Cont.	24" o.c.
TBD	CLA	*Chasmanthium latifolium*	Northern Sea Oats	1 gal.	Cont.	24" o.c.
TBD	DCG	*Deschampsia cespitosa 'Goldschleier'*	Tufted Hair Grass	1 gal.	Cont.	18" o.c.
TBD	HMG	*Hakonechloa macra 'All Gold'*	All Gold Hakone Grass	1 gal.	Cont.	18" o.c.
TBD	NTE	*Nassella tenuissima*	Mexican Feather Grass	2 gal.	Cont.	18" o.c.
TBD	PNW	*Panicum virgatum 'Northwind'*	Northwind Switchgrass	2 gal.	Cont.	24" o.c.
Ground Covers						
TBD	ANN	*Annuals*	Seasonal Annuals	2 1/4"	Cont.	8" o.c.
TBD	HCA	*Hypericum calycinum*	St. John's Wort	2 1/4"	PP	12" o.c.
TBD	PST	*Phlox stolonifera 'Blue Ridge'*	Blue Creeping Phlox	1 qt.	Cont.	18" o.c.
TBD	TCO	*Tiarella cordifolia 'Oakleaf'*	Oakleaf Foamflower	1 qt.	Cont.	18" o.c.
Lawn						
TBD		*Sodded Lawn (per sq. yd.)*				

MASTER PLANTING SCHEDULE

SCALE : NTS

CRYSTAL HOUSE III

ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW

DRAWN BY
AW, SL, NM

CHECKED BY
TR

NORTH

SCALE
AS NOTED

PLANTING DETAILS

L3.03

ARLINGTON COUNTY PLANTING SPECIFICATIONS

I. Scope of work
A. This work shall consist of clearing and soil preparation, finish grading, planting and drainage, including all labor, materials, tools, equipment and any other appurtenances necessary for the completion of this project.

II. Materials
A. Generally all materials shall be best of its kind available. Soil and planting shall not begin until all irrigation work around planting areas so complete and approved.
B. Plants
All plants shall be healthy, of normal growth, well-rooted, and free from disease and insects.
C. Topsoil
Organic topsoil shall be free of debris, rocks larger than 2", wood, roots, vegetable matter and clay clods.
D. Mulch
Mulch shall be double-shredded hardwood bark.

III. Fertilizer and conditioners
A. Organic fertilizer shall be processed sewer sludge with minimum content of 1% nitrogen and 2%phosphoric acid, equal to "nitrohumus."
B. Organic fertilizer and soil conditioner shall be "gro-power" or equal and organic base materials comprised of decomposed animal and vegetable matter and composted to support bacterial cultures, containing no poultry, animal or human waste. Guaranteed analysis (5-3-1); nitrogen 5%, phosphate 3%, potash 1%, 50% humus and 15% humic acids.

IV. General work procedures
A. Landscape work shall be according to the workmanlike standards established for landscape construction and plantings.

V. Weeding
A. Before and during preliminary grading and finish grading, all weeds and grasses shall be dug out by the roots and disposed of at the contractor's expense.

VI. Topsoil
A. Contractor shall provide 4" minimum thick topsoil layer in all planting areas. Topsoil shall be spread over a prepared surface as a uniform layer to produce a 4" compacted thickness. Topsoil present at the site, if any, may be used to supplement total amount required.

VII. Soil conditioning
A. Cultivate all areas shall be planted to depth of 6". All debris exposed from excavation and cultivation shall be disposed of at the contractor's expense. Conditioner shall be spread evenly in all planting areas and tilled in two directions into the top 4", with the following per 1,000 square feet.
150 pounds "gro-power" or equal
100 pounds agricultural gypsum
20 pounds nitroform (course) 3-o-o blue chip

VIII. Planting
Position trees and shrubs at their intended locations as per the plans and secure the approval of the landscape architect or his representative before excavating the pits, making necessary adjustments as directed.
A. Planting pits shall be dug with level bottoms, twice the width of the diameter of the root ball and depth matching Arlington county details r7.2 and r7.6. Each plant pit shall be backfilled with the following prepared soil, mixed thoroughly:
1 part leaf mould or compost
1 part cow manure by volume
3 parts topsoil by volume
21 grams "agriform" planting tablets or equal
2 tablets per 1 gal. Plant
3 tablets per 5 gal. Plant
4 tablets per 15 gal. Plant
For larger plants, 2 tablets per 1/2" diameter of trunk caliper
B. Prepared soil shall be tamped firmly at bottom of pit. Fill prepared soil around ball of plant halfway; insert plant tablets, complete backfill and water thoroughly.
C. All plants shall be set so that they bear the same relation to the required grade as they bore to the natural grade before being transplanted.
D. Immediately after planting, stake all trees to prevent damage from wind. Fasten trees to upper end of stake in at least two places using hose type ties.
E. Prepare raised earth basin as wide as planting hole of each tree.
F. Water immediately after planting. Water shall be applied to each tree and shrub in such manner as not to disturb backfill and to the extent that all materials in the planting hole are thoroughly saturated.
G. Prune all proposed trees directly adjacent to walkways to a minimum of 7'-0" branching height.

IX. Groundcover
A. All ground cover areas shall receive a 1/4" layer of humus raked into the top 1" of prepared soil prior to planting ground cover.
B. Spacing and variety of ground cover shall be as shown on approved drawings.
C. Immediately after planting ground cover, contractor shall thoroughly water the ground cover.
D. All ground cover areas shall be treated with a pre-emergent before final landscape inspection. Ground cover areas shall be weeded prior to applying pre-emergent. Pre-emergent shall be applied per manufacturer's recommendation.

X. Finish grading
A. All areas will be received by the contractor at substantially plus/minus 0.1 foot of finish grade.
B. All lawn and planting areas shall be graded to a smooth, even and uniform plane with no abrupt change of surface, unless otherwise directed by landscape architect or his representative. Soil areas adjacent to buildings shall slope away from building.
C. All planting areas shall be graded and maintained to allow free flow of surface water.

XI. Guarantee
A. Contractor shall guarantee all plants for a period of two years from acceptance of job.

XII. Clean up
A. Upon the completion of all planting work and before final acceptance, the contractor shall remove all material, equipment and debris resulting from his work. All paved areas shall be broom cleaned and the site left in a neat and acceptable condition as approved by the owner's authorized representative.
B. All trees, shrubs other plants and plant beds shall be maintained by pruning, cultivating and weeding as required for healthy growth. This work shall include restoring planting saucers; tightening and repairing stakes and guy supports; resetting trees and shrubs to proper grades or vertical position as required; restoring or replacing damaged wrappings; and spraying with herbicide as required to keep trees and shrubs free of insects and disease.
C. Lawns shall be maintained by watering, fertilizing, weeding, mowing, trimming and other operations such as rolling, regrading, and replanting as required to establish a smooth, acceptable lawn free of eroded or bare areas.

XIII. Maintenance (alternate bid)
Cost per month after initial 90-day maintenance period.

XIV. Planting material guarantee
A. Planting material shall be of good nursery stock and a nursery guarantee shall be provided by the general contractor through the developer for two years, including the replacement and maintenance (to include but not be limited to pruning, feeding, spraying, mulching, weeding and watering) of all landscape materials following the issuance of the master certificate of occupancy.

XV. Urban forester notification
A. The developer agrees to notify the Arlington county department of parks, recreation and cultural affairs urban forester at 703-228-6557 at least 72 hours in advance of the scheduled planting of any trees in the public right of way and to be available at the time of planting to meet with the staff of the DPRCR to inspect the plant material, tree pit, and the technique of planting. Soil used in the tree pit must meet the specifications for street tree planting "standards for planting and preservation of trees on site plan projects" available from the urban forester.

PLANTING NOTES

1. Plant material shall be furnished and installed as indicated, including all labor, materials, plants, equipment, incidentals, and clean-up.

THIS SHEET OF COUNTY REQUIRED SPECIFICATIONS AND NOTES ARE IN ADDITION TO THE SPECIFICATION SECTION 32 93 00 - TREES, SHRUBS AND GROUNDCOVER IN THIS SET. ARLINGTON COUNTY SPECIFICATIONS SHALL GOVERN ANY CONFLICTS IN SPECS. CONTRACTOR TO REPORT IMMEDIATELY TO THE PROJECT LANDSCAPE ARCHITECT ON ANY CONFLICTS OR DISCREPANCIES FOUND.

2. The contractor shall be responsible for planting at correct grades and alignment. Layout to be approved by owners' representative prior to installation.

3. Plants shall be typical of their species and variety; have normal growth habits, well-developed densely foliated branches, and vigorous root systems; and be free from defects and injuries.

4. Contractor shall report any soil or drainage conditions considered detrimental to growth of plant material.

5. All plant material shall be guaranteed by the contractor to be in vigorous growing condition. Provision shall be made for a growth guarantee of at least one year from the date of acceptance for trees and shrubs. Replacements shall be made at the beginning of the first succeeding planting season. All replacements shall have a guarantee equal to that stated above.

6. Plant material shall be planted on the day of delivery if/when practical. In the event that this is not possible, the contractor shall protect stock not planted. Plants shall not remain unplanted for longer than a three-day period after delivery. Any plants not installed during this period shall be rejected, unless owner and contractor provide otherwise by written agreement.

7. Quality and size of plants, spread of roots, and size of rootball shall be in accordance with the most recent version of ANSI Z60 "American Standard for Nursery Stock" published by the American Association of Nurserymen, inc.

8. All plants shall be planted in amended topsoil that is thoroughly watered and tamped as back-filling progresses. Planting mix to be as shown on planting details. Large planting areas to incorporate fertilizer and soil conditioners as stated in planting specifications.

9. Plants shall not be bound with wire or rope at any time so as to damage the bark or break branches. Plants shall be handled form the bottom of the ball only.

10. Planting operations shall be performed during periods within the planting season when weather and soil conditions are suitable and in accordance with accepted local practice. Plants shall not be installed in top soil that is in a muddy or frozen condition. All plant material shall be sprayed with "wilt-pruf" or equal as per manufacturers instructions.

11. No plant, except groundcovers, shall be planted less than two feet from existing structures and sidewalks.

12. Set all plants plumb and straight. Set at such level that a normal or natural relationship to the ground if the plant with the ground surface will be established. Locate the plant in the center of the pit.

13. All injured roots shall be pruned to make clean ends before planting utilizing clean, sharp tools. It is advisable to prune approximately 1/3 of the growth of large trees (2" caliper and greater) by the removal of superfluous branches, those which cross, those which run parallel, etc. Main leader of trees shall not be cut back. Long sides branches shall be shortened.

14. Each tree and shrub shall be pruned in accordance with standard horticultural practice to preserve the natural character of plant. Pruning shall be done with clean, sharp tools.

15. Trees shall be supported immediately after planting. All trees 6" and greater in caliper shall by guyed. Smaller trees shall be staked. Guying wires and stakes shall be installed as indicated. The landscape contractor shall remove staking, guying and tree wrap at the end of one year maintenance and guarantee period.

16. All planting beds shall be mulched with 3" layer of double shredded hardwood bark mulch.

17. New planting areas and sod shall be adequately irrigated or watered to establish the proposed plants and lawn.

18. All plants shown on the approved landscape plan shall be installed, inspected and approved by the landscape architect or his representative. The landscape architect shall take into account seasonal considerations in this regard. Trees, shrubs, vines and groundcover as required by or associated with a subdivision or site plan approved by the planning authorities shall be installed during the following planting seasons: TBD

The following tree varieties shall not be planted during the fall planting season due to the hazards associated with planting these trees in this season:

Acer rubrum	Populus spp.
Betula spp.	Prunus spp.
Carpinus spp.	Pyrus spp.
Cratecus spp.	Quercus spp.
Koelreuteria paniculata	Salix spp.
Liquidambar styraciflua	Tilia tomentosa
Liriodendron tulipifera	Zelkova
Platanus acerifolia	

Any plantings installed in conflict with this requirement must receive written approval of the landscape architect prior to planting. Failure to comply with these requirements will require the removal of the planting in question. This requirement does not apply to seeding or sodding or plantings specifically for soil stabilization purposes. Plantings associated with any lot given a certificate of occupancy outside these periods shall be provided during the previous or next appropriate season.

19. All disturbed areas shall be treated with 4" top soil and seeded in accordance with permanent stabilization methods indicated on soil erosion and sediment control sheet.

GENERAL NOTES FOR STREET TREE PLANTINGS

1. A PERMIT IS REQUIRED WHEN TREES ARE PLANTED IN PUBLIC RIGHT-OF-WAY OR IN A PUBLIC EASEMENT. THE DEPARTMENT OF ENVIRONMENTAL SERVICES SHALL ISSUE THE PERMIT ACCORDING TO THE PROVISIONS OF THE CURRENT ARLINGTON COUNTY ADMINISTRATIVE REGULATION 4.3.

2. TREE SPECIES SHALL BE SELECTED FROM THE ARLINGTON COUNTY STREET TREE LIST* OR PER SECTOR PLAN REQUIREMENTS.

3. TREES SHALL BE NURSERY GROWN SPECIMENS THAT MEET THE LATEST EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60). BALLED AND BURLAPPED TREES SHALL BE SECURELY HELD IN PLACE BY UNTREATED BURLAP AND STOUT ROPE (NYLON ROPE IS NOT ACCEPTABLE). LOOSE, BROKEN OR MANUFACTURED BALLS ARE UNACCEPTABLE.

4. CALL MISS UTILITY AT (800) 552-7001 FOR UTILITY LOCATION PRIOR TO EXCAVATION.

5. AT TIME OF PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES THAT POSE A HAZARD TO PEDESTRIANS. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.

6. TREE PIT AND TREE STRIP PLANTING AREA DIMENSIONS.
(A) 5x12' OR LARGER IS STANDARD
(B) 4x15' MINIMUM IS ALLOWED PER SITE CONDITIONS AND COUNTY URBAN FORESTER'S APPROVAL.

7. SPACE TREES 25'-30' APART OR PER SECTOR PLAN REQUIREMENTS OR SITE CONDITIONS.

8. SITE CHARACTERISTICS, SUCH AS OVERHEAD POWER LINES, EXISTING VEGETATION, AND INFRASTRUCTURE ITEMS SUCH AS CURBS, SIDEWALKS AND UTILITIES SHALL BE CONSIDERED. TREES THAT GROW TALLER THAN 25 FEET SHOULD NOT BE PLANTED DIRECTLY UNDER POWER LINES. WHEN POSSIBLE THE TREE LEADER SHALL BE OFFSET FROM POWER LINES.

9. BACKFILL SOIL MIXTURE SHALL BE $\frac{3}{4}$ EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH $\frac{1}{4}$ ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE COUNTY URBAN FORESTER. PEAT MOSS MAY NOT BE USED.

10. IF THE QUANTITY OF ACCEPTABLE EXISTING SOIL IS INSUFFICIENT FOR THE PLANTING REQUIREMENTS, THE CONTRACTOR MAY USE TOPSOIL. SOIL TEST REPORT RESULTS FOR THE TOPSOIL WILL BE MADE AVAILABLE TO THE COUNTY URBAN FORESTER UPON REQUEST. CONTRACTOR SHALL SUBMIT TOPSOIL FOR APPROVAL TO COUNTY URBAN FORESTER THAT MEETS THE FOLLOWING SPECIFICATIONS:
(A.) TOPSOIL CONSISTS OF A SANDY LOAM WITH UNIFORM COMPOSITION AND IS FREE OF STONES, LUMPS, PLANTS, ROOTS, AND OTHER DEBRIS OVER $1\frac{1}{2}$" IN LENGTH.
(B.) TOPSOIL HAS A PH RANGE OF 5.5 TO 6.5 AND A MINIMUM CONTENT OF 1.0% ORGANIC MATTER.
(C.) TOPSOIL DOES NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH. SOLUBLE SALT LEVEL SHALL NOT EXCEED 3 MILLOHMS PER CENTIMETER.

11. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.

12. TREES MAY ONLY BE STAKED IF REQUIRED BY THE COUNTY URBAN FORESTER. REFER TO ARLINGTON COUNTY STANDARD STAKING DETAILS.

13. MULCH SHALL BE CLEAN, SCREENED, DOUBLE-HAMMERED HARDWOOD BARK MULCH, UNIFORM IN SIZE AND FREE OF STONES, CLODS, NON-ORGANIC DEBRIS AND OTHER FOREIGN MATERIAL.

14. ALL PLANTS SHALL BE WATERED TWICE: ONCE AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION. EACH WATERING WILL CONSIST OF 20 GALLONS PER TREE.

15. CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL AND DEBRIS FROM SITE.

ARLINGTON COUNTY LANDSCAPE MAINTENANCE MANAGEMENT PROGRAM

I. General
A. All planting areas, including lawns, buffers, and parking lots, shall be periodically inspected a minimum of once per month, every two (2) weeks during the growing season, or after each mowing session. A fall clean-up shall be performed each year.
B. Remove all litter, debris and weeds.
C. Maintain a minimum of a 2-inch depth of organic hardwood mulch or equal in all planting beds.

II. Irrigation (if applicable)
A. Automatic sprinklers shall be cleaned out and turned off in the fall prior to the first frost, and tested when turned on in the spring.
B. Evaluate success of irrigation system and modify as necessary.
Water requirements:
a. New turf: keep moist until all seed germinates and becomes an established stand of turf.
b. Existing turf: during dry periods, water twice a week for 20 minutes at a time, or set irrigation for coverage of 1-2 inches of water per week.

III. Seasonal flowers
A. Annual flower beds shall be periodically mulched and the soil amended annually. New plantings shall be provided in May of each year. During the growing season, all beds shall receive periodic inspections per note I, irrigation and weeding to maintain a neat appearance.

IV. Turf
A. Lawn areas shall not exceed a height of 4 inches. Approximately 12-15 mowings per year will be required.
B. Fertilizer and soil amendments should be added a necessary and/or on a seasonal basis. Fertilizer is optimally applied to lawn and turf areas three tunes per season. Timing, frequency and rate of application shall be adjusted according to weather and to horticultural and soil test conditions for each specific site. Fertilizer shall be applied by accepted methods only. Safety shall be of prime consideration. Care shall be taken not to apply fertilizer when the ground is wet.
C. Soil amendments such as lime, gypsum or peat moss may be to be added to the soils of lawns, turf or planting areas periodically. The need for such soil amendments shall be analyzed during the periodic inspections and in conjunction with soil tests.
D. Soil amendments shall be applied in accordance with manufacturers' specifications or based upon soil test results. Apply a 3-1-2 (21-7-14, 10-4-6, or 24-4-b) 50% organic fertilizer twice a year between March 15 to April 15 and September 1 to October 1. If necessary, two additional applications may be made in May and November. Do not apply fertilizer or soil amendments while turf is either wet or under extreme stress, in windy conditions, or when children are present.

V. Pruning
A. Removal of dead, diseased, insect infested or weak wood shall take place in the dormant season or after flowering. Excessive shoots and suckers shall be removed.
B. Shrub material used as a screen shall be pruned as a mass to enhance their natural form. Hedges
C. Root pruning of trees adjacent to curbs or sidewalks shall occur during periodic inspections with knowledge of most recent pruning. No more than 1/3 of root system shall be pruned during year.

VI. Insect and disease control
A. The control of insects and disease associated with all planting areas shall always be a maintenance priority. All plantings, including existing mature trees, shall be periodically inspected for insect or disease infestation. Methods utilized to control insects or disease may range from spraying and pruning to plant removal. Whatever method is utilized, safety and control shall be of prime concern. Trained and certified personnel shall perform these tasks.

VII. Renovation
A. Renovation includes the reseeding or replanting of landscape areas damaged, destroyed or failing due to insects, disease, weather or physical damage.
B. Lawn -- all areas where soil has been exposed shall be renovated during the next planning season. Proper horticultural and soil erosion prevention methods shall be utilized. If soil erosion has occurred, the area shall be repaired with a seed mixture compatible to existing plantings shall be utilized.
C. Plantings -- all plantings which are damaged or destroyed shall be replaced during the next growing season. A failing, damaged or destroyed landscape screen or buffer must be renovated or replaced within a reasonable period of time, but not to exceed the subsequent growing season.

VIII. Site amenities
A. Benches, paths, bicycle racks, trash receptacles and signs shall be inspected at least twice a year, once in March and once in August, to determine their condition. Any damaged, worn or unsafe conditions shall be rectified immediately.

IX. Paved surfaces
A. All paved surfaces, concrete sidewalks, asphalt pavement and decorative pavement shall be inspected on a regular basis. All such surfaces shall be inspected at least once per month.
B. Trash, stains and/or obstructions shall be removed immediately. Pavement shall be inspected for damage, cracks, and/or potholes, and returned to their original conditions.
C. Snow shall be removed during and following every storm. Sidewalks and parking areas shall be kept clear of ice and snow during business hours.

