

200 Quannapowitt Pkwy.

Wakefield, Massachusetts

Conservation Commission Presentation
August 12, 2021

Design Team

APPLICANT:

CCF QUANNAPOWITT PROPERTY
COMPANY, LLC
185 DARTMOUTH STREET, SUITE 402
BOSTON, MA 02116

SITE ENGINEERS:

ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY
WOBURN, MA 01888-0118

LAND SURVEYORS:

MERRILL
427 COLUMBIA ROAD
HANOVER, MA 02339

LANDSCAPE ARCHITECTS:

COPLEY WOLFF DESIGN GROUP
10 POST OFFICE SQUARE, SUITE 1315
BOSTON, MA 02109

ARCHITECT:

CUBE 3 STUDIO
160 STATE STREET, FLOOR 6
BOSTON, MA 02109

TRAFFIC ENGINEERS:

VANASSE & ASSOCIATES, INC.
35 NEW ENGLAND BUSINESS CENTER
DRIVE, SUITE 140
ANDOVER, MA 01810

ENVIRONMENTAL CONSULTANT:

GODDARD CONSULTING INC.
291 MAIN STREET, SUITE 8
NORTHBOROUGH, MA 01532











CONSERVATION AREA

CONSERVATION AREA

CONSERVATION AREA









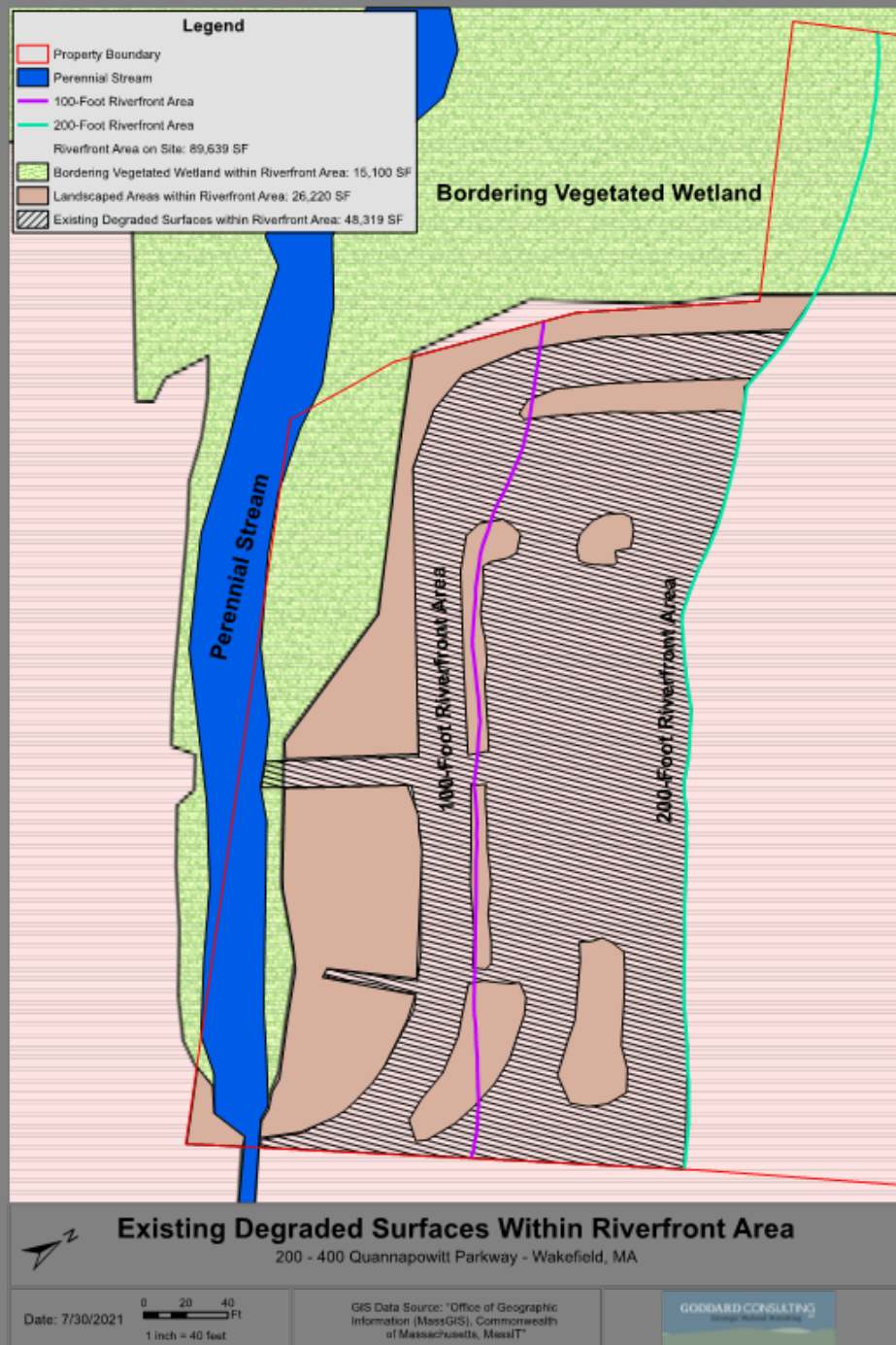


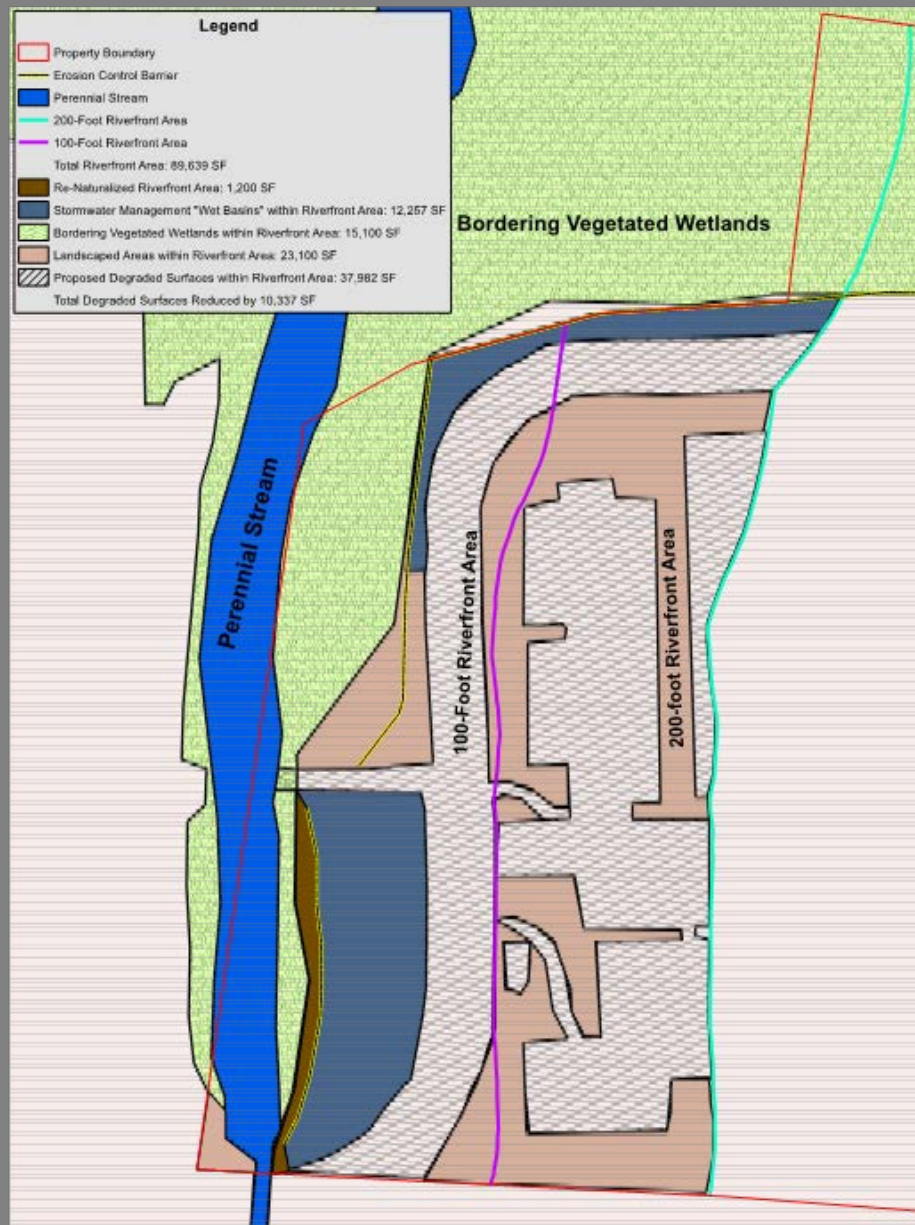












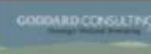
Proposed Degraded Surfaces Within Riverfront Area

200 - 400 Quannapowitt Parkway - Wakefield, MA

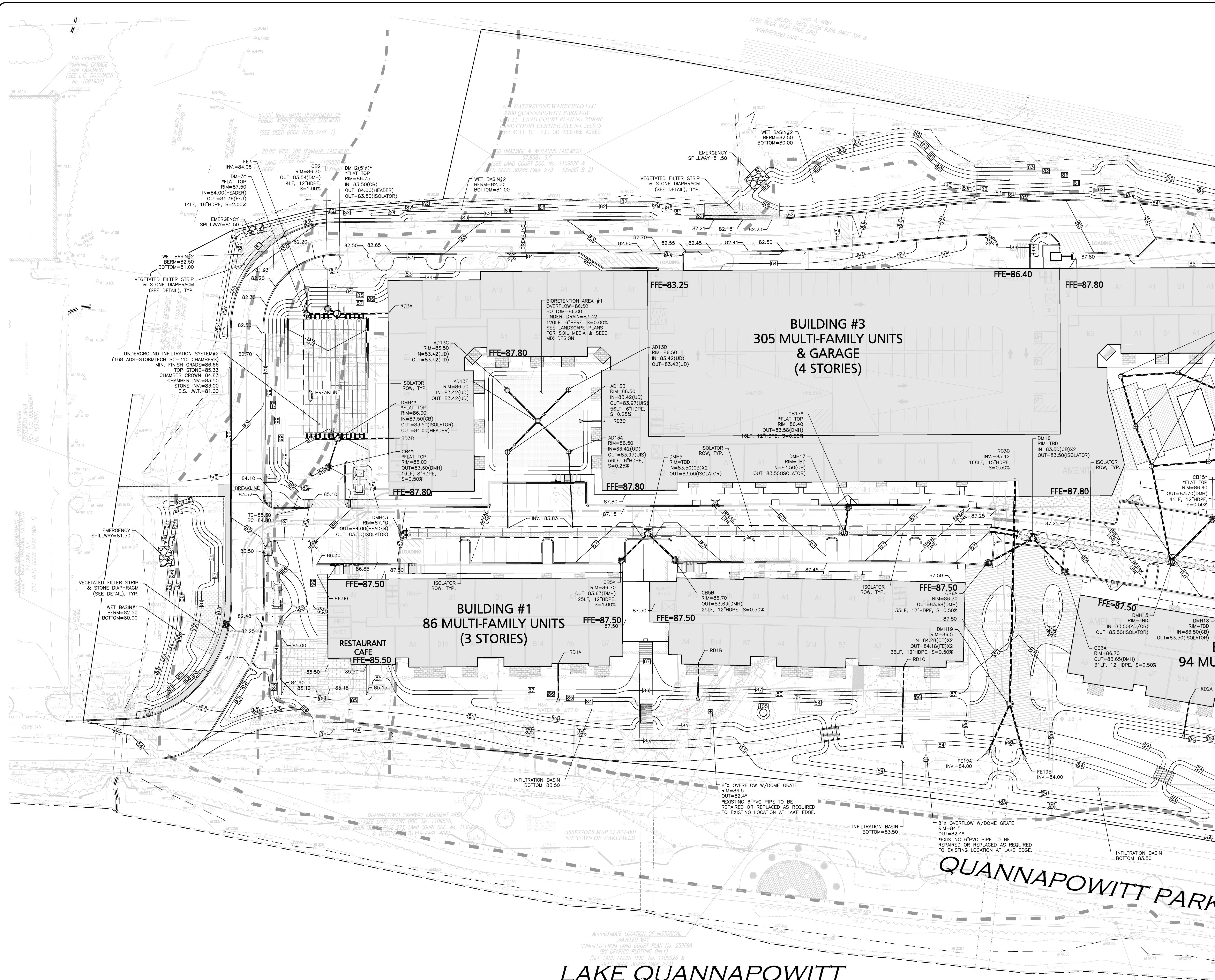
Date: 7/30/2021

0 20 40
Feet
1 inch = 40 feet

GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"



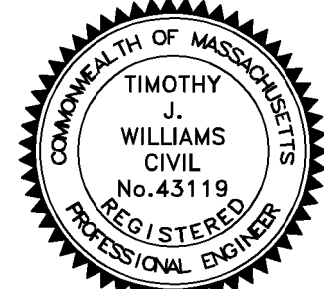




LEGEND:

- DRAIN MANHOLE
- CATCH BASIN
- CATCH BASIN - DOUBLE GRATE
- FLARED END SECTION
- DRAIN LINE
- RIPRAP OUTFALL
- 1' CONTOUR
- TOP OF BERM
- BIO/INFILTRATION BASIN
- INFILTRATION SYSTEM

- NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - ALL ELEVATIONS REFER TO NAVD '88.
 - THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
 - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES. DIGSAFE: 1-888-344-7233



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
2	8/03/2021	Issued to Conservation Commission
1	3/31/2021	Re-issued to ZBA

APPLICANT:
CCF QUANNAPOWITT PROPERTY
COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

PROJECT:
200-400 QUANNAPOWITT
PARKWAY
WAKEFIELD, MA 01880

PROJECT NO. 1623-11 **DATE:** MARCH 16, 2021
SCALE: 1"=30' **DWG. NAME:** C-1623-11.dwg
DESIGNED BY: NCD **CHECKED BY:** TJW

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY
WOBBURN MA 01888-0118
TEL: (781) 935-6889
FAX: (781) 935-2886

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

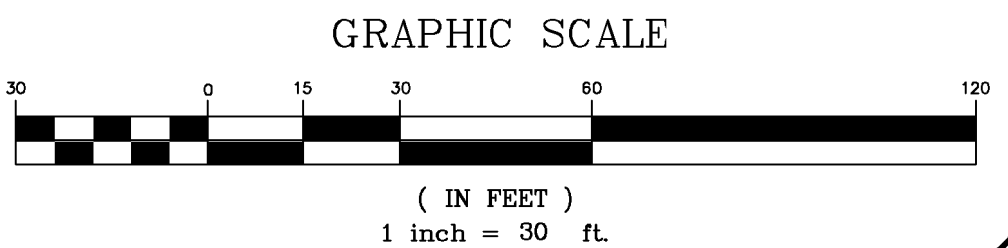
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DRAWING TITLE: GRADING & DRAINAGE PLAN **SHEET No.** C-105A

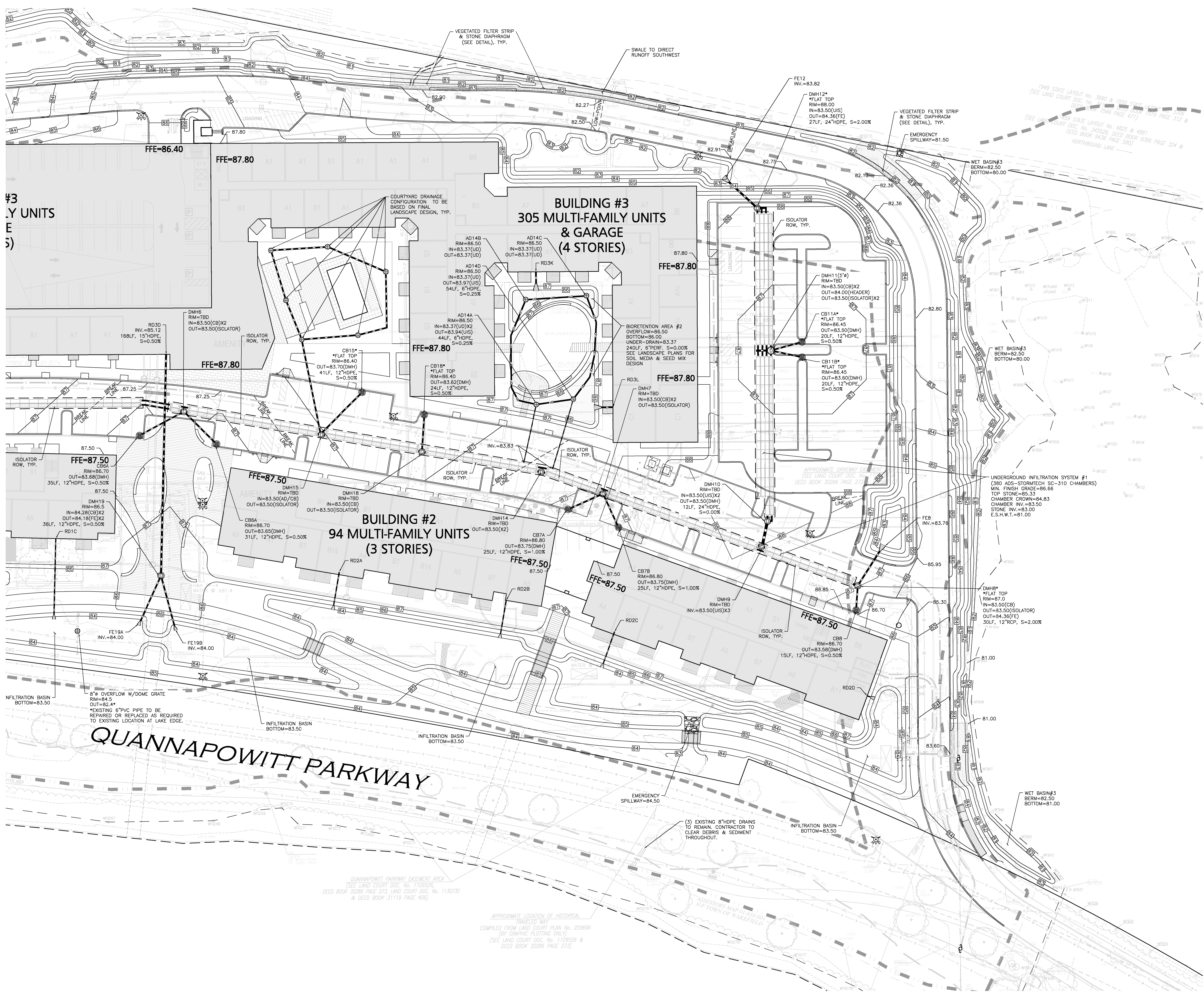
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1-888-344-7233



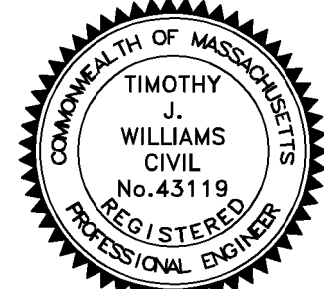
IN PROJECTS 1623-11 CIVIL DRAWINGS CURRENT C-1623-11 - GRADING & DRAINAGE DWG



LEGEND:

DRAIN MANHOLE
CATCH BASIN
CATCH BASIN - DOUBLE GRATE
FLARED END SECTION
DRAIN LINE
RIPRAP OUTFALL
1' CONTOUR
TOP OF BERM
BIO/INFILTRATION BASIN
INFILTRATION SYSTEM

- NOTES:
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PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

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BOSTON, MA 02116

PROJECT:
200-400 QUANNAPOWITT PARKWAY
WAKEFIELD, MA 01880

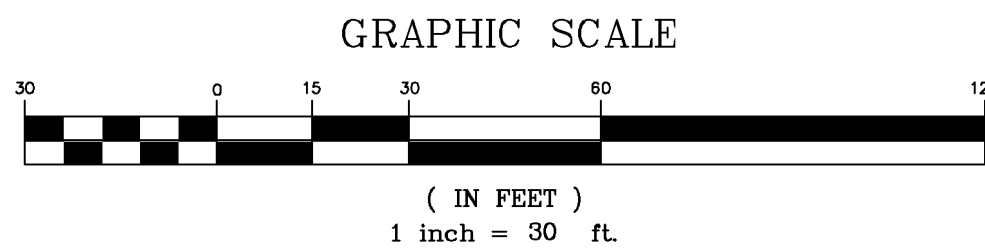
PROJECT NO.	1623-11	DATE:	MARCH 16, 2021
SCALE:	1"=30'	DWG. NAME:	C-1623-11.dwg
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DRAWING TITLE:	SHEET NO.
GRADING & DRAINAGE PLAN	C-105B

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Impact Summary

Existing:

• Total Lot Wetland Area	= ±283,000 s.f. (6.5 acres)
• Total Disturbance in 0-25-foot buffer	= ±13,000 s.f. (0.3 acres)
• Total disturbance in 25-100-foot buffer	= ±132,000 s.f. (3.0 acres)
• Total Lot 0-100ft Riverfront Area	= ±44,000 s.f. (1.0 acres)
• Total Disturbance in 0-100ft Riverfront Area	= ±14,000 s.f. (0.3 acres)
• Total Lot 100-200ft Riverfront Area	= ±45,000 s.f. (1.0 acres)
• Total Disturbance in 100-200ft Riverfront Area	= ±35,000 s.f. (0.8 acres)
Overall Total Lot Impervious Area	= ±425,000 s.f. (9.8 acres)

Floodplain:

• Existing Flood Plain Volumes	= ±127,000 c.f.
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Impact Summary

Proposed:

- Total Lot Wetland Area = $\pm 283,000$ s.f. (6.5 acres)
- Total Disturbance in 0-25-foot buffer = $\pm 10,000$ s.f. (0.2 acres)
- Total disturbance in 25-100-foot buffer = $\pm 131,000$ s.f. (3.0 acres)

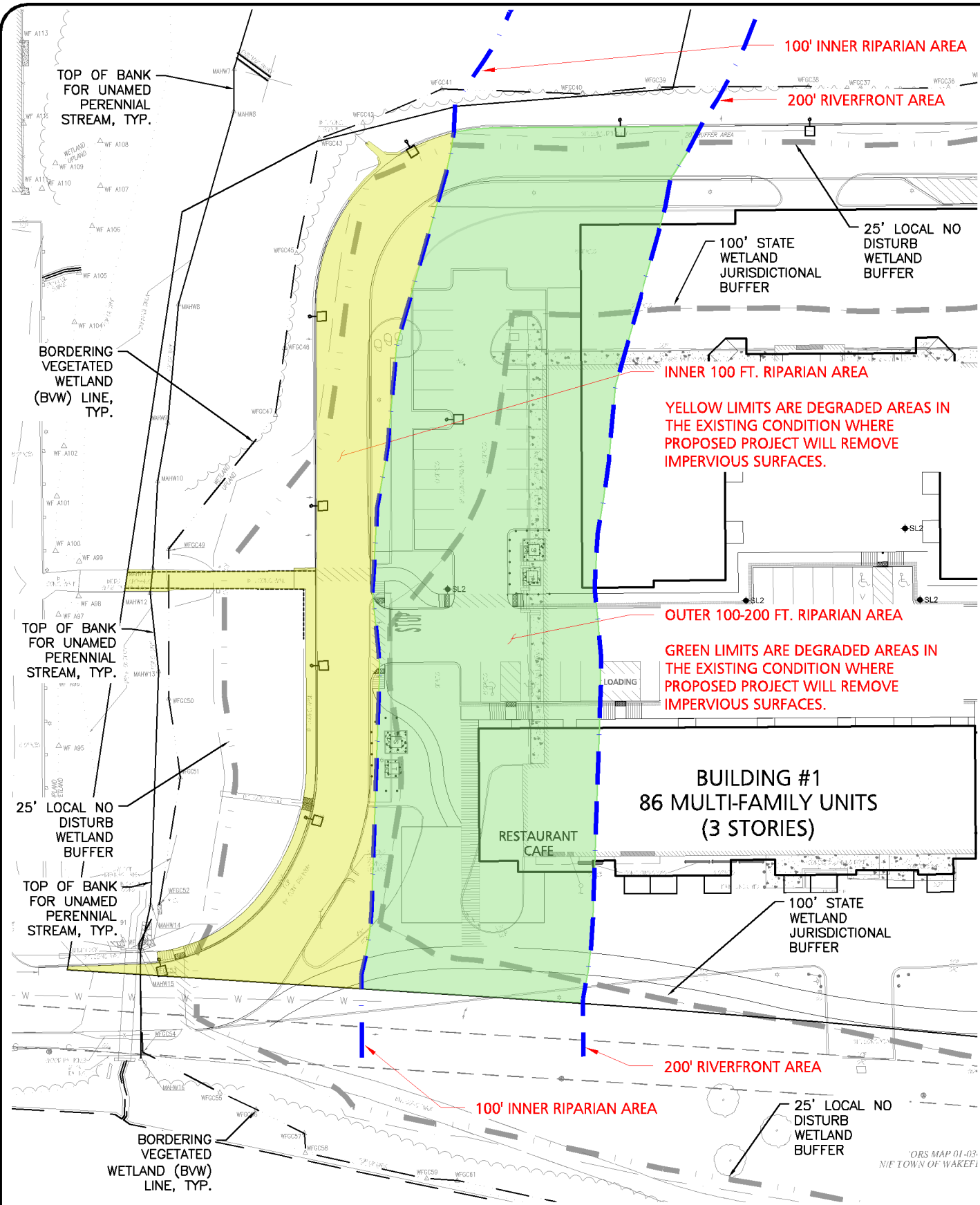
- Total Lot 0-100ft Riverfront Area = $\pm 44,000$ s.f. (1.0 acres)
- Total Disturbance in 0-100ft Riverfront Area = $\pm 12,000$ s.f. (0.3 acres)

- Total Lot 100-200ft Riverfront Area = $\pm 45,000$ s.f. (1.0 acres)
- Total Disturbance in 100-200ft Riverfront Area = $\pm 26,000$ s.f. (0.6 acres)

Overall Total Lot Impervious Area = $\pm 384,000$ s.f. (8.8 acres)

Floodplain:

- Proposed Flood Plain Volumes = $\pm 163,000$ c.f.



LEGEND:

- 100' INNER RIPARIAN AREA
- 200' RIVERFRONT AREA
- 25 FT. LOCAL NO DISTURB WETLAND BUFFER
- 100 FT. STATE JURISDICTIONAL WETLANDS BUFFER
- TOP OF BANK OF UNAMED PERENNIAL STREAM
- BORDERING VEGETATED WETLANDS LINE (BVW)
- INNER 100 FT. RIPARIAN AREA (YELLOW) EXISTING DEGRADED AREA WHERE PROP. PROJECT IS REMOVING IMPERVIOUS SURFACES.
- OUTER RIPARIAN AREA (GREEN) EXISTING DEGRADED AREA WHERE PROP. PROJECT IS REMOVING IMPERVIOUS SURFACES.

		EXISTING	PROPOSED	TOTAL INCREASED PERVIOUS
100' INNER RIPARIAN	IMPERVIOUS (S.F)	13,745	12,252	----
	PERVIOUS (S.F)	30,416	31,909	+1,493
	TOTAL (S.F)	44,161		----
200' OUTER RIPARIAN	IMPERVIOUS (S.F.)	34,574	25,730	----
	PERVIOUS (S.F)	10,904	19,748	+8,844
	TOTAL (S.F)	45,478		----

- CONCLUSIONS:
- WITHIN THE 100' INNER RIPARIAN AREA THERE IS A 1,493 S.F. INCREASE OF PERVIOUS GREEN AREA DUE TO BUILDING AND PAVEMENT REMOVAL.
 - WITHIN THE 100' - 200' OUTER RIPARIAN AREA THERE IS 8,844 S.F. INCREASE OF PERVIOUS GREEN AREA DUE TO BUILDING AND PAVEMENT REMOVAL.
 - IN TOTAL THERE WILL BE AN INCREASE OF PERVIOUS GREEN AREAS AND A REDUCTION OF DEGRADED AREAS BY 10,337 S.F.

GRAPHIC SCALE



(IN FEET)
1 inch = 60 ft.

