

617.8
State Environmental Quality Review (SEQR)
FINAL SCOPING DOCUMENT
THE PROPOSED BROOKFIELD RESOURCE MANAGEMENT FACILITY
DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

This Scoping Document is issued pursuant to Part 617.8 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

SEQR Status: Type I

Lead Agency:

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This Draft Scoping Document identifies and describes the scope of environmental studies to be conducted to analyze the potential significant environmental impacts of the Project. This document is being distributed by the Wawayanda Planning Board, as SEQRA lead agency, to the public and to all interested and involved agencies for review and comment. Following public and agency comment, the Wawayanda Planning Board will issue a Final Scoping Document.

General Site Description

The project property consists of approximately 48.2 acres in the Town of Wawayanda, Orange County in southeastern New York. Project site is located generally south of the City of Middletown. The site is primarily a suburban setting of farmland with scattered homes and commercial buildings. It is bounded to the south by Dolsontown Road, to the east by an abandoned railroad easement, to the north by electrical transmission lines, the 36 MW Shoemaker combustion station, an electrical substation, the City of Middletown sewer easement, and the Middletown Sewage Treatment Plant. To the west is generally open land, with residences and commercial uses interspersed, extending to Rte 17M. Highway access to and from the Brookfield site is via Dolsontown Road, a two lane secondary highway maintained in good condition by the Town of Wawayanda Highway Department. Dolsontown road intersects with NYS Route 17M at a recently constructed four lane bridge.

Project Description

Brookfield Resource Management is proposing to develop a vertically integrated recycling facility on the above referenced site. Operations on site will include the reduction, separation, processing, and shipment of end of life durable goods, metals, plastics, glass, and fiber. Incidental materials received in the course of operations, such as fuels, oil, fluids, etc. will also be recycled, or managed by manifest to an approved processor. Facilities proposed on site will include an office building, truck and equipment repair shop, a vehicle processing building, and material processing buildings.

The project includes a review and analysis of the potential subdivision and development of several additional proposed lots fronting on Dolsontown Road. These lots will be analyzed with regard to potential impacts associated with current permitted uses based on zoning. A worst case scenario analysis for development will be undertaken, including each of the components identified for the Brookfield site, i.e. traffic, drainage, impacts to land, etc.

With respect to need, the proposed Brookfield operation is warranted in light of the continued local and regional need for recycling, as necessary to reduce the cost and impacts associated with the use of virgin resources. In terms of benefits, the proposed operation will serve to supply a needed resource to the community and the region by providing a local, environmentally responsible facility for processing these materials. The location and accessibility of the site will provide for the needs of the community in an economical manner. Recycling in this location will conserve significant amounts of fuel and labor which would be expended to bring recyclables to other facilities. Use of these more distant facilities would also increase the impact upon the regional transportation network. In addition, a direct benefit to the Town, County, and School District will be created with respect to tax revenue generated by the site.

The amount of material to be processed at the proposed Brookfield Facility, as with any business, is governed by market demand for the finished recyclable product, which is essentially a new raw material. The project sponsor is an experienced recycler and has reviewed current business activity, market conditions for this area and expected development trends. Based upon these factors, reasonable estimates of expected market demand for the products to be produced at the site were developed.

The Project Sponsor is proposing a phased development approach. It is anticipated that Phase 1 of the construction process will involve construction of the basic site infrastructure, stormwater management systems, metals reduction and processing equipment, the buildings shown on the attached site plan, associated berms and landscaping to reduce visual access to the site. Phase 2 will entail construction of an ancillary building, with associated roadways, parking, etc. Phase 3 will consist of development of the "frontage" lots for uses appropriate to the Town Zoning regulations. The DEIS for the project will evaluate the specific potential impacts of Phase 1. The potential impacts associated with Phases 2 and 3 will be evaluated in a generic manner for uses permissible under the Town Zoning Ordinance. The ultimate development of the frontage lots shall meet the thresholds established under this SEQR review.

The following matrix provides a breakdown of how the potential impacts for Phase 1, the recycling facility proper, and the additional lots shall be evaluated in the DEIS. Generic evaluations shall be used to set development thresholds for the SEQR review of Phases 2 and 3. Impacts that cannot reasonably be evaluated at this time, such as the visual impact of a future building, are so noted:

Discipline	Phase 1	Phase 2-3
Geology/Soils	Specific Evaluation	Generic Evaluation
Water Resources	Specific Evaluation	Not Evaluated
Air Resources	Specific Evaluation	Not Evaluated
Ecology	Specific Evaluation	Generic Evaluation
Wetlands	Specific Evaluation	Generic Evaluation
Traffic	Specific Evaluation	Generic Evaluation
Land Use	Specific Evaluation	Generic Evaluation
Visual Resources	Specific Evaluation	Not Evaluated
Noise	Specific Evaluation	Not Evaluated
Socioeconomic	Specific Evaluation	Generic Evaluation
Environmental Justice	Specific Evaluation	Not Evaluated
Cultural Resources	Specific Evaluation	Generic Evaluation

DEIS CONTENT

The DEIS will assemble relevant and material facts, evaluate reasonable alternatives, and will be written in plain language that can be easily read and understood by the public. Highly technical material will be summarized and, if it must be included in its entirety, referenced in the DEIS and included as an Appendix. The DEIS will include all elements required by 6 NYCRR 617.9.

The DEIS will be written in the third person without use of the terms I, we, and our. Narrative discussions will be accompanied to the greatest extent possible by illustrative tables and graphics. All graphics will clearly identify the project area, and footnotes will be used to cite references. All assertions will be supported by evidence, while opinions of the applicant that are unsupported by evidence will be identified as such.

Full scale Site Plans are to be included with the DEIS as an appendix and reduced copies of such Plans, as applicable to specific sections, will be included in the text of the DEIS.

COVER SHEET

DEIS Cover Sheet listing names, addresses and phone numbers of individuals or organizations that prepared any portion of the DEIS, title of project, location of the project (streets, town, county, state), DEIS identification, location, name and address of the Lead Agency as well as the name and telephone number of the person at the lead agency who can provide further information, and relevant dates (i.e. date of DEIS submittal, provision for future insertion of date of acceptance of DEIS by the Lead Agency, date, time, and place of the public hearing, final date for acceptance of written comments).

DEIS Table of Contents including listings of tables, figures, maps, charts, appendices, and any items that may be submitted under separate cover (and identified as such).

A list of all abbreviations and acronyms will be provided.

EXECUTIVE SUMMARY

All of the information presented in the Executive Summary will be provided in greater detail and substance in the Existing Setting, Potential Environmental Impacts, and Proposed Mitigation Measures Sections as appropriate. The executive summary will be presented in a brief and succinct format, and should not constitute an exhaustive narrative discussion that will be provided elsewhere.

The Executive Summary will contain a brief description of the proposed action, including all project components including site location (streets, Town, County, Tax ID numbers), total site acreage. All easements affecting the site, existing zoning, existing access, existing site character and vegetative conditions, a list of abutting properties, any known plans for development on abutting parcels, either in progress or before a Planning Board. A description of the permits and approvals required for completion of the proposed project shall also be included.

Section 1. INTRODUCTION

1.1 Project Location

- Describe the project location on a regional and local scale. A site location map (USGS base) and a regional location map shall be included in the DEIS. The location map shall also clearly indicate the City and Town boundary.

1.2 General Project Description

- Describe the areas to be developed and include information on land acreage and existing site character and vegetative conditions.
- Describe easements affecting the site, existing and proposed zoning, and existing access.
- Provide a list of abutting properties.
- Describe any known plans for development on parcels within one half mile, either in progress or before the Planning Board.
- Describe the type of development proposed for different areas, including proposed land uses, buildings, roads, water supply and wastewater disposal.
- Provide a master plan level figure illustrating the project and its surroundings. Land use and population trend data and analysis will be provided within a one-half mile radius of the site.
- Description of reasonable full build-out scenario for Phase 2-3 development based upon Town of Wawayanda Zoning Code permitted uses in the MC District for purposes of generic SEQR evaluation.
- Provide a table summarizing which sections of the EIS will be handled specifically, generically, and those that are not a part of this EIS, by project phase. The rows will represent each EIS section while the columns will be Phases 1, 2 and 3. The cells will state if this section and phase is considered specifically, generically, or not at all in this EIS.

1.3 Project Purpose, Need and Benefits

1.3.1 Background and History

- Describe historical background of the area.
- Provide a description of the background and history of local land use regulations and regional land use plans, as well as the Town comprehensive plan.

1.3.2 Public Need for the Project

- Describe the need for the type of recycling facilities to be provided by the project.
- Specific information that shall be included will address viability concerns, and will include service area, fuel consumption and energy usage.

1.3.3 Objectives

- Describe objectives of the project sponsor and compatibility with adopted community development plans.

1.3.4 Benefits of the Proposed Action

- Discuss potential benefits to environmental protection and the economic benefits to the community and the region.

1.4 Environmental Review, Permits and Approvals

United States Army Corps of Engineers

Jurisdictional Determination and Nationwide Permit

New York State Department of Environmental Conservation (NYSDEC)

Part 201 State Facility Air Discharge Permit, or, possibly Registration (air modeling is underway by CHA)

SPDES Permit for Storm Water Discharges Associated with Industrial Activities, or, SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, except Construction Activity, (GP-0-06-002).

SPDES General Permit For Stormwater Discharges From Construction Activities (GP-0-0-8-001).

Section 401 Water Quality Certificate, pending ACOE decision.

Registration of Bulk Storage Tanks

Approval for Sewer Extension

Watermain Extension Water Supply Permit

Article 24 – Freshwater Wetlands Permit
Part 360 – Solid Waste Permit
Water and Sewer Extensions

Orange County Department of Health

Approval for Water and Sewer Extensions
Realty Subdivision

Orange County Planning Department

Advisory Recommendation – 239 LMN

Town of Wawayanda Planning Board

Special Use Permit
Site Plan Approval
Subdivision

Town of Wawayanda Town Board

Approval for Water and Sewer extensions

Town of Wawayanda Highway Department

Access, Road Improvement and Driveway Permit

Town of Wawayanda Zoning Board of Appeals

Area Variances granted

NYS Office of Parks, Recreation and Historic Preservation

Determination of impact on historic and cultural resources

City of Middletown

NYS Department of Agriculture and Markets

Middletown Central School District

Section 2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Overall Project Design and Layout

- This section of the DEIS shall describe the project in more general terms and in its totality. Proposed land uses and their location shall be described.

2.2 Project Components

- Prepare a detailed description and mapping of the various components that will make up the project. The description shall include amount of land development, land clearing, road development, parking areas, site drainage, total acreage of impervious surfaces, site access and egress, traffic, utilities, water, sewer, lighting and landscaping. The subdivision of land shall be described. The description shall be developed for each phase of the project identified. Site plans at a minimum scale of 1" equals 50 shall be provided.
- The DEIS shall also include plans at sufficient level of detail to illustrate the project components. The plans shall be of sufficient detail to evaluate the proposed actions for which permits and approvals are being sought.
- The project description shall clearly set forth, for each portion of the overall project site proposed to be developed, the type and number of buildings/facilities, floor area of industrial commercial, and other supporting facilities. The description shall also provide an estimate of total employment on-site.
- The DEIS shall include a discussion of the portions of the project site that will be remain undeveloped and possible mechanisms to protect these areas from future development.
- The DEIS shall include a description of energy and materials management including guidelines for site operations, energy use and conservation, and water use and conservation.

2.2.1 Buildings

- Describe the location, sizes, and architectural style of buildings being proposed. Architectural renderings of all proposed buildings in Phase 1 shall be illustrated in elevation drawings.

2.2.2 Water Supply

- Identify the sources of potable and non-potable water supply and discuss their capacity to serve the proposed project as well as any interrelationships with other existing water supply systems.
- Provide groundwater resource evaluation for the non-potable water usage proposed for the facility. If on-site groundwater resources are to be utilized, standard pump testing for capacity and evaluation of the groundwater resources, including potential impacts of use of the resource on other groundwater users, must be evaluated. Information generated during the hydro-geologic analysis and pump testing shall be included as an appendix of the DEIS.

2.2.3 Wastewater Disposal

- Identify the methods proposed for wastewater disposal and the locations where wastewater disposal is proposed.

- Discuss waste characteristics of material to be disposed of. Discuss quantity of wastewater to be disposed of. Discuss implementation of best management practices to protect sanitary sewer systems from potential impacts from spills or other discharges.

2.2.4 Site Drainage and Grading

- Discuss the general drainage characteristics of the site and also identify subcatchments within the project site.
- Illustrate grading proposed within development areas and discuss how development will affect sub-catchment boundaries and stormwater runoff.
- Provide a grading plan showing existing topography and grading on a two-foot contour interval.
- Provide cut and fill estimates.
- Provide calculations of the size of proposed impervious surfaces.
- Discuss and illustrate proposed stormwater control measures.
- The methodologies that will be used to analyze stormwater generation and stormwater control are discussed in more detail in Attachment 1 of this document.

2.2.5 Traffic, Parking and Pedestrian Circulation

- In the context of existing conditions discuss the proposed project-generated traffic, access to the project, parking location, size and capacity, internal vehicular circulation and pedestrian access provided within the project.
- Describe public transit routes and potential for employees to use public transit including connections from transit stops to the site.
- Road maintenance activities, particularly winter maintenance including location of snow storage, shall be discussed.

Maximum vehicular trips generated on hourly, and daily and weekly basis shall be analyzed

- Discuss hours of operation with regard to traffic staging.
- Discuss queuing capacity at project entrance road.
- Discuss coordination of project entrance road with adjoining Simon Business Park proposed roadway.
- Provide existing mapping and evaluation of existing roadway at Rte 17M and Dolsontown Road. Include existing bridge, road geometry, turn movement analysis, lane width, as available from the existing OCDPW design or as-built plans.

2.2.6 Lighting

- Discuss and illustrate the location and type of lighting that will occur within the project, including motion-sensitive lighting, cutoff light fixtures and recessed light fixtures. Provide photometric plan and lighting details.

2.2.7 Landscaping and Open Space Management

- Discuss and illustrate how open space within the development will be landscaped and how existing vegetation in undisturbed areas will be maintained.
- The DEIS shall discuss the use of native versus non-native plant materials.

- The DEIS shall discuss adjoining recreational uses, such as the proposed rail trail, proposed for areas outside of the project.
- Provide a landscape plan detailing proposed mitigation measures.

2.2.8 Signage

- Signage, on-site and off-site, shall be described, located, and illustrated.

2.2.9 Utilities

- Utilities required to serve the project shall be identified, the quantity of utility service required by the project shall be estimated, and service providers shall be identified. Providers shall be contacted regarding the capacity required to serve the project. Any improvements required to serve the project, based on existing utility demand estimates shall be identified. Any return correspondence from the subject utilities shall be documented and discussed in the DEIS.

2.3 Construction Activities

2.3.1 Construction Schedule

- An overall construction schedule shall be provided including the sequencing of construction activities, and approximate duration of each construction event.
- The effects of the proposed construction schedule on such things as land disturbance, exposed soils, traffic generation, water use, wastewater disposal, and solid waste management shall be quantified. Phased plans for items such as grading, erosion and sediment control and traffic improvements will be provided.
- Routing of construction vehicles shall be described as well as routes and parking sites for construction workers. Estimate of the types and number of construction vehicles will be provided. Maximum construction vehicular trips generated on hourly, and daily and weekly basis shall be analyzed for all intersections identified in Section 3.7.

Methods of handling and storing construction materials shall be described.

2.3.2 Construction Stage Activities

- This section of the DEIS shall provide more detail regarding activities such as clearing and grubbing, installation of erosion control measures, rough grading, final grading, installation of infrastructure and utilities, building construction, and landscaping. In particular, impacts on wetlands and surface water shall be presented. Plans for these items will address phasing or construction sequence.
- This section of the DEIS shall also discuss construction inspection methods and procedures for the local municipalities and other regulatory agencies.
- The DEIS shall provide a description of the envisioned sequence of construction activities.

Section 3.0 ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATION MEASURES

This section of the DEIS will identify the existing environmental conditions, potential impacts of the action, and proposed mitigation measures as appropriate for each of the major issues identified in this Scoping Document. The format or organization of this section will include the following subsection headings for each topic:

- Environmental Conditions
- Potential Impacts
- Proposed Mitigation Measures

In this section the DEIS shall assemble the relevant data as it applies to the various biological, physical, social, and cultural resources on the site or within the community. The onsite data shall be based on site-specific research completed by the applicant's consultants, or available in the public domain. On-site data shall be collected for the entire property. The data for the community shall rely upon prior studies or other sources. Information from local municipal authorities such as fire and police shall be collected by the applicant. See further notes below.

- Mapping shall be provided to clearly illustrate existing environmental conditions.
- Describe the anticipated impacts and all meaningful mitigation measures as it is applicable to the resources. Mitigation may include use of innovative construction techniques, changing construction timing, relocation of facilities, etc. Positive impacts shall be identified as well.