SECTION 32 93 00
TREES, SHRUBS AND GROUND COVER
PART 1 – GENERAL

1.1 SUMMARY
A. This Section includes the following:
1. Trees.
2. Shrubs.
3. Ground cover.
4. Plants.
5. Planters.
B. Related Sections include the following:
1. Division 31 Section "Earthwork" for excavation, filling, and rough grading and for subsurface aggregate drainage and drainage backfill materials.
2. Division 32 Section "Unit Pavers" for adjacent paved areas.
3. Division 32 Section "Irrigation" for irrigation of plant materials.

1.2 DEFINITIONS
A. Balled and Burlapped Stock: Plant material dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required; wrapped, tied, rigidly supported, and drum–laced as recommended by ANSI Z60.1.

B. Balled and Potted Stock: Plant material dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant material required.

C. Bare–Root Stock: Plant material with a well–branched, fibrous–root system developed by transplanting or root pruning, with soil or growing medium removed, and with not less than minimum root spread according to ANSI Z60.1 for kind and size of plant material required.

D. Container–Grown Stock: Healthy, vigorous, well–rooted plant material grown in a container with well–established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for kind, type, and size of plant material required.

E. Fabric Bag–Grown Stock: Healthy, vigorous, well–rooted plant material established and grown in–ground in a porous fabric bag with well–established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of plant material required.

F. Finish Grade: Elevation of finished surface of planting soil.

G. Manufactured Topsoil: Soil produced off–site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

H. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.

I. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

1.3 REFERENCE STANDARDS
A. Comply with applicable recommendations of the following:
1. Hortus Third – Cornell University.
2. "American Standard for Nursery Stock", American Association of Nurserymen (ANSI Z60.1)
3. Landscape Specification Guidelines for the Baltimore – Washington Metropolitan Area, latest edition.

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE

PLANTING SPECS

L3.04

1.4 SUBMITTALS

A. Product Data: Manufacturer's specifications and technical data including the following:
1. If specified plant material is not obtainable, submit proof of non–availability together with proposal for use of equivalent material at least 30 days prior to starting work under this section.
2. Manufacturer's installation instructions.
3. Bag labels or product data sheets and source data for commercial fertilizer, soil amendments, mulches, and other commercial products indicating weight, analysis, and manufacturer.
4. Any required certificates of inspection of plant material by state or federal authorities.

B. Samples for Verification:
1. Submit samples of mulches, topsoil, soil mixes and organic compost materials used in soil mixes.
2. Submit one pound samples packaged in plastic bags.
3. Provide samples typical of material used in project with same color, texture, and organic composition.

C. Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the following:
1. Manufacturer's certified analysis for standard products.
2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

D. Qualification Data: For installation.

E. Material Test Reports: Submit test reports of soil tests of representative topsoil and site soil mixes, prepared by a qualified soil testing laboratory.

F. Planting Schedule: Indicating anticipated planting dates for plant material.

G. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of plant material during a calendar year. Submit before expiration of required maintenance periods.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Submit installer qualifications verifying years of experience; include list of completed projects having similar scope of work identified by name, location, date, reference names and phone numbers.
1. Installer's Field Supervision: Require Installer to maintain an experienced full–time supervisor on Project site when planting is in progress.

B. Soil–Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

C. Topsoil Analysis: Furnish soil analysis by a qualified soil–testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant–nutrient content of topsoil.
1. Report suitability of topsoil for plant growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.

D. Provide quality, size, genus, species, and variety of plant material indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."
1. Obtain inspections and approvals of plant material required by state, federal, or other authorities and secure permits and certificates required, including certification of plant materials by state or federal departments of agriculture indicating they are free from hazardous insects or apparent disease.
2. Architect may inspect and /or tag plant material at growing site, upon site delivery or by use of photographs. Inspection, tagging or approval does not preclude right of rejection at any time for reasons of size, condition or size of ball or roots, improper handling, care or maintenance; latent defects or injuries.
3. Do not remove or cover approval marks or tags during planting operations.
4. Notify Architect of sources of planting materials seven days in advance of delivery to site.

E. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches (150 mm) above ground for trees up to 4–inch (100–mm) caliper size, and 12 inches (300 mm) above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip–to–tip.

F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

1.6 DELIVERY, STORAGE, AND HANDLING

A. Preparation for Delivery: Prepare materials for delivery in a manner to prevent damage.
1. Balled and burlapped (B&B) plants: Deliver exterior plants freshly dug. Dig, bind, and otherwise prepare for shipment in manner that will not damage roots, trunk, branches or impair future development and normal growth and shape after replanting. Ball with firm, natural balls of soil. Wrap ball firmly with biodegradable fabric and secure. Comply with ANSI Z60.1 for ball sizes and ratios. Do not prune plants prior to delivery.

B. Delivery: Coordinate delivery with planting operations.
1. Notify Architect one week in advance of delivery so plant material may be inspected upon arrival at project site. Remove unacceptable plant material immediately from project site.
2. Deliver fertilizer, and other packaged/bagged commercial products in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark, and in conformance with applicable laws.
3. Deliver plants with legible identification labels that state plant botanical and common name and size. Use durable labels which will remain legible through final inspection.
4. Provide protection during delivery to prevent damage to plants or desiccation of leaves. Plants will be rejected which show transpiration damage or wind burn.

C. Handling: Handle materials in a manner to prevent damage.
1. Do not bind plants in a manner which would damage branches or require pruning that would disfigure plant.
2. Protect plants from rough handling.
3. Do not drop plants.
4. Do not pick up container or balled plants by stems or trunks.

D. Storage and Protection: Store materials in a manner to prevent damage.
1. Heel–in plant material immediately upon delivery if not to be planted within 24 hours. Protect roots from drying or other possible injury. Open bundles of plants and separate before covering. Do not allow air pockets among roots. Protect from weather. Do not store plants with branches tied so as to disfigure or impair normal shape, growth, and development.
2. Do not remove container–grown plants from containers until ready for planting.
3. Protect materials from damage by the elements and construction procedures.
4. Store materials at temperatures above 40 degrees F.

E. Store fertilizer and other similar materials in original unopened containers so that effectiveness is not impaired

1.7 COORDINATION

A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
5. Spring Planting: March 1 – May 15th
6. Fall Planting: September 15th – December 1st

B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.8 SPECIAL WARRANTY

A. Contractor/installer shall warrant plant materials and work for a period of 1 full year from Substantial Completion Date. When notified in writing from the Architect, Contractor shall promptly and without inconvenience and cost to the Owner, correct said deficiencies.
1. Warrant plant materials provided under this contract against failure to show satisfactory growth, healthy branching and foliage conditions typical of the species for a period of 1 year following the Substantial Completion Date.

B. Substantial Completion: When the work has been satisfactorily completed, Substantial Completion acceptance will be granted and the warranty period will begin.
1. Upon completion of the work, submit a written notice requesting Substantial Completion acceptance observation at least 5 days prior to anticipated observation date.
2. Within 10 days following observation, Contractor will be notified in writing of acceptance or of any deficiencies in the work.
3. Correct defects or damages and remove unacceptable materials from the site.
4. Upon completion of punch list items, submit written notice requesting Substantial Completion observation at least 5 days prior to anticipated observation date.
5. Within 10 days following completion of satisfactory Substantial Completion observation, Contractor will be notified in writing of Substantial Completion. Date of this document establishes the beginning of the warranty period.

C. Final Acceptance: When the work has been satisfactorily completed and all warranty periods have ended final acceptance will be granted.
1. Upon completion of the work and the ending of the warranty periods, submit written notice requesting a final acceptance observation at least 5 days prior to anticipated observation date.
2. Within 10 days following observation, Contractor will be notified in writing of acceptance or of any deficiencies in the work.
3. Correct defects or damages and remove unacceptable materials from the site.
4. Upon completion of punch list items, submit a written notice requesting a final acceptance observation at least 5 days prior to anticipated observation date.
5. Within 10 days following completion of a satisfactory final acceptance observation, Contractor will be notified in writing of final acceptance.

D. Replacements: Plants which fail to fulfill requirements of these specifications or are in a declining or unimproved condition as determined by the Architect at the end of the warranty period shall be replaced with plant material as originally specified but oversized to compensate for the growth of adjacent plants. Replace rejected plants as quickly as possible.
1. Replacement inspection: Upon completion of replacement planting, arrange for a substantial completion acceptance observation of the replaced plants.
2. Replacement warranty: Warranty replacement plants for 1 full year from date of substantial completion acceptance.
3. Second replacements: Replacement plants which fail to fulfill the specifications at the end of the replacement warranty period shall be replaced with oversized plants of the type specified or replaced with alternate species or credited to the Owner at current year's replacement cost at the option of the Owner.

1.9 MAINTENANCE

A. Begin maintenance immediately after plant is planted and continue until Substantial Completion acceptance.

B. Maintenance Requirements:
1. Protect plants and planting areas from damage.
2. Keep plants healthy, vigorous, trim and neat.
3. Prune to maintain plants in normal growth pattern.
4. Spray to control disease and insects.
5. Maintain mulch bed to 2 inch depth.
6. Keep beds free from weeds.
7. Watering:
a. Initial watering: Water new plants when planted and then on a weekly basis for one month. Provide minimum of 1 inch of precipitation per week.
b. After initial watering period, water plants a minimum of once every two weeks until the end of the maintenance period.
c. Use new irrigation system with the Architect's permission, to provide watering of plants.
d. Water as required to maintain adequate moisture, and when directed by Architect.
8. Maintain stakes, and guys in taut and rigid state with wires in place and safety flags clearly visible.
9. Reset plants to proper grade and upright condition if required and add topsoil and mulch to areas of settlement.

PART 2 – PRODUCTS

2.1 TREE AND SHRUB MATERIAL

A. General: Furnish nursery–grown trees and shrubs complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well–shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

B. Grade: Provide trees and shrubs of sizes and grades complying with ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to Architect, with a proportionate increase in size of roots or balls.

C. Label at least one tree and one shrub of each variety and caliper with a securely attached, waterproof tag bearing legible designation of botanical and common name.

D. If formal arrangements or consecutive order of trees or shrubs is shown, select stock for uniform height and spread, and number label to assure symmetry in planting.

2.2 SHADE AND FLOWERING TREES

A. Shade Trees: Single–stem trees with straight trunk, well–balanced crown, and intact leader, of height and caliper indicated, complying with ANSI Z60.1 for type of trees specified.
1. Provide balled and burlapped trees.
2. Branching Height: One–half of tree height.

B. Small Trees: Branched or pruned naturally according to species and type specified, with relationship of caliper, height, and branching according to ANSI Z60.1.
1. Provide balled and burlapped trees.

C. Multistem Trees: Branched or pruned naturally according to species and type specified, with relationship of caliper, height, and branching according to ANSI Z60.1.
1. Provide balled and burlapped trees.

2.3 DECIDUOUS SHRUBS

A. Form and Size: Deciduous shrubs with not less than the minimum number of canes required by and measured according to ANSI Z60.1 for type, shape, and height of shrubs specified.

2.4 CONIFEROUS EVERGREENS

A. Form and Size: Normal–quality, well–balanced, coniferous evergreens, of type, height, spread, and shape specified, complying with ANSI Z60.1.

2.5 BROADLEAF EVERGREENS

A. Form and Size: Normal–quality, well–balanced, broadleaf evergreens, of type, height, spread, and shape specified, complying with ANSI Z60.1.

2.6 GROUND COVER PLANTS

A. Ground Cover: Provide ground cover of size and species indicated, established and well rooted in pots or similar containers, and complying with ANSI Z60.1.

2.7 PLANTS

A. Perennials: Provide healthy, field–grown plants from a commercial nursery, of species and variety shown or listed.

2.8 TOPSOIL

A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 4 percent organic material content; free of stones 1 inch
or larger in any dimension and other extraneous materials harmful to plant growth.
1. Topsoil Source: Import or manufacture topsoil from off–site sources. Obtain topsoil displaced from naturally
well–drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from agricultural land, bogs or marshes.
2. Soil shall be free of add–mixture of subsoil, and contain no weeds, stones, lumps, clods of hard earth, slag, cinders,
sticks, plants, roots, trash or other extraneous materials.
3. Topsoil that has been stockpiled for long periods shall be inoculated to reestablish its microbial activity.
4. Mechanical Analysis:
a. Sand: 50–60%
b. Silt: 15–25%
c. Clay: 10–15%

2.9 INORGANIC SOIL AMENDMENTS

A. Lime: ASTM C 602, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent and as
follows:
1. Class: Class T, with a minimum 99 percent passing through No. 8 sieve and a minimum 75 percent passing
through No. 60 sieve.
2. Class: Class O, with a minimum 95 percent passing through No. 8 sieve and a minimum 55 percent passing
through No. 60 sieve.
3. Provide lime in form of dolomitic limestone.

B. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum 99 percent passing
through No. 6 sieve and a maximum 10 percent passing through No. 40 sieve.

C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

D. Aluminum Sulfate: Commercial grade, unadulterated.

E. Perlite: Horticultural perlite, soil amendment grade.

F. Agricultural Gypsum: Finely ground, containing a minimum of 90 percent calcium sulfate.

G. Sand: Clean, washed, natural or manufactured, free of toxic materials.

H. Diatomaceous Earth: Calcined, diatomaceous earth, 90 percent silica, with approximately 140 percent water
absorption capacity by weight.

I. Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

2.10 ORGANIC SOIL AMENDMENTS

A. Peat: Sphagnum peat moss, partially decomposed, finely divided or granular texture, with a pH range of 3.4 to 4.8.

B. Peat: Finely divided or granular texture, with a pH range of 6 to 7.5, containing partially decomposed moss peat,
native peat, or reed–sedge peat and having a water–absorbing capacity of 1100 to 2000 percent.

C. Leaf Mold: Shredded, well composted leaf material, free of trash

D. Pine Bark: Potting grade pine bark; less than 10% wood fiber
1. Size: No particle size larger than ½ inch

E. Manure: Well–rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw,
sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.

2.11 FERTILIZER

A. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 4 percent nitrogen and 20 percent phosphoric
acid.

B. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

C. Commercial Fertilizer: Commercial–grade complete fertilizer of neutral character, consisting of fast– and
slow–release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified
soil–testing agency.

D. Slow–Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water–insoluble nitrogen,
phosphorous, and potassium in the following composition:
1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified
soil–testing agency.

2.12 MULCHES

A. Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of the
following:
Well aged, fine shredded hardwood, dark brown in color, uniform in size and free of foreign matter.

B. Mineral Mulch: Hard, durable stone, washed free of loam, sand, clay, and other foreign substances, of type, size
range, and color specified on drawings.

2.13 WEED–CONTROL BARRIERS

A. Nonwoven Fabric: Polypropylene or polyester fabric, 3 oz./sq. yd. minimum.

2.14 STAKES AND GUYS

A. Upright and Guy Stakes: Rough–sawn, sound, new hardwood, redwood, or pressure–preservative–treated softwood,
free of knots, holes, cross grain, and other defects, 2 by 2 inches by length indicated, pointed at one end.

B. Guy and Tie Wire: ASTM A 641/A 641M, Class 1, galvanized–steel wire, 2–strand, twisted, 0.106 inch in diameter.

C. Guy Cable: 5–strand, 3/16–inch diameter, galvanized–steel cable, with zinc–coated turnbuckles, a minimum of 3
inches long, with two 3/8–inch galvanized eyebolts.

D. Hose Chafing Guard: Reinforced rubber or plastic hose at least 1/2 inch in diameter, black, cut to lengths required to
protect tree trunks from damage.

E. Flags: Standard surveyor's plastic flagging tape, white, 6 inches long.

2.15 MISCELLANEOUS PRODUCTS

A. Antidesiccant: Water–insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver
in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.

B. 2.16 PLANTING SOIL MIX

A. Mixing: Review mixing equipment and methods with Architect prior to starting batch mixing.

B. Plant Excavation Backfill Mixtures:
1. 3/4 sandy loam topsoil mixed with 1/4 organic material and granular fertilizer.

C. Planter Over Structure Backfill Mixtures:
1. 1/3 sandy loam topsoil mixed with 1/3 sand and 1/3 organic material and granular fertilizer.

D. Fertilizer Quantities for Backfill:
1. Trees: 1/2 lb. of 10:6:4 commercial fertilizer per inch of trunk diameter.
2. Shrubs: 1/4 lb. of 10:6:4 commercial fertilizer per foot of height or spread per plant or 3 – 5 lbs. of 10:6:4
commercial fertilizer per 100 sq. ft. of bed area.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine areas to receive plant material for compliance with requirements and conditions affecting installation and
performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, and existing plant material from damage
caused by planting operations.

B. Provide erosion–control measures to prevent erosion or displacement of soils and discharge of soil–bearing water
runoff or airborne dust to adjacent properties and walkways.

C. Lay out individual tree and shrub locations and areas for multiple exterior plantings. Stake locations, outline areas,
adjust locations when requested, and obtain Architect's acceptance of layout before planting. Make minor adjustments as required.

D. Apply antidesiccant to trees and shrubs using power spray to provide an adequate film over trunks, branches, stems,
twigs, and foliage to protect during digging, handling, and transportation.
1. If deciduous trees or shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again
two weeks after planting.

3.3 TREE AND SHRUB PITS

A. Walls of pits shall be dug so that they are vertical, or sloping outward in heavy soils, and scarified.

B. Pits shall be a minimum of 12 inches larger on every side than the ball of tree or shrub.

C. Depth shall be enough to allow 1/8 of ball to be above existing grade. Plants shall rest on undisturbed soil or well compacted backfill.

D. Pits located near foundations, footings and structural slabs shall be dug without disturbing construction. If a pit is below footing, angle of repose shall be 45 degrees from top of footing to bottom of pit.

E. If rock, underground construction, tree roots or other obstructions are encountered in the excavation of plant pits, alternate locations may be approved. Notify Architect if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
1. Hardpan Layer: Drill 6–inch diameter holes into free–draining strata or to a depth of 10 feet, whichever is less, and backfill with free–draining material.

F. Where location cannot be changed, submit a written estimate before proceeding of the cost required to move the obstruction to a depth of not less than 6 inches below the required depth of pit.

G. Drainage: Notify Architect if subsoil conditions evidence unexpected water seepage or retention in tree or shrub pits. Fill excavations with water and allow to percolate away before positioning trees and shrubs

H. Disposal of Soil:
1. Legally dispose of unacceptable or unused excess soil off–site.

I. Subsoil removed from excavations may be used as backfill.

3.4 PLANTING IN PLANTERS OVER STRUCTURE

A. Planter Drainage Materials
1. Install insulation, drainage board, and filter fabric in planting areas.
2. Butt join filter fabric and continuously cover bottom and sides of planter. Prevent slippage during backfill.
3. Securely bind filter fabric around risers, conduits, pipes, piers and other intrusions through planter to prevent soil from entering drainage layer.

B. Backfill at Planters Over Structure:
1. Mixing:
a. Before mixing, clean topsoil of roots, plants, sods, stones, clay lumps and other extraneous materials harmful or toxic to plant growth.
b. Mix soil amendments and fertilizers with topsoil at approved rates.
2. Place backfill mixture in 12 inch layers maximum.
3. Pass over each lift with compactor to eliminate air pockets and minimize settling.
4. Compact fill loosely to allow water to flow through soil.
5. Place fill to elevation above grade to compensate for anticipated settlement to required elevation.

3.5 PLANTING BED PREPARATION

A. Ground cover:
1. Beds shall be loosened to a depth of 9 inches minimum prior to planting using one of the following methods:
a. Hand digging
b. Roto–tilling
c. Picking – for small areas or on slopes
2. Organic matter shall be spread over bed to a depth of 3 inches for peatmoss and other organics after soil has been loosened. Organic matter shall then be worked into bed by roto–tilling or picking.
3. Fertilizer shall be top–dressed over bed area at rate of 3 lbs. per sq. ft. and incorporated.
4. Entire bed shall be mulched, 2 inches maximum.

B. Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

C. Restore planting beds if eroded or otherwise disturbed after finish grading and before planting.

3.6 TREE AND SHRUB PLANTING

A. Set balled and burlapped stock plumb and in center of pit or trench with top of root ball 1 inch above adjacent finish grades.
1. Remove burlap and wire baskets from tops of root balls and partially from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one–half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.

B. Set container grown stock plumb and in center of pit or trench with top of root ball 1 inch above adjacent finish grades.
1. Carefully remove root ball from container without damaging root ball or plant.
2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one–half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.

C. Organic Mulching: Apply 2–inch minimum thickness of organic mulch extending 12 inches beyond edge of planting pit or trench. Do not place mulch within 3 inches of trunks or stems.

3.7 TREE AND SHRUB PRUNING

A. Prune, thin, and shape trees and shrubs as directed by Architect.
1. Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise indicated by Architect, do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are sizes after pruning.

