
Port of Albany Transfer Facility

Engineering Report
Prepared in Support of the
Application for a Solid Waste Management Facility
Permit Modification

Prepared For

Waste Management of New York, LLC

100 Boat Street

Albany, New York 12202



December 2019

Revised December 2020

Barton & Loguidice

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1.0 Introduction

This Engineering Report is submitted on behalf of Waste Management of New York, LLC (WMNY) to the New York State Department of Environmental Conservation (NYSDEC) as part of a package submitted for a modification to the existing permit to add the acceptance of putrescible municipal solid waste (MSW) to the list of the materials currently accepted. WMNY operates the Port of Albany transfer station in the City of Albany, Albany County, New York. This facility employs a full-time staff of trained and qualified personnel to carry out the operation.

This Engineering Report has been developed in accordance with the requirements set forth in 6 NYCRR Parts 360.16(c)(3) (Engineering Report) and 362-3.5 (Design and Operating Requirements). In accordance with 6 NYCRR Part 360.16(c)(4), this Engineering Report is accompanied by a Facility Manual, which is separately bound.

1.1 Existing Conditions

The facility is located at 100 Boat Street in the central portion of the Port of Albany, City of Albany, Albany County, New York. Figure 1 (Regional Overview Map) shows the general site location. Waste Management's Transfer Station and Hauling Division facilities are located on two (2) adjacent parcels, encompassing a total of approximately six (6) acres. The site layout is shown on Figure 2 – Site Plan and shows the transfer station located on the east side of the property.

The existing property is currently situated at 100 feet above mean sea level (MSL), which is located within the 100-year flood plain elevation of the nearby Hudson River according to Federal Emergency Management Agency (FEMA) floodplain maps. All MSW and C&D waste will be removed from the floor at the end of each operating day, which will minimize any possible impacts due to potential flooding of the facility.

The zoning designation of the Port of Albany Site and the surrounding properties is I-2 (general industrial district). Utilities and rights-of way are shown on the Regional Overview Map (Figure 1).

The site has historically operated as a transfer facility since the late 1980s and is currently permitted to receive, handle and process 749 tons per day (tpd) of dry commercial wastes, construction and demolition (C&D) debris, and source-separated recyclables. All processing of material delivered to the site by collection vehicles occurs inside the 19,659 sf transfer station building. The processing area consists of three tipping bays for receiving and processing of material, as shown on the Transfer Station Floor Plan (Figure 3).

1.2 Material Management Service Area

The material accepted at the Port of Albany Transfer Station currently consists primarily of dry commercial waste, C&D debris, and recyclables collected within the City of Albany and throughout eight (8) surrounding counties.

It is proposed that the facility will also accept MSW from residential or commercial entities within a similar service area with no change to the currently permitted limit of 749 (tpd).

1.3 Solid Waste Management Policy/Plans

Operation of the Port of Albany transfer station is consistent with New York State (NYS) material management policy. As available local landfill disposal capacity space becomes increasingly limited, the associated increase in tipping fees at these landfills for the disposal of MSW has imposed a significant economic burden on the hauling industry and the sectors they serve. The limited number of local sites approved by the NYSDEC for disposal of MSW via direct haul compels the hauling industry to transport material to approved transfer stations for consolidation and long haul transportation to landfills remote to the area. This has demonstrated an increase need for solid waste transfer facilities.

The Rapp Road Landfill, owned and operated by the City of Albany, and the Town of Colonie's Landfill have limited WMNY from delivering MSW to these facilities due to capacity constraints, requiring WMNY to drive long distances to dispose of solid waste material. Based on these facts, there is a demonstrated need for MSW transfer facilities. In response to these needs, WMNY proposes to accept MSW at the Port of Albany transfer facility to assist in the stated objectives. This facility will contribute towards the local material management plans by providing local disposal options.

The site currently collects and handles source-separated recyclables and will continue to do so. Providing this service in the area will allow for continued access to recycling outlets for residents and to maintain recycling rates in the area. Continued diversion is in-line with the State's Solid Waste Management Plan (SWMP).

The facility is located within the Capital Region Solid Waste Management Partnership planning unit, which has an approved Local Solid Waste Management Plan. Although this facility is not specifically identified as part of the continued solid waste management within the planning unit, the use of a transfer station to haul material to approved disposal/processing facilities located outside of the planning unit is consistent with the local planning unit's solid waste management plan objectives.

2.0 Engineering Analysis

2.1 Facility Operating Plan

The Port of Albany transfer station facility consists of a 19,659 square foot building, which includes the materials processing area, administrative offices and weigh scale. The site also includes paved access roads and parking areas. The materials processing area consists of three (3) tipping areas with a recessed transfer trailer load out pit in the center of the building structure. The tipping areas are separated for recyclables, C&D debris and solid waste transfer.

MSW, C&D debris, and recyclables, will be accepted at the facility from municipal, commercial, industrial, and residential sources. Only materials specifically approved by the NYSDEC will be accepted for handling. Procedures for screening loads, refusing unauthorized shipments, and managing unauthorized material which is unloaded on the tipping floor are addressed in Section 2.4 of the Facility Manual (bound separately).

As it is currently permitted, the transfer station will operate six days per week, Monday through Saturday. Deliveries of material are accepted from 6:00 a.m. to 5:00 p.m. Monday through Friday and 6:00 a.m. to 3:00 p.m. on Saturday. Material processing (tipping, sorting, loading, etc.) may continue within the transfer structure until 11:00 p.m. on weekdays and 6:00 p.m. on Saturdays. Attendants are on duty in the transfer station during all hours of operation Monday through Saturday, and in the office Monday through Friday.

All putrescible material will be loaded into trailers daily and removed from the site within seven calendar days of receipt or within one business day of a container becoming full, whichever comes first. All non-putrescible recyclables will be loaded into trailers and removed from the site within 180 days. Unrecoverable recyclables may be stored for a maximum of 14 days before transfer. Incidental putrescible waