

TOWN OF WAPPINGER

PLANNING BOARD

PROJECT NAME: Jiffy Lube Multi-Care

MEETING DATE: April 18, 2022

ACCOUNT NUMBER: 21-3448 (Site Plan) / 21-4095 (SUP)

DATE PREPARED: April 7, 2022

X **SITE PLAN** **X** **SPECIAL USE PERMIT** **SUBDIVISION**

THE ATTACHED HAS BEEN REFERRED TO YOU FOR YOUR COMMENTS AND RECOMMENDATIONS. PLEASE SUBMIT ANY COMMENTS TO THE TOWN OF WAPPINGER PLANNING BOARD, 20 MIDDLEBUSH ROAD, WAPPINGERS FALLS, NY 12590 WITHIN FIFTEEN (15) DAYS.

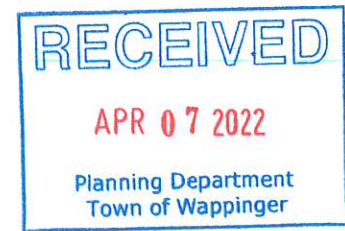
 1 TOWN FILE
 7 TOWN OF WAPPINGER PLANNING BOARD
 1 ENGINEER TO THE TOWN
 1 PLANNER TO THE TOWN
 1 ATTORNEY TO THE TOWN
 HIGHWAY SUPERINTENDENT
 FIRE PREVENTION BUREAU
 RECREATION
 ARMY CORP. OF ENGINEERS
 DUTCHESS COUNTY DEPT. OF PLANNING
 DUTCHESS COUNTY DEPT. OF PUBLIC WORKS
 NEW YORK STATE DEPT. OF TRANSPORTATION
 DUTCHESS COUNTY DEPT. OF HEALTH
 DUTCHESS COUNTY SOIL & WATER
 NYS DEPT OF D.E.C
 TOWN OF FISHKILL
 TOWN OF EAST FISHKILL
 TOWN-OF LAGRANGE
 VILLAGE OF WAPPINGER PLANNING BOARD
 BUILDING INSPECTOR
 1 ZONING ADMINISTRATOR-BARBARA ROBERTI
 TOWN CLERK
 CAMO POLUTION
 STORM WATER MANAGEMENT (WALTER ARTUS)
 CENTRAL HUDSON

***** PLEASE NOTE ANY VIOLATIONS UPON YOUR REVIEW*****



January 14, 2022

Mr. Bruce Flower, Chairman
Town of Wappinger
Planning Board
20 Middlebush Road
Wappingers Falls, NY 12590



RE: Proposed Jiffy Lube Multi-Care - 1506 US 9, Wappingers Falls, NY 12590
Tax Parcel #6157-02-653974
Stormwater Management Narrative

Dear Mr. Flower,

Our Client, Jiffy Lube International, Inc. (Jiffy Lube), proposes to redevelop the above referenced parcel. The existing parcel at 1506 US 9 is located at the north end of the 12.97 acres Wappinger Plaza shopping center property and is currently developed with a former Sonic Restaurant building and associated parking. The improvements will be contained to a 0.75 acre "lease area" and will consist of a new proposed 3,064 square feet Jiffy Lube Multi-Care facility with four (4) bays and associated parking, access drives, and trash enclosure. This summary will describe the stormwater management methodology used and the design assumptions considered in managing the drainage across the site in order to comply with Chapter 9 "Redevelopment Activity" of the New York State Stormwater Management Design Manual.

Existing Conditions

In its current existing conditions, the site is developed with an approximately 1,815 sf existing freestanding masonry former Sonic Restaurant and associated 12 space parking lot, 24 drive-in dining spaces and drive-thru on the 0.75 acre "lease area". The building is currently vacant and it will be demolished to make way for the proposed improvements.

Considering only the lease area the existing conditions consist of 6,314 sf (0.145 AC) of pervious area and 26,356 sf (0.605 AC) of impervious area. An impervious percentage of 80.67%

As noted on the topographic survey included as part of the submitted Engineering Plan Set, runoff from the site currently drains undetained in a southerly direction and is captured by a series of inlets and underground storm sewer lines that are part of the overall Wappinger Plaza shopping center stormwater management system.

Proposed Conditions

As shown on the drawings, the proposed improvements will consist of a new approximately 3,064 sf Jiffy Lube Multi-Care facility with four (4) bays and associated parking, access drives, and trash enclosure. The improvements will be constructed on a total of 0.75 acre "lease area" within the shopping center.

Under proposed re-developed conditions, the lease area will consist of 10,711 sf (0.246 AC) of pervious area and 21,959 sf (0.504 AC) of impervious area. An impervious percentage of 67.21%. The proposed improvements will reduce the impervious percentage by 13.46% and provide a net benefit to the overall shopping center stormwater management facilities.

