



MEMORANDUM

To: Lawrence Township

From: Anthony Caponigro, PE
Kimley-Horn and Associates, Inc.

Date: 12/12/2023

Subject: Stormwater Management Narrative
Mercer Mall
N.J.S.H Route 1 & Quaker Bridge Road, NJ 08648

Please see below for a summary of the proposed stormwater management at N.J.S.H. Route 1 & Quaker Bridge Road:

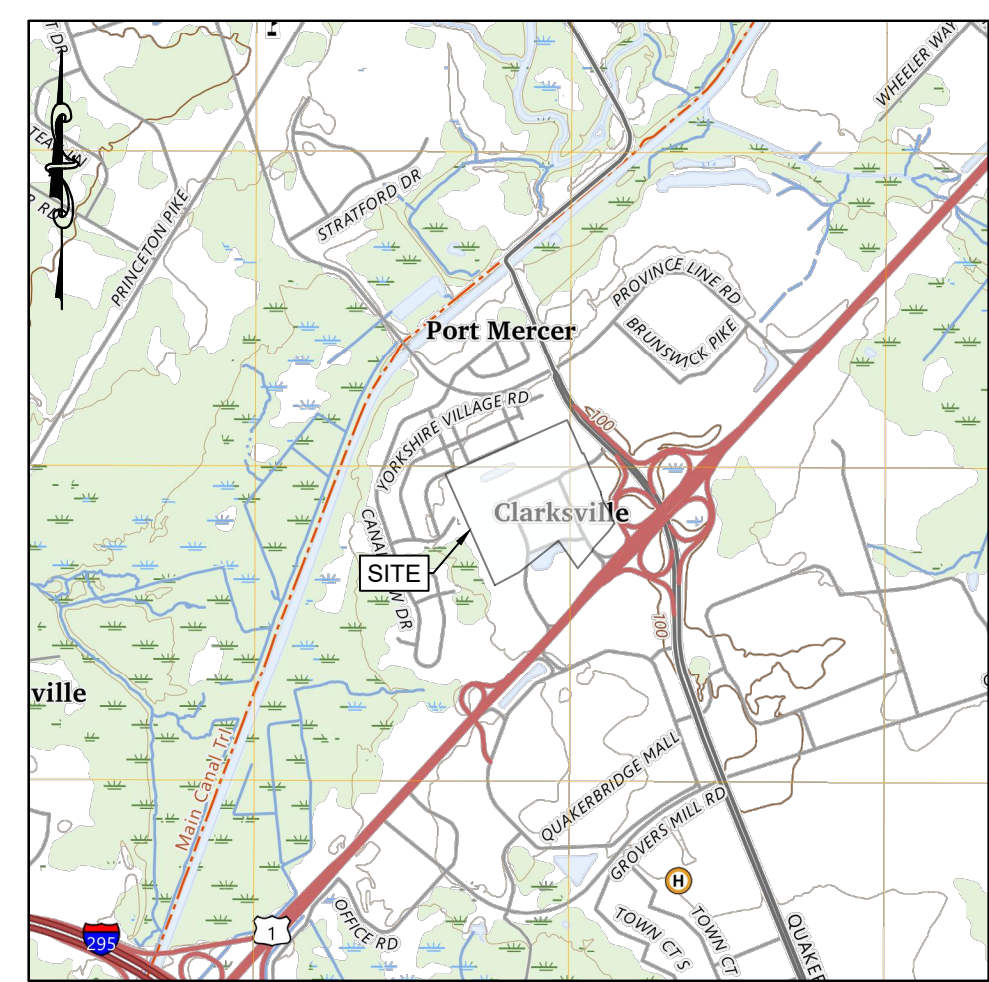
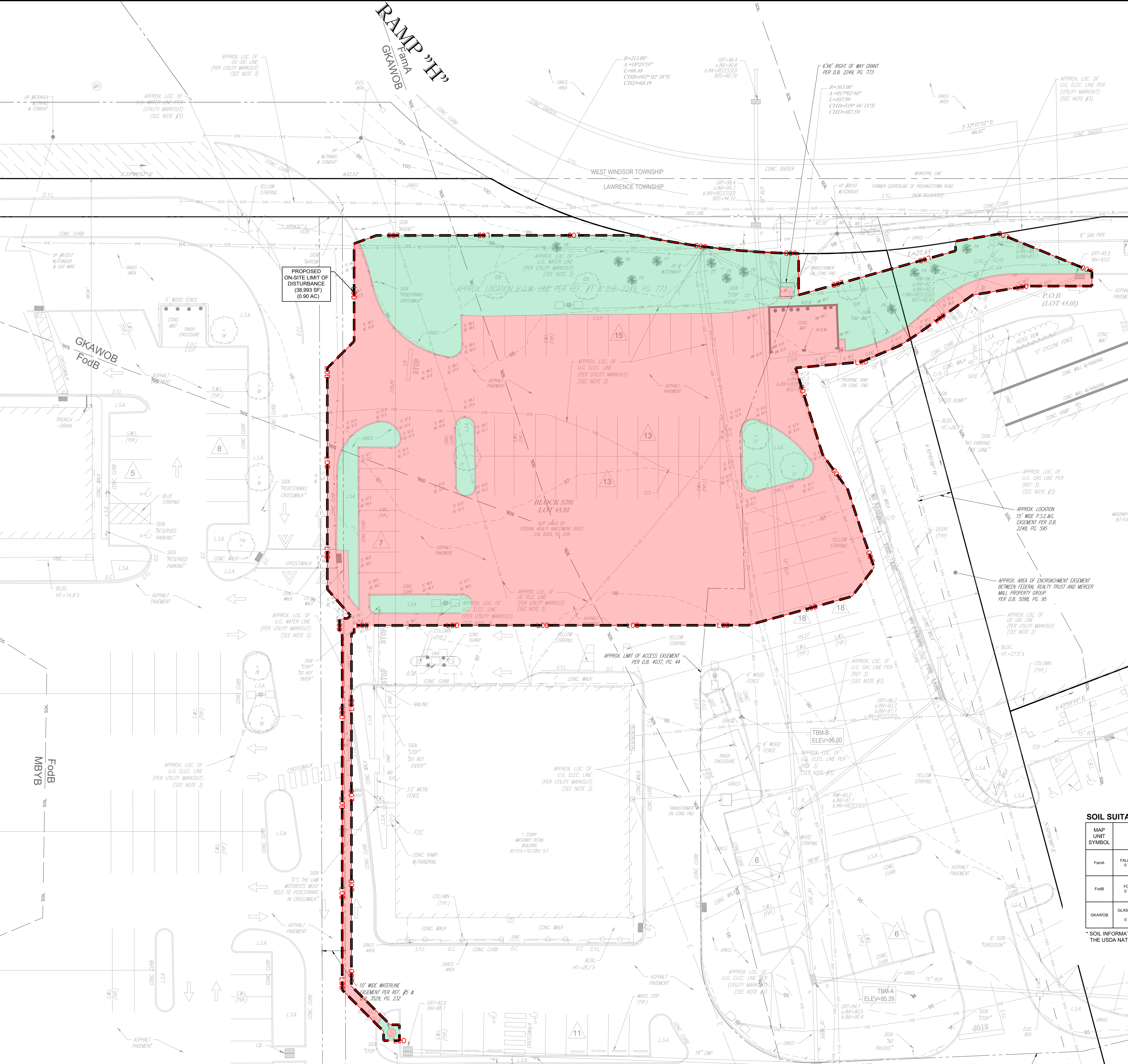
This subject property contains an existing mixed use shopping center situated in Lawrence Township, NJ and is approximately 1,961,496 SF (45.03 AC). The proposed project consists of the construction of a 1-story, 2,200 SF convenience store within the existing parking area located at the site frontage along Quakerbridge Road. The proposed improvements will also include the installation of parking, utilities, landscaping, and stormwater management structures.

NJDEP NJAC 7:8-1.2 defines major development as resulting in 1 AC (43,560 SF) or more of land disturbance and/or creation of $\frac{1}{4}$ acre (10,890 SF) or more of “regulated motor-vehicle surface.” “Regulated motor-vehicle surface” is defined as a net increase in motor vehicle surface and/or the total area of motor vehicle surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant, where the water quality treatment will be modified or removed.

The proposed Limit of Disturbance (LOD) is 38,993 SF, less than the 43,560 SF LOD threshold for major development. The existing impervious area at the shopping center is 1,610,388 SF, and the proposed impervious area for the shopping center with the convenience store is 1,609,658 SF. This is a decrease of impervious area onsite by 730 SF, which also does not define the project as major development. Because the project proposes less than 1 acre of disturbance and less than $\frac{1}{4}$ acre of additional regulated motor vehicle surface, the project is not considered a major development and is exempt from the NJAC 7:8 requirements.

The proposed improvements within the shopping center will maintain existing drainage patterns. Runoff from the site will sheet flow into the proposed inlets, that will then connect into the existing onsite stormwater management system. This runoff ultimately discharges into the existing detention basin along the northern site boundary. The project will be compliant with the NJDEP Stormwater Management requirements, as outlined above.

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USGS MAP (PRINCETON QUADRANGLE)
SCALE: 1"=2,000'



SOILS MAP (USGS SOILS MAP AERIAL IMAGERY)
SCALE: 1"=500'

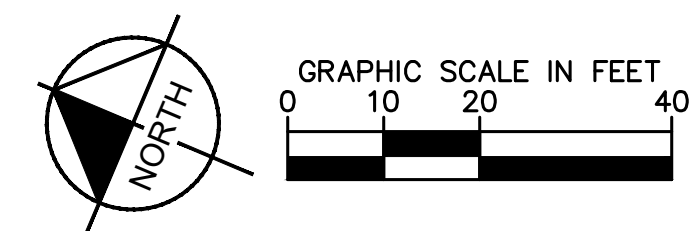
HATCH LEGEND

	DRAINAGE AREA LINE
	PROPOSED LIMIT OF DISTURBANCE
	PERVIOUS COVER
	IMPERVIOUS COVER

SOIL SUITABILITY AND CHARACTERISTICS

MAP UNIT SYMBOL	SOIL	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	FOR USE AS ROADFILL	FOR USE AS TOPSOIL	FOR USE AS GRAVEL	FOR USE AS SAND	HYDRIC SOILS	HYDRIC SOIL GROUP
FmA	FALLSINGTON SANDY LOAMS 0 TO 2 PERCENT SLOPES	0 TO 10 IN.	MORE THAN 80 IN.	FAIR	FAIR	POOR	FAIR	YES	CO
FmB	FORT MOTT LOAMY SAND 0 TO 5 PERCENT SLOPES	MORE THAN 80 IN.	20 TO 40 IN.	GOOD	FAIR	POOR	FAIR	N	A
GKAWOB	GLASSBORO AND WOODSTOWN SANDY LOAMS 0 TO 5 PERCENT SLOPES	0 TO 80 IN.	10 TO 90 IN.	FAIR	FAIR	POOR	FAIR	N	AD

* SOIL INFORMATION HAS BEEN OBTAINED FROM THE WEB SOIL SURVEY WHICH IS OPERATED BY THE USDA NATIONAL RESOURCES CONSERVATION SERVICE.



NO.	REVISIONS	DATE	BY

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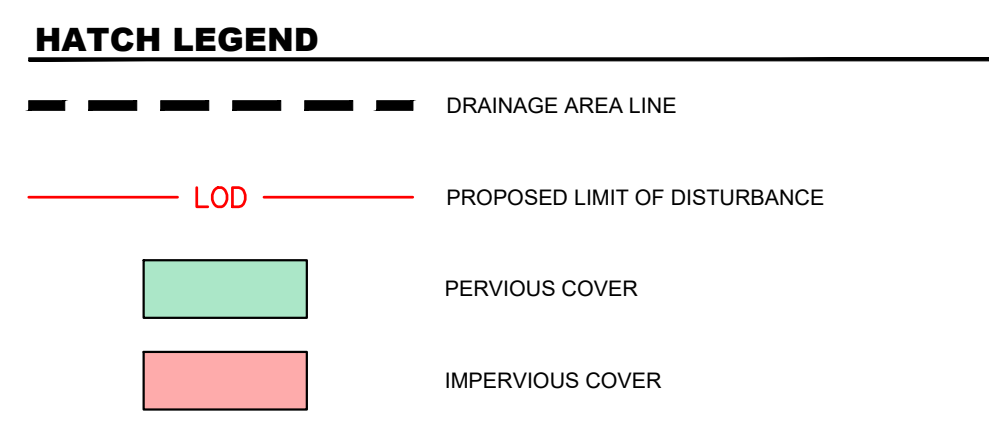
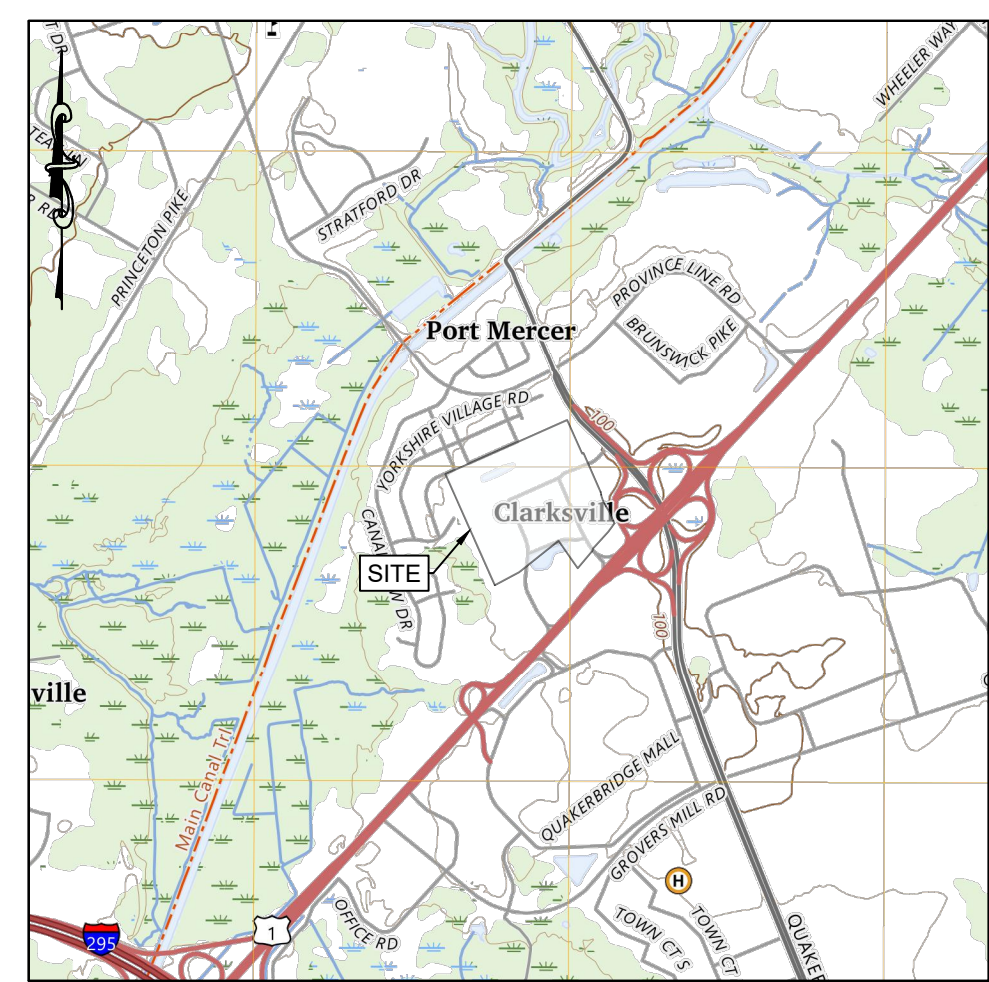
