APPENDIX B – SEQR FULL ENVIRONMENTAL ASSESSMENT FORM – PART 3

SEQR FULL ENVIRONMENTAL ASSESSMENT FORM – PART 3

EVALUATION OF THE IMPORTANCE OF IMPACTS

Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

Instructions

Discuss the following for each impact identified in column 2 of Part 2:

1. Briefly describe the impact.

2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).

3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

To answer the question of importance, consider:

- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact

Agency Use Only [IfApplicable]

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☐ Part 1 ☐ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

____
____
____

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
____ as lead agency that:

☐ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

____
____
____
____

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:	
Name of Lead Agency:	
Name of Responsible Officer in Lead Agency:	
Title of Responsible Officer:	
Signature of Responsible Officer in Lead Agency:	Date:
Signature of Preparer (if different from Responsible Officer)	Date:

For Further Information:

Contact Person:

Address:

Telephone Number:

E-mail:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

EXPANDED ENVIRONMENTAL ASSESSMENT

I. Project Description

A. Proposed Development

Scannell Properties is proposing to construct a 278,670 ± square foot sales distribution center on two parcels totaling ±56.0 acres along NYS Route 150 in the Town of Schodack, Rensselaer County, New York. The main parcel consists of ±32.5 acres and the other parcel of ±23.5 acres. The two properties will be consolidated into one as part of this project. The proposed facility will be constructed in its entirety in one phase. There will be a various employee shifts per day depending on the employee job and the tenants operational demands at the time. During the peak operational season, there is anticipated to be 10-hour to 12-hour warehouse shifts which will be staggered with shift changes around 1:00 am, 8:00 am, 2:00 pm and 7:00 pm Monday through Sunday. The truck shipping will be consistent during all hours of the day with anticipated increased arrival/departure volumes during the nighttime hours of 7:00 pm to 7:00 am Monday through Sunday.

The sales distribution center products will not be stored on-site but will be in process in various arrangements including: push carts up to eight feet tall and pallets on-floor up to five feet tall. Pallets will not be encapsulated and all commodities will be packaged in corrugate. The commodity classification for this facility is considered Cartoned Unexpanded Group A Plastics, as noted below:

Item	Product Type	Commodity Classification (Fire)
1	Books	Class III Commodities
2	Music (CDs, DVDs)	Unexpanded Group A Plastics
3	Toys	Unexpanded Group A Plastics
4	Electronics	Class IV Commodities and Unexpanded Group A Plastics
5	Kitchen Products	Class I and IV Commodities
6	Home Improvement	Class I and IV Commodities
7	Baby Products	Class II and IV Commodities and Unexpanded Group A Plastics
8	Musical Instruments	Class I, III and IV Commodities
9	Video Games	Unexpanded Group A Plastics
10	Automotive Supplies	Class I, III and IV Commodities
11	Other Non-Media	Class I, III and IV Commodities
12	Grocery	Class I, II and III Commodities
13	Health and Personal	Class III and IV Commodities
14	Lawn and Garden	Class I and IV Commodities
15	Office Supplies	Class III and IV Commodities and Unexpanded Group A Plastics
16	Personal	Class III and IV Commodities and Unexpanded Group A Plastics
17	Personal Care Appliances	Class III and IV Commodities
18	Pet Supplies	Class I, II and IV Commodities and Unexpanded Group A Plastics

There is no intent to store any products classified by the US Department of Transportation as Hazardous Materials or Controlled Goods in the aforementioned arrangements. Any Hazardous Materials passing through this location will be negligible and well below Maximum Allowable Quantities, as defined by NFPA and IFC.

There will be limited amount of janitorial supplies as would be expected to operate a building of this size and scope. Idle pallets are limited to the Inbound dock during processing and will not be stored on-site.

The project site is currently zoned Planned Development District (PD-3) and the proposed use, sales distribution center, is an allowed use within this district subject to site plan approval. Because the project site is located within the Town's Water Quality Control District, the project does require a special permit. The property is located within Extension No. 3 to Sewer District No. 6 and within Extension No. 5 to Consolidated Water District 101.

The project includes associated on-site roadways, parking, utility infrastructure, landscaping, and stormwater management facilities. There will be three (3) driveway entrances to the site off NYS Route 150 (Schodack Valley Road); one dedicated driveway for employees, one dedicated driveway for entering trucks and one dedicated driveway for exiting trucks. A security gate with a Guard House will be provided at each truck entrance. Approximately 442 parking spaces will be provided for employees and approximately 294 parking spaces will be provided for truck trailers. Off-site improvements will include extension of water, sewer, and natural gas mains to the project site. The off-site utilities will be extended from their current mains along US Route 9&20 at the intersection of NYS Route 150. Off-site roadway improvements are identified in the Traffic Impact Study and consist of upgrades at the US Route 9&20 intersection with NYS Route 150 as well as widening of NYS Route 150 to accommodate dedicated left turn lanes at the proposed entrance driveways into the site.

Additional project information is provided in the site plan package of drawings that accompany this EAR.

B. Project Implementation

Implementation of the project involves several approvals including the following:

1. Coordinated SEQRA review by the Town of Schodack Planning Board (Lead Agency), as the action is considered to be a "Type I" action.

2. Site Plan review and approval by the Schodack Planning Board.

3. Special Permit from Schodack Planning Board for development within a Direct Recharge Area of the groundwater aquifer per the Water Quality Control District requirements.

4. NYSDEC and NYSDOH approvals for extension of the water and sewer mains to the project site.

5. NYSDOT review and approval of the Traffic Impact Study.

6. NYSDOT approval of three (3) new curb cuts onto NYS Route 150.

7. Town of Schodack work permits for connection to the Town sanitary sewer system.

8. Town of Schodack work permits for connection to the Town water main.

9. Town of Schodack (MS4) approval and acceptance of the Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared in compliance with the NYSDEC General Permit for

Stormwater Discharges from Construction Activity (GP-0-15-002), as well as approval for disturbing more than five (5) acres of land at one time.

The following review agencies may be included in the necessary project review process:

1. Town of Schodack Town Board
    a. SEQRA Review - Involved Agency
    b. Acceptance of dedication of new water and sewer mains, as necessary.

2. Town of Schodack Planning Board
    a. SEQRA Review - Lead Agency
    b. Site Plan review/approval.
    c. Special Use Permit per Water Quality Control requirements
    d. SWPPP and 5-acre Waiver approval

3. Town of Schodack Department of Public Works
    a. Permits for water and sewer service connections

4. Rensselaer County Industrial Development Agency
    a. Potential project financing

5. Rensselaer County Planning Board
    a. SEQRA review - Interested Agency
    b. Site Plan Review Recommendation

6. Rensselaer County Health Department
    a. SEQRA review - Involved Agency
    b. Approval of water and sewer main extensions

7. New York State Department of Health
    a. SEQRA review - Involved Agency
    b. Approval of water main extension

8. New York State Department of Environmental Conservation
    a. SEQRA Review - Involved Agency
    b. General Permit for Stormwater Discharges
    c. Approval of sewer main extension

9. New York State Department of Transportation
    a. SEQRA Review - Involved Agency
    b. Approval of Traffic Impact Study
    c. Permits for curb cuts and all work in NYSDOT right-of-way

10. New York State Office of Parks, Recreation and Historic Preservation
    a. SEQRA Review - Involved Agency
    b. Sign-off on Archaeological and Historic Impacts

11. U. S. Army Corps of Engineer
    a. Wetlands Jurisdictional Determination

II. IMPACT ANALYSIS AND MITIGATION MEASURES

A. Impact on Zoning

The site is zoned Planned Development District (PD-3). The proposed sales distribution center facility is a permitted use within the PD-3 zoning district subject to site plan approval. Because the project site is located within the Town's Water Quality Control District, the project also requires a special permit. There are no specific use and bulk zoning regulations applicable to this site; however, the Schodack Planning Board will establish appropriate bulk regulations as part of the Site Plan Review process.

The project is consistent with the Town of Schodack Comprehensive Plan (January 2011), particularly Guiding Principle #5: Encourage business growth around the I-90 exits and the Route 9 & 20 Corridor to build a strong tax base for public services and to provide retail and service business support for Town Residents. The Route 9 & 20 has become a sales distribution center corridor with the recent developments of the Amazon Fulfillment Center and the Hannaford Distribution Center.

The project is also consistent with the Route 9 Corridor Development Plan (July 2006) as follows:

- Traffic is concentrated where flow will be minimal and highway access greatest.
- The facility will provide employment opportunities.
- The Facility is a clean operation that does not threaten the aquifer more than the existing activity.
- The facility is not water intensive and does not use or generate hazardous materials.

B. Impact on Land

Pursuant a Draft Generic Environmental Impact Statement prepared in April 2000 (last revised February 2001) on behalf of R.J. Valente, a prior applicant for a mining permit at the site, a portion of this property has been used as a gravel mine by various entities since the 1930s. Therefore, a portion of this property has been significantly altered in the past. The remainder of the site is unused forest.

Construction of paved areas and buildings will result in alteration of the existing ground. Approximately ±41 acres of the present ground cover will be disturbed during construction. The development of the site will require that some fill material (e.g. driveway and parking stone sub-base) will be imported to the project site to achieve the proposed grades.

According to the Rensselaer County Soil Survey, Natural Resources Conservation Service website (NRCS), there are six (6) mapped soils identified within the project boundary. Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB), Hoosic gravelly sandy loam, rolling (HoC), and Hoosic gravelly sandy loam, steep (HoE) have a hydrologic soil group A, meaning these soils have a high infiltration rate when thoroughly wet. These soils make up approximately 43% of the site. Castile gravely silt loam, 0 to 5 percent slopes (CbA), and Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, have a hydrologic soil group A/D, meaning these soils have a low infiltration rate when thoroughly wet. These soils make up a minority of the site; approximately 7.9%. In general, the majority of the on-site soils are types of soils are adequate for supporting the proposed project. Where unsuitable soils are encountered, they will be removed and disposed of in accordance with all local, state, and federal regulations. Refer to Appendix D for NRCS soils information and Appendix E for the Geotechnical Engineering Report.

It is estimated that about 220,000 cubic yards of soil will need to be cut for use as on-site fill for construction of the building, driveways, parking and stormwater management facilities. The site will be designed to balance the on-site cuts and fills to the greatest extent possible and it is anticipated that no structural soil will need to be imported onto the site. Topsoil will be stripped, stockpiled and re-used on site; because less topsoil will be needed in the final condition is anticipated that approximately 11,000 CY of topsoil may be exported from the site. Material, such as crushed stone sub-base material for building slabs, driveways and parking lots will be imported to the site. The following are estimated import quantities needed for the site work: 26,000 CY of subbase stone; 10,300 CY of asphalt, 4,100 CY of concrete. However, some on-site material may be able to be processed on-site and used for the sub-base material.

The previous Geotechnical Report prepared for a similar development (refer to Appendix E), bedrock was encountered in only one (1) of the test borings performed by the Geotechnical Engineer within the current development site. Boring B-45 hit bedrock at a depth of 24.4’ below existing grade, at roughly elevation 316 feet. There is no rock shown at the depths expected for building, pavement, or pond excavation. Therefore, no rock excavation is currently expected.

Also, based on the Geotechnical Engineering Report prepared for a similar project, groundwater was encountered only in only two (2) of the 32 borings and 38 test pits performed throughout the site and the adjacent property. The only location on the proposed site where water was encountered was at boring B-37 at 38 feet below grade at approximately elevation 285 feet. Water was also encountered at 8’ below test pit TP-58; however, this location is not within the current project site. Updated geotechnical investigations are being completed for the proposed development to supplement the previously completed Geotechnical Engineering Report.

During construction, erosion control measures such as silt fence, diversion swales/berms and sediment traps/basins will be installed to mitigate the potential for erosion of soils and downstream siltation. The proposed stormwater sedimentation basins will function as temporary sediment traps/basins during construction. Upon the completion of construction those temporary facilities will be converted to permanent facilities. All erosion and sediment control measures will be constructed in accordance with the latest edition of the New York State Standards and Specifications for Erosion and Sediment Controls.

Common industry practices, such as the spraying of water to control dust and confining construction work periods to those permitted by the Town, will further mitigate the normal unavoidable short-term impacts associated with construction.

Based on the above, the proposed project will not have a significant impact on land.

C. Impact on Water

Wetlands

A wetland delineation of the project site was conducted by Terrestrial Environmental Specialists (TES) for a previous project in November 2011. Verification of the wetland delineation is in the process of being conducted as the previous report is over 5-years old. TES also investigated available background information and performed a field review for wetlands and other waters of the United States. This wetland investigation was conducted for the project site (Tax IDs 189.-10-40.131 & 189.-10-40.132) as well as the adjacent property (Tax ID 189.-10-36). For the purpose of this report, only wetlands found on the project site (Tax ID 189.-10-36) will be discussed.

TES collected and reviewed available background information and maps including a topographic map, wetland maps, soils map and descriptions, surface water classification map, flood rate insurance map, and an aerial photograph to locate potential wetlands on the site. There are no mapped state-regulated (i.e. NYSDEC) wetlands on the site.

TES utilized methods described in the Army Corps of Engineers (ACOE) wetland delineation manual to search for wetlands within the project area. No wetlands were delineated on the project site, however there were two (2) streams on the site referred to as Stream 1 (Wetland B) and Stream 2 (Wetland C). The delineated streams are shown on Figure 10 in the Wetland Delineation Report (see Appendix F). Stream 1 occupies approximately 0.05 acres of the site with a length of 237 feet within the property boundary. Stream 2 has a length of 234 feet within the property boundary. Photographs and field data sheets are provided in Wetland Delineation Report Appendix A and Appendix B, respectively.