3.1 Geologic and Topographic Resources

- The geology of the proposed project site shall be described, including such things as the depth to bedrock, type of bedrock, and bedrock outcropping. Any geologic conditions that could affect site planning shall be illustrated on an appropriate figure. If geologic features identify the potential for blasting, a proposed blasting plan will be provided, including estimates of material to be removed.
- The topography of the site shall be illustrated on an appropriate topographic map produced from survey. Entire site shall have a two-foot contour interval.
- Site topography and its influence on drainage patterns shall be discussed.
- Identification of existing on-site slopes ranging from 0-10%, 10-15%, and greater than 15%. Discuss grading plan and mitigation measures to reduce impacts of proposed grading of steep slopes.
- Site and regional seismic characteristics shall be evaluated and discussed.
- Planned alteration of existing site elevations shall be analyzed to assess the potential impact on site topography. Consideration shall be given to changes in slope conditions and grading that will affect natural drainage patterns.
- Areas where imported fill may be required shall be clearly identified and an estimate of the fill quantities shall be provided.

- A Stormwater Pollution Prevention Plan (SWPPP) in accordance with current NYSDEC and Town of Wawayanda regulations shall be prepared and describe measures proposed to mitigate impacts from changes in drainage patterns that will result from topographic alterations.
- The methodologies that will be used to analyze stormwater generation and stormwater control are discussed in more detail in Attachment 1 of this document.

3.2 Surface Water Resources

- This section of the DEIS will include a description of all existing surface waters and wetlands on and within 1,000 feet of the project site showing all connections between onsite and adjacent water resources including wetlands.. This will also include a depiction of all watersheds, sub-basins and contributing drainage areas for all water bodies, wetlands and streams onsite and adjacent to the site. The tributary of Monhegan Brook that exists on the property will be described including location, watershed, width, depth, substrate, flow regimes, and classifications. Any published floodplain elevations for the vicinity of the site shall be identified and mapped.
- Locations of site surface water resources shall be illustrated at an appropriately (1" equals 100') scaled base map.
- Impacts to the physical and chemical qualities of the on-site streams as well as off-site surface waters, such as Monhegan Brook, shall be discussed in the DEIS. Impacts from bridging, culverting, stream bank disturbance, diversion, impoundment, etc. on hydrology (including stream flow and water supply during drought conditions) and water quality shall be assessed and suitable mitigation measures proposed for any impacts that are identified.
- The DEIS shall assess the potential impacts to surface waters from changes in drainage patterns and changes in land use as a result of the proposed project. The stormwater impact assessment shall include analysis of runoff volumes, peak runoff rates, and water quality impacts. Impact to floodplain elevation shall also be evaluated.
- An analysis of the direct and indirect impacts of the construction and operation of the Project shall include:
 - (a) Map of entire area of disturbance - it includes all areas where existing vegetation is to be removed, and where heavy equipment is operating, either for pre construction or post construction activities.
 - (b) Calculation of all impervious surfaces, pre and post development,.
 - (c) Assessment of all indirect impacts to surface waters including:
 - increased stormwater runoff (uncontrolled, untreated)
 - impacts on groundwater recharge
 - flow constrictions (construction of roads, structures, utility crossings across wetlands or upstream/downstream of them)
 - increased water level fluctuation
 - (d) Changes in water quality including sediment deposition, pollutant accumulation in wetland sediments, and nutrient enrichment.

- (e) Cumulative impacts on water resources.
- (f) The fate of road salt and impacts on water quality, including plan for the storage of plowed snow, proximity of roads and parking areas to streams and wetlands.
- (g) Potential hazardous and toxic substances will be identified and addressed. Data from similar facilities shall be used to determine stormwater chemical constituents for treatment methods and calculations and design.
- (h) Impacts associated with potable water use shall be identified, including any potential impacts to existing sources of potable water supply.

Mitigation shall include:

- An identification and evaluation of reasonable mitigation measures (including avoidance, and minimization) regarding impacts on Waters of the State of New York and the United States and the other surface waters identified above.
- Consideration of specific design measures as mitigation. As applicable, enhanced site design protocols and best management practices (BMP's) will be incorporated in the site plan for the project.
- Each significant impact described in this section should also be discussed in terms of mitigation. Some impacts cannot be mitigated; this should be noted when appropriate.
- The use and effectiveness of vegetated buffer zones (around all wetlands and streams) for mitigating the effects of specific impacts on water quality and habitat should be discussed in the EIS.
- The methodologies that will be used to analyze stormwater generation and stormwater control are discussed in more detail in Attachment 1 of this document.
- The DEIS shall discuss how the project will meet the conditions of regulatory agency stormwater permits for construction, including preparation of a Stormwater Pollution Prevention Plan in accordance with the NYSDEC's "General Permit 0-08-001". Suitable stormwater management mitigation measures shall be proposed for any potentially significant impacts identified.
- The DEIS shall also discuss how proposed sediment and stormwater controls will be maintained.
- The DEIS shall discuss and illustrate measures proposed to mitigate the potential for soil erosion and surface water sedimentation in accordance with NYSDEC SWPPP requirements. Using the grading plan and available soils mapping the DEIS shall describe and illustrate the

various structural, vegetative, and operational mitigation measures for erosion and sediment control.

- A sediment and erosion control plan illustrating proposed measures shall be included in the DEIS plan set.

3.3 Groundwater Resources

- Groundwater resources on and around the project site shall also be described. Depth to groundwater, general groundwater quality, directions of groundwater flow, and types, locations, and yields of wells in the area are all topics that shall be covered in the DEIS.
- Seasonal high groundwater on the proposed project site shall also be discussed in terms of locations, depths, time of year, and its affect on site planning.
- The DEIS shall contain the well log(s) as well as the results of pump tests, with yield projections, for any wells proposed for use as part of the project.
- Description of groundwater / wetland connections including recharge, discharge, water supply and hydro period.

3.4 Climate and Air Resources

- Existing local climate and air quality data shall be summarized in the DEIS. The DEIS shall discuss any climatic limitations imposed on the project as well as potential impacts to local air quality, including impacts from project-related vehicular traffic, including using CAL3QHC modeling, if found applicable during review of the Traffic Impact Study (TIS), and measures to mitigate any potentially significant impacts to air quality.
- Project related air quality impacts during construction are expected to include fugitive dust emissions from ground excavation, cut-and-fill operations, and removal of debris. Fugitive dust emissions will depend on such factors as soil properties, meteorology, and construction practices. The EIS should include an analysis of fugitive dust and use of fugitive dust control measures including the following measures recommended by the New York State Department of Transportation:
 - a) Water or other wetting agents on areas of exposed soils on a scheduled basis;
 - b) Covered trucks for soils and other dry materials;
 - c) Limited storage of soils on the construction site;
 - d) Final grading and landscaping of exposed areas as soon as possible.
- An air quality impact analysis must be performed for all pollutants emitted during the construction period. The air quality analysis shall identify each source of air pollution used in the construction, estimate of air emissions, and potential mitigation measures to reduce the emissions.

- An air quality analysis shall be performed for all pollutants emitted during the operation and mitigation measures identified. The air quality analysis shall identify each source of air pollution used in the operation, estimate of air emissions, and potential mitigation measures to reduce the emissions.
- Air quality analysis shall be performed for mobile sources including on-site equipment, truck traffic, truck queuing and cars accessing the site.
- Air quality impacts associated with idling vehicles will be addressed.

3.5 Terrestrial and Aquatic Ecology

- The DEIS will provide a study of the probable ecological impacts of the construction and operation of the project to terrestrial, wetland and aquatic habitats, and plant and animal species of conservation concern. It will also include a discussion of the site's biodiversity (pre and post construction).
- The methodologies that will be employed to determine the presence of any, , rare, threatened or endangered animals, plant and natural communities, and/or significant wildlife habitats within the project site and surroundings are detailed in Attachment 2 of this document. In the following sections.
- A description of vegetation communities and potential wildlife habitat shall be provided. Property evaluation for rare, threatened or endangered species shall be completed, especially if such animals or plants are believed to exist in the area based on NY Natural Heritage Program and USFWS data.
- The methodologies that will be employed to determine the presence of any rare, threatened, endangered or special concern animals, plant and natural communities, and/or significant wildlife habitats within the project site and surroundings are detailed in Attachment 2 of this document.

3.5.1 Vegetation

- A survey of the vegetation on the project site shall be performed with particular attention paid to areas that have potential to be developed.
- Provide a map of the vegetation communities on the project site consistent with community types defined by Reschke (1990).
- Provide a description of the each of the plant communities including dominant species.
- Provide a comprehensive list of plant species found on the project site including the identification of any rare threatened or endangered species found on the project site.
- Provide a comparison of the amount of the different vegetation community types on the property with and without the proposed project.
- The impacts of the loss and conversion of vegetation shall be assessed from the standpoint of soil erosion, groundwater recharge, and provision of food and cover for wildlife.
- Impacts to any rare, threatened, endangered plant species shall be discussed in the DEIS.

- Mitigation measures such as, maintenance of specimen trees, replanting native vegetation, transplanting, etc. shall be considered as mitigation measures based on the identification of potentially significant impacts to plant communities.