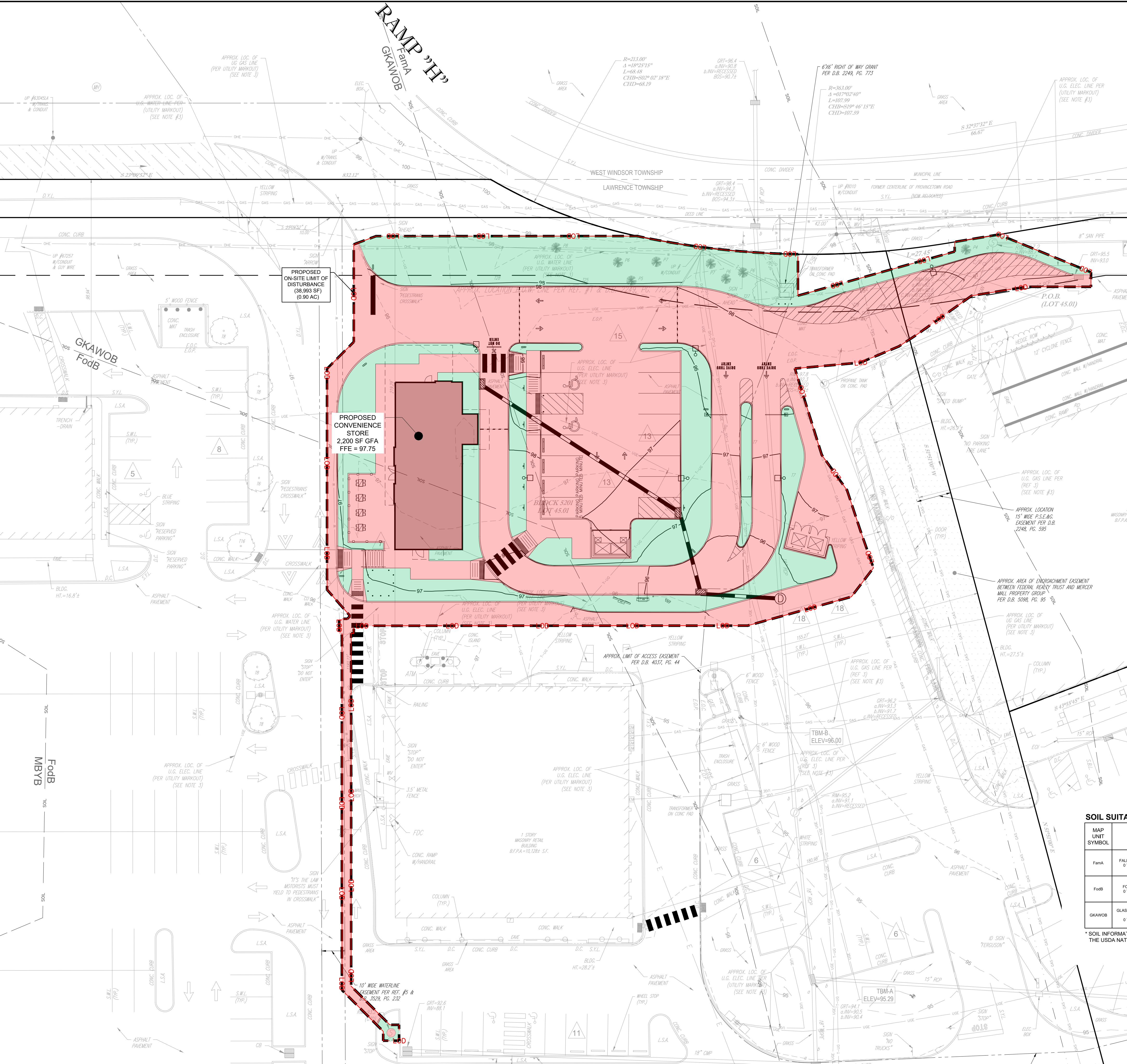
KHA PROJECT	112210003
DATE	12/12/2023
SCALE	AS SHOWN
DESIGNED BY	SLWG
DRAWN BY	JW
CHECKED BY	TMM