Stream 1 is located along the northeastern boundary of the site and appears to be an intermittent relatively permanent water (RPW). It is a tributary of the Moordener Kill and is designated as a Class C stream with C Standards. Stream 2 is located along the northwestern boundary of the site and is a perennial RPW. It is part of the Moordener Kill and is designated as a Class C stream with C(TS) Standards. Stream 2 is a state-protected water body since it has a Classification or Standard of C(T) (trout) or higher. Streams 1 and 2 are considered Corps jurisdictional water bodies as they are both associated with tributary systems to navigable waters.

Development of the project site will avoid disturbance of the ACOE jurisdictional Wetlands B (Stream 1) and C (Stream 2). Based on the above, the project will not impact any wetlands under the jurisdiction of the USACOE or the NYSDEC. As mentioned, verification of the wetland delineation is currently being conducted as part of this project, and the pending report will be provided in a subsequent submittal to verify the wetland boundary in accordance with ACOE requirements.

Stormwater Runoff

A drainage study of the site was conducted by McFarland Johnson, Inc. of Saratoga Springs, New York (MJ) for this project. The study included an analysis of the existing and proposed hydrology and hydraulics to ensure that the proposed development does not significantly affect the environment. The results of the report confirm that this site can support the proposed development. The full Stormwater Management Report, dated April 2021, is included in Appendix G.

Although the project will alter the existing site topography, the existing drainage pattern will be maintained on the east and west sides of the property. There are two (2) analysis points where peak stormwater runoff is evaluated for both existing and proposed conditions. Analysis Point #1 is located along the Moordener Kill where it runs onto the property just east of Route I-90.; Analysis Point #2 is located where the existing roadside swale on the south side of NYS Route 150 discharges into a tributary of the Moordener Kill. See Appendix G for the locations of these analysis points.

The construction of buildings and paved areas is expected to increase the rate and volume of stormwater run-off. The increase in run-off will be mitigated by the inclusion of stormwater management facilities designed to temporarily detain and infiltrate stormwater run-off during storm events and slowly release and/or infiltrate stormwater after a storm event. These facilities will be designed in accordance with the NYSDEC Stormwater Design Manual and consist of Sedimentation Basins for pre-treatment prior to discharging into Infiltration Basins that will provide stormwater detention and water quality treatment.

Stormwater run-off from the building, driveways and parking areas will be collected in a series of catch basins and directed through a piping network to the stormwater management facilities. The stormwater infiltration basins will be sized to mitigate the Water Quality Volume (WQv), the Runoff Reduction Volume (RRv), the Channel Protection Volume (CPv), the Overbank Flood (Qp), and the Extreme Storm (Qf). Each of these is addressed below:

- Water Quality Volume: The required WQv is provided in two Infiltration Basins.
- Runoff Reduction Volume: The RRv is achieved by infiltrating 100% of the WQv.
- Channel Protection Volume: The CPv requires that a minimum of 24-hour detention be provided for the 1-year, 24-hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 1-year storm event.
- Overbank Flood: The Qp requires that the there be no net increase in peak runoff for the 10-year, 24 hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 10-year storm event.
- Extreme Storm: The Qf requires that the there be no net increase in peak runoff for the 100-year, 24 hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 100-year storm event.

Peak Runoff Comparison
Existing vs. Proposed

Drainage Area	10-Year Design Storm Discharge (cfs)	
	Existing	Proposed
Analysis Point #1	0.74	0.59
Analysis Point #2	5.52	0.98

Drainage Area	100-Year Design Storm Discharge (cfs)	
	Existing	Proposed
Analysis Point #1	8.50	6.66
Analysis Point #2	20.05	4.13

As depicted above, the peak runoff rates generated from the site for each of the design storms will be decreased after the construction of this project and the implementation of the stormwater management plan. It should be noted that the runoff volumes will decrease after construction is complete. This is due to utilizing infiltration as part of the stormwater management system, which will foster recharge of the groundwater aquifer.

This project will be required to comply with the State Pollutant Discharge Elimination System (SPDES) Phase II General Permit for Stormwater Discharges from Construction Activities (GP-0-20-002). As part of these requirements a Stormwater Pollution Prevention Plan (SWPPP) will be prepared describing erosion and sedimentation control measures.

The Town of Schodack is an MS4 community and therefore this project will comply with the NYSDEC Phase II stormwater regulations and will incorporate Best Management Practices (BMP's) to ensure that water quality on site will be protected. BMP's to be employed will, at a minimum, include:

- Temporary Erosion and Sediment Control Measures shall include:
  - Silt fencing placed around construction areas prior to grading activities;
  - Diversion Channels to prevent runoff from leaving the site
  - Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed;
  - Permanent seeding and planting of all unpaved areas using the hydro-mulching grass seeding technique;
  - Mulching exposed areas, where specified;
  - Temporary seeding and planting of all unpaved areas using the hydro-mulching grass seeding technique within 14 days of disturbance;
  - Frequent watering to minimize wind erosion during construction; and
  - Rock check dams

- Permanent structural practices for this site shall include:
  - Outlet protection using stone riprap as specified;
  - Utilize storm sewer collection system that will be tested for water tightness;
  - Sedimentation basins will also serve as a temporary sediment basin;
  - Vegetated and/or riprap lined swales.

All erosion and sediment control measures will be designed in accordance with the New York State Standards and Specifications for Erosion and Sediment Controls. The site contractor will be required to adhere to all erosion and sediment control measures as defined in the MS4 approved SWPPP.

The building will be constructed in a single phase with a total building area of approximately 278,670 ± SF. MS4 (Town of Schodack) approval of a waiver to disturb more than five (5) acres at a time will be required. To obtain such a waiver, at least two site inspections are required to be performed during construction by a qualified professional, every seven days, for as long as the disturbed area exceeds five acres. This increased frequency of inspection will ensure that the erosion and sediment control facilities are functioning as designed and that there are no impacts to the waters of the U.S.

Based on the above, there will not be a significant impact on stormwater runoff from the project site.

Water Usage
Water will be supplied through the Town of Schodack municipal water system. The project site is located within Water District 101, extension No. 5 for this district was approved in June 2017 to encompass the project site.

Based upon actual water usage from a similarly sized facility, the projected peak water usage for the sales distribution center facility is estimated to be 160 GPM at 80-psi with a projected daily demand of approximately 6,000 GPD. It is planned to extend the municipal water main to the project site from the existing 12-inch main located in the vicinity of the intersection of US Route 9 & 20. Refer to the Utility Plans for the location of the existing main and the proposed extension to the project site.

The water system serving Water District #CWD101 has a capacity of 0.5 MGD and current usage is approximately 130,000 GPD. Therefore, the system has sufficient capacity to meet the water demand of 6,000 GPD for this project.

Based on the above, this project will not have a significant impact on the municipal water system.

Sanitary Sewer
The projected sanitary sewer discharge from the sales distribution center facility is estimated to be 6,000 GPD with a peak flow of 160 GPM, based upon actual water usage from a similarly sized facility. It is planned to extend the municipal sanitary sewer to the project site from the existing 8-inch main located in the vicinity of the intersection of US Route 9 & 20. Refer to the Utility Plans for the location of the existing main and the proposed extension to the project site.

