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NEW CASTLE ASPHALT, LLC

Rensselaer (Riverside Avenue) Plant
Port of Rensselaer, City of Rensselaer, Rensselaer County, New York

APPLICATION FOR CONSTRUCTION AND OPERATION OF BLACKTOP PLANT

Prepared by: Griggs-Lang Consulting Geologists, Inc.

Date: May 31, 2011

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Details dated January 14, 2011 (Two Sheets)

NOTE: ALL OVERSIZED DRAWINGS IN SEPARATE FILE

1.0 INTRODUCTION

1.1 Introduction

This report describes the proposed construction and operation of New Castle Asphalt, LLC's ("New Castle") blacktop plant on the west side of Riverside Avenue in the Port of Rensselaer. The report and accompanying Site Plan is provided as part of the application for Site Plan Review and a Special Use Permit from the City of Rensselaer.

1.2 Location

The site is located on the west side of Riverside Avenue and to the north of the Irwin Stewart Port Expressway ("Port Expressway"), as shown on the Location Map on the next page. The site is accessed from U.S. Route 20 via the Port Expressway.

The site is located in the City of Rensselaer Industrial Zoning District and is in the active Port of Albany-Rensselaer. The site is surrounded by existing heavy industrial activities including but not limited to:

- The Besicorp-Empire Power Generation Plant (to the northeast and east);
- The Fulton Cogeneration Associates Power Cogeneration Plant (to the north)
- A large-scale scrap-metal crusher and export operation (to the northwest); and
- Several active petroleum bulk storage and distribution facilities (to the south), the closest being the Getty Terminal Facility (see map on page 2) and Polsinello Fuels.

In addition, the land west of the site (across and on the west side of the Hudson River) is occupied by a variety of heavy industrial activities in the Port of Albany-Rensselaer.

The site is well suited for the proposed project. The proposed 400 ton per hour blacktop plant will assimilate well into the surrounding heavy industrial activities and will not cause any significant contrast to the industrial character of the zoning district. All potentially sensitive receptors are separated from this site by intervening heavy industrial activity. The distances between the nearest potential receptors are:

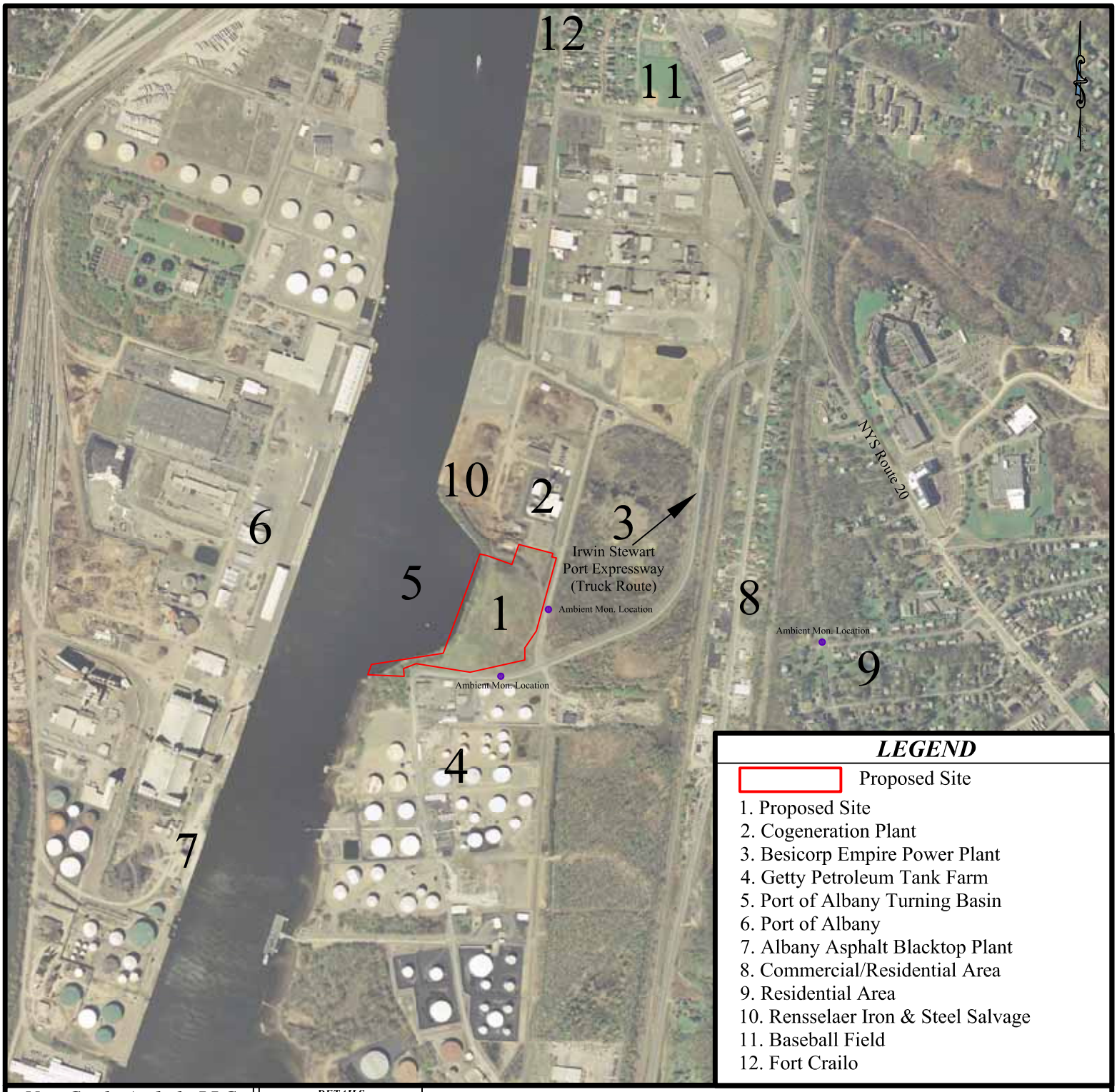
- Ft. Crailo—approximately 3700 feet north of site
- Ball Field—approximately 3300 feet north of site
- Educational facility—SUNY facility on US Route 20—approximately 2600 feet
- Nearest residential area to the north—approximately 3300 feet
- Nearest residence in primarily commercial area east of site—approximately 1400 feet
- Nearest residential area—approximately 1800 feet east of site.

1.3 Ownership

The site is owned by the Albany-Rensselaer Port District Commission and is leased to the applicant, New Castle Asphalt, LLC. It is located on Tax Parcel 154-5-3.

2.0 PURPOSE

The proposed plant will provide blacktop for use in the construction and maintenance of roads, driveways, parking lots and sidewalks. Currently, the nearest blacktop plants are located in South Troy (Callanan), West Sand Lake (Troy Sand & Gravel), the Port of Albany (Albany Asphalt) and Watervliet (Callanan). Blacktop for construction must be hauled from these more distant locations at greater expense to individuals, private developers and governmental agencies. In addition, hauling from more distant locations puts increased strain on the local highway infrastructure.



LEGEND

Proposed Site

1. Proposed Site
2. Cogeneration Plant
3. Besicorp Empire Power Plant
4. Getty Petroleum Tank Farm
5. Port of Albany Turning Basin
6. Port of Albany
7. Albany Asphalt Blacktop Plant
8. Commercial/Residential Area
9. Residential Area
10. Rensselaer Iron & Steel Salvage
11. Baseball Field
12. Fort Crailo

New Castle Asphalt, LLC

Proposed Site

City of Rensselaer, Rensselaer County, New York

LOCATION MAP

Griggs-Lang Consulting Geologists, Inc.
8 Brunswick Road Troy, NY 12180
Phone: (518) 270-5920 Fax: (518) 270-5922

DETAILS
Date: 1/28/11
Scale: 1" = 1000'
Contour Interval: N/A
USGS Base: Albany 7.5', Troy South 7.5', Delmar 7.5', East Greenbush 7.5'
Project Manager: PHG
Drafted by: JWR
Checked by: PHG
Base Map(s): 1) 2007 One Foot Color Orthoimages from NYS GIS Clearinghouse

Scale: 1" = 1000'

1000 0 1000 2000

3.0 EXISTING CONDITIONS

3.1 Topography

The attached Site Plan Map (Existing Conditions) shows the existing conditions of the site. In general, the site grades gently from an approximate high elevation of 26 feet above mean sea level at the top of the bank along the Hudson River down to an elevation of approximately 18 feet along an active railroad spur on the east side of the property. The easternmost part of the side grades up slightly (elevation 19 feet) towards Riverside Avenue.

The property narrows in its southwest portion near the 90 degree turn in Riverside Avenue to the southwest of the site. This part of the property grades to the steep bank of the Hudson River.

3.2 Vegetation

The site was formerly used as a lay down and parking area for the construction of the adjacent plant. Most of the proposed site (approximately 4.6 acres) is covered by a layer of crushed stone. A secondary growth of mixed trees and brush covers the western and northern perimeters of the property. The remainder of the site is covered by open grasslands.

3.3 Railroad Spur

A single line railroad spur exists along the northeast and eastern parts of the property. This spur is not proposed to be used by the applicant but is used by the adjacent metal salvage operation.

3.4 Utilities

Eight and 12 inch diameter water lines exist along Riverside Avenue on the east side of the site. The water lines along the Port Expressway on the south side of the site are six inches and 12 inches in diameter. These lines and related water features are shown on the Site Plan Map (Existing Conditions).

The stormwater pipes and related features run along Riverside Avenue, as shown on the Site Plan Map (Existing Conditions). The lines are 12 inches in diameter. A 36 inch diameter storm pipe water collector runs across the southwest part of the site through the NYSDOT stormwater easement.

The site is lit by a handful of pole-mounted lights in the center of the property, left over from the site's prior use. The poles are approximately 25 feet high and are guarded by concrete blocks.

Overhead electrical and phone lines run along the west and south sides of Riverside Avenue, as shown on the Site Plan Map (Existing Conditions). A power transmission line from the adjacent cogeneration plant runs north-south and then east-west across the northeast part of the site.

A gas delivery line and commercial gas service point exists along the east side of Riverside Drive.

3.5 Access

Two unpaved access points along the south side of the site provide access to Riverside Avenue at the locations shown on the Site Plan Map (Existing Conditions).

3.6 Floodplain

The FEMA floodplain maps indicate the elevation of the 100-year floodplain ranges from about 19 feet to the south of the site to about 20 feet to the north of the site. The majority of the site is above these elevations; only a portion of the railroad spur and the eastern side of the site are

below the 19 to 20 foot elevation. Riverside Avenue and a part of the Port Expressway southeast of the site is below this elevation.

3.7 Future Bike Path

A bike path has been proposed by Empire-Besicorp to be built along Riverside Avenue, east and south of the site. The bike path through the industrial area will terminate at an overlook area to the southwest of the site, overlooking the Hudson River and the industrial Port of Albany-Rensselaer.

4.0 DESCRIPTON OF PROPOSED OPERATIONS

The general operations of the proposed blacktop plant are described below.

4.1 Proposed Access and Traffic Flow

All vehicles will access the site via the proposed entrance from Riverside Avenue in the southeast part of the site. This proposed entrance is at the location of one the existing access points. All vehicles will travel north on the entrance road along the east side of the site. Trucks delivering recycled asphalt pavement ("RAP") and aggregates will turn left into the Stockpile Area, deposit their materials at the appropriate stockpile, travel west across the Stockpile Area to the perimeter access road, turn left (south) and depart the site.

Employees, liquid asphalt and delivery trucks and trucks picking up blacktop will proceed north along the entrance road along the east side of the site to the Plant Area. Employees will park in the two parking areas near the plant or the lab and depart via the perimeter access road along the west side of the site.

Liquid asphalt and delivery trucks will use the road that bypasses the blacktop plant, take a left turn just north of the plant, deliver their materials to the bulk storage from the concrete pad, proceed southwest to the perimeter access road, turn left (south) and depart the site via Riverside Avenue to the Port Expressway.

Trucks picking up blacktop will proceed north along the entrance road along the east side of the site, turn left into the Plant Area, wait until signaled to pull under the plant discharge and hot silos, receive their load of blacktop, pull out from beneath the plant heading north, turn left (west) onto the perimeter access road, go around the north side of the lab and proceed south to the site exit onto the Port Expressway.

Overall, the flow of traffic on the entrance road/perimeter access road will be one-way in a counter-clockwise direction.

Two rollover curbs will be placed in the entrance/perimeter access road to contain stormwater on site. The rollover curb is a surface water divide in the road that on one side directs stormwater back towards the interior of the site and on the other keeps stormwater from entering the site.

The entrance/perimeter access road will be paved. Details of the road construction are shown on the Detail Sheets.

4.2 Access Control

Access to the site will be controlled by perimeter berms and the gates on the entrance road/perimeter access road, as shown on the Site Plan Map (Proposed Conditions). The gates' typical construction is shown on the Details Sheets.

4.3 Truck Routes

Employee vehicles and most delivery trucks will travel south and west on the Port Expressway to Riverside Avenue to access the site. The nearest liquid asphalt distributor is Gorman Brothers, located further south of the site in the Port of Rensselaer, so it is expected that liquid asphalt deliveries will come via Riverside Avenue from the south.

Trucks leaving the Port of Rensselaer from this site will use NYS Route 9J and US Route 20. The potential impact of project generated traffic is assessed in the Traffic Study prepared by Creighton Manning Engineers. No significant impact is expected since the trucks will use designated truck routes designed to carry truck traffic before exiting onto state or federal highways intended for truck traffic.

4.4 Blacktop Plant Components and Layout

The proposed blacktop plant will be a drum mix plant. The plant will mix coarse aggregate (crushed stone), sand and liquid asphalt to produce blacktop. Drum mix plants produce one type of blacktop at a time in a continuous feed as compared to batch plants that can make a different batch of blacktop for each "batch". Drum mix plants are becoming more common than batch plants because they are more efficient, employ superior emission control technology and produce a generally more uniform and higher quality product.

The blacktop plant consists of various components, all necessary for its efficient operation. These components are:

- *Cold feed bins*—Aggregates at ambient temperatures (hence the term "cold") are loaded into these bins, metered out through the bottom onto a conveyor that delivers the aggregates to the drum. A screen removes potential clumps in the aggregate before it enters the drum.
- *RAP bins*—RAP is loaded into bins, crushed to size in a single pass, metered out through the bottom onto a conveyor that delivers the aggregates to the drum. The RAP is fed into the drum mixing zone as a means of controlling blue smoke. A screen removes potential clumps in the RAP before it enters the drum.
- *Drum*—The drum is a near horizontally oriented cylinder that slowly rotates. Aggregates are fed into the drum and heated by a low NO_x emissions burner which dries the aggregates and heats them to the temperature of the liquid asphalt, promoting better adhesion and a more durable blacktop. The drum uses counterflow technology which means the aggregate moves in the opposite direction of the heat from the burner. Aggregate moves through the center of the drum and is heated while the RAP is introduced into an isolated mixing chamber behind the burner. Flights inside the drum keep the RAP flowing along the exterior of the drum where it is subject to less heat. These technologies control odors and blue smoke. Liquid asphalt is metered into the drum in the mixing area before the aggregate/RAP/liquid asphalt mixture is removed from the drum via hot mix conveyor to the hot storage silos and discharge area.
- *Hot Storage Silos/Discharge Area*—Trucks pull onto one of the two scales under the silos and discharge area to be loaded. The appropriate mix is dropped via chute into the waiting truck. When full, the truck pulls out, trims, picks up a ticket at the control room, covers the blacktop at the truck rack and leaves the site. Since a drum plant produces one mix at a time, the hot storage silos serve the purpose of holding and discharging multiple mixes and providing surge storage. The use of silos tends to even out the flow of traffic. The silos are heated to keep the blacktop from hardening.
- *Baghouse*—One of the most noticeable and largest components of the blacktop plant are the emission control features, including the baghouse. The emissions from the

drum are collected by a positive reclaim system and fed back in a closed loop to the burner for ignition to prevent blue smoke and odors. The exhaust emissions are fed by enclosed duct to the baghouse. Oversized particles are removed at the entrance to the baghouse and the air is circulated in a circuitous path through the hanging bags. Particulates adhere to and drop from the bags and are collected by a screw conveyor that moves the dust to a collection silo. The collection silo is periodically emptied and stored on site. The baghouse removes approximately 99.94 percent of particulate matter and modern blacktop plants are minor sources of dust. Most of the dust is re-incorporated into the blacktop.

- *Control Room*— The plant is highly automated with the controls located in this room. The plant operator works in this room, sets the plant to produce the desired mixes and prints the ticket for each load
- *Liquid Storage*—Liquids used in the manufacture of blacktop and maintenance of the plant are stored in the area northwest of the drum. These tanks are located within impermeable secondary containment. Trucks delivering these fluids park on an impermeable concrete pad.
- *Lab*—Routine labs tests required by specifying agencies are performed in the lab. This testing ensures that high quality blacktop is produced.
- *Spray Bars and Truck Racks*—Automated spray bars spray the bed of blacktop trucks to prevent blacktop from sticking. This process is automated and controlled by the plant operator to prevent truck drivers from over application and subsequent leakage. The truck racks after the plant allow truck drivers to trim and cover the blacktop prior to leaving the site. The spray bars are located on an impermeable pad.

The locations, sizes and heights of the buildings and necessary structures are shown on the Site Plan Map (Proposed Conditions). The tallest buildings are the fuel and additive storage buildings which will be approximately 18 feet high. The hot storage silos are the tallest structures and will be approximately 66 feet high with necessary appurtenances (e.g. blacktop elevator) that are approximately 84 feet high. The City ordinance applies to buildings and allows necessary structures (such as elevators) to be up to 87.5 feet high.

4.5 Stockpile Area

Aggregate and RAP will be hauled to the site in tri-axle dump trucks (22 ton loads) and trailer dump (34 ton loads) trucks. The aggregates and RAP that make up the bulk of the blacktop will be stored in open piles in the Stockpile Area in the southern part of the property. The Stockpile Area will be bermed along its perimeter and graded to direct stormwater towards the stormwater management area.

The floor of the Stockpile Area will be covered with crushed stone.

The size and location of the stockpiles will vary over time as materials will be delivered and fed to the plant and different aggregates will be needed for different types of blacktop. In general, it is anticipated that the aggregates will consist of different sizes of crushed stone (e.g. NYSDOT #3, #2, #1, #1A, Screenings, Natural Sand) so it's not possible to state how much of each product will be on site at any time. The height of the stockpiles will be approximately 20 feet or less.

RAP will also be stored in the Stockpile Area. RAP from milled up roads will be re-used in the blacktop, thereby reducing the need to landfill, reducing the amount of aggregates needed, and reducing the amount of fuel and asphalt needed.

Aggregates and RAP will be excavated from the piles by a rubber tired front end loader and fed to the cold feed and RAP bins, respectively.

4.6 Stormwater Management Area

Currently, stormwater drains towards the railroad spur along the east side of the site. Water collects along the railroad spur and infiltrates or overflows the area, entering the existing stormwater system along Riverside Avenue near its intersection with the Port Expressway.

The perimeter of the site will be bermed to prevent runon into the site and keep runoff from leaving disturbed areas of the site. Rollover curbs will be placed on the perimeter access road to keep the site drainage internal and prevent runon to the site.

Runoff from the Stockpile and Plant Areas will be directed to the Stormwater Management Area ("SMA") in the east-center of the site. The runoff will enter a stone-lined ditch along the west and north sides of the SMA. The ditch will empty into a sediment trap which will empty into a detention pond. Water will be treated in this system prior to being discharged into the same stormwater system that currently receives the site's runoff.

4.7 Parking

Approximately six people will be employed at the site. Off-street parking for 15 has been provided: three spots by the lab and 12 spots by the plant.

4.8 Lighting

NYSDOT, the Thruway Authority and other specifying agencies periodically require that roads be paved at night for the convenience of the motoring public. The adjacent power plants operate at night also. Therefore, the site will be equipped with lights for required night time operations. The existing lighting will be kept in place as much as possible. The Stockpile Area will be lit by two of the existing pole mounted lights. The pole in the southern part of the Stockpile Area will be moved a few feet to the southeast to avoid areas frequented by equipment.

The cold feed bins and RAP bins will be lit by another of the existing pole mounted lights.

The Plant Area will be illuminated by hooded lights mounted on the plant and related structures.

The locations of the existing and proposed lights are shown on the Site Plan Map (Proposed Conditions).

4.9 Truck Loading Areas

Trucks will be loaded with blacktop under the hot storage silos, described in Section 4.4 above.

4.10 Equipment Operation

Heavy equipment will be used as needed to operate the site. Rubber tired front end loaders will operate in the Stockpile Area to feed RAP and aggregates to the blacktop plant. A small skid steer will be used to clean up loose debris, mainly in the Plant Area. A small off-road truck will move material around the site on an infrequent basis. An excavator will be used to clean out stormwater features for a few days per year. On road trucks will deliver aggregates (primarily trailer dumps), deliver RAP (a mix of tri-axle dumps and trailer dumps) and pick up blacktop (primarily tri-axle dumps).

4.11 Water Supply

Water service will be obtained by tying into the existing City water lines. The City of Rensselaer Water Department indicated there is sufficient pressure and supply for the limited water use expected at the site.

4.12 Natural Gas
The burner on the drum will be fueled by natural gas, used oil or fuel oil. A gas service exists on the east side of Riverside Avenue. The utility company has been contacted regarding tying into this service. The proposed tie-in is shown on the Site Plan Map (Proposed Conditions).

4.13 Electricity
The remaining fixed equipment at the site will be powered by electricity. Electrical service exists along Riverside Avenue adjacent to the site. The utility company has been contacted regarding tying into this service. The proposed tie-in is shown on the Site Plan Map (Proposed Conditions).

4.14 Sewage
According to Rensselaer County and the City, there is no sewer service near the site. An on-site septic system will be constructed in the northeast part of the site, as shown on the Site Plan Map (Proposed Conditions). The septic leach field will likely be raised bed above the elevation of the 100-year floodplain and designed and built in accordance with the County Department of Health requirements.

4.15 Buffer Zones and Green Space
The site covers approximately 12.4 acres, of which 5.8 acres will be used by the blacktop plant, roads, stockpile area and related features. Another 0.8 acres is covered by the stormwater management area. Approximately 53 percent of the site will remain as green space.

4.16 Landscaping
The site is zoned industrial and is located in the center of the Port of Rensselaer surrounded by heavy industrial uses, including a metal salvage yard, a cogeneration plant, a power plant, large fuel storage facilities and the industrial Port of Albany across the Hudson River. The details of revegetating disturbed areas such as perimeter berms are described in Section 3.1.3 of the Stormwater Pollution Prevention Plan ("SWPPP").

4.17 Signs
The proposed signs for the exterior of the site are shown on the Site Plan Map (Proposed Conditions) and the Detail Sheets. The signs will include:

- A sign at the entrance to identify the site
- A "Do Not Enter" sign at the exit (since the perimeter road is one way)
- Bicycle crossing signs at the points where the proposed bike path crosses the entrance/perimeter access road
- A stop sign at the exit

Additional signs will be used on site to direct traffic, limit speed, notify truck drivers to cover loads and other purposes for the safe and efficient operation of the site. These signs will be internal to the site.

4.18 Pedestrian Access
No pedestrian access to the site is required or proposed.

5.0 APPROVALS
The following approvals are required to begin construction of the site:

- Special Use Permit from the City of Rensselaer—the site is located within the Floodplain Overlay, although the elevation of most of the site is above the 100-year floodplain elevation of approximately 19 to 20 feet.
- Site Plan Review by the City of Rensselaer
- Floodplain Development Permit Application by the City of Rensselaer
- Construction SWPPP for the City of Rensselaer—addresses stormwater and sediment control during the construction of the site
- NYSDEC Air Registration
- Rensselaer County Health Department approval of septic system—to be obtained once City site plan approval has been obtained;

In addition, the following plans will be required after the above approvals are granted:

- NYSDEC Multi-Sector General Permit for Industrial Activities—this is a general permit that requires submission (30 days prior to beginning operation of the blacktop plant) of a Notice of Intent and preparation of a SWPPP for the post-construction (i.e. blacktop plant) activities at the site. This plan is kept on-site and does not require regulatory review.
- EPA Spill Prevention and Countermeasure Plan ("SPCC")—this plan describes the efforts to prevent, control and clean up potential spills at the site. It is required to be prepared and implemented within the first six months of the site's operation and does not require regulatory review.
- NYSDEC Petroleum Bulk Storage Registration—all bulk storage will be done in accordance with applicable NYSDEC requirements. The Site Plan accounts for required impermeable pads and impermeable secondary containment. The registration will be obtained from NYSDEC once the bulk storage is purchased.

The information in this application duplicates the information that would be included in the two above plans.

6.0 IMPACT ASSESSMENT AND MITIGATION

The site is located in the City of Rensselaer Industrial Zoning District and is in the active Port of Albany-Rensselaer. The site is surrounded by existing heavy industrial activities including but not limited to:

- The Besicorp-Empire Power Generation Plant;
- The Fulton Cogeneration Associates Power Cogeneration Plant
- A large-scale scrap-metal crusher and export operation; and
- Several active petroleum bulk storage and distribution facilities, the closest being the Getty Terminal Facility and Polsinello Fuels (see Location Map on page 2).

In addition, the land west of the site (across and on the west side of the Hudson River) is occupied by a variety of heavy industrial activities in the Port of Albany-Rensselaer.

This is an ideal location for a blacktop plant. The proposed blacktop plant will assimilate well into the surrounding heavy industrial activities and will not cause any significant contrast to the industrial character of the zoning district. All potential sensitive receptors are separated from this site by intervening heavy industrial activity. The distances between the nearest potential receptors are:

- Ft. Crailo—approximately 3700 feet north of site
- Ball Field—approximately 3300 feet north of site
- Educational facility—SUNY facility on US Route 20—approximately 2600 feet

- Nearest residential area to the north—approximately 3300 feet
- Nearest residence in primarily commercial area east of site—approximately 1400 feet
- Nearest residential area—approximately 1800 feet east of site.

The potential impacts of the proposed project are described below and in the May 9, 2011 letter to Sarah Crowell in the Appendix.

6.1 Potential Air Impacts

A blacktop plant operated on line power, as proposed, is a minor source of emissions. The proposed plant has been capped out by rule (limiting the amount of emissions) and only requires an air registration from NYSDEC. There are six reported Title V facilities near the site, five in the Port of Rensselaer and one on US Route 20 just north of the site. Title V facilities produce emissions that are each at least 10 times more than the emissions proposed from this site during a busy year.

The proposed emissions controls were described above in Section 4.4 and are summarized below. These technologies will control dust and other emissions from the site.

- Counterflow and internal flight technology in the drum limits the liquid asphalt exposure to the high temperatures needed to dry the aggregate;
- RAP is fed into the drum mixing chamber behind the burner, limiting the exposure of the asphalt to the high temperatures needed to dry the aggregate;
- Fumes from the drum are captured and fed via closed duct to the burner where they are burned
- Captured air is vented through the baghouse which removes approximately 99.94 percent of particulate matter

Further, measures are taken to control the moisture of the aggregate and RAP stockpiles (see Stockpile Maintenance Plan in the Appendix). Drier aggregate requires less fuel consumption and produces fewer emissions.

Fugitive dust will be controlled via best management practices outlined in the Fugitive Dust Control Plan in the Appendix.

The project will not emit 1000 tons per year of carbon dioxide, 3.5 tons per year of nitrous oxide, 1000 tons per year of carbon equivalent of perfluorocarbons, 0.045 tons per year of sulfur hexafluoride, more than 1000 tons per year of carbon dioxide equivalent hydrochlorofluorcarbons, 43 tons per year of methane, 10 tons per year of any one designated hazardous air pollutant (HAP) or 25 tons per year of any combination of HAP, does not have an emission rate or more than 5 pounds per hour, will not produce more than 10 million BTUs per hour and will not use more than 2500 MW hours of electricity per year and will not exceed 50% of any of the two emission thresholds.

An air permit registration was submitted to NYSDEC, the recognized authority on air approvals. NYSDEC indicated the air registration is not subject to public review because it is a *minor* source that requires only an air registration, the lowest form of approval granted by NYSDEC (see chart on following page describing the various levels of air approvals). Blacktop plants have high degrees of emission control and are small sources of emissions. The fact that the proposed plant requires an air registration from NYSDEC is proof that it is <u>not</u> a significant source of air emissions.

The minor nature of the emissions from this facility combined with the proposed emission control technology and best management practices will ensure that this site will not have a significant impact on air quality and not generate blue smoke or offensive odors.

6.2 Traffic

The potential impact of project-generated traffic is assessed in the Traffic Study and Supplemental Traffic Analysis prepared by Creighton Manning Engineers. These studies were submitted under separate cover and are included in the Appendix.

6.3 Visual

A Visual Impact Assessment was done in accordance with the NYSDEC Visual Policy. This study is in the Appendix.

The site is located in an industrially zoned area in the center of the Port of Rensselaer, surrounded by heavy industrial uses. The industrial activities at the site are located as far from Riverside Avenue and the Port Expressway as possible and perimeter berms and large green spaces (approximately 53 percent of the site) are located along the parts of the site most visible from these roads. The visual character of the site will be consistent with the zoning and surrounding land-uses and there are no potential residential receptors near the site. No significant visual impacts will occur.

6.4 Proposed Bike Path

As part of a prior approval of the cogeneration plant, a bike path is proposed to be built along Riverside Avenue and the Port Expressway, ending in an overlook area along the southwest side of the site. The bike path winds through a heavy industrial area and the overlook area will have a tree obscured vista of a portion of the industrial Port of Albany.

The bike path will cross the entrance and exit. Striping and signage will be placed at these locations sufficient to alert vehicles and bicyclists.

The vegetated perimeter berms between the site and proposed bike path and overlook area will provide screening. However, the proposed site is consistent with the surrounding industrial land-uses so there will be no significant impacts to the bike path or overlook area.

6.5 Noise

The area surrounding the site is industrial in nature and potential sensitive receptors are not located proximal to the site. To determine compliance with the noise provisions of the City ordinance and to assess potential impacts to receptors as per the State Environmental Quality Review Act (SEQRA), the following work was performed:

- We familiarized ourselves with the nature of the community, and identified potential receptors, existing noise sources and representative ambient monitoring locations
- We monitored ambient sound levels at the chosen locations on Riverside Avenue, the Port Expressway and the residential area to the east of site (see map on page 2).
- We familiarized ourselves with the types of equipment that would operate at the site and the general nature of site activities in order to identify potential noise sources.
- We obtained sound measurements of equipment from other sites and from equipment manufacturers that were representative of the equipment to be used at the site.
- We modeled the on-site sound levels, calculating the attenuation to the streets, as per the noise provisions of the City ordinance, and to the nearest potential receptors, consistent with the principles of SEQRA.

SUMMARY OF POTENTIAL NOISE IMPACTS

Receptor Location	Sound Level of Trucks	Sound Level of Stockpile Area	Sound Level of Plant	Ambient Sound Level	New Ambient Sound Level	Sound Level Increase
Riverside Avenue (East)	63.0	54.8	63.1	68.5	70.6	+2.1
Riverside Avenue (South)	51.4	56.2	62.5	67.1	68.7	+1.6
Residential Area to East	37.6	45.9	47.6	54.6	55.5	+1.3
Overlook Area	65.5	57.3	51.8	67.1	69.6	+2.5

All sound readings in dBA (one-hour L_{eq})

- The expected sound levels due to on-site activities at the potential receptors to determine the changes in the ambient sound level. These changes in sound levels were compared to applicable standards and mitigation was added as needed. The results of this analysis are shown on the table on the next page.

The main noise sources in the area are the two power plants, the metal salvage yard, traffic on the local roads and other industrial activities in the Port of Rensselaer.

6.5.1 Expected Sound Level at Riverside Avenue (East of Site)

The expected sound level of trucks on the perimeter access road, the loader and trucks in the Stockpile Area and the Plant Area at Riverside Avenue is expected to be 63.0 dBA, 54.8 dBA and 63.1 dBA, respectively. The existing ambient sound level at Riverside Avenue was measured to range from 68.5 to 70.2 dBA. Even assuming the lower ambient sound level, the resulting combined sound level would be 70.6 dBA, a change from the current ambient level of 2.1 dBA. Increases of less than three dBA are imperceptible to barely perceptible and well within the normal fluctuation of sound levels in this area. No significant impact will occur.

6.5.2 Expected Sound Level at Riverside Avenue (South of Site)

The expected sound level of trucks on the perimeter access road, the loader and trucks in the Stockpile Area and the Plant Area at Riverside Avenue to the south of the site is expected to be 51.4 dBA, 56.2 dBA and 62.5 dBA, respectively. The existing ambient sound level measured at the Port Expressway ranged from 67.1 to 69.6 dBA. Even assuming the lower ambient sound level, the resulting combined sound level would be 68.7 dBA, a change from the current ambient level of 1.6 dBA. Increases of less than three dBA are imperceptible to barely perceptible and well within the normal fluctuation of sound levels in this area. No significant impact will occur.

6.5.3 Expected Sound Level at Residential Area

The expected sound level of trucks on the perimeter access road, the loader and trucks in the Stockpile Area and the Plant Area at the residential area to the east of the site is expected to be 37.6 dBA, 45.9 dBA and 47.6 dBA, respectively. The existing ambient sound level measured at the residential area ranged from 54.6 to 55.5 dBA. Even assuming the lower ambient sound level, the resulting combined sound level would be 55.9 dBA, a change from the current ambient level of 1.3 dBA. Increases of less than three dBA are imperceptible to barely perceptible and well within the normal fluctuation of sound levels in this area. No significant impact will occur.

6.5.4 Expected Sound Level at Overlook Area

The expected sound level of trucks on the perimeter access road, the loader and trucks in the Stockpile Area and the Plant Area at the proposed overlook area to the southwest of the site is expected to be 65.3 dBA, 57.3 dBA and 51.8 dBA, respectively. The existing ambient sound level was measured at Riverside Avenue was measured to range from 67.1 to 69.6 dBA. Even assuming the lower ambient sound level, the resulting combined sound level would be 69.6 dBA, a change from the current ambient level of 2.5 dBA. Increases of less than three dBA are imperceptible to barely perceptible and well within the normal fluctuation of sound levels in this area. No significant impact will occur.

6.5.5 Recommended Noise Best Management Practices

Although the acoustical analysis above indicated no potential significant changes in the sound levels around the site due to the proposed project, the following best management practices are recommended to keep sound levels low and to address potential impulse sounds:

- Equipment, including noise control mufflers, should be kept in good repair
- Speed limits on the site should be 15 miles per hour

- The blacktop plant should be oriented as shown on the Site Plan Map (Proposed Conditions). This location and orientation was chosen because it orients the loudest part of the plant away from potential receptors and keeps the loudest site activities as far from public areas as possible.
- The proposed entrance/perimeter access road should be paved. A smooth road reduces the sound level of trucks.
- Loadout from the stockpiles should be from the interior of the piles, thus leaving the bulk of the piles as a sound barrier between the equipment and potential off-site receptors to the maximum extent practicable.
- The proposed flow through traffic patterns will reduce the need for heavy equipment to back up. However, the loader in the Stockpile Area should be equipped with a white noise back up alarm or a sonar activated alarm that only sounds when it detects an obstacle behind the reversing loader.
- Truck drivers will be instructed to use jake brakes only in emergency situations.
- Truck drivers will be instructed to not slam tailgates when they empty a load of RAP or aggregate.

6.5.6 Noise Conclusions

There will be no significant noise impact due to site operation even at the closest public and residential areas. More distant locations will similarly not be impacted.

6.6 Floodplain

The site has been laid out so that no structures are located in the 100-year floodplain. Approximately 1050 cubic yards of fill will be placed in the 100-year floodplain area. The septic system will likely be a raised bed system above the 100-year floodplain level and will be approved by the County Department of Health. The displacement of potential floodwaters by the fill (entrance/perimeter access road and some of the perimeter berms along the eastern side of the site) will result in no significant increase in flood level. No significant impacts will occur.

6.7 Stormwater

Potential impacts to stormwater during operations were an integral part of laying out the site and have been addressed in the Site Plan. These measures include:

- Perimeter berms will control runon to the site and prevent runoff from the Plant and Stockpile Areas
- Rollover curbs on the entrance/perimeter access road will keep sediment laden stormwater on-site.
- The roads will be paved and swept regularly to prevent trackage onto public roads and buildup of sediment
- Trackage and spillage will be cleaned up promptly
- Approximately 53 percent of the site will be green space.
- Disturbed areas outside the Plant and Stockpile Areas will be revegetated.
- The Plant and Stockpile Areas will drain internally to the Stormwater Management Area for treatment and promotion of infiltration prior to discharge to the existing stormwater system along the Port Expressway.

Erosion and sediment control issues during construction are addressed in the Construction SWPPP.