3.8 GUYING AND STAKING

A. Upright Staking and Tying: Stake trees of 2– through 5–inch caliper. Stake trees of less than 2–inch caliper only as required to prevent wind tip–out. Use a minimum of 2 stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend at least 72 inches above grade. Set vertical stakes and space to avoid penetrating root balls or root masses. Support trees with two strands of tie wire encased in hose sections at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree. Use the number of stakes as follows:
1. Use 2 stakes for trees up to 12 feet high and 2–1/2 inches or less in caliper; 3 stakes for trees less than 14 feet high and up to 4 inches in caliper. Space stakes equally around trees.

B. Guying and Staking: Guy and stake trees exceeding 14 feet in height and more than 3 inches in caliper, unless otherwise indicated. Securely attach no fewer than 3 guys to stakes 30 inches long, driven to grade.
1. For trees more than 6 inches in caliper, anchor guys to pressure–preservative–treated deadmen 8 inches in diameter and 48 inches long buried at least 36 inches below grade. Provide turnbuckles for each guy wire and tighten securely.
2. Attach flags to each guy wire, 30 inches above finish grade.
3. Paint turnbuckles with luminescent white paint.

3.9 GROUND COVER AND PLANT PLANTING

A. Set out and space ground cover and plants as indicated.

B. Dig holes large enough to allow spreading of roots, and backfill with planting soil.

C. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

D. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

E. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.10 PLANTING BED MULCHING

A. Mulch backfilled surfaces of planting beds and other areas indicated.
1. Organic Mulch: Apply 2–inch minimum thickness of organic mulch, and finish level with adjacent finish grades. Do not place mulch against plant stems.
2. Mineral Mulch: Apply 2–inch minimum thickness or according to plans of mineral mulch, and finish level with adjacent finish grades. Do not place mulch against plant stems.

3.11 CLEANUP AND PROTECTION

A. During exterior planting, keep adjacent paving and construction clean and work area in an orderly condition.

B. Protect exterior plants from damage due to landscape operations, operations by other contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

3.12 DISPOSAL

A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

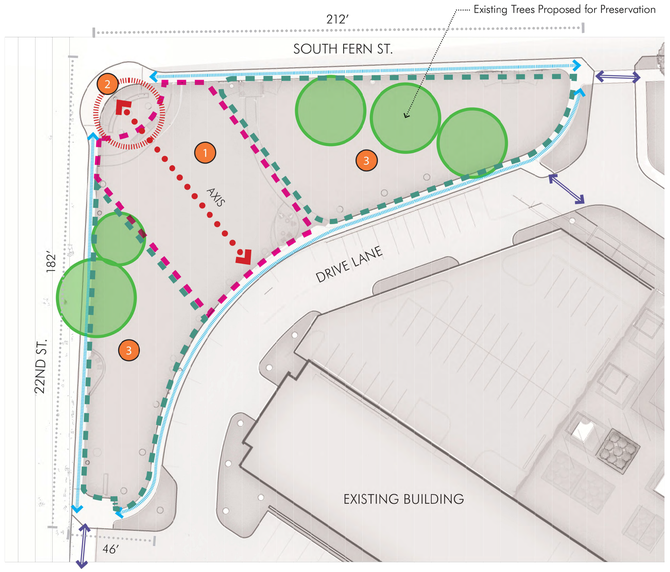
DESIGNED BY TR, AW
DRAWN BY AW, SL, NM
CHECKED BY TR
NORTH

SCALE

PLANTING SPECS

L3.05

SOUTH FERN ST. CORNER PARK
LANDSCAPE PLAN



LEGEND

- 1 CORE AREA
- 2 ARRIVAL POINT
- 3 SECONDARY AREAS
- TREE CANOPY AREA
- MAIN SPACE
- STREET ACCESS
- CENTRAL AXIS
- CROSSWALK
- GATEWAY & ARRIVAL

SPATIAL ARRANGEMENT PLAN

KEY PLAN

LEGEND

1. SECLUDED GARDEN (OPEN LAWN AREA)
2. ARRIVAL AREA & TRELLIS
3. WOODLAND
4. MAIN PATHWAY
5. SMALL URBAN ORCHARD
6. POLLINATOR MEADOW
7. DOG RUN (ENCLOSED)
8. SEATING & RESTING POINTS
9. BIKE RACKS

LANDSCAPE PLAN

PARKERRODRIGUEZ, INC.
Planning | Urban Design | Landscape Architecture

CRYSTAL HOUSE
CONCEPT LANDSCAPE DESIGN

*Draft Concepts shown are subject to change throughout the development of the process.

BOARD 4
ROSELAND RESIDENTIAL TRUST

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE

PARK DESIGN

L4.00

SOUTH FERN ST. CORNER PARK
PARK COMPONENTS

The park consists of 3 distinct landscape characters zones which users can explore and enjoy. These character zones include;

1. Small Urban Orchard
2. Pollinator Meadow
3. Woodland

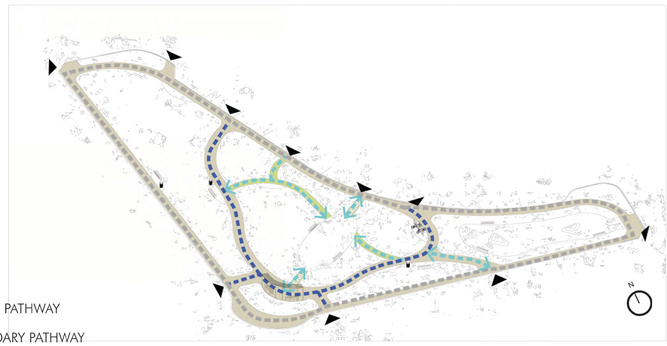
CHARACTER ZONES PLAN

KEY PLAN

LEGEND

- SMALL URBAN ORCHARD
- SECLUDED GARDEN
- WOODLAND
- POLLINATOR MEADOW
- DOG RUN (ENCLOSED)
- SEATING / RESTING POINT

PROGRAM & ACTIVITIES PLAN



LEGEND

- PRIMARY PATHWAY
- SECONDARY PATHWAY
- STREET PATHWAY
- PARK ACCESS / EGRESS POINT

ACCESS & CIRCULATION PLAN

PARKERRODRIGUEZ, INC.
Planning | Urban Design | Landscape Architecture

CRYSTAL HOUSE
CONCEPT LANDSCAPE DESIGN

*Draft Concepts shown are subject to change throughout the development of the process.

BOARD 5
ROSELAND RESIDENTIAL TRUST

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE

PARK DESIGN

L4.01

SOUTH FERN ST. CORNER PARK
CONCEPTUAL VISUALIZATION

KEY PLAN

PARKERRODRIGUEZ, INC.
Planning | Urban Design | Landscape Architecture

CRYSTAL HOUSE
CONCEPT LANDSCAPE DESIGN

*Draft Concepts shown are subject to change throughout the development of the process.

ROSELAND RESIDENTIAL TRUST

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE

PARK DESIGN

L4.02

SOUTH FERN ST. CORNER PARK
PROGRAM & USE SUMMARY

The park consists of a series of interlinked and accessible open spaces areas which offer a range of flexible programmed passive uses for users to explore and enjoy.

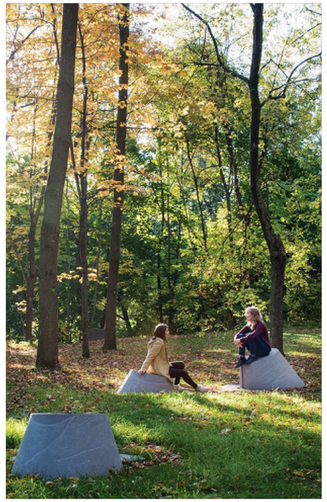
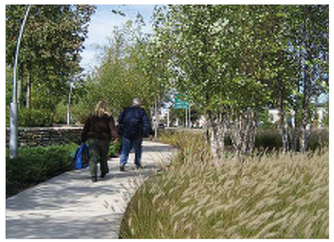
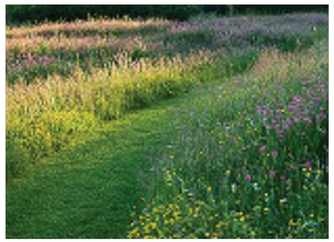
Recommended program & use include:

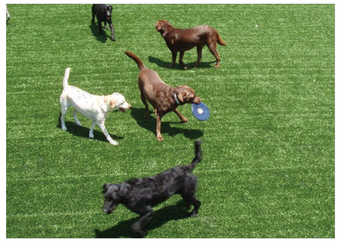
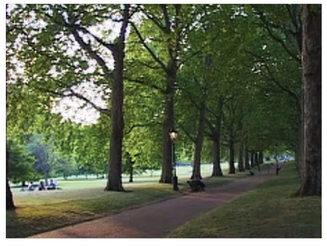
NATURAL LANDSCAPE AREAS

- SEATING AND RESTING POINTS
- OBSERVATION AREA
- INFORMAL GATHERING & MEETING SPACES
- HABITAT & WILDLIFE EDUCATIONAL NODES
- EDIBLE LANDSCAPE

DOG RUN:

- DOG RUN AS PER PSMP GUIDELINE MIN. 2,000SF)
- SEATING AREA
- DRINKING FOUNTAIN
- DISPOSAL BAG DISPENSERS
- DOG PLAY FEATURES
- BALL DISPENSER SYSTEM

PRECEDENT IMAGERY

CRYSTAL HOUSE III
ARLINGTON, VA

PARKER RODRIGUEZ, INC
PLANNING URBAN DESIGN LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

DEVELOPER/OWNER
Roseland/Mack-Cali
101 Eisenhower Parkway
Roseland, NJ 07068

ARCHITECT
Lessard Design
8521 Leesburg Pike
Suite 700
Vienna, VA 22182

CIVIL
Bowman Consulting
14020 Thunderbolt Place
Suite 300
703-464-1000

STAMP

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
LANDSCAPE ARCHITECT

REVISIONS

1ST SUBMISSION	08/02/16
2ND SUBMISSION	12/14/16
4.1 SUBMISSION	10/06/17
POST - 4.1 SITE PLAN SUBMISSION	01/05/18
FIRST PRELIMINARY SUBMISSION	10/19/18
SECOND PRELIMINARY SUBMISSION	01/23/19
4.1 SUBMISSION	09/10/19
PLANNING COMMISSION RESUBMISSION	10/23/19
4.1 SUBMISSION	11/25/19

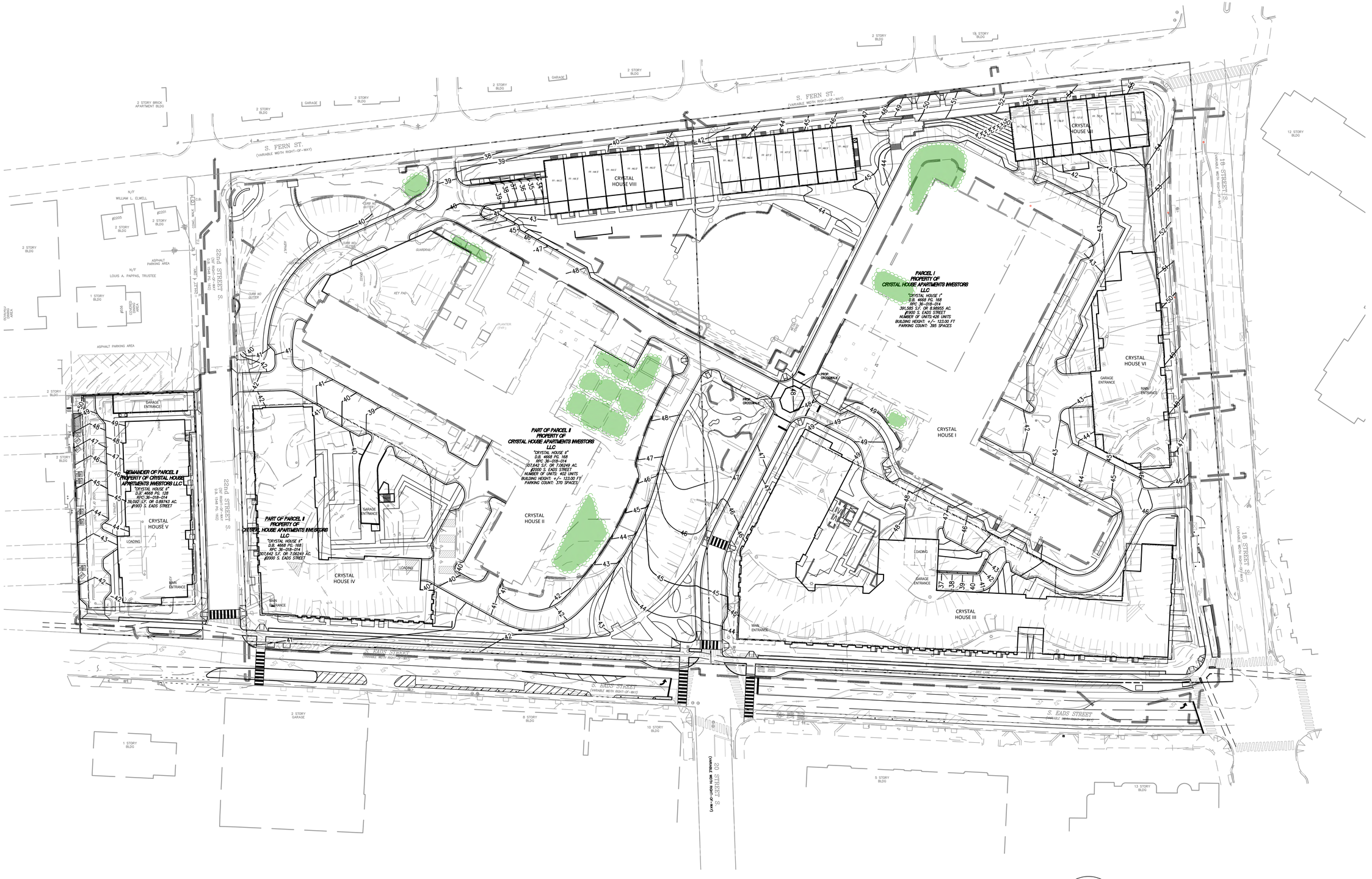
ORIGINAL ISSUE DATE

DESIGNED BY
TR, AW
DRAWN BY
AW, SL, NM
CHECKED BY
TR
NORTH

SCALE

PARK DESIGN

L4.03



NOTE – GREEN SHADED AREAS REPRESENT EXISTING TREE CANOPY TO REMAIN AND USED FOR CANOPY CREDIT

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Wetland Studies and Solutions, Inc.
a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

TREE CANOPY CREDIT OVERALL

CRYSTAL HOUSES

Arlington County, Virginia

WSSI Project Number: 22621.02

Copyright © 2019 Wetland Studies and Solutions, Inc.

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

DATE: March 5, 2019

SCALE: 1" = 50'

Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ1.00

Computer File Name:
L:\22000s\22600\22621.02\CADD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CADD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 1.00 Plotted By: Hulse, Cary, 11/25/2019 2:20 PM

LEGEND

- EXISTING TREE TO REMAIN WITH CRITICAL ROOT ZONE (CRZ) & STRUCTURAL CRITICAL ROOT ZONE (SRZ)
- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO BE REMOVED BY ARBORIST (SEE SPECIFICATIONS)
- TPF — PROPOSED TREE PROTECTION FENCE (SEE DETAIL & SPECIFICATIONS)
- RP — PROPOSED ROOT PRUNING (SEE DETAIL & SPECIFICATIONS)
- PROPOSED LOD
- AREAS OF SPECIAL "BY-HAND" DEMOLITION IS REQUIRED. (SEE SPECIFICATIONS SHEET LJ3.01)

NOTES:

1. *TREE LOCATIONS MAY BE APPROXIMATE. OWNER AND CONTRACT ARBORIST SHALL VERIFY ALL TREE LOCATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND/OR TREATMENT OR REMOVAL.*
2. *PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO COMMENCEMENT OF DEMOLITION/CONSTRUCTION ACTIVITY. COUNTY ARBORIST, OWNER, DESIGN TEAM MEMBERS (PROJECT ARBORIST, LANDSCAPE ARCHITECT, ENGINEER AND ARCHITECT), CONTRACT ARBORIST, SITE AND LANDSCAPE CONTRACTORS SHALL ATTEND.*
3. *THE INSPECTION OF THESE TREES CONSISTED SOLELY OF A VISUAL INSPECTION FROM THE GROUND. WHILE MORE THOROUGH TECHNIQUES ARE AVAILABLE FOR INSPECTION AND EVALUATION, THEY WERE NEITHER REQUESTED NOR CONSIDERED NECESSARY OR APPROPRIATE AT THIS TIME.*
4. *TREES RATED "POOR" OR "DEAD" THAT ARE NOT RECOMMENDED FOR REMOVAL DUE TO CONSTRUCTION IMPACT MAY WARRANT FURTHER EVALUATION AND/OR TREATMENT OR REMOVAL.*

BY HAND DEMOLITION REQUIRED WITHIN CRZ OF TREES TO BE RETAINED. ARBORIST OVERSIGHT REQUIRED FOR ALL WORK. FURTHER DESIGN COORDINATION REQUIRED.

BY HAND DEMOLITION REQUIRED WITHIN CRZ OF TREES TO BE RETAINED. ARBORIST OVERSIGHT REQUIRED FOR ALL WORK. FURTHER DESIGN COORDINATION REQUIRED.

MATCHLINE SHEET LJ1.02

MATCHLINE SHEET LJ1.03

PART OF PARCEL II
PROPERTY OF
CRYSTAL HOUSE APARTMENTS INVESTORS LLC

GRAPHIC SCALE
25 0 25 50 100
(IN FEET)
1 inch = 25 ft.

Wetland Studies and Solutions, Inc.
a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

TREE PRESERVATION PLAN (1 of 4)

CRYSTAL HOUSES

Arlington County, Virginia

WSSI Project Number: 22621.02

Copyright © 2019 Wetland Studies and Solutions, Inc.

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED DWL LAYOUT	CH	
2	09/10/19	REVISED DWL LAYOUT	CH	
3	11/25/19	REVISED DWL LAYOUT	CH	

SCALE: 1" = 25'

DATE: March 5, 2019

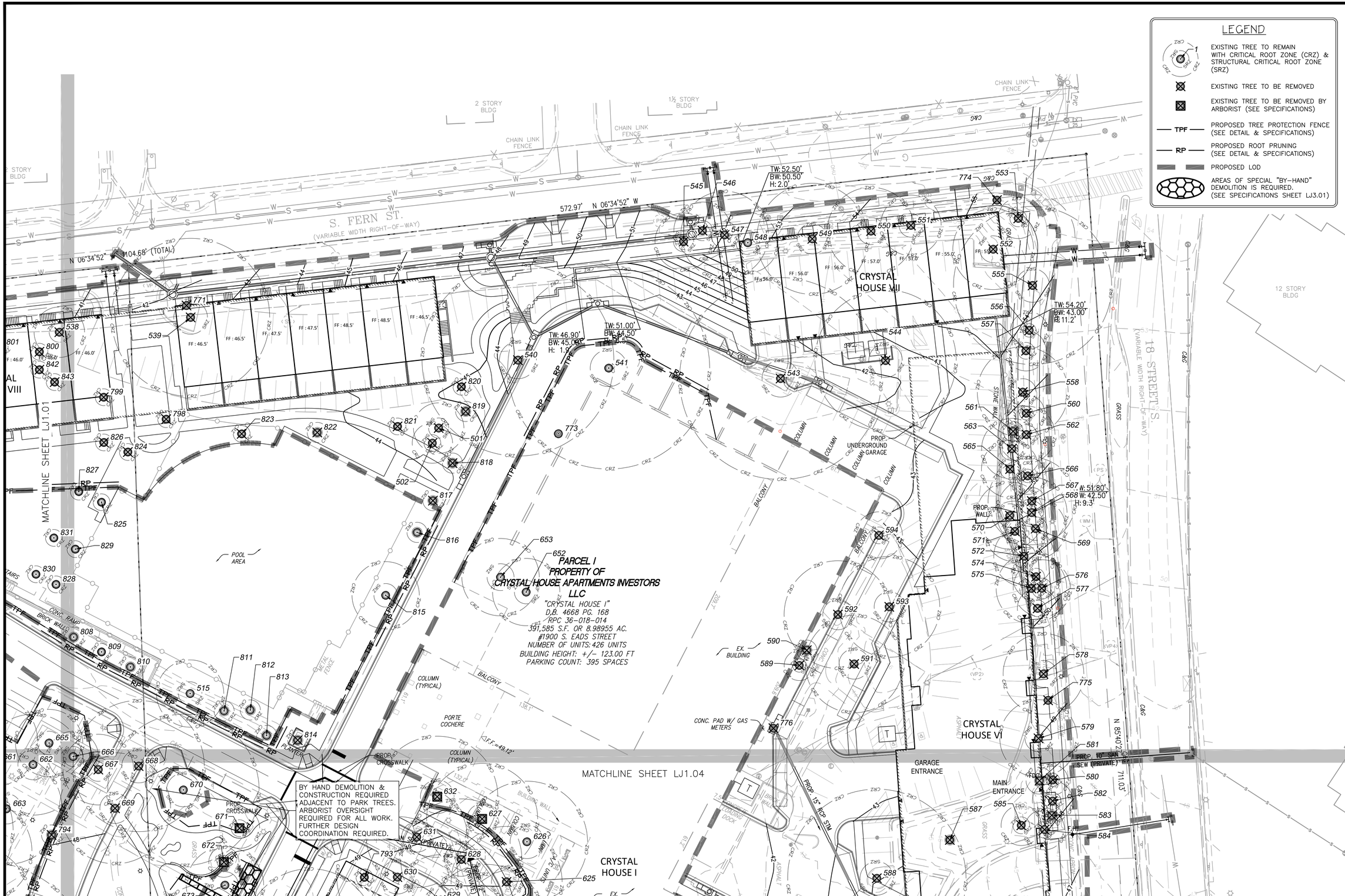
Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ1.01

Computer File Name:
L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 1:01 Plotted By: Hulse, Cory, 11/25/2019 2:20 PM



Wetland Studies and Solutions, Inc.
a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

TREE PRESERVATION PLAN (2 of 4)

CRYSTAL HOUSES

Arlington County, Virginia

WSSI Project Number: 22621.02

Copyright © 2019 Wetland Studies and Solutions, Inc.