3.5.4 Wetlands (other waters of the US discussed in Surface Waters)

- The presence of any on-site wetlands will be identified in the DEIS. Appropriate maps and field delineations from NYSDEC and the U.S. Army Corps of Engineers, as applicable, will be examined for wetland identification. Wetlands will be included in the water resources map described in section 3.2. The DEIS shall include a brief description of the delineation methodology.
- The applicant shall address issues raised in the NYS DEC letter dated August, 20, 2008.
- The DEIS shall include a brief description of the delineation methodology. The federal wetland delineation report shall be appended to the DEIS.
- A description of the characteristics of all wetlands identified, including a description of the contributing drainage area, hydroperiod, location, size, hydrological relationship to the rest of the property, type and value of wetland plant communities, functions, habitat value, soils, and hydrology data collected for each wetland site identified will be, based on actual on-site wetland observations.
- Description of all direct and indirect impacts to wetlands.
- Calculation of all impervious surfaces, pre and post development, and description of total impervious surfaces located within each wetland contributing drainage area on site.
- Changes in wetland ponding (water depth), hydroperiod, or other periodic water level fluctuations within wetlands
- Assessment of all indirect impacts including:
 - a) Increased stormwater runoff , including any uncontrolled or untreated discharge.
 - b) Impacts on groundwater recharge
 - c) Flow constrictions (construction of roads, structures, utility crossings across wetlands or upstream/downstream of them)
 - d) Increased water level fluctuation and changes in hydrology during drought
- Changes in water quality including sediment deposition, hazardous/ toxic substances, pollutant accumulation in wetland sediments, pollutant/nutrient load from stormwater.
- Cumulative impacts on wetlands.
- The fate of road salt and impacts on water quality, including plan for the storage of plowed snow, proximity of roads and parking areas to streams and wetlands.

- An analysis of the loss of the functions and benefits of the impacted wetlands. Impacts to wetland hydrology as a result of changes in vegetation cover, erosion and sedimentation, irrigation and other factors shall be addressed in the DEIS.
- Impacts on wetland hydrology associated with the use of ground water for any type of water supply (potable or process) must be identified, studied and mitigated.
- Site planning consideration given to wetlands shall be discussed in the DEIS
- A discussion of vegetated buffers shall be provided; specifically the use of such buffers as mitigation for specific impacts. References for this include but are not limited to the Environmental Law Institute's publications: Thresholds for Land Use Planners, and Planner's Guide to Wetland Buffers for Local Governments.
- Identification and evaluation of reasonable mitigation measures, to avoid or minimize wetlands impacts, if any. Each significant impact described in this section should also be discussed in terms of mitigation. Some impacts cannot be mitigated; this should be noted when appropriate.
- Permitting requirements for any wetland activities shall be discussed in the DEIS.
- The DEIS shall include a wetland mitigation plan to compensate for any losses in wetland function and value, if proposed impacts exceed regulatory thresholds for the mitigation requirement. The mitigation plan shall specify the areas and location of any proposed wetland mitigation and shall follow U.S. Army Corps of Engineers wetland mitigation criteria, including criteria for success and monitoring/management.

3.6 Soils

- The DEIS shall contain a high definition soils map with an accuracy of 0.5 to 1.0 acre for the portions of the property proposed to be developed based on an on-site evaluation. A detailed analysis of all soil types identified on site shall be presented.
- Area outside of development envelopes shall be mapped using published sources.
- DEIS text shall discuss the properties and constraints of each of the mapped soil types as they pertain to development. Characteristics that shall be considered include seasonal high groundwater, erosion potential, shallow bedrock, etc. These characteristics shall then be evaluated for building locations, roadways and parking areas, and underground utilities.
- Deep hole test pits or soil boring logs shall be included in the DEIS.

- This section shall address the impacts that may result from required excavations, filling and site grading. Methods for stockpiling soils on site shall be addressed as well as re-use of stockpiled soil materials in project development.
- Impacts to significant agricultural soil resources shall be addressed.
- Measures to mitigate potential impacts from soil erosion and sedimentation shall be fully described in the DEIS. Mitigation measures which may be proposed include the use of structural erosion control devices such as silt fences and stone check dams, sediment basins, a phasing plan for site disturbance, and other similar best management practices.
- The phasing plan shall take into account site specific characteristics including slopes, soil types, results of soil testing described above, as well as the measures proposed to mitigate potential impacts.
- A sediment and erosion control plan shall be presented in the DEIS. A draft version of a construction Stormwater Pollution Prevention Plan prepared in accordance with the requirements of NYSDEC shall be included in the DEIS as an appendix.
- Attachment 1 contains more details regarding the methodologies that will be used to identify potential impacts from soil erosion and the methodologies that will be used to develop measures to mitigate any impacts identified.

3.7 Traffic Patterns

- A traffic study will be performed in order to characterize the existing local road network and traffic volumes.
- A traffic impact study will be performed for the proposed action to assess the potential impact of project construction and operation on local traffic patterns and roadways. The traffic impact study will be included as an Appendix in the DEIS.
- The methodologies that will be employed to assess traffic and potential traffic impacts from the proposed project are presented in detail in Attachment 3 of this document.
- Turning movement counts will be taken at the following intersections in order to assess the potential impact of the project:
 - NYS Route 17 M at Dolsontown Road and County Road 108.
 - NYS Route 17 M at US Route 6 and Sunrise Park Road.
 - NYS Route 17 M at US Route 6 and I84 eastbound.
 - Dolsontown Road and McVeigh Road.
 - McVeigh Road and Rte 17M.
 - Dolsontown Road site access drive including queue analysis.
 - NYS Route 17 M at US Route 6 and I84 westbound.
 - NYS Route 17 M at US Route 6 and County Roads 12 and 50
 - NYS Route 17 M at US Route 6 and Gates School House Road/Hartley Road.
 - NYS Route 17 M at US Route 6 and County Road 31, 6 ½ Station Road
 - Dolsontown and Genung Street.
 - Shutt Road and East Main Street.
 - Shutt Road and Genung Street.

- Turning movements and existing road geometry will be analyzed at Rte 17M and Dolsontown Road.
- The traffic study will also take into account any other recent studies that may have been prepared by NYSDOT or other agencies.
- Traffic study will identify existing weight restrictions on all roadways identified above.
- Appropriate seasonal adjustments will be applied based on consultation with NYSDOT.
- The DEIS will also provide an inventory of local pedestrian traffic in the vicinity of the proposed project site.
- Based on the analysis of existing conditions and projected trip generation data (for the year the proposed project may open as well as one year of full utilization), the traffic study will evaluate the needs for any specific improvements or design features to be incorporated into the project design to mitigate potentially significant impacts.
- As assessment of potential vehicular and pedestrian conflicts will be included in the DEIS along with mitigation measures for any potentially significant impacts that are identified.
- The DEIS should explore the potential for employees to use public transit to access the site. Is there service along Route 6 or Route 17M? If so, where are the stops located? How will transit riders connect from the stop to the site?
- Traffic study will evaluate existing road conditions of Dolsontown Road with regard to anticipated heavy vehicle traffic. Mitigation measures, if applicable, shall be addressed.

3.8 Land Use and Community Character

- Include assessments of recent aerial photographs and land use maps of the site and surrounding areas, generally the Dolsontown Road corridor from Genung Street to Route 17M and the 17M corridor from the City line to I-84.
- Describe how the proposed project and the required land use planning decisions could affect existing and possible future land use and community character.

3.8.1 Existing Use of Site

- Discuss the existing uses of the site, including the historical agricultural use of the site.
- Describe impacts to local and regional agricultural resources on the property as a result of the development of the proposed project.

3.8.2 Adjacent Land Uses and Community Character

- Provide a description of uses of adjacent lands and those within a ½ mile radius of the project site.
- This section shall provide a discussion of how the proposed project may affect future land use of other property in the vicinity of the site and how the project will alter current land use of the site. The relationship of this project to other development projects in the area, either under construction or under review, shall be assessed.
- The DEIS shall provide a description of how the project complies with local zoning regulations in terms of use, density, etc. including discussion on applicable sections of the Town of Wawayanda Zoning Law.
- The DEIS shall address the potential impact of the project on the former railway ROW designated as a future extension of the County Rail Trail.
- The introduction of the project on the proposed project site shall be assessed from the standpoint of currently undeveloped land in the vicinity, and the type of future development of such lands if the project was to be developed.
- The proposed project's compatibility with the existing character of the surrounding lands shall be addressed in the DEIS.
- The DEIS will include a qualitative and quantitative discussion of how the project will impact community character.

Community character is defined as:

- The built environment which may include historic building, development and land-use patterns, architectural landscape, roads, sidewalks, and visual character. The natural, or "un-built," environment often encompasses stream corridors, open spaces, farms, geographical features, critical habitats, and air and water quality. The interaction between the built and un-built environment is also an element of community character.
- The social and cultural characteristics of a community can include those attributes that reflect its overall quality of life (e.g., quality of schools, poverty and crime rates, demographics, etc.) and represent its cultural resources (e.g. hospitals, museums, social gatherings, local arts, community activities, etc.).
- The community's economic environment may include the number and quality of jobs, unemployment rates, type of business, and presence and/or vitality of a downtown area.