APPLICANT/OWNER:
CCF QUANNAPOWITT PROPERTY COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

PROJECT:
200 - 400 QUANNAPOWITT PARKWAY
WAKEFIELD, MA

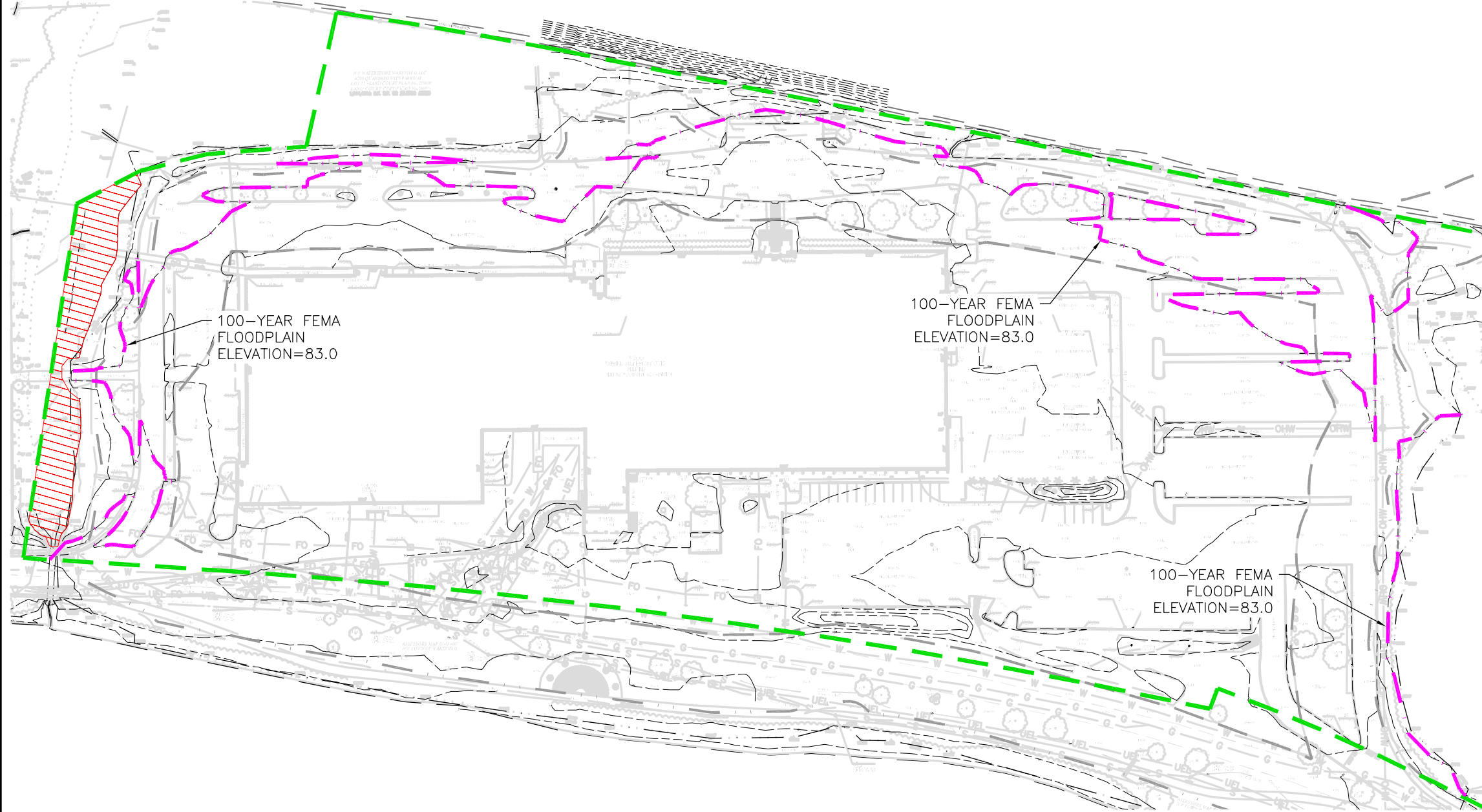
PROJECT NO. 1623-11 DATE: 08/03/2021
SCALE: 1" = 60' DWG. NAME: FLOODPLAIN
DESIGNED BY: ND CHECKED BY: TW

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting ♦ landscape architecture
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100 COMMERCE WAY, SUITE 5
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TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA ♦ LAKEVILLE, MA ♦ MANCHESTER, NH

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DRAWING TITLE: RIVERFRONT DISTURBANCE EXHIBIT
SHEET No. EX-1



EXISTING FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
ELEVATION 81 TO 82: $(11,883+54,749)/2 = 33,291$ C.F.
ELEVATION 82 TO 83: $(54,749+132,683)/2 = 93,716$ C.F.

TOTAL=127,007 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE" ELEVATION=83.0.
REFERENCE FEMA FLOOD INSURANCE RATE MAP (FIRM)
DATED JUNE 4, 2010, PANEL 25017C0314E.

GRAPHIC SCALE



(IN FEET)
1 inch = 120 ft.

N:\PROJECTS\1623-11\CIVIL\DRAWINGS\CURRENT\RESOURCE AREA EXHIBITS\C-1623-11 -EXISTING FLOODPLAIN EXHIBITS.DWG

APPLICANT/OWNER:
CCF QUANNAPOWITT PROPERTY
COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

PROJECT:

200 - 400 QUANNAPOWITT
PARKWAY
WAKEFIELD, MA

PROJECT NO.	1623-11	DATE:	08/03/2021
SCALE:	1" = 120'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	ND	CHECKED BY:	TW

PREPARED BY:



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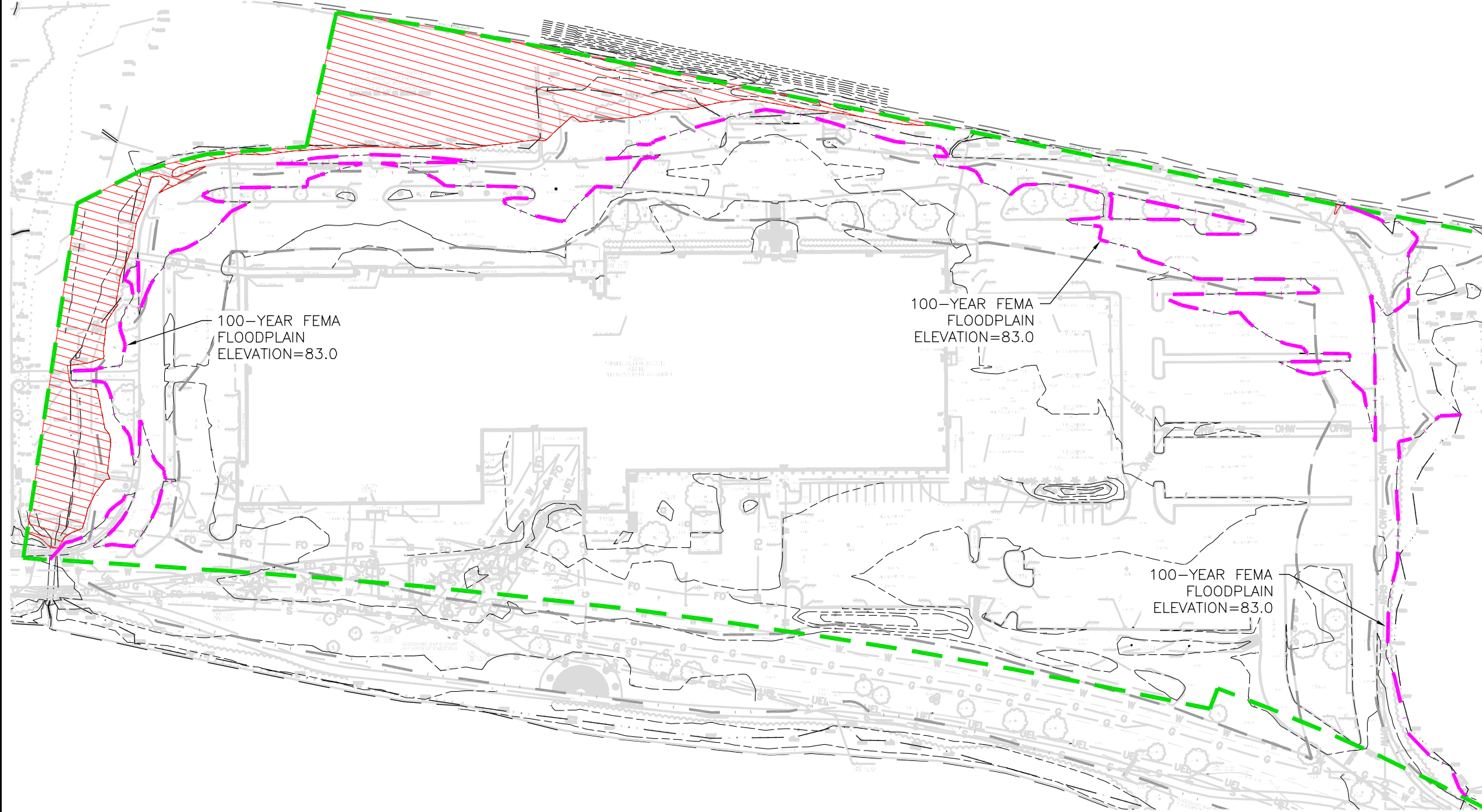
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DRAWING TITLE:
EXISTING FLOOD PLAIN
VOLUME EXHIBIT