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS				
No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

SCALE: 1" = 25'

DATE: March 5, 2019

Boundary and Topo Source:
Bowman Consulting

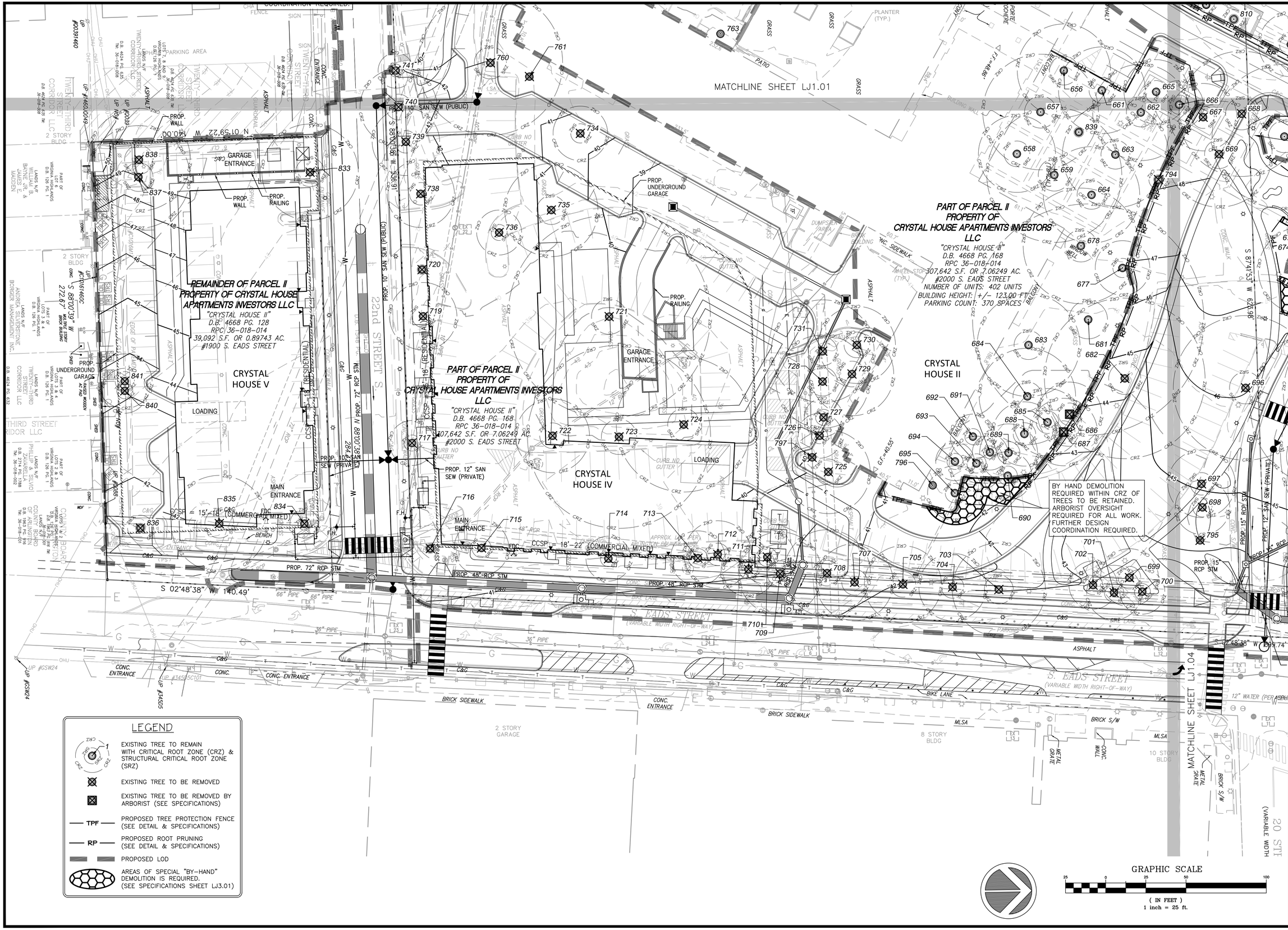
Design	Draft	Approved
CH	CH	---

Sheet #

LJ1.02

Computer File Name:
L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 1.02 Plotted By: Hulse, Cory, 11/25/2019 2:20 PM



LEGEND

- EXISTING TREE TO REMAIN WITH CRITICAL ROOT ZONE (CRZ) & STRUCTURAL CRITICAL ROOT ZONE (SRZ)
- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO BE REMOVED BY ARBORIST (SEE SPECIFICATIONS)
- TPF — PROPOSED TREE PROTECTION FENCE (SEE DETAIL & SPECIFICATIONS)
- RP — PROPOSED ROOT PRUNING (SEE DETAIL & SPECIFICATIONS)
- PROPOSED LOD
- AREAS OF SPECIAL "BY-HAND" DEMOLITION IS REQUIRED. (SEE SPECIFICATIONS SHEET LJ3.01)

Wetland Studies and Solutions, Inc. a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

TREE PRESERVATION PLAN (3 of 4)

CRYSTAL HOUSES

Arlington County, Virginia

WSSI Project Number 22621.02

Copyright © 2019 Wetland Studies and Solutions, Inc.

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

DATE: March 5, 2019

SCALE: 1" = 25'

Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ1.03

Computer File Name:
L:\22000s\22600\22621.02\CADD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CADD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 1:03 Plotted By: Hulse, Cory, 11/25/2019 2:20 PM

MATCHLINE SHEET LJ1.02

MATCHLINE SHEET LJ1.03

BY HAND DEMOLITION & CONSTRUCTION REQUIRED ADJACENT TO PARK TREES. ARBORIST OVERSIGHT REQUIRED FOR ALL WORK. FURTHER DESIGN COORDINATION REQUIRED.

CRYSTAL HOUSE I

CRYSTAL HOUSE VI

CRYSTAL HOUSE III

EX. BUILDING

PROP. UNDERGROUND GARAGE

GARAGE ENTRANCE

MAIN ENTRANCE

LOADING

PROP. WALL

PROP. CROSSWALK

PROP. 12" SAN SEW (PRIVATE)

PROP. 8" SAN SEW (PRIVATE)

PROP. 10" SAN SEW (PRIVATE)

PROP. 12" RCP STM

PROP. 15" RCP STM

PROP. 18" RCP STM

PROP. 48" RCP STM

PROP. 12" SAN SEW (PRIVATE)

PROP. 15" RCP STM

PROP. 12" SAN SEW (PRIVATE)

PROP. 48" RCP STM

N 85°40'23" E 711.03'

S 87°14'53" W 693.96'

N 02°48'38" E 367.86'

S 48°35' W 1009.74' (TOTAL)

CONC. PAD W/ GAS METERS

CONC. RAMP

CONC. PAD

CONC. WALK

CONC. S/W

BUILDING WALL

BALCONY

COLUMN (TYPICAL)

PORTE COCHERE

AC UNITS

LOADING DOCK

F.F.=49.12'

F.F.=42.39'

F.F.=41.40'

F.F.=41.40'

F.F.=42.39'

F.F.=41.40'

F.F.=41.40'

F.F.=42.39'

F.F.=41.40'

F.F.=42.39'

F.F.=41.40'

F.F.=42.39

Date: SEPTEMBER 2019

Tree Protection Action Key (TPAK)

Project: Crystal House

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	Condition Rating %	Condition Rating	Approx Crown Radius (FT)	Number of Stems	SCRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone (1.5 ft radius/in DBH)	Priority (1-4)	Removal	Removal By Arborist	Preservation Measures: Root Prune	Tree Protection Fence	Mulch	Tree Condition Inspections	By-Hand Demolition	Construction Oversight/Monitoring	Comments	Additional Notes	Condition Notes
501	10.5	China-fir	Cunninghamia lanceolata	69	Fair	10	1	6.0	15	2	X										Full Crown, Confined Roots
502	6,6	China-fir	Cunninghamia lanceolata	66	Fair	14	2	5.0	12	2	X										Full Crown, Confined Roots
515	15	pine, eastern white	Pinus strobus	69	Fair	14	1	8.0	23	2			X	X	X	X		X			Full Crown, Confined Roots
524	17	pine, eastern white	Pinus strobus	50	Fair	15	1	8.0	26	2	X									Suspect girdling root below soil line	One Sided, Broken Limbs, Girdling Roots,
527	2	cherry, Yoshino	Prunus x yedoensis	59	Fair	4	1	2.0	3	2	X									Buried root collar. Dieback	Full Crown, Small DW (1-2"), Stressed,
528	4	cherry, Yoshino	Prunus x yedoensis	70	Good	4	1	3.0	6	2	X									Crossing/Rubbing branches	Full Crown, Mechanical Damage,
529	5	cherry, Yoshino	Prunus x yedoensis	67	Fair	6	1	3.0	8	2	X									Trunk split	Full Crown, Trunk Decay, Weak Union,
530	27	sycamore, American	Platanus occidentalis	48	Poor	15	1	10.0	41	2	X									Top Removed, removal recommended	Full Crown, Narrow Crown, Small DW (1-2"), Root Damage/Decay, Trunk Decay, Basal Decay, Broken Limbs, Stressed,
531	7,6	holly, American	Ilex opaca	70	Good	9	2	5.0	14	2	X									Codominant stems.	Full Crown, Confined Roots
532	13	Japanese cryptomeria	Cryptomeria japonica	53	Fair	8	1	7.0	20	2	X									Codominant stems. Stub cuts. Poor spacing.	Narrow Crown, Trunk Decay, Included Bark, Weak Union,
533	10,7.5	Japanese cryptomeria	Cryptomeria japonica	53	Fair	8	2	7.0	20	2	X									Codominant stems.	One Sided, Included Bark, Weak Union,
534	23	pine, eastern white	Pinus strobus	58	Fair	18	1	9.0	35	2	X									Many pruning wounds on trunk	One Sided, Trunk Decay,
536	15	pine, eastern white	Pinus strobus	63	Fair	14	1	8.0	23	2	X									Buried root collar. Recent disturbance	Full Crown, Root Damage/Decay,
538	12	cherry, Yoshino	Prunus x yedoensis	75	Good	11	1	7.0	18	2	X									DBH at 3'. Excessive mulch	Full Crown, Branch Decay,
539	31	sycamore, American	Platanus occidentalis	67	Fair	32	1	10.0	47	2	X									Codominant stems.	Full Crown, Small DW (1-2"), Branch Decay, Confined Roots
540	38.5	oak, willow	Quercus phellos	50	Fair	30	1	11.0	57	2	X										Full Crown, Large DW (3"+), Small DW (1-2"), Compacted Soils, Root Damage/Decay, Trunk Decay, Branch Decay, Stressed, Confined Roots
541	41	oak, willow	Quercus phellos	72	Good	50	1	11.0	62	2			X	X	X	X		X			Full Crown, Large DW (3"+), Trunk Decay, Branch Decay, Confined Roots
543	37	oak, willow	Quercus phellos	53	Fair	36	1	11.0	56	2	X										Full Crown, Large DW (3"+), Root Damage/Decay, Trunk Decay, Branch Decay, Stressed, Confined Roots
544	27.5	oak, willow	Quercus phellos	55	Fair	35	1	10.0	42	2	X										Full Crown, Large DW (3"+), Small DW (1-2"), Compacted Soils, Root Damage/Decay, Trunk Decay, Branch Decay, Stressed, Confined Roots
545	12	holly, American	Ilex opaca	59	Fair	8	1	7.0	18	2	X										Full Crown, Trunk Decay, Vines, Confined Roots
546	9,6.5	holly, American	Ilex opaca	42	Poor	6	2	6.0	17	2	X									decay in both stems, removal recommended	Trunk Decay, Basal Decay, Branch Decay, Weak Union, Vines, Confined Roots
547	17	holly, American	Ilex opaca	58	Fair	10	1	8.0	26	2	X										Full Crown, Trunk Decay, Branch Decay, Vines, Confined Roots
548	12.5	holly, American	Ilex opaca	61	Fair	11	1	7.0	18	2									NO IMPACT	Codominant	Full Crown, Trunk Decay, Weak Union, Vines,
549	22	maple, red	Acer rubrum	64	Fair	21	1	9.0	33	2	X									Codominant. Girdling root 2"	Full Crown, Compacted Soils, Included Bark, Girdling Roots,
550	17	maple, red	Acer rubrum	30	Poor	11	1	8.0	26	2	X									Top removed. Decay throughout remaining tree. Decay fungi conks present. removal recommended	Root Damage/Decay, Trunk Decay, Basal Decay, Branch Decay, Serious Decline, Confined Roots
551	12	maple, red	Acer rubrum	44	Poor	13	1	7.0	18	2	X									Girdling root 2". Codominant, splitting.	Trunk Decay, Branch Decay, Broken Limbs, Weak Union, Girdling Roots, Confined Roots
552	16	sycamore, American	Platanus occidentalis	69	Fair	17	1	8.0	24	2	X										Full Crown, Branch Decay,
553	9	pine, eastern white	Pinus strobus	69	Fair	8	1	5.0	14	3	X										One Sided, Small DW (1-2"),
555	31	cedar, deodar	Cedrus deodara	66	Fair	25	1	10.0	47	3	X									Codominant	Full Crown, Large DW (3"+), Included Bark, Confined Roots
556	7	pine, eastern white	Pinus strobus	64	Fair	6	1	4.0	11	2	X									Thin crown	Small DW (1-2"), Broken Limbs, Suppressed, Confined Roots
557	9	pine, eastern white	Pinus strobus	63	Fair	6	1	5.0	14	2	X										One Sided, Basal Decay, Excessive Lean, Confined Roots
558	19	pine, eastern white	Pinus strobus	69	Fair	10	1	9.0	29	2	X										Full Crown, Confined Roots
560	7	pine, eastern white	Pinus strobus	69	Fair	7	1	4.0	11	2	X										Full Crown, Small DW (1-2"), Confined Roots
561	5	pine, eastern white	Pinus strobus	34	Poor	6	1	3.0	8	4	X									trunk decay. removal recommended	Narrow Crown, Trunk Decay, Basal Decay, Stressed, Serious Decline, Confined Roots
562	11	pine, eastern white	Pinus strobus	58	Fair	10	1	6.0	17	3	X										Full Crown, Small DW (1-2"), Stressed, Confined Roots
563	11	pine, eastern white	Pinus strobus	69	Fair	12	1	6.0	17	2	X										Full Crown, Confined Roots
565	13	pine, eastern white	Pinus strobus	69	Fair	11	1	7.0	20	2	X										Full Crown, Small DW (1-2"), Confined Roots
566	8	pine, eastern white	Pinus strobus	66	Fair	6	1	5.0	12	2	X										Confined Roots
567	17	pine, eastern white	Pinus strobus	58	Fair	8	1	8.0	26	3	X										Small DW (1-2"), Broken Limbs, Excessive Lean, Confined Roots
568	13.5	pine, eastern white	Pinus strobus	69	Fair	9	1	7.0	21	2	X										Small DW (1-2"), Confined Roots
569	12	pine, eastern white	Pinus strobus	63	Fair	14	1	7.0	18	3	X										One Sided, Small DW (1-2"), Confined Roots
570	14	pine, eastern white	Pinus strobus	66	Fair	7	1	7.0	21	3	X										One Sided, Small DW (1-2"), Confined Roots
571	12	pine, eastern white	Pinus strobus	53	Fair	9	1	7.0	18	3	X										One Sided, Small DW (1-2"), Trunk Decay, Suppressed, Confined Roots
572	13	pine, eastern white	Pinus strobus	53	Fair	8	1	7.0	20	3	X									Thin crown. Large pruning wound on trunk.	One Sided, Trunk Decay, Confined Roots
574	10	pine, eastern white	Pinus strobus	48	Poor	6	1	6.0	15	3	X									BROKEN TOP	Confined Roots
575	16	pine, eastern white	Pinus strobus	66	Fair	8	1	8.0	24	3	X										One Sided, Small DW (1-2"), Confined Roots
576	11	pine, eastern white	Pinus strobus	59	Fair	9	1	6.0	17	3	X										One Sided, Small DW (1-2"), Broken Limbs, Excessive Lean, Confined Roots
577	6,6	pine, eastern white	Pinus strobus	44	Poor	7	2	5.0	12	4	X									BROKEN TOP. Codominant. removal recommended	Trunk Decay, Included Bark, Insect/Disease Problem, Girdling Roots, Confined Roots
578	16	pine, eastern white	Pinus strobus	69	Fair	12	1	8.0	24	3	X										Small DW (1-2"), Confined Roots
579	15	pine, eastern white	Pinus strobus	69	Fair	12	1	8.0	23	3	X										Small DW (1-2"), Confined Roots
580	7	holly, American	Ilex opaca	50	Fair	5	1	4.0	11	3	X									RECENT CONSTRUCTION	Trunk Decay, Stressed, Mechanical Damage, Confined Roots
581	6	holly, American	Ilex opaca	69	Fair	5	1	4.0	9	3	X										Narrow Crown, Stressed, Confined Roots
582	8	holly, American	Ilex opaca	50	Fair	8	1	5.0	12	3	X									RECENT CONSTRUCTION	Trunk Decay, Mechanical Damage, Confined Roots
583	6	holly, American	Ilex opaca	64	Fair	5	1	4.0	9	3	X										Stressed, Vines, Mechanical Damage, Confined Roots
584	8	holly, American	Ilex opaca	67	Fair	8	1	5.0	12	3	X										Trunk Decay, Branch Decay, Vines, Confined Roots
585	9	holly, American	Ilex opaca	67	Fair	9	1	5.0	14	3	X										Trunk Decay, Branch Decay, Confined Roots
587	5	maple, red	Acer rubrum	88	Good	8	1	3.0	8	2	X									Codominant	Full Crown,
588	35	oak, willow	Quercus phellos	69	Fair	36	1	10.0	53	2	X										Full Crown, Trunk Decay, Confined Roots
589	7.5	holly, Chinese	Ilex cornuta	69	Fair	3	1	5.0	12	3	X										Confined Roots
590	4	holly, Chinese	Ilex cornuta	67	Fair	3	1	3.0	6	3	X										Confined Roots
591	22	maple, sugar	Acer saccharum	63	Fair	26	1	9.0	33	3	X										Full Crown, Trunk Decay, Branch Decay, Confined Roots
592	22	oak, willow	Quercus phellos	66	Fair	24	1	9.0	33	3	X										Full Crown, Trunk Decay, Confined Roots
593	20	maple, sugar	Acer saccharum	63	Fair	18	1	9.0	30	3	X										Full Crown, Included Bark, Weak Union, Confined Roots
594	7,7.5	dogwood, Kousa	Cornus kousa	66	Fair	16	3	6.0	17	3	X										Trunk Decay, Branch Decay, Included Bark,
595	30	oak, willow	Quercus phellos	66	Fair	25	1	10.0	45	2	X									Fungal fruiting bodies on large trunk wound.	One Sided, Trunk Decay, Vines, Mechanical Damage, Confined Roots
596	20	magnolia, southern	Magnolia grandiflora	64	Fair	20	1	9.0	30	3	X									Codominant stems.	One Sided, Small DW (1-2"), Included Bark, Confined Roots
597	5.5,4.5,4,4	dogwood, Kousa	Cornus kousa	70	Good	9	4	5.0	14	2	X										Large DW (3"+), Trunk Decay, Confined Roots
598	8	holly, American	Ilex opaca	66	Fair	6	1	5.0	12	2	X										Full Crown, Trunk Decay,
599	5	holly, American	Ilex opaca	66	Fair	5	1	3.0	8	3	X										Trunk Decay, Basal Decay,
600	5.5	holly, American	Ilex opaca	59	Fair	5	1	4.0	9	3	X										Trunk Decay,
601	11	holly, American	Ilex opaca	63	Fair	8	1	6.0	17	3	X									Codominant	Trunk Decay, Included Bark,
602	8	holly, American	Ilex opaca	59	Fair	6	1	5.0	12	3	X										Trunk Decay, Broken Limbs, Confined Roots
603	10,7	holly, American	Ilex opaca	59	Fair	6	2	7.0	18	3	X									Codominant stems.	Trunk Decay, Broken Limbs, Included Bark, Weak Union, Mechanical Damage, Confined Roots
604	14	holly, American	Ilex opaca	69	Fair	9	1	7.0	21	3	X										Full Crown, Confined Roots
605	10.5	hemlock, eastern	Tsuga candensis	64	Fair	9	1	6.0	15	4	X									WOLLY ADELGID	Full Crown, Small DW (1-2"), Insect/Disease Problem,
606	7	hemlock, eastern	Tsuga candensis	50	Fair	6	1	4.0	11	4	X									WOLLY ADELGID	Small DW (1-2"), Basal Decay, Stressed, Serious Decline, Insect/Disease Problem, Confined Roots
607	8,6	hemlock, eastern	Tsuga candensis	61	Fair	11	2	6.0	15	4	X									WOLLY ADELGID	Small DW (1-2"), Basal Decay, Weak Union, Stressed, Insect/Disease Problem,
608	11	hemlock, eastern	Tsuga candensis	55	Fair	8	1	6.0	17	4	X									WOLLY ADELGID	Small DW (1-2"), Trunk Decay, Insect/Disease Problem, Confined Roots
609	9	hemlock, eastern	Tsuga candensis	52	Fair	5	1	5.0	14	4	X									WOLLY ADELGID	One Sided, Small DW (1-2"), Trunk Decay, Basal Decay, Insect/Disease Problem, Confined Roots
610	7,7	hemlock, eastern	Tsuga candensis	64	Fair	8	2	6.0	15	3	X									WOLLY ADELGID	Small DW (1-2"), Basal Decay, Weak Union, Insect/Disease Problem, Confined Roots
611	8	hemlock, eastern	Tsuga candensis	69	Fair	7	1	5.0	12	3	X									WOLLY ADELGID	Insect/Disease Problem,