Petroleum products are stored in double-lined containers or within impermeable secondary containment. Delivery of these products will occur on an impermeable pad, as shown in the Site Plan. Inspection, spill prevention and spill prevention training will be done in accordance with

applicable EPA and NYSDEC requirements. Spill clean up kits will be kept on site and the NYSDEC Spill Hotline will be contacted in the event of a reportable spill. Any spills will be cleaned up properly.

6.8 Groundwater

No significant impacts to groundwater or groundwater users will occur due to project implementation. The site is remotely located and surrounded by larger and more intense industrial uses than proposed for this site. There are no groundwater users near the site.

Best management practices to protect surface and groundwater are described in the Construction SWPPP. These measures include but are not limited to:

- Controlling runoff from the site and directing it to the Stormwater Management system for treatment prior to discharge;
- The septic system will likely be a raised bed system above the 100-year floodplain level and will be approved by the County Department of Health;
- Storing petroleum products, additives and asphalt in covered buildings and in doubly lined tanks with secondary containment;
- All petroleum products will be stored in accordance with petroleum bulk storage regulations;
- Fuel transfer areas will be paved;
- Equipment parking areas will be paved; and
- The site will operate under a Multi-Sector General Permit and a Spill Prevention, Countermeasure and Control Plan.

6.9 Plants and Wildlife

The site has been historically used for industrial purposes and was recently used as a construction lay down and parking area during the construction of the nearby power plant. The site is covered by a layer of crushed stone that in turn overlies a layer of older fill.

NYSDEC was contacted when this project began and stated that although there are significant species that have been identified in the area that since the site had been previously disturbed there was no potential to impact any species or habitat. No significant habitat exists on the site—the site is almost exclusively covered by a barren layer of crushed stone (see photos below). No potential impacts to plants and wildlife can occur.

Photo looking northeasterly showing the general nature of the site. The site has been previously disturbed and is covered by a layer of crusher run.

Photo looking southeasterly showing the general nature of the site. The site has been previously disturbed and is covered by a layer of crusher run.

6.10 Cultural Resources

A Phase 1A/1BCultural Resources investigation was performed at the site and is include din the Appendix. This investigation found that most of the native soils had been removed by prior industrial activities over a large portion of the site. The site has been historically used for industrial purposes and was recently used as a construction lay down and parking area during the construction of the nearby power plant. The site is covered by a layer of crushed stone that in turn overlies a layer of older fill. No significant impacts to cultural resources were identified.

The potential impacts of the project on existing or potentially eligible historical resources in the surrounding community were investigated in the Visual Study in the Appendix. No significant impacts will occur to historical resources.

6.11 Energy Use

The proposed plant will be powered by electricity supplied by the adjacent utility line. The drum will use natural gas from the adjacent gas service. There is no indication there is insufficient capacity to connect to the adjacent gas and electrical services and no indication this relatively minor user will require construction of a new substation or upgrading of an existing substation. The site is adjacent to a series of transmission lines so the only added infrastructure would be the connection. The electrical lines already extend to the site so this would require minimal work.

The project is not well-suited for using on-site renewable energy sources. There is very little free space on-site so it would not be practical to set up a large array of solar panels of a wind turbine. In fact, to do so would be almost as much of a project as building the blacktop plant. There is no

usable hydroelectric power on site. The project proposes to use the available adjacent gas and electrical services, both of which are widely recognized as clean energy sources. The blacktop plant will be state of the art and more fuel efficient and cleaner than the older plants that are currently serving this market. Construction of this plant will not create additional demand for blacktop but it will reduce overall emissions by reducing the distance traveled by trucks to and from the blacktop plant and by having a cleaner, more fuel efficient plant. Overall, this plant will reduce energy consumption.

In addition, this plant will be more capable of fully using recycled asphalt pavement (RAP) in the blacktop. This reduces the need for asphalt, requires less energy to make blacktop and incorporates a potential waste product into a valuable and salable product.

Energy will not be significantly impacted by the project.

6.12 Odor and Light

These potential impacts were also addressed earlier in this application. The proposed plant will be state of the art and incorporates technology to prevent odors and blue smoke.

A lighting plan was submitted with the application and all lights were hooded and shown only on the site. Further:

- There are no residences or receptors adjacent to the site that could be impacted by the limited lights to be used at the site;
- The site is located in the middle of an industrial zoned area surrounded by other more intensive industrial uses—these uses employ lighting to a much greater extent than the proposed blacktop plant; and
- The site will typically only operate at night when supplying a project mandated (typically NYSDOT) paving job. Nighttime paving is done to reduce impacts to the driving public and benefits everyone.

The project will not produce odors and lighting will not be a significant impact.

6.13 Human Health

The presence of a spill remediation on or adjacent to the site or the disposal of solid or hazardous waste on other sites is not relevant to an assessment of the potential impacts of this project. The BASF site is located more than 2000 feet north of the site but construction and operation of a blacktop plant on our property will not affect the remediation done on that property or any other properties. There will be no export of on-site materials from this property. The on-site materials will be graded and used on site.

The only known institutional controls limiting the use of the site are: (1) the bike path and overlook which are outside the limits of the project and were purposely avoided by the project; and (2) the easements for utilities which were identified and purposely avoided during the design and layout of the property. The only interaction between easements and the projects will be where the access roads cross such easements and this crossing is not contravened by the easements and will in no way impact the utilities that are the subject of the easements.

Human health will not be significantly impacted by the project.

6.14 Community Character

Local fire, EMS and police departments are staffed and equipped to protect industrial installations. The project will place no additional demands on schools.

The site has been previously disturbed, most recently having been graded and covered by a layer of crusher run to serve as a lay down and parking area for the construction of the adjacent power generating plant. A cultural resources investigation has been performed and no evidence of historical structures has been found on the site to date. The Visual Study assessed potential impacts to all structures within the study area, including historical structures, and no significant impacts were identified.

The site is zoned industrial, has been used for industrial purposes in the past and the comprehensive and riverfront revitalization plans both call for its continued industrial use. By definition, projects that comply with the locally adopted planning documents cannot have a significant impact on community character.

No potential impacts to the bike path or overlook will occur, as outlined in Section 6.4 above.

APPENDIX

ENVIRONMENTAL ASSESSMENT FORM, PART 1

617.20
Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.

Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

THIS AREA FOR LEAD AGENCY USE ONLY

DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project: ☐ Part 1 ☐ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☐ A. The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact on the environment, therefore **a negative declaration will be prepared.**

☐ B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore **a CONDITIONED negative declaration will be prepared.***

☐ C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore **a positive declaration will be prepared**.

*A Conditioned Negative Declaration is only valid for Unlisted Actions

_____
Name of Action

_____
Name of Lead Agency

_____ _____
Print or Type Name of Responsible Officer in Lead Agency | Title of Responsible Officer

_____ _____
Signature of Responsible Officer in Lead Agency | Signature of Preparer (If different from responsible officer)

_____
Date

Reset

PART 1--PROJECT INFORMATION
Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action: New Castle Asphalt, LLC--Proposed Blacktop Plant

Location of Action (include Street Address, Municipality and County)

Riverside Drive, Port of Rensselaer, City of Rensselaer, Rensselaer County, New York

Name of Applicant/Sponsor: New Castle Asphalt, LLC

Address: 118 Button Road

City / PO: Waterford State: NY Zip Code: 12188

Business Telephone: (518) 432-4470

Name of Owner (if different): Albany-Rensselaer Port District Commission

Address: 106 Smith Boulevard

City / PO: Albany State: NY Zip Code: 12202

Business Telephone: (518) 463-8763

Description of Action:

Construction and operation of a 400 ton per hour capacity drum mix blacktop plant on an industrially zoned parcel approximately 12 acres in size.

Reset

Please Complete Each Question--Indicate N.A. if not applicable

A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: ☐ Urban ☑ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
   ☐ Forest ☐ Agriculture ☑ Other Former staging area for power plant construction

2. Total acreage of project area: 12 acres.

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	6 acres	5 acres
Forested	0.5 acres	0.5 acres
Agricultural (Includes orchards, cropland, pasture, etc.)	0 acres	0 acres
Wetland (Freshwater or tidal as per Articles 24,25 of ECL)	0 acres	0 acres
Water Surface Area	0.5 acres	0.5 acres
Unvegetated (Rock, earth or fill)	5 acres	5 acres
Roads, buildings and other paved surfaces	0 acres	1 acres
Other (Indicate type) _____	_____ acres	_____ acres

3. What is predominant soil type(s) on project site? Udorthents (sandy), part of site covered by crusher run

   a. Soil drainage: ☑ Well drained 100 % of site ☐ Moderately well drained _____ % of site.
   ☐ Poorly drained _____ % of site

   b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? N/A acres (see 1 NYCRR 370).

4. Are there bedrock outcroppings on project site? ☐ Yes ■ No

   a. What is depth to bedrock >100' (in feet)

5. Approximate percentage of proposed project site with slopes:

   ☑ 0-10% 95 % ☐ 10- 15% 0 % ☑ 15% or greater 5 %

6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places? ☐ Yes ■ No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? ☐ Yes ■ No

8. What is the depth of the water table? 12-17' (in feet)

9. Is site located over a primary, principal, or sole source aquifer? ☐ Yes ■ No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? ☐ Yes ■ No

Reset

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? ☐ Yes ☒ No

According to:

Site previously disturbed

Identify each species:

N/A

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations?

☐ Yes ☒ No

Describe:

N/A

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

☐ Yes ☒ No

If yes, explain:

N/A

14. Does the present site include scenic views known to be important to the community? ☐ Yes ☒ No

N/A

15. Streams within or contiguous to project area:

Hudson River is the western boundary of the property

a. Name of Stream and name of River to which it is tributary

N/A

16. Lakes, ponds, wetland areas within or contiguous to project area:

None

b. Size (in acres):

N/A

Reset

17. Is the site served by existing public utilities? ☑ Yes ☐ No

a. If **YES,** does sufficient capacity exist to allow connection? ☑ Yes ☐ No _____

b. If **YES**, will improvements be necessary to allow connection? ☐ Yes ☑ No _____

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? ☐ Yes ☑ No

20. Has the site ever been used for the disposal of solid or hazardous wastes? ☐ Yes ☑ No

B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate).

a. Total contiguous acreage owned or controlled by project sponsor: 12 acres.

b. Project acreage to be developed: 6 acres initially; 6 acres ultimately.

c. Project acreage to remain undeveloped: 6 acres.

d. Length of project, in miles: N/A (if appropriate)

e. If the project is an expansion, indicate percent of expansion proposed. N/A %

f. Number of off-street parking spaces existing N/A ; proposed N/A

g. Maximum vehicular trips generated per hour: Varies (upon completion of project)?

h. If residential: Number and type of housing units:

	One Family	Two Family	Multiple Family	Condominium
Initially	N/A			
Ultimately	N/A			

i. Dimensions (in feet) of largest proposed structure: N/A height; N/A width; N/A length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? N/A ft.

2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? 0 tons/cubic yards.

3. Will disturbed areas be reclaimed ☐ Yes ☑ No ☐ N/A

a. If yes, for what intended purpose is the site being reclaimed?

N/A

b. Will topsoil be stockpiled for reclamation? ☐ Yes ☑ No

c. Will upper subsoil be stockpiled for reclamation? ☐ Yes ☑ No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 1ac grass acres.

Reset

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

☐ Yes ☒ No

6. If single phase project: Anticipated period of construction: 2 months, (including demolition)

7. If multi-phased:

   a. Total number of phases anticipated N/A (number)

   b. Anticipated date of commencement phase 1: N/A month N/A year, (including demolition) N/A

   c. Approximate completion date of final phase: N/A month year. N/A

   d. Is phase 1 functionally dependent on subsequent phases? ☐ Yes ☐ No

8. Will blasting occur during construction? ☐ Yes ☒ No

9. Number of jobs generated: during construction 10 ; after project is complete

10. Number of jobs eliminated by this project 0 .

11. Will project require relocation of any projects or facilities? ☐ Yes ☒ No

    If yes, explain:

    N/A

12. Is surface liquid waste disposal involved? ☐ Yes ☒ No

    a. If yes, indicate type of waste (sewage, industrial, etc) and amount N/A

    b. Name of water body into which effluent will be discharged N/A

13. Is subsurface liquid waste disposal involved? ☐ Yes ☒ No Type N/A

14. Will surface area of an existing water body increase or decrease by proposal? ☐ Yes ☒ No

    If yes, explain:

    N/A

15. Is project or any portion of project located in a 100 year flood plain? ☒ Yes ☐ No

16. Will the project generate solid waste? ☐ Yes ☒ No

    a. If yes, what is the amount per month? N/A tons

    b. If yes, will an existing solid waste facility be used? ☐ Yes ☒ No

    c. If yes, give name N/A ; location N/A

    d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? ☐ Yes ☒ No

Reset

e. If yes, explain:

N/A

17. Will the project involve the disposal of solid waste? ☐ Yes ☒ No

a. If yes, what is the anticipated rate of disposal? N/A tons/month.

b. If yes, what is the anticipated site life? N/A years.

18. Will project use herbicides or pesticides? ☐ Yes ☒ No

19. Will project routinely produce odors (more than one hour per day)? ☐ Yes ☒ No

20. Will project produce operating noise exceeding the local ambient noise levels? ☐ Yes ☒ No

21. Will project result in an increase in energy use? ☐ Yes ☒ No

If yes, indicate type(s)

Energy use will be reduced by providing a local source of blacktop, reducing the distance this material needs to be hauled to the job site.

22. If water supply is from wells, indicate pumping capacity N/A gallons/minute.

23. Total anticipated water usage per day 0 gallons/day.

24. Does project involve Local, State or Federal funding? ☐ Yes ☒ No

If yes, explain:

N/A

Reset

25. Approvals Required:

			Type	Submittal Date
City, Town, Village Board	☐ Yes	☐ No		
City, Town, Village Planning Board	☒ Yes	☐ No	Site Plan Review/SUP	2/11
City, Town Zoning Board	☐ Yes	☐ No		
City, County Health Department	☐ Yes	☐ No		
Other Local Agencies	☐ Yes	☐ No		
Other Regional Agencies	☐ Yes	☒ No		
State Agencies	☒ Yes	☐ No	DEC Air Permit DEC Stormwater MSGP	2/11 N/A
Federal Agencies	☐ Yes	☐ No		

C. Zoning and Planning Information

1. Does proposed action involve a planning or zoning decision? ☒ Yes ☐ No

If Yes, indicate decision required:

☐ Zoning amendment	☐ Zoning variance	☐ New/revision of master plan	☐ Subdivision
☒ Site plan	☒ Special use permit	☐ Resource management plan	☐ Other

Reset

2. What is the zoning classification(s) of the site?

Industrial

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

Heavy industrial

4. What is the proposed zoning of the site?

N/A

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

N/A

6. Is the proposed action consistent with the recommended uses in adopted local land use plans? ■ Yes ☐ No

N/A

7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?

Industrial, power plant, cogeneration plant, metal salvage yard, fuel storage and distribution

8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile? ■ Yes ☐ No

9. If the proposed action is the subdivision of land, how many lots are proposed? N/A

a. What is the minimum lot size proposed? N/A

Reset

10. Will proposed action require any authorization(s) for the formation of sewer or water districts? ☐ Yes ☒ No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection?

☐ Yes ☒ No

a. If yes, is existing capacity sufficient to handle projected demand? ☐ Yes ☒ No

The existing community services can readily handle the minimal demands of this project

12. Will the proposed action result in the generation of traffic significantly above present levels? ☐ Yes ☒ No

a. If yes, is the existing road network adequate to handle the additional traffic. ☐ Yes ☐ No

All traffic will use the Stewart Port Expressway which is specifically intended for truck traffic from the Port of Rensselaer.

D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

E. Verification

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name New Castle Asphalt, LLC Date 2/3/11

Signature _____

Title Principal Geologist, Consultant representing applicant

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

Reset

VISUAL IMPACT ASSESSMENT DATED MAY 2011

NOTE: ALL OVERSIZED DRAWINGS ARE IN SEPARATE FILE

Griggs-Lang Consulting Geologists, Inc.
8 Brunswick Road Troy, New York 12180
Phone: (518) 270-5920 Fax: (518) 270-5922

NEW CASTLE ASPHALT, LLC

Rensselaer (Riverside Avenue) Plant
Port of Rensselaer, City of Rensselaer, Rensselaer County, New York

APPLICATION FOR CONSTRUCTION AND OPERATION OF BLACKTOP PLANT: VISUAL IMPACT ASSESSMENT

Prepared by: Griggs-Lang Consulting Geologists, Inc.

Date: May 2011

TABLE OF CONTENTS

1.0 INTRODUCTION

The following Visual Impact Assessment is for the proposed construction and operation of a blacktop mixing plant by New Castle Asphalt LLC in the Port of Rensselaer. This Visual Study supplements the initial application to the City of Rensselaer Planning Commission.

This report assesses the potential visual impacts of the proposed blacktop plant by:

- Identifying national, statewide and local aesthetic resources potentially within the viewshed of the project area;
- Determining the potential visual impact of the project at identified aesthetic resources and receptor locations; and
- Proposing mitigation measures as needed to mitigate any potential visual impacts to the maximum extent practicable.

The Visual Impact Assessment was prepared in accordance with and uses standard assessment methodologies as described in the New York State Department of Environmental Conservation (NYSDEC) Visual Policy.

2.0 PROJECT DESCRIPTION

2.1 Location

The site is located on the west and north side of Riverside Drive, just northwest of the western end of the Irwin Stewart Port Expressway. The location and surrounding area is shown on the Visual Base Map in the Appendix.

2.2 Existing Conditions

The site is accessed from U.S. Route 20 via the Port Expressway.

The site is located in the City of Rensselaer Industrial Zoning District and is in the active Port of Rensselaer. The site is surrounded by existing heavy industrial activities including but not limited to:

- The Besicorp-Empire Power Generation Plant (to the northeast and east);
- The Fulton Cogeneration Associates Power Cogeneration Plant (to the north)
- A large-scale scrap-metal crusher and export operation (to the northwest); and
- Several active petroleum bulk storage and distribution facilities (to the south), the closest being the Getty Terminal Facility (see map on page 2) and Polsinello Fuels.

In addition, the land west of the site (across and on the west side of the Hudson River) is occupied by a variety of heavy industrial activities in the Port of Albany.

The site is well suited for the proposed project. The proposed 400 ton per hour blacktop mixing plant will assimilate well into the surrounding heavy industrial activities and will not cause any significant contrast to the industrial character of the zoning district. All potentially sensitive receptors are separated from this site by intervening heavy industrial activity. The distances between the nearest potential receptors are:

- Ft. Crailo—approximately 3700 feet north of site
- Ball Field—approximately 3300 feet north of site
- Educational facility—SUNY facility on US Route 20—approximately 2600 feet
- Nearest residential area to the north—approximately 3300 feet
- Nearest residence in primarily commercial area east of site—approximately 1400 feet
- Nearest residential area—approximately 1800 feet east of site.

The intended use of the site is industrial, which is consistent with the City's Comprehensive Plan and Waterfront Revitalization Plan.

The Site Plan Map (Existing Conditions) attached to the Site Plan Application shows the existing conditions of the site. In general, the site grades gently from an approximate high elevation of 26 feet above mean sea level at the top of the bank along the Hudson River down to an elevation of approximately 18 feet along an active railroad spur on the east side of the property. The easternmost part of the side grades up slightly (elevation 19 feet) towards Riverside Avenue.

The property narrows in its southwest portion near the 90 degree turn in Riverside Avenue. This part of the property grades to the steep bank of the Hudson River.

The site was formerly used as a lay down and parking area for the construction of the adjacent plant. Most of the proposed site is covered by a layer of crushed stone. A secondary growth of mixed trees and brush covers the western and northern perimeters of the property. The remainder of the site is covered by open grasslands.

A single line railroad spur exists along the northeast and eastern parts of the property. This spur is not proposed to be used by the applicant but is used by the adjacent metal salvage operation.

2.3 Proposed Operations

2.3.1 Proposed Access and Traffic Flow

All vehicles will access the site via the proposed entrance from Riverside Avenue on the southeast part of the site. This proposed entrance is at the location of an existing access point. All vehicles will travel north on the entrance road along the east side of the site. Trucks delivering recycled asphalt pavement ("RAP") and aggregates will turn left into the Stockpile Area, deposit their materials at the appropriate stockpile, travel west across the Stockpile Area to the perimeter access road, turn left (south) and depart the site.

Employees, liquid asphalt and delivery trucks and trucks picking up blacktop will proceed north along the entrance road along the east side of the site to the Plant Area. Employees will park in the two parking areas near the plant or the lab and depart via the perimeter access road along the west side of the site.

Liquid asphalt and delivery trucks will use the road that bypasses the blacktop plant, take a left turn just north of the plant, deliver their materials to the bulk storage area from the concrete pad, proceed southwest to the perimeter access road, turn left (south) and depart the site via Riverside Avenue.

Trucks picking up blacktop will proceed north along the entrance road along the east side of the site, turn left into the Plant Area, wait until signaled to pull under the plant discharge and hot silos, receive their load of blacktop, pull out from beneath the plant heading north, turn left (west) onto the perimeter access road, go around the north side of the lab and proceed south to the site exit onto Riverside Avenue.

Overall, the flow of traffic on the entrance road/perimeter access road will be one-way in a counter-clockwise direction.

Two rollover curbs will be placed in the entrance/perimeter access road to contain stormwater on site. The rollover curb is a surface water divide in the road that on one side directs stormwater back towards the interior of the site and on the other side keeps stormwater from entering the site.

The entrance/perimeter access road will be paved.

2.3.2 Access Control

Access to the site will be controlled by perimeter berms and the gates on the entrance road/perimeter access road, as shown on the Site Plan Map (Proposed Conditions). The gates' typical construction is shown on the Details Sheets in the Site Plan Application.

2.3.3 Truck Routes

Employee vehicles and most delivery trucks will travel south and west on Riverside Avenue to the Port Expressway to access the site. The nearest liquid asphalt distributor is Gorman Brothers, located further south of the site in the Port of Rensselaer, so it is expected that liquid asphalt deliveries will come via Riverside Avenue from the south.

Trucks leaving the Port of Rensselaer from this site will use NYS Route 9J and US Route 20. The potential impact of project generated traffic is assessed in the Traffic Study prepared by Creighton Manning Engineers. No significant impact is expected since the trucks will use designated truck routes designed to carry truck traffic before exiting onto state or federal highways intended for truck traffic.

2.3.4 Blacktop Plant Components and Layout

The proposed blacktop plant will be a drum mix plant. Drum mix plants produce one type of blacktop at a time in a continuous feed as compared to batch plants that can make a different batch of blacktop for each "batch". Drum mix plants are becoming more common than batch plants because they are more efficient, employ superior emission control technology and produce a generally more uniform and higher quality product.

The blacktop plant consists of various components, all necessary for its efficient operation. These components are:

- *Cold feed bins*—Aggregates at ambient temperatures (hence the term "cold") are loaded into these bins, metered out through the bottom onto a conveyor that delivers the aggregates to the drum. A screen removes potential clumps in the aggregate before it enters the drum.
- *RAP bins*—RAP is loaded into bins, crushed to size in a single pass, metered out through the bottom onto a conveyor that delivers the aggregates to the drum. The RAP is fed into the drum mixing zone as a means of controlling blue smoke. A screen removes potential clumps in the RAP before it enters the drum.
- *Drum*—The drum is a near horizontally oriented cylinder that slowly rotates. Aggregates are fed into the drum and heated by a low NO_x emissions burner which dries the aggregates and heats them to the temperature of the liquid asphalt, promoting better adhesion and a more durable blacktop. The drum uses counterflow technology which means the aggregate moves in the opposite direction of the heat from the burner. Aggregate moves through the center of the drum and is heated while the RAP is introduced into an isolated mixing chamber behind the burner. Flights inside the drum keep the RAP flowing along the exterior of the drum where it is subject to less heat. These technologies eliminate odors and blue smoke. Liquid asphalt is metered into the drum in the mixing area before the aggregate/RAP/liquid asphalt mixture is removed from the drum via hot mix conveyor to the hot storage silos and discharge area.
- *Hot Storage Silos/Discharge Area*—Trucks pull onto one of the two scales under the silos and discharge area to be loaded. The appropriate mix is dropped via chute into the waiting truck. When full, the truck pulls out, trims, picks up a ticket at the control room, covers the blacktop at the truck rack and leaves the site. Since a drum plant produces one mix at a time, the hot storage silos serve the purpose of holding

and discharging multiple mixes and providing surge storage. The use of silos tends to even out the flow of traffic. The silos are heated to keep the blacktop from hardening.

- *Baghouse*—One of the most noticeable and largest components of the blacktop plant are the emission control features, including the baghouse. The emissions from the drum are collected by a positive reclaim system and fed back in a closed loop to the burner for ignition to prevent blue smoke and odors. The exhaust emissions are fed by enclosed duct to the baghouse. Oversized particles are removed at the entrance to the baghouse and the air is circulated in a circuitous path through the hanging bags. Particulates adhere to and drop from the bags and are collected by a screw conveyor that moves the dust to a collection silo. The collection silo is periodically emptied and stored on site. The baghouse removes approximately 99.94 percent of particulate matter and modern blacktop plants are minor sources of dust. Essentially all of the dust is re-incorporated into the blacktop.
- *Control Room*— The plant is highly automated with the controls located in this room. The plant operator works in this room, sets the plant to produce the desired mixes and prints the ticket for each load
- *Liquid Storage*—Liquids used in the manufacture of blacktop and maintenance of the plant are stored in tanks in the area northwest of the drum. These tanks are located within impermeable secondary containment. Trucks delivering these fluids park on an impermeable concrete pad.
- *Lab*—Routine labs tests required by specifying agencies are performed in the lab. This testing ensures that high quality blacktop is produced.
- *Spray Bars and Truck Racks*—Automated spray bars spray the bed of blacktop trucks to prevent blacktop from sticking. This process is automated and controlled by the plant operator to prevent truck drivers from over application and subsequent leakage. The truck racks after the plant allow truck drivers to trim and cover the blacktop prior to leaving the site.

The location, size and height of these structures is shown on the Site Plan Map (Proposed Conditions) in the Site Plan Application.

2.3.5 Stockpile Area

Aggregate and RAP will be hauled to the site in tri-axle dump trucks (22 ton loads) and trailer dump trucks (34 ton loads). The aggregates and RAP that make up the bulk of the blacktop will be stored in open piles in the Stockpile Area in the southern part of the property. The Stockpile Area will be bermed along its perimeter and graded to direct stormwater towards the stormwater management area.

The floor of the Stockpile Area will be covered with crushed stone.

The size and location of the stockpiles will vary over time as materials will be delivered and fed to the plant and different aggregates will be needed for different types of blacktop. In general, it is anticipated that the aggregates will consist of different sizes of crushed stone (e.g. NYSDOT #3, #2, #1, #1A, Screenings, Natural Sand) so it's not possible to state how much of each product will be on site at any time. The height of the stockpiles will be approximately 20 feet or less.

RAP will also be stored in the Stockpile Area. RAP from milled up roads will be re-used in the blacktop, thereby reducing the need to landfill, reducing the amount of aggregates needed, and reducing the amount of fuel and asphalt needed.

Aggregates and RAP will be excavated from the piles by a rubber tired front end loader and fed to the cold feed and RAP bins, respectively.

2.3.6 Stormwater Management Area

Currently, stormwater drains towards the railroad spur along the east side of the site. Water collects along the railroad spur and infiltrates or overflows the area, entering the existing stormwater system along Riverside Avenue and the Port Expressway.

The perimeter of the site will be bermed to prevent runon into the site and keep runoff from leaving disturbed areas of the site. Rollover curbs will be placed on the perimeter access road to keep the site drainage internal and prevent runon to the site.

Runoff from the Stockpile and Plant Areas will be directed to the Stormwater Management Area ("SMA") in the east-center of the site. The runoff will enter a stone-lined ditch along the west and north sides of the SMA. The ditch will empty into a sediment trap which will empty into a detention pond. Water will be treated in this system prior to being discharged into the same stormwater system that currently receives the site's runoff.

2.3.7 Parking

Approximately six people will be employed at the site. Off-street parking for 15 has been provided: three spots by the lab and 12 spots by the plant.

2.3.8 Lighting

NYSDOT, the Thruway Authority and other specifying agencies periodically require that roads be paved at night for the convenience of the motoring public. The adjacent power plants operate at night also. Therefore, the site will be equipped with lights for required night time operations. The existing lighting will be kept in place as much as possible. The Stockpile Area will be lit by two of the existing pole mounted lights. The pole in the southern part of the Stockpile Area will be moved a few feet to the southeast to avoid areas frequented by equipment.

The cold feed bins and RAP bins will be lit by another of the existing pole mounted lights.

The Plant Area will be illuminated by hooded lights mounted on the plant and related structures.

The locations of the existing and proposed lights are shown on the Site Plan Map (Proposed Conditions) in the Site Plan Application.

2.3.9 Truck Loading Areas

Trucks will be loaded with blacktop under the hot storage silos, described in Section 2.3.4 above.

2.3.10 Equipment Operation

Heavy equipment will be used as needed to operate the site. Rubber tired front end loaders will operate in the Stockpile Area to feed RAP and aggregates to the blacktop plant. A small skid steer will be used to clean up loose debris, mainly in the Plant Area. A small off-road truck will move material around the site on an infrequent basis. An excavator will be used to clean out stormwater features for a few days per year. On road trucks will deliver aggregates (primarily trailer dumps), deliver RAP (a mix of tri-axle dumps and trailer dumps) and pick up blacktop (primarily tri-axle dumps).

3.0 METHODOLOGY

This Visual Impact Assessment was prepared using review of published literature, initial topographic map and aerial photo assessment, development of a computerized three dimensional model and viewshed analyses, aerial photo assessment to determine the locations of wooded area, line of sight sectional analyses and field verification of the computer modeling and line of sight

sectional analyses. This methodology assesses all structures and potential receptors within a 2.5-mile radius of the site.

3.1 Literature Review

Published literature and authoritative websites were reviewed to identify potential aesthetic resources of statewide and local significance within the study area, in accordance with the NYSDEC Visual Policy. All identified resources within the study area were considered during this impact assessment.

3.2 Initial Assessment of Viewshed

The site layout and regional topography was preliminarily assessed using site specific maps, topographic quadrangle maps and aerial photos of the study area. This initial analysis indicated that due to the location, topography and orientation of the proposed site, the site would have a very limited viewshed, particularly to the east and west of the site.

3.3 Development of Computerized Model and Viewshed Analysis

A computerized three dimensional topographic model of the study area was created using the digital elevation models for the Troy South, East Greenbush, Albany and Delmar 7.5 minute quadrangles. Due to the relatively flat-lying topography in the Hudson River Valley and the large number of buildings in the potential viewshed area, this topographic model was not useful. Modeling the height and shape of the numerous buildings in the Cities of Rensselaer and Albany was an enormous undertaking so more reliance was placed on the field reconnaissance.

3.4 Balloon Test and Field Reconnaissance

Two large red weather balloons were placed at the location of hot storage silos, the highest structures of the proposed blacktop plant. The upper balloon was placed at the same height as the silos; the lower balloon was flown at a height approximately five to eight feet below the upper balloon to provide a larger target and to allow for a better determination of the amount of the silos that might be potentially visible.

All roads within a 2.5 mile radius of the site were driven and walked out on April 22, 2011 to determine the locations from which the balloons and silos would be potentially visible. This field reconnaissance was done during leaf-off conditions and, thus, represents a worst-case assessment. The location of and direction to the site was verified by map orientation and instrument measurement of bearings. Binoculars were used to confirm the potential visibility of the site as needed, especially from more distant locations.

Locations having any view of the site were noted and the degree and nature of the potential visibility was assessed and noted.

3.5 Line of Sight Sections

Line of Sight Sections (see Appendix) were drawn from all potentially sensitive receptors in the study area that were identified during the field reconnaissance as having potential views of any part of the site. Intervening wooded areas were added to the sections based on review of the 2007 aerial photos with two foot resolution. The height of the trees in the wooded areas was assumed to be 40 feet[1]. Trees that will be removed during construction were not used in the assessment. The sections show the distinction between vegetation that will remain and on-site vegetation that will ultimately be removed. Lines of sight were drawn from the receptor, assuming an eye height of six feet above the ground (or walkway in the case of the Empire State Plaza), looking towards

[1] This is conservative since no wooded areas were found to be less than 40 feet high and the average height of wooded areas was found to be 60 feet during the field verification

the site. Intervening topography and wooded areas were identified and the potential visibility assessed.

The following were field verified during leaf off conditions for accuracy:

- The presence of potential receptors within the potential viewshed
- The location, height and effectiveness of an intervening wooded buffer
- The assessment of potential visibility

A 300-foot thickness of leafless deciduous trees was considered a total visual screen, as per standard practice. Lesser thicknesses of deciduous trees (when leafless) are considered partial screens. Coniferous trees generally provide a more effective screen.

4.0 STUDY AREA

A composite 2.5-mile radius study area was evaluated to determine the potential visual impacts associated with the project. This radius is roughly double the distance typically required by the NYS OPRHP. Even at this distance, the silos would be difficult to distinguish even with binoculars. The study area distance was determined by taking into account the following factors:

- Overall scope of the project;
- The nature of the surrounding, largely industrial area;
- Changes in topography of construction;
- The scale of the project relative to the distances to potential receptors;
- Relation of site to surrounding topography; and
- Proposed structures, including the blacktop plant.

At distances beyond 2.5 miles atmospheric conditions render most detail indiscernible to the casual observer and the site is barely discernible even with binoculars.

The extent of the study area is shown on the enclosed Visual Base Map.

5.0 POTENTIAL RECEPTORS

5.1 Inventory of Aesthetic Resources

The following aesthetic resources were inventoried in accordance with the NYSDEC Visual Policy:

- Properties on or eligible for inclusion in the National or State Register of Historic Places
- State Parks
- Urban Cultural Parks
- The State Forest Preserves
- National Wildlife Refuges, State Game Refuges and State Wildlife Management Areas
- National Natural Landmarks
- The National Park System, Recreation Areas, Seashores and Forests
- Rivers designated as National or State Wild, Scenic or Recreational
- A site, area, lake, reservoir or highway designated or eligible for designation as scenic
- Scenic Areas of Statewide Significance
- A State or Federally designated trail, or one proposed for designation
- Adirondack Park Scenic Vistas
- State Nature and Historic Preserve Areas
- Palisades Park
- Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space category

5.1.1 Literature and Website Research

Literature and authoritative websites were reviewed to identify all potential aesthetic resources of statewide and local significance within the study area. Sources of information included but were not limited to:

- The New York State Office of Parks Recreation and Historic Preservation's SPHINX System
- The National Register of Historic Places
- The New York State Office of Parks Recreation and Historic Preservation's Regional Map of State Parks
- Cornell University Geospatial Information Repository
- NYSDEC State Recreation Lands interactive navigator
- National Wildlife Refuge System Map
- NYSDEC list of New York State Wildlife Management Areas
- National Park Service Map of National Natural Landmarks in New York State
- National Park Service Map of the National Park System areas in New York State
- NYSDEC Wild, Scenic, and Recreational Rivers Program
- The New York State Department of Transportation Scenic Byways Map
- The City of Albany Comprehensive Plan
- The City of Rensselaer Comprehensive Plan

The locations of these and all other potential sensitive receptors were evaluated during this assessment.

6.0 ANALYSIS AND IMPACT ASSESSMENT

The following criteria were used to analyze the potential for visual impact:

- *Distance*—The potential for visual impact decreases as the distance between the resource and the project increases. Three main components of visual analysis (texture, lines and color) are perceived differently at varying distances due to atmospheric effects The following range of views were considered in the impact assessment:
    - Foreground (0-1 mile). In the foreground, textures, lines and color are readily discernible. Close up features make up a greater portion of the overall view at any one location and typically have greater impacts than from more distant views.
    - Middle Ground (1-2½ miles). In the middle ground, textures tend to be poorly discernible but lines and color are fairly discernible.
    - Background (2½-5 miles). In the background, weather conditions can significantly affect the visibility, texture is not discernible, lines tend to fade and colors are muted. Distant features make up a smaller portion of the overall view at any one location and typically have less impact than from more distant views.
- *Nature of the Resource and Circumstance of the View*--The nature and value of the resource is taken into account during the impact assessment. For example, the potential visual impact to a national landmark is given greater weight than a residence or a non-scenic road with the same potential view of the project.
- *Size and Duration of View*—The size and duration of the project that would be visible from each resource was considered in the impact assessment. All aspects of the project were considered.

6.1 Impact Assessment

The potential visual impact of the proposed blacktop plant is assessed below for each location with potential views of the site. All photos were taken from the most visible representative

vantage point using a 50 mm focal length that best reproduces what a human eye discerns.