SHEET No.

EL.81

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EXISTING FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
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ELEVATION 82 TO 83: $(54,749+132,683)/2 = 93,716$ C.F.

TOTAL=127,007 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE" ELEVATION=83.0.
REFERENCE FEMA FLOOD INSURANCE RATE MAP (FIRM)
DATED JUNE 4, 2010, PANEL 25017C0314E.

GRAPHIC SCALE



(IN FEET)
1 inch = 120 ft.

N:\PROJECTS\1623-11\CIVIL\DRAWINGS\CURRENT\RESOURCE AREA EXHIBITS\C-1623-11 -EXISTING FLOODPLAIN EXHIBITS.DWG

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COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

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WAKEFIELD, MA

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PREPARED BY:



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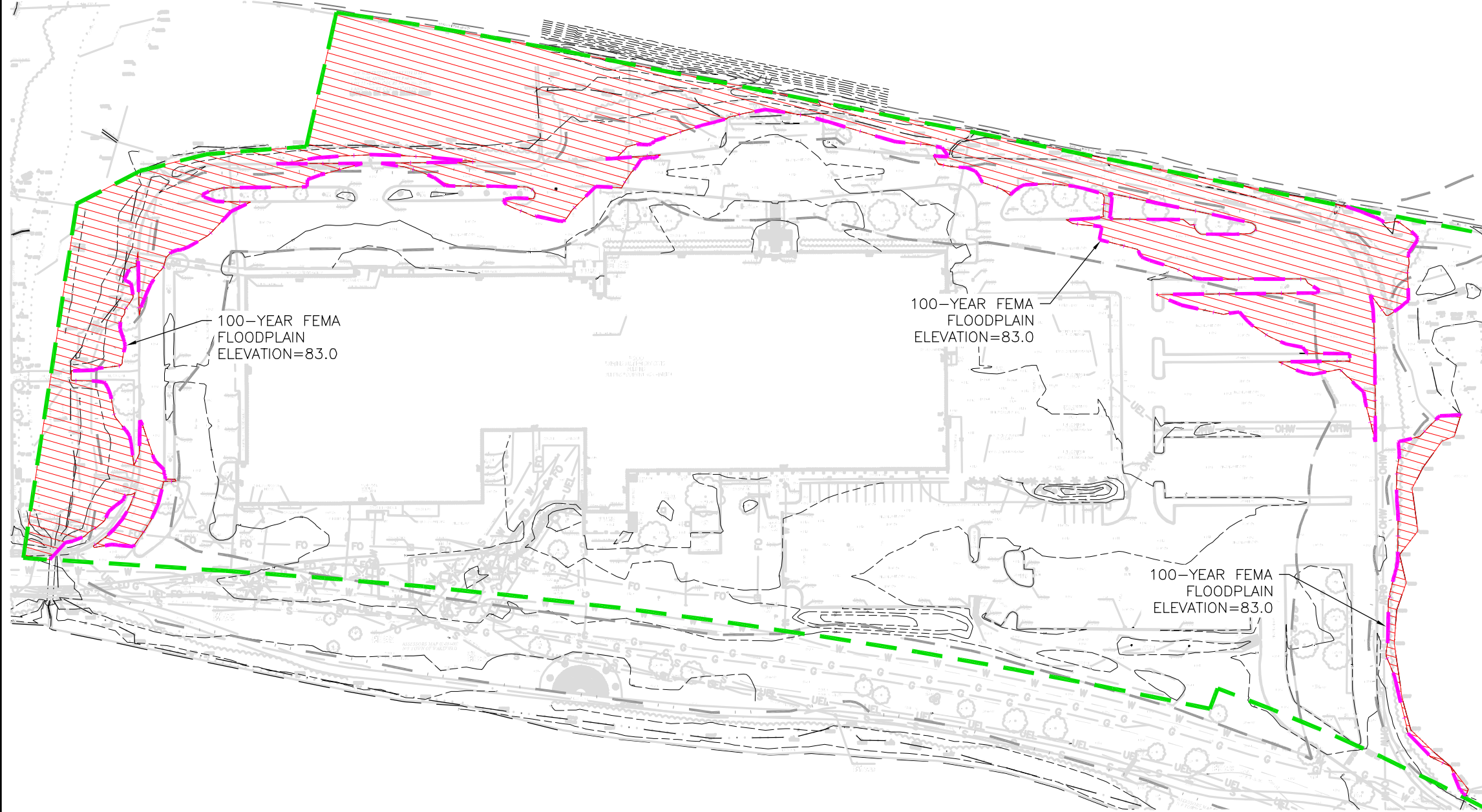
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DRAWING TITLE:
EXISTING FLOOD PLAIN
VOLUME EXHIBIT

SHEET No.

EL.82

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EXISTING FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
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ELEVATION 82 TO 83: (54,749+132,683)/2 =93,716 C.F.

TOTAL=127,007 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE" ELEVATION=83.0.
REFERENCE FEMA FLOOD INSURANCE RATE MAP (FIRM)
DATED JUNE 4, 2010, PANEL 25017C0314E.

GRAPHIC SCALE



(IN FEET)
1 inch = 120 ft.