Sanitary sewer will be collected and directed to the Town of Schodack municipal sanitary sewer system. The project site is located within Sanitary Sewer District No. 6. The sewer district Extension No. 3 was completed in June 2017 to encompass the project site.

Sanitary wastewater collected within the Sewer District is directed to the Town of East Greenbush municipal sewer system. The Town of Schodack has an agreement with the Town of East Greenbush for the discharge of up to 45,000 GPD into the East Greenbush sewer system. The Town of Schodack is currently sending 25,000-30,000 GPD to East Greenbush. Therefore, there is sufficient reserve capacity to accept the additional wastewater from the proposed project.

Based on the above, this project will not have a significant impact on the municipal sanitary sewer system.

Groundwater Aquifer
According to the Schodack Terrace and Valatiekill Aquifer map provided in Appendix H, the project site is located over a groundwater aquifer and lies within the Direct Recharge Area Boundary. As such, the site is subject to the requirements of Town Code Chapter 223 Water Quality Control. Provided below is a summary of the requirements (in italics) that are or may be perceived to be applicable to the development of the proposed project, followed by either how the project complies with the requirement or justification as to why the requirement is not applicable.

Uses permitted under the Town of Schodack Zoning Law (Chapter 219) are permitted in the Water Quality Control District subject to the provisions of Chapter 223 Water Quality Control (223-6.C.1). Sales Distribution Center is an allowed use within the PDD district.

Permits for wastewater disposal shall be obtained from the Rensselaer County Department of Health (RCDOH) or the New York State Department of Environmental Conservation (NYSDEC) as required and provided to the Town (223-6.C.1.c). Appropriate approvals will be obtained from the RCDOH and/or the NYSDEC, as applicable. All wastewater will be collected and be treated at an approved existing off-site wastewater treatment facility.

There shall be no open storage of hazardous materials or petroleum (223-6.C.1.f). There will be no open storage of petroleum or hazardous materials.

Hazardous material storage for commercial/industrial uses that is not regulated by NYSDEC shall only *occur on an enclosed, impervious surface that is bermed or otherwise constructed to contain spills or leaks (223-6.C.1.h).* The operator intends to use hydrogen fuel cells to power their forklifts used inside the distribution center. As such there will be no hazardous material stored onsite.

Petroleum shall be stored in individual containers with a capacity less than 60 gallons or in aboveground tanks. The tanks shall be installed on an impervious surface and be fully enclosed by a structure that prevents exposure to outside weather or have a secondary containment with a minimum capacity equal to that of the tanks (223-6.C.1.i). Petroleum will not be stored on-site, therefore this section is not applicable to the project.

For parking lots and vehicle storage or sales areas regularly holding 100 vehicles or more for at least five days per week, or at vehicle washing facilities, gasoline sales and motor vehicle service stations, an impervious surface (e.g., asphalt or concrete) with water flow directed towards an appropriately sized and maintained oil/water separator or water quality inlet structure shall be required. Collected petroleum product and other waste materials shall be removed as needed by a hauler licensed by the NYSDEC. The Planning Board may require oil/water separators or water quality inlet structures for other uses where petroleum is stored or transferred or where less than 100 commercial trucks or construction vehicles are stored. This provision may be waived if the site requires and has obtained a NYSDEC SPDES permit (223-6.C.1.j). The project will provide off-line oil water separators at the end of each closed drainage system before discharge into the sediment forebays. In addition, each drainage structure will have a 2 foot sump and a hooded outlet to further trap sediment and oil providing additional water quality volume and resulting in cleaner runoff.

Excavations or cut-ins that expose groundwater within the Wellhead Protection Area are prohibited. This provision does not apply to temporary (less than 60 days) construction-related excavations or cut-ins (223-6.C.1.m). The project is not within a Wellhead Protection Area.

Based on the Geotechnical Engineering Report completed for the previous project on the site (refer to Appendix E), groundwater was encountered only in only two (2) of the 32 borings and 38 test pits performed throughout the site and the adjacent property. The only location on the proposed site where water was encountered was at boring B-37 at 38 feet below grade at approximately elevation 285 feet. Water was also encountered at 8’ below test pit TP-58; however, this location is not within the current project site. Updated geotechnical investigations are being completed for the proposed development to supplement the previously completed Geotechnical Engineering Report. Based on this information, all grading will occur well above the elevation of the groundwater encountered in the borings; as such there is no anticipated impact to aquifer.

The project will comply with all applicable requirements of the Water Quality Control regulations. In addition, it should be noted that this project will employ infiltration as part of the stormwater management system design. As such, recharge of the groundwater aquifer will be promoted. Refer to the Stormwater Runoff section of this report for additional information.

Based on the above, the project will not have a significant impact on the groundwater aquifer.

D. Impact on Air

No fixed source point emissions are anticipated as part of the proposed development. The proposed building within the development will be cooled by electrically powered systems. Heating will be supplied by natural gas, which is a clean burning fuel. Therefore, potential impacts on air would be due to the emissions from car and truck traffic associated with the proposed facility. It is anticipated that there would be a maximum of 936 passenger vehicles throughout the day during a seasonal peak commuting to the site; and a maximum of 359 daily trucks accessing the site. The shift changes and shipping schedules are staggered throughout the day to avoid any congestion and idling vehicles.

Standard operating procedures for the inbound and outbound truck traffic is as outlined below:

- Inbound trucks coming into the site first check in at the security gate and then either: 1) drop off their loaded or empty trailer in one of the parking spaces in the yard; or 2) go to one of the loading docks to unload their freight; or 3) pick up either an empty or a loaded trailer from the yard.
- Trucks that drop off their trailer will usually pick up a loaded or empty trailer when they leave.
- Trucks that go to the loading dock leave once their delivery is made.
- All outbound trucks check in at the security gate before they leave the site.

There is typically a minimal amount of time that trucks will be idling and waiting to drop off or pick up a trailer. In the event that they are waiting for a period of more than five (5) minutes, they must turn off their engine in accordance with the New York State Heavy Duty Vehicle Idling Law (6 NYCRR Subpart 217-3).

The United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) measure and record emissions which are or could be harmful to people. The main sources of harmful emissions are grouped into four categories:

- Pointsources – include facilities like factories and electric power plants.
- Mobilesources – include cars and trucks, lawn mowers, airplanes and anything else that moves and emits pollution into the air.
- Biogenicsources – include trees and vegetation, gas seeps, and microbial activity.
- Area sources – consist of smaller stationary sources such as dry cleaners and degreasing operations.

The mobile air pollution sources include all types of vehicles traveling to and from the proposed development. Vehicles emit hydrocarbons, nitrogen oxides, carbon monoxides and particulates. Vehicular emissions are influenced predominately by operating speed, idling mode and operating time. Vehicular emissions are also influenced by the age of the vehicle and condition of the vehicle and condition of the vehicle emission control system. Due to the increasingly stringent emission control standards, total vehicular emissions are anticipated to decrease until such time as all automobiles are emission control-equipped.