Based on a conversation with the Village's review engineer and an analysis of Chapter 9 "Redevelopment Activity" of the New York State Stormwater Management Design Manual, we have determined that the site must provide Water Quality Treatment Volume for the total impervious area.

Due to the nature of the proposed building as a vehicle maintenance and repair site, we are proposing the use of an alternative SMP to meet the WQv criteria. The alternative chosen for this site is a Contech CDS water quality structure, a flow through practice that will treat the calculated peak runoff rate from the WQv design storm. As noted on the enclosed Water Quality Calculations spreadsheet, the total required water quality volume for the site is 2,496 cubic feet and the water quality peak flow for sizing the alternative SMP is 0.54 cfs. As noted on the plans, a Contech stormwater quality unit CDS2020-5-C has been chosen for this application. This unit has the capacity to handle the peak flow and provide the 75% required removal rate.

Under proposed conditions, runoff from the site will be captured by the underground storm sewer system and routed to the CDS unit where the flow will be captured and cleaned for the more frequent storm events and bypass the larger storm events.

Conclusion

It is our professional opinion that with the incorporation of the above mentioned stormwater management methodology, the proposed development plan for this site will be able to adequately manage the runoff across the site in accordance with the current requirements of Chapter 9 "Redevelopment Activity" of the New York State Stormwater Management Design Manual and will present no detrimental impacts downstream or to adjacent properties.

Please feel free to contact our office with any questions, comments, or concerns.