Date: SEPTEMBER 2019

Tree Protection Action Key (TPAK)

Project: Crystal House

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	Condition Rating %	Condition Rating	Approx Crown Radius (FT)	Number of Stems	SCRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone (1.5 ft radius/in DBH)	Priority (1-4)	Removal	Removal By Arborist	Preservation Measures: Root Prune	Tree Protection Fence	Mulch	Tree Condition Inspections	By-Hand Demolition	Construction Oversight/Monitoring	Comments	Additional Notes	Condition Notes
612	25	oak, willow	Quercus phellos	66	Fair	24	1	10.0	38	2	X									Large trunk wound. Good response growth. Decay fungi visible.	Full Crown, Trunk Decay, Mechanical Damage, Confined Roots
613	7	hemlock, eastern	Tsuga candensis	48	Poor	6	1	4.0	11	4	X									WOLLY ADELGID	Large DW (3"+), Small DW (1-2"), Stressed, Insect/Disease Problem, Confined Roots
614	20	oak, willow	Quercus phellos	73	Good	21	1	9.0	30	2	X										Full Crown, Included Bark, Confined Roots
615	10.5	spruce, Norway	Picea abies	69	Fair	11	1	6.0	15	2	X										Small DW (1-2"), Confined Roots
616	21	oak, willow	Quercus phellos	77	Good	21	1	9.0	32	2	X										Full Crown, Confined Roots
617	18.5	oak, willow	Quercus phellos	73	Good	18	1	8.0	27	2	X										Full Crown, Confined Roots
619	34	oak, pin	Quercus palustris	69	Fair	36	1	10.0	51	2	X										Full Crown, Small DW (1-2"), Trunk Decay, Confined Roots
620	35	oak, pin	Quercus palustris	69	Fair	34	1	10.0	53	2	X										Full Crown, Confined Roots
621	27	magnolia, southern	Magnolia grandiflora	64	Fair	24	1	10.0	41	3	X									Large >4" girdling root.	Full Crown, Branch Decay, Girdling Roots, Confined Roots
622	5,4,3.5	magnolia, saucer	Magnolia x soulangiana	67	Fair	10	3	5.0	12	2	X										Full Crown, Trunk Decay, Vines, Mechanical Damage, Confined Roots
623	36	oak, willow	Quercus phellos	81	Good	40	1	10.0	54	2	X										Full Crown, Trunk Decay, Vines, Confined Roots
624	20	buckeye, yellow	Aesculus flava	66	Fair	14	1	9.0	30	2	X										One Sided, Trunk Decay, Confined Roots
625	21.5	buckeye, yellow	Aesculus flava	66	Fair	15	1	9.0	33	2	X									Codominant stems.	Trunk Decay, Confined Roots
626	22	buckeye, yellow	Aesculus flava	66	Fair	20	1	9.0	33	2				X	X	X	X		X	Codominant stems.	One Sided, Trunk Decay, Confined Roots
627	18.5	buckeye, yellow	Aesculus flava	69	Fair	15	1	8.0	27	2		X									One Sided, Confined Roots
628	20.5	buckeye, yellow	Aesculus flava	69	Fair	18	1	9.0	30	2	X									Codominant stems.	Confined Roots
629	16	buckeye, yellow	Aesculus flava	66	Fair	12	1	8.0	24	2	X										Trunk Decay, Confined Roots
630	21	buckeye, yellow	Aesculus flava	64	Fair	18	1	9.0	32	2	X									Codominant stems.	Root Damage/Decay, Trunk Decay, Included Bark, Confined Roots
631	16	buckeye, yellow	Aesculus flava	67	Fair	16	1	8.0	24	2	X										Branch Decay, Confined Roots
632	20	buckeye, yellow	Aesculus flava	66	Fair	20	1	9.0	30	2		X									One Sided, Basal Decay, Stressed, Mechanical Damage, Confined Roots
633	19.5	buckeye, yellow	Aesculus flava	67	Fair	18	1	9.0	30	2	X										Full Crown, Root Damage/Decay, Trunk Decay, Basal Decay, Broken Limbs, Confined Roots
634	23	buckeye, yellow	Aesculus flava	73	Good	20	1	9.0	35	2	X										Full Crown, Small DW (1-2"), Included Bark, Confined Roots
635	22	buckeye, yellow	Aesculus flava	48	Poor	20	1	9.0	33	4	X									removal recommended	Compacted Soils, Root Damage/Decay, Trunk Decay, Basal Decay, Broken Limbs, Stressed, Mechanical Damage, Girdling Roots, Confined Roots
636	17.5	buckeye, yellow	Aesculus flava	66	Fair	15	1	8.0	27	2	X										Trunk Decay, Included Bark, Confined Roots
639	11.5	holly, American	Ilex opaca	53	Fair	8	1	7.0	18	2	X										Large DW (3"+), Trunk Decay, Branch Decay, Stressed, Insect/Disease Problem,
640	12.5	holly, American	Ilex opaca	53	Fair	8	1	7.0	18	2	X										Small DW (1-2"), Trunk Decay, Branch Decay, Stressed, Insect/Disease Problem,
641	30	Japanese pagodatree	Styphnolobium japonicum	67	Fair	30	1	10.0	45	2	X									DBH at 3.5'. Lifting sidewalk	Full Crown, Small DW (1-2"), Included Bark, Confined Roots
642	31	Japanese pagodatree	Styphnolobium japonicum	63	Fair	25	1	10.0	47	3	X									DBH at 3.5'	Full Crown, Large DW (3"+), Small DW (1-2"), Trunk Decay, Basal Decay, Branch Decay, Included Bark, Confined Roots
643	19	Japanese pagodatree	Styphnolobium japonicum	67	Fair	28	1	9.0	29	2	X										Full Crown, Small DW (1-2"), Trunk Decay, Confined Roots
644	24	Japanese pagodatree	Styphnolobium japonicum	70	Good	25	1	10.0	36	3	X									DBH at 3.5'	Narrow Crown, Large DW (3"+), Small DW (1-2"), Trunk Decay, Included Bark, Confined Roots
645	12	holly, American	Ilex opaca	73	Good	8	1	7.0	18	2	X										Broken Limbs, Included Bark,
646	13	holly, American	Ilex opaca	69	Fair	10	1	7.0	20	2	X										Trunk Decay, Included Bark, Mechanical Damage,
647	15	holly, American	Ilex opaca	0	Dead	6	1	8.0	23	4	X									ASSESSED AS DEAD	Trunk Decay,
648	12	holly, American	Ilex opaca	67	Fair	10	1	7.0	18	2	X										Trunk Decay, Branch Decay, Included Bark, Weak Union,
649	38	oak, willow	Quercus phellos	73	Good	30	1	11.0	57	2	X									Many large pruning wounds	Full Crown, Trunk Decay, Branch Decay, Confined Roots
650	33	oak, willow	Quercus phellos	69	Fair	30	1	10.0	50	2	X									Many large pruning Wounds. Fungal fruiting bodies present.	Full Crown, Small DW (1-2"), Compacted Soils, Root Damage/Decay, Trunk Decay, Confined Roots
651	30	oak, willow	Quercus phellos	77	Good	30	1	10.0	45	2	X										Full Crown, Small DW (1-2"), Trunk Decay, Branch Decay, Confined Roots
652	13	magnolia, southern	Magnolia grandiflora	64	Fair	16	1	7.0	20	2									NO IMPACT		Full Crown, Trunk Decay, Basal Decay, Included Bark, Confined Roots
653	15	magnolia, southern	Magnolia grandiflora	59	Fair	15	1	8.0	23	2									NO IMPACT	codominant	Full Crown, Trunk Decay, Branch Decay, Included Bark, Weak Union, Confined Roots
656	19	buckeye, yellow	Aesculus flava	69	Fair	15	1	9.0	29	2									NO IMPACT		Trunk Decay, Confined Roots
657	24	buckeye, yellow	Aesculus flava	66	Fair	17	1	10.0	36	2									NO IMPACT	Codominant stems.	One Sided, Included Bark, Confined Roots
658	16	buckeye, yellow	Aesculus flava	69	Fair	14	1	8.0	24	2									NO IMPACT		One Sided, Confined Roots
659	24	buckeye, yellow	Aesculus flava	64	Fair	18	1	10.0	36	2									NO IMPACT	Codominant stems.	Trunk Decay, Included Bark, Confined Roots
661	18	buckeye, yellow	Aesculus flava	66	Fair	15	1	8.0	27	2									NO IMPACT		Trunk Decay, Mechanical Damage, Confined Roots
662	20	buckeye, yellow	Aesculus flava	66	Fair	15	1	9.0	30	2			X	X	X	X		X			Trunk Decay, Confined Roots
663	22	buckeye, yellow	Aesculus flava	66	Fair	15	1	9.0	33	2			X	X	X	X		X			Trunk Decay, Included Bark, Confined Roots
664	17	buckeye, yellow	Aesculus flava	66	Fair	15	1	8.0	26	2			X	X	X	X		X			Root Damage/Decay, Trunk Decay, Confined Roots
665	12,4,3	holly, Chinese	Ilex cornuta	64	Fair	10	3	7.0	20	3			X	X	X	X		X			Full Crown, Small DW (1-2"), Trunk Decay, Included Bark, Confined Roots
666	10	holly, Chinese	Ilex cornuta	64	Fair	10	1	6.0	15	2			X	X	X	X		X		Codominant stems.	Full Crown, Trunk Decay, Basal Decay, Included Bark, Confined Roots
667	10,10,3	holly, Chinese	Ilex cornuta	63	Fair	15	3	7.0	21	2	X										Full Crown, Small DW (1-2"), Trunk Decay, Confined Roots
668	26	buckeye, yellow	Aesculus flava	64	Fair	20	1	10.0	39	3	X									Large cavity	Full Crown, Trunk Decay, Confined Roots
669	19	buckeye, yellow	Aesculus flava	66	Fair	16	1	9.0	29	3	X									Codominant stems.	Full Crown, Trunk Decay, Included Bark, Confined Roots
670	18	buckeye, yellow	Aesculus flava	73	Good	20	1	8.0	27	2			X	X	X	X	X	X			Full Crown, Trunk Decay, Confined Roots
671	4,4,4,3,3,3,3, 1	magnolia, saucer	Magnolia x soulangiana	75	Good	8	8	5.0	14	2		X									Full Crown,
672	4,4,4,2	magnolia, saucer	Magnolia x soulangiana	75	Good	8	4	4.0	11	2		X									Full Crown, Included Bark,
673	15	buckeye, yellow	Aesculus flava	69	Fair	10	1	8.0	23	2			X	X	X	X	X	X			Full Crown, Confined Roots
674	16	buckeye, yellow	Aesculus flava	67	Fair	13	1	8.0	24	2			X	X	X	X	X	X			Full Crown, Root Damage/Decay, Trunk Decay, Weak Union, Confined Roots
677	8,9	magnolia, southern	Magnolia grandiflora	70	Good	10	2	7.0	18	2			X	X	X	X		X			Full Crown, Root Damage/Decay, Included Bark,
678	22	cedar, deodar	Cedrus deodara	72	Good	18	1	9.0	33	2			X	X	X	X		X			Full Crown, Confined Roots
681	43	oak, willow	Quercus phellos	84	Good	30	1	11.0	65	2			X	X	X	X		X			Full Crown, Root Damage/Decay, Trunk Decay,
682	33	sycamore, American	Platanus occidentalis	69	Fair	25	1	10.0	50	2	X										Full Crown, Root Damage/Decay, Trunk Decay, Branch Decay, Confined Roots
683	21	magnolia, southern	Magnolia grandiflora	75	Good	15	1	9.0	32	2									NO IMPACT	Large girdling root (5")	Full Crown, Trunk Decay, Vines, Girdling Roots, Confined Roots
684	20	magnolia, southern	Magnolia grandiflora	70	Good	15	1	9.0	30	2									NO IMPACT	Codominant. Large girdling root.	Full Crown, Included Bark, Vines, Girdling Roots,
685	14	holly, American	Ilex opaca	75	Good	10	1	7.0	21	2			X	X	X	X		X			Full Crown,
686	12.6	holly, American	Ilex opaca	69	Fair	10	2	7.0	20	2		X								Codominant	Full Crown, Included Bark,
687	15	holly, American	Ilex opaca	69	Fair	12	1	8.0	23	2		X								Codominant	Full Crown, Small DW (1-2"), Included Bark,
688	13	holly, American	Ilex opaca	75	Good	10	1	7.0	20	2			X	X	X	X		X			Full Crown,
689	9,7.3	holly, American	Ilex opaca	69	Fair	10	3	7.0	18	2									NO IMPACT	Small stem is dead.	Full Crown, Large DW (3"+), Included Bark,
690	9,4	holly, American	Ilex opaca	63	Fair	7	2	6.0	15	3			X	X	X	X	X	X			Full Crown, Trunk Decay, Included Bark, Confined Roots
691	7	holly, American	Ilex opaca	63	Fair	7	1	4.0	11	3									NO IMPACT		Full Crown, Excessive Lean,
692	9	holly, American	Ilex opaca	75	Good	8	1	5.0	14	2									NO IMPACT		Full Crown, Vines,
693	11,6.5	holly, American	Ilex opaca	64	Fair	10	2	7.0	20	3			X	X	X	X	X	X			Full Crown, Small DW (1-2"), Trunk Decay, Included Bark, Confined Roots
694	8	holly, American	Ilex opaca	55	Fair	6	1	5.0	12	3									NO IMPACT	Extensive decay	Full Crown, One Sided, Trunk Decay, Basal Decay, Broken Limbs, Included Bark, Vines, Confined Roots
695	9,5	dogwood, spp.	Cornus spp.	58	Fair	10	2	6.0	15	3			X	X	X	X	X	X			Full Crown, Trunk Decay, Branch Decay, Included Bark, Confined Roots
696	30	oak, willow	Quercus phell

Date: SEPTEMBER 2019

Tree Protection Action Key (TPAK)