The effect of automobiles on air quality was assessed using NYSDEC publication Air Guide-23, "Indirect Sources of Air Contamination," dated June 29, 1989. This publication contains a three-level process for evaluating air quality impacts. If the criteria set forth in the first level (Level I) are violated, then a second level (Level II) is required. If the criteria set forth in the second level are violated, then a third level is required. Each air quality evaluation level is more detailed and sophisticated than the previous level. The results of the air quality evaluation demonstrate if the proposed development may cause violation of State or Federal AAQS.

The Air Guide-23 Level I analysis guidelines state that all major intersections located within a distance of up to one mile from the project and influenced by at least 50 peak-hour vehicles of site-generated traffic should be considered for analysis, and that Level I analysis on Air Guide-23 requires no further air quality evaluation if overall levels of service (LOS) at major intersections within one mile of the proposed development are C or better. As stated in the Traffic Impact Study, all intersections analyzed for this project will operate at an overall levels of service (LOS) of C or better after this project is fully operational. Therefore, the impact on air is insignificant and no further analysis is required.

Based on the above, this project will not have a significant impact on air.

E. Impact on Plants and Animals

An endangered species screening was conducted on the site by Terrestrial Environmental Specialists (TES) for a previous project in November 2011. This endangered investigation was conducted for the project site (Tax IDs 189.-10-40.131 & 189.-10-40.132) as well as the adjacent property (Tax ID 189.-10-36). For the purpose of this report, only species found on the project site will be discussed.

As documented by TES in their report enclosed in Appendix F, the site consists of quarries, deciduous forest upland, evergreen forest upland, and streams. The quarry consisted primarily of bare soil with scattered plants. Lespedeza bush clover (Lespedeza capitata) was the dominant herbaceous plant.

The majority of the site was deciduous forest upland, which comprised the central and western portions. The dominant species found in the tree layer were black cherry (Prunus serotina), sugar maple (Acer saccharum), red maple (Acer rubrum), red oak (Quercus rubra), black oak (Quercus velutina), shagbark hickory (Carya ovata), big tooth aspen (Populus grandidentata), black birch (Betula lenta), green ash (Fraxinus pensylvanica), eastern white pine (Pinus strobus), and pitch pine (Pinus rigida). The dominant species found in the shrub layer were shagbark hickory, white ash (Fraxinus americana), tatarian honeysuckle (Lonicera tatarica), eastern hop hornbeam (Ostrya virginia), white pine, and sugar maple. The herbaceous layer contained Christmas fern (Polystichum achrosticoides), evergreen woodfern (Dryopteris intermedia), white pine, garlic mustard (Alliaria petiolata), tatarian honeysuckle, Canada goldenrod (Solidago canadensis), orchard grass (Dactylis glomerata), fescue (Fescuta sp.), and highbush blueberry (Vaccinium corymbosum).

The evergreen forest upland cover type contained white pine and pitch pine in the tree layer. The dominant species in the shrub layer were white pine, eastern hop hornbeam, and red maple. The herb layer contained highbush blueberry. This cover type is located in the central and southeastern portions of the site.

TES contacted the NYSDEC Natural Heritage Program. They reported no known species or unique communities in the project vicinity. The USFWS website lists three species for Rensselaer County. The bald eagle has been delisted from the federal Endangered Species Act. Based on the field investigation, there were no stick nests on the site that would be used for nesting bald eagles. The Indiana bat is considered not to be present or in such small numbers that there would be no impact to this species. The shortnose sturgeon is known only from the Hudson River and its immediate vicinity.

Based on the above, the project will not have a significant impact on plants and animals.

F. Impact on Aesthetic Resources

Impacts on aesthetic resources are essentially related to visual impacts of this project. According to the NYSDEC Policy on Assessing and Mitigating Visual Impacts (DEP-00-2), an aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. In order for an impact to occur, a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment and/or appreciation of the appearance of an inventoried resource (e.g. a cooling tower plume blocks the view from a State Park overview).

An assessment has been completed and is included in Appendix J that identifies the inventoried resources within a five-mile radius of the project site. The closest of the listed resources within a five-mile radius is approximately 1 mile away (Evergreen Country Club). With the area's hilly topography and vegetation, the project is not expected to be visible from the historical places listed in Appendix J. Therefore, based on the State's criteria this project will not have a significant visual impact on inventoried resources.

Although the project does not have a visual impact based on the NYSDEC guidelines, there are potential visual impacts to the surrounding neighbors; and while the adjacent residential neighborhood is not considered an inventoried resource, it is considered in this report. The potential visual impacts and mitigations to the adjacent residential neighborhoods are addressed below.

Visual Impacts on Neighbors

A line of site analysis was done from both the north and south property lines to review any potential impact to neighboring properties. Every effort will be made to save existing vegetation that serves as a natural buffer between the abutting residential properties and the site. In addition, existing berms will be landscaped along the northern property edge to create a visual barrier to the proposed facility from any potential future residents north of NYS Route 150. Photo simulations, prepared by Lincoln Brown Illustration, are provided in Appendix J and show views of the project site along Route 150, and demonstrates how the landscaped berms partially screen the project. The single residential home between the property and NYS Route 150/Moordener Kill is more than 50 feet lower in elevation than the proposed site with mature vegetation between the house and project site. The visual impact Section View 4 provided in Appendix J shows that the proposed building and parking areas should not be visible from this residence.

To the southeast, a sound wall is proposed along a portion of the southern property line that will screen the view of the building and truck activities from the adjacent property and neighboring Birchwood Estates. The remainder of the site should not be visible due to existing heavy vegetation and proposed supplemental landscape plantings. The visual impact Section View 5 provided in Appendix J shows that the proposed project should not be visible and only the upper portion of the building may be visible during times where there is no foliage on the existing trees.

Site Lighting

Lighting will be provided for the parking lot areas surrounding the building and along the driveways into the site. The lighting will consist of energy efficient LED light fixtures with a color temperature of 4000k. The lights will have edges that extend below the level of the fixture to reduce the potential for source glare and light spillage. The light fixtures will be mounted on poles and on the building ranging in height from 15 to 40 feet. The foot-candle level will be zero at the property line, except for the driveway where lighting will extend to Route 150 and light the driveway intersection for safety. The lights are more than 300 feet away from the nearest residence to the north and more than 500’ from the residence to the south.

Based on the above, the project will not have a significant impact on aesthetic resources.

G. Impact on Noise

A detailed noise impact analysis was conducted by Ostergaard Acoustical Associates, entitled Evaluation of Sound Emissions, dated March 29, 2021 was prepared for this project, which is provided in Appendix K. The analysis gives specific attention to potential noise generated by the proposed development. The analysis studied the noise impact from eight locations surrounding the project property. Five analysis locations occur within the single family residential properties within the Birchwood Estates Subdivision (specifically on Julianne Drive) and the balance of the analysis points occur to the southwest, and north across NYS Route 150.