6.1.1 Proposed City Boat Launch (Comprehensive Plan)

Photo 1 (Proposed City Boat Launch, Section A-A'): The City's Waterfront Revitalization Plan proposes a boat launch and historic overlook of the Port of Albany and its turning basin be built to the west of the 90 degree bend in Riverside Avenue, southwest of the site. The boat launch and overlook have not been built in the more than 20 years since it was first proposed and it is uncertain when they will be built. This photo looks northeast and the vantage point is located about 1120 feet from the proposed silos, the tallest structures on the site (the red arrow points to the top balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). Approximately 30 feet of the silos would be visible through a partial screen of vegetation from this location during leaf-off conditions. The lower approximately 54 feet of the silos and the remainder of the site would not be visible during leaf-off conditions. During leaf-on conditions, the top of the silos would likely be visible through a thicker vegetative screen (this vegetation is located on the southwest part of the site and is not proposed to be removed). The existing view includes the northwest part of the Getty Tank Farm (visible in the right side of the photo). The purpose of the boat launch and historic overlook is to provide access to the river, parking for facility users and a place to view the historic, industrial Port of Albany and the turning basin for ships leaving the Port. As such, this viewpoint is intended to see a variety of industrial uses. The partial vegetative screen and location of silos, the tallest structures in the northern part of the proposed site, makes the best use of the existing screening trees from this location. Line of Sight Section A-A' shows that the trees at stations 0 to 2+10 and 2+90 to 3+80 will completely screen the view of the site from the boat launch (located further west of this photo vantage point), even during leaf-off conditions. *There is no significant impact to visual resources at this location.*

6.1.2 Water Filtration Plant on Riverside Avenue

Photo 2 (Water Filtration Plant on Riverside Avenue, Section H-H'): The water filtration plant is located southwest of the Fort Crailo neighborhood. Although the filtration plant is not a sensitive receptor, it represents the worst-case view of the proposed blacktop plant from this area. The photo looks south and the vantage point is about 3450 feet from the proposed silos, the tallest structures on the site (the red arrow points to the top balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). From this vantage point, the upper 40 feet of the silos would be partly visible through the utility lines along the east side of Riverside Avenue and the vegetation (which would remain) located on the north side of the site. The lower approximately 44 feet of the silos and remainder of the site would not be visible, even during leaf-off conditions.

If the vantage point is moved a few feet to the left (east), the silos would be screened by the building and vegetation on the east side of Riverside Avenue. If the vantage point is moved to the middle of Riverside Avenue, the view is comparable. Leaf-on conditions do not significantly change the potential visibility from this location.

The existing view includes the industries and businesses on both sides of Riverside Avenue, the remnants of the BASF site, the metal scrap yard and the cogeneration plant. The area between this vantage point and the site is zoned industrial and is intended to remain in industrial use according to the Comprehensive Plan. The majority of the site will be screened by the trees to remain along the north side of the site. The glimpse of the upper half of the silos down the Riverside Avenue corridor will be brief, is below the horizon line of buildings and crossing utility lines, is consistent with the character of the area and is hard to distinguish from the clutter of utility lines. *There is no significant impact to visual resources at this location.*

6.1.3 Fort Crailo Park

Photo 3 (Fort Crailo Park, Section G-G'): Fort Crailo includes the historic building on the east side of Riverside Avenue as well as a small riverfront park on the west side of Riverside Avenue. Both are located in the Fort Crailo neighborhood. The photo looks south and the vantage point is about 4050 feet from the proposed silos, the tallest structures on the site, which are not visible from this vantage point or any location in the riverfront park. Note that the orange feature above the brown building in the center of the photo is a wind sock and is not the red balloon representing the position and height of the proposed silos. The silos are located along a line of sight that is blocked by the brown building.

The existing view includes the industries and businesses on both sides of Riverside Avenue, the remnants of the BASF site, the metal scrap yard and the blue-gray smokestack of the cogeneration plant. *The site is not visible from the park and there can be no significant impact to visual resources at this location.*

6.1.4 Sidewalk in Front of Fort Crailo

Photo 4 (Front Sidewalk at Fort Crailo, Section H-H'): Fort Crailo is an important historic building located in the Crailo neighborhood of Rensselaer on the south side of Columbia Turnpike (US Route 20). This vantage point is from the front sidewalk at Fort Crailo, where the song, "Yankee Doodle" was composed in 1758. There is a very limited view of the silos from the front sidewalk; the silos and remainder of the site are not visible from the building or other parts of the ground.

The photo looks south and the vantage point is about 4050 feet from the proposed silos, the tallest structures on the site (the red arrow points to the bottom balloon which was set at a height of approximately 84 feet, the height of the top of the silos). From this vantage point, the upper 25 feet of the silos would be partly visible under the utility lines and through the trees along the east side of Riverside Avenue. The vegetation (which would remain) located on the north side of the site will completely screen the rest of the silos and the remainder of the site during leaf-off and leaf-on conditions. The top 25 feet of the silos will be barely discernible at this distance during leaf-on conditions.

The existing view includes other residences in the Crailo neighborhood along the east side of Riverside Avenue (the silos and site are not visible from the residences but are intermittently visible from the front sidewalks), the industries and businesses on both sides of Riverside Avenue, the remnants of the BASF site, the metal scrap yard and the cogeneration plant. The majority of the site will be screened by the trees to remain along the north side of the site. The glimpse of the upper portion of the silos down the Riverside Avenue corridor will be brief, is below the horizon line of buildings and crossing utility lines, is consistent with the character of the area and is hard to distinguish from the clutter of signs and utility lines. *There is no*

significant impact to visual resources at this location or in the area between this vantage point and the Filtration Plant (see Photo 2 above).

6.1.5 Front Yard of 383 Route 9J

Photo 5 (Front Yard of 383 Route 9J, Section K-K'): The few residences along Route 9J to the east of the site are the closest to the proposed blacktop plant. This vantage point is from the front sidewalk at 383 Route 9J. There is a limited view of the upper half of the silos from the front sidewalk; the lower part of the silos and remainder of the site are not visible from this location.

The photo looks westerly and the vantage point is about 1750 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). From this vantage point, the upper half of the silos would be partly visible during leaf-off conditions through the trees between Route 9J and Riverside Avenue. The vegetation (which would remain) will significantly screen the rest of the silos and the remainder of the site during leaf-off conditions. During leaf-on conditions, the trees at Station 0+45 to 0+70, 2+70 to 3+00 and 3+20 to 3+65 (see Line of Sight Section K-K') will screen the lower part of the silos and the rest of the plant. The upper half of the silos will be barely discernible through the trees during leaf-on conditions.

The existing view includes businesses along the west side of Route 9J, the tank farms on the south side of Riverside Avenue south of the site and the power generating plants along Riverside Avenue north of the site. The majority of the site will be screened by the trees to remain between Riverside Avenue and Route 9J. The glimpse of the upper portion of the silos down Route 9J is brief, is through the intervening trees and is consistent with the character of the area. *There is no*

significant impact to visual resources at this location or at the adjacent residences along Route 9J (see also Photo 6 below).

6.1.6 Stilsing Electric on Route 9J

Photo 6 (Near Stilsing Electric on Route 9J, Section M-M'): This portion of NYS Route 9J contains businesses such as Stilsing Electric and offers a brief glimpse between buildings of the upper approximately 20 feet of the silos. There are no residences in this area of limited visibility.

This vantage point is from the front of Stilsing Electric along the east side of Route 9J. There is a limited view of the upper 20 feet of the silos from the front of the business; the lower part of the silos and remainder of the site are not visible from the location during leaf-on conditions. During leaf-off conditions, the lower parts of the silo would be significantly screened by the trees at Stations 7+90 to 8+20 (see Line of Sight Section M-M').

The photo looks westerly and the vantage point is about 1800 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). From this vantage point, the upper 20 feet of the silos would be visible during leaf-off and leaf-on conditions above the tree line and below the power transmission lines. The vegetation (which would remain) will completely screen the rest of the silos and the remainder of the site during leaf-off and leaf-on conditions.

The existing view includes businesses along the west side of Route 9J, the tank farms on the south side of Riverside Avenue south of the site and the power transmission lines along Riverside Avenue east of the site. The majority of the site will be screened by the trees to remain between

Riverside Avenue and Route 9J. The glimpse of the upper portion of the silos down the Route 9J is brief, is beneath the power transmission lines and is consistent with the character of the area. *There is no significant impact to visual resources at this location (see also Photo 5 above).*

6.1.7 Near Riverview Terrace, Rensselaer

Photo 7 (Near 21 Riverview Terrace, Rensselaer, Section L-L'): Riverview Terrace is an east-west trending road in the Prospect Heights neighborhood on the ridge east of the site. This vantage point offers one of the least obstructed views that exist for some of the residences through breaks or low spots in the trees east of the site along the west side of this neighborhood. The views from the homes at lower elevations on the left and right side of this photo are more completely screened by the trees to the east. The views from homes further up the hill (behind the photo vantage point) are screened by homes, trees in the community and trees on the ridge to the west.

This vantage point is typical of one of the few observed views in the Prospect Heights neighborhood. The community was driven out to determine the location of publicly accessible vantage points but there may be a few additional locations (e.g. in the back yards) that might have views, particularly of the top of the silos.

This vantage point is near 21 Riverview Terrace, the most visible vantage point observed in this area. The photo looks westerly and the vantage point is about 2500 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). There is a limited view of the upper 15 feet of the silos from the location through the intervening trees during leaf-off conditions (at Stations 1+60 to 2+20 on Line of Sight Section L-L'). During leaf-on

conditions, the upper part of the silos and the rest of the plant would be significantly screened. The gray pad of crusher run on the site is visible in the thin spot in the trees to the left and below the red arrow. The southern side of the blacktop plant and a portion of the stormwater management area and the northern portion of the stockpile area will be visible during leaf-off conditions from this location. During leaf-on conditions, the site will be screened.

Large portions of the industrial Port of Albany, the power generating plants in the Port of Rensselaer, the tank farms on the south side of Riverside Avenue south of the site and the power transmission lines along Riverside Avenue east of the site are visible from this location. The visible upper portion of the silos will be hard to discern among the clutter of vertical power transmission lines and industrial buildings, through a partial screen of trees during leaf-off conditions. Equipment and truck movement will draw the eye during leaf-off conditions (the plant typically does not operate during cold weather) much as trucks moving along Riverside Avenue and the Port Expressway were observed during the field investigation. The glimpse of the site during leaf-off conditions is brief, does not break the horizon line, is partially screened by intervening trees and is consistent with the character of the area. *There is no significant impact to visual resources at this location (see also Photo 8 below for another view from the Prospect Heights neighborhood).*

6.1.8 53 Hillview Avenue, Rensselaer

Photo 8 (53 Hillview Avenue, Section M-M'): Hillview Avenue is an east-west trending road in the Prospect Heights neighborhood on the ridge east of the site. This vantage point offers one of the least obstructed views that exist for some of the residences through breaks or low spots in the trees east of the site (along the west side of this neighborhood). The views from homes further up

the hill (behind the photo vantage point) are screened by homes, trees in the community and trees on the ridge to the west.

This vantage point is typical of one of the few observed views in the Prospect Heights neighborhood. The community was driven out to determine the location of publicly accessible vantage points but there may be additional locations (e.g. in the back yards) that might have views towards the site.

This vantage point is near 53 Hillview Avenue, near the west end of the road. The photo looks northwesterly and the vantage point is about 2400 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). There is a limited view through the intervening trees (at Stations 1+20 to 2+10 on Line of Sight Section M-M') of the upper 10-15 feet of the silos from this vantage point and scattered views of the crusher run pad to the south of the proposed silo; the lower part of the silos and the rest of the site is mostly screened from this location. The back yards were not accessible but the upper part of the silos and parts of the plant and stockpile area are expected to be partially visible from the backyards through thin spots or breaks in the trees during leaf-off conditions. During leaf-on conditions, the site will be mostly screened by the intervening trees.

The existing view includes the tank farms on the south side of Riverside Avenue south of the site, the power transmission lines along Riverside Avenue east of the site, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the ridge between the site and this location. The glimpse of the site is brief, does not break the horizon line, is consistent with the character of the area and will be difficult to discern through the trees, even during leaf-off conditions. *There is no significant impact to visual resources at this location (see also Photo 7 above).*

6.1.9 42 Ridge Road, Rensselaer

Photo 9 (42 Ridge Road, Section N-N'): Ridge Road is a generally north-south trending road located south of the Clinton Heights neighborhood on the ridge east of the site. This vantage point offers one of the few views that exist for some of the residences through breaks or low spots in the trees (see Stations 1+95 to 3+15 and 3+35 to 4+50 on Line of Sight Section N-N') southeast of the site. The views from homes further up the hill (behind the photo vantage point) are screened by homes and trees in the community and on the ridge to the west.

This vantage point is the only observed view in this area. The community was driven out to determine the location of publicly accessible vantage points but there may be a few additional locations (e.g. in the back yards) that might have views towards the site.

This vantage point is near 42 Ridge Road. The homes in the foreground and behind the vantage point of this photo are screened form the site by the intervening trees. The photo looks northwesterly and the vantage point is about 5250 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). There is a limited view through the intervening trees of the upper 10 feet of the silos from this vantage point; the lower part of the silos and the rest of the site are screened from the location. The back yards were not accessible but the upper part of the silos and parts of the plant and stockpile area are expected to be partially visible from the backyards through thin spots or breaks in the trees during leaf-off conditions. During leaf-on conditions, the site will be screened by the intervening trees

The existing view includes the power transmission lines along Riverside Avenue east of the site, the power generating plants to the north of the site and part of the industrial Port of Albany. The

majority of the site will be screened by the trees along the ridge between the site and this location. The glimpse of the site is brief, does not break the horizon line, is consistent with the character of the area and will be difficult to discern through the trees, even during leaf-off conditions. *There is no significant impact to visual resources at this location.*

6.1.10 SUNY Albany East, Rensselaer

Photo 10 (SUNY Albany Facility North of Columbia Turnpike, Section J-J'): The SUNY Facility overlooks Columbia Turnpike and offers views to the southwest towards the site. This vantage point is from the south side of the facility, reserved for truck deliveries to SUNY and does not represent a location widely accessible or traveled by the public. The site is not visible if the vantage point is moved a few feet in either direction and the site is not visible from the northern and more public side of the facility.

This vantage point is the only observed view in the facility and in this area. This photo looks southwesterly and the vantage point is about 3100 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 15-20 feet of the silos from this vantage point are visible above the treeline and against the backdrop of the industrial Cargill facility on the west side of the Hudson River in the Port of Albany; the lower part of the silos and the rest of the site are screened from the location. The limited view will not change significantly during leaf-on conditions.

The existing view includes Columbia Turnpike, the water treatment plant in the foreground, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of

the site is brief, does not break the horizon line, is consistent with the character of the area and will be against an existing industrial backdrop (the Cargill Facility), even during leaf-off conditions. *There is no significant impact to visual resources at this location.*

6.1.11 3rd and Catherine Streets, Rensselaer

Photo 11 (3rd Street Near Intersection with Catherine Street, Section I-I'): Only one publicly accessible viewpoint of a part of the site was found in the residential community north of Partition Street. This vantage point is the east side of 3rd Street, just south of its intersection with Catherine Street. The site is not visible if the vantage point is moved to the west side of the 3rd Street and is not visible from Pine Street, the next intersection to the south or to the north (where 3rd Street crests and drops off to the north). The orientations of the streets in this neighborhood do not allow views towards the site (the local buildings intervene) except along 3rd Street.

This photo looks south-southwesterly and the vantage point is about 10,750 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible above the treeline and buildings just to the right (west) of the green copper patina of the Rensselaer Train Station; the lower part of the silos and the rest of the site are screened from the location. This extremely limited view will not change significantly during leaf-on conditions.

The existing view includes the train station, much of the City of Rensselaer, local utility lines, residences, several smokestacks, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is

consistent with the character of the area. The site is more than two miles from this location and the balloons were difficult to identify even with the aid of binoculars. *There is no significant impact to visual resources at this location.*

6.1.12 Overlook on Empire State Plaza

Photo 12 (Overlook on Empire State Plaza, Section E-E'): People at the overlook along the eastern side of the Empire State Plaza from the South Corning Tower to the Egg has a limited view of the top of the silos. Other ground level points in the Empire State Plaza do not have views of the site.

This photo looks south-southeasterly and the vantage point is about 9,450 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible above the treeline (see Stations 12+60 to 13+40 on Line of Sight Section E-E') and buildings just to the left (northeast) of the white fuel tank in the center of the photo. This limited view will not change during leaf-on conditions.

The existing view includes a parking garage, a large part of the City of Albany, a small part of the Port of Albany, part of the City of Rensselaer and the power generating plants to the north of the site. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The site is more than 1.75 miles from this location and the balloons were difficult to identify even with the aid of binoculars. *There is no significant impact to visual resources at this location.*

6.1.13 22 Liebel Street, Albany

Photo 13 (22 Liebel Street, City of Albany, Section D-D'): Very few publicly accessible viewpoints were observed in the residential community south of 2nd Avenue in the City of Albany. This vantage point is near 22 Liebel Street. The site is not visible if the vantage point is moved a few feet in any direction. The orientations of the streets in this neighborhood do not typically allow views towards the site (the local buildings intervene).

This photo looks southeasterly and the vantage point is about 6,650 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible through the local trees (Stations 1+30 to 2+25 on Line of Sight Section D-D') and above the distant treeline and buildings and chain link fence; the lower part of the silos and the rest of the site is screened from this location. This extremely limited view will be screened during leaf-on conditions.

The existing view includes parts of the City of Albany, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The limited amount of the upper part of the silos sticking above the distant treeline will be barely discernible at a distance of 6,650 feet (the balloons were difficult to identify even with the aid of binoculars). *There is no significant impact to visual resources at this location.*

6.1.14 Albany Community Charter School, Leonard Street

Photo 14 (Albany Community Charter School, Leonard Street, City of Albany, Section D-D'): Very few publicly accessible viewpoints were observed in the residential community south of 2nd Avenue in the City of Albany. This vantage point is on the corner of Leonard Street adjacent to the Albany Community Charter School. The site is not visible if the vantage point is moved a few feet in any direction, including the park and grassy areas in the foreground of this photo.

This photo looks southeasterly and the vantage point is about 6,250 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 5-10 feet of the silos from this vantage point are visible through the utility lines and above the distant treeline ((see Station *+20 to 8+40 on Line of Sight Section D-D'); the lower part of the silos and the rest of the site are significantly screened from this location even during leaf-off conditions. This extremely limited view will be not change significantly during leaf-on conditions.

The existing view includes parts of the City of Albany, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The limited amount of the upper part of the silos sticking above the distant treeline will be barely discernible at a distance of 6,250 feet (the balloons were difficult to identify even with the aid of binoculars). *There is no significant impact to visual resources at this location.*

6.1.15 Nutgrove Apartments, Albany

Photo 15 (Nutgrove Apartments, South of McCarty Avenue, City of Albany, Section C-C'): This is the only publicly accessible viewpoint observed in this residential community. This vantage point is on the south side of the Nutgrove Apartment complex located on the south side of McCarty Avenue. The site is not visible if the vantage point is moved a few feet in any direction. The top 10 feet of the silos will be visible through a partial screen of local trees along the chain link fence; the remainder of the site will not be visible from this vantage point.

This photo looks southeasterly and the vantage point is about 5,600 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible through the trees in the foreground (Stations 0+70 to 2+00 on Line of Sight Section C-C') and above the distant treeline; the lower part of the silos and the rest of the site are screened from this location during leaf-off conditions. This limited view will be better screened by the vegetation in the foreground during leaf-on conditions.

The existing view includes parts of the City of Albany, I-787, the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The limited amount of the upper part of the silos sticking above the distant treeline will be barely discernible at a distance of 5,600 feet (the balloons were difficult to identify even with the aid of binoculars). *There is no significant impact to visual resources at this location.*

6.1.16 Kenwood Convent, Albany

Photo 16 (Kenwood Convent, South of Kenwood Road, City of Albany, Section B-B'): The Kenwood Convent is a National Historic Building. There are no views towards the site over most of the grounds but there is a small opening through trees on the property to the east through which the top of the silos could be viewed during leaf-off conditions. The site is not visible if the vantage point is moved a few feet in any direction.

This photo looks east-southeasterly and the vantage point is about 5,600 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible through the trees in the foreground (Stations 0+20 to 1+45 on Line of Sight Section B-B') and above the distant treeline; the lower part of the silos and the rest of the site are screened from this location during leaf-off conditions. This limited view will be better screened by the vegetation in the foreground during leaf-on conditions.

The existing view includes the power generating plants to the north of the site and part of the industrial Port of Albany. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The limited amount of the upper part of the silos sticking above the distant treeline will be barely discernible at a distance of 5,600 feet (the balloons were difficult to identify even with the aid of binoculars). *There is no significant impact to visual resources at this location.*

6.1.17 Island Creek Park, Albany

Photo 17 (Island Creek Park, Port of Albany, Section F-F'): Island Creek Park is a small riverfront park with a river overlook. There are no views towards the site over most of the grounds but the top 5-10 feet of the silos are visible under the power transmission lines and above the distant treeline at the river overlook.

This photo looks south-southeasterly and the vantage point is about 4,400 feet from the proposed silos, the tallest structures on the site (the red arrow points to the upper balloon which was set at a height of approximately 89 feet, about five feet above the top of the silos). The upper 10 feet of the silos from this vantage point are visible beneath the power transmission lines and above the treeline along the east bank of the Hudson River during both leaf-on and leaf-off conditions.

The existing view includes an almost total view of the former BASF site, the power generating plants to the north of the site, the scrap recycling yard and the part of the tank farms in the industrial Port of Rensselaer. The majority of the site will be screened by the trees along the north side of the site. The glimpse of the site is brief, does not break the horizon line and is consistent with the character of the area. The limited amount of the upper part of the silos sticking above the distant treeline will be barely discernible at a distance of 4,400 feet (the balloons were difficult to identify even with the aid of binoculars) and will get lost in the clutter of the trees and the power transmission lines. *There is no significant impact to visual resources at this location.*

APPENDIX

NOTE: **Visual Base Map dated April 22, 2011**
Line of Sight Sections dated April 22, 2011 (two sheets)

Are large oversized maps and are attached as separate files.

MAY 9, 2011 LETTER TO SARAH CROWELL

Griggs-Lang Consulting Geologists, Inc.
8 Brunswick Road Troy, New York 12180
Phone: (518) 270-5920 Fax: (518) 270-5922

May 9, 2011

Sarah Stern Crowell, AICP, Director
Office of Planning and Development
City of Rensselaer
62 Washington Street
Rensselaer, New York 12144

Re. New Castle Asphalt, LLC—Proposed Blacktop Plant

Dear Ms. Crowell:

The following letter is provided in response to draft Parts 2 and 3 of the Environmental Assessment Form (EAF) provided to us on April 7, 2011. This document provided a preliminary assessment of the potential impacts of the project and identified potential significant impacts. In addition, the discussion of the EAF on April 7th included a request that additional studies be completed.

The information below responds to the issues raised AND points out pertinent information already provided in the application. The item numbers mirror the corresponding sections of Part 3 of the EAF.

Item 4: Potential Impact on Groundwater
This section identifies as potential impacts:

- Discharge of sanitary wastewater to groundwater from a septic system located adjacent to the 100-year floodplain; and
- Storage of petroleum or chemical products over groundwater or an aquifer.

This section indicates that upon approval and implementation the mitigating measures will reduce this impact to not significant and not adverse but identifies the impact as adverse in another section. On-site soil conditions are not suited for a traditional leach field and a raised bed or equivalent system will be required. The County Department of Health (DOH) has jurisdiction over and will review and approve the septic system. County DOH requirements allow septic leach fields in 100-year floodplains with special provisions to address the one percent possibility of a flood. DOH approval carries a presumption of no significant impact. We request that the final EAF be revised as there is no significant potential to impact groundwater, especially since there are no known groundwater users that could be impacted. Further, we request that the City approval not be delayed until County DOH approval is obtained. The City can approve this project with a condition stating that County DOH approval of the septic system must be obtained.

The project, as designed and proposed, will not have a significant adverse impact on groundwater. The best management practices outlined in the application (e.g. storage of petroleum products in secondary containment, fueling and loading on impermeable pads, etc.) are

standard practice at blacktop plants and will reduce the impact to not significant, as stated in the EAF.

Item 5: Potential Impact on Flooding
This section identifies as potential impacts:

- A concrete pad with "spray bars";
- A septic leach field that will have tiles below the elevation of the 100-year floodplain and this could impact the water quality of the Hudson River; and
- Floodwater will continue to impact the part of Riverside Avenue adjacent to the site.

This section recommends relocating the septic leach field and identifies the impact as adverse.

Although not specifically listed in the EAF as a significant impact, we would like to clarify the purpose of the concrete pad with spray bars. Trucks coming to the site for blacktop will stop on the concrete pad before receiving a load of blacktop. At the concrete pad an automated system controlled by the plant operator will apply a small amount of an EPA approved product to the beds of the trucks. This product keeps the blacktop from sticking to the truck beds. The amount applied is automatically controlled by the plant operator to prevent spillage or minor dripping. This best management practice does not contribute to any significant impact to flooding.

This site will generate approximately the same amount of septic wastewater as a single family-residence. It is not cost-effective or practical for such a small project to extend the sanitary sewer lines to the site. The septic leach field will not have tiles below the elevation of the 100-year floodplain. The soil conditions are not suited for a traditional leach field and a raised bed or equivalent system will be required. The County Department of Health (DOH) has jurisdiction over and will review and approve the septic system. County DOH requirements allow septic leach fields in 100-year floodplains with special provisions to address the one percent possibility of a flood. We request that the EAF be revised as there is no significant potential to impact groundwater, especially since there are no known groundwater users that could be impacted. Further, we request that the City approval not be delayed until County DOH approval is obtained. The City can approve this project with a condition stating that County DOH approval of the septic system must be obtained. Such approval carries a presumption of no significant impact and certainly will not have a significant impact on flooding.

The application includes an assessment of the impact on flooding that concludes that the project will not significantly raise flood water levels and thus, meets the City's Flood Damage Control regulation, as stated in the EAF.

Section 6: Potential Impact on Air
This section identifies as potential impacts:

- The potential to emit more one or more greenhouses gases at significant levels;
- The potential to generate more than 10 tons per year of a designated hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants;
- The project may require a state air application, produce total air emissions more than 5 pounds per hour or may include a heat source capable of producing more than 10 million BTUs per hour;
- The project may consume more than 100,000 gallons of fuel per year;
- The project may use more than 2,500 MW hours of electricity per year;
- The project may reach 50% of any two of the above stated air emission thresholds; and
- Wind may carry emissions to nearby residences.

The potential impact is listed as unknown by the City on the EAF.

The project will not emit 1000 tons per year of carbon dioxide, 3.5 tons per year of nitrous oxide, 1000 tons per year of carbon equivalent of perfluorocarbons, 0.045 tons per year of sulfur hexafluoride, more than 1000 tons per year of carbon dioxide equivalent hydrochlorofluorcarbons, 43 tons per year of methane, 10 tons per year of any one designated hazardous air pollutant (HAP) or 25 tons per year of any combination of HAP, does not have an emission rate or more than 5 pounds per hour, will not produce more than 10 million BTUs per hour and will not use more than 2500 MW hours of electricity per year and will not exceed 50% of any of the two emission thresholds.

An air permit registration was submitted to NYSDEC, the recognized authority on air approvals. NYSDEC indicated the air registration is not subject to public review because it is a *minor* source that requires only an air registration, the lowest form of approval granted by NYSDEC (see chart on following page describing the various levels of air approvals). Blacktop plants have high degrees of emission control and are small sources of emissions. The fact that the proposed plant requires an air registration from NYSDEC is proof that it is not a significant source of air emissions.

All air emissions can potentially travel to a residence. This is not a valid means of assessing potential air impacts. The proper way of assessing air impacts is to determine whether the concentration or rate of air emissions will have the potential to significantly impact air quality. NYSDEC is the recognized expert on this subject and the fact that NYSDEC requires only an air registration for this limited scope project is proof that it is not a significant source of air emissions.

Section 7: Potential Impact on Plants and Animals

This section identifies as potential impacts:

- May cause reduction or loss of individuals of endangered or threatened species that use the site or are found on, over or near the site;
- May result in reduction or degradation of any habitat used by rare, threatened or endangered species;
- May cause reduction or loss of individuals of special concern or conservation need species that use the site or are found on, over or near the site;
- May result in reduction or degradation of any habitat used by special concern or conservation need species;
- May result in the removal or ground disturbance of any a portion of a designated significant natural community; and
- May significantly interfere with nesting/breeding, foraging or over-wintering habitat for the predominant species that occupies or uses the site.

The potential impact is listed as unknown by the City on the EAF.

The site has been historically used for industrial purposes and was recently used as a construction lay down and parking area during the construction of the nearby power plant. The site is covered by a layer of crushed stone that in turn overlies a layer of older fill.

We contacted NYSDEC when we began this project and were told that although there are significant species that have been identified in the area that since the site had been previously disturbed there was no potential to impact any species or habitat. No significant habitat exists on the site—the site is almost exclusively covered by a barren layer of crushed stone. No potential impacts to plants and wildlife can occur.

GENERALIZED OVERVIEW OF LEVELS OF NYSDEC AIR APPROVALS

Type of Approval	Emission Limits (Per Year)	Project Applicability	Level of Environmental Review
Title V Permit[1]	1. More than 100 tons of regulated air pollutants ($PM_{2.5}$, PM_{10}, NO_x, SO_x, CO) and 50 tons of VOCs 2. More than 100,000 tons of CO_2 equivalent greenhouse gases 3. More than 10 tons of any single hazardous air pollutant 4. More than 25 tons of any combination of hazardous air pollutants	Not applicable	Major air emission source, Type I action and typically requires a DEIS
State Facility Permit[2]	1. Between 50 and 100 tons of regulated air pollutants ($PM_{2.5}$, PM_{10}, NO_x, , SO_x, CO) and 25 and 50 tons of VOCs 2. Between 5 and 10 tons of any single hazardous air pollutant 3. Between 12.5 and 25 tons of any combination of hazardous air pollutants	Not applicable	Type I action, typically does not require a DEIS
Minor Facility Registration[3]	1. Less than 50 tons of regulated air pollutants ($PM_{2.5}$, PM_{10}, NO_x, VOC, SO_x, CO) and 25 tons of VOCs 2. Less than 5 tons of any single hazardous air pollutant 3. Less than 12.5 tons of any combination of hazardous air pollutants	Applicable	Minor air emission sources—ministerial action under SEQRA
Exempt or Trivial Activity[4]	-	Not applicable	No air approval required

[1] See Subpart 201-6 at http://www.dec.ny.gov/regs/13539.html
[2] See Subpart 201-5 at http://www.dec.ny.gov/regs/4301.html
[3] See Subpart 201-4 at http://www.dec.ny.gov/regs/4302.html
[4] See Subpart 201-3.2 and 3.3 at http://www.dec.ny.gov/regs/4303.html

Section 9: Potential Impact on Aesthetic Resources

This section identifies as potential impacts:

- Project may be visible from officially designated aesthetic resources such as Island Park Creek, Corning Preserve and the Hudson River;
- Project may be visible seasonally or year-round from publicly-accessible vantage points such as the proposed bike trail and scenic overlook; and
- Viewers engaged in recreational or tourist activities may view the project.

The EAF further states that a potentially large number of people in Rensselaer, Albany and on the Hudson River may be impacted, the geographic extent of the impact will include the reach of the Hudson River from which the site might be visible (as well as the southern end of the proposed bike path) and the industrial use of the site does not diverge from local needs and goals related to aesthetic resources.

The applicant is completing a Visual Study in accordance with the NYSDEC Visual Policy. This study included computer terrain modeling, a balloon test to represent the full height of the tallest proposed structure, field inspection of potential views during leaf-off (worst-case visibility) conditions from the surrounding community and assessment of potential views form areas of identified visibility. In addition, an archeological historian assessed all structures with a potential view of the site for eligibility for inclusion on the National and State Registers of Historic Places.

The assessment of potential impacts on aesthetic resources is not a simple matter of determining whether a project is visible. The assessment considers the setting (in this case, the middle of the industrial Port of Rensselaer), compliance with comprehensive plans, the nature and duration of any views, the seasonality of the views and the location of significant resources. The fact that a site or a portion of a site is visible does not mean the project will have a significant adverse impact.

This project is located in the middle of the industrial Port of Rensselaer and across the river from the industrial Port of Albany. The site is surrounded by a scrap metal yard, two large power generating plants and an even larger series of industrial fuel tank farms and related commercial and industrial uses. The west side of the Hudson River contains similarly diverse industrial uses. The nearest residential communities are located approximately 1800 and over 3500 feet from the site on the other side of the existing industrial uses that surround the site.

The City's comprehensive plan and zoning identifies this site as intended for continued industrial use. The comprehensive plan and riverfront revitalization plan calls for providing opportunities for access to the river, a recreational bike path through the industrial area and an overlook of the industrial Port of Albany. The proposed project is consistent with the comprehensive plan and riverfront revitalization plan because it continues the industrial use of the site and employs best management practices such as revegetation of disturbed areas, proper site design and layout, landscaping, maintenance of green space and perimeter wooded areas, etc.

The visual assessment of the site indicates that even the highest point of the proposed blacktop plant is visible from very few locations even during leaf-off conditions. Few of the locations from which the plant was visible will have year-round views; almost all will be screened during leaf-on conditions when the site will be in operation. Further, the few locations with views had very brief glimpses of the top of the silo and could not see the vast majority of the site. The remote location of the plant relative to potential receptors further mitigates any potential impacts: the limited views of the plant are difficult to discern at the great distances to the limited number of potential receptors.

The officially adopted City plans call for the construction of a bike path and overlook adjacent to the site. The application accounts for and was designed to accommodate these features. These features will be built shortly and the proposed project does not interfere with either the bike path or the overlook. The officially adopted plans recognized that these recreational features would go through an industrial area and specifically stated that they should not interfere with the ongoing or future industrial uses. The purpose of the overlook is to provide a viewing point for the industrial Port of Albany and the Port of Albany turning basin. To say that an adjacent industrial use in an area that has historically been used for industrial purposes, that is intended to be used for industrial purposes and that is surrounded by other industrial uses contradicts the conclusions reached in Section 11 of the EAF ("As local plans call for a bike trail to pass through an area zoned for industry, this impact does not diverge from local needs and goals").

Section 10: Potential Impact on Historic and Archeological Resources
This section identifies as potential impacts:

- Proposed action may occur within or contiguous to a site which is listed on the State or National Register of Historic Places;
- Project is located within an area designated as sensitive for archeological sites; and
- Project may destroy or alter part of a site or property containing significant historic or archeological resources and may alter the property's setting or environment.

The potential impact is listed as unknown by the City on the EAF.

The applicant is preparing a Cultural Resources investigation for the project. The preliminary investigation indicates there are no significant impacts to identified cultural resources and the site-specific subsurface investigation will be concluded shortly. The likelihood of a potential impact is small since the site has been used for industrial purposes in the past and has largely been previously disturbed by the placement of at least two levels of fill. The last level of fill was placed by Besicorp during the construction of the adjacent plant. The site was graded and covered by a layer of crusher run to serve as a lay down and parking area. Besicorp was not required to perform an archeological assessment because of the prior history of disturbance but instead was required to stop work if any archeological resources were identified during site work..

Section 13: Potential Impact on Transportation
This section identifies as potential impacts:

- The project may cause the Level of Service of the intersection of South Street and the ramp to Routes 9 and 20 northbound (westbound) falling below Level of Service C; and
- Project traffic may exceed the capacity of the existing road network at the intersection of South Street and the ramp to Route 9 and 20 northbound (westbound).

The potential impact is listed as unknown by the City on the EAF.

A supplemental traffic assessment of the intersection has been prepared by Creighton Manning Engineers (CME). The Level of Service at this intersection will not change due to the addition of the project's truck traffic. The Level of Service is controlled by the amount of traffic on Routes 9 and 20, particularly during peak hours. The Port Expressway was specifically built to alleviate traffic issues in the industrial Port of Rensselaer and has historically handled traffic volumes much higher than that proposed by New Castle. CME's study concludes that the intersection in question will perform adequately and will not be adversely impacted by the project.

Section 14: Potential Impact on Energy
This section identifies as potential impacts:

- Insufficient capacity to allow connection to gas and electricity;
- Project may require an upgrade of an existing or construction of a new substation;
- Project may require extension of an energy transmission system; and
- Project does not incorporate on-site renewable energy sources.

There is no indication there is insufficient capacity to connect to the adjacent gas and electrical services and no indication this relatively minor user will require construction of a new substation or upgrading of an existing substation. The site is adjacent to a series of transmission lines so the only added infrastructure would be the connection. The electrical lines already extend to the site so this would require minimal work.