PRE-DEVELOPMENT DRAINAGE AREA MAP

PRELIMINARY/FINAL MAJOR SITE PLANS
N.J.S.H. ROUTE 1 & QUAKER BRIDGE ROAD
TAX MAP SHEETS 52.02 AND 52.03
BLOCK 5201, LOTS 32, 39, 40, 41, 01, AND 45.01
LAWRENCE TOWNSHIP NEW JERSEY

SHEET NUMBER
DA-1

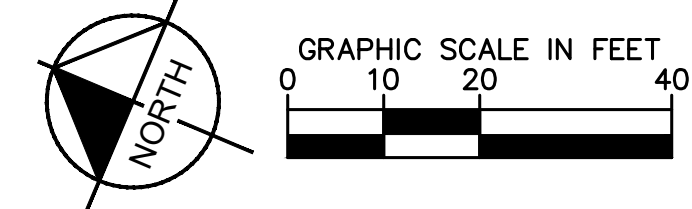
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POST-DEVELOPMENT DRAINAGE AREA MAP

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 N.J.S.H. ROUTE 1 & QUAKER BRIDGE ROAD
 TAX MAP SHEETS 52.02 AND 52.03
 BLOCK 5201, LOTS 32, 39, 40, 41, 01, AND 45.01
 LAWRENCE TOWNSHIP NEW JERSEY

SHEET NUMBER
DA-2