Any noise emissions from the project will be attenuated, or reduced to levels that will have no effect on existing ambient levels from the proposed development due to sound wave divergence (the spreading out of sound energy wave) over a long distance and the proposed 590 feet long, 15-foot-high sound wall located at the southeast end of the project. Table 7 below illustrates that the worst-case maximum sound emissions will be significantly below Schodack Chapter 151 noise code limit of 90 dB(A) and the existing maximum ambient dB(A).

Table 7 — Lowest maximum traffic sound levels compared to maximum site sound emissions, A-weighted sound pressure levels in dB re 20μPa.

Location	Lowest Measured Traffic Maximum	Modelled Maximum	Difference
B	68	56	-12
C	68	47	-21
D	54	37	-17
E	48	50	2
F	48	51	3
G	48	51	3
H	48	49	1
I	48	49	1

Results show that anticipated maximum project sound levels are typically well below existing maximum ambient sound levels at northern receptors and are generally in line with existing ambient conditions to the south. Increase compared to existing conditions are slight and on the order of 1-to3 dB(A), which will result in no acoustical impact per DEC guidelines and will be compliant with Schodack Code Chapter 151 and Chapter 219-23A.

Based on the above, the project will not have a significant impact on existing noise levels.

H. Impact on Historical and Archaeological Resources

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) reviewed the project site in November 2011 and determined that there will be no impact on cultural resources, nor is it eligible for inclusion in the State and National Register of Historic Places. See OPRHP letter dated November 21, 2011 in Appendix L.

Based on the above, the project will not have a significant impact on historical or archaeological resources.

I. Impact on Open Space and Recreation

The project will disturb approximately ±41 acres, out of a total 56± acres. Of the ±41 acres disturbed, ±6.4 acres (15.6 percent) will be buildings, ±24.6 acres (60.0 percent) will be asphalt or concrete, and the remaining ±10 acres (24.4 percent) will be restored to lawn area or utilized for stormwater management facilities. Overall, ±25 acres of the total 56 acres will remain as open green space (44.6 percent), and 15 of the total 56 acres will be remain undisturbed.

Although the construction of the sales distribution center facility will result in the reduction of current open space, the project site is currently a vacant gravel mine and woodland. The property is privately owned and maintained and does not currently provide a recreational benefit to the community. In addition, the development of this land is compatible with the Town zoning and Comprehensive Plan.

Based on the above, the project will not have a significant impact on open space and recreation.

J. Impact on Transportation

A Traffic Impact Study (TIS) was performed by McFarland-Johnson, Inc, of Saratoga Springs, New York (MJ) for the proposed sales distribution center project dated March 23, 2021 and is included in Appendix M. The purpose of this study is to evaluate traffic operations for the weekday morning and evening peak hours for 2021 Base Conditions as well as the 2022 Build and No-Build Conditions within the study area which included the following intersections:

- US Route 9/20 @ NYS Route 150 (Schodack Valley Rd.) – *Signalized*
- US Route 9 @ US Route 20 (Main Intersection)- *Signalized*
- US Route 9 @ US Route 20 (Channelized Movements East) - *Un-Signalized*
- US Route 9 @ US Route 20 (Channelized Movements West) - *Un-Signalized*
- US Route 9 @ Richwood Drive – *Un-Signalized*
- US Route 9 @ Amazon Distribution Center Employee Driveway – *Signalized*
- US Route 9 @ Amazon Distribution Center Truck Driveway – *Un-Signalized*
- US Route 9/20 @ Interstate 90 Westbound Exit 11 Off Ramp – *Un-Signalized*
- US Route 9/20 @ Interstate 90 Eastbound Exit 11 On Ramp – *Un-Signalized*

<u>Conclusions and Recommendations:</u> MJ has evaluated the traffic operations within the study area surrounding the proposed Sales Distribution Center in Schodack, NY. Results from the 2022 Build conditions indicate that the traffic generated by the proposed project will produce negligible increases in delay to the traveling public within the existing study area intersections and that access into and out

of the proposed development can be provided in a safe manner with the proposed roadway configurations shown on the plans and the recommended mitigation shown on sheet C-01, included in Appendix M.

Based on the completed capacity analysis, MJ offers the following conclusion and recommendations:

- The proposed sales distribution center is projected to create 309 trips during the morning peak hour and 338 trips during the evening peak hour based on projected staffing/shifts provided by a similar sales distribution center.
- The employee and truck entrance driveways for the proposed development shall be stop sign controlled and consist of a single entrance and exit lane, as well as a dedicated left turn lane on NYS Route 150 in accordance with NYSDOT highway design manual guidelines.
- The truck enter and exit driveways will include a single exit lane and will have sufficient sight distance with the removal of vegetation along NYS Route 150.
- Mitigation at the US Route 9&20 / NYS Route 150 intersection will include the addition of a 150' permissive-protected left turn lane on the eastbound approach and a 100' permissive left-turn lane on the westbound approach, as well as traffic signal timing changes to optimize traffic flow through the intersection.
- The signal timings at the US Route 9&20 / NYS Route 150 intersection should be monitored as optimization may be needed with the construction of developments in the area and potential traffic pattern changes post-pandemic.
- Widening of NYS Route 150 from the US Route 9&20 intersection to the proposed employee entrance is recommended to provide dedicated left turn lanes into the site at the truck entrance and the employee entrance is recommended based on AASHTO left lane warrants.
- The existing surrounding roadway network has adequate capacity to accommodate the additional traffic generated by the proposed development with negligible impacts to the traveling public with the recommended mitigation in place.

The following is a summary of the Traffic Impact Study.

<u>Existing Conditions:</u> The project is located on the south side of NYS Route 150 (Schodack Valley Road), to the west of US Route 9/20. NYS Route 150 (Schodack Valley Road) is a two-lane east-west road classified as an urban minor arterial to the east of US Route 9/20 and an urban major collector to the west, with an annual average daily traffic (AADT) volume of 4,000 east of US Route 9/20 and 770 to the west (along the property frontage), with a posted speed limit of 45 mph. NYS Route 150 (Schodack Valley Road) serves to provide access to Interstate 90 for businesses and homes east and west of US Route 9/20.

The US Route 9/20 overlap is classified as an urban principal arterial with an AADT of approximately 17,500 vehicles and a posted speed limit of 45 mph in the project study area. It serves as a North-South connector between Interstate 90 interchanges 11 and 12, providing access to businesses and homes in the area as well as the state, county and local collector roadway network.

<u>2021 Existing Traffic Volumes:</u> Existing traffic volumes for the study area intersections were established for this project by performing manual turning movement counts (TMC). Traffic counts were video recorded from 7:00 to 9:00 AM and 4:00 to 6:00 PM on Thursday, February 4, 2021. Class, speed, and volume data were also collected over a 24-hour period on NYS Route 150 (Schodack Valley Road). The TMC data shows that the traffic peaks between 7:00 to 8:00 in the morning and 4:00 to 5:00 in the evening.