The project is not well-suited for using on-site renewable energy sources. There is very little free space on-site so it would not be practical to set up a large array of solar panels of a wind turbine. In fact, to do so would be almost as much of a project as building the blacktop plant. There is no usable hydroelectric power on site. The project proposes to use the available adjacent gas and electrical services, both of which are widely recognized as clean energy sources. The blacktop plant will be state of the art and more fuel efficient and cleaner than the older plants that are currently serving this market. Construction of this plant will not create additional demand for blacktop but it will reduce overall emissions by reducing the distance traveled by trucks to and from the blacktop plant and by having a cleaner, more fuel efficient plant. Overall, this plant will reduce energy consumption.

In addition, this plant will be more capable of fully using recycled asphalt pavement (RAP) in the blacktop. This reduces the need for asphalt, requires less energy to make blacktop and incorporates a potential waste product into a valuable and salable product.

Energy will not be significantly impacted by the project.

Section 15: Potential Impact on Odor and Light

This section identifies as potential impacts:

- The project may create odors;
- The project may cause bright lights to shine onto adjoining properties; and
- Prevailing winds may carry odors to nearby residences.

The potential impact is listed as unknown by the City on the EAF.

These potential impacts were addressed in the application. The proposed plant will be state of the art and incorporates technology to prevent odors and blue smoke.

A lighting plan was submitted with the application and all lights were hooded and shown only on the site. Further:

- There are no residences or receptors adjacent to the site that could be impacted by the limited lights to be used at the site;
- The site is located in the middle of an industrial zoned area surrounded by other more intensive industrial uses—these uses employ lighting to a much greater extent than the proposed blacktop plant; and
- The site will typically only operate at night when supplying a project mandated (typically NYSDOT) paving job. Nighttime paving is done to reduce impacts to the driving public and benefits everyone.

The project will not produce odors and lighting will not be a significant impact.

Section 16: Potential Impact on Human Health
This section identifies as potential impacts:

- There is a completed emergency spill remediation on or adjacent to the site;
- The site has an institutional control limiting use of the property;
- The project may affect institutional controls put in place to ensure the site is protective of the environment and human health; and
- The project will be within 2000 feet of a site used for disposal of solid or hazardous waste.

The potential impact is listed as unknown by the City on the EAF.

The presence of a spill remediation on or adjacent to the site or the disposal of solid or hazardous waste on other sites is not relevant to an assessment of the potential impacts of this project. The BASF site is located more than 2000 feet north of the site but construction and operation of a blacktop plant on our property will not affect the remediation done on that property or any other properties. There will be no export of on-site materials from this property. The on-site materials will be graded and used on site.

The only known institutional controls limiting the use of the site are: (1) the bike path and overlook which are outside the limits of the project and were purposely avoided by the project; and (2) the easements for utilities which were identified and purposely avoided during the design and layout of the property. The only interaction between easements and the projects will be where the access roads cross such easements and this crossing is not contravened by the easements and will in no way impact the utilities that are the subject of the easements.

Human health will not be significantly impacted by the project.

Section 18: Potential Impact on Community Character
This section identifies as potential impacts:

- The project may replace or eliminate existing historic structures of importance to the community;
- The project may increase demand for community services (schools, police and fire); and
- The project may create or eliminate employment.

The potential impact is listed as unknown by the City on the EAF. The EAF also states that the site is an industrial use in an area zoned "Industry" and that local fire, EMS and police departments are staffed and equipped to protect industrial installations. The reasoning for listing this potential impact as unknown is related to the potential for historic structures.

The site has been previously disturbed, most recently having been graded and covered by a layer of crusher run to serve as a lay down and parking area for the construction of the adjacent power generating plant. A cultural resources investigation is being performed and no evidence of historical structures has been found on the site to date. The likelihood of finding such structures is small since the site has been disturbed on several occasions in the past. Further, the site is zoned industrial, has been used for industrial purposes in the past and the comprehensive and riverfront revitalization plans both cal for its continued industrial use. By definition, projects that comply with the locally adopted planning documents cannot have a significant impact on community character.

No potential impacts to the bike path or overlook will occur, as outlined in Section 9 above.

Community character will not be significantly impacted by the project.

* * *

Please call me or Mark Visscher anytime if you have any questions about this document or the project.

Cordially,

Paul H. Griggs, Principal Geologist
Griggs-Lang Consulting Geologists, Inc.

Enc.

Cc. Steve Griffen, Jack Rifenburg, Roddy Valente, Joe Zappone

Z:\clients\New Castle Asphalt\Rensselaer-2\Letters\Crowell 5'9'11.doc

REQUEST FOR SITE PLAN REVIEW AND SPECIAL USE PERMIT APPROVAL

CITY OF RENSSELAER
PLANNING AND DEVELOPMENT AGENCY
BUILDING & ZONING

CITY HALL, 62 WASHINGTON STREET
RENSSELAER, NEW YORK 12144-2696
Planning (518) 465-1693 Building (518) 462-5489 Fax (518) 465-2031

REQUEST FOR SITE PLAN REVIEW AND/OR SPECIAL USE PERMIT APPROVAL UNDER CITY ZONING ORDINANCE

Property Address: Riverside Drive

Zoning District: Industrial Tax Map # or #'s 154.00-5-3

REQUEST (check all that apply): Site Plan Review ($25) X Special Use Permit ($25) X

Site Plan Amendment ($25) ____ Certificate of Appropriateness ($0) ____

Applicant's Name (PRINT): NEW CASTLE ASPHALT LLC

Full Mailing Address: 118 BUTTON ROAD WATERFORD NY 12188

Full Physical Address (No P.O. Boxes): 118 BUTTON ROAD WATERFORD NY 12188

Telephone Number(s): 518-432-4430

Owner's Name (IF NOT APPLICANT): Albany-Rensselaer Port District Commission

Full Mailing Address: 106 Smith Boulevard Albany, NY 12202

Full Physical Address (No P.O. Boxes): same as above

Telephone Number(s): (518) 463-8763

Detailed description of proposed activity and use(s): CONSTRUCTION & OPERATION OF A 300 TPH [illegible] [illegible] PLANT W/ SUPPORTING FACILITIES, OFFICE, CONTROL ROOM & SCALE HOUSE

I also enclose a plot (site) plan and supporting information to demonstrate compliance with the regulations applying to the use intended and the standards for SITE PLAN REVIEW AND APPROVAL noted in ARTICLE VII and/or SPECIAL USE PERMITS stated in ARTICLE VI of the CITY ZONING ORDINANCE (Local Law #1, adopted 1979) and as described under Site Plan Details on page 3 of this application.

REQUEST must be accompanied by cash or check (made payable to the CITY OF RENSSELAER):

John K. [signature] 2/14/11 ____ Amount Enclosed

Signature of Applicant Date

Richard [signature] 2-14-11

Signature of Owner (if not applicant) Date

FOR PLANNING COMMISSION USE ONLY

Received by Planning Commission Secretary: Date:_____

Public Notice: Date:_____

Referred to County: Date:_____ Action:_____

Public hearing: Date:_____

Planning Commission Action: Date:_____ Action:_____

Applicant notified of Action on Preliminary Site Plan: Date:_____

Final Site Plan submitted: Date:_____

Final Site Plan: Approved: _____

Disapproved:_____

REIMBURSABLE COSTS:

Have such costs been incurred? Yes:_____

Description:_____ Amount:_____

Description:_____ Amount:_____

Description:_____ Amount:_____

No:_____

Has the City been reimbursed? Yes:_____ Date:_____

No:_____

PERFORMANCE BOND/GUARANTEE:

Is Bond required? Yes:_____ Amount:_____

No:_____

Has Bond/Guarantee been posted? Yes:_____ Amount:_____

No:_____

Building and Zoning Administrator notified to issue BUILDING PERMIT: DATE:_____

ENVIRONMENTAL REVIEW

Applicant shall also complete a Short Environmental Assessment Form for the following requests: 1) construction or expansion of a non-residential facility that is not consistent with existing zoning and/or exceeds 4,000 s.f. (63'x63') of gross floor area 2) construction or expansion of a 4-family residential structure or larger 4) use variance 5) area variance for non-residential structure 6) area variance for a 4-family residential structure or larger 7) special use permit

If the project meets the following thresholds then the applicant shall complete a Full Environmental Assessment Form: 1) located in or adjacent to an historic district / site / structure or public park land / open space 2) is non-residential and will alter more than 10 acres 3) is residential and involves connecting 250 units or more to public water/sewer 4) is residential and involves 50 units or more not to be connected to public water/sewer 5) involves a facility over 100,000 s.f. in gross floor area.

SITE PLAN DETAILS

The application for preliminary site plan approval shall be accompanied by a site plan with information drawn from the following checklist as determined necessary by Planning and Development Agency Staff.
Incomplete applications will not be placed on the agenda. Eight (8) full-scale copies and four (4) copies on letter (8.5"x11") or tabloid (11"x17") size paper are requested per application.

Ideally, site plans should be prepared by a licensed architect, surveyor, or engineer. A survey and/or signed, stamped professional plans are nearly always required to accompany the application for site plan review when the project involves new construction or significant additions.

Preliminary Site Plan Elements:

1. Title of drawing, including property address, name / address of applicant, and name / address of person responsible for preparation of such drawing (such as the professional architect, engineer, or surveyor);
2. North arrow, scale, and date;
3. Boundaries of the property, adjacent parcels, streets, and zoning setbacks plotted to scale;
4. Existing watercourses;
5. Grading and drainage plan, showing existing and proposed contours at an appropriate interval, to be specified by Planning and Development Agency staff;
6. Location, proposed use, and height of all buildings;
7. Location, design, and construction materials of all parking and loading areas, with access and egress drives thereto;
8. Provision for pedestrian access;
9. Location of outdoor storage, if any;
10. Location, design, and construction materials of all existing or proposed site improvements, including drains and culverts;
11. Description of the method of sewage disposal and location, design, and construction materials of such facilities;
12. Location of fire and other emergency zones, including the location of fire hydrants;
13. Location, design, and construction materials of all energy distribution facilities, including electrical, gas, and solar energy;
14. Location, size, design, and construction materials of all proposed signage;
15. Location and proposed development of all open spaces and buffer areas, including indication of existing vegetative cover;
16. Location and design of outdoor lighting facilities;
17. Designation of the amount of building area proposed for retail sales or similar commercial activity.
18. General landscaping plan and schedule; and
19. Other elements integral to the proposed development, as considered necessary by Planning and Development Agency staff, including identification of any State or County permits required for the project's execution.

FEBRUARY 15, 2011 LETTER TO BUILDING AND ZONING ADMINISTRATOR

G-L Engineering, P.C.
8 Brunswick Road Troy, New York 12180
Phone: (518) 270-5920 Fax: (518) 270-5922

February 15, 2011

Daniel Moore, Building & Zoning Administrator
Office of Building Department
City Hall, 62 Washington Street
Rensselaer, New York 12144-2696

Re. New Castle Asphalt, LLC—Proposed Blacktop Plant in Port of Rensselaer

Dear Mr. Moore:

The following information is provided in support of New Castle Asphalt, LLC's application to construct and operate a blacktop plant on the west side of Riverside Avenue and the north side of the Irwin Stewart Port Expressway in the Port of Rensselaer.

Enclosed for your review are two copies of the following for the above referenced project:

- Floodplain Development Permit Application
- Environmental Assessment Form
- Site Plan Maps showing the area of filling in the floodplain
- Calculations supporting this floodplain certification

This information is also included in the Site Plan application submitted today.

Site activities will include an entrance road/perimeter access road, a stockpile area, perimeter berms, the blacktop plant, a lab and plant control room, employee parking areas and stormwater control features including stormwater basins, ditches and related features. These features are shown on the attached Site Plan.

The site is owned by the Albany-Rensselaer Port District Commission and is leased to the applicant, New Castle, Asphalt, LLC. It is located on Tax Parcel 154-5-3.

The attached Site Plan Map (Existing Conditions) shows the existing conditions of the site. In general, the site grades gently from an approximate high elevation of 25 feet above mean sea level at the top of the bank along the Hudson River down to an elevation of approximately 19 feet along an active railroad spur on the east side of the property. The easternmost part of the site grades up slightly towards Riverside Avenue.

The elevation of the 100-year flood is about 19 feet above mean sea level to the south of the site to about 20 feet to the north of the site. The site has been laid out so that no structures are located in the 100-year floodplain. Approximately 1050 cubic yards of fill will be placed in the 100-year floodplain area. The displacement of potential floodwaters by the fill (entrance/perimeter access

road and some of the perimeter berms along the eastern side of the site) will result in no significant increase in the flood level (see attached calculations).

Please call me anytime if you have any questions.

Cordially,

Mark Visscher, P.E.
Senior Engineer
G-L Engineering, P.C.

Enc.

Z:\clients\New Castle Asphalt\Rensselaer-2\Letters\Moore Floodplain 2'15'11.doc

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

(2 completed copies of the application

SECTION 1: GENERAL PROVISIONS (to be read and signed by APPLICANT):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements.
7. Applicant hereby gives consent to the Local Administrator or his/her representative to make reasonable inspections required to verify compliance.
8. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

John K Mahoney — Applicant Signature

2/14/11 — Date

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT)

	NAME	ADDRESS	TELEPHONE
APPLICANT	New Castle Associates LLC	118 Buttermilk Road Waterford NY	432-4470
BUILDER			
ENGINEER	G-L Engineering PC	8 Brookwood Rd Troy NY	270-5920
CONSULTANT	Georgia-Lee Consulting	8 Brookwood Rd Troy NY	270-5920

PROJECT LOCATION:

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well-known landmark. A sketch attached to this application showing the project location would be helpful.

The site is located at the northwest corner of Riverside Avenue and the Irwin Stewart Port Expressway. See location map in Site Plan Drawings.

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELOPMENT

ACTIVITY

- [x] New Structure
- [ ] Addition
- [ ] Alteration
- [ ] Relocation
- [ ] Demolition
- [ ] Replacement

STRUCTURE TYPE

- [ ] Residential (1-4 Family)
- [ ] Residential (More than 4 Family)
- [x] Non-residential (Floodproofing? [x] Yes)
- [ ] Combined Use (Residential & Commercial)
- [ ] Manufactured (Mobile) Home

ESTIMATED COST OF PROJECT: $

B. OTHER DEVELOPMENT ACTIVITIES:

- [ ] Fill [ ] Mining [ ] Drilling [x] Grading
- [ ] Excavation (Except for Structural Development Checked Above)
- [ ] Watercourse Alteration (Including Dredging and Channel Modifications)
- [x] Drainage Improvements (Including Culvert Work)
- [ ] Road, Street or Bridge Construction
- [ ] Subdivision (New or Expansion)
- [ ] Individual Water or Sewer System
- [ ] Other (Please Specify) _____

After completing SECTION 2, APPLICANT should submit form to Local Administrator for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by LOCAL ADMINISTRATOR)

The proposed development is located on FIRM Panel No. _____ , Dated _____

The Proposed Development:

- [ ] Is NOT located in a Special Flood Hazard Area. (Notify the applicant that the application review is complete and NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED).
- [ ] Is located in a Special Flood Hazard Area. FIRM zone designation is _____
  100-Year flood elevation at the site is _____ Ft. NGVD (MSL) / [ ] Unavailable
- [ ] The proposed development is located in a floodway.
  FBFM Panel No. _____ Dated _____
- [ ] See Section 4 for additional instructions.

_____ _____

Local Administrator Signature Date

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by LOCAL ADMINISTRATOR)

The applicant must submit the documents checked below before the application can be processed:

☐ A site plan showing the location of all existing structures, water bodies, adjacent roads, lot dimensions and proposed development.

☐ Development plans, drawn to scale, and specifications, including where applicable, details for anchoring structures, proposed elevation of lowest floor (including basement), types of water resistant materials used below the first floor, details of floodproofing of utilities located below the first floor and details of enclosures below the first floor.

☐ Subdivision or other development plans (If the subdivision or other development exceeds 50 lots or 5 acres, whichever is the lesser, the applicant must provide 100-year flood elevations if they are not otherwise available).

☐ Plans showing the extent of watercourse relocation and/or landform alterations.

☐ Plans showing top of proposed new fill elevation in FT. NGVD (MSL).

☐ Plans showing proposed flood proofing protection level (non-residential only) in FT. NGVD (MSL). For flood proofed structures, applicant must attach certification from registered engineer or architect.

☐ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.

☐ Other:

SECTION 5: DEVELOPMENT PERMIT DETERMINATION (To be completed by LOCAL ADMINISTRATOR)

I have determined that the proposed activity: A. ☐ Is / B. ☐ Is not in conformance with provisions of Local Law # 2 of 6/17/1987 and / or Special Use Permit Approved_____. The development permit is issued subject to the conditions attached to and made part of this permit.

Local Administrator Signature

Date

If BOX A is checked, the Local Administrator may issue a Demolition, Grading, or Building Permit upon payment of designated fee.
If BOX B is checked, the Local Administrator will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Local Administrator or may request a hearing from the Board of Appeals.

APPEALS: Appealed to Board of Appeals? ☐ Yes ☐ No Hearing date:_____

Appeals Board Decision — Approved? ☐ Yes ☐ No

Conditions

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued)

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application). Complete 1 or 2 below.

1. Actual (As-Built) Elevation of the top of the lowest floor, including basement (in Coastal High Hazard Areas / Zone V, bottom of lowest structural member of the lowest floor, excluding piling and columns) is: _____ FT. NGVD (MSL).

2. Actual (As-Built) Elevation of floodproofing protection is: _____ FT. NGVD (MSL).

NOTE: Any work performed prior to submittal of the above information is at the risk of the Applicant.

SECTION 7: COMPLIANCE ACTION (To be completed by LOCAL ADMINISTRATOR)

The LOCAL ADMINISTRATOR will complete this section as applicable based on inspection of the project to ensure compliance with the community's local law for flood damage prevention.

INSPECTIONS:

DATE	BY	DEFICIENCIES? ☐ YES ☐ NO
DATE	BY	DEFICIENCIES? ☐ YES ☐ NO
DATE	BY	DEFICIENCIES? ☐ YES ☐ NO

SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by LOCAL ADMINISTRATOR)

Certificate of Compliance issued prior to granting of Certificate of Occupancy:

ISSUED BY	DATE

CERTIFICATE OF COMPLIANCE
FOR DEVELOPMENT IN A SPECIAL FLOOD HAZARD AREA
(OWNER MUST RETAIN THIS CERTIFICATE)

TO BE COMPLETED AND ISSUED PRIOR TO FINAL INSPECTION FOR A CERTIFICATE OF OCCUPANCY

SECTION A (To be completed by APPLICANT – sign either A.1 or A.2 not both)

PREMISES LOCATED AT

OWNER:

OWNER ADDRESS:

CHECK ONE: ☐ NEW BUILDING ☐ EXISTING BUILDING ☐ FILL ☐ OTHER: _____

1. I CERTIFY THAT I HAVE COMPLIED WITH THE REQUIREMENTS OF LOCAL LAW # 2 of 6/17/1987 (City Code Chapter 105), AND THE SPECIAL USE PERMIT APPROVED _____.

APPLICANT SIGNATURE DATE

2. I CERTIFY THAT I HAVE COMPLIED WITH THE REQUIREMENTS OF LOCAL LAW # 2 of 6/17/1987 (City Code Chapter 105), THE SPECIAL USE PERMIT APPROVED _____, AND THE AREA VARIANCE GRANTED _____.

APPLICANT SIGNATURE DATE

SECTION B (To be completed by LOCAL ADMINISTRATOR)

This certifies based on a final site inspection that the above described floodplain development complies with requirements of Flood Damage Prevention Local Law Number 2 of 1987, or has a duly granted variance.

LOCAL ADMINISTRATOR SIGNATURE

PERMIT NO: PERMIT DATE:

CREIGHTON MANNING TRAFFIC STUDIES

PARTNERS
John M. Tozzi, P.E.
Edward V. Woods, P.E.
Donald G. Sovey, P.L.S.

Creighton Manning

March 2, 2011

Mr. Roderick Valente
New Castle Asphalt, LLC
118 Button Road
Waterford, NY 12188

RE: Traffic Evaluation, New Castle Blacktop Plant, City of Rensselaer, Rensselaer County, NY; CME Project No. 10-259

Dear Mr. Valente:

As requested, Creighton Manning Engineering, LLP (CME) has completed a traffic evaluation for the proposed New Castle Blacktop Plant, located on the northwest corner of Irwin Stewart Port Expressway (ISPE) and Riverside Avenue in the Port of Rensselaer, in the City of Rensselaer, New York, as shown on Figure 1. The purpose of this analysis is to document the existing traffic conditions in the area, estimate site generated traffic, and determine the operating conditions with and without the project.

ENGINEERS
PLANNERS
SURVEYORS

A. Introduction and Background

The plant is located just south of the recently completed gas-fired power plant and north of fuel and petroleum storage businesses. The proposed plant is expected to import raw materials via trucks, including aggregate, sand, recycled pavement, and liquid asphalt, and then combine them into new production blacktop used primarily for road paving, parking lots, etc. The plant will operate during the construction season when blacktop is in demand, typically April to November. This means that virtually no activity will take place over the winter. Trucking operations will usually occur from 7 AM to 5 PM, Monday through Friday with about 6 people on-site per shift. It is estimated that the plant will begin operation this year, or shortly after it is approved, subject to the granting of all the necessary approvals and permits.

B. Existing Conditions

The study evaluated the NY Route 9J/ISPE/South Street intersection which is the main entrance to the port and from which all site generated trucks will enter and exit the port; trucks are restricted from using Riverside Avenue and Broadway (through the Fort Crailo area) to access Route 9/20 north of the site. The intersection is 3-phase, signal controlled, with a single lane on each approach. Because South Street and ISPE intersect Route 9J at a skewed angle, northbound left turns from Route 9J onto ISPE, and eastbound right turns from ISPE onto Route 9J, are yield controlled separate from the signalized intersection.[1] Similarly, southbound Route 9J left turns to South Street, and westbound South

2 Winners Circle
Albany, NY 12205
518.446.0396 (p)
518.446.0397 (f)
www.cmellp.com

[1] It was noted during the field investigation that the yield sign for the eastbound right turn movement from ISPE to Route 9J southbound is missing.

Street right turns onto Route 9J are stop controlled separate from the signalized intersection. Traffic counts from 3:30 p.m. to 6:00 p.m. were conducted at this intersection on February 10, 2011 and from 7:00 a.m. to 9:00 a.m. on February 11, 2011. The traffic counts indicate that the peak hours occurred from 7:15 to 8:15 a.m. and from 4:15 to 5:15 p.m. The AM peak hour volume is approximately 13% higher than the PM peak hour, making the AM peak hour the worst-case condition. This coincides with the peak traffic period of the project site, discussed in the next section. Therefore, the AM peak hour will be used for the remainder of this analysis.

Passenger cars made up 83% of the AM peak hour traffic volumes with heavy vehicles making up the remaining 13% at the intersection. Entering the port, passenger cars make up 67% and trucks make up 33% of the AM peak hour traffic volumes, while exiting the port, traffic consists of 25% passenger cars and 75% trucks. The existing AM peak hour traffic volumes are shown on Figure 2-1. The raw turning movement count data is included under Attachment A.

C. Traffic Forecasts

Background Volumes

To forecast traffic volumes, it is necessary to understand trends in background growth rates, other developments proposed in the area, and the additional traffic generated by the proposed project. The City of Rensselaer Planning and Building Department was contacted to determine if there were any other proposed development projects underway in the port. No other projects were noted and a review of the background traffic volumes on Route 9J indicated that the volumes have remained fairly steady over the years with an annual average daily traffic volume (AADT) of 4,500 vehicles per day. Given that the project is anticipated to open this construction season, the existing traffic volumes will serve to represent predevelopment conditions.

Trip Generation

Trip generation determines the quantity of traffic expected to travel to/from the project site. Trip generation was estimated using site specific information provided by the applicant for the anticipated operations of the facility. The following assumptions are made regarding the proposed operations:

- An annual blacktop production of 200,000 tons is anticipated to peak in September.
- A peak production of approximately 1,800 tons per day is expected, requiring an equal amount of raw materials to be delivered to the site.
- The peak hour of the work day occurs in the morning with approximately 25% of the daily blacktop production being delivered in a single hour.
- Trailer dump trucks (34-ton capacity) are to be used to supply raw materials with tri-axle (22-ton) trucks making blacktop deliveries.

During a typical work day, blacktop production is expected to peak during the morning when the demand for deliveries to customers is expected to be the greatest. During the peak production, approximately 82 loads of blacktop are expected to be loaded onto trucks, with 53 loads of raw material being delivered daily. With 25% of the daily production to occur in a single hour, 34

loads will depart during the peak hour, with 34 trucks returning. Table 1 summarizes the detailed trip generation calculations for the AM peak hour.

Table 1 – AM Peak Hour Trip Generation

Production-1,800 tons/day	÷	22 tons/truck	=	82 loads/day
Supply-1,800 tons/day	÷	34 tons/truck	=	53 loads/day
135 loads/day	x	25% peak hour	=	34 loads/hour
34 loads/hour	x	2 trips/direction	=	34 trips enter, 34 trips exit

This analysis assumes that all the raw materials arrive from outside the port by truck. The applicant has noted that liquid asphalt may arrive from facilities within the port and trucks hauling new blacktop to a paving job could return with used blacktop for recycling, thereby decreasing the number of trips needed to bring raw materials into the site. However, the above estimate is used in this analysis to represent a worst-case assumption with no credits for the potential reduction in off-site trips.

In the afternoon peak hour, plant operations will wind down to only 4% of the daily production occurring. This equates to 5 truck loads, or 10 trips (5 entering, 5 exiting) that would occur when background traffic increases for the weekday commute home. Since the afternoon background traffic is less than the morning peak hour, and the trip generation is significantly less, analysis of the weekday AM peak hour will represent the worst-case traffic condition for the study area.

Trip Distribution, Assignment, and Build Volumes

Traffic generated by the project was distributed at the study area intersection based on the anticipated market areas. Trucks arriving and departing the port will primarily use the state roadway system to travel to specific job sites and haul raw materials to the site. It is estimated that a majority of the site generated trips will be destined to and from the west and will use the Route 9/20/9J interchange to gain regional access to the interstate highway system. Based on the configuration of the interchange, 90% of arriving trucks will travel south on Route 9J and make a right turn into the port, while 90% of trucks exiting, will travel straight through the intersection onto South Street. The remaining 10% is expected to travel to and from the east on Route 9/20 and arriving trucks will travel south on South Street into the port and exiting trucks will turn left onto Route 9J. The trip distribution and trip assignment for the project are shown on figures 2-2 and 2-3, respectively.

Trips generated by the operations were then added to the existing traffic volumes, which result in the Build traffic volumes. These volumes represent conditions *after* the plant is in operation and is shown on Figure 2-4.

D. Intersection Operations

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection, i.e. the number of lanes provided, permitted turning movements, and traffic control. Intersection evaluations were made using the latest version of the Highway Capacity Software (HCS+ version 5.4) which automates the procedures contained

in the *2000 Highway Capacity Manual,* the industry standard for evaluating intersection operations and traffic impacts. Levels of service are similar to a road report card, in which grades are assigned based on the amount of delay drivers experience traveling through an intersection. Grades range from LOS A to LOS F with LOS A conditions considered excellent with very little vehicle delay while LOS F represents poor conditions with long vehicle delays. Attachment B contains detailed descriptions of LOS criteria for signalized intersections and the detailed HCS Level of Service reports.

Because the South Street right turn and the southbound Route 9J left turn occur before the signalized intersection, it is not included in the analysis below. However, the northbound left turn movement from Route 9J to ISPE must obey the traffic light indications due to the location of the stop bar. Therefore this and the ISPE right turn movement are included in the signalized analysis. Table 2 summarizes the results of the Level of Service calculations for the AM peak hour.

Table 2 – Signalized Level of Service Summary

Intersection Approach		AM Peak Hour	
		Existing	Build
Route 9J/ISPE/South St			
ISPE EB	LTR	B (20)	C (21)
South St WB	LT	C (23)	C (23)
Rt 9J NB	LTR	C (31)	C (31)
Rt 9J SB	TR	B (16)	B (17)
	Overall	C (26)	C (26)

Key: X (Y) = Level of Service (Delay, seconds per vehicle).
NB, SB, WB, EB = Northbound, Southbound, Westbound, Eastbound intersection approaches.
LTR = Left-turn, through, and/or right-turn movements.

The above analysis indicates that the Route 9J/ISPE/South Street intersection currently operates at an overall LOS C and will continue to do so after the blacktop plant is completed. All movements will operate similar to existing conditions with delays increasing by one second or less. The capacity of the existing intersection is more than adequate to accommodate the proposed traffic volumes. Therefore, no level of service mitigation is proposed.

It should be noted that during the field investigation, 3-phase signal operations were observed, with a Route 9J phase allowing permitted left turns, (i.e. lefts turn vehicles operate under a green ball indication and must first yield to oncoming traffic). The eastbound and westbound approaches from the port and South Street operated with split phases. Split phasing means that the port and South Street approaches have separate phases, when normally they would run concurrently, similar to the northbound and southbound Route 9J approaches. Split phasing provides a protected phase, i.e. left turns do not conflict with another movement, typically indicated with left turn arrows. However, the eastbound and westbound approaches do not include any exclusive left turn arrows to indicate that a protected phase is provided. Thus, drivers unfamiliar with the operations on these approaches could stop in the intersection under a green ball, yielding to oncoming traffic, not knowing that the opposing approach has a red light. If split phasing remains, it is recommended that exclusive green arrows be added to the signal system.

E. Conclusions

The New Castle Blacktop Plant is estimated to generate a peak traffic flow of approximately 135 loads of raw materials and blacktop per day, which will equate to approximately 68 truck trips during the peak hour (34 entering, 34 exiting) at maximum production. After distributing the project generated traffic through the local roadway network, it is projected that the intersection of Route 9J/ISPE/South Street will operate at acceptable levels of service with ample capacity to accommodate the proposed traffic during the peak blacktop production period. Overall, the proposed project will not have any significant traffic impact.

Please feel free to call our office if you have any questions or comments regarding the above analysis.

Respectfully submitted,
Creighton Manning Engineering, LLP

Kenneth Wersted, P.E.
Project Manager

Attachments

C: Paul Griggs, Griggs-Lang Consulting Geologists, Inc.

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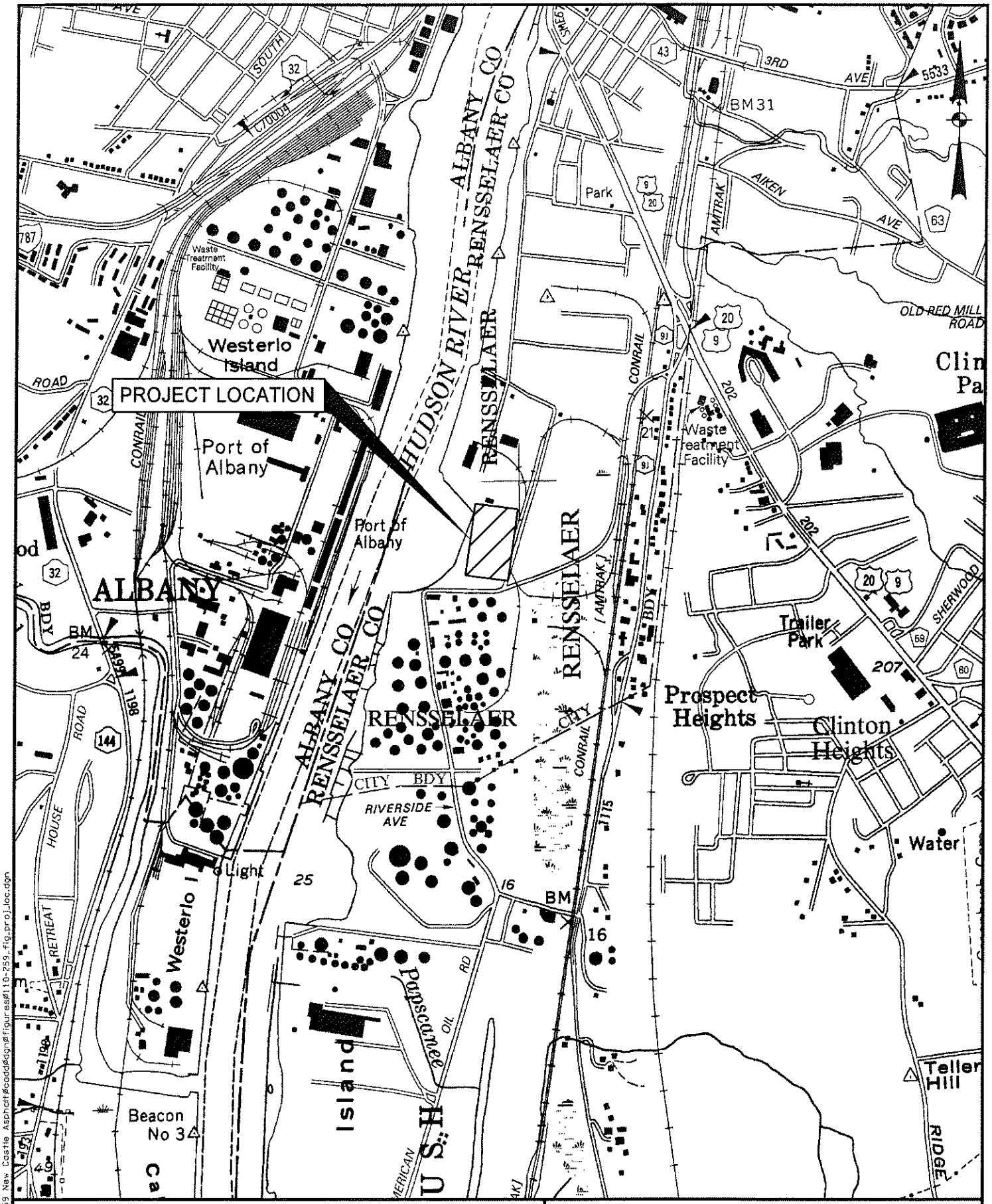

PROJECT LOCATION

NEW CASTLE BLACKTOP PLANT
CITY OF RENSSELAER, NEW YORK

Creighton Manning

PROJECT: 110-259	DATE: 3/2011	FIGURE: 1

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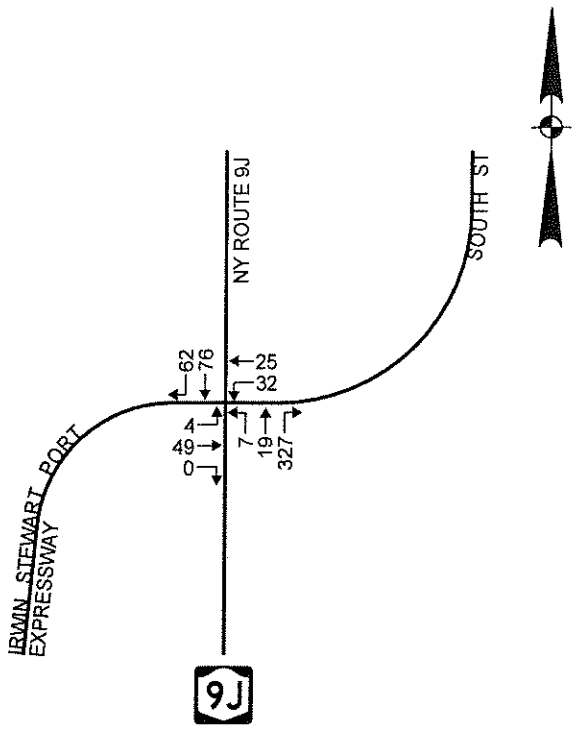
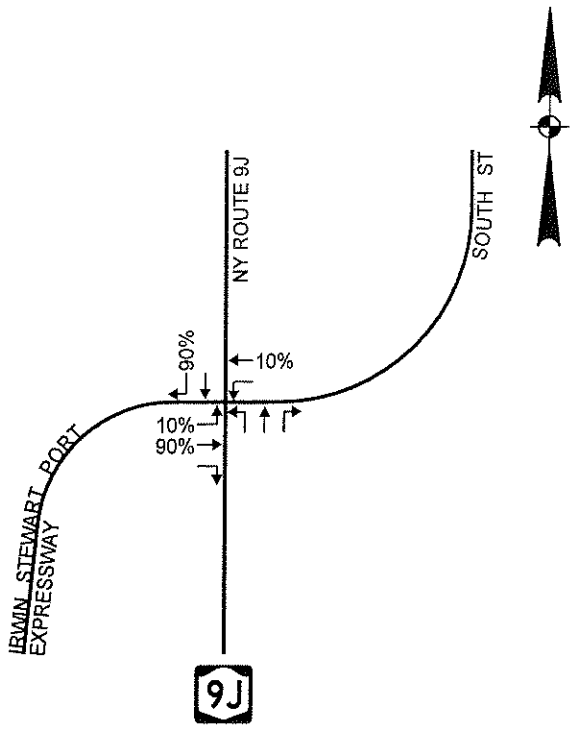
1 EXISTING