Project: Crystal House

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	Condition Rating %	Condition Rating	Approx Crown Radius (FT)	Number of Stems	SCRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone Radius (1.5ft radius/in DBH)	Priority (1-4)	Removal	Removal By Arborist	Preservation Measures: Root Prune	Tree Protection Fence	Mulch	Tree Condition Inspections	By-Hand Demolition	Construction Oversight/Monitoring	Comments	Additional Notes	Condition Notes
701	11	holly, American	Ilex opaca	64	Fair	8	1	6.0	17	2	X										Full Crown, Trunk Decay, Confined Roots
702	10.5	holly, American	Ilex opaca	66	Fair	8	1	6.0	15	2	X										Full Crown, Trunk Decay, Broken Limbs, Confined Roots
703	19.5	oak, willow	Quercus phellos	72	Good	15	1	9.0	30	2	X										Full Crown, Confined Roots
704	14.5	oak, willow	Quercus phellos	67	Fair	15	1	7.0	21	2	X										Full Crown, Small DW (1-2"), Confined Roots
705	17	oak, willow	Quercus phellos	67	Fair	15	1	8.0	26	2	X										Full Crown, Small DW (1-2"), Confined Roots
707	16	oak, willow	Quercus phellos	63	Fair	15	1	8.0	24	2	X									Codominant	Full Crown, Included Bark, Confined Roots
708	18	pine, eastern white	Pinus strobus	66	Fair	15	1	8.0	27	2	X										Full Crown, Small DW (1-2"), Confined Roots
709	17	pine, eastern white	Pinus strobus	64	Fair	15	1	8.0	26	3	X										Full Crown, Excessive Lean, Confined Roots
710	11	spruce, Norway	Picea abies	64	Fair	10	1	6.0	17	3	X										Small DW (1-2"), Excessive Lean, Confined Roots
711	11	spruce, Norway	Picea abies	58	Fair	10	1	6.0	17	2	X										Small DW (1-2"), Stressed, Confined Roots
712	14	spruce, Norway	Picea abies	70	Good	12	1	7.0	21	2	X										Small DW (1-2"), Root Damage/Decay, Broken Limbs, Confined Roots
713	11	spruce, Norway	Picea abies	67	Fair	10	1	6.0	17	2	X										One Sided, Small DW (1-2"), Confined Roots
714	10	spruce, Norway	Picea abies	70	Good	8	1	6.0	15	2	X										Confined Roots
715	11	hemlock, eastern	Tsuga candensis	0	Dead	10	1	6.0	17	3	X									ASSESSED AS DEAD	Basal Decay, Confined Roots
716	4	maple, red	Acer rubrum	80	Good	6	1	3.0	6	2	X									Excessive mulch. Buried root collar.	Full Crown, Branch Decay, Broken Limbs, Confined Roots
717	9	oak, northern red	Quercus rubra	47	Poor	10	1	5.0	14	2	X									3" girdling root	Full Crown, Large DW (3"+), Small DW (1-2"), Stressed, Serious Decline, Girdling Roots, Confined Roots
719	16	oak, northern red	Quercus rubra	59	Fair	15	1	8.0	24	2	X										Full Crown, Small DW (1-2"), Confined Roots
720	47	maple, red	Acer rubrum	84	Good	5	1	12.0	71	2	X									Codominant	Full Crown, Vines, Girdling Roots, Confined Roots
721	44	oak, willow	Quercus phellos	77	Good	35	1	11.0	66	2	X									Fungal bodies present on large, old pruning wound	Full Crown, Small DW (1-2"), Trunk Decay, Branch Decay, Confined Roots
722	7,6,3,3,5,5,5, 4,6	magnolia, saucer	Magnolia x soulangiana	73	Good	12	9	8.0	23	2	X										Full Crown, Confined Roots
723	40	oak, willow	Quercus phellos	75	Good	35	1	11.0	60	2	X										Full Crown, Large DW (3"+), Small DW (1-2"), Branch Decay, Confined Roots
724	28	oak, willow	Quercus phellos	72	Good	22	1	10.0	42	2	X										Full Crown, Trunk Decay, Confined Roots
725	17	maple, sugar	Acer saccharum	59	Fair	20	1	8.0	26	3	X										Full Crown, Small DW (1-2"), Trunk Decay, Basal Decay, Confined Roots
726	9	holly, American	Ilex opaca	59	Fair	7	1	5.0	14	3	X										Full Crown, Trunk Decay, Basal Decay, Confined Roots
727	9	holly, American	Ilex opaca	61	Fair	7	1	5.0	14	3	X										Full Crown, Trunk Decay, Confined Roots
728	11,13	Japanese pagodatree	Styphnolobium japonicum	59	Fair	15	2	8.0	26	2	X										One Sided, Large DW (3"+), Small DW (1-2"), Trunk Decay, Branch Decay,
729	17	Japanese pagodatree	Styphnolobium japonicum	61	Fair	15	1	8.0	26	2	X									Codominant	Trunk Decay, Branch Decay, Confined Roots
730	16	Japanese pagodatree	Styphnolobium japonicum	63	Fair	20	1	8.0	24	2	X										Small DW (1-2"), Trunk Decay, Branch Decay, Vines, Confined Roots
731	21	maple, sugar	Acer saccharum	58	Fair	15	1	9.0	32	3	X										Trunk Decay, Branch Decay, Girdling Roots, Confined Roots
734	8,7,5	crabapple, flowering	Malus spp.	48	Poor	10	3	7.0	18	4	X									Excessive Sprouting	Large DW (3"+), Trunk Decay, Basal Decay, Branch Decay, Stressed,
735	19	sycamore, American	Platanus occidentalis	69	Fair	20	1	9.0	29	2	X									Unidentified insect masses on bottom side of some branches.	Full Crown, Root Damage/Decay, Trunk Decay, Excessive Lean, Confined Roots
736	9	sycamore, American	Platanus occidentalis	58	Fair	12	1	5.0	14	2	X										Full Crown, Trunk Decay, Stressed, Confined Roots
738	8	yellowwood	Cladrastis kentukea	30	Poor	5	1	5.0	12	3	X										Trunk Decay, Basal Decay, Branch Decay, Stressed, Mechanical Damage, Serious Decline, Confined Roots
739	16	oak, northern red	Quercus rubra	64	Fair	18	1	8.0	24	2	X										Full Crown, Small DW (1-2"), Trunk Decay, Branch Decay, Confined Roots
740	18	oak, northern red	Quercus rubra	72	Good	16	1	8.0	27	2	X										Full Crown, Small DW (1-2"), Confined Roots
741	8	oak, northern red	Quercus rubra	56	Fair	10	1	5.0	12	3	X										Full Crown, Small DW (1-2"), Stressed, Confined Roots
742	28	sycamore, American	Platanus occidentalis	63	Fair	25	1	10.0	42	3			X	X	X	X	X	X		Hangers.	Full Crown, Large DW (3"+), Trunk Decay, Confined Roots
743	10	sycamore, American	Platanus occidentalis	73	Good	15	1	6.0	15	2			X	X	X	X	X	X		Codominant stems.	Full Crown, Trunk Decay, Confined Roots
744	5	maple, red	Acer rubrum	72	Good	6	1	3.0	8	4	X									Uncorrectable. Codominant stems.	Girdling Roots,
745	3	maple, red	Acer rubrum	80	Good	4	1	2.0	5	4	X									Severe circling root mass. Uncorrectable. Severe circling roots 2-3". Uncorrectable.	Full Crown, Girdling Roots,
746	24	sycamore, American	Platanus occidentalis	72	Good	20	1	10.0	36	2			X	X	X	X	X	X			Full Crown, Small DW (1-2"), Trunk Decay, Confined Roots
747	20	sycamore, American	Platanus occidentalis	69	Fair	25	1	9.0	30	2			X	X	X	X	X	X			Full Crown, Small DW (1-2"), Root Damage/Decay, Confined Roots
748	21	sycamore, American	Platanus occidentalis	64	Fair	25	1	9.0	32	2			X	X	X	X	X	X		Excessive sprouting near pruning wounds.	Full Crown, Root Damage/Decay, Trunk Decay, Confined Roots
751	13	cherry, Yoshino	Prunus x yedoensis	72	Good	15	1	7.0	20	2			X	X	X	X		X		DBH at 2.5 ft. Excessive mulch	Full Crown, Confined Roots
752	5	cherry, Yoshino	Prunus x yedoensis	84	Good	6	1	3.0	8	2	X									Excessive mulch. Codominant stems.	Full Crown, Broken Limbs,
753	10	douglas-fir	Pseudotsuga menziesii	53	Fair	9	1	6.0	15	2	X									Codominant stems.	Small DW (1-2"), Included Bark, Weak Union, Suppressed, Confined Roots
754	9	douglas-fir	Pseudotsuga menziesii	67	Fair	9	1	5.0	14	2	X										One Sided, Excessive Lean,
755	12	douglas-fir	Pseudotsuga menziesii	70	Good	10	1	7.0	18	2	X										One Sided, Small DW (1-2"), Confined Roots
756	11,6	magnolia, southern	Magnolia grandiflora	70	Good	10	2	7.0	20	3	X									Codominant stems.	Narrow Crown,
757	20	magnolia, southern	Magnolia grandiflora	73	Good	15	1	9.0	30	2	X										One Sided, Small DW (1-2"),
758	22	magnolia, southern	Magnolia grandiflora	70	Good	22	1	9.0	33	2	X										Full Crown, Small DW (1-2"), Broken Limbs,
759	21	oak, scarlet	Quercus coccinea	59	Fair	24	1	9.0	32	2	X									2" girdling root. Confined growing space	Full Crown, Small DW (1-2"), Branch Decay, Stressed, Girdling Roots, Confined Roots
760	28	sycamore, American	Platanus occidentalis	56	Fair	30	1	10.0	42	2	X									BROKEN TOP	One Sided, Root Damage/Decay, Trunk Decay, Branch Decay, Confined Roots
761	2	lilac, common	Syringa vulgaris	75	Good	3	30	2.0	3	2	X									CLUSTER OF LILAC SHRUBS WHITE FLOWERS	
762	2	unknown shrub	unknown shrub	75	Good	3	30	2.0	3	2	X									HEDGEROW ALONG BUILDING PHOTO 103,104	
763	2	juniper, spp.	Juniperus spp.	75	Good	3	10	2.0	3	2									NO IMPACT	HEDGEROW ALONG BUILDING	
764	6,4	holly, Chinese	Ilex cornuta	69	Fair	5	2	4.0	11	2									NO IMPACT	Codominant stems.	Confined Roots
765	5,3	holly, Chinese	Ilex cornuta	69	Fair	4	2	4.0	9	2									NO IMPACT	Codominant stems.	Confined Roots
766	6,6,4,4	holly, Chinese	Ilex cornuta	67	Fair	5	4	6.0	15	2									NO IMPACT		Confined Roots
767	8,8,4,4	holly, Chinese	Ilex cornuta	66	Fair	6	4	7.0	20	2									NO IMPACT		Confined Roots
768	2	holly, Chinese	Ilex cornuta	72	Good	6	6	2.0	3	2									NO IMPACT	HEDGEROW IN PLANTER BOX	Confined Roots
771	2	yew, spp.	Taxus spp.	78	Good	3	10	2.0	3	2	X									CLUSTER OF YEW BETWEEN SIDEWALK AND PARKING LOT	
773	2	holly, Chinese	Ilex cornuta	75	Good	6	66	2.0	3	2									NO IMPACT	HEDGEROW ALONG BUILDING 1 COURTYARD BRICK RETAINING WALL	
774	2	juniper, spp.	Juniperus spp.	75	Good	3	50	2.0	3	2	X									SHRUB CLUSTER ALONG EDGE OF SIDEWALK	
775	2	holly, spp.	Ilex spp.	78	Good	3	100	2.0	3	2	X									HEDGEROW ALONG RETAINING WALL UP TO TAGGED HOLLYS	
776	2	unknown shrub	unknown shrub	75	Good	3	15	2.0	3	2	X									HEDGEROW ALONG BUILDING PHOTO 105-107	
777	5,2,5	holly, Chinese	Ilex cornuta	75	Good	5	2	3.0	8	2	X										Full Crown, Vines,
778	6,3	holly, Chinese	Ilex cornuta	75	Good	5	2	4.0	11	2	X										Full Crown, Trunk Decay, Vines,
779	6,2.5,2	holly, Chinese	Ilex cornuta	75	Good	5	3	4.0	11	2	X										Full Crown,
780	2	holly, spp.	Ilex spp.	75	Good	2	90	2.0	3	2	X									HEDGEROW ALONG EDGE OF SIDEWALK	
781	2	holly, spp.	Ilex spp.	75	Good	4	14	2.0	3	2	X									HEDGEROW ALONG EDGE OF SIDEWALK	
782	2	unknown shrub	unknown shrub	75	Good	3	47	2.0	3	2	X									CLUSTER ALONG BUILDING PHOTO 103,104	
783	2	unknown shrub	unknown shrub	75	Good	3	32	2.0	3	2	X									CLUSTER ALONG CORNER OF BUILDING PHOTO 108,109	
784	1,1,1	crapemyrtle, common	Lagerstroemia indica	86	Good	4	4	2.0	3	2	X										Mechanical Damage,
785	2	unknown shrub	unknown shrub	75	Good	3	49	2.0	3	2	X									CLUSTER ALONG BUILDING PHOTO 110,111	
786	2	juniper, spp.	Juniperus spp.	75	Good	3	4	2.0	3	2	X									CLUSTER ALONG SIDEWALK	
787	2	holly, spp.	Ilex spp.	75	Good	4	14	2.0	3	2	X									CLUSTER ALONG SIDEWALK	
788	2,2,1	dogwood, Kousa	Cornus kousa	73	Good	4	3	2.0	5	2	X										Branch Decay,
789	2,2,2	dogwood, Kousa	Cornus kousa	75	Good	5	3	2.0	5	2	X										Small DW (1-2"),
790	2,1	dogwood, Kousa	Cornus kousa	72	Good	5	2	2.0	3	2	X										Small DW (1-2"),
791	2,1,1,2,2,1,1	dogwood, Kousa	Cornus kousa	72	Good	5	7	3.0	6	2	X										Small DW (1-2"), Branch Decay,
792	2,2,2,1	dogwood, Kousa	Cornus kousa	75	Good	5	4	3.0	6	2	X										
793	2,2,2,1,1	magnolia, saucer	Magnolia x soulangiana	75	Good	3	5	3.0	6	2	X										

Date: SEPTEMBER 2019

Tree Protection Action Key (TPAK)

Project: Crystal House

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Botanical Name	Condition Rating %	Condition Rating	Approx Crown Radius (FT)	Number of Stems	SCRZ Structural Critical Root Zone (radius) in Feet	CRZ Critical Root Zone Radius (1.5ft radius/in DBH)	Priority (1-4)	Removal	Removal By Arborist	Preservation Measures: Root Prune	Tree Protection Fence	Mulch	Tree Condition Inspections	By-Hand Demolition	Construction Oversight/Monitoring	Comments	Additional Notes	Condition Notes
794	2	juniper, spp.	Juniperus spp.	75	Good	3	25	2.0	3	2	X									CLUSTER IN COURTYARD OF BUILDING 2	
795	2	unknown shrub	unknown shrub	75	Good	3	2												NO IMPACT	CLUSTER ALONG PARKING LOT PHOTO 105-107	
796	2	holly, spp.	Ilex spp.	75	Good	4	14	2.0	3	2	X									CLUSTER ALONG CORNER OF BUILDING 2, SHRUB	
797	2	lilac, common	Syringa vulgaris	75	Good	3	17	2.0	3	2	X									SHRUB CLUSTER ALONG CORNER OF BUILDING 3	
798	3	maple, red	Acer rubrum	72	Good	5	1	2.0	5	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Basal Decay, Hardware,
799	3	maple, red	Acer rubrum	73	Good	5	1	2.0	5	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware,
800	3	spruce, Colorado	Picea pungens	70	Good	3	1	2.0	5	2	X									NEWLY PLANTED.	Small DW (1-2"), Stressed, Hardware,
801	3	tuliptree	Liriodendron tulipifera	86	Good	5	0	2.0	5	2	X									NEWLY PLANTED.	Full Crown, Small DW (1-2"), Hardware,
802	3	tuliptree	Liriodendron tulipifera	88	Good	5	1	2.0	5	2	X									NEWLY PLANTED.	Full Crown, Hardware,
803	3	yellowwood	Cladrastis kentukea	86	Good	5	1	2.0	5	2	X									NEWLY PLANTED.	Full Crown, Hardware,
804	3	maple, sugar	Acer saccharum	89	Good	6	1	2.0	5	2	X									NEWLY PLANTED.	Full Crown, Hardware,
805	3	yellowwood	Cladrastis kentukea	77	Good	6	1	2.0	5	2	X									NEWLY PLANTED.	Full Crown, Hardware,
806	3	maple, sugar	Acer saccharum	86	Good	5	1	2.0	5	2	X									NEWLY PLANTED. Some twig dieback.	Full Crown, Hardware,
807	3	maple, sugar	Acer saccharum	88	Good	10	1	2.0	5	2			X	X	X	X		X		NEWLY PLANTED.	Full Crown, Hardware, Confined Roots
808	4	honeylocust, thornless	Gleditsia triacanthos inermis	80	Good	8	1	3.0	6	2			X	X	X	X		X		NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
809	3	honeylocust, thornless	Gleditsia triacanthos inermis	81	Good	8	1	2.0	5	2			X	X	X	X		X		NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Mechanical Damage, Confined Roots
810	4	honeylocust, thornless	Gleditsia triacanthos inermis	77	Good	8	1	3.0	6	2			X	X	X	X		X		NEWLY PLANTED. Excessive mulch. Buried root collar. Codominant stem	Full Crown, Hardware, Confined Roots
811	4	honeylocust, thornless	Gleditsia triacanthos inermis	81	Good	9	1	3.0	6	2			X	X	X	X		X		NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
812	4	honeylocust, thornless	Gleditsia triacanthos inermis	78	Good	6	1	3.0	6	2									NO IMPACT	NEWLY PLANTED. Excessive mulch. Buried root collar.	Narrow Crown, Hardware, Confined Roots
813	4	honeylocust, thornless	Gleditsia triacanthos inermis	78	Good	9	1	3.0	6	2			X	X	X	X		X		NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
814	4	honeylocust, thornless	Gleditsia triacanthos inermis	80	Good	10	1	3.0	6	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar. Very confined root space. In a 7x7' planter.	Full Crown, Hardware, Confined Roots
815	13	cherry, Yoshino	Prunus x yedoensis	70	Good	14	1	7.0	20	2									NO IMPACT	DBH at 2.5'. Many pruning cuts.	Full Crown, Branch Decay, Confined Roots
816	4	maple, red	Acer rubrum	84	Good	10	1	3.0	6	2			X	X	X	X		X		NEWLY PLANTED. codominant Stem	Full Crown, Hardware, Confined Roots
817	4	maple, red	Acer rubrum	86	Good	10	1	3.0	6	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Mechanical Damage, Confined Roots
818	4	maple, red	Acer rubrum	89	Good	10	1	3.0	6	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
819	4	maple, red	Acer rubrum	91	Very Good	8	1	3.0	6	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware,
820	3	maple, red	Acer rubrum	84	Good	7	1	2.0	5	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
821	3	maple, red	Acer rubrum	84	Good	6	1	2.0	5	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware,
822	4	maple, red	Acer rubrum	75	Good	8	1	3.0	6	2	X									NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Trunk Decay, Hardware, Mechanical Damage,
823	3	maple, red	Acer rubrum	86	Good	8	1	2.0	5	2	X									Inside fenced area/no access. NEWLY PLANTED.	Full Crown, Hardware,
824	3	honeylocust, thornless	Gleditsia triacanthos inermis	73	Good	6	1	2.0	5	2	X									Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Hardware, Confined Roots
825	3	honeylocust, thornless	Gleditsia triacanthos inermis	73	Good	6	1	2.0	5	2									NO IMPACT	Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Hardware, Confined Roots
826	3	oak, willow	Quercus phellos	78	Good	6	1	2.0	5	2	X									Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
827	3	oak, willow	Quercus phellos	86	Good	6	1	2.0	5	2			X	X	X	X		X		Inside fenced area/no access. NEWLY PLANTED.	Full Crown, Hardware, Confined Roots
828	3	oak, willow	Quercus phellos	75	Good	6	1	2.0	5	2									NO IMPACT	Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
829	3	honeylocust, thornless	Gleditsia triacanthos inermis	81	Good	6	1	2.0	5	2									NO IMPACT	Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Narrow Crown, Hardware, Confined Roots
830	3	oak, willow	Quercus phellos	78	Good	6	1	2.0	5	2									NO IMPACT	Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Narrow Crown, Hardware, Mechanical Damage, Confined Roots
831	3	oak, willow	Quercus phellos	77	Good	6	1	2.0	5	2									NO IMPACT	Inside fenced area/no access. NEWLY PLANTED. Excessive mulch. Buried root collar.	Full Crown, Hardware, Confined Roots
832	4	tuliptree	Liriodendron tulipifera	77	Good	8	1	3.0	6	2	X									Inside fenced area/no access. NEWLY PLANTED.	Full Crown, Weak Union, Hardware, Confined Roots
833	16,12	crabapple, flowering	Malus spp.	36	Poor	9	2	9.0	30	4	X										Trunk Decay, Branch Decay, Broken Limbs, Included Bark, Confined Roots
834	5,4	hemlock, eastern	Tsuga candensis	45	Poor	4	2	4.0	9	4	X									HEMLOCK WOOLY ADELGID	Severe decay throughout. Hangers.
835	20	sycamore, American	Platanus occidentalis	64	Fair	18	1	9.0	30	3	X									Poor pruning cuts. Powdery mildew	Small DW (1-2"), Included Bark, Stressed, Insect/Disease Problem, Confined Roots
836	3,2,2,2,2,1,1, 1,1,1	mimosa	Albizia julibrissin	47	Poor	7	10	3.0	8	4	X									Invasive. Stump sprout.	Full Crown, Trunk Decay, Mechanical Damage, Insect/Disease Problem, Confined Roots
837	17,13	crabapple, flowering	Malus spp.	48	Poor	18	2	9.0	32	4	X									Codominant. Decayed throughout.	Trunk Decay, Weak Union, Confined Roots
838	17,13	crabapple, flowering	Malus spp.	48	Poor	18	2	9.0	32	4	X									Codominant. Decayed throughout. Multiple decay fungi present. Many Ganoderma conks.	Large DW (3"+), Small DW (1-2"), Trunk Decay, Branch Decay, Broken Limbs, Confined Roots
839	2,1,1	birch, river	Betula nigra	75	Good	3	3	2.0	3	3									NO IMPACT	NEWLY PLANTED. Same location as recently removed tree 660.	
840	9	linden, American	Tilia americana	50	Fair	12	1	5.0	14	4	X									Fenceline tree	Mechanical Damage, Confined Roots
841	8,7	mulberry, white	Morus alba	50	Fair	12	2	6.0	17	4	X									Fenceline tree	Trunk Decay, Broken Limbs, Mechanical Damage,
842	3	spruce, Colorado	Picea pungens	75	Good	3	1	2.0	5	1	X									newly planted	
843	3	spruce, Colorado	Picea pungens	75	Good	3	1	2.0	5	1	X									newly planted	

Wetland Studies and Solutions, Inc. a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

TREE PRESERVATION SCHEDULE

CRYSTAL HOUSES
Arlington County, Virginia
WSSI Project Number: 22621.02

Copyright © 2019 Wetland Studies and Solutions, Inc.