3.8.3 Local and Regional Land Use Plans

- The DEIS shall discuss how the proposed project and local land planning decisions required for the project could affect future land use plans both locally and regionally.
- The local and regional land use plans to be addressed shall include County land use plans (including the *Comprehensive Plan Strategies for Quality Communities*, *Orange County Open Space Plan*, *Orange County Farmland Protection Plan*, *Economic Trends and Impacts in Orange County Agriculture*, and the Town Comprehensive Plan. Any data and analysis compiled by municipal committees, if available, shall also be considered.

- There should also be an analysis of New York State Agricultural District Policies and the proposed action.

3.8.4 Visual Resources and Aesthetics

Visual Resources

- Characterize the existing visual environment focusing primarily on the visibility of the project from surrounding lands.
- A visual impact study will be performed to determine the visibility of the project from surrounding lands.
- The methodology that will be used to perform the visual impact study is described in Attachment 4 of this document and shall be consistent with the July 31, 2000 NYSDEC Program Policy "Assessing and Mitigating Visual Impacts."
- The visual impact study will determine the zone of visibility and identify potentially sensitive receptors for the proposed development. Sensitive receptors shall include those listed in the aforementioned NYSDEC Program Policy as well as public roads, public parking areas, public gathering areas, public recreational areas, public hiking trails and other areas of local concern identified by the Lead Agency within a five-mile radius.
- On a clear day with good visibility examine each area identified as having the potential for views into the project. Examinations shall take place during leaf-off conditions. Examinations shall consist of sensitive receptors identified as having potential views as determined by the Lead Agency at the April 22, 2009 Planning Board meeting, in accordance with the preliminary visual assessment prepared by TRC.
- Include in the DEIS paired photographs of views from sensitive receptors with and without the development of the project. Views shall include foreground, middleground, and background views and be based on unobstructed views from sensitive receptors.
- The DEIS shall discuss suitable measures to mitigate potential impacts. The discussion shall include measures such as project component locations, structure heights, landscaping and berms to screen the development, the use of camouflage, non-specular materials, cut-off light fixtures, and other similar type measures.

Noise

- The existing sound levels on and around the project site shall be characterized based upon existing land uses (stationary sources) and traffic (mobile sources) levels.
- Sound pressure levels shall be described in a-weighted decibels (dBA) and the sound environment shall be characterized using the time equivalent level (Leq).
- The operational sound levels associated with the project shall be determined taking into consideration both mobile and stationary sources. This shall be accomplished by identifying sensitive receptor locations in relation to proposed new sources, calculating source levels, and projecting sound levels at various distances from the various sources and at sensitive receptor locations.
- Impact assessment methodologies will be consistent with NYSDEC Program Policy DEP-00-1 – "Assessing and Mitigating Noise Impacts", the Federal Interagency Committee on Urban Noise, "Guidelines for Considering Noise in Land Use Planning and Control" the

Department of Housing and Urban Development, “Noise Assessment Guidelines”, and the Federal Highway Administration, “Noise Barrier Design Handbook”.

- Where necessary, suitable mitigation measures aimed at attenuating potential sound impacts will be proposed, including such things as screening, types of equipment, noise dampening measures such as resilient conveyor drops, etc. Mitigation measures shall attempt to quantify the reduction in sound levels that would be accomplished by the proposed measures. The site noise profile shall be evaluated in accordance with the applicable requirements of Part 360. Compliance with the Town of Wawayanda 65 dBA noise level standard at a point 100 feet from the property line will be assessed.
- An analysis of noise mitigation measures during construction including, but not limited to the use of muffler systems on its construction equipment; construction schedules developed in consultation with the community to minimize noise impacts; etc.
- For areas where estimated construction sound levels are expected to exceed the existing background level by a significant amount, potential impacts shall be presented and evaluated by the Lead Agency.
- A comparative noise assessment shall be developed that evaluates the noise impacts from the construction and operation of the Project compared to significant local activities.

3.9 Community and State Facility Services

- This section shall identify the entities and/or jurisdiction that would provide the services listed below.
- Entities shall be provided with a project description and asked to provide an assessment of their ability to serve the proposed project.

3.9.1 Emergency Services (including fire, ambulance and medical)

3.9.2 Police

3.9.3 Potable Water

3.9.4 Wastewater

3.9.6 Utilities

3.10 Socio-Economic Setting

- Fiscal and Economic Benefits Impact Analysis
The project will generate substantial employment opportunities, new economic activity, and tax revenues during both the construction and operation periods. The following tasks would be performed to generate a complete profile of fiscal and economic costs and benefits within the study area, a one-mile radius around the site, inclusive of the City of Middletown.
- Existing Conditions
Provide Existing Demographic and Economic Profile.

A demographic and economic profile of the communities within the study, to include the Town of Wawayanda, City of Middletown and the Town of Wallkill, will be compiled and described in terms of key population and household characteristics and employment patterns. Based on information available from local, county, state, and federal sources, employment and economic baseline information will be summarized and described. Any potential new commercial development projects that could affect local employment patterns in the Town should be identified through discussions with local and county government representatives.

In addition to 1990 and 2000 Census data, more recent population estimates to include 2007 from the US Census Bureau will be used. Employment data, from the City of Middletown, Wawayanda, and Wallkill shall be used to provide a profile of employment by location below the county level.

- Construction Phase
Estimate Construction Generated Economic Activity.

Based on the estimated capital investment for the project, the economic analysis will summarize the key economic benefits associated with the project. These benefits include direct activity associated with construction wages and salaries and the purchase of goods and materials, as well as the ripple- or multiplier-effect generated as this economic activity is felt in the larger regional economy (including tax revenues generated by the construction project). The analysis will utilize the econometric model, Regional Input-Output Modeling System (RIMS II), developed by the U.S. Department of Commerce.

An analysis will be provided for the construction period of the potential beneficial and disruptive effects on local households, properties, businesses, and other entities and institutions of this activity. The consulting teams for the Town Planning Board and the project developer will identify prospective receptor locations based upon: workers at the site who need services; vehicular traffic associated with construction; visual, noise odors or other externalities potentially emanating from the site. Issues of community and visitors perceptions will also be considered as part of the potential effects of the construction activity.

As part of this analysis, tabular and graphic materials on significant receptor entities will be provided, including name, address, and type of entity.

- Operations Phase
Estimate Potential Economic Benefits.

Based on anticipated employment generated by the project once it is completed and operational, a similar evaluation of the total economic effects would be prepared also using the RIMS II model, using the agreed upon industry sector. This effort would summarize the estimated number of jobs to be generated during operation of the proposed facility (along with anticipated wages and salaries) and how much this increased expenditure in the local economy will create demand for goods and services and labor in the regional economy. The

study will evaluate whether the existing labor supply can meet the expected increased demand. If the demand for labor exceeds the local and regional supply, some secondary impacts may occur from new residential development (see Growth Inducing Aspects, below).

Besides county level economic effects covered by RIMS, more local town level impacts will be described, based upon information on the local business that may serve the facility, and other relevant considerations.

Costing of Potential Externalities from Operation of the Project

The emissions, visual impacts, proximity of the project, any relevant traffic, noise, odors generated on nearby residential and non-residential properties (with receptors and locations to be agreed upon), shall be analyzed with respect to any potential the externality cost implications.

An analysis of the value loss (costs) of any of the externalities shall be researched, where the relevant conducted technical analyses and findings show potential significant offsite environmental and quality of life impacts. The valuation of any losses shall be analyzed based upon the relevant and applicable literature in the field of property values and environmental externalities associated with such type industrial operations, as well as discussion with local real estate experts. Offsite impacts that are within governmental acceptable standards, but where the literature indicates potential externality costs will be covered, as well as where there are no accepted publicly accepted standards.

The Applicant shall describe the financial resources available for facility decommissioning and site restoration in the event the project is not completed. The Applicant shall also describe the financial resources available for facility decommissioning of the operating plant at the end of its useful life and return of the property to the conditions and/or land use controls/zoning designation in place at that future time.”

Evaluate Potential Community-Related Costs.

This section will assess the probable impacts of the Project on community facilities and services. A comprehensive qualitative and quantitative analysis of county, town, school district, and special districts fiscal impacts of the Project will be provided.

1. The effects on public service costs of the Project on the governmental functions of the county, the town, the school district, and relevant special districts will be determined. This analysis will cover both current operating costs and potential impacts on equipment and capital outlay expenditures. Any significant factors that could impact public services with respect to personnel, equipment and facilities will be identified. The analysis will provide a quantitative determination of the added costs, if any, to the local governments identified above. These costs should be broken down into ongoing costs and one-time costs.