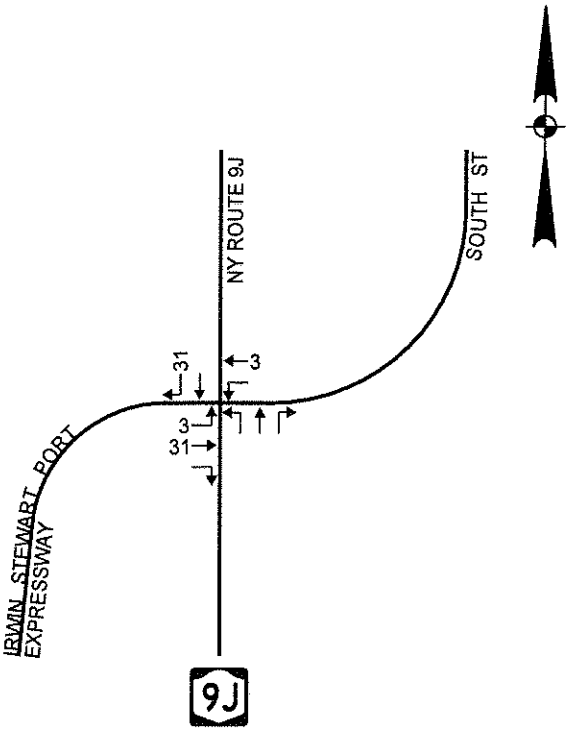


AM (PM) PEAK HOUR

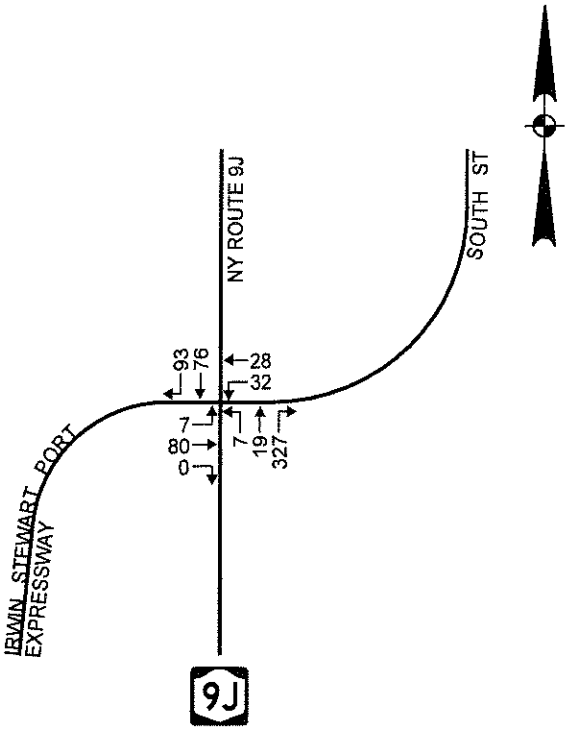
2 TRIP DISTRIBUTION



3 TRIP ASSIGNMENT



4 BUILD



AM PEAK HOUR
TRAFFIC VOLUMES

NEW CASTLE BLACKTOP PLANT
CITY OF RENSSELAER, NEW YORK

Creighton Manning

PROJECT: 110-259	DATE: 3/2011	FIGURE: 2

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Attachment A – Raw Traffic Count Data

Project: 110-259
Counted By: DPR
Location: Rensselaer, NY
Other:

File Name : tm10259a1
Site Code : 10-259-1
Start Date : 2/11/2011
Page No : 1

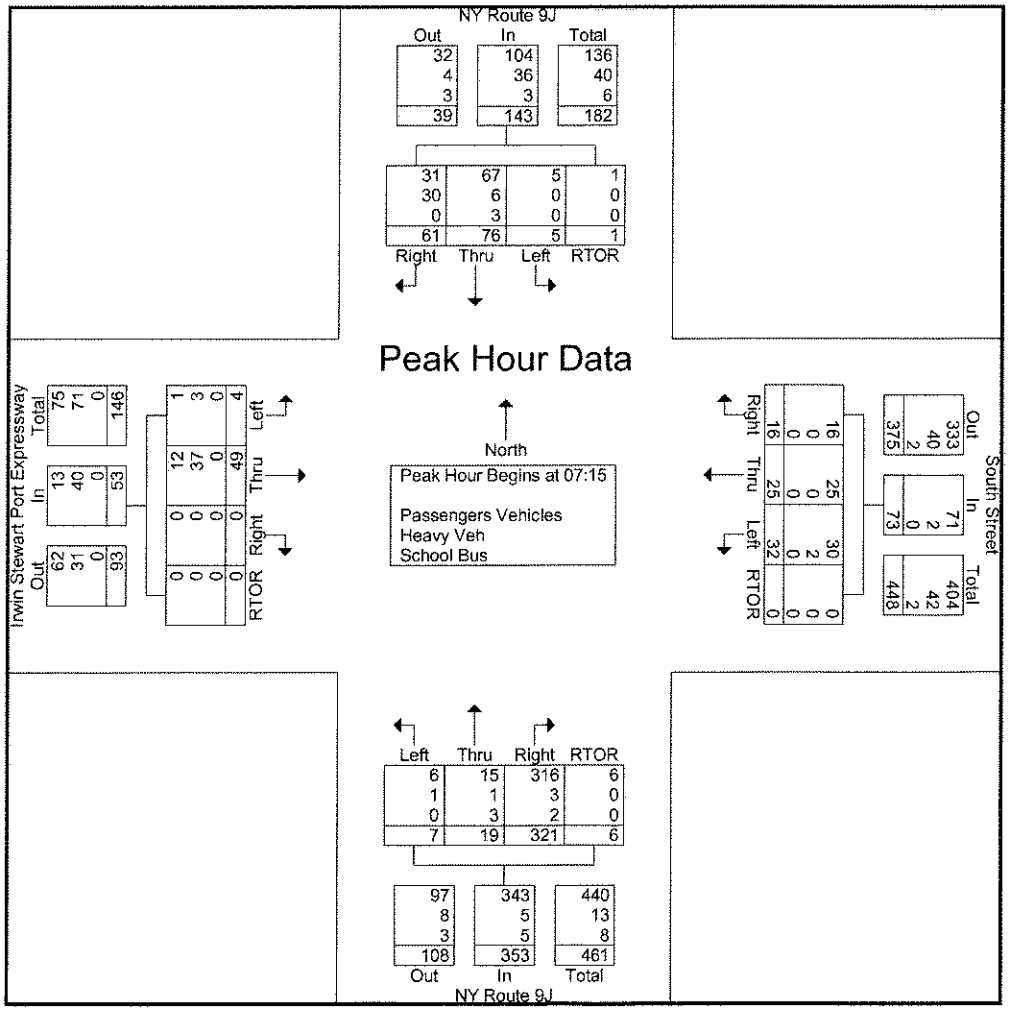
Groups Printed- Passengers Vehicles - Heavy Veh - School Bus

	Irwin Stewart Port Expressway Eastbound					South Street Westbound					NY Route 9J Northbound					NY Route 9J Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00	0	4	1	0	5	5	4	3	0	12	0	2	49	3	54	1	18	14	1	34	105
07:15	0	10	0	0	10	0	9	2	0	11	1	3	67	6	77	1	10	19	0	30	128
07:30	3	13	0	0	16	10	5	6	0	21	3	5	77	0	85	1	31	14	0	46	168
07:45	0	10	0	0	10	16	7	5	0	28	3	8	109	0	120	2	21	16	0	39	197
Total	3	37	1	0	41	31	25	16	0	72	7	18	302	9	336	5	80	63	1	149	598
08:00	1	16	0	0	17	6	4	3	0	13	0	3	68	0	71	1	14	12	1	28	129
08:15	2	15	1	0	18	7	1	3	0	11	0	4	59	0	63	1	13	7	0	21	113
08:30	2	14	2	0	18	8	3	6	0	17	0	7	61	0	68	2	10	13	0	25	128
08:45	0	11	0	0	11	5	1	4	0	10	0	4	46	1	51	2	17	5	1	25	97
Total	5	56	3	0	64	26	9	16	0	51	0	18	234	1	253	6	54	37	2	99	467
Grand Total	8	93	4	0	105	57	34	32	0	123	7	36	536	10	589	11	134	100	3	248	1065
Apprch %	7.6	88.6	3.8	0		46.3	27.6	26	0		1.2	6.1	91	1.7		4.4	54	40.3	1.2		
Total %	0.8	8.7	0.4	0	9.9	5.4	3.2	3	0	11.5	0.7	3.4	50.3	0.9	55.3	1	12.6	9.4	0.3	23.3	
Passengers Vehicles	3	27	3	0	33	54	32	30	0	116	6	30	528	10	574	11	120	42	2	175	898
% Passengers Vehicles	37.5	29	75	0	31.4	94.7	94.1	93.8	0	94.3	85.7	83.3	98.5	100	97.5	100	89.6	42	66.7	70.6	84.3
Heavy Veh	5	66	1	0	72	3	2	0	0	5	1	2	5	0	8	0	10	58	1	69	154
% Heavy Veh	62.5	71	25	0	68.6	5.3	5.9	0	0	4.1	14.3	5.6	0.9	0	1.4	0	7.5	58	33.3	27.8	14.5
School Bus	0	0	0	0	0	0	0	2	0	2	0	4	3	0	7	0	4	0	0	4	13
% School Bus	0	0	0	0	0	0	0	6.2	0	1.6	0	11.1	0.6	0	1.2	0	3	0	0	1.6	1.2

Project: 110-259
Counted By: DPR
Location: Rensselaer, NY
Other:

File Name : tm10259a1
Site Code : 10-259-1
Start Date : 2/11/2011
Page No : 2

	Irwin Stewart Port Expressway Eastbound					South Street Westbound					NY Route 9J Northbound					NY Route 9J Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	0	10	0	0	10	0	**9**	2	0	11	1	3	67	**6**	77	1	10	**19**	0	30	128
7:30:00 AM	**3**	13	0	0	16	10	5	**6**	0	21	**3**	5	77	0	85	1	**31**	14	0	**46**	168
7:45:00 AM	0	10	0	0	10	**16**	7	5	0	**28**	3	**8**	**109**	0	**120**	**2**	21	16	0	39	**197**
8:00:00 AM	1	**16**	0	0	**17**	6	4	3	0	13	0	3	68	0	71	1	14	12	**1**	28	129
Total Volume	4	49	0	0	53	32	25	16	0	73	7	19	321	6	353	5	76	61	1	143	622
% App. Total	7.5	92.5	0	0		43.8	34.2	21.9	0		2	5.4	90.9	1.7		3.5	53.1	42.7	0.7		
PHF	.333	.766	.000	.000	.779	.500	.694	.667	.000	.652	.583	.594	.736	.250	.735	.625	.613	.803	.250	.777	.789
Passenger Vehicles	1	12	0	0	13	30	25	16	0	71	6	15	316	6	343	5	67	31	1	104	531
% Passengers Vehicles	25.0	24.5	0	0	24.5	93.8	100	100	0	97.3	85.7	78.9	98.4	100	97.2	100	88.2	50.8	100	72.7	85.4
Heavy Veh	3	37	0	0	40	2	0	0	0	2	1	1	3	0	5	0	6	30	0	36	83
% Heavy Veh	75.0	75.5	0	0	75.5	6.3	0	0	0	2.7	14.3	5.3	0.9	0	1.4	0	7.9	49.2	0	25.2	13.3
School Bus	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	0	3	0	0	3	8
% School Bus	0	0	0	0	0	0	0	0	0	0	0	15.8	0.6	0	1.4	0	3.9	0	0	2.1	1.3



Project: 110-259
Counted By: JD
Location: Rensselaer, NY
Other:

File Name : tm10259p1
Site Code : 10-259-1
Start Date : 2/10/2011
Page No : 1

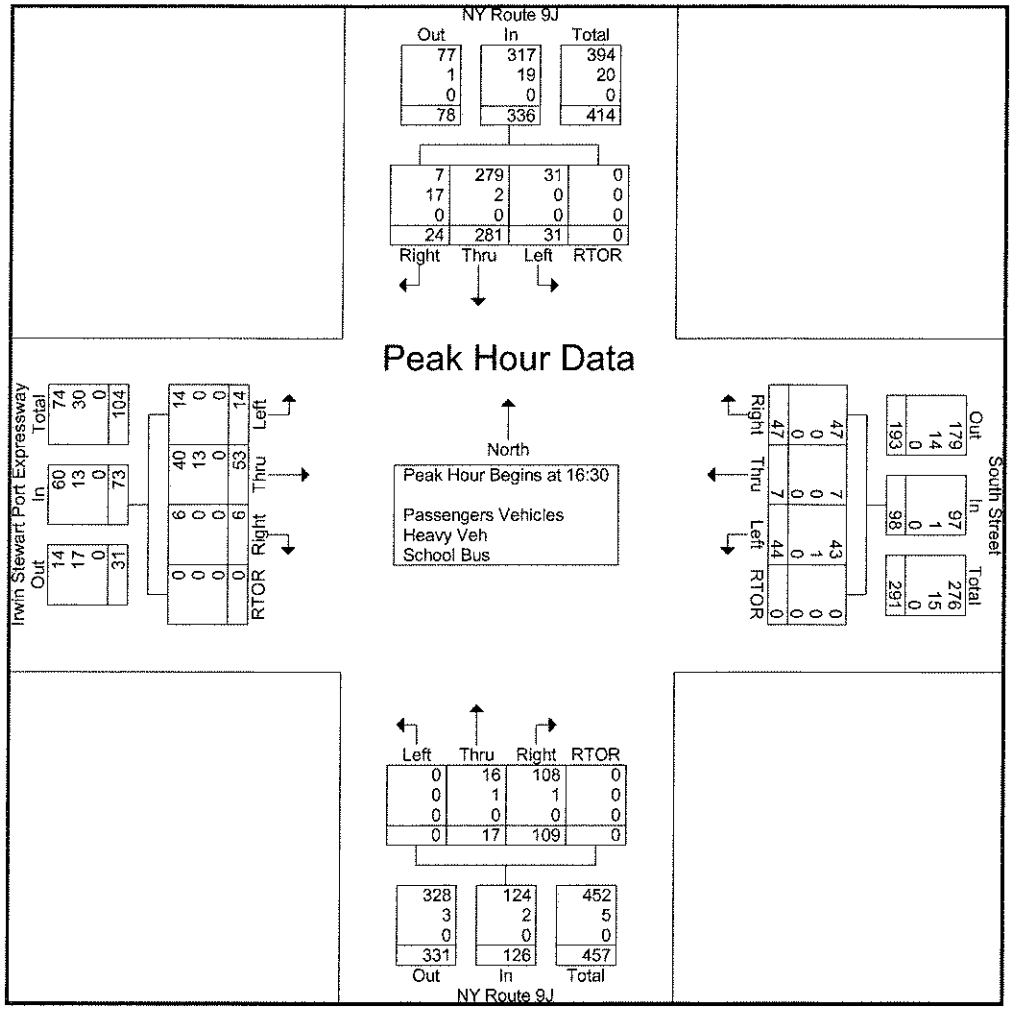
Groups Printed- Passengers Vehicles - Heavy Veh - School Bus

	Irwin Stewart Port Expressway Eastbound					South Street Westbound					NY Route 9J Northbound					NY Route 9J Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
15:30	1	1	1	0	3	4	0	3	0	7	0	0	10	0	10	1	8	1	0	10	30
15:45	2	11	0	0	13	12	1	17	0	30	1	4	32	0	37	6	54	13	0	73	153
Total	3	12	1	0	16	16	1	20	0	37	1	4	42	0	47	7	62	14	0	83	183
16:00	2	9	2	0	13	3	2	8	0	13	2	6	24	0	32	1	44	9	0	54	112
16:15	1	13	2	0	16	10	0	9	0	19	0	5	37	0	42	14	54	9	0	77	154
16:30	3	15	1	0	19	9	1	10	0	20	0	6	33	0	39	9	62	7	0	78	156
16:45	2	8	2	0	12	9	0	10	0	19	0	3	37	0	40	13	67	6	0	86	157
Total	8	45	7	0	60	31	3	37	0	71	2	20	131	0	153	37	227	31	0	295	579
17:00	4	15	2	0	21	20	4	15	0	39	0	5	25	0	30	4	63	6	0	73	163
17:15	5	19	2	0	26	9	3	10	0	22	0	5	22	0	27	9	76	5	0	90	165
17:30	1	7	0	0	8	6	1	10	0	17	0	4	21	0	25	4	79	6	0	89	139
17:45	1	13	1	0	15	9	0	11	0	20	1	3	30	0	34	5	59	3	0	67	136
Total	11	54	5	0	70	44	8	46	0	98	1	17	98	0	116	22	277	20	0	319	603
Grand Total	22	111	13	0	146	91	12	103	0	206	4	41	271	0	316	66	566	65	0	697	1365
Apprch %	15.1	76	8.9	0		44.2	5.8	50	0		1.3	13	85.8	0		9.5	81.2	9.3	0		
Total %	1.6	8.1	1	0	10.7	6.7	0.9	7.5	0	15.1	0.3	3	19.9	0	23.2	4.8	41.5	4.8	0	51.1	
Passengers (vehicles)	20	74	11	0	105	87	11	101	0	199	3	40	262	0	305	66	556	18	0	640	1249
% Passengers (vehicles)	90.9	66.7	84.6	0	71.9	95.6	91.7	98.1	0	96.6	75	97.6	96.7	0	96.5	100	98.2	27.7	0	91.8	91.5
Heavy Veh	2	37	2	0	41	3	1	0	0	4	1	1	7	0	9	0	7	47	0	54	108
% Heavy Veh	9.1	33.3	15.4	0	28.1	3.3	8.3	0	0	1.9	25	2.4	2.6	0	2.8	0	1.2	72.3	0	7.7	7.9
School Bus	0	0	0	0	0	1	0	2	0	3	0	0	2	0	2	0	3	0	0	3	8
% School Bus	0	0	0	0	0	1.1	0	1.9	0	1.5	0	0	0.7	0	0.6	0	0.5	0	0	0.4	0.6

Project: 110-259
Counted By: JD
Location: Rensselaer, NY
Other:

File Name : tm10259p1
Site Code : 10-259-1
Start Date : 2/10/2011
Page No : 2

	Irwin Stewart Port Expressway Eastbound					South Street Westbound					NY Route 9J Northbound					NY Route 9J Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Peak Hour Analysis From 3:30:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:30:00 PM																					
4:30:00 PM	3	15	1	0	19	9	1	10	0	20	0	**6**	33	0	39	9	62	**7**	0	78	156
4:45:00 PM	2	8	**2**	0	12	9	0	10	0	19	0	3	**37**	0	**40**	**13**	67	6	0	86	157
5:00:00 PM	4	15	2	0	21	**20**	**4**	**15**	0	**39**	0	5	25	0	30	4	63	6	0	73	163
5:15:00 PM	**5**	**19**	2	0	**26**	9	3	10	0	22	0	5	22	0	27	9	**76**	5	0	**90**	**165**
Total Volume	14	57	7	0	78	47	8	45	0	100	0	19	117	0	136	35	268	24	0	327	641
% App. Total	17.9	73.1	9	0		47	8	45	0		0	14	86	0		10.7	82	7.3	0		
PHF	.700	.750	.875	.000	.750	.588	.500	.750	.000	.641	.000	.792	.791	.000	.850	.673	.882	.857	.000	.908	.971
Passengers Vehicles	14	40	6	0	60	43	7	47	0	97	0	16	108	0	124	31	279	7	0	317	598
% Passengers Vehicles	100	70.2	85.7	0	76.9	91.5	87.5	104.4	0	97.0	0	84.2	92.3	0	91.2	88.6	104.1	29.2	0	96.9	93.3
Heavy Veh	0	13	0	0	13	1	0	0	0	1	0	1	1	0	2	0	2	17	0	19	35
% Heavy Veh	0	22.8	0	0	16.7	2.1	0	0	0	1.0	0	5.3	0.9	0	1.5	0	0.7	70.8	0	5.8	5.5
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Attachment B – Level of Service Analysis

LOS Definitions

The following is an excerpt from the 2000 Highway Capacity Manual (HCM).

Level of Service for Signalized Intersections

Level of service for a signalized intersection is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group. Levels of service are defined to represent reasonable ranges in control delay.

LOS A describes operations with low control delay, up to 10 s/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay.

LOS B describes operations with control delay greater than 10 and up to 20 s/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.

LOS C describes operations with control delay greater than 20 and up to 35 s/veh. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with control delay greater than 35 and up to 55 s/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 s/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.

LOS F describes operations with control delay in excess of 80 s/veh. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also be contribute significantly to high delay levels.

SHORT REPORT

General Information		Site Information	
Analyst	DPR	Intersection	NY RT 9J/South St/Port Expy
Agency or Co.	CME, RT9JSOUTHSTexam	Area Type	All other areas
Date Performed	2/28/2011	Jurisdiction	City of Rennselaer
Time Period	AM PH	Analysis Year	2011 Existing

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	0	0	1		0	1	0		1	0
Lane Group		LTR			LT			LTR			TR	
Volume (vph)	4	49	0	32	25		7	19	327		76	62
% Heavy Vehicles	75	76	0	6	0		14	21	2		12	48
PHF	0.78	0.78	0.78	0.65	0.65		0.74	0.74	0.74		0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A		A	A	A		A	A
Startup Lost Time		2.0			2.0			2.0			2.0	
Extension of Effective Green		2.0			2.0			2.0			2.0	
Arrival Type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	6	0	0	1
Lane Width		14.0			11.0			12.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0			0			0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	NS Perm	06	07	08
Timing	G = 13.5	G = 9.5	G =	G =	G = 20.5	G =	G =	G =
	Y = 5.5	Y = 5.5	Y =	Y =	Y = 5.5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 60.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		68			87			469			175	
Lane Group Capacity		258			274			547			461	
v/c Ratio		0.26			0.32			0.86			0.38	
Green Ratio		0.22			0.16			0.34			0.34	
Uniform Delay d_1		19.2			22.4			18.4			14.9	
Delay Factor k		0.11			0.11			0.39			0.11	
Incremental Delay d_2		0.5			0.7			12.8			0.5	
PF Factor		1.000			1.000			1.000			1.000	
Control Delay		19.7			23.0			31.2			15.5	
Lane Group LOS		B			C			C			B	
Approach Delay		19.7			23.0			31.2			15.5	
Approach LOS		B			C			C			B	
Intersection Delay		25.9			Intersection LOS			C				

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SHORT REPORT

General Information		Site Information	
Analyst	DPR	Intersection	NY RT 9J/South St/Port Expy
Agency or Co.	CME, RT9JSOUTHSTbuam	Area Type	All other areas
Date Performed	2/28/2011	Jurisdiction	City of Rennselaer
Time Period	AM PH	Analysis Year	2011 Build

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	0	1	0	0	1		0	1	0		1	0
Lane Group		LTR			LT			LTR			TR	
Volume (vph)	7	80	0	32	28		7	19	327		76	93
% Heavy Vehicles	86	85	0	6	11		14	21	2		12	66
PHF	0.78	0.78	0.78	0.65	0.65		0.74	0.74	0.74		0.78	0.78
Pretimed/Actuated (P/A)	A	A	A	A	A		A	A	A		A	A
Startup Lost Time		2.0			2.0			2.0			2.0	
Extension of Effective Green		2.0			2.0			2.0			2.0	
Arrival Type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0		0	0	6	0	0	1
Lane Width		14.0			11.0			12.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour		0			0			0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	NS Perm	06	07	08
Timing	G = 13.5	G = 9.5	G =	G =	G = 20.5	G =	G =	G =
	Y = 5.5	Y = 5.5	Y =	Y =	Y = 5.5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 60.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		112			92			469			215	
Lane Group Capacity		245			261			546			410	
v/c Ratio		0.46			0.35			0.86			0.52	
Green Ratio		0.22			0.16			0.34			0.34	
Uniform Delay d_1		20.1			22.5			18.4			15.8	
Delay Factor k		0.11			0.11			0.39			0.13	
Incremental Delay d_2		1.4			0.8			13.0			1.2	
PF Factor		1.000			1.000			1.000			1.000	
Control Delay		21.4			23.3			31.4			17.1	
Lane Group LOS		C			C			C			B	
Approach Delay	21.4			23.3			31.4			17.1		
Approach LOS	C			C			C			B		
Intersection Delay	25.8			Intersection LOS			C					

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PARTNERS
John M. Tozzi, P.E.
Edward V. Woods, P.E.
Donald G. Sovey, P.L.S.

Creighton Manning

May 17, 2011

Mr. Roderick Valente
New Castle Asphalt, LLC
118 Button Road
Waterford, NY 12188

RE: Supplemental Traffic Evaluation, New Castle Blacktop Plant, City of Rensselaer, Rensselaer County, NY; CME Project No. 10-259

Dear Mr. Valente:

In response to City of Rensselaer Planning Commission comments, Creighton Manning Engineering, LLP (CME) has completed a traffic evaluation at the US Route 9 and US Route 20 (Columbia Turnpike)/NY Route 9J/South Street intersection for the proposed New Castle Blacktop Plant, located in the Port of Rensselaer. CME previously completed a traffic evaluation for this project dated March 2, 2011. The purpose of this additional analysis is to document the existing and future traffic conditions at this additional intersection.

ENGINEERS
PLANNERS
SURVEYORS

A. Existing Conditions

The Columbia Turnpike/NY Route 9J/South Street is an unsignalized intersection with stop sign control on the eastbound Route 9J approach and the westbound South Street approach. The eastbound Route 9J approach and westbound South Street approaches both consist of a single lane for right-turn movements only (left-turns are restricted on these approaches). The northbound and southbound Route 9&20 approaches both consist of a through-lane and a shared through/right-turn lane. (Left-turns are restricted on both of these approaches).

The peak hour of traffic in this area was determined to be from 7:15 to 8:15 a.m. based on the previous traffic counts. Therefore, a traffic count during this period was conducted at the Route 9&20/Route 9J/South Street intersection on April 29, 2011. This coincides with the peak traffic period of the project site.

Passenger cars made up 94% of the AM peak hour traffic volumes with heavy vehicles making up the remaining 6% at the intersection. The existing AM peak hour traffic volumes are shown on Figure 1-1. The raw turning movement count data is included under Attachment A.

B. Traffic Forecasts

Trip Distribution, Assignment, and Build Volumes

Given that the project is anticipated to open this construction season, the existing traffic volumes will serve to represent predevelopment conditions.

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Albany, NY 12205
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518.446.0397 (f)
www.cmellp.com

The site generated traffic was distributed according to the trip distribution and assignment patterns discussed in the previous traffic evaluation. The volumes were carried through from the Route 9J/South Street/Irwin Stewart Port Expressway intersection to the Route 9&20/Route 9J/South Street intersection. It is expected that 90% of site generated truck traffic will travel to and from the west on Routes 9&20, while the remaining 10% of site generated truck traffic will travel to and from the east on Routes 9&20. The trip distribution and trip assignment for the project are shown on Figures 1-2 and 1-3, respectively.

Trips generated by the operations were then added to the existing traffic volumes, which result in the Build traffic volumes. These volumes represent conditions *after* the plant is in operation and is shown on Figure 1-4.

C. Intersection Operations

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using the latest version of the Highway Capacity Software (HCS+ version 5.4) which automates the procedures contained in the *2000 Highway Capacity Manual,* the industry standard for evaluating intersection operations and traffic impacts. Attachment B contains the detailed HCS Level of Service reports.

Table 1 summarizes the results of the Level of Service calculations for the AM peak hour.

Table 1 – Unsignalized Level of Service Summary

Intersection Approach		AM Peak Hour	
		Existing	Build
Columbia Turnpike/Route 9J/South St			
South St WB	R	F (61)	F (93)
Rt 9J EB	R	B (12)	B (12)

Key: X (Y) = Level of Service (Delay, seconds per vehicle).
WB, EB = Westbound and Eastbound intersection approaches.
R = right-turn movements.

The above analysis indicates that the westbound South Street approach currently operates at a LOS F with delays of up to approximately 61 seconds. These delays are primarily due to a lack of gaps in the traffic on Route 9&20. With the additional 31 truck trips from the site exiting South Street onto Route 9&20, the average delay is expected to increase by approximately 32 seconds. The queues on the ramp often back up to South Street during the peak hour and this condition is expected to continue in the future with any development in the Port. However, most (approximately 78%) of the traffic volume on the ramp originates from drivers entering the city from East Greenbush on Route 9J, while approximately 20% are vehicles from the Port of Rensselaer, and the remaining 2% are vehicles from South Street. Therefore, the delays are primarily experienced by commuters and port traffic. The Port Expressway was originally constructed at a time where the port was more heavily used, particularly by BASF. Therefore, use of the area roadways has likely decreased since BASF's closure in 2000.

The port expressway and Route 9J/South Street ramps are the only viable way for trucks to access Route 9&20 from the Port of Rensselaer. Sending truck traffic through the Fort Crailo neighborhood or East Street are not viable options. And, adding a traffic light that only serves a

right turn movement would unnecessarily increase the delays to the higher traffic volumes on Route 9&20.

Therefore, the increases in delay during the AM peak hour are considered an acceptable condition given that this is a temporary peak hour condition and that off-peak periods are expected to operate at lower delays. The Route 9J/South Street interchange with Route 9&20 should continue to serve as the primary access to the Port of Rensselaer.

D. Conclusions

The New Castle Blacktop Plant is estimated to generate a peak traffic flow of approximately 68 truck trips during the peak hour (34 entering, 34 exiting) at maximum production. After distributing the project generated traffic through the local roadway network, it is projected that the intersection of Route 9&20/Route 9J/South Street will operate at level of service F, but is otherwise considered an acceptable condition given that it is limited to the peak hour and that off-peak periods would operate with lower delays. Furthermore, the Route 9&20/Route 9J/South Street interchange should continue to serve as the primary regional access for the Port of Rensselaer.

Please feel free to call our office if you have any questions or comments regarding the above analysis.

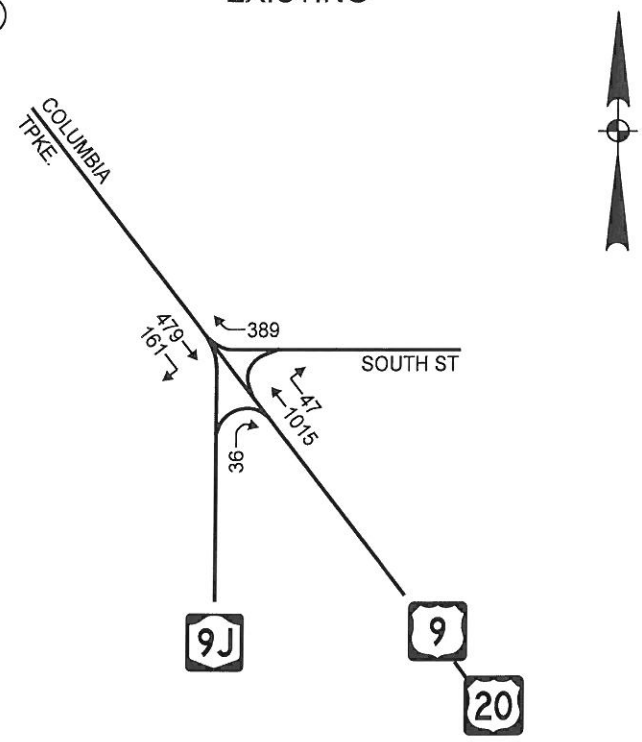
Respectfully submitted,
Creighton Manning Engineering, LLP

Kenneth Wersted, P.E.
Project Manager

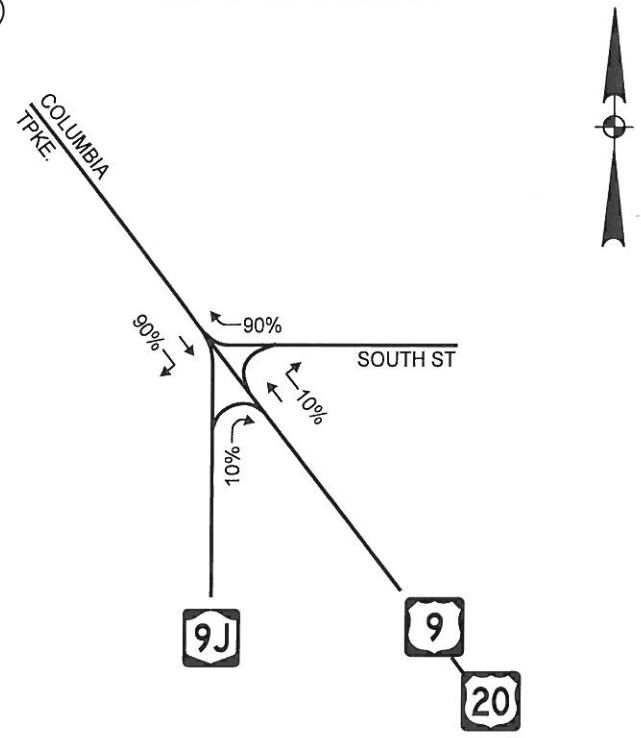
Attachments

C: Paul Griggs, Griggs-Lang Consulting Geologists, Inc.