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

SCALE: 1" = 25'

DATE: March 5, 2019

Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ2.02

Computer File Name:
L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 2.02 Plotted By: Hulse, Cary, 11/25/2019 2:20 PM

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
501	10.5	Cunninghamia lanceolata	Yes	69%	58%	3.95	1
502	6,6	Cunninghamia lanceolata	Yes	66%	58%	3.02	1
515	15	Pinus strobus	No	69%	55%	5.67	0
524	17	Pinus strobus	Yes	50%	55%	4.68	1
527	2	Prunus x yedoensis	Yes	59%	55%	0.65	1
528	4	Prunus x yedoensis	Yes	70%	55%	1.55	1
529	5	Prunus x yedoensis	Yes	67%	55%	1.85	1
530	27	Platanus occidentalis	Yes	48%	58%	7.52	2
531	7,6	Ilex opaca	Yes	70%	73%	4.59	1
532	13	Cryptomeria japonica	Yes	53%	70%	4.83	1
533	10,7.5	Cryptomeria japonica	Yes	53%	70%	4.83	1
534	23	Pinus strobus	Yes	58%	55%	7.31	2
536	15	Pinus strobus	Yes	63%	55%	5.16	2
538	12	Prunus x yedoensis	Yes	75%	55%	4.95	1
539	31	Platanus occidentalis	Yes	67%	58%	11.98	3
540	38.5	Quercus phellos	Yes	50%	75%	14.25	3
541	41	Quercus phellos	No	72%	75%	22.10	0
543	37	Quercus phellos	Yes	53%	75%	14.74	3
544	27.5	Quercus phellos	Yes	55%	75%	11.48	3
545	12	Ilex opaca	Yes	59%	73%	5.17	2
546	9,6.5	Ilex opaca	Yes	42%	73%	3.36	1
547	17	Ilex opaca	Yes	58%	73%	7.13	2
548	12.5	Ilex opaca	No	61%	73%	5.30	0
549	22	Acer rubrum	Yes	64%	70%	9.87	2
550	17	Acer rubrum	Yes	30%	70%	3.53	1
551	12	Acer rubrum	Yes	44%	70%	3.68	1
552	16	Platanus occidentalis	Yes	69%	58%	6.33	2
553	9	Pinus strobus	Yes	69%	55%	3.40	1
555	31	Cedrus deodara	Yes	66%	50%	10.17	3
556	7	Pinus strobus	Yes	64%	55%	2.47	1
557	9	Pinus strobus	Yes	63%	55%	3.09	1
558	19	Pinus strobus	Yes	69%	55%	7.18	2
560	7	Pinus strobus	Yes	69%	55%	2.65	1
561	5	Pinus strobus	Yes	34%	55%	0.95	1
562	11	Pinus strobus	Yes	58%	55%	3.50	1
563	11	Pinus strobus	Yes	69%	55%	4.16	1
565	13	Pinus strobus	Yes	69%	55%	4.92	1
566	8	Pinus strobus	Yes	68%	55%	2.89	1
567	17	Pinus strobus	Yes	58%	55%	5.41	2
568	13.5	Pinus strobus	Yes	69%	55%	5.29	2
569	12	Pinus strobus	Yes	63%	55%	4.13	1
570	14	Pinus strobus	Yes	66%	55%	5.05	2
571	12	Pinus strobus	Yes	53%	55%	3.51	1
572	13	Pinus strobus	Yes	53%	55%	3.80	1
574	10	Pinus strobus	Yes	48%	55%	2.66	1
575	16	Pinus strobus	Yes	66%	55%	5.78	2
576	11	Pinus strobus	Yes	59%	55%	3.59	1
577	6,6	Pinus strobus	Yes	44%	55%	1.93	1
578	16	Pinus strobus	Yes	69%	55%	6.05	2
579	15	Pinus strobus	Yes	69%	55%	5.67	2
580	7	Ilex opaca	Yes	50%	73%	2.54	1
581	6	Ilex opaca	Yes	69%	73%	2.99	1
582	8	Ilex opaca	Yes	50%	73%	2.90	1

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
583	6	Ilex opaca	Yes	64%	73%	2.79	1
584	8	Ilex opaca	Yes	67%	73%	3.90	1
585	9	Ilex opaca	Yes	67%	73%	4.38	1
587	5	Acer rubrum	Yes	88%	70%	3.06	1
588	35	Quercus phellos	Yes	69%	75%	18.05	4
589	7.5	Ilex cornuta	Yes	69%	73%	3.99	1
590	4	Ilex cornuta	Yes	67%	73%	1.95	1
591	22	Acer saccharum	Yes	63%	75%	10.31	3
592	22	Quercus phellos	Yes	66%	75%	10.83	3
593	20	Acer saccharum	Yes	63%	75%	9.38	2
594	7,7.5	Cornus kousa	Yes	66%	88%	6.32	2
595	30	Quercus phellos	Yes	66%	75%	14.77	3
596	20	Magnolia grandiflora	Yes	64%	70%	8.97	2
597	5.5,4.5,4,4	Cornus kousa	Yes	70%	88%	5.54	1
598	8	Ilex opaca	Yes	66%	73%	3.81	1
599	5	Ilex opaca	Yes	66%	73%	2.38	1
600	5.5	Ilex opaca	Yes	59%	73%	2.58	1
601	11	Ilex opaca	Yes	63%	73%	4.98	1
602	8	Ilex opaca	Yes	59%	73%	3.44	1
603	10,7	Ilex opaca	Yes	59%	73%	5.17	2
604	14	Ilex opaca	Yes	69%	73%	6.98	2
605	10.5	Tsuga candensis	Yes	64%	60%	3.84	1
606	7	Tsuga candensis	Yes	50%	60%	2.10	1
607	8,6	Tsuga candensis	Yes	61%	60%	3.66	1
608	11	Tsuga candensis	Yes	55%	60%	3.61	1
609	9	Tsuga candensis	Yes	52%	60%	2.78	1
610	7,7	Tsuga candensis	Yes	64%	60%	3.84	1
611	8	Tsuga candensis	Yes	69%	60%	3.30	1
612	25	Quercus phellos	Yes	66%	75%	12.30	3
613	7	Tsuga candensis	Yes	48%	60%	2.03	1
614	20	Quercus phellos	Yes	73%	75%	11.02	3
615	10.5	Picea abies	Yes	69%	55%	3.78	1
616	21	Quercus phellos	Yes	77%	75%	12.06	3
617	18.5	Quercus phellos	Yes	73%	75%	9.91	2
619	34	Quercus palustris	Yes	69%	65%	15.19	4
620	35	Quercus palustris	Yes	69%	65%	15.64	4
621	27	Magnolia grandiflora	Yes	64%	70%	12.11	3
622	5,4,3.5	Magnolia x soulangiana	Yes	67%	70%	3.76	1
623	36	Quercus phellos	Yes	81%	75%	21.94	5
624	20	Aesculus flava	Yes	66%	70%	9.19	2
625	21.5	Aesculus flava	Yes	66%	70%	10.11	3
626	22	Aesculus flava	No	66%	70%	10.11	0
627	18.5	Aesculus flava	Yes	69%	70%	8.66	2
628	20.5	Aesculus flava	Yes	69%	70%	9.63	2
629	16	Aesculus flava	Yes	66%	70%	7.35	2
630	21	Aesculus flava	Yes	64%	70%	9.42	2
631	16	Aesculus flava	Yes	67%	70%	7.53	2
632	20	Aesculus flava	Yes	66%	70%	9.19	2
633	19.5	Aesculus flava	Yes	67%	70%	9.41	2
634	23	Aesculus flava	Yes	73%	70%	11.82	3
635	22	Aesculus flava	Yes	48%	70%	7.46	2
636	17.5	Aesculus flava	Yes	66%	70%	8.27	2
639	11.5	Ilex opaca	Yes	53%	73%	4.62	1

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
640	12.5	Ilex opaca	Yes	53%	73%	4.62	1
641	30	Styphnolobium japonicum	Yes	67%	58%	11.59	3
642	31	Styphnolobium japonicum	Yes	63%	58%	11.14	3
643	19	Styphnolobium japonicum	Yes	67%	58%	7.34	2
644	24	Styphnolobium japonicum	Yes	70%	58%	9.70	2
645	12	Ilex opaca	Yes	73%	73%	6.39	2
646	13	Ilex opaca	Yes	69%	73%	6.48	2
647	15	Ilex opaca	Yes	0%	73%	0.00	0
648	12	Ilex opaca	Yes	67%	73%	5.85	2
649	38	Quercus phellos	Yes	73%	75%	20.93	5
650	33	Quercus phellos	Yes	69%	75%	17.02	4
651	30	Quercus phellos	Yes	77%	75%	17.23	4
652	13	Magnolia grandiflora	No	64%	70%	5.83	0
653	15	Magnolia grandiflora	No	59%	70%	6.23	0
656	19	Aesculus flava	No	69%	70%	9.14	0
657	24	Aesculus flava	No	66%	70%	11.03	0
658	16	Aesculus flava	No	69%	70%	7.70	0
659	24	Aesculus flava	No	64%	70%	10.76	0
661	18	Aesculus flava	No	66%	70%	8.27	0
662	20	Aesculus flava	No	66%	70%	9.19	0
663	22	Aesculus flava	No	66%	70%	10.11	0
664	17	Aesculus flava	No	66%	70%	7.81	0
665	12,4,3	Ilex cornuta	No	64%	73%	6.04	0
666	10	Ilex cornuta	No	64%	73%	4.64	0
667	10,10,3	Ilex cornuta	Yes	63%	73%	6.34	2
668	26	Aesculus flava	Yes	64%	70%	11.66	3
669	19	Aesculus flava	Yes	66%	70%	8.73	2
670	18	Aesculus flava	No	73%	70%	9.25	0
671	4,4,4,3,3,3	Magnolia x soulangiana	Yes	75%	70%	4.73	1
672	4,4,4,2	Magnolia x soulangiana	Yes	75%	70%	3.68	1
673	15	Aesculus flava	No	69%	70%	7.22	0
674	16	Aesculus flava	No	67%	70%	7.53	0
677	8,9	Magnolia grandiflora	No	70%	70%	5.91	0
678	22	Cedrus deodara	No	72%	50%	7.91	0
681	43	Quercus phellos	No	84%	75%	27.21	0
682	33	Platanus occidentalis	Yes	69%	58%	13.05	3
683	21	Magnolia grandiflora	No	75%	70%	11.03	0
684	20	Magnolia grandiflora	No	70%	70%	9.84	0
685	14	Ilex opaca	No	75%	73%	7.61	0
686	12,6	Ilex opaca	Yes	69%	73%	6.48	2
687	15	Ilex opaca	Yes	69%	73%	7.48	2
688	13	Ilex opaca	No	75%	73%	7.07	0
689	9,7,3	Ilex opaca	No	69%	73%	5.98	0
690	9,4	Ilex opaca	No	63%	73%	4.53	0
691	7	Ilex opaca	No	63%	73%	3.17	0
692	9	Ilex opaca	No	75%	73%	4.89	0
693	11,6.5	Ilex opaca	No	64%	73%	6.04	0
694	8	Ilex opaca	No	55%	73%	3.17	0
695	9,5	Cornus spp.	No	58%	60%	3.47	0
696	30	Quercus phellos	Yes	64%	75%	14.41	3
697	11,9	Tsuga candensis	Yes	47%	60%	3.94	1
698	11	Tsuga candensis	Yes	47%	60%	3.09	1
699	9,8.5	Ilex opaca	Yes	64%	73%	5.57	2

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
700	8,5.5	Ilex opaca	Yes	63%	73%	4.53	1
701	11	Ilex opaca	Yes	64%	73%	5.11	2
702	10.5	Ilex opaca	Yes	66%	73%	4.76	1
703	19.5	Quercus phellos	Yes	72%	75%	10.78	3
704	14.5	Quercus phellos	Yes	67%	75%	7.05	2
705	17	Quercus phellos	Yes	67%	75%	8.57	2
707	16	Quercus phellos	Yes	63%	75%	7.50	2
708	18	Pinus strobus	Yes	66%	55%	6.50	2
709	17	Pinus strobus	Yes	64%	55%	5.99	2
710	11	Picea abies	Yes	64%	55%	3.88	1
711	11	Picea abies	Yes	58%	55%	3.50	1
712	14	Picea abies	Yes	70%	55%	5.41	2
713	11	Picea abies	Yes	67%	55%	4.06	1
714	10	Picea abies	Yes	70%	55%	3.87	1
715	11	Tsuga candensis	Yes	0%	60%	0.00	0
716	4	Acer rubrum	Yes	80%	70%	2.23	1
717	9	Quercus rubra	Yes	47%	75%	3.16	1
719	16	Quercus rubra	Yes	59%	75%	7.13	2
720	47	Acer rubrum	Yes	84%	70%	27.76	6
721	44	Quercus phellos	Yes	77%	75%	25.27	6
722	7,6,3,3,3,5,5	Magnolia x soulangiana	Yes	73%	70%	7.71	2
723	40	Quercus phellos	Yes	75%	75%	22.50	5
724	28	Quercus phellos	Yes	72%	75%	15.09	4
725	17	Acer saccharum	Yes	59%	75%	7.57	2
726	9	Ilex opaca	Yes	59%	73%	3.87	1
727	9	Ilex opaca	Yes	61%	73%	3.98	1
728	11,13	Styphnolobium japonicum	Yes	59%	58%	5.80	2
729	17	Styphnolobium japonicum	Yes	61%	58%	5.96	2
730	16	Styphnolobium japonicum	Yes	63%	58%	5.75	2
731	21	Acer saccharum	Yes	58%	75%	9.11	2
734	8,7,5	Malus spp.	Yes	48%	63%	3.63	1
735	19	Platanus occidentalis	Yes	69%	58%	7.51	2
736	9	Platanus occidentalis	Yes	58%	58%	2.99	1
738	8	Cladrastis kentukea	Yes	30%	60%	1.43	1
739	16	Quercus rubra	Yes	64%	75%	7.69	2
740	18	Quercus rubra	Yes	72%	75%	9.70	2
741	8	Quercus rubra	Yes	56%	75%	3.38	1
742	28	Platanus occidentalis	No	63%	58%	10.06	0
743	10	Platanus occidentalis	No	73%	58%	4.22	0
744	5	Acer rubrum	Yes	72%	70%	2.52	1
745	3	Acer rubrum	Yes	80%	70%	1.67	1
746	24	Platanus occidentalis	No	72%	58%	9.92	0
747	20	Platanus occidentalis	No	69%	58%	7.91	0
748	21	Platanus occidentalis	No	64%	58%	7.74	0
751	13	Prunus x yedoensis	No	72%	55%	5.14	0
752	5	Prunus x yedoensis	Yes	84%	55%	2.32	1
753	10	Pseudotsuga menziesii	Yes	53%	50%	2.66	1
754	9	Pseudotsuga menziesii	Yes	67%	50%	3.02	1
755	12	Pseudotsuga menziesii	Yes	70%	50%	4.22	1
756	11,6	Magnolia grandiflora	Yes	70%	70%	6.40	2
757	20	Magnolia grandiflora	Yes	73%	70%	10.28	3
758	22	Magnolia grandiflora	Yes	70%	70%	10.83	3
759	21	Quercus coccinea	Yes	59%	73%	9.04	2

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
760	28	Platanus occidentalis	Yes	56%	58%	9.06	2
761	2	Syringa vulgaris	Yes	75%	75%	1.13	SHRUB
762	2	unknown shrub	Yes	75%	65%	0.98	SHRUB
763	2	Juniperus spp.	No	75%	75%	1.13	SHRUB
764	6,4	Ilex cornuta	No	69%	73%	3.49	0
765	5,3	Ilex cornuta	No	69%	73%	2.99	0
766	6,6,4,4	Ilex cornuta	No	67%	73%	4.67	0
767	8,8,4,4	Ilex cornuta	No	66%	73%	6.19	0
768	2	Ilex cornuta	No	72%	73%	1.04	SHRUB
771	2	Taxus spp.	Yes	78%	60%	0.94	SHRUB
773	2	Ilex cornuta	No	75%	73%	1.09	SHRUB
774	2	Juniperus spp.	Yes	75%	75%	1.13	SHRUB
775	2	Ilex spp.	Yes	78%	73%	1.13	SHRUB
776	2	unknown shrub	Yes	75%	65%	0.98	SHRUB
777	5,2.5	Ilex cornuta	Yes	75%	73%	2.72	1
778	6,3	Ilex cornuta	Yes	75%	73%	3.81	1
779	6,2.5,2	Ilex cornuta	Yes	75%	73%	3.81	1
780	2	Ilex spp.	Yes	75%	73%	1.09	SHRUB
781	2	Ilex spp.	Yes	75%	73%	1.09	SHRUB
782	2	unknown shrub	Yes	75%	65%	0.98	SHRUB
783	2	unknown shrub	Yes	75%	65%	0.98	SHRUB
784	1,1,1,1	Lagerstroemia indica	Yes	86%	78%	1.33	1
785	2	unknown shrub	Yes	75%	65%	0.98	SHRUB
786	2	Juniperus spp.	Yes	75%	75%	1.13	SHRUB
787	2	Ilex spp.	Yes	75%	73%	1.09	SHRUB
788	2,2,1	Cornus kousa	Yes	73%	88%	1.93	1
789	2,2,2	Cornus kousa	Yes	75%	88%	1.97	1
790	2,1	Cornus kousa	Yes	72%	88%	1.26	1
791	2,1,1,2,2,	Cornus kousa	Yes	72%	88%	2.52	1
792	2,2,2,1	Cornus kousa	Yes	75%	88%	2.63	1
793	2,2,2,1,1	Magnolia x soulangiana	Yes	75%	70%	2.10	1
794	2	Juniperus spp.	Yes	75%	75%	1.13	SHRUB
795	2	unknown shrub	No	75%	65%	0.98	SHRUB
796	2	Ilex spp.	Yes	75%	73%	1.09	SHRUB
797	2	Syringa vulgaris	Yes	75%	75%	1.13	SHRUB
798	3	Acer rubrum	Yes	72%	70%	1.51	1
799	3	Acer rubrum	Yes	73%	70%	1.54	1
800	3	Picea pungens	Yes	70%	55%	1.16	1
801	3	Liriodendron tulipifera	Yes	86%	70%	1.80	1
802	3	Liriodendron tulipifera	Yes	88%	70%	1.84	1
803	3	Cladrastis kentukea	Yes	86%	60%	1.55	1
804	3	Acer saccharum	Yes	89%	75%	2.00	1
805	3	Cladrastis kentukea	Yes	77%	60%	1.38	1
806	3	Acer saccharum	Yes	86%	75%	1.93	1
807	3	Acer saccharum	No	88%	75%	1.97	0
808	4	Gleditsia triacanthos inermis	No	80%	60%	1.91	0
809	3	Gleditsia triacanthos inermis	No	81%	60%	1.46	0
810	4	Gleditsia triacanthos inermis	No	77%	60%	1.84	0
811	4	Gleditsia triacanthos inermis	No	81%	60%	1.95	0
812	4	Gleditsia triacanthos inermis	No	78%	60%	1.88	0
813	4	Gleditsia triacanthos inermis	No	78%	60%	1.88	0
814	4	Gleditsia triacanthos inermis	Yes	80%	60%	1.91	1
815	13	Prunus x yedoensis	No	70%	55%	5.03	0

Date: SEPTEMBER 2019

Tree Replacement Calculations

Project: Crystal House

Tree #	DBH (inches)	Species	To Be Removed (Y/N)	Condition	Species Rating	Total Score	Replacements Required
816	4	Acer rubrum	No	84%	70%	2.36	0
817	4	Acer rubrum	Yes	86%	70%	2.41	1
818	4	Acer rubrum	Yes	89%	70%	2.49	1
819	4	Acer rubrum	Yes	91%	70%	2.54	1
820	3	Acer rubrum	Yes	84%	70%	1.77	1
821	3	Acer rubrum	Yes	84%	70%	1.77	1
822	4	Acer rubrum	Yes	75%	70%	2.10	1
823	3	Acer rubrum	Yes	86%	70%	1.80	1
824	3	Gleditsia triacanthos inermis	Yes	73%	60%	1.32	1
825	3	Gleditsia triacanthos inermis	No	73%	60%	1.32	0
826	3	Quercus phellos	Yes	78%	75%	1.76	1
827	3	Quercus phellos	No	86%	75%	1.93	0
828	3	Quercus phellos	No	75%	75%	1.69	0
829	3	Gleditsia triacanthos inermis	No	81%	60%	1.46	0
830	3	Quercus phellos	No	78%	75%	1.76	0
831	3	Quercus phellos	No	77%	75%	1.72	0
832	4	Liriodendron tulipifera	Yes	77%	70%	2.14	1
833	16,12	Malus spp.	Yes	36%	63%	4.49	1
834	5,4	Tsuga candensis	Yes	45%	60%	1.63	1
835	20	Platanus occidentalis	Yes	64%	58%	7.37	2
836	3,2,2,2,2,1	Albizia julibrissin	Yes	47%	35%	0.82	1
837	17,13	Malus spp.	Yes	48%	63%	6.36	2
838	17,13	Malus spp.	Yes	48%	63%	6.36	2
839	2,1,1	Betula nigra	No	75%	70%	1.05	0
840	9	Tilia americana	Yes	50%	73%	3.26	1
841	8,7	Morus alba	Yes	50%	45%	2.48	1
842	3	Picea pungens	Yes	75%	55%	1.24	1
843	3	Picea pungens	Yes	75%	55%	1.24	1
		Total Removals:	**230**	**Total replacements required:**			**359**

NOTE: SHRUBS/HEDGES NOT COUNTED FOR REPLACEMENT

Wetland Studies and Solutions, Inc. a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

Copyright © 2019 Wetland Studies and Solutions, Inc.