N:\PROJECTS\1623-11\CIVIL\DRAWINGS\CURRENT\RESOURCE AREA EXHIBITS\C-1623-11 -EXISTING FLOODPLAIN EXHIBITS.DWG

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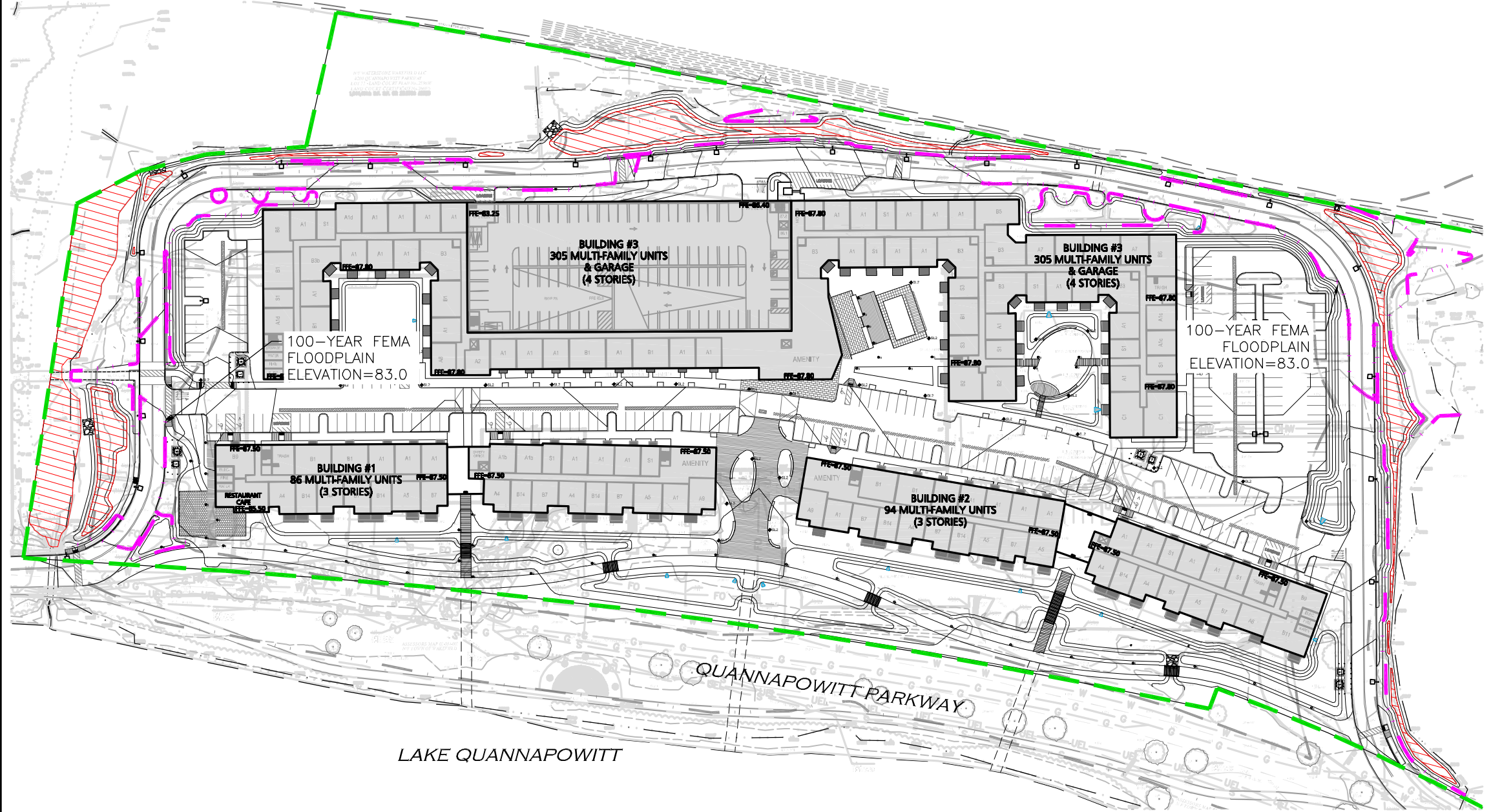
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DRAWING TITLE:
**EXISTING FLOOD PLAIN
VOLUME EXHIBIT**

SHEET No.

EL.83

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PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
ELEVATION 81 TO 82: $(27,793+81,220)/2 = 54,506$ C.F.
ELEVATION 82 TO 83: $(81,220+136,561)/2 = 108,891$ C.F.

TOTAL=163,379 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE" ELEVATION=83.0.
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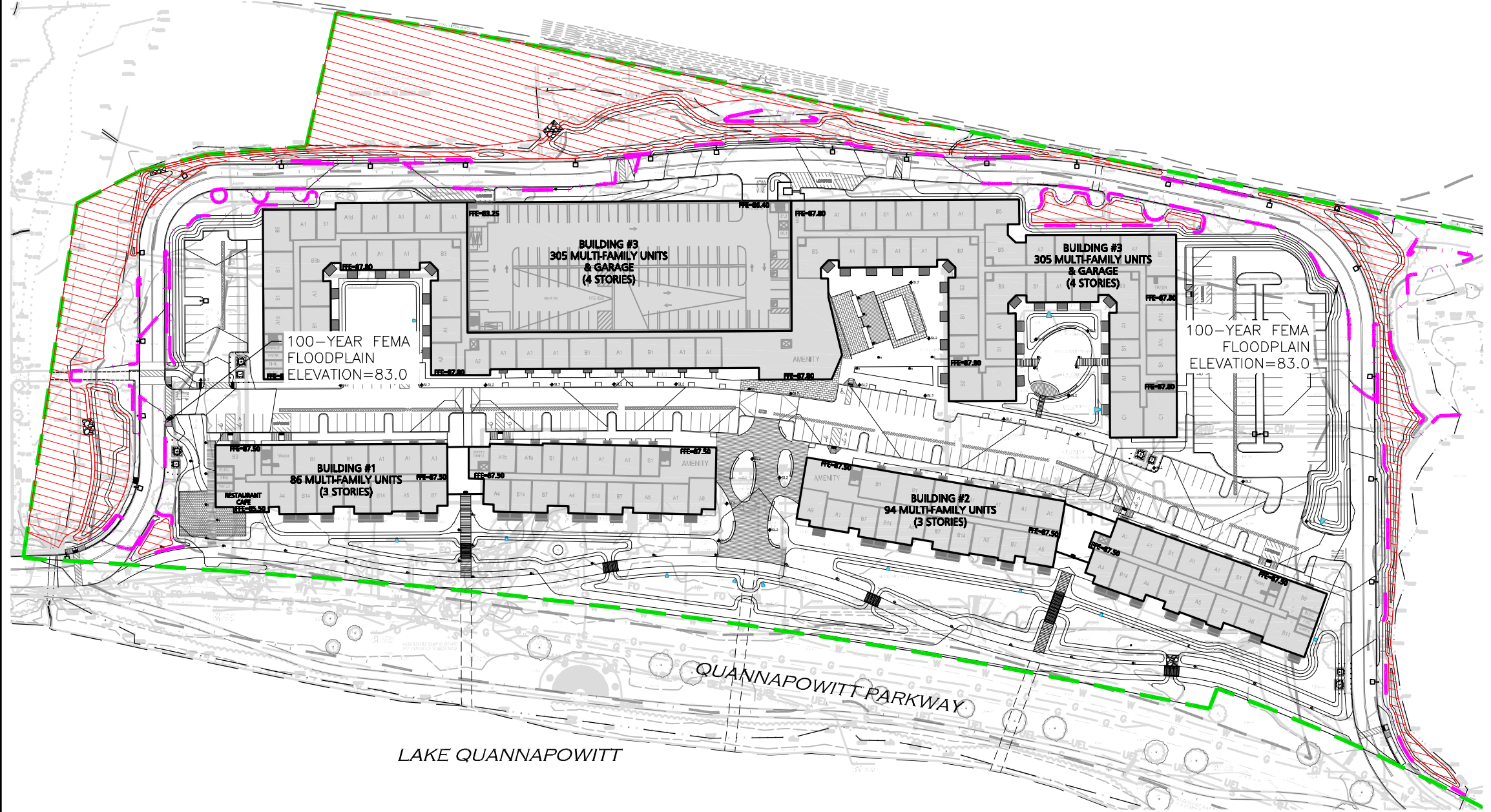
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DRAWING TITLE: PROPOSED FLOOD PLAIN VOLUME EXHIBIT	SHEET No. EL.81
--	---------------------------



PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
ELEVATION 81 TO 82: $(27,793+81,220)/2 = 54,506$ C.F.
ELEVATION 82 TO 83: $(81,220+136,561)/2 = 108,891$ C.F.