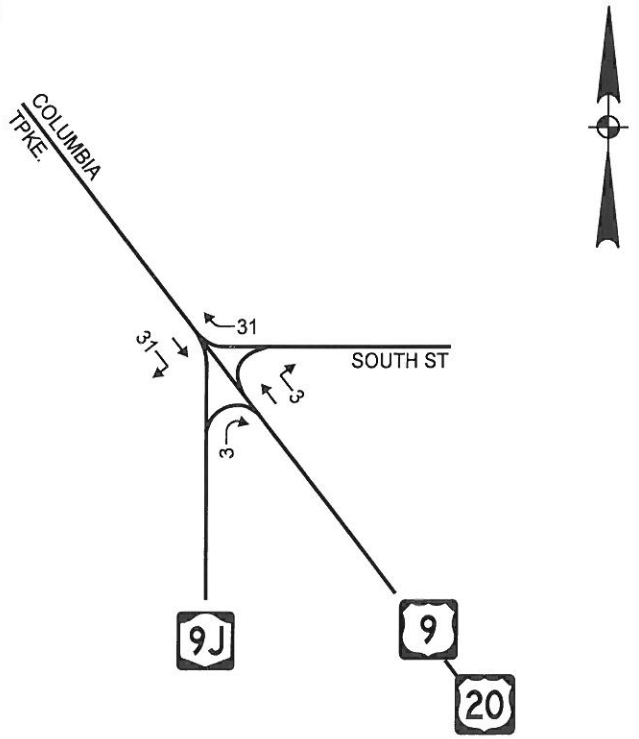
1 EXISTING



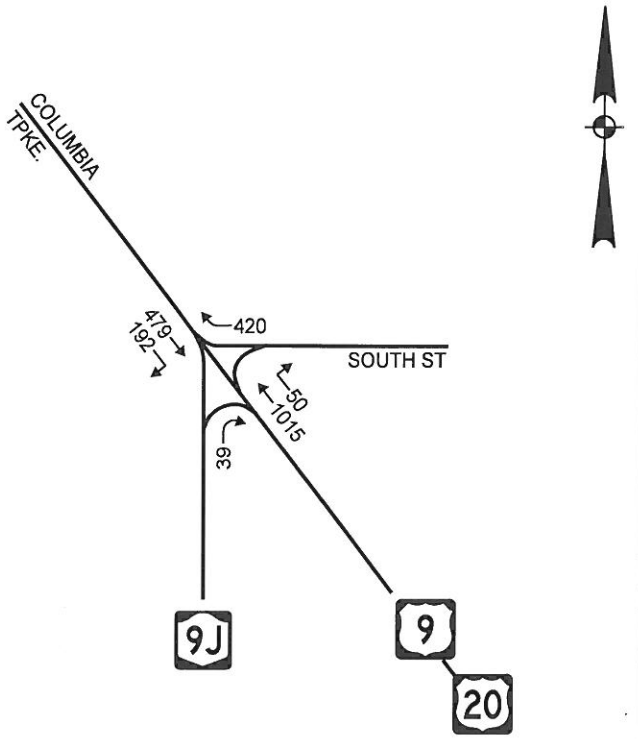
2 TRIP DISTRIBUTION



3 TRIP ASSIGNMENT



4 BUILD



AM PEAK HOUR
TRAFFIC VOLUMES

NEW CASTLE BLACKTOP PLANT
CITY OF RENSSELAER, NEW YORK

Creighton Manning

PROJECT: 110-259	DATE: 3/2011	FIGURE: 1

F:\Projects\2010\110-259 New Castle Asphalt\cadd\dgn\figures\110-259_fig_trf_suppl.dgn

Attachment A – Raw Traffic Count Data

Project: 110-259
Counted By: KGD
Location: Rensselaer, NY
Comments:

File Name : tm10259a2
Site Code : 11259-2
Start Date : 4/29/2011
Page No : 1

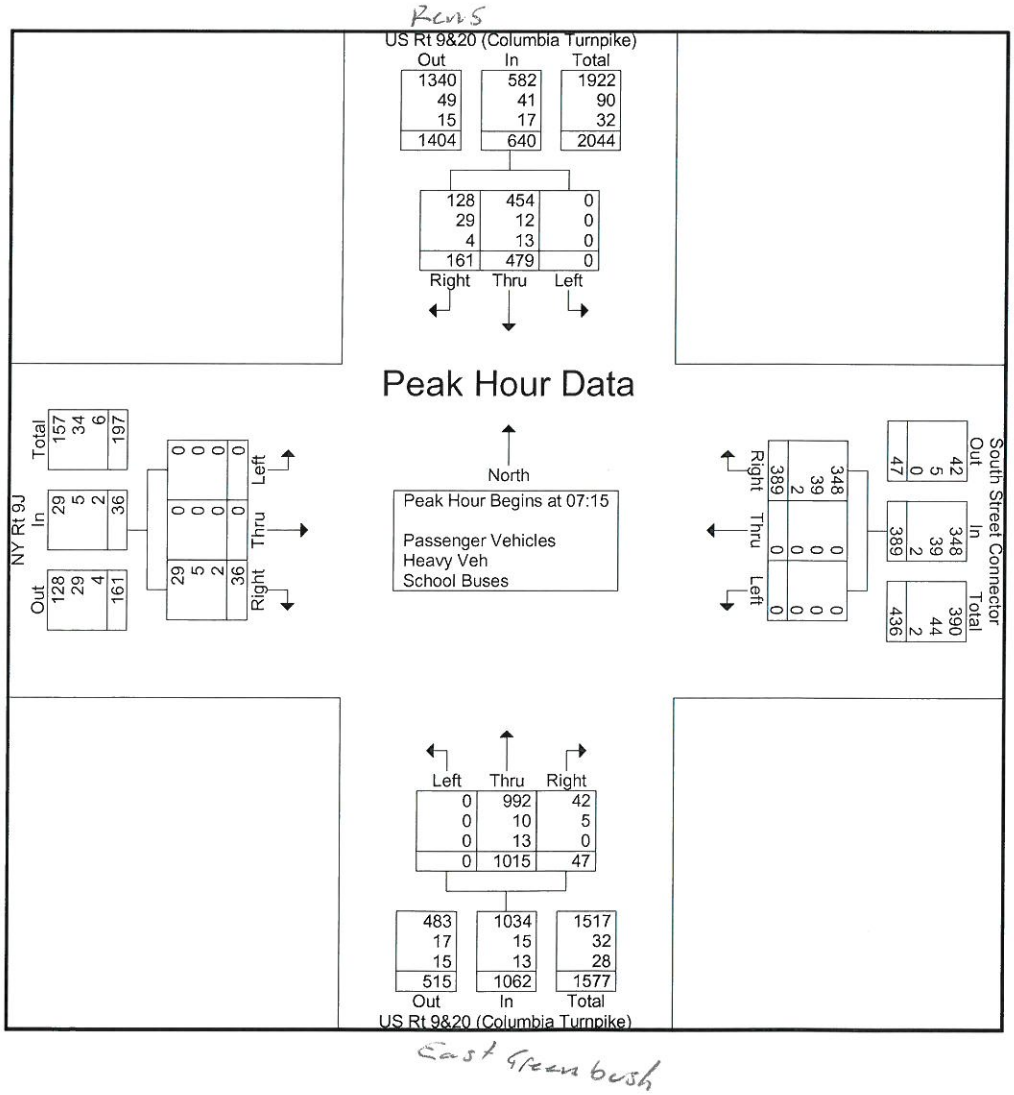
Groups Printed- Passenger Vehicles - Heavy Veh - School Buses

	NY Rt 9J Eastbound				South Street Connector Westbound				US Rt 9&20 (Columbia Turnpike) Northbound				US Rt 9&20 (Columbia Turnpike) Southbound							
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:15	0	0	4	4	0	0	83	83	0	205	11	216	0	100	36	0	136	0	439	439
07:30	0	0	4	4	0	0	92	92	0	273	10	283	0	110	46	0	156	0	535	535
07:45	0	0	11	11	0	0	120	120	0	266	14	280	0	158	45	0	203	0	614	614
Total	0	0	19	19	0	0	295	295	0	744	35	779	0	368	127	0	495	0	1588	1588
08:00	0	0	17	17	0	0	94	94	0	271	12	283	0	111	34	0	145	0	539	539
Grand Total	0	0	36	36	0	0	389	389	0	1015	47	1062	0	479	161	0	640	0	2127	2127
Apprch %	0	0	100		0	0	100		0	95.6	4.4		0	74.8	25.2					
Total %	0	0	1.7	1.7	0	0	18.3	18.3	0	47.7	2.2	49.9	0	22.5	7.6		30.1	0	100	
Passenger Vehicles	0	0	29	29	0	0	348	348	0	992	42	1034	0	454	128		582	0	0	1993
% Passenger Vehicles	0	0	80.6	80.6	0	0	89.5	89.5	0	97.7	89.4	97.4	0	94.8	79.5	0	90.9	0	0	93.7
Heavy Veh	0	0	5	5	0	0	39	39	0	10	5	15	0	12	29		41	0	0	100
% Heavy Veh	0	0	13.9	13.9	0	0	10	10	0	1	10.6	1.4	0	2.5	18	0	6.4	0	0	4.7
School Buses	0	0	2	2	0	0	2	2	0	13	0	13	0	13	4		17	0	0	34
% School Buses	0	0	5.6	5.6	0	0	0.5	0.5	0	1.3	0	1.2	0	2.7	2.5	0	2.7	0	0	1.6

Project: 110-259
Counted By: KGD
Location: Rensselaer, NY
Comments:

File Name : tm10259a2
Site Code : 11259-2
Start Date : 4/29/2011
Page No : 2

	NY Rt 9J Eastbound				South Street Connector Westbound				US Rt 9&20 (Columbia Turnpike) Northbound				US Rt 9&20 (Columbia Turnpike) Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 7:15:00 AM to 8:00:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 7:15:00 AM																	
7:15:00 AM	0	0	4	4	0	0	83	83	0	205	11	216	0	100	36	136	439
7:30:00 AM	0	0	4	4	0	0	92	92	0	**273**	10	**283**	0	110	**46**	156	535
7:45:00 AM	0	0	11	11	0	0	**120**	**120**	0	266	**14**	280	0	**158**	45	**203**	**614**
8:00:00 AM	0	0	**17**	**17**	0	0	94	94	0	271	12	283	0	111	34	145	539
Total Volume	0	0	36	36	0	0	389	389	0	1015	47	1062	0	479	161	640	2127
% App. Total	0	0	100		0	0	100		0	95.6	4.4		0	74.8	25.2		
PHF	.000	.000	.529	.529	.000	.000	.810	.810	.000	.929	.839	.938	.000	.758	.875	.788	.866
Passenger Vehicles	0	0	29	29	0	0	348	348	0	992	42	1034	0	454	128	582	1993
% Passenger Vehicles	0	0	80.6	80.6	0	0	89.5	89.5	0	97.7	89.4	97.4	0	94.8	79.5	90.9	93.7
Heavy Veh	0	0	5	5	0	0	39	39	0	10	5	15	0	12	29	41	100
% Heavy Veh	0	0	13.9	13.9	0	0	10.0	10.0	0	1.0	10.6	1.4	0	2.5	18.0	6.4	4.7
School Buses	0	0	2	2	0	0	2	2	0	13	0	13	0	13	4	17	34
% School Buses	0	0	5.6	5.6	0	0	0.5	0.5	0	1.3	0	1.2	0	2.7	2.5	2.7	1.6



Attachment B – Level of Service Analysis

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*DPR*	Intersection	*RTS9&20/South St/RT 9J*
Agency/Co.	*CME, RTS9&20SOUTHexam*	Jurisdiction	*City of Rennselaer*
Date Performed	*5/2/2011*	Analysis Year	*2011 Existing*
Analysis Time Period	*AM PH*		

Project Description	*110-259 - New Castle Blacktop Plant*
East/West Street: *Route 9J/South Street*	North/South Street: *US Routes 9 & 20*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*1015*	*47*		*479*	*161*
Peak-Hour Factor, PHF	*1.00*	*0.94*	*0.94*	*1.00*	*0.79*	*0.79*
Hourly Flow Rate, HFR (veh/h)	*0*	*1079*	*50*	*0*	*606*	*203*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)			*36*			*389*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*0.53*	*1.00*	*1.00*	*0.81*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*67*	*0*	*0*	*480*
Percent Heavy Vehicles	*0*	*0*	*20*	*0*	*0*	*11*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*1*	*0*	*0*	*1*
Configuration			*R*			*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			*R*
v (veh/h)					*480*			*67*
C (m) (veh/h)					*498*			*593*
v/c					*0.96*			*0.11*
95% queue length					*12.34*			*0.38*
Control Delay (s/veh)					*60.7*			*11.8*
LOS					*F*			*B*
Approach Delay (s/veh)	--	--	*60.7*			*11.8*		
Approach LOS	--	--	*F*			*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*DPR*	Intersection	*RTS9&20/South St/RT 9J*
Agency/Co.	*CME, RTS9&20SOUTHbuam*	Jurisdiction	*City of Rennselaer*
Date Performed	*5/2/2011*	Analysis Year	*2011 Build*
Analysis Time Period	*AM PH*		

Project Description	*110-259 - New Castle Blacktop Plant*
East/West Street: *Route 9J/South Street*	North/South Street: *US Routes 9 & 20*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*1015*	*50*		*479*	*192*
Peak-Hour Factor, PHF	*1.00*	*0.94*	*0.94*	*1.00*	*0.79*	*0.79*
Hourly Flow Rate, HFR (veh/h)	*0*	*1079*	*53*	*0*	*606*	*243*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)			*39*			*420*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*0.53*	*1.00*	*1.00*	*0.81*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*73*	*0*	*0*	*518*
Percent Heavy Vehicles	*0*	*0*	*26*	*0*	*0*	*17*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*1*	*0*	*0*	*1*
Configuration			*R*			*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			*R*
v (veh/h)					*518*			*73*
C (m) (veh/h)					*481*			*561*
v/c					*1.08*			*0.13*
95% queue length					*16.44*			*0.45*
Control Delay (s/veh)					*92.5*			*12.4*
LOS					*F*			*B*
Approach Delay (s/veh)	--	--	*92.5*			*12.4*		
Approach LOS	--	--	*F*			*B*		

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CULTURAL RESOURCES INVESTIGATION

NOTE: ALL OVERSIZED DRAWINGS IN SEPARATE FILES

PHASE I CULTURAL RESOURCES SURVEY
SITE ASSESSMENT AND SITE IDENTIFICATION PHASES
PROPOSED NEW CASTLE ASPHALT PLANT
CITY OF RENSSELAER, RENSSELAER COUNTY, NEW YORK

Prepared for
New Castle Asphalt, LLC
Riverside Avenue
Rensselaer, New York 12144

Prepared by
Stephen J. Oberon
Columbia Heritage, Ltd.
P.O. Box 235
Old Chatham, New York 12136

Report CA634AB-1-6-11
June 2011

TABLE OF CONTENTS

PHASE IA SITE ASSESSMENT STUDY

PROJECT BACKGROUND

Construction of an asphalt plant is proposed for a parcel encompassing approximately 4.6 acres (1.9 hectares) of almost flat terrain in the southwest portion of the City of Rensselaer and the western part of Rensselaer County, in east-central New York State. The site is bounded by the Hudson River on the west, the Conrail tracks alongside Riverside Avenue on the east and the Irwin Stewart Expressway on the south. The City of Albany is located directly across the river from the study area. The project will involve construction of a blacktop mixing plant, detention ponds, an on-site septic system, parking areas and an entrance from the south.

This portion of the City of Rensselaer, is characterized mostly by industrial and commercial structures built during the second half of the twentieth century. The landscape is dominated by the building and associated stacks of the Empire-Besicorp power generation complex adjacent to the northeast across Riverside
Avenue and the Polsinello Fuel complex adjacent to the south and southeast across the Irwin Stewart Expressway.

As a part of compliance with operative historic preservation laws, Columbia Heritage, Ltd. was contracted by New Castle Asphalt, LLC to perform a Phase IA site assessment study and a Phase IB site identification survey for the proposed project area. This investigation follows the current standards and guidelines developed by the New York Archaeological Council (NYAC) and adopted by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

The proposed construction site is located near the eastern edge of the Hudson Valley portion of the Hudson-Mohawk Lowlands region of New York State, a 10- to 20-mile (16- to 32-kilometer)-wide lowland situated between the Taconic Hills on the east and the Helderberg Escarpment on the west with the Hudson River running down the center. The vicinity of the project area is geologically characterized by Middle Ordovician bedrock consisting mostly of Normanskill shale (Thompson 1966: Figs. 8 & 33; Fisher et al. 1970).

At the end of the Pleistocene Glacial Epoch, the Hudson Valley in the Albany area was occupied by a glacial lake (Glacial lake Albany). Streams flowing into this lake an meltwaters from the Pleistocene glaciers retreating northward provided sediment that was deposited in the lake, Coarse-textured sand and gravel were deposited as deltas where streams entered the lake. None of these delta deposits occur at the parcel that is the focus of this investigation. Finer grained sediment was transported and deposited in the center of the lake, primarily as repeated thin beds of varved silt and clay, Occasionally, storm events and lake bottom currents cut channels in the silt and clay deposits that were filled in with isolated lenses of sand and gravel. After Glacial Lake Albany retreated, the flow of the Hudson River was re-established. Sediment was transported from as far away as the Adirondack Mountains and redeposited on the bottom and sides of the Hudson River. These sediments contain distinctive lithologies consisting of particular granites, gneisses and similar igneous and metamorphic rock types that do not outcrop any closer than the Adirondacks. During flood events, thin layers of predominantly silt and clay with some sand and little gravel were deposited on the Hudson floodplain.

As noted above, the area to be affected by proposed construction consists of mostly flat terrain. A layer of gravel has been deposited over most of the ground surface. A steep slope characterizes the riverbank along the western edge of the property. This subarea is populated by grasses and young forest growth, as is the northernmost portion of the parcel, which is separated from the gravel surface, the railroad tracks and the property adjacent on the north by a chain link fence.

This Phase IA site assessment study was performed between March and May 2011 with Stephen Oberon, serving as Principal Investigator, assisted by Kim Croshier, using resources of the New York State Office of Parks, Recreation and Historic Preservation, the New York State Museum, the New York State Library, and the New York State Archives in Albany, and the Rensselaer County Public Library in Troy. A walking reconnaissance of the study area was carried out by the Principal Investigator, during which the relative archaeological potential of the various subareas was assessed, any prior disturbance and other factors likely to reduce such potential were noted, and any structures with a view of the study area that meet minimum age criteria for inclusion on the State and National Register of Historic Places were identified. We are grateful to Louis Polsinello for sharing his knowledge of the site and its vicinity.

CULTURAL BACKGROUND AND SENSITIVITY ASSESSMENT

As noted, the property that makes up the area to be affected by proposed construction consists of mostly flat land much of whose ground surface is currently covered by gravel, with narrow subareas of grasses and young forest along the riverbank and the northernmost portion of the property. No visible ruins or anomalies that might indicate the presence of buried structural remains or cultural features were identified during walking reconnaissance under spring leaf conditions.

Historic Structures

Five structures currently listed on the National Register of Historic Places are located a radius of one mile (1.6 kilometers) of the proposed construction. These are listed below.

Number	Name	Location
07NR05742	W.P.Irwin Bank Building	156 Broadway, Rensselaer
90NR01004	Aiken House	Riverside & Aiken Ave, Rensselaer
90NR01003	Fort Crailo	Columbia & Riverside Ave, Rensselaer
02NR04995	A. Mendelson & Son Company Building	Albany
90NR01673	Cherry Hill	Albany

The proposed construction would not be visible from any of these historic locations. No structures that have been nominated to or determined eligible for inclusion on the State or National Register were noted within a one-mile (1.6-kilometer) radius of the area to be affected. Given the urban landscape to the west and north, the proposed construction would be have the potential to be visible at a considerable distance and to varying degrees from historically or architecturally significant buildings in the City of Rensselaer and the City of Albany. The potential visual impact of all potentially sensitive receptors, including structures listed or potentially eligible for inclusion on the National Register of Historic Places was addressed in the May 2011 Visual Impact Assessment prepared by Griggs-Lang Consulting Geologists, which evaluated potential visual impact in accordance with the New York State Department of Environmental Conservation's Visual Policy. This study documented that even the highest and most exposed parts of the property (i.e., the top of the hot storage silos) were visible from very few locations in the 2.5-mile (4-kilometer) area encompassed by that study. The site's visibility was found to be very limited even during leaf-off conditions. The Principal Investigator surveyed each of the potential receptors, identified any potentially-eligible structures at these locations, and confirmed the findings of the Griggs-Lang assessment.

Native American Era

Four sites of Native American occupation are listed in the New York State Office of Parks, Recreation

and Historic Preservation (OPRHP) archaeological files within approximately one mile (1.6 kilometers) of the study area. One non-duplicate site is listed in the New York State Museum (NYSM) site files. These sites are summarized as follows:

Site File Number	Name/Time Period/Culture	Distance
A08303.000101 (NYSM 11692)	Papscane Creek Site 1 / Late Woodland Mohican camp (A.D. 1000-1600) NRE	1mi/1,6km
A08303.000075	Stolen Flag Site / time period/culture unknown	0.75mi/1.2km
A08341.000008	Unnamed / Late Archaic and Woodland	0.66mi/1.1km
A08303.000093	North Papscane Island Prehistoric Site, Loci 1-3 / Late Woodland?	0.75mi/1.2km
NYSM 354	no temporal or cultural information	0.4mi/0.6km

Those sites for whom temporal information exists date from the later periods of indigenous occupation extending to the arrival of the Dutch in the area during the early seventeenth century. This is consistent with other sites in the nearby Town of North Greenbush and Town of East Greenbush for which temporal and cultural context exists document aboriginal activity in this area over this period of some 4200 years.

This area in and around the City of Rensselaer has not been the subject of systematic professional archaeological survey, although several site-specific studies have been done here over the past two decades (Milner 2003, Hartgen 1992, 2002, Collamer 1991, Wilson 1984). Much of the land included within the city limits contains existing structures and roads dating to the period prior to the 1970's when archaeological survey became a requirement for many construction projects. It is therefore likely that both the number and range of Native American occupation sites actually present this area are underrepresented in the current site files.

Based on the proximity of known sites to the affected area, a theoretical potential must be recognized for buried cultural resources associated with the Native American era of occupation to be present. These are likely to represent the remains of what would most likely have been seasonal occupations by small groups exploiting the plant and animal resources offered by the nearby river and the rich soils of the floodplain environments. Such occupations would most likely have been a component in the seasonal patterns of movement that characterized indigenous populations through at least the Archaic and Transitional periods, although small seasonal occupation sites were also present during later times.

As noted, Native American archaeological remains likely to be present in this area would probably consist of small, seasonally occupied camps that would have supported small numbers of people for short periods of time, probably on a recurring basis. Cultural remains associated with such sites typically are sparse, shallow and spatially restricted, although they may include hearths, storage pits and/or traces of structures. Larger sites, such as existed at or near this location in the seventeenth century, is also likely to have included refuse deposits and fortifications. Exposed veins of lithic resources suitable for the manufacture of stone tools, and rock formations such as caves and overhangs that could provide shelter, are also likely to have attracted the indigenous population of the area, as are certain natural phenomena, such as springs and unique

rock formations, that would have held religious significance. The physiographic character of the study area precludes the presence of these latter categories of sites. Reconnaissance of the property noted no exposed deposits of lithic material known to have been used in the manufacture of stone tools, no rock overhangs or caves that might have served as shelters, and no natural features known to have been endowed with religious significance.

The potential for the subject parcel to contain buried Native American era cultural remains would be greatly reduced by information provided by Louis Polsinello, owner of the property adjacent to the south. Mr. Polsinello notes the study area to have been low-lying and poorly-drained parcel often characterized by standing water during times of flood or heavy rain prior to construction of the existing turning area for river traffic in the 1970's. At that time, the property was raised to its current elevation by the deposition of fill from the river (personal communication). To the degree this description applies to the land included in the current study area, a low cultural resources potential would be assessed.

European American Era

European American era settlement of this portion of what is now the City of Rensselaer dates to middle decades of the seventeenth century, when the land was part of the Greenbush Farm owned by Jeremias Van Rensselaer. Settlement near the Hudson gravitated toward the intersections of early roads and locations where energy to drive water powered industries was available, and the settlements of Bath-on-the-Hudson and Greenbush, now part of the City of Rensselaer, and the village of Defreestville grew during the middle decades of the nineteenth century.

Outside these more nucleated locations, settlement was characterized by scattered farmsteads, with houses and other buildings constructed along roadways. Most early residents engaged primarily in subsistence farming, with industrial and commercial activity focused in rural service centers such as those noted above. The development and elaboration of the railroad transportation network during the middle decades of the nineteenth century and the growth of industry during the Civil War era increased the power of larger regional centers such as Troy and Rensselaer to attract both capital and population at the expense of local manufacturing businesses.

Following its arrival in Rensselaer, then known as Greenbush, in 1842, the Albany and West Stockbridge Railroad and its successors and competitors changed the appearance of the settlement, particularly along the Hudson. The rails known today as the Troy Industrial Track are the only surviving portion of the original Troy and Greenbush Railroad from this era (Ernie Mann, personal communication). The New York Central tracks were built in 1851, providing a quantum advance in the scale and scope of rail service provided to the town.

The historical and archaeological site files maintained by the New York State Office of Parks, Recreation and Historic Preservation in Albany lists four sites within one mile (1.6 kilometers)of the study area pertaining to the European American era of settlement. These are outlined below.

Unique Site Number	Name(s) / Description	Location
A08341.000003	Douw's Point / 17th century distillery	500ft/152m

A08303.000054	Rut Van Deusen House Site (?) / general location of early 18th century house	0.85mi/1.4km
A08303.000055	Kost Verloren House Site / general location of 18th century house	0.9mi/1.5km
A08341.000005	Vlie House Site / general area of mid-18th century house	1000ft/305m

No structures are depicted on or immediately adjacent to the subject property on nineteenth century maps of the area. Based on known European American era settlement patterns, the proximity of documented early structures to the north and south, and a search of historical texts and maps, a general potential must be recognized for the presence of buried cultural remains pertaining to the seventeenth through nineteenth century occupation of the area for any intact soils dating from this period that might be present within the proposed construction area. The information provided by Mr. Polsinello discussed above would also pertain to European American era cultural resources potential. The Douw Point Site was discovered on his property in 1972, in a location near the riverbank that was characterized by good drainage, in contrast to the physiography of the subject parcel (personal communication). The dramatic variation across such a comparatively short distance may well be due to the depositional characteristics of this former lake area outlined in the general geological and geomorphological background provided in the previous section.

RECOMMENDATIONS

A Phase IB site identification survey is recommended for the portions of the affected area that contain intact former or current at least moderately well-drained upper soils, as such locations in this physiographic setting must be considered to have a potential for the presence of buried Native American and European American era cultural resources. Preliminary deep testing is recommended to ascertain the degree to which such soils are present within the area and at the depths to be affected by proposed construction activity.

PHASE IB SITE IDENTIFICATION SURVEY

RESEARCH DESIGN

The Phase IA site assessment performed for this 4.6-acre (1.9-hectare) study area identified a theoretical potential for cultural resources pertaining to both the Native and the European American eras of occupation to be present within the area to be affected by proposed construction. This assessment was based on the proximity of documented European American era occupation in the immediate vicinity of the project site, and the general potential for Native American cultural activity to have taken place in more physiographically attractive settings along the banks of the Hudson and nearby islands.

Flatter, better-drained locations near a water source have been found to have been preferred by indigenous populations in the Northeast for occupations ranging from small camps to villages. In times of turmoil, defensive considerations were added to these criteria. Steeply sloping and poorly drained areas or wetlands would generally be seen as of low potential for the occurrence of Native American cultural resources. The frequent flooding that characterized most river islands would have created a fertile environment for seasonal gathering and later cultivation of plant resources and exploitation of river fauna.

Exceptions to this assessment would include steeply sloping locations where lithic resources such as chert would have been accessible to indigenous populations and/or where rock overhangs and caves that could have served as shelters are present. Although poorly-drained areas would seldom be expected to contain habitation sites, the more elevated, better-drained peripheries of such places are likely to have been selected for camps from which the plant and animal resources of the wetter areas would be exploited. Such camps would have served as temporary habitation sites and locations where food was prepared, tools completed and repaired, and animal resources processed (i.e., skinned, butchered, smoked, dried) after being procured nearby.

Smaller sites, which predominate prior to the later Woodland Period and continue to occur during this time, are known to have been occupied by indigenous populations in conjunction with what was usually a seasonal exploitation of plant and animal resources. Generally, such camps would be inhabited for short periods of time, although such episodes of occupation are known to have continued on a regular basis over many centuries.

The inventory of reported archaeological sites for this area indicates that Native American occupation persisted from at least the Late Archaic through the Late Woodland period (c. 2400BC-AD 1650) and on into the European American era of settlement during the later seventeenth and eighteenth century. Based on this information, the temporal and cultural affiliation of Native American era archaeological remains that might be expected to occur in this part of what is now the City of Rensselaer could represent all but the earlier phases of human culture in this region.

As mentioned above, occupation through at least the Middle Woodland Period was considered likely to have occurred on a seasonal basis and to have usually been associated with the exploitation of nearby plant and animal resources. The material remains of sites reflecting such behavior are most likely to be sparse, shallow and spatially restricted, although deeper cultural features and remains of structures may be present. Larger sites, usually pertaining to Woodland period occupations, may include deep refuse deposits, remains of more substantial structures

and defensive constructions, such as stockades.

Because reconnaissance had revealed no outcrops of lithic material likely to have been utilized in the manufacture of stone tools, the potential for the presence of bedrock quarry sites was considered low. The absence of caves and rock overhangs eliminates the potential for shelters associated with such features to be present within the affected area. The absence of native stone or glacial outwash in this riverine environment seriously reduces or eliminates the potential for localized exploitation of accessible cobbles and boulders of chert, quartz, quartzite and other lithic resources suitable for the manufacture of stone tools and the presence of small stone processing stations and workshops.

No traces of structures or other anomalies likely to be associated with buried cultural resources were noted in reconnaissance.

Published sources identify no European American era buildings within the affected area during the nineteenth and twentieth centuries, although two early structures are known to have stood a short distance to the north and south. The potential would therefore exist for outbuildings or activity areas associated with these sites to have stood in the area between them. Like smaller traditional Native American sites, the archaeological remains of early buildings, along with the remains of eighteenth century military activity, and cultural features associated with such sites would be likely to be spatially restricted and characterized by sparse cultural material quite limited in vertical extent and occurring near the ground surface in areas not characterized by stream or erosion deposition. The potential for the cultural resources potential of this parcel having been seriously reduced as a result of the late twentieth century filling of a previously inhospitable piece of land must also be considered.

METHODOLOGY

Topographically, the affected area consists of generally flat terrain with steep slopes down to the Hudson River. Most of the property is covered by gravel pavement, with grassy and lightly wooded subareas along its western and northern peripheries.

In view of the oral historical information provided by the owner of the adjacent property, the first issue to be addressed related to whether potentially culture-bearing soils are present and subject to project impact. If so, the potential would exist for the presence of cultural resources pertaining to the early period of European American occupation as well as possible use of the parcel by indigenous groups active in the area over some four millennia.

A subsurface sampling plan was developed calling for mechanically-assisted deep testing to be carried out systematically across portions of the parcel today covered with gravel pavement. If a potential original ground surface were encountered, the surrounding area would be be archaeologically sampled by means of hand-dug shovel test holes executed in a grid pattern and placed at intervals of approximately 50 feet (15 meters). Test holes would be dug using small hand tools and their contents would be screened through 1/4-inch (6.25-millimeter) hardware cloth to facilitate the recovery of smaller cultural items. If deep fill rather than natural soil was encountered past the depth of proposed project impact, the mechanical sampling interval would be doubled to 100 feet (30 meters) until potentially affected natural upper soils were found to be present.

Any pre-World War II era cultural items recovered would be marked with a numbered pin flag and their location recorded on the project map. Any isolated finds of cultural material would be more intensively investigated by means of eight additional screened shovel tests placed 3 and 10 feet (1 and 3 meters) in cardinal directions around the original find spot to assess whether focused cultural activity or a stray find was indicated.

Such methods are considered adequate for detecting traces of smaller Native American camps, special purpose sites and early Euro-American era sites as well as any larger Native or European American era occupations that might be present. Evidence of the remains of very small buildings, such as privies, and single-episode single-person Native American activity areas are less likely to be detected by the 50-foot (15-meter) interval. Since the vicinity of small buildings is usually characterized by some scatter of cultural material, it was hoped the more concentrated presence of cultural items would in turn lead to the identification of these features and/or structural remains during the more intensive investigation that follows initial identification. Likewise, the intensive additional sampling around any potentially early item encountered would increase the chance of correctly identifying spatially restricted sites as activity areas rather than stray finds.

FIELD INVESTIGATION

Phase IB field investigation of the proposed development site was carried out in May of 2011 under partly cloudy to sunny skies, calm conditions and temperature between 70 and 75 degrees Fahrenheit (21 and 24 degrees Centigrade). Ground visibility was generally poor in shovel tested subareas due to the presence of grass and young forest understory, with no ground visibility in locations featuring gravel pavement. The Phase IB field investigation was carried out by the Principal Investigator. A small track hoe with a three-foot (0.9- meter) bucket was provided by the applicant and its operation supervised by the Principal Investigator. Geomorphology was interpreted in the field by Paul Griggs based on observation of the subsurface sampling.

As outlined in the previous section, deep test locations were laid out at intervals of approximately 50 feet (15 meters) across the paved portion of the site and shovel test locations across locations populated by grasses and young forest. Shovel tests were dug by hand using small hand tools and measured roughly 24 inches in diameter. Their contents were screened through 1/4-inch hardware cloth to facilitate the recovery of smaller cultural items. Sampling along the southern edge of the affected area indicated intact if somewhat truncated soils were present, with yellow brown sandy subsoil encountered at depths ranging from six to 16 inches (15-40 centimeters) and overlain by dark to very dark brown silty sand and dark brown root and leaf mat, with both strata containing dense gravel and cobbles. A stratum of dark grey brown sand and a layer of mottled grey and yellow brown clay was encountered beneath the yellow brown sand in TP-3 and TP-6, respectively.

gradual decrease in the presence of fill material was recorded in testing locations moving west to east. The shovel test nearest the riverbank (TP-1) was found to be characterized by grey brown silty sandy fill to a depth of 20.8 inches (52 centimeters); a layer of mottled yellow brown and grey brown clayey silt fill was recorded in TP-2 above what were interpreted as natural upper and subsoils. The test holes dug along the riverbank (TP-8 - TP-14) revealed consistent fill deposits to depths of 22-24 inches (55-60 centimeters). This reinforced reconnaissance observations of this subarea, characterized by a sharp increase in elevation over the adjacent river as typical of a fill environment.

No evidence of Native American cultural activity was encountered in shovel testing. A wire nail, a piece of bottle glass, part of an iron strap, and a fragment of iron fence wire were recovered from TP-6 and iron wire was recovered from TP-7. Cultural items in both test holes occurred in the upper stratum.

Mechanically-assisted sampling in the paved area consisted of first removing the approximately 12 inches ((0.3 meters) of hard-packed gravel and underlying cloth foundation that characterized the ground surface, then proceeding in approximately six-inch (15-centimeter) levels through fill in the hope of encountering natural upper soils to be shovel tested. As noted, testing locations were laid out in a 50-foot (15-meter) grid across the paved area, avoiding places where underground utilities had been identified. The initial track-hoe test (P-1), placed near the southern edge of the property, revealed river bottom fill to be present to a depth of over 70 inches (17.5 meters) with ground water present at 52 inches (130 centimeters). A very similar soil profile was found to characterize the subsequent test (P-2) placed approximately 100 feet (30 meters) to the north and initial sampling within the delineated Area of Potential Effect (APE). Due to the presence of fill to depths exceeding proposed project impact, the sampling interval was lengthened to 100 feet (30 meters) as outlined in the previous section, with the intention of reducing the grid again when potential cultural-bearing upper soils were located.

Mechanically-assisted tests ranged from 42 to 70 inches (10.5 to 17.5 meters) in depth and encountered mottled grey and yellow brown clay and/or dark yellow brown clay with dense cobbles, representing river bottom fill, sometimes beneath or alternating with a level of black cinders and/or twentieth century trash. Ground water was found to be present in many but not all deep tests. Shovel tests placed at approximately 50-foot (15-meter) intervals along the riverbank revealed fill material to be present in this area as well. No potential culture-bearing upper soils were encountered. The testing locations are shown on the project map included in the appendix of this report.

CONCLUSIONS AND RECOMMENDATIONS

Sampling of the area to be affected by proposed construction did not encounter any pre-twentieth century cultural items and indicated most of the property has been filled with at least 42 inches (10.5 meters) of material interpreted as representing dredging deposition associated with construction of the adjacent turning area for river traffic during the 1970's.

In his assessment of the geomorphology of the site, Paul Griggs indicates the site of the proposed blacktop mixing plant is situated on at least two episodes of fill that have been placed atop recent alluvium and glacial lake sediments in the 100-year floodplain of the Hudson River. On-site subsurface investigations indicate that the fill/soil profile, from oldest to youngest, consisted of (a) glacial lake sediments overlain by (b) floodplain deposits overlain by (c) fill composed of mixed wood, sand and gavel, clay and construction debris, overlain by (d) fill consisting of crushed stone (crusher run). The first episode of filling probably occurred during the dredging of the turning basin for the Port of Albany. This fill consisted of mixed wood, dredged sand and gravel (with Adirondack lithologies), dredged silt and clay and construction debris (e.g., recent bricks, concrete, blacktop, shredded metal) dredged from the river, mixed with other fill and deposited on the site. It is recognized by its lack of distinct bedding and mixed composition. The last episode of fill was the placement of a thin layer of crushed stone over the majority of the site, underlain by a layer of filter fabric. It is likely any upper soils present prior to this event were removed, as is standard procedure to stabilize fill deposits (personal communication). The refuse encountered in these fill deposits and the cultural items recovered in shovel testing are seen to have little potential to yield significant cultural information.

Based on this Phase I investigation, proposed construction is seen to have no effect on cultural remains pertaining to the Native American or early European American occupations of the area. Consequently, no further investigation is recommended.