TREE PRESERVATION
TREE REPLACEMENT CALCULATIONS

CRYSTAL HOUSES
Arlington County, Virginia
WSSI Project Number: 22621.02

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

DATE: March 5, 2019

SCALE: 1" = 25'

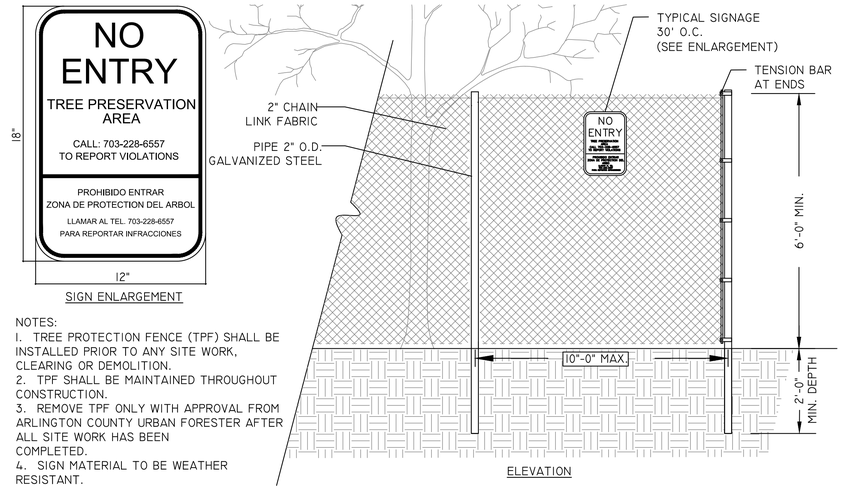
Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ2.03

Computer File Name:
L:\22000s\22600\22621.02\CADD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CADD\05--ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 2.03 Plotted By: Hulse, Cary, 11/25/2019 2:20 PM

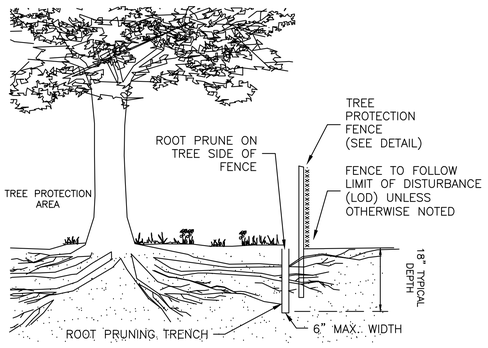


NOTES:
1. TREE PROTECTION FENCE (TPF) SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
2. TPF SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. REMOVE TPF ONLY WITH APPROVAL FROM ARLINGTON COUNTY URBAN FORESTER AFTER ALL SITE WORK HAS BEEN COMPLETED.
4. SIGN MATERIAL TO BE WEATHER RESISTANT.

1 / 3.01 **6' CHAIN LINK TREE PROTECTION FENCE** NTS

02231.1 (2013)

ARLINGTON VIRGINIA DPR



NOTES:
1. TREE PROTECTION AREA WILL BE DETERMINED AS PART OF THE PLAN REVIEW PROCESS. EXACT LOCATION, DEPTH AND METHODS OF ROOT PRUNING TO BE DETERMINED IN THE FIELD BY PROJECT ARBORIST.
2. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.
3. TRENCH SHOULD BE BACKFILLED IMMEDIATELY OR INCORPORATED WITH SILT FENCE INSTALLATION.
4. ROOTS SHOULD BE SEVERED BY TRENCHER, VIBRATORY PLOW OR APPROVED EQUIVALENT. ROOTS OVER 1.5" DIAMETER SHOULD BE CLEANLY CUT BY HAND. ROOT PRUNING ADJACENT TO SPECIMEN TREES MAY REQUIRE SOIL REMOVAL BY SUPERSONIC AIR TOOL TO MINIMIZE TREE AND ROOT IMPACTS.

2 / 3.01 **ROOT PRUNING (TYPICAL)**
SCALE: NTS

ARLINGTON COUNTY STANDARD TREE PROTECTION NOTES

1. BEFORE ANY GRADING, DEMOLITION, OR OTHER DISTURBANCE, TREE PROTECTION NEEDS TO BE INSTALLED PER PLAN, AND INSPECTED BY AN ARLINGTON COUNTY PARKS AND RECREATION URBAN FORESTER. EROSION AND SEDIMENT CONTROLS ARE INSPECTED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
2. PLANTS SHALL BE FURNISHED AND INSTALLED AS INDICATED, INCLUDING ALL PLANTS, MATERIALS, AND EQUIPMENT.
3. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS, WELL-DEVELOPED DENSELY FOLIATED BRANCHES, AND VIGOROUS ROOT SYSTEMS; AND BE FREE FROM DEFECTS AND INJURIES.
4. PLANTS SHALL BE PLANTED ON THE DAY OF DELIVERY IF/WHEN PRACTICAL. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE-DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD SHALL BE REJECTED, UNLESS OWNER AND CONTRACTOR PROVIDE OTHERWISE BY WRITTEN AGREEMENT. ALL PLANTS KEPT ON SITE FOR ANY PERIOD OF TIME SHOULD BE WATERED AND CARED FOR USING ANSI A300 STANDARDS.
5. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOT BALL ONLY.
6. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOP SOIL THAT IS IN MUDDY OR FROZEN CONDITION. LAWNS, TREES AND SHRUBS SHALL BE INSTALLED BETWEEN 03/15 AND 06/15 OR BETWEEN 09/15 AND 12/01. IF A PROJECT COMPLETION IS OUTSIDE OF THIS PLANTING PERIOD, CONTACT THE ARLINGTON COUNTY URBAN FORESTER TO OBTAIN A DEFERRAL OR APPROVAL FOR PLANTING OUT OF SEASON.
7. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED WITHIN TWO FEET OF A SIDEWALK.
8. TREES AND SHRUBS SHALL BE PLANTED IN HOLES TWO TO THREE TIMES AS WIDE AND TO THE DEPTH OF THE ROOT BALL.
9. PLANTS SHALL BE PLANTED IN IN SITU SOIL THAT IS THOROUGHLY WATERED.
10. SET ALL PLANTS PLUMB AND STRAIGHT SET AT SUCH LEVEL THAT NORMAL OR NATURAL RELATIONSHIP BETWEEN THE PLANT AND THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE THE PLANT IN THE CENTER OF THE PIT.
11. INJURED ROOTS SHALL BE PRUNED TO CLEAN ENDS BEFORE PLANTING WITH CLEAN, SHARP TOOLS. THE LEADER OF TREES SHALL NOT BE CUT BACK.
12. PRESERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY A DEPARTMENT OF PARKS AND RECREATION URBAN FORESTER.
13. ALL DISTURBED AREAS SHALL BE TREATED WITH 4" TOP SOIL OR COMPOST AND SEEDED IN ACCORDANCE WTH PERMANENT STABILIZATION METHODS INDICATED ON SOIL EROSION AND SEDIMENT CONTROL SHEET AND/OR LANDSCAPE PLAN.

TREE PRESERVATION SPECIFICATIONS AND NARRATIVE

1. GENERAL
 1.1. ALL MEASURES WILL BE REVIEWED AFTER INSTALLATION AND APPROVED BY OWNER AND *COUNTY ARBORIST*.
 1.2. SUBSTITUTIONS OR ALTERNATIVE METHODS OR MATERIALS SHALL BE REVIEWED AND APPROVED BY *COUNTY ARBORIST*.
 1.3. ALL TREE PROTECTION MEASURES MUST BE IN PLACE PRIOR TO COMMENCEMENT OF DEMOLITION, SITE CLEARING OR CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION. TREE PROTECTION MEASURES MAY ONLY BE REMOVED WITH *COUNTY ARBORIST* APPROVAL.
 1.4. REFER TO THE TREE PROTECTION ACTION KEY (TPAK) FOR SPECIFIC RECOMMENDATIONS FOR EACH TREE.
2. REMOVAL BY ARBORIST
 2.1. TREES DESIGNATED AS "REMOVAL BY ARBORIST" SHALL BE REMOVED BY A QUALIFIED ARBORIST "BY HAND", TO MINIMIZE POTENTIAL FOR DAMAGE TO REMAINING TREES AND ROOTS.
 2.2. CREWS SHALL BE DIRECTLY SUPERVISED BY A CERTIFIED ARBORIST.
 2.3. TRUCKS AND MECHANIZED EQUIPMENT SHALL NOT ENTER THE FENCED TREE PROTECTION AREAS.
 2.4. STUMPS SHALL BE LEFT IN PLACE OR GROUND OUT AT THE OWNERS DISCRETION. STUMPS IN TURF/LANDSCAPE AREAS OR WITHIN ROOT AERATION MATTING AREAS SHALL BE GROUND.
 2.5. STUMP GRINDING SHALL BE WITH SMALL MACHINES SPECIFICALLY DESIGNED FOR THAT PURPOSE. NO STUMPS SHALL BE EXCAVATED EXCEPT AS DESCRIBED HEREIN. STUMPS SHALL BE GROUND NOT MORE THAN 8" BELOW GRADE AND CARE MUST BE TAKEN TO MINIMIZE DAMAGE TO ROOTS OF RETAINED TREES.
3. TREE PROTECTION FENCE
 3.1. TYPICALLY, INSTALL AFTER ROOT PRUNING AND PRIOR TO CLEARING & GRADING.
 3.2. FENCE SHALL BE 6' HIGH CHAIN LINK FENCE FABRIC MOUNTED ON 8', 1.5"ø GALVANIZED STEEL PIPE LINE POSTS. CORNER POSTS SHALL BE 2"ø. FENCE SHALL BE ATTACHED TO POSTS USING ALUMINUM TIES. PLASTIC "ZIP" TIES SHALL NOT BE USED.
 3.3. TREE PROTECTION AREA SIGNS SHALL BE AFFIXED TO ALL TREE PROTECTION FENCE AT 30' SPACING AVERAGE. SIGNS SHALL BE BILINGUAL (ENGLISH AND SPANISH). SIGNS SHALL NOT BE AFFIXED DIRECTLY TO TREES. SEE DETAIL.
 3.4. SILT FENCE SHALL BE COORDINATED FOR INSTALLATION TO ENHANCE PROTECTION AND AVOID UNNECESSARY ROOT CUTS BY SILT FENCE INSTALLATION.
 3.5. FENCE MAY BE REMOVED ONLY AFTER ALL CONSTRUCTION AND FINAL LANDSCAPING IS COMPLETE AND WITH *COUNTY ARBORIST* APPROVAL.
4. ROOT PRUNE
 4.1. THE EXACT LOCATION AND DEPTH WILL BE DETERMINED DURING THE PRE-CONSTRUCTION MEETING. SPECIFIC EQUIPMENT & METHODS WILL BE DETERMINED BY *COUNTY ARBORIST* BASED UPON DEPTH & TREE IMPACT. (SEE DETAIL)
 4.2. HAND PRUNE ROOTS OVER 1" DIAMETER WITHIN CRZS OF SIGNIFICANT TREES. STEEP SLOPES, DEEP EXCAVATIONS AND PAVEMENT/CURB REMOVAL WILL BE REVIEWED WHEN OPEN FOR HAND ROOT PRUNING DURING CONSTRUCTION.
 4.3. COORDINATE WITH SILT FENCE INSTALLATION TO MINIMIZE UNNECESSARY ROOT DAMAGE.
 4.4. ROOT PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST.
5. WOOD CHIP MULCH
 5.1. INSTALL MULCH FOR DESIGNATED SIGNIFICANT TREES. MULCH AREA SHALL BE ONE OF THE FOLLOWING, AT THE DISCRETION OF THE CONTRACT ARBORIST AND OWNER:
 5.2. INSTALL MULCH BED RINGS. MULCH SHOULD COVER AT LEAST THE ENTIRE STRUCTURAL ROOT ZONE. LARGER MULCH BEDS ARE PREFERRED.
 5.3. MULCH SHALL BE INSTALLED TO A DEPTH OF 4".
 5.4. MULCH SHALL BE DOUBLE GROUND SHREDDED HARDWOOD, AGED FOR AT LEAST 6 MONTHS FROM AN APPROVED SOURCE. INSUFFICIENTLY OR IMPROPERLY AGED MULCH CONTAINING HIGH BACTERIAL COUNTS OR HIGH LEVELS OF BARK OR OTHER MATERIALS RESISTANT TO DECOMPOSITION SHALL NOT BE USED. MULCH SHALL NOT CONTACT TRUNK OF TREES.
 5.5. EDGING IS NEITHER NECESSARY NOR DESIRABLE FOR THIS OPERATION.
6. CONSTRUCTION MONITORING/INSPECTIONS
 6.1. A CERTIFIED ARBORIST SHALL MAKE REGULAR MONTHLY INSPECTIONS DURING ACTIVE CONSTRUCTION AND DEMOLITION AND PROVIDE REPORTS TO THE OWNER AND *COUNTY ARBORIST*. REPORTS SHALL DOCUMENT CONDITION OF TREE PROTECTION DEVICES AND PROVIDE RECOMMENDATIONS FOR MAINTENANCE AND/OR ADDITIONAL CARE.
7. MISCELLANEOUS TREE PROTECTION REQUIREMENTS
 7.1. NO TOXIC MATERIALS SHALL BE STORED WITHIN 100' OF TREE PROTECTION AREAS.
 7.2. ALL WORK IN OR NEAR TREE PROTECTION AREAS SHALL BE PERFORMED IN A MANNER TO MINIMIZE DAMAGE TO TREES, SHRUBS, GROUND COVER, SOIL AND ROOT SYSTEMS.
 7.3. MECHANIZED EQUIPMENT SHALL NOT BE PERMITTED TO ENTER ANY TREE PROTECTION AREAS.
8. CANOPY PRUNING & SUPPORT CABLES
 8.1. CANOPY PRUNING SHALL BE CLEANING PRUNING AND/OR RESTORATION PRUNING AND SHALL BE IN CONFORMANCE WITH CURRENT ANSI A300 STANDARDS AND ISA BEST MANAGEMENT PRACTICES.
 8.2. PRUNING SHALL REMOVE ONLY DEAD, DYING, DAMAGED OR BROKEN BRANCHES GREATER THAN 1" IN DIAMETER. PRUNING OF SMALL TREES MAY INCLUDE REMOVAL OF LIMBS TO IMPROVE STRUCTURE.
 8.3. FOLIAGE REMOVAL SHALL NOT BE MORE THAN 25% OF THE TOTAL LIVE CANOPY VOLUME OF ANY TREE IN ANY ONE SEASON. PRUNING SHALL NOT REMOVE INTERIOR BRANCHING EXCEPT AS OTHERWISE STATED.
 8.4. PRUNING FOR SPECIFIC CLEARANCE (FOR CONSTRUCTION ACCESS OR PROPOSED IMPROVEMENTS) SHALL BE REVIEWED AND APPROVED BY THE OWNER AND *COUNTY ARBORIST*.
 8.5. SUPPORT CABLES SHALL BE INSTALLED IN CONFORMANCE WITH CURRENT ANSI A300 STANDARDS AND ISA BEST MANAGEMENT PRACTICES.
9. CONSTRUCTION STRATEGIES FOR TREE PROTECTION
 9.1. CONSTRUCTION STAGING, ACCESS, STOCKPILING, EQUIPMENT STORAGE, ETC. SHALL BE LIMITED TO AREAS OF EXISTING PAVEMENT AND AREAS WITHIN THE LOD EXCEPT AS OTHERWISE NOTED.
 9.2. PROPOSED LANDSCAPE PLANTINGS OUTSIDE THE LOD SHALL BE INSTALLED BY HAND. MECHANIZED EQUIPMENT SHALL NOT BE USED OUTSIDE THE LOD OR OFF OF EXISTING PAVED AREAS TO EXCAVATE FOR PLANTINGS OR FOR STAGING PLANT MATERIAL.
 9.3. COORDINATE PLANTING LOCATIONS WITHIN CRZS WITH THE CONTRACT ARBORIST TO AVOID UNNECESSARY ROOT DAMAGE. PLANTING PITS WITHIN CRZS SHOULD BE DUG BY HAND. ROOTS GREATER THAN 1.5" SHOULD NOT BE CUT.
10. SPECIAL "BY-HAND" DEMOLITION PROCEDURES
 10.1. DEMOLITION OF WALKS, CURBS AND OTHER HARDSCAPE WITHIN TREE PROTECTION AREAS (TPAS) SHALL BE PERFORMED BY-HAND.
 10.2. WORK SHALL BE PERFORMED BY THE CONTRACT ARBORIST OR DIRECTLY SUPERVISED BY A CERTIFIED ARBORIST.
 10.3. MECHANIZED EQUIPMENT SHALL NOT ENTER THE TPAS.
 10.4. ALL WORK SHALL BE PERFORMED IN A MANNER TO AVOID SOIL COMPACTION AND ROOT DISTURBANCE OR DAMAGE.
 10.5. BACKFILL OF VOIDS FROM DEMOLITION WITHIN THE TPAS SHALL BE LOOSELY PLACED TOPSOIL. ONLY THE AMOUNT OF SOIL NECESSARY TO FILL THE VOID WITHOUT SPREADING OVER EXISTING ADJACENT GRADES SHALL BE ALLOWED.
 10.6. ROOTS ENCOUNTERED DURING DEMOLITION SHALL BE REVIEWED ON A CASE-BY-CASE BASIS BY THE CONTRACT ARBORIST. THE ARBORIST SHALL PROVIDE APPROPRIATE TREATMENT OR PRUNING METHODS AS NEEDED AND IN GENERAL CONFORMANCE WITH ACCEPTED INDUSTRY STANDARDS AND THIS SECTION.

CANOPY CREDIT CALCULATIONS

PARCEL 1	
20 YEAR TREE COVER WORKSHEET	
1 GROSS SITE AREA	391,585 SQ. FT.
2 PERCENT OF TREE COVER REQUIRED	10 %
3 TREE COVER REQUIRED	39,159 SQ. FT.
4 TREE CANOPY TO BE PRESERVED	4,118 SQ. FT.
5 CREDIT FOR TREES TO BE PRESERVED (1.25xcanopy)	5,148 SQ. FT.
6 ADDITIONAL CREDITS	0 SQ. FT.
7 TREE COVER TO BE PROVIDED BY PLANTING TREES	64,104 SQ. FT.
8 TOTAL TREE COVER PROVIDED	69,252 SQ. FT.
9 EXCESS TREE COVER	30,093 SQ. FT.

PARCEL 2 (North Part)	
20 YEAR TREE COVER WORKSHEET	
1 GROSS SITE AREA	307,642 SQ. FT.
2 PERCENT OF TREE COVER REQUIRED	10 %
3 TREE COVER REQUIRED	30,764 SQ. FT.
4 TREE CANOPY TO BE PRESERVED	8,268 SQ. FT.
5 CREDIT FOR TREES TO BE PRESERVED (1.25xcanopy)	10,335 SQ. FT.
6 ADDITIONAL CREDITS	0 SQ. FT.
7 TREE COVER TO BE PROVIDED BY PLANTING TREES	53,216 SQ. FT.
8 TOTAL TREE COVER PROVIDED	63,551 SQ. FT.
9 EXCESS TREE COVER	32,787 SQ. FT.

PARCEL 2 (South Part)	
20 YEAR TREE COVER WORKSHEET	
1 GROSS SITE AREA	39,092 SQ. FT.
2 PERCENT OF TREE COVER REQUIRED	10 %
3 TREE COVER REQUIRED	3,909 SQ. FT.
4 TREE CANOPY TO BE PRESERVED	0 SQ. FT.
5 CREDIT FOR TREES TO BE PRESERVED (1.25xcanopy)	0 SQ. FT.
6 ADDITIONAL CREDITS	0 SQ. FT.
7 TREE COVER TO BE PROVIDED BY PLANTING TREES	5,938 SQ. FT.
8 TOTAL TREE COVER PROVIDED	5,938 SQ. FT.
9 EXCESS TREE COVER	2,029 SQ. FT.

SEE SHEET L3.03 FOR PLANTING SCHEDULE

Wetland Studies and Solutions, Inc. a DAVEY company
5300 Wellington Branch Drive • Suite 100
Gainesville, Virginia 20155
Phone: 703-679-5600 • Fax: 703-679-5601
www.wetlandstudies.com

Copyright © 2019 Wetland Studies and Solutions, Inc.

TREE PRESERVATION NOTES & DETAILS

CRYSTAL HOUSES
Arlington County, Virginia
WSSI Project Number: 22621.02

INTERNATIONAL SOCIETY OF ARBORICULTURE
CARY HULSE
ISA No PD-1080A
CERTIFIED ARBORIST

REVISIONS

No.	Date	Description	Rev. By	App. By
1	07/24/19	REVISED CIVIL LAYOUT	CH	
2	09/10/19	REVISED CIVIL LAYOUT	CH	
3	11/25/19	REVISED CIVIL LAYOUT	CH	

SCALE: 1" = 25'

DATE: March 5, 2019

Boundary and Topo Source:
Bowman Consulting

Design	Draft	Approved
CH	CH	---

Sheet #
LJ3.01

Computer File Name:
L:\22000s\22600\22621.02\CAD\05-ENVR\22621-02_Crystal Houses_Trees_2019.11.25.dwg

L:\22000s\22600\22621.02\CAD\05-ENVR\22621.02_Crystal Houses_Trees_2019.11.25.dwg 3.01 Plotted By: Hulse, Cary, 11/25/2019 2:20 PM