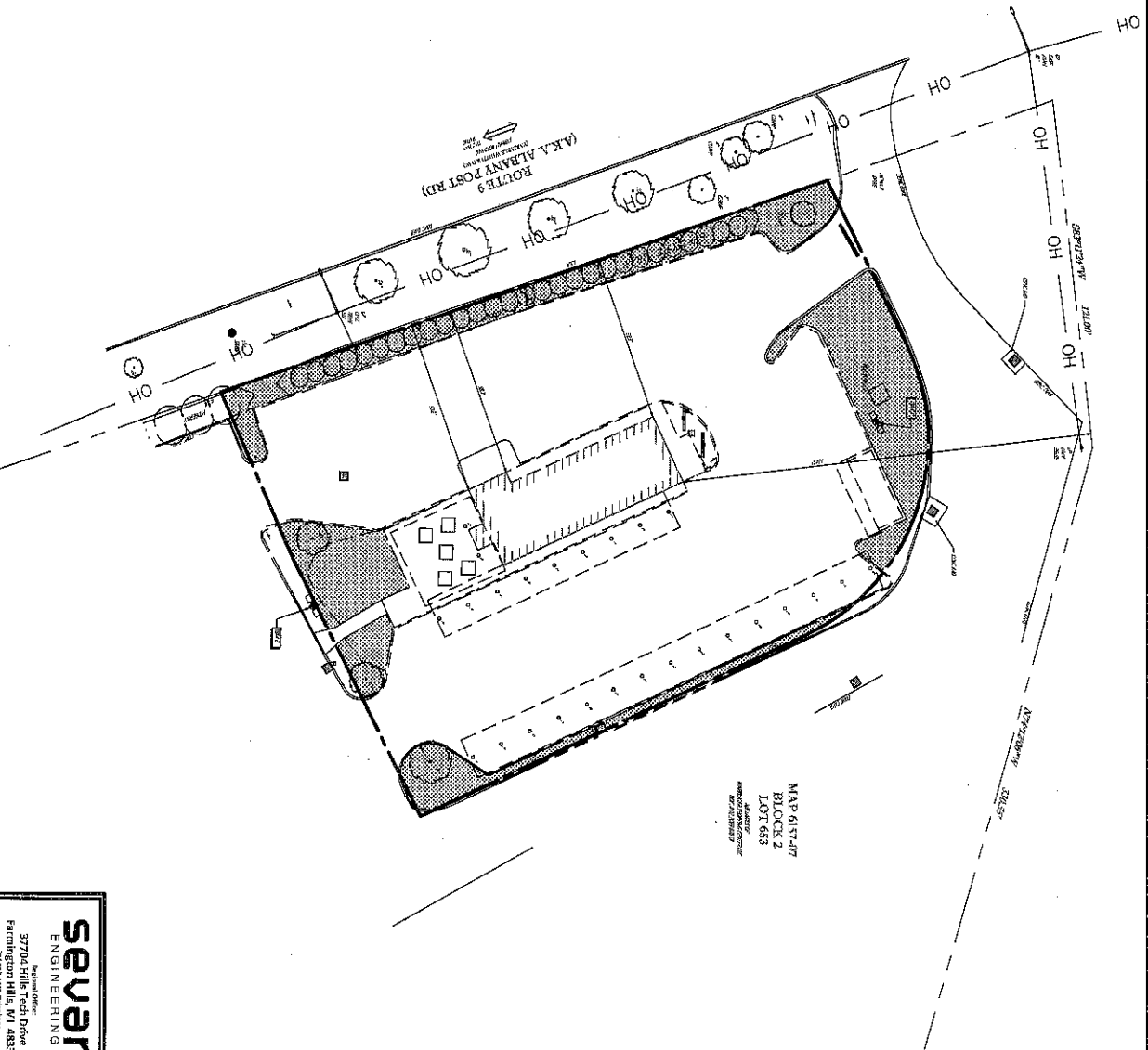
Regards,
Sevan Multi-Site Solutions



Timothy Kratz, P.E.
Operations Director – Engineer of Record
tim.kratz@sevansolutions.com
(586) 899-2473

Attachments:

1. Exhibit EC-Existing Conditions
2. Exhibit PC-Proposed Conditions
3. Water Quality Calculations



MAP 617-47
BLOCK 2
LOT 655
ALBANY POST RD. 124.00'

SCALE: 1" = 40'-0"

0 40' 80'

EXISTING CONDITIONS

seven ENGINEERING 37704 Hill Tech Drive Farmington Hills, MI 48331 734.325.4400 www.sevenengineering.com		customer PROJECT LOCATION 1506 US 9 WAPPINGERS FALLS, NY (DUTCHESS COUNTY)																															
SHEET MANAGEMENT PROJECT NO.: 156 DATE: 01.14.2012 CHECKED: VANDER LIND SUBMITTAL: 11.17.2011		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION																											
NO.	DATE	DESCRIPTION																															
SHEET TITLE EXISTING CONDITIONS		SHEET NUMBER EC																															

PERVIOUS/IMPERVIOUS AREAS	
TOTAL LEASE AREA = 0.75 AC	
PERVIOUS AREA = 0.145 AC	
IMPERVIOUS AREA = 0.605 AC	

NEW YORK STATE - STORMWATER MANAGEMENT DESIGN MANUAL

WATER QUALITY CALCULATIONS

TOTAL REQUIRED WATER QUALITY FOR THE SITE

90% Rainfall Event Number (Fig 4.1)	P=	1.4 in
0.05+0.009 (I) (minimum Rv=0.2)	Rv=	0.6548
Total Drainage Area	At=	0.75 Ac
Impervious Area	Ai=	0.504 Ac
Impervious Area Percentage	Ai=	67.2 %
90% Rule	Wqv=	2496 c.f.

WATER QUALITY PEAK FLOW CALCULATION

90% Rainfall Event Number (Fig 4.1)	P=	1.4 in
Area	A=	0.75 Ac
Water Quality Volume	Wqv=	2496 c.f.
Runoff Volume	Q=	0.92 in
Curve Number	CN=	95.05
$I_a = (200/CN) - 2$	$I_a =$	0.10 in
$R = I_a/P$	R=	0.07
q_u (From Exhibits 4-I to 4-III)	$q_u =$	500
$Q_p = q_u * A * WQ_v$	P=	0.54 cfs

April 04, 2022

Mr. Bruce Flower, Chairman
Town of Wappinger
Planning Board
20 Middlebush Road
Wappingers Falls, NY 12590

**Re: Jiffy Lube Multi-Care
Amended Site Plan and Special Use Permit Review
Tax Parcel #657-02-653974
CPL # 14926-00050**


Dear Chairman Flower and Planning Board Members,

As Agents for the Applicant, Jiffy Lube International, Inc., we respectfully submit the below responses, **in red**, to the comments of the review letter from CPL Architecture, Engineering, Planning, dated March 1st, 2022, for the above referenced project, along with the following enclosed documents to complete our application: **Twelve (12) Sets of the Revised Site Plan, Rev3, dated 04-01-2022**

1. Applicant must provide approval from the Dutchess County Department of Behavioral and Community Health for the change in use of the parcel with respect to sanitary wastewater and drinking water usage rate.
Per discussion with DCDBCH and CPL, a Water / Sewer Adequacy form is not needed. We will work with the village on further confirming backflow prevention review jurisdiction and provide submitted applications as requested / required.
2. Provide a copy of the geotechnical investigation report prepared by Geostructures Inc. as referenced on Sheet C1.10.
See provided Geotech Report.
3. Show the total area of the limits of disturbance in acres and square feet on Sheet C1.11
Square footage has been added to sheet C1.11
4. Please include a copy of the water quality calculations on Sheet C1.31.
Calculations have been provided

Thank you for your time and attention to this matter. If you have any further questions, please feel free to contact us.

Regards,


Tim Kratz, PE
Engineer of Record
219.841.6535