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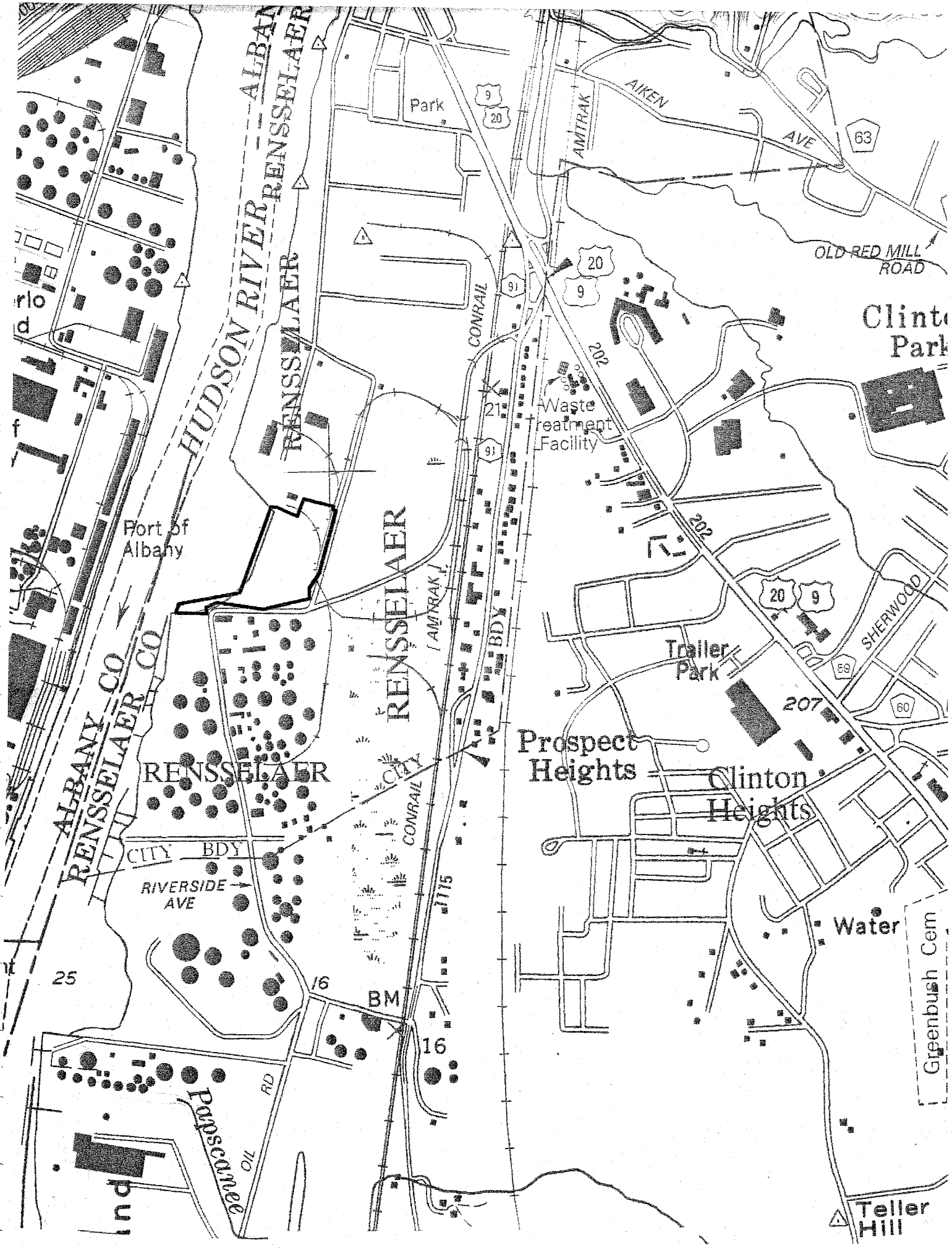
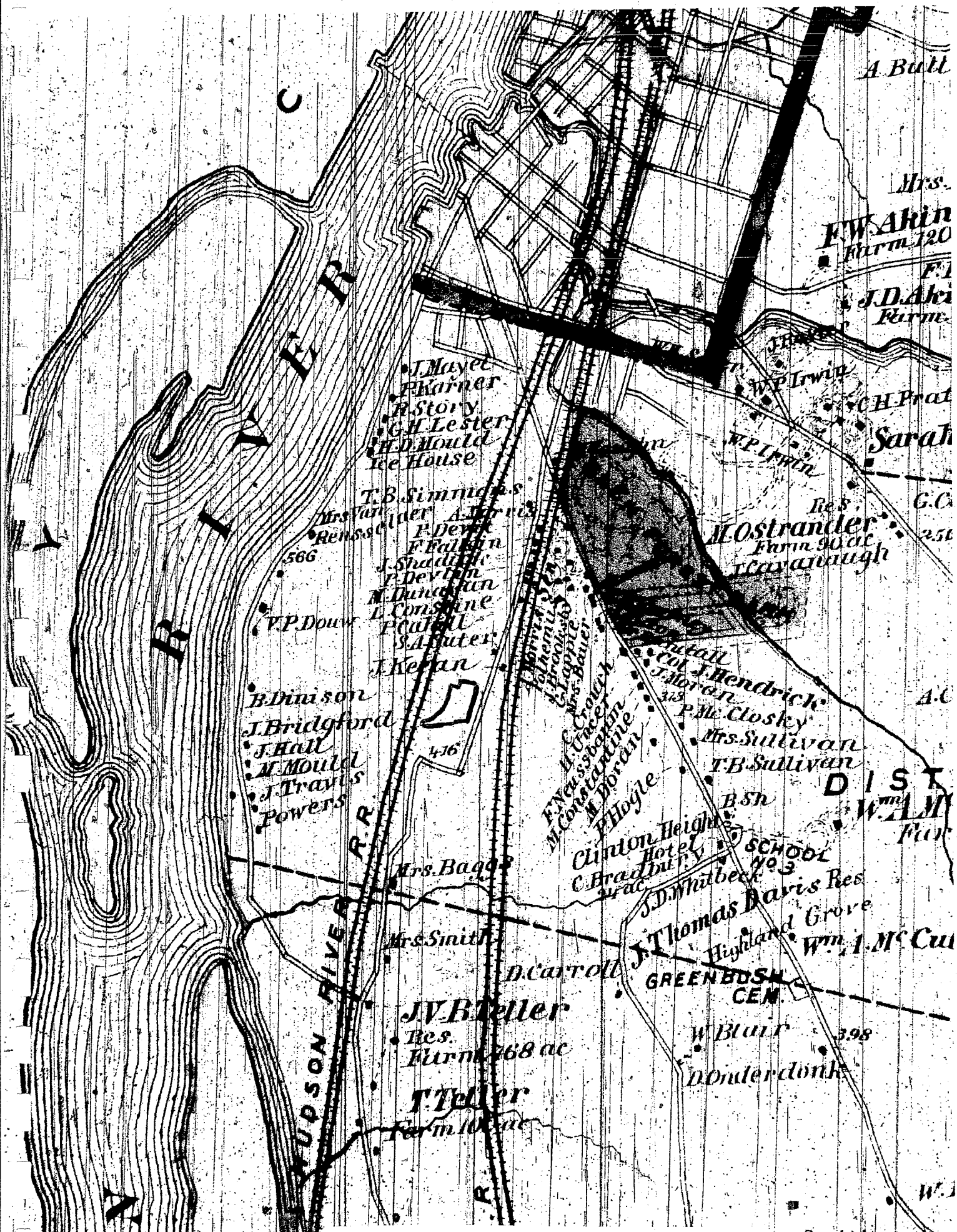
APPENDIX A

FIGURES

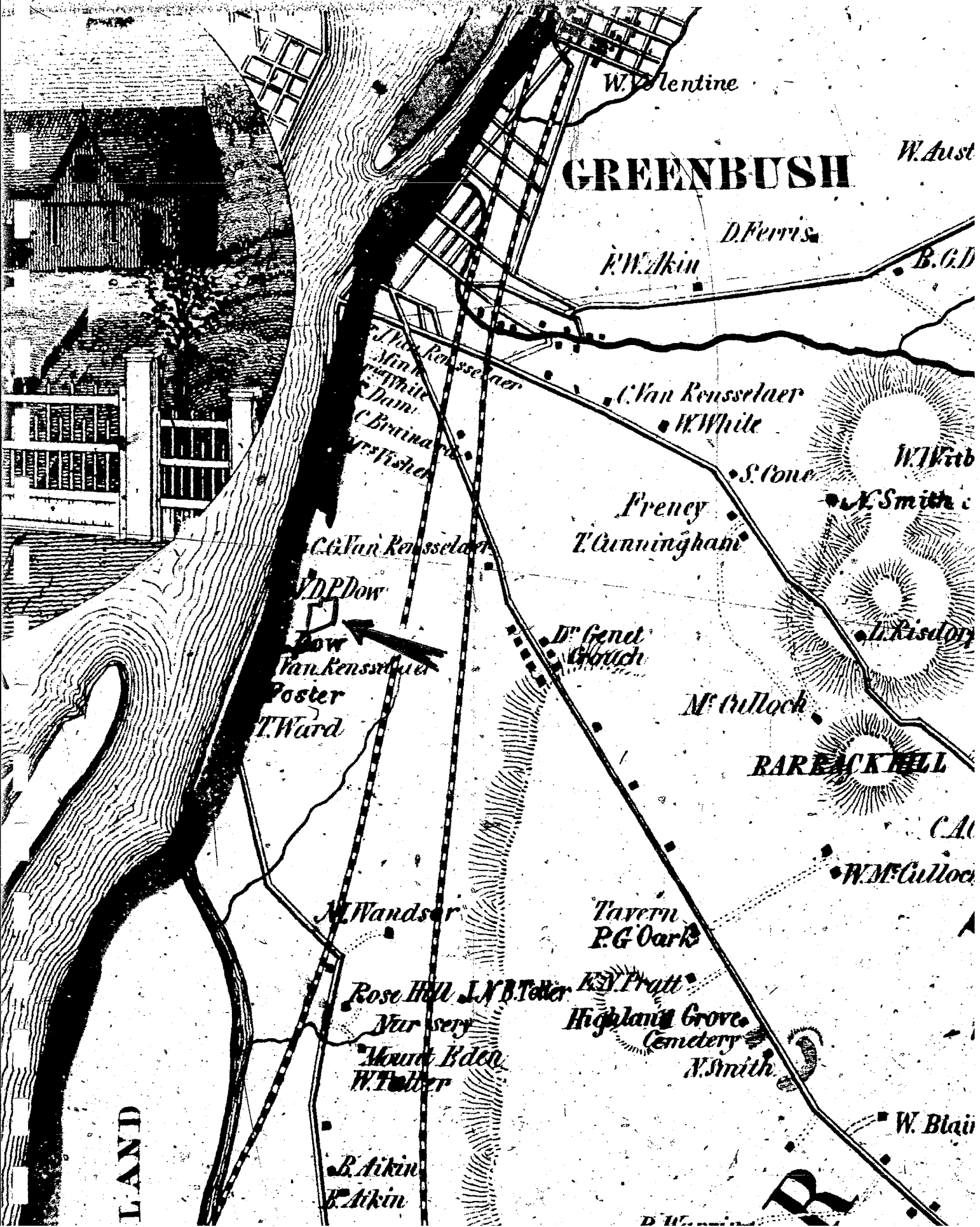


LOCATION OF PROJECT AREA ON USGS
DELMAR, NY, 7.5 MINUTE QUAD SHEET



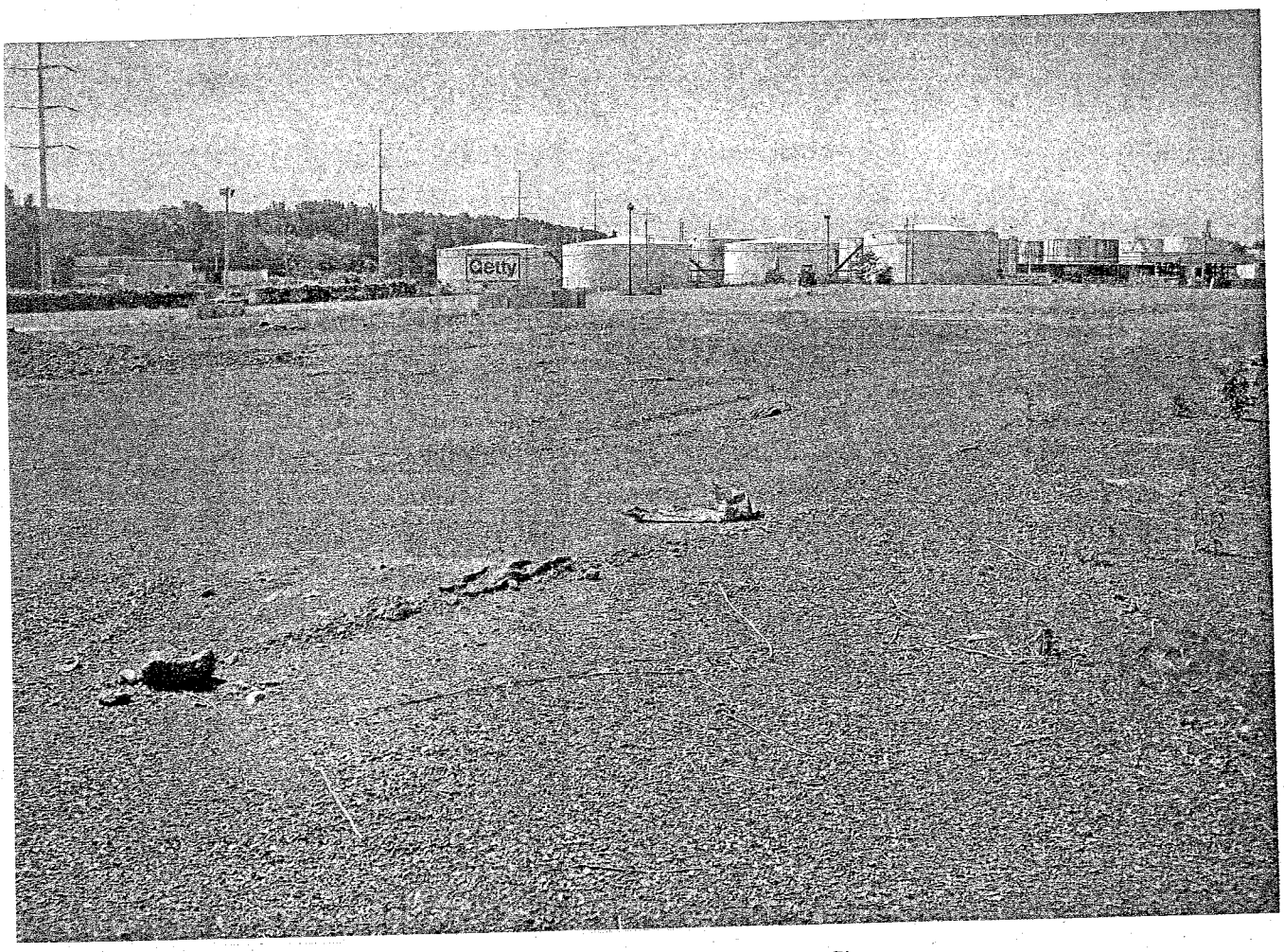
PROJECT AREA AND VICINITY - 1876
(from Beers 1876)

PROJECT AREA AND VICINITY - 1854
(from Rogerson 1854)

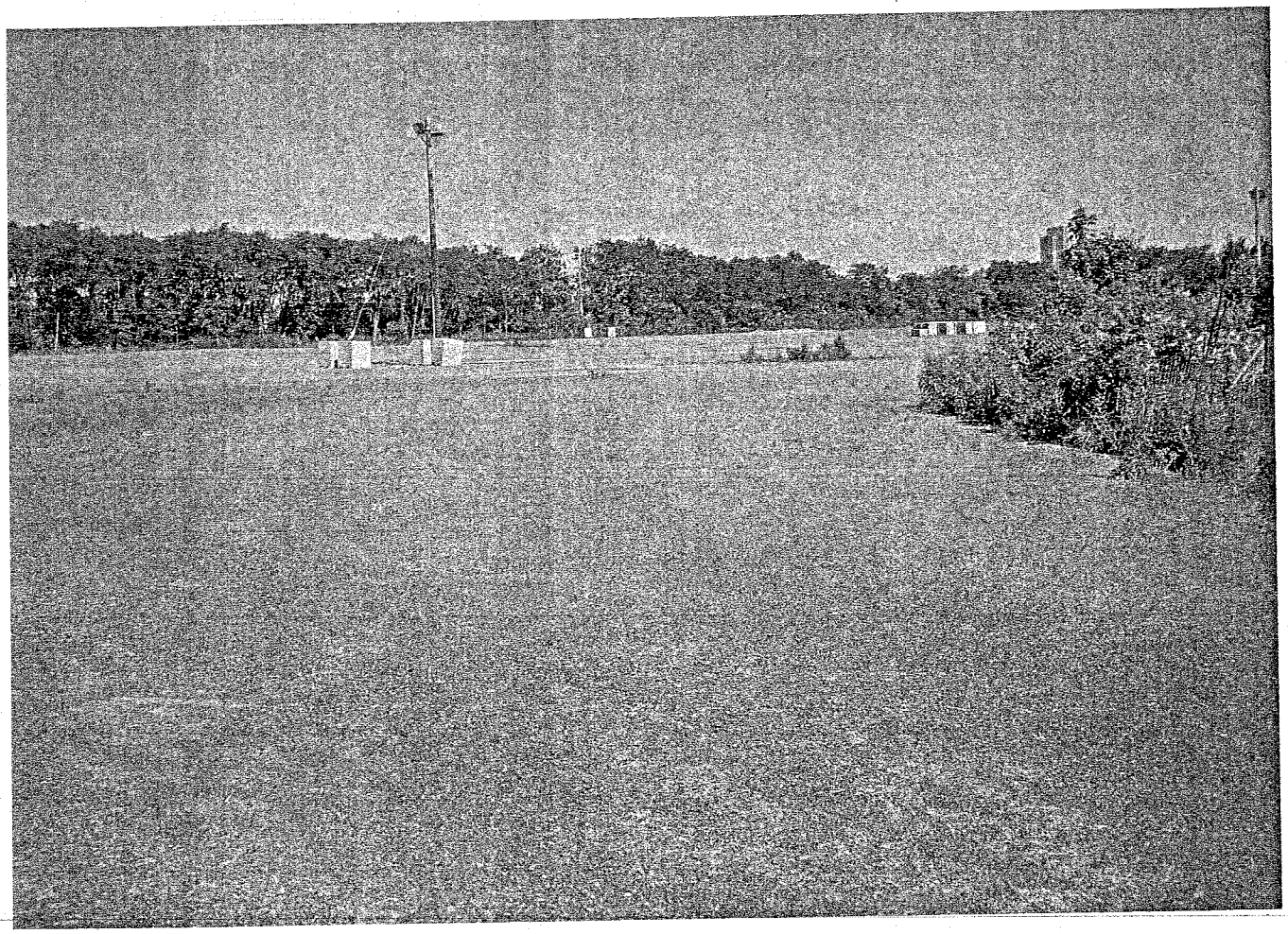


APPENDIX B

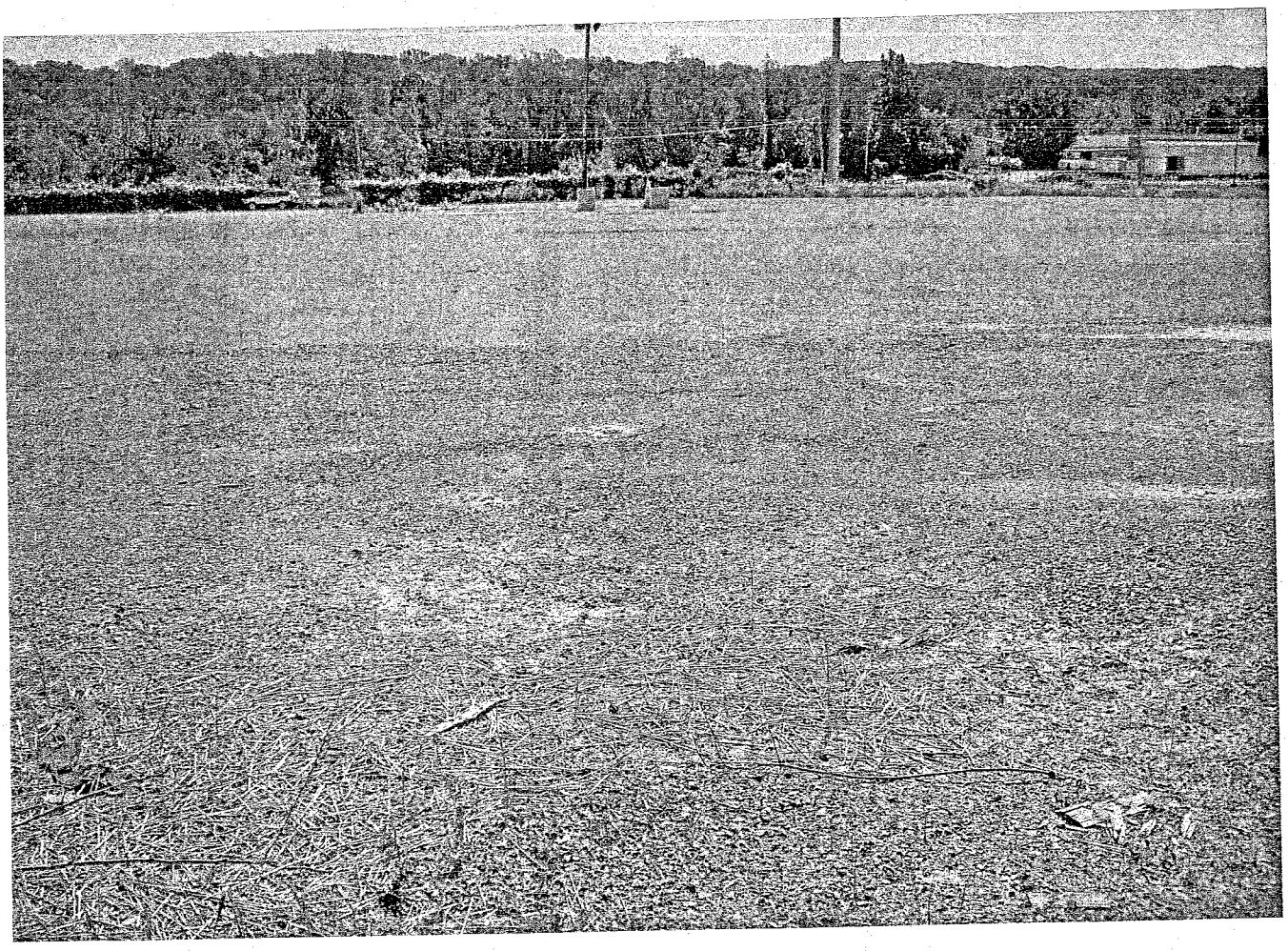
PHOTODOCUMENTATION



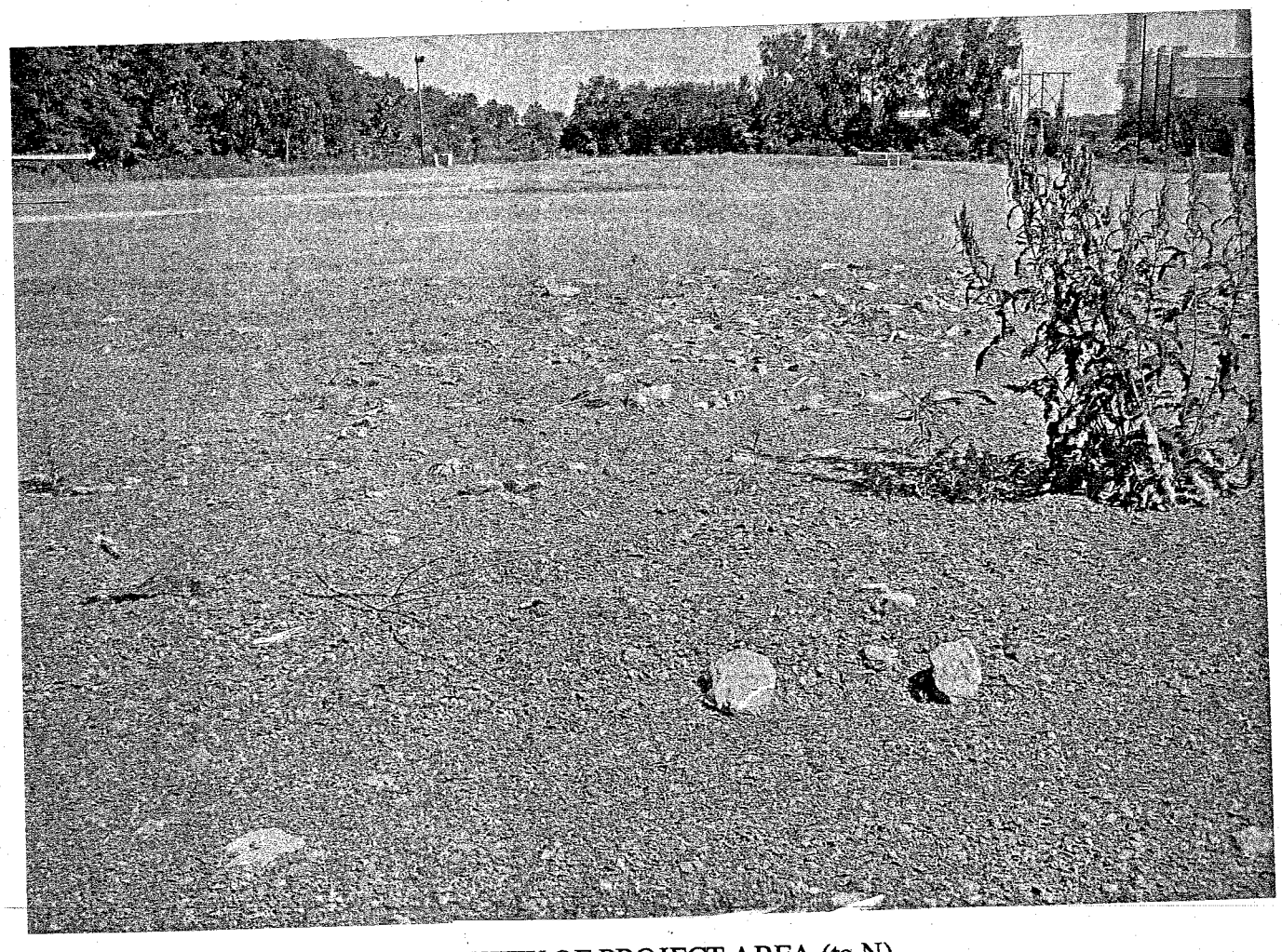
VIEW OF PROJECT AREA (to S)



VIEW OF PROJECT AREA (to W)



VIEW OF PROJECT AREA (to E)



VIEW OF PROJECT AREA (to N)

APPENDIX C

SUBSURFACE SAMPLING RECORD

NEW CASTLE ASPHALT PLANT - CA634B

PHASE IB SUBSURFACE SAMPLING RECORD

UNIT	STRATUM	DEPTH(cm)	SOIL PROFILE	CULTURAL
TP-1	1	0-48+	grey brown silty sand, dense cmf gravel cobbles, under grass	none
TP-2	1	0-24	mottled yellow brown/grey grown/medium brown silt, some clay, cobbles, boulders (fill) under dark brown root/leaf mat	none
	2	24-38	dark grey grown silt, trace sand, dense cmf gravel, cobbles	none
	3	38-50+	yellow brown silt, some clay, cmf gravel	none
TP-3	1	0-17	(same as Stratum 2 above)	none
	2	17-34	(same as Stratum 3 above)	none
	3	34-50+	dark grey brown sand, trace silt, cmf gravel	none
TP-4	1	0-15	dark grey brown silty sand, cmf gravel, cobbles, boulders	none
	2	15-33	yellow brown sand, dense cmf gravel, cobbles	none
	3	33-48+	yellow brown sand, very dense cmf gravel. cobbles	none
TP-5	1	0-18	dark grey brown silty sand, cmf gravel, under dark brown root/leaf mat	aluminum(NR)
	2	18-33	(same as above)	none
	3	33-52+	yellow brown sand, very dense cmf gravel, cobbles, boulders	none
TP-6	1	0-28	very dark brown moist silt, some sand, cmf gravel, cobbles, boulders	yes
	2	28-49+	mottled grey/yellow brown clay	none
TP-7	1	0-28	dark grey brown silty sand, cmf gravel (fill?) under dark brown root/leaf mat	yes
	2	28-40	very dark grey brown sand, dense cmf gravel, cobbles, boulders	none
	3	40-52+	yellow brown sand, dense cmf gravel, cobbles boulders	none
TP-8	1	0-34	very dark brown sand, some silt, dense cobbles and boulders (fill)	----
	2	34-44+	yellow brown sand, very dense cobbles, boulders (fill)	----

TP-9	1	0-28	(same as above)	----
	2	28-43+	(same as above)	----
TP-10	1	0-17	(same as above)	----
	2	17-34	(same as above)	----
	3	34-48+	grey sand, dense cobbles, boulders (fill)	----
TP-11	1	0-22	(same as above)	----
	2	22-50+	(same as above)	----
TP-12	1	0-26	(same as above)	----
	2	26-46+	(same as above)	----
TP-13	1	0-22	(same as above)	----
	2	22-40	mottled yellow brown/grey brown clay (fill)	----
	3	40-52+	dark yellow brown sand, dense cobbles (fill)	----
TP-14	1	0-32+	grey brown silty sand, dense cobbles, boulders (fill)	----

NR = not retained
cmf = coarse, medium, fine

APPENDIX D

ARTIFACT CATALOGUE

ARTIFACT CATALOGUE
NEW CASTLE ASPHALT PLANT

QUANTITY	DESCRIPTION	PROVENIENCE
1	iron wire nail	TP-6, Level 1
1	iron fencing wire fragment	
1	dark brown bottle glass fragment	
1	iron strap fragment	
2	iron fencing wire fragments	TP-7, Level 1

NYSDEC AIR REGISTRATION APPLICATION, STOCKPILE MAINTENANCE PLAN AND FUGITIVE DUST CONTROL PLAN

New York State Department of Environmental Conservation
Air Facility Registration

DEC ID

Owner/Firm

						Taxpayer ID
Name	**New Castle Asphalt, LLC**					**2 7 3 4 5 7 8 8 9**
Street Address	**118 Button Road**					
City / Town / Village	**Waterford**	State or Province	**NY**	Country	**USA**	Zip **12188**

Owner/Firm Contact

Name	**Roderick J. Valente**	Phone No.	**(518) 432-4470**

Facility

Name	**New Castle Asphalt, LLC**		
Location Address	**37 Riverside Avenue**		
City / Town / Village	**Rensselaer**	Zip	**12144**

Facility Information

Total Number of Emission Points: **1**

X Cap by Rule

Description

This application is for a new Air Facility Registration. The facility includes a 400 ton per hour hot mix asphalt drum plant that can be fueled by natural gas, recycled oil or fuel oil. The maximum 12 month rolling average of criterial pollutants will be capped at less than 50% of the Title V threshold for all criteria pollutants, and is, therefore, subject to Cap by Rule.

Standard Industrial Classification Codes

2951					

HAP CAS Numbers

75-07-0	**71-43-2**	**100-41-4**	**50-00-0**	**91-20-3**	**106-51-4**
108-88-3	**1330-20-7**				

Applicable Federal and New York State Requirements (Part Nos.)

201	202	211	212	215	225
40 CFR 60					

Certification

I certify that this facility will be operated in conformance with all provisions of existing regulations.

Responsible Official	Title
Signature	Date ____/____/____

New York State Department of Environmental Conservation
Air Permit Application

DEC ID	APPLICATION ID	OFFICE USE ONLY
	- - /	/ /

Section I - Certification

Title V Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information [required pursuant to 6 NYCRR 201-6.3(d)] I believe the information is, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official	Title
Signature	Date / /

State Facility Certification

I certify that this facility will be operated in conformance with all provisions of existing regulations.

Responsible Official **Roderick J. Valente**	Title **Managing Member**
Signature	Date / /

Section II - Identification Information

Title V Facility Permit	State Facility Permit
❑ New ❑ Significant Modification ❑ Administrative Amendment ❑ Renewal ❑ Minor Modification General Permit Title:	**X** New ❑ Modification General Permit Title:
❑ Application involves construction of new facility	❑ Application involves construction of new emission unit(s)

Owner/Firm

Name	**New Castle Asphalt, LLC**		
Street Address	**118 Button Road**		
City **Waterford**	State **NY**	Country **USA**	Zip **12188**
Owner Classification ❑ Federal ❑ State ❑ Municipal **X** Corporation/Partnership ❑ Individual			Taxpayer ID **2 7 3 4 5 7 8 8 9**

Facility

❑ Confidential

Name	**New Castle Asphalt, LLC**	
Location Address	**37 Riverside Avenue**	
X City / ❑Town/❑Village	**Rensselaer**	Zip **12144**

Project Description

❑ Continuation Sheet(s)

This application is for a new Air Facility Registration. The facility includes a 400 ton per hour hot mix asphalt drum plant that will be fired by either natural gas, recycled oil or fuel oil. Power will be supplied by line power. The facility also will include a hammer mill crusher that will be used to process RAP. The crusher will be powered by line power and will be part of the hot mix plant.

The facility will be capped below 50% of the Title V thresholds.

Owner/Firm Contact Mailing Address

Name (Last, First, Middle Initial) **Valente, Roddy**			Phone No. **(518) 432-4470**
Affiliation **New Castle Asphalt, LLC**	Title **Member**		Fax No.
Street Address **118 Button Road**			
City **Waterford**	State **NY**	Country **USA**	Zip **12188**

Facility Contact Mailing Address

Name (Last, First, Middle Initial) **Valente, Roddy**			Phone No. **(518) 432-4470**
Affiliation **New Castle Asphalt, LLC**	Title **Member**		Fax No.
Street Address **118 Button Road**			
City **Waterford**	State **NY**	Country **USA**	Zip **12188**

New York State Department of Environmental Conservation
Air Permit Application

DEC ID

Section III - Facility Information

Classification

❑ Hospital ❑ Residential ❑ Educational/Institutional ❑ Commercial **X** Industrial ❑ Utility

Affected States (Title V Only)

❑ Vermont ❑ Massachusetts ❑ Rhode Island ❑ Pennsylvania Tribal Land:_____
❑ New Hampshire ❑ Connecticut ❑ New Jersey ❑ Ohio Tribal Land:_____

SIC Codes

2951												

Facility Description

❑ Continuation Sheet(s)

This is a hot mix asphaltic concrete producing facility. It has one asphalt plant operating on-site that is fueled by one of three fuels: natural gas, recycled oil and No. 2 fuel oil. The asphalt plant will be powered by line power. It also has a hammer mill crusher powered by line power that will be used to process RAP.

Compliance Statements (Title V Only)

I certify that as of the date of this application the facility is in compliance with all applicable requirements: ❑ YES ❑ NO
If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application (the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block on page 8 of this form along with the compliance plan information required. For all emission units at this facility that are operating in compliance with all applicable requirements complete the following:

- ❑ This facility will continue to be operated and maintained in such a manner as to assure compliance for the duration of the permit, except those units referenced in the compliance plan portion of Section IV of this application.
- ❑ For all emission units, subject to any applicable requirements that will become effective during the term of the permit, this facility will meet all such requirements on a timely basis.
- ❑ Compliance certification reports will be submitted at least once a year. Each report will certify compliance status with respect to each requirement, and the method used to determine the status.

Facility Applicable Federal Requirements

❑ Continuation Sheet(s)

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	**NYCRR**	**201**	**7**	**2**					
6	**NYCRR**	**211**		**3**					
6	**NYCRR**	**212**		**10**					
6	**NYCRR**	**215**							
6	**NYCRR**	**225**	**1**						
6	**NYCRR**	**225**	**2**						

Facility State Only Requirements

❑ Continuation Sheet(s)

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

DEC ID

Section III - Facility Information (continued)

Facility Compliance Certification

❑ Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	**NYCRR**	**201**		**7**	**2**	**a**			

X Applicable Federal Requirement
❑ State Only Requirement

X Capping

CAS No.	Contaminant Name
630 - 08 - 0	**Carbon Monoxide**

Monitoring Information

❑ Ambient Air Monitoring ❑ Work Practice Involving Specific Operations **X** Record Keeping/Maintenance Procedures

Description

The facility is a hot mix asphalt producing facility. The facility will cap the emissions of Carbon Monoxide to less than 25 tons by limiting asphalt production to 350,000 tons during any 12 month rolling period.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description
24.9		**34**	**tons**

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
17	**annual maximum rolled monthly**	**05**	**monthly**	**10**	annually

Facility Emissions Summary

X Continuation Sheet(s)

CAS No.	Contaminant Name	PTE (lbs/yr)	PTE Range Code	Actual (lbs/yr)
NY075 - 00 - 5	**PM-10**		**B**	
NY075 - 00 - 0	**PARTICULATES**			
7446 - 09 - 5	**SULFUR DIOXIDE**		**B**	
NY210 - 00 - 0	**OXIDES OF NITROGEN**		**B**	
630 - 08 - 0	**CARBON MONOXIDE**	**49,900**		
7439 - 92 - 1	**LEAD**		**Y**	
NY998 - 00 - 0	**VOC**		**B**	
NY100 - 00 - 0	**HAP**		**Y**	
75 - 07 - 0	**Acetaldehyde**		**Y**	
71 - 43 - 2	**Benzene**		**Y**	
100 - 41 - 4	**Ethyl Benzene**		**Y**	
50 - 00 - 0	**Formaldehyde**		**Y**	

DEC ID

Section III - Facility Information

Facility Emissions Summary (continuation)

CAS No.	Contaminant Name	PTE (lbs/yr)	PTE Range Code	Actual (lbs/yr)
91 - 20 - 3	Naphthalene		Y	
106 - 51 - 4	Quinone		Y	
108 - 88 - 3	Toluene		Y	
1330 - 20 - 7	Xylene		Y	
- -	Arsenic		Y	
- -	Barium		Y	
- -	Beryllium		Y	
- -	Cadmium		Y	
- -	Chromium		Y	
- -	Copper		Y	
- -	Hexavalent chromium		Y	
- -	Manganese		Y	
- -	Mercury		Y	
- -	Nickel		Y	
- -	Selenium		Y	
- -	Silver		Y	
- -	Zinc		Y	
- -				
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DEC ID

Section IV - Emission Unit Information

Emission Unit Description

❑ Continuation Sheet(s)

EMISSION UNIT: **1-NEWCA**

Emission Unit 1-NEWCA is composed of a 400 ton hot mix asphalt drum plant and associated control equipment used in the production of asphaltic concrete. The hot mix plant is fueled by either natural gas, recycled oil or fuel oil. Power is supplied by line power. A hammer mill crusher attached to the asphalt plant will be used to process RAP for use in hot mix asphalt production.