TOTAL=163,379 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE"
ELEVATION=83.0. REFERENCE FEMA FLOOD
INSURANCE RATE MAP (FIRM) DATED JUNE 4,
2010, PANEL 25017C0314E.

GRAPHIC SCALE



(IN FEET)
1 inch = 120 ft.

APPLICANT/OWNER:
CCF QUANNAPOWITT PROPERTY
COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

PROJECT:

200 - 400 QUANNAPOWITT
PARKWAY
WAKEFIELD, MA

PROJECT NO.	1623-11	DATE:	08/03/2021
SCALE:	1" = 120'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	ND	CHECKED BY:	TW

PREPARED BY:

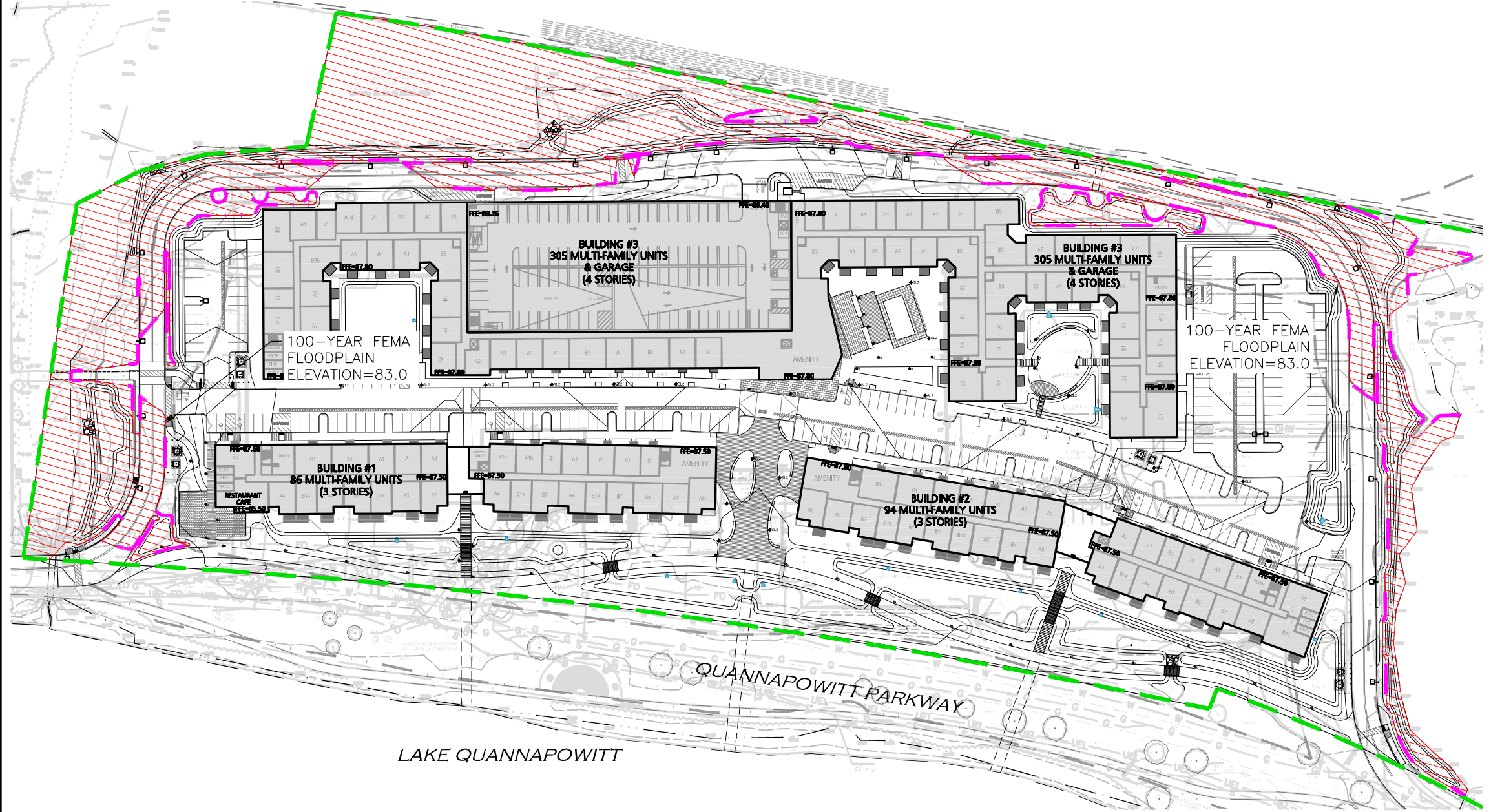


ALLEN & MAJOR
ASSOCIATES, INC.

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DRAWING TITLE:	SHEET No.
PROPOSED FLOOD PLAIN VOLUME EXHIBIT	EL.82



PROPOSED FLOODPLAIN VOLUMES:

ELEVATION 80 TO 81: UNDISTURBED
ELEVATION 81 TO 82: $(27,793+81,220)/2 = 54,506$ C.F.
ELEVATION 82 TO 83: $(81,220+136,561)/2 = 108,891$ C.F.

TOTAL=163,379 CUBIC FEET (C.F.)

100-YEAR FLOODPLAIN FEMA ZONE "AE"
ELEVATION=83.0. REFERENCE FEMA FLOOD
INSURANCE RATE MAP (FIRM) DATED JUNE 4,
2010, PANEL 25017C0314E.

GRAPHIC SCALE



(IN FEET)
1 inch = 120 ft.

APPLICANT/OWNER:
CCF QUANNAPOWITT PROPERTY
COMPANY, LLC
185 DARTMOUTH STREET
BOSTON, MA 02116

PROJECT:
**200 - 400 QUANNAPOWITT
PARKWAY
WAKEFIELD, MA**

PROJECT NO.	1623-11	DATE:	08/03/2021
SCALE:	1" = 120'	DWG. NAME:	FLOODPLAIN
DESIGNED BY:	ND	CHECKED BY:	TW

PREPARED BY:

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DRAWING TITLE: PROPOSED FLOOD PLAIN VOLUME EXHIBIT	SHEET No. EL.83
--	---------------------------

200 Quannapowitt Pkwy.

Wakefield, Massachusetts

Conservation Commission Presentation
August 12, 2021