Due to the COVID-19 pandemic, the data collected was compared to data from a study completed by McFarland Johnson, dated March 29, 2018 (Revised June 26, 2018) for the recently constructed sales distribution center project in Schodack, NY (Intersection #6 and #7). Following the NYSDOT Memo "Traffic Data Collection Guidance During COVID-19 Pandemic" dated August 11, 2020, to model existing and proposed traffic as accurately as possible for non-Pandemic conditions, the 2019 Build Scenario traffic volumes from the previous study were used as a base for this analysis as they were higher than the 2021 counted volumes. These adjusted volumes were used as the base scenario to develop a comparison to future conditions and enable the analysis to calibrate the traffic model to mimic the present real-life operations anticipated following the COVID-19 pandemic.

Analysis of the base condition allows the TIS to develop a comparison to future conditions and enables the study to calibrate the traffic model to mimic the present real-life operations anticipated following the COVID-19 Pandemic.

<u>2022 Background (No-Build) Volumes:</u> The 2021 base traffic volumes were grown by an annual background growth rate of 1.0% per year, based on a review of the historic traffic volume data available for US Route 9 provided in the NYSDOT annual traffic volume data reports.

<u>Trip Generation:</u> The proposed distribution center is scheduled to be completed in 2022. For analysis purposes, site generated traffic was estimated using traffic data available from a similar size and nature of a sales distribution center. The facility is anticipated to operate on four separate shifts associated with two shift lengths of 10 and 12 hours, respectively. This will break up the peak hour traffic volumes entering/exiting the site to avoid a whole facility turn over in a small timeframe. The proposed operations had these shift changes occurring at the following two-hour timeframes:

- Morning Shift Change 7:00AM to 9:00PM
- Evening Shift Change 6:00AM to 8:00PM

The truck traffic is consistently projected to be between 29-58 trips during the morning and evening peak hours. Shown in the Table below are the resulting trip generation volumes for the proposed project.

Trip Generation Table

Type of Land Use	Source	Vehicle Type	Weekday Morning Peak (7:00-9:00AM)			Weekday Evening Peak (6:00-8:00PM)		
			Enter	Exit	Total	Enter	Exit	Total
278,670 SF Distribution Center	Similar Facility	Employees	140	140	280	140	140	280
		Trucks	12	17	29	34	24	58
		Total	152	157	309	174	164	338

<u>Trip Distribution:</u> Trip distribution for the proposed project included consideration of the existing traffic patterns in the area, previous sales distribution center traffic studies completed as well as the general residential base for potential employee locations in the region. This resulted in an estimation that 90%

of employee traffic and 100% of truck traffic will exit the site to the east. 55% of the employee traffic will travel north on US Route, 9 while 30% will travel south, and 5% will travel east. It is also assumed that nearly all of the truck traffic (90%) will travel north to utilize the I-90 partial cloverleaf Interchange 11.

2022 Build Traffic Volumes: Weekday morning and evening peak hour traffic volumes were calculated associated with the 2022 build conditions. These volumes represent the 2021 base volumes combined with the addition of the estimated trips generated by the proposed project as well as the background annual traffic growth. As a conservative measure, the proposed development's peak hour of traffic generation was combined with the existing background traffic's peak hours. The current proposed operations result in peak hour traffic generation that may be offset depending on the shift change taking place; however, the background traffic in the area is consistent during the overall commuter peak periods (7-9AM and 4-6PM) such that combining the peak volumes was determined to be the most appropriate and accurate means of determining the overall 2022 Build volumes.

Traffic Operations Analysis – Intersection Capacity Analysis: The proposed development, with the proposed mitigation measures, has a negligible effect on the traffic operations in the study area. Described below is a detailed breakdown of the impacts, if any, on the study area intersections' operations as a result of traffic from the proposed development.

No. 1 – US Route 9/20 at NYS Route 150 (Schodack Valley Rd.)

This signalized intersection is operating adequately for the base and no build scenarios during the morning and evening peak hours with an overall LOS 'C' and LOS 'B', respectively. Under the build scenario, the eastbound level of service drops from a LOS 'C' to LOS 'F' during the morning peak hour and a LOS 'B to LOS 'D' during the evening peak hour due to the volume of site-generated traffic making left turns on this approach. Under this scenario, the intersection will operate at an overall LOS 'D' during the morning peak hour and an overall LOS 'C' during the evening peak hour. In order to improve levels of service and mitigate the effects of site generated traffic on the intersection, it is recommended that dedicated permissive-protected left turn lanes be added to the eastbound and westbound approaches as well as incorporate changes to the traffic signal timing by increasing the cycle length from 65 to 73 seconds during the morning peak hour and 63 to 80 seconds during the evening peak hour in order to provide more time to the east and west left turn movements. This mitigation has the effect of improving the individual turn movement's levels of service as well as the overall levels of service to a LOS C and LOS B for the AM and PM peak hours, respectively. Providing the protective left turn movements will also benefit the proposed truck traffic enabling safer left turn movements into US Route 9/20.

No. 2 – US Route 9 at US Route 20

This 2-Phase signalized intersection only services the conflicting through movements at the 'Y' interchange, resulting in acceptable levels of operations for all scenarios (LOS 'C' or better). No noticeable impacts from the proposed development are projected at this intersection; therefore, no mitigation is recommended as a result of the proposed development.

No. 3 – US Route 9 at US Route 20 (East Connections)

This un-signalized intersection has low stop sign controlled volumes as it provides specific movements for US Route 9 NB traffic turning onto US Route 20 SB and vice versa. This intersection has good operations for all scenarios (LOS 'B' or better). The proposed development has no impacts, as all LOS are maintained, and the vehicle delays are not projected to change. No mitigation is recommended at this intersection.

No. 4 – US Route 9 at US Route 20 (West Connections)

This un-signalized intersection has low stop sign controlled volumes as it provides specific movements for US Route 20 NB traffic turning onto US Route 9 SB and vice versa. This intersection has acceptable operations for all scenarios (LOS 'C' or better). The proposed development will have a negligible impact on the operations, and acceptable levels of service are maintained. No mitigation is recommended at this intersection as a result of the proposed development's traffic.

No. 5 – US Route 9 at Richwood Drive

This un-signalized intersection has acceptable operations for all scenarios (LOS 'C' or better). The proposed development is projected to increase the delay for the side street approach by an average of less than 1 second during the morning and evening peak hours, respectively, and the overall intersection LOS remains at an 'A' LOS during the 2022 Build scenario. No mitigation is recommended at this intersection as acceptable operating conditions remain after incorporating the proposed development's traffic.

No. 6 – US Route 9 at Amazon Sales Distribution Center Employee Driveway

This signalized intersection has acceptable operations for all scenarios (LOS 'B' or better). Despite using the worst-case scenario volumes projected for this intersection in the previous traffic study for this distribution center, there is adequate capacity, and the proposed development is not projected to have a noticeable impact on traffic operations at this intersection. No mitigation is recommended at this intersection as good operating conditions remain after incorporating the proposed development's traffic.

No. 7 – US Route 9 at Amazon Sales Distribution Center Truck Driveway

This un-signalized intersection is operating efficiently today and will continue to do so under all No-Build and Build scenarios, with an overall level of service of LOS 'A'. The proposed development is not projected to have a noticeable impact on traffic operations at this intersection. No mitigation is recommended at this intersection as good operating conditions remain after incorporating the proposed development's traffic.