Building

❑ Continuation Sheet(s)

Building	Building Name	Length (ft)	Width (ft)	Orientation

Emission Point

❑ Continuation Sheet(s)

EMISSION PT.: **00001**

Ground Elev. (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section Length (in)	Cross Section Width (in)
22	**35.5**		**61**	**225**		

Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal
46	**55,855**					

EMISSION PT.:

Ground Elev. (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section Length (in)	Cross Section Width (in)

Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal

Emission Source/Control

❑ Continuation Sheet(s)

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.
HMA01	**I**	**01/01/11**	**04/15/11**				**Gencor 400 ton per hour HMA Plant**

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description
400	**9**	**tons per hour**				

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.
00BH1	**K**	**01/01/11**	**04/15/11**		**016**	**Fabric Collector**	

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

DEC ID

Section IV - Emission Unit Information

EMISSION UNIT	
1 - N E W C A	Emission Source/Control (continuation)

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.
00CR1	**I**	**01/01/11**	**04/15/11**				**Schutte-Buffalo RC 2232 Hammer Mill**

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description
60	**9**	**tons per hour**				

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

Emission Source ID	Emission Source Type	Date of Construction	Date of Operation	Date of Removal	Control Type Code	Control Type Description	Manufacturer's Name/Model No.

Design Capacity	Design Capacity Units Code	Design Capacity Units Description	Waste Feed Code	Waste Feed Description	Waste Type Code	Waste Type Description

DEC ID

Section IV - Emission Unit Information (continued)

Process Information

❑ Continuation Sheet(s)

EMISSION UNIT **1-NEWCA** PROCESS **GAS**

Description

Aggregate is dried in a rotary dryer fueled by natural gas. The dried aggregate is mixed with hot liquid asphalt in the dryer and is discharged into a slat conveyor. The slat conveyor carries the asphalt up to a storage silo for later discharge.

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description
30500205		**200,000**	**38**	**tons per year**

❑ Confidential ❑ Operating at Maximum Capacity ❑ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		
	4	**125**		**Ground**

Emission Source/Control Identifier(s)

HMA01	**00BH1**						

EMISSION UNIT **1-NEWCA** PROCESS **RAP**

Description

Milled or ripped up asphalt pavement is sent through a hammer mill crusher for use in the production of hot mix asphalt.

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description
30502004		**216,000**	**38**	**tons per year**

❑ Confidential ❑ Operating at Maximum Capacity ❑ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		
	12	**300**		

Emission Source/Control Identifier(s)

00CR1							

DEC ID

Section IV - Emission Unit Information (continued)

Process Information

❑ Continuation Sheet(s)

EMISSION UNIT **1 - N E W C A** PROCESS **W O F**

Description

Aggregate is dried in a rotary dryer fueled by recycled oil. The dried aggregate is mixed with hot liquid asphalt in the dryer and is discharged into a slat conveyor. The slat conveyor carries the asphalt up to a storage silo for later discharge.

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description
30500205		**100,000**	**38**	**tons per year**

❑ Confidential ❑ Operating at Maximum Capacity ❑ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		
	4	**63**		**Ground**

Emission Source/Control Identifier(s)							
HMA01	**00BH1**						

EMISSION UNIT **1 - N E W C A** PROCESS **N O 2**

Description

Aggregate is dried in a rotary dryer fueled by fuel oil. The dried aggregate is mixed with hot liquid asphalt in the dryer and is discharged into a slat conveyor. The slat conveyor carries the asphalt up to a storage silo for later discharge.

Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units	
	Quantity/Hr	Quantity/Yr	Code	Description
30500205		**50,000**	**38**	**tons per year**

❑ Confidential ❑ Operating at Maximum Capacity ❑ Activity with Insignificant Emissions	Operating Schedule		Building	Floor/Location
	Hrs/Day	Days/Yr		
	4	**31**		

Emission Source/Control Identifier(s)							

DEC ID

Section IV - Emission Unit Information (continued)

Emission Unit	Emission Point	Process	Emission Source	Emission Unit Applicable Federal Requirements ❑ Continuation Sheet(s)									
				Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
1 - NEWCA	**00001**	**GAS**	**HMA01**	**6**	**NYCRR**	**201**	**5**	**1**					
1 - NEWCA	**00001**	**GAS**	**HMA01**	**6**	**NYCRR**	**201**	**7**	**2**					
1 - NEWCA	**00001**	**GAS**	**HMA01**	**6**	**NYCRR**	**212**		**10**	**a**	**2**			
1 - NEWCA	**00001**	**GAS**	**HMA01**	**6**	**NYCRR**	**212**		**3**	**a**				
1 - NEWCA	**00001**	**GAS**	**HMA01**	**6**	**NYCRR**	**212**		**6**	**a**				

Emission Unit	Emission Point	Process	Emission Source	Emission Unit State Only Requirements ❑ Continuation Sheet(s)									
				Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
-													
-													
-													

Emission Unit Compliance Certification

X Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

❑ Applicable Federal Requirement ❑ State Only Requirement **X** Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name

Monitoring Information

❑ Continuous Emission Monitoring
❑ Intermittent Emission Testing
❑ Ambient Air Monitoring
❑ Monitoring of Process or Control Device Parameters as Surrogate
❑ Work Practice Involving Specific Operations
❑ Record Keeping/Maintenance Procedures

Description

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description

DEC ID

Section IV - Emission Unit Information

Emission Unit	Emission Point	Process	Emission Source	Emission Unit Applicable Federal Requirements (continuation)									
				Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
1 - NEWCA		GAS	HMA01	40	CFR	60	i						
1 - NEWCA		NO2	HMA01	6	NYCRR	201	5	1					
1 - NEWCA		NO2	HMA01	6	NYCRR	201	7	2					
1 - NEWCA		NO2	HMA01	6	NYCRR	212		10	a	2			
1 - NEWCA		NO2	HMA01	6	NYCRR	212		3	a				
1 - NEWCA		NO2	HMA01	6	NYCRR	212		6	a				
1 - NEWCA		NO2	HMA01	40	CFR	60	i						
1 - NEWCA		WOF	HMA01	6	NYCRR	201	5	1					
1 - NEWCA		WOF	HMA01	6	NYCRR	201	7	2					
1 - NEWCA		WOF	HMA01	6	NYCRR	212		10	a	2			
1 - NEWCA		WOF	HMA01	6	NYCRR	212		3	a				
1 - NEWCA		WOF	HMA01	6	NYCRR	212		6	a				
1 - NEWCA		WOF	HMA01	40	CFR	60	i						
1 - NEWCA		RAP	00CR1	6	NYCRR	200							
1 - NEWCA		RAP	00CR1	6	NYCRR	201							
1 - NEWCA		RAP	00CR1	6	NYCRR	212							
1 - NEWCA		RAP	00CR1	40	CFR	60	000						
-													

DEC ID

Section IV - Emission Unit Information

Emission Unit Compliance Certification (continuation)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	**NYCRR**	**201**	**6**	**1**	**a**				

X Applicable Federal Requirement - State Only Requirement **X** Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
1 - NEWCA	**00001**	**GAS**	**HMA01**	- -	

Monitoring Information

- Continuous Emission Monitoring
- Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
X Record Keeping/Maintenance Procedures

Description

Criteria pollutants will be capped at the facility level such that the total of all sources will be below Title V thresholds for average. The limits on the asphalt plant will be on asphalt production.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
17	**annual max rolled monthly**	**05**	**monthly**	**09**	**annually**

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	**NYCRR**	**201**	**6**	**1**	**a**				

- Applicable Federal Requirement - State Only Requirement - Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
1 - NEWCA	**00001**	**NO2**	**HMA01**	- -	

Monitoring Information

- Continuous Emission Monitoring
- Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
X Record Keeping/Maintenance Procedures

Description

Criteria pollutants will be capped at the facility level such that the total of all sources will be below Title V thresholds for any 12-month rolling average. The limits on the asphalt plant will be on asphalt production.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	**Limit Units** Code	Limit Units Description

Averaging Method **Code**	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
17	**annual max rolled monthly**	**05**	**monthly**	**09**	**annually**

DEC ID

Section IV - Emission Unit Information

Emission Unit Compliance Certification (continuation)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
6	**NYCRR**	**201**	**6**	**1**	**a**				

X Applicable Federal Requirement - State Only Requirement **X** Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
1 - NEWCA	**00001**	**WOF**	**HMA01**	- -	

Monitoring Information

- Continuous Emission Monitoring
- Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
X Record Keeping/Maintenance Procedures

Description

Criteria pollutants will be capped at the facility level such that the total of all sources will be below Title V thresholds for average. The limits on the asphalt plant will be on asphalt production.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
17	**annual max rolled monthly**	**05**	**monthly**	**09**	**annually**

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

- Applicable Federal Requirement - State Only Requirement - Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
				- -	

Monitoring Information

- Continuous Emission Monitoring
- Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
X Record Keeping/Maintenance Procedures

Description

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	**Limit Units** Code	Limit Units Description

Averaging Method **Code**	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description

DEC ID

Section IV - Emission Unit Information (continued)

Emission Unit Compliance Certification (continuation)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause
40	**CFR**	**60**	**000**						

X Applicable Federal Requirement - State Only Requirement X Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name
1 - NEWCA		**RAP**	**00CR1**	**NY075 - 00 - 5**	**PM 10**

Monitoring Information

- Continuous Emission Monitoring
X Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
- Record Keeping/Maintenance Procedures

Description

The fugitive emissions from the crusher shall not exceed 15 percent opacity based on a 6 minute average.

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	Limit Units Code	Limit Units Description
15		**136**	**percent**

Averaging Method Code	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description
18	**6 minute average**	**14**	**as required**	**10**	**upon request**

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

X Applicable Federal Requirement - State Only Requirement - Capping

Emission Unit	Emission Point	Process	Emission Source	CAS No.	Contaminant Name

Monitoring Information

- Continuous Emission Monitoring
X Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of Process or Control Device Parameters as Surrogate
- Work Practice Involving Specific Operations
- Record Keeping/Maintenance Procedures

Description

Work Practice Type	Process Material Code	Process Material Description	Reference Test Method

Parameter Code	Parameter Description	Manufacturer Name/Model No.

Limit Upper	Limit Lower	**Limit Units** Code	Limit Units Description

Averaging Method **Code**	Averaging Method Description	Monitoring Frequency Code	Monitoring Frequency Description	Reporting Requirements Code	Reporting Requirements Description

DEC ID

Section IV - Emission Unit Information (continued)

Determination of Non-Applicability (Title V Only)

- Continuation Sheet(s)

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

Emission Unit	Emission Point	Process	Emission Source	- Applicable Federal Requirement - State Only Requirement

Description

Rule Citation

Title	Type	Part	Sub Part	Section	Sub Division	Paragraph	Sub Paragraph	Clause	Sub Clause

Emission Unit	Emission Point	Process	Emission Source	- Applicable Federal Requirement - State Only Requirement

Description

Process Emissions Summary

X Continuation Sheet(s)

EMISSION UNIT	1-NEWCA					PROCESS	G	A	S
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined			
NY210 - 00 - 0	**Oxides of Nitrogen**		**100**	**0**	**10.4**	**03**			

PTE			Standard Units	PTE How Determined	Actual	
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)
10.4	**5,200**			**03**		

EMISSION UNIT	1-NEWCA					PROCESS	G	A	S
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined			
NY075 - 00 - 5	**PM10**		**100**	**99.95**	**18,400**	**03**			

PTE			Standard Units	PTE How Determined	Actual	
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)
9.2	**4,600**			**03**		

EMISSION UNIT	1-NEWCA					PROCESS	G	A	S
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined			
7446 - 09 - 5	**Sulfur Dioxide**		**100**	**0**	**1.4**	**03**			

PTE			Standard Units	PTE How Determined	Actual	
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)
1.4	**680**			**03**		

NYS Air Permit Application
(supporting information)

DEC ID

Section IV - Emission Unit Information

Process Emissions Summary (continuation)

EMISSION UNIT	1-NEWCA					PROCESS	GAS

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
630 - 08 - 0	Carbon Monoxide		100	0	52.0	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
52.0	26,000			03		

EMISSION UNIT	1-NEWCA					PROCESS	GAS

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY998 - 00 - 0	Volatile Organic Compounds		100	0	12.8	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
12.8	6,400			03		

EMISSION UNIT	1-NEWCA					PROCESS	GAS

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY100 - 00 - 0	Total HAPs		100	0	1.7	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
1.7	834			03		

EMISSION UNIT	1-NEWCA					PROCESS	NO2

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY210 - 00 - 0	Oxides of Nitrogen		100	0	22.2	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
22.2	4,435			03		

EMISSION UNIT	1-NEWCA					PROCESS	NO2

CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY075 - 00 - 5	PM10		100	99.95	18,400	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
9.2	1,318			03		

DEC ID

Section IV - Emission Unit Information

Process Emissions Summary (continuation)

EMISSION UNIT	1-NEWCA					PROCESS	NO2	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined		
630 - 08 - 0	**Carbon Monoxide**		100	0	52.0	03		
PTE			Standard Units	PTE How Determined	Actual			
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)		
52.0	6,921			03				

EMISSION UNIT	1-NEWCA					PROCESS	NO2	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined		
NY998 - 00 - 0	**Volatile Organic Compounds**		100	0	12.8	03		
PTE			Standard Units	PTE How Determined	Actual			
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)		
12.8	1,629			03				

EMISSION UNIT	1-NEWCA					PROCESS	NO2	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined		
7446 - 09 - 5	**Sulfur Dioxide**		100	0	5.8	03		
PTE			Standard Units	PTE How Determined	Actual			
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)		
5.8	12,511			03				

EMISSION UNIT	1-NEWCA					PROCESS	NO2	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined		
NY100 - 00 - 0	**Total Haps**		100	0	3.0	03		
PTE			Standard Units	PTE How Determined	Actual			
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)		
3.0	374			03				

EMISSION UNIT	1-NEWCA					PROCESS	WOF	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined		
NY210 - 00 - 0	**Oxides of Nitrogen**		100	0	22.0	03		
PTE			Standard Units	PTE How Determined	Actual			
(lbs/hr)	(lbs/yr)	(standard units)			(lbs/hr)	(lbs/yr)		
22.0	5,500			03				

DEC ID

Section IV - Emission Unit Information

Process Emissions Summary (continuation)

EMISSION UNIT	1 - NEWCA			PROCESS	W O F
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY075 - 00 - 5	**PM10**		**100**	**99.5**	**18,400**	**03**

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
9.2	**2,300**			**03**		

EMISSION UNIT	1 - NEWCA			PROCESS	W O F
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
630 - 08 - 0	**Carbon Monoxide**		**100**	**0**	**52.0**	**03**

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
52.0	**13,000**			**03**		

EMISSION UNIT	1 - NEWCA			PROCESS	W O F
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY998 - 00 - 0	**Volatile Organic Compounds**		**100**	**0**	**12.8**	**03**

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
12.8	**3,200**			**03**		

EMISSION UNIT	1 - NEWCA			PROCESS	W O F
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
7446 - 09 - 5	**Sulfur Dioxide**		**100**	**0**	**23.2**	**03**

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
23.2	**5,800**			**03**		

EMISSION UNIT	1 - NEWCA			PROCESS	W O F
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY100 - 00 - 0	**Total Haps**		**100**	**0**	**3.0**	**03**

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
3.0	**758**			**03**		

EMISSION UNIT			PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

DEC ID

Section IV - Emission Unit Information

Process Emissions Summary (continuation)

EMISSION UNIT	1 - NEWCA				PROCESS	RAP
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined
NY075 - 00 - 5	PM10		100	0	0.1	03

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)
0.1	518			03		

EMISSION UNIT					PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

EMISSION UNIT					PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

EMISSION UNIT					PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

EMISSION UNIT					PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

EMISSION UNIT					PROCESS	
CAS No.	Contaminant Name	% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined

PTE (lbs/hr)	PTE (lbs/yr)	PTE (standard units)	Standard Units	PTE How Determined	Actual (lbs/hr)	Actual (lbs/yr)

DEC ID

Section IV - Emission Unit Information (continued)

EMISSION UNIT	Emission Unit Emissions Summary			❑ Continuation Sheet(s)
-				
CAS No.	Contaminant Name			
- -				
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
CAS No.	Contaminant Name			
- -				
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
CAS No.	Contaminant Name			
- -				
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)
CAS No.	Contaminant Name			
- -				
ERP (lbs/yr)	PTE Emissions		Actual	
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)

Compliance Plan

❑ Continuation Sheet(s)

For any emission units which are not in compliance at the time of permit application, the applicant shall complete the following

Consent Order	Certified progress reports are to be submitted every 6 months beginning ____/____/______

Emission Unit	Process	Emis. Source	Applicable Federal Requirement									
			Title	Type	Part	Sub Part	Section	Sub Division	Parag.	Sub Parag.	Clause	Sub Clause
-												

Remedial Measure / Intermediate Milestones	R/I	Date Scheduled

DEC ID

Section IV - Emission Unit Information (continued)

Request for Emission Reduction Credits

❑ Continuation Sheet(s)

EMISSION UNIT | | - | | | | | | |

Emission Reduction Description

Contaminant Emission Reduction Data

Baseline Period ____/____/____ to ____/____/____

Reduction	
Date	Method
____/____/____	

CAS No.	Contaminant Name	ERC (lbs/yr)	
		Netting	Offset
- -			
- -			
- -			

Facility to Use Future Reduction

Name	APPLICATION ID
	- - - /
Location Address	
❑ City / ❑ Town / ❑ Village	State / Zip

Use of Emission Reduction Credits

❑ Continuation Sheet(s)

EMISSION UNIT | | - | | | | | | |

Proposed Project Description

Contaminant Emissions Increase Data

CAS No.	Contaminant Name	PEP (lbs/yr)
- -		

Statement of Compliance

❑ All facilities under the ownership of this "ownership/firm" are operating in compliance with all applicable requirements and state regulations including any compliance certification requirements under Section 114(a)(3) of the Clean Air Act Amendments of 1990, or are meeting the schedule of a consent order.

Source of Emission Reduction Credit - Facility

Name	PERMIT ID
	- - /
Location Address	
❑ City / ❑ Town / ❑ Village	State / Zip

Emission Unit	CAS No.	Contaminant Name	ERC (lbs/yr)	
			Netting	Offset
-	- -			
-	- -			
-	- -			

DEC ID

Supporting Documentation

X P.E. Certification (form attached)

❑ List of Exempt Activities (form attached)

❑ Plot Plan

X Calculations

❑ Air Quality Model (_____ / _____ / _____)

❑ Confidentiality Justification

❑ Ambient Air Monitoring Plan (_____ / _____ / _____)

❑ Stack Test Protocols/Reports (_____ / _____ / _____)

❑ Continuous Emissions Monitoring Plans/QA/QC (_____ / _____ / _____)

❑ MACT Demonstration (_____ / _____ / _____)

❑ Operational Flexibility: Description of Alternative Operating Scenarios and Protocols

❑ Title IV: Application/Registration

❑ ERC Quantification (form attached)

❑ Use of ERC(s) (form attached)

❑ Baseline Period Demonstration

❑ Analysis of Contemporaneous Emission Increase/Decrease

❑ LAER Demonstration (_____ / _____ / _____)

❑ BACT Demonstration (_____ / _____ / _____)

❑ Other Document(s): _____ (/ /)

_____ (/ /)

_____ (/ /)

_____ (/ /)

_____ (/ /)

_____ (/ /)

_____ (/ /)

_____ (/ /)

DEC ID

P.E. Certification

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering. This is defined as the performance of a professional service such as consultation, investigation, evaluation, planning, design or supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principals and data. Based on my inquiry of those individuals with primary responsibility for obtaining such information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name of P.E.

Signature of P.E.

Date _____ / _____ / _____

NYS License No.

Phone ( )

Calculation Sheets

NEW CASTLE ASPHALT LLC
Rensselaer Facility
Air Emission Summary

Annual Emissions

Plant	Fuel Use	Annual Prod.	Hours of Oper.	PM10	NOx	VOC's	SO2	CO	Total Haps
Asphalt Drum Plant (gas fired)	62,000,000	200,000	500	4,600	5,200	6,400	680	26,000	834
Asphalt Drum Plant (oil fired)	75,000	50,000	125	1,150	2,750	1,600	550	6,500	374
A/C Heater (Exempt Process)	84,231	NA	NA	168	1,685	29	11,961	421	NA
Asphalt Drum Plant (recycled oil fired)	200,000	100,000	250	2,300	5,500	3,200	5,800	13,000	758
Aggregate Plant - RAP Processing Plant	NA	216,000	3,600	518	NA	NA	NA	NA	NA
TOTALS (in pounds)				**8,737**	**15,135**	**11,229**	**18,991**	**45,921**	**1,966**
TOTALS (in tons)				**4.4**	**7.6**	**5.6**	**9.5**	**23.0**	**1.0**

NEW CASTLE ASPHALT LLC
Rensselaer Facility
Air Emission Summary

Annual Emissions
Asphalt Plant Gas Fired
Process - GAS

Emission Source	Fuel Use	Annual Prod.	Hours of Op.	PM10	NOx	VOC's	SO2	CO	HAPs
Asphalt Drum Plant (gas fired)	62,000,000	200,000	500	4,600	5,200	6,400	680	26,000	834
TOTALS (in pounds per year)				**4,600**	**5,200**	**6,400**	**680**	**26,000**	**834**
TOTALS (in tons per year)				**2.3**	**2.6**	**3.2**	**0.3**	**13.0**	**0.4**
TOTALS (in pounds per hour)				**9.2**	**10.4**	**12.8**	**1.4**	**52.0**	**1.7**

NEW CASTLE ASPHALT LLC
Rensselaer Facility
Process - NO2

Emission Source	Fuel Use	Annual Prod.	Hours of Op.	PM10	NOx	VOC's	SO2	CO	HAPs
Asphalt Drum Plant (oil fired)	75,000	50,000	125	1,150	2,750	1,600	550	6,500	374
A/C Heater	84,231	NA	8,760	168	1,685	29	11,961	421	NA
TOTALS (in pounds per year)				**1,318**	**4,435**	**1,629**	**12,511**	**6,921**	**374**
TOTALS (in tons per year)				**0.7**	**2.2**	**0.8**	**6.3**	**3.5**	**0.2**
TOTALS (in pounds per hour)				**9.2**	**22.2**	**12.8**	**5.8**	**52.0**	**3.0**

NEW CASTLE ASPHALT LLC
Rensselaer Facility
Air Emission Summary

Annual Emissions
Asphalt Plant Waste Oil Fired
Process - WOF

Emission Source	Fuel Use	Annual Prod.	Hours of Op.	PM10	NOx	VOC's	SO2	CO	HAPs
Asphalt Drum Plant (recycled oil fired)	200,000	100,000	250	2,300	5,500	3,200	5,800	13,000	758
TOTALS (in pounds per year)				**2,300**	**5,500**	**3,200**	**5,800**	**13,000**	**758**
TOTALS (in tons per year)				**1.2**	**2.8**	**1.6**	**2.9**	**6.5**	**0.4**
TOTALS (in pounds per hour)				**9.2**	**22.0**	**12.8**	**23.2**	**52.0**	**3.0**

Annual Emissions
Crushers
Process - DRY

Emission Source	Fuel Use	Annual Prod.	Hours of Op.	PM10	NOx	VOC's	SO2	CO	HAPs
Crushers	NA	216,000	3,600	518	NA	NA	NA	NA	NA
TOTALS (in pounds)				**518**	**NA**	**NA**	**NA**	**NA**	**NA**
TOTALS (in tons)				**0.3**	**NA**	**NA**	**NA**	**NA**	**NA**
TOTALS (in pounds per hour)				**0.1**	**NA**	**NA**	**NA**	**NA**	**NA**

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Emission Calculations
Emission Inventory
Process WOF - Gencor Drum Plant

Plant Description	Gencor Drum Plant	**Annual Production**	
Capacity	400 tph	100,000	tons

Annual Waste Oil Consumption
200,000 Gallons (Assumes 2.0 gallons per ton of HMA)
Sulfur Content
NA Percent
Natural Gas Consumption
NA Cubic Feet (Assumes 0.31MCF per ton of HMA)

Criteria Emission Calculations
Waste Oil-Fired Dryer from Drum HMA Plants

CAS#	Name	AP-42 Emission Factors[1]	Emissions[2]
NY075-00-5	PM10	0.023	2,300
7446-09-5	Sulfur Dioxide	0.058	5,800
NY210-00-0	Oxides of Nitrogen	0.055	5,500
630-08-0	Carbon Monoxide	0.130	13,000
NY998-00-0	Volatile Organic Compounds	0.032	3,200

[1]Emission Factors in Pounds Per Ton of Asphalt

[2]Emissions in pounds per year. Calculation based on mulitplying the AP-42 emission factor by the total permitted asphalt production for one year.

PM emissions are total filterable particulates.

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Hazardous Air Pollutant (HAP'S) Emission Calculations
Emission Inventory
Process WOF - Gencor Drum Plant

Plant Description Gencor Drum Plant **Annual Production**
Capacity 400 tj tph 100,000 tons

Annual Waste Oil Consumption
200,000 Gallons (Assumes 2.0 gallons per ton of HMA)
Sulfur Content

Natural Gas Consumption
NA Cubic Feet (Assumes 0.31MCF per ton of HMA)

Hazardous Air Pollutant (HAP'S) Emission Calculations
Waste Oil-Fired Dryer from Drum HMA Plants

CASRN	Name	AP-42 Emission Factors	Emissions
71-43-2	Benzene	3.9E-04	3.9E+01
100-41-4	Ethylbenzene	2.4E-04	2.4E+01
50-00-0	Formaldehyde	3.1E-03	3.1E+02
91-20-3	Naphthalene	6.5E-04	6.5E+01
108-88-3	Toluene	2.9E-03	2.9E+02
1330-20-7	Xylene	2.0E-04	2.0E+01
	Arsenic	5.6E-07	5.6E-02
	Cadmium	4.1E-07	4.1E-02
	Chromium	5.5E-06	5.5E-01
	Lead	1.5E-05	1.5E+00
	Manganese	7.7E-06	7.7E-01
	Mercury	2.6E-06	2.6E-01
	Nickel	6.3E-05	6.3E+00
	Selenium	3.5E-07	3.5E-02
	Total HAP's (Pounds per year)		758
	Total HAP's (Tons per year)		0.38

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Emission Calculations
Emission Inventory
Process GAS - Gencor Drum Plant

Plant Description Gencor Drum Plant **Annual Production**
Capacity 400 tph 200,000 tons

Annual Fuel Oil Consumption
NA Gallons (Assumes 1.5 gallons per ton of HMA)
Sulfur Content
NA Percent
Natural Gas Consumption
62,000,000 Cubic Feet (Assumes 0.31MCF per ton of HMA)

Criteria Emission Calculations
Gas-Fired Dryer from Batch HMA Plants

CAS#	Name	AP-42 Emission Factors[1]	Emissions[2]
NY075-00-5	PM10	0.023	4,600
7446-09-5	Sulfur Dioxide	0.0034	680
NY210-00-0	Oxides of Nitrogen	0.026	5,200
630-08-0	Carbon Monoxide	0.13	26,000
NY998-00-0	Volatile Organic Compounds	0.032	6,400

[1]Emission Factors in Pounds Per Ton of Asphalt

[2]Emissions in pounds per year. Calculation based on mulitplying the AP-42 emission factor by the total permitted asphalt production for one year.

TOC's are total organic compounds measured as methane based upon EPA Method 25A.

PM emissions are total filterable particulates.

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Emission Calculations
Emission Inventory
Process GAS - Gencor Drum Plant

Plant Description Gencor Drum Plant
Capacity 400 tph
Annual Production 200,000 tons

Annual Fuel Oil Consumption
NA Gallons (Assumes 1.5 gallons per ton of HMA)
Sulfur Content
NA Percent
Natural Gas Consumption
62,000,000 Cubic Feet (Assumes 0.31MCF per ton of HMA)

Hazardous Air Pollutant (HAP'S) Emission Calculations
Gas-Fired Dryer from Drum HMA Plants

CASRN	Name	AP-42 Emission Factors[1]	Emissions[2]
71-43-2	Benzene	0.00039	78.00
100-41-4	Ethylbenzene	0.00024	48.00
50-00-0	Formaldehyde	0.0031	620.00
91-20-3	Naphthalene	0.00009	18.00
108-88-3	Toluene	0.00015	30.00
1330-20-7	Xylene	0.0002	40.00

Total HAP's (Pounds per year)	834
Total HAP's (Tons per year)	0.42

[1]Emision factors in pounds per ton of asphalt

[2] Emissions in pounds per year. Calculation based on multiplying the AP-42 emission factor by the total permitted asphalt production for one year.

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Emission Calculations
Emission Inventory
Process NO2 - Gencor Drum Plant

Plant Description Gencor Drum Plant
Capacity 400 tph
Annual Production 50,000 tons

Annual Fuel Oil Consumption
75,000 Gallons (Assumes 1.5 gallons per ton of HMA)
Sulfur Content
NA Percent
Natural Gas Consumption
NA Cubic Feet (Assumes 0.31MCF per ton of HMA)

Criteria Emission Calculations
Oil-Fired Dryer from Drum HMA Plants

CAS#	Name	AP-42 Emission Factors[1]	Emissions[2]
NY075-00-5	PM10	0.023	1,150
7446-09-5	Sulfur Dioxide	0.011	550
NY210-00-0	Oxides of Nitrogen	0.055	2,750
630-08-0	Carbon Monoxide	0.130	6,500
NY998-00-0	Volatile Organic Compounds	0.032	1,600

[1]Emission Factors in Pounds Per Ton of Asphalt
[2]Emissions in pounds per year. Calculation based on mulitplying the AP-42 emission factor by the total permitted asphalt production for one year.
TOC's are total organic compounds measured as methane based upon EPA Method 25A.
PM emissions are total filterable particulates.

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Mix Asphalt (HMA) Hazardous Air Pollutant (HAP'S) Emission Calculations
Emission Inventory
Process NO2 - Gencor Drum Plant

Plant Description Gencor Drum Plant **Annual Production**
Capacity 400 tph 50,000 tons

Annual Fuel Oil Consumption
75,000 Gallons (Assumes 1.5 gallons per ton of HMA)
Sulfur Content
NA Percent
Natural Gas Consumption
NA Cubic Feet (Assumes 0.31MCF per ton of HMA)

Hazardous Air Pollutant (HAP'S) Emission Calculations
Oil-Fired Dryer from Drum HMA Plants

CASRN	Name	AP-42 Emission Factors	Emissions
71-43-2	Benzene	0.00039	20
100-41-4	Ethylbenzene	0.00024	12
50-00-0	Formaldehyde	0.0031	155
91-20-3	Naphthalene	0.00065	33
108-88-3	Toluene	0.0029	145
1330-20-7	Xylene	0.0002	10
	Total HAP's (Pounds per year)		374
	Total HAP's (Tons per year)		0.19

NEW CASTLE ASPHALT LLC
Rensselaer Facility

Hot Oil Heater Emission Calculations
Emission Inventory

Burner Make:		
Burner Model:		
Burner Output (MM BTU/hr):		1.25
Maximum Fuel Usage (Gallons per hour):		9.6
Number of Hot Oil Heaters:		1
Operating Parameters:		
Minutes per Hour (Maximum potential):		
Hours per day:		
Days per Year:		
Annual Hours:		
Estimated Annual Residual Fuel Use (Gallons):		NA
Estimated Annual Distillate Fuel Use (Gallons):	8760 hrs	84,231
Sulfur Content(%S):		
Estimated Annual Natural Gas Use (Cu. Ft.):		

Proposed Capping Limits

	PM	NOx	VOC	SO2	CO
Distillate Oil Factors (lbs/1,000 gals)	2.00	20.00	0.34	142.00	5.00
Annual Emissions (in pounds per year)	168	1685	29	11961	421

NEW CASTLE ASPHALT LLC
Rensselaer Facility
Process RAP - RAP Processing Plant

Source #	Equipment Type	Rated TPH	Ave TPH	Hours Per Day	Days Per Yr	TPA	Em Factor PM10* (lb/ton)	PM10 (lbs)	PM10 (tons)
00CR1	Secondary Crusher - H. Mill	60	60	12	300	216,000	0.0024	518	0.3
							Totals	**518**	**0.3**

[a]AP-42 emissions factors from Table 11.19.2.2-1 in AP-42 11.19.2 Crushed Stone Processing

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8 Brunswick Road Troy, New York 12180
Phone: (518) 270-5920 Fax: (518) 270-5922

NEW CASTLE ASPHALT, LLC
Rensselaer (Riverside Avenue) Plant
Port of Rensselaer, City of Rensselaer, Rensselaer County, New York

STOCKPILE MAINTENANCE PLAN

FOR

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared by: Griggs-Lang Consulting Geologists, Inc.

Date: February 15, 2011

1.0 INTRODUCTION

This Stockpile Maintenance Plan is submitted to comply with 6 NYCRR §212.12. The plan details methods to be employed by New Castle Asphalt, LLC to control and/or reduce moisture content in its aggregate stockpiles at the proposed Rensselaer Plant.

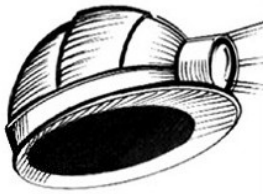
2.0 LOCATION AND SITE DESCRIPTION

The Rensselaer Plant is located on the west side of Riverside Avenue in the City of Rensselaer, Rensselaer County, New York. A 400 ton per hour drum mix plant is proposed to be built at this location during 2011.

3.0 METHODS TO CONTROL MOISTURE CONTENT

The following methods will be used to control moisture content in the stockpiles:

- The perimeter of the Stockpile Area will be bermed to prevent external stormwater from entering the Stockpile Area
- Vehicle access points to the Stockpile Area will have rollover curbs that prevent external stormwater from entering the area.
- The Stockpile Area will be graded to the northeast to direct water away from the stockpiles and towards a stormwater basin well removed from the stockpiles.
- Loader operators will be trained to preferentially avoid wetter portions of the pile whenever feasible.
- The stockpiles will be located in an area subject to direct sunlight throughout the day.



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NEW CASTLE ASPHALT, LLC
Rensselaer Plant
Port of Rensselaer, City of Rensselaer, Rensselaer County, New York

FUGITIVE DUST CONTROL PLAN

FOR

N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Facility Contact:	Roderick J. Valente, Managing Member New Castle Asphalt, LLC Riverside Avenue Rensselaer, New York 12144
Company Contact:	Roderick J. Valente, Managing Member New Castle Asphalt, LLC 118 Button Road Waterford, New York 12188 (518) 432-4470
Prepared by:	Paul H. Griggs, Principal Geologist Griggs-Lang Consulting Geologists, Inc.

Date: May 31, 2011

1.0 INTRODUCTION

The following report outlines the procedures that will be taken to control fugitive dust at the proposed New Castle Asphalt Rensselaer Plant in the Port of Rensselaer, City of Rensselaer, Rensselaer County.

The site is located on the west and north sides of Riverside Avenue and northwest of the Port Expressway in the center of the Port of Rensselaer.

A copy of this Fugitive Dust Control Plan will be kept on-site.

2.0 POTENTIAL DUST SOURCES

The following potential sources of fugitive dust will exist at the proposed Rensselaer Plant:

- Heavy equipment operation, primarily in the Stockpile Area
- Trucks on the entrance/perimeter access road
- Plant operations
- Load out and wind erosion from stockpiles

3.0 METHODS FOR CONTROLLING FUGITIVE DUST

The proposed Rensselaer Plant will use the following best management practices to control dust. These methods are in addition to those implemented in the blacktop plant (such as the baghouse):

- Wooded perimeter buffer zones not needed for the safe and efficient operation of the site will be maintained. Approximately 53 percent of the site will be green space.
- The vegetated perimeter berms will reduce incident wind speeds, thereby reducing the potential for wind erosion.
- Areas not needed for the safe and efficient operation of the site will be vegetated.
- The largest potential sources of dust are located as far from the property line as possible and as far from Riverside Avenue and the Port Expressway as possible.
- Stockpile heights will be kept low to reduce the opportunity for wind erosion.
- The aggregates have a natural moisture content that helps bind finer grained particles together and minimize the generation of dust.
- Stockpiled RAP will be bound together by asphalt and will be an insignificant source of dust.
- The active excavated faces of the stockpiles that are more susceptible to wind erosion will be oriented towards the center of the site.
- Spilled material will be periodically cleaned up in the Plant Area by a skid steer, reincorporated into salable products or stored in areas not subject to erosion.
- Baghouse fines will be reincorporated into salable products or emptied into trucks on an infrequent basis and stored in areas not subject to erosion.
- A speed limit of 15 mph will be posted on the site to control the amount of dust generated on the entrance/perimeter access road.
- The entrance/perimeter access road will be paved and swept as needed to control the build up of sediment and the generation of dust.
- Truck racks will be used to allow truckers to trim and cover their loads prior to leaving the site.
- Spillage will be cleaned up as needed to control generation of excessive amounts of dust and to keep the site clean. The frequency of cleaning up spilled material will vary depending on how much material is running through the plant and how much product is being produced during a given day.

In accordance with 6 NYCRR Part 201-1.8, no person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage, or disposal in a manner that would reintroduce them to the outdoor atmosphere.