Each town function is to be examined for possible impact on town service and capital outlay

demands resulting from this Project. Particular attention and focus will be paid to potential increases in the cost of providing transportation/highway, police, fire, and emergency medical services, and any public infrastructure improvements required to service the facility. For each relevant governmental function impacted by the Project, an analysis will be performed to assess the impact of the Project and to develop suitable mitigation measures. A discussion will be provided addressing how anticipated service needs will be met. Where the Project does impact either a service provided by the town or requires additional capital outlays (equipment or physical facilities), a fiscal estimate of the added cost to the town shall be determined.

Each of the primary service providers of town services will be contacted to determine their capacity to serve the proposed Project. Interviews will be conducted with key local government officials and staff, including applicable fire companies or departments, emergency service providers, and special district supervisors. Other methodologies and approaches may also be used by the Applicant to determine the impact of the Project on local government services.

Information and findings of expenditure impacts on local governments of any comparable projects should also be included.

The information provided should be based on the assumption that the Project is complete. Where appropriate, the Applicant may provide information on a phase-in basis consistent with the development and building of the project.

2. Base level information is required on the 48.2 acre site to be used for the Project. Information is required on each of the parcels that will compose the Project Site. For each parcel, information will be provided on its current property use, the acreage, assessed value, the property taxes currently paid (county, town, school district, and special districts), and any exemptions. Such other information on the Project site that is important to an understanding of the Project and its effect on local governmental revenues and expenditures will also be included.

3. Cost estimates are required for the Project in order to determine an overall value of the Project for use in estimating the expected property tax payments and the impact on school state aid. The cost estimates should include both the construction costs and the land value. Phased construction costs for each year of the build-out should be included.

4. The effects of the Project on local government revenues, such as property taxes, sales and excise taxes, user fees, and federal and state aid will be determined for Orange County, the Town of Wawayanda, the Enlarged City School District of Middletown, and any relevant special districts. The additional property tax revenues to be generated by the Project should take into consideration property taxes currently being paid on the parcels in the Project site.

As part of the potential revenue impact analysis for the Enlarged City School District of

Middletown, a determination will be made of the effect of the added property wealth of the Project on state school aid for foundation aid, transportation aid, and BOCES aid. For purposes of the school aid impact calculations, existing formulas will be used but with the added property wealth from the Project included in the base data. A comparison will be made of the existing aid received with the school aid that would be received with the Project information included

5. Any potential financing issues, including proposed public bonding, and subsidies, (tax credits, PILOTS, etc) that will affect state, county, town and applicable school district revenues and cost of government services will be identified, discussed and quantified to the extent possible.
6. The net fiscal effects of the impact of the Project on public expenditures and revenues will be shown for Orange County, Town of Wawayanda, the Enlarged City School District of Middletown, and any relevant special districts.

In support of the fiscal impact analysis, a copy of the latest Town of Wawayanda budget and a copy of the latest Enlarged City School District of Middletown budget will be provided.

Evaluate Potential Environmental Justice Issues.

NYSDEC guidance “*CP-29: Environmental Justice and Permitting*” sets forth guidance for incorporating environmental justice (EJ) concerns into the NYSDEC environmental permit review process. The NYSDEC programs that are subject to review for environmental justice impact, that may relate to the proposed Project are:

- a) Air Pollution Control - 6 NYCRR Part 201
- b) State Pollutant Discharge Elimination System (SPDES) - 6 NYCRR Parts 750 through 758
- c) Part 360 Solid Waste

The NYSDEC Policy establishes that upon receipt of an application for a permit covered by the NYSDEC policy, the NYSDEC Division of Environmental Permits will conduct a preliminary screen to identify whether the proposed action is in or near potential environmental justice areas and determine whether potential adverse environmental impacts related to the proposed action are likely to affect potential environmental justice areas. Following the completion of the preliminary screening process, the NYSDEC Division of Environment Permits staff provides permit applicants with the NYSDEC findings relevant to environmental justice issues associated with the Project and whether detailed studies will be required to address potential impacts to identified communities of concern. The NYSDEC employs a two-step methodology for conducting the preliminary screening analysis:

Step 1: Identify potential adverse environmental impacts and area to be affected. NYSDEC staff in the Division of Environmental Permits and the affected environmental quality divisions will identify potential adverse environmental impacts associated with the proposed action. Environmental quality program staff will identify the area to be affected by the potential adverse environmental impacts (i.e., the screening area).

Step 2: Determine whether potential adverse environmental impacts are likely to affect a potential environmental justice area. An integrated geographic and demographic information program will be used to determine whether potential adverse environmental impacts from the proposed action are likely to affect a potential environmental justice area.

If an Environmental Justice Analysis is determined to be required, the following tasks will be performed and summarized in the DEIS:

1. Review of technical guidance and examples received from USEPA and NYSDEC, including USEPA's Environmental Justice NEPA Compliance Analysis and USEPA Region 2's Draft Interim Policy on Identifying EJ Areas and the NYSDEC environmental justice policy, "CP-29: Environmental Justice and Permitting", and the "Final Report of the New York State Department of Environmental Conservation Disproportionate Adverse Environmental Impact Analysis Work Group" issued in July 2004. The DEIS will present a summary overview of these documents.
2. Performance of a socioeconomic analysis of the screening area. The analysis will include a description and map for each census tract whose geographic center is within a one mile radius of the Project summarizing the following parameters: population, percent minority vs. percent non-Hispanic white and household income based on the latest available Census data. The results of this socioeconomic analysis will be summarized in a table and compared to socioeconomic characteristics of designated reference communities - Orange County and New York State.

For the identified community of concern, if applicable, an analysis will be conducted to determine whether a potential disproportionate and adverse environmental impact(s) related to the proposed action are likely to affect the identified community of concern. The analysis will identify and map potential adverse environmental impact.

The Applicant shall prepare a list of locations which will be included in the Environmental Justice analysis for the Lead Agency's review prior to performing the analysis. The Applicant shall also prepare an enhanced public participation plan, following the guidelines of CP-29. Upon approval of the public participation plan, the applicant shall implement the public participation plan in order to develop the environmental justice analysis. The enhanced public participation plea will be summarized and the plan included as an appendix.

3.11 Cultural Resources

- The DEIS shall contain a discussion and summary of the Cultural Resources Investigation. The Cultural Resources Investigation Reports shall be included as an appendix to the DEIS.
- The methodologies that will be used to conduct cultural resources investigations are included in Attachment 5 of this report.
- The results of these reports shall be summarized in this section of the DEIS and include a discussion of potential presence and significance of any historic or prehistoric cultural resources that would influence site planning.
- The DEIS shall discuss potential impacts to historic or prehistoric resources identified during the investigations of the property. Consultation with NYS Office of Parks, Recreation, Historic and Preservation and the Town of Wawayanda Historians shall be undertaken during the cultural analysis. Information received from these 2 agencies shall be incorporated into any reports and correspondence from these agencies shall be included in an appendix of the DEIS.
- Any conflict of the development plan with potentially significant resources shall be identified along with the nature of the conflict (i.e. grading, filling).
- A description of any necessary mitigation measures, including avoidance or on-site archeological monitoring during construction, shall also be included.

Section 5.0 ALTERNATIVES

- SEQRA requires consideration of feasible alternatives to the proposed actions considering the objectives and capabilities of the project sponsor. The DEIS shall discuss the alternatives presented below. Alternatives shall be prepared in sufficient detail so that impacts can be compared to those of the proposed action. An alternative shall consider a reduced project scale and its effect on the viability and the environmental impacts of the project. A detailed explanation shall be provided of why a particular alternative may not be feasible and how the environmental impacts differ from that of the proposed action.

5.1 Alternative Locations

- The DEIS shall discuss alternative locations that were examined for the project.

5.2 Alternative Use of the Site

- The DEIS shall address potential alternative uses that could occur on the site and how they relate to current local land use regulations.

5.3 Alternative Layouts

- Design alternatives considered shall include a discussion of potential alternative configurations for the project. The selection criteria for the preferred alternative shall be identified.
- The DEIS shall discuss land development limitations such as zoning, wetlands, and steep slopes, etc. that affect project component layout, design and reorganization.

5.4 Alternative Scale

- This DEIS shall describe an alternative scale design which reduces adverse impacts to natural resources on the site including surface and groundwater resources, steep slopes, important habitat areas and prime farmland soils.

5.5 Alternative Water Supply

- This DEIS section shall identify different alternatives considered for water supply, including the potential to connect to municipal services.

5.6 Alternative Wastewater Disposal

- This DEIS section shall identify different alternatives considered for sewage disposal including the potential to connect to municipal services.

5.7 No-Action Alternative

- The no action alternative shall describe impacts of leaving the lands in their present state.

Section 6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

- This section shall identify or evaluate the irreversible and irretrievable commitment of resources including soils and agricultural resources, groundwater and the use of surface waters to accept sewage effluent.

Section 7.0 GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS OF THE PROPOSED ACTION

- This section of the DEIS shall discuss the anticipated off-site impacts of the Brookfield Resource Management project. The secondary impacts that the proposed project and any required land planning decisions may have in inducing economic growth or development in the vicinity of the project shall be discussed.
- The DEIS shall evaluate additional traffic, stormwater and wastewater that could accompany potential development outside of the project site.
- The analysis of secondary and cumulative impacts shall include industrial/commercial development, housing, and economic development.
- Existing Land Use and Zoning Analysis. - Evaluate the existing land use pattern and zoning regulations with respect to new commercial and residential development.
- Inventory of Likely Development Locations. - An inventory of "soft-sites" within the study area would be prepared based on windshield surveys, discussions with Town officials and county planning representatives.
- Identification of Environmental Constraints - New development within the study area will also be constrained by topography, water resources, soils, water supply, and wastewater infrastructure. Sites identified in the soft-site inventory would be screened for likely elements that would constrain development.
- Prepare Secondary Development Analysis - Using the inventory of development locations, screened for environmental constraints, the likely level of secondary development induced by the project would be projected for the year 2025 based on forecasts for new residential,

commercial and/or Industrial development. Current zoning would be used as the basis for development allocation within the study area. The analysis will include any additional residential, commercial or industrial development within the Project site owned by the project developer and/or or owner-operator, as well as activity attracted to the general area because of the type and volume of secondary materials generated by the facility.

Section 8.0 EFFECTS OF THE PROPOSED ACTION ON THE USE AND CONSERVATION OF ENERGY

- This section of the DEIS shall discuss the effects that the proposed project would have on energy consumption. A comparison of energy consumption and conservation with and without the proposed project shall be included in this section in the DEIS.

MAPS

- This section shall contain preliminary site plans addressing the scope of the investigations prescribed in this Scoping Document;
1. Phasing Plan.
 2. Grading Plans.
 3. Erosion and Sedimentation Control Plans.
 4. Landscaping Plan.
 5. Lighting Plan.
 6. Cross Sections.
 7. Digital Terrain Model.
 8. Utility and Stormwater Management Plan.
 9. Appropriate Site Development Details.
 10. Aerial Photograph.
 11. Wetland Delineation.

APPENDICES

- This section shall contain a compilation of the technical reports prepared for the project in their entirety.

Appendix	SEQRA Documentation including, Environmental Assessment Form, Positive Declaration and Final Scope for the DEIS
Appendix	Fiscal and Marketing Information
Appendix	Wetlands Delineation Report
Appendix	Ecological Communities Evaluation

Appendix	Stormwater Pollution Prevention Plan
Appendix	Visual Impact Study
Appendix	Traffic Impact Study
Appendix	Stage 1A and Stage 1B Cultural Resources Investigations
Appendix	Fiscal Impact Analysis
Appendix	Regulatory Agency and other Correspondence
Appendix	Noise Study
Appendix	On-site Water Resources Evaluation
Appendix	Air Resources Modeling

Attachment 1. Stormwater Pollution Prevention Plan

1. The methodologies for the assessment of potential for impacts associated with stormwater and sediment and erosion control and design of mitigation measures will be consistent with the following;
 - HydroCAD Stormwater Modeling System, Applied Microcomputer Systems.*
 - Reducing the Impacts of Stormwater Runoff From New Development. NYSDEC. 1992.*
 - New York State Stormwater Management design manual August 2003 revised April 2008.*
 - SPDES General Permit for Stormwater Discharges from Construction Permit GP-0-08-001.*
 - SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, except Construction Activity, (GP-0-06-002).*
2. Stormwater analysis of pre-construction and post-construction conditions will be performed using the USDA SCS TR-20 based HydroCAD analysis. This will include the following.
 - a. The project site and surroundings areas tributary to the project site will be subdivided into subcatchments using existing topography (2 foot contour interval for project site).
 - b. Adjustments to post-construction subcatchment boundaries will be made based on grading plans prepared for the project.

- c. Area-weighted curve numbers will be assigned to each subcatchment based on detailed on-site soil mapping of project site soils and USDA-NRCS mapping of off-site areas, as well as vegetation cover types based upon on site investigations.
 - d. Post-construction weighted curve numbers will be calculated from project layout plans.
 - e. Type three curve storms for the 1-year, 2-year, 10-year, 25-year and 100-year return interval will be simulated for pre- and post-development conditions.
 - f. Stormwater control measures such and detention areas will be designed based on runoff volumes, peak runoff rates and times of concentration of runoff in accordance with NYSDEC criteria.
 - g. Stormwater quality measures shall be designed based on a 1.2 inch storm event.
3. Grading plans at two foot contour intervals will be used to develop sediment and erosion control plans.
 4. Erosion control measures will be designed for all areas of disturbance and will include the following.
 - a. Sediment and erosion control plans will give preference to non-structural methods such as temporary infiltration basins sized to capture the first one half inch of runoff (3,600 cubic feet of storage per acre served).
 - b. Sediment and erosion control plans shall also indicate methods of vegetative stabilization, including seeding, mulching and geotextile stabilization where appropriate.
 - c. Structural erosion control measures such as silt fences, stone check dams, etc. will be designed for areas of lesser slopes and shorter slope lengths. Long, steep slopes shall employ hay bale stabilization treatments as necessary.
 - d. The DEIS will include a discussion of inspection and maintenance procedures for erosion control measures.

Attachment 2. Aquatic/Terrestrial Resources, Rare, Threatened and Endangered Species

1. File searches of the NYSDEC Natural Heritage Program and US Fish and Wildlife Service databases will be requested. File searches will be performed for known occurrences of listed rare, threatened, endangered or special concern animals, plants and natural communities, and/or significant wildlife habitats within the project site and surroundings.
2. Any NYSDEC or USFWS reported occurrences on the site will be investigated for that occurrence. Flora and fauna surveys will be presented for the project site.
3. Vegetation studies to inventory species and identify natural plant communities and habitats consistent with community types defined by Reschke (1990) will be presented. Limits of community occurrences will be determined first from interpretation of aerial photographs. Final mapping of plant communities will be produced from on site investigations.
4. A comprehensive list of plant species found on the project site including the identification of any rare threatened or endangered species found on the project site will be developed from a survey of the different plant community types identified in paragraph 3.
5. Rare or unique habitats/natural communities that could support rare, threatened, or endangered species will also be identified when performing the task in paragraph 3. This shall include, but not be limited to the following; bog turtle, Indiana bat, and any other species identified by DEC or USFWS.
6. Wildlife species consisting of mammals, birds, reptiles and amphibians observed directly in the various on-site communities in the field will be documented. Wildlife signs (e.g. song, nests, tracks, scat, burrows, markings, etc.) will also be recorded as observed.
7. Bird census work will be performed for resident and migratory species. The bird census work will be performed in the spring (migratory species) and summer (resident/breeding species) months, and each day will include early morning hours. Census work will include all of the habitat types present on the project site. All birds seen or heard will be recorded to the lowest possible classification.
8. Potential habitats for reptiles and amphibians (frogs, salamanders, turtles and snakes) will be specifically searched. These habitats primarily include wetlands and stream areas, adjacent uplands, sunning spots, loose logs, rocks and soil.
9. The field observations of wildlife species and habitat made during the studies listed above will be used along with existing data sources (e.g. Breeding Bird Atlas and range maps) to develop a list of wildlife species likely to occur on the project site.

Attachment 3. Traffic

1. The methodology for assessing the potential impacts from traffic generated by the construction and operation of the Brookfield Resource Management Facility and two additional lots will follow the procedures provided in the following documents:

Transportation Research Board, National Transportation Resources Council. Special Report 209, *Highway Capacity Manual* (2000 update).

Institute of Transportation Engineers (ITE) Trip Generation Manual, latest Edition.

SYNCHRO 6 Traffic Signal Software, Trafficware Corporation, latest Edition.
2. Existing data on vehicle traffic and use levels will be obtained from the New York State Department of Transportation and County Planning Department. Projects under review shall be considered under the future “no build” scenario. Projects under review shall also be considered under the “build” scenario in order to add the cumulative effects of projects currently before the Planning Board. Projects under review by the Town of Wawayanda Planning Board, City of Middletown Planning Board and Town of Wallkill Planning Board shall be considered based on the potential for traffic to be generated through the intersections identified.
3. Following the review of information discussed in paragraph 2, the documented existing conditions will be compiled to determine use levels and physical characteristics for the roadways identified.
4. The existing data will be supplemented with a traffic study. The traffic study will consist of the following components:
 - a. Turning movement counts will be conducted at the selected intersections. Morning and afternoon peak turning movement counts will be made for each intersection. These peak periods will be determined by review of the historical data discussed in paragraph 3 and actual field counts.
 - b. Roadway geometries will be examined to determine the number of approach lanes, lane and shoulder widths, traffic control by approaches, and sight distances. Using this data, a Level of Service (LOS) will be calculated using the *Highway Capacity Manual* methodology. Levels of Service will be identified for all intersections required in DEIS.
 - c. Existing mapping will be presented for analysis at Rte 17M and Dolsontown Road. Detailed design plans for the site entrance drive at Dolsontown Road will be included in the plan set appended to the DEIS. The horizontal geometry for Dolsontown and McVeigh Road and other intersections to be studied shall be presented using media currently available in the public domain.

The Project-related impacts will be determined by conducting a comparison of projected future traffic conditions, both trucks and cars and with existing conditions as determined in paragraphs 4 and 5 under two scenarios: one with the Project (Build) and one without the Project (No Build). These projections will be performed for the full build out of the proposed Brookfield Resource Facility, as well as a separate full build out of all additional proposed lots, assuming it is in full operation. Background traffic levels will be projected for the year of full build out using NYSDOT projected growth rates up to the design year. Also included will be a Table listing trip generation rates used in the study. If sources other than ITE are used, they will be explained and documented.

The projections of future conditions will incorporate data from the local planning board regarding any other pending or approved projects that will affect roadway use levels and traffic patterns. NYSDOT's annual traffic information from Route 17M will be used to establish the annual rate of traffic growth for the design year.

7. The results of the Traffic Impact Study will be used to determine the adequacy of the road system to accommodate potential Project vehicle needs. A check at unsignalized intersections to determine if a traffic signal installation is warranted will be performed.

Estimates will be prepared to illustrate expected traffic conditions. A trip generation estimate will be prepared and will take into account the total number of expected (peak period) vehicular trips, including employees, visitors, etc. The anticipated vehicular distribution of these trips will also be estimated based on existing traffic distributions. All intersections identified by the Lead Agency will be addressed.

Figures illustrating the mitigation required to offset reductions in operating level of service caused by the development will be prepared.

Attachment 4. Visual Resources and Aesthetics

1. The methodology for the assessment of potential visual and aesthetic impacts will be consistent with the following guidelines.

- The SEQR Handbook*. New York State Department of Environmental Conservation. November 1992
- NYSDEC Program Policy “*Assessing and Mitigating Visual Impacts*”, July 31, 2000

2. USGS topographic data shall be used to create a viewshed map for an area within a five mile radius of the project site. The viewshed map will show areas that have potential visibility to the project site.

Areas that have potential visibility to the project site shall be plotted on a USGS quadrangle map and will identify ½ mile, three mile, and five mile radii to the project site. The viewshed map will identify project site, municipal boundaries, major roads and other identifying features.

Sensitive receptors, as defined in item 1 above, will be identified and shown on the viewshed map.

3. On a clear day with good visibility examine sensitive receptors identified as having the potential for views into the project. Examinations shall take place during leaf-off conditions. Examinations shall consist of driving roads, walking hiking trails, and visiting sensitive receptors identified as having potential views. Evaluate the amount of screening provided by seasonal cover as it may reduce the duration of views or obscure views.

On viewshed maps identify where views do exist and photograph the view into the project. Photographs shall be taken using 50 mm lenses which best simulates the perception of the human eye. The camera used to take the photographs will be a full-frame digital camera or a 35mm film camera.

4. A physical target (balloon, crane or similar measure) at the location of the tallest proposed building shall be used to provide orientation when assessing visibility.
5. Prepare and include in the DEIS the actual zone of visibility map for the project components based upon the photographs collected.
6. Include in the DEIS, a paired photograph-based representative views of visual conditions with and without the development of the project. Paired photographs shall include a simulation of all project components as they would appear during facility operations using reasonable worst-case operating assumptions. Elements will include structures and site improvements, clearing and grading, visible plumes, any expected outdoor storage, and occupied vehicle layover areas should they be visible. Visual simulations will also show any proposed visual mitigation measures. The selection of representative views to be simulated shall be made in consultation with the Lead Agency and will be based on the relative importance of public viewing points,

level of viewer exposure and geographic distribution. Representative views shall include the most significantly affected near views.

7. Photographic simulations of developed conditions will be constructed using a technique that merges existing conditions photographs with an elevated, 3D computer model of a proposed action. This 3D computer model will be matched to the existing conditions photographs using references that exist in both the photographs and the 3D model of the action. The simulation will show the proposed development using photorealistic textures that accurately portray the color and materials proposed and will show conditions under reasonable worst-case operating conditions. Ambient lighting in the simulations will be set to the time of day and year of when the photographs were taken.
8. The DEIS shall include a discussion of the numbers and types (hiking, driving, existing land uses, etc.) of people to be affected, the durations of views that can be expected, and how views may vary between leaf on and leaf off conditions. This shall include a discussion concerning the nature of the visual change and the public's probable reaction to such change. The DEIS will also include a qualitative assessment of the project's impacts on the visual character of the landscape including an assessment of the form, line, color, texture and scale of the landscape with and without the proposed project.
9. The DEIS shall discuss suitable measures to mitigate potential impacts. The discussion shall include measures such as project component locations, structure heights, use of camouflaging colors, non-reflective glass, cut-off light fixtures, and other similar measures intended to mitigate the project's impacts on visual resources

Attachment 5. Cultural Resources

1. The methodology for assessing cultural resources will follow the procedures outlined in the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (New York Archaeological Council, 1994);
2. The Project cultural resource investigation will be conducted by a professional archaeologist, qualified according to the standards of the New York State Archaeological Council, and the National Park Service 36 CFR 61 and 36 CFR 800 Section 14.09 guidelines (hereinafter "the archaeologist"). The OPRHP Coordinator will be consulted throughout the course of the investigation. *The NYS Phase 1 Archeological Report Format Requirements* (April 2005) will be utilized. The methodology to be followed for each of these studies is presented below.
3. The Applicant shall conduct Phase IA and Phase IB cultural resource investigations to identify archaeologically sensitive areas, cultural/sacred areas, and standing structures that are at least 50 years old that may be affected by the Project, and to locate prehistoric and historic cultural/archaeological resources that may exist within the proposed Project Area. Consultation with Town of Wawayanda Historian will be undertaken in the Phase 1A & 1B analysis.

4. The Phase IA investigation will gather information concerning the environmental/physical and cultural settings of the Project Area through a literature search. The Phase IA investigation will consist of the following elements:
 - a. Preliminary review of historic maps and literature relating to the Project Area.
 - b. Review of OPRHP and New York State (NYS) Museum archaeological site file inventories. A list of prior projects completed in the immediate area of the Project and a summary of the results of those studies will be developed.
 - c. Review of the OPRHP lists of sites registered and nominated for inclusion in the State and/or National Register of Historic Places within one mile of the Project Area.
 - d. An on-site field reconnaissance of the Project Area, with photographic documentation of existing conditions.
 - e. Assessment of archaeological sensitivity based upon the environmental/physical characteristics of the Project Area and the types and density of cultural sites identified within one mile of the Project Area. Site types likely to be identified and the anticipated condition of these sites will be described.

5. The Phase IB field investigation will be conducted in areas considered to be sensitive for the location of significant cultural resources. The Phase IB investigation will be conducted as follows:

The Phase IB field survey will be limited to potentially sensitive areas identified in the Phase IA survey, within areas of proposed Project alteration.

The most efficient means of investigation is through an extensive walkover of the developable lands within the parcels. The walkover is recommended to: 1) identify the presence or absence of map documented structures and/or the remains of such structures within the project area; 2) identify surface evidence of pre-contact use or occupation; and 3) based on the first two, to identify areas suitable for archeological testing to verify the presence and extent of pre-contact and/or historic archeological remains.

Where shovel testing is considered necessary, the shovel tests will be 40cm in diameter. The soil from each test will be passed through 0.25 inch hardware cloth and carefully examined for historic and prehistoric cultural materials. The stratigraphy of each test will be recorded including the soil type and depth of each stratum. Artifacts will be assigned to the soil stratum from which they are retrieved. Notations about the surrounding landscape will also be recorded if the archeologists feel that the field conditions have affected the results of the tests. Photographs characterizing the project area will be recorded. The locations of the tests will be recorded on project maps of appropriate scale.

All prehistoric cultural material observed will be collected. Historic artifacts such as glass, ceramics, food remains, and the like will also be collected. Coal, ash, cinder, and brick will be noted, but only samples of these will be retained.

Cataloging and accessioning tasks will be completed. All cultural materials will be identified by provenience, counted and or weighed. The resulting catalog will be computerized.

A report detailing the results of the Phase 1B investigations will be prepared and will include a discussion of field methodology, results and will include test excavation records and an artifact inventory.