No. 8 – US Route 9/20 & I-90 Westbound Exit 11 Off-Ramp

This un-signalized intersection has acceptable operations for the morning peak hour (LOS 'A'); however, existing left-turn movements from the off-ramp experience delay and failing levels of service in the evening peak hour for all scenarios. The proposed development is projected to increase the delay of the left-turn movement, dropping the level of service from a LOS 'C' to a LOS 'D' during the morning peak hour. However, the average delay is only projected to increase by less than 5 seconds. These increases in delay do not result in a change in overall LOS from the background to the build scenarios and the overall intersection LOS remains at a LOS 'A' as the high volume, US Route 9/20 traffic remains a free flow condition. No mitigation is recommended at this intersection as a result of the proposed development's traffic.

No. 9 – US Route 9/20 & I-90 Eastbound Exit 11 On-Ramp

This un-signalized intersection has free flow conditions for all movements except the northbound left turns to enter the on ramp; therefore, it operates at a LOS 'A' for all scenarios. The proposed development is projected to have a negligible impact on traffic operations during both the morning and evening peak hours. The overall intersection LOS remains at unchanged at an 'A' LOS as the US Route 9/20 traffic remains a free flow condition. No mitigation is recommended at this intersection as good operating conditions remain after incorporating the proposed development's traffic.

No. 10 – NYS Route 150 (Schodack Valley Road) at Proposed Truck Entrance

The proposed sales distribution center development project will add consistent low volume truck traffic at this intersection throughout the day. Due to the relatively low peak volume of proposed left turning truck traffic at this intersection, the proposed unsignalized entrance provides acceptable LOS for the morning and evening peak hours, with proposed LOS 'A'. In order to increase safety and reduce the impact of site generated traffic making left turns into the site, a dedicated left turn lane on NYS Route 150 is recommended at this intersection. The proposed left turn truck volumes meet the guidelines provided in the AASHTO design manual for left-turn lane warrants. With the recommended left-turn lane, the proposed driveway will have a negligible impact on the traveling public on NYS Route 150.

No. 11 – NYS Route 150 (Schodack Valley Road) at Proposed Employee Driveway

This proposed unsignalized intersection is projected to operate efficiently with an overall LOS 'A' during both peak hours. The proposed single enter and exit lane provides adequate capacity for the traffic generated by the development. In order to increase safety and reduce the impact of site generated traffic making left turns into the site, a dedicated left turn lane on NYS Route 150 is recommended at this intersection. The proposed left turn volumes meet the guidelines provided in the AASHTO design manual for left-turn lane warrants. With the recommended left-turn lane, the proposed driveway will have a negligible impact on the traveling public on NYS Route 150.

No. 12 – NYS Route 150 (Schodack Valley Road) at Proposed Truck Exit

The proposed sales distribution center development will add consistent low volume of exiting truck traffic at this intersection throughout the day. Due to the proposed volume of truck traffic at this intersection and the restriction of trucks to exiting movements only, the proposed stop-sign control provides acceptable LOS for the morning and evening peak hours, with proposed LOS 'A'. The proposed truck exit does not currently have the necessary sight distance available due the presence of overgrown vegetation along NYS Route 150, and this vegetation, will need to be cleared in order to achieve the necessary sight distance. An application for a permit from NYSDOT to allow clearing will be submitted. The proposed driveway will have a negligible impact on the traveling public on US Route 9 as this will be a free movement.

Sight Distance Analysis: The sight distances at the proposed site entrances on NYS Route 150 were field measured as well as calculated based on the roadway alignment and profile to determine if the available intersection sight distances meet the AASHTO recommended values. The standard intersection sight distance values and recommendations were applied for the right and left turning movements at the employee entrance. As shown in the following table, adequate site distance is available at the proposed employee driveway and the truck entrance onto NYS Route 150 (Schodack Valley Road). The proposed truck exit does not currently have the necessary sight distance available due the presence of vegetation along NYS Route 150, and this vegetation, which is within the DOT right-of-way, will need to be cleared in order to achieve the necessary sight distance.

Sight Distance Summary Table

SIGHT DISTANCE CALCULATIONS						
Location	Speed Limit	Direction	AASHTO/NYSDOT Recommended Intersection Sight Distance	Available Intersection Sight Distance	AASHTO/NYSDOT Recommended Stopping Sight Distance	Available Stopping Sight Distance
Truck Entrance Only	45 mph	Looking West	500 feet (combination truck, Case F)	629 feet	360 feet	470 feet
Employee Entrance/Exit	45 mph	Looking East	500 feet	590 feet	360 feet	To US Route 9 Intersection (925 feet)
	45 mph	Looking West	430 feet	504 feet	360 feet	464 feet
Truck Exit	45 mph	Looking East	765 feet (combination truck)	765 feet	360 feet	492 feet
	45 mph	Looking West	700 feet (combination truck)	496 feet 1093 feet*	360 feet	896 feet

* Sight distance would increase with removal of trees and branches along the roadway

<u>Signal Warrant Analysis:</u> Signal warrants were reviewed for the proposed site driveways in accordance with the Federal Highway Administrations; Manual of Uniform Traffic Control Devices, 2009 edition. The site entrances were reviewed to see if the volume of employee or truck traffic warranted the consideration of a signal. Due to the projected levels of service and the relatively low volume of traffic traveling along NYS Route 150, a traffic signal is not warranted at any of the proposed site driveways.

K. Impact on Energy

National Grid (NG) currently provides natural gas and electric in the Town of Schodack and it is anticipated that the proposed distribution center facility will utilize National Grid for these services.

The electric demand includes three separate 3,000-amp services/meters: two for the building and one for the EV Charging System. Each service entrance rated switch board will be 480V/3PH/4W. The electric distribution system on site will consist of a below ground duct bank system with ground mounted transformers. Natural gas will be piped underground into the building mechanical room to run the building's HVAC system.

The natural gas demand for the whole development is estimated to be 15,325,000 BTUs. This includes the generator demand of 6,285,000 BTUs as week as the anticipated demand of 282,500 BTUs per HVAC unit with a projected total of 32 units currently proposed equates to a total HVAC demand of 9,040,000 BTUs. The required equipment delivery pressure is between 7"-14" WC. These natural gas demands have been submitted to National Grid for their review.

Request for Service letters are pending. It is anticipated that they will be capable of meeting the projects demands.

L. Impact on Growth and Character of Community or Neighborhood

The sales distribution center will not significantly alter the character of community, as the US Route 9 & 20 corridor is principally commercial use and has been established as the sale distribution center corridor with the recent development of the Amazon Sales Distribution Center and the Hannaford Distribution Center. The recent Amazon Sales Distribution Center which completed construction and opened in 2020 is within 1 mile of the proposed project. Since this property is zoned PD-3, the community planned on the development of this property to generate new jobs and support the growth of the Town of Schodack. The sales distribution center project will be a benefit to economic development in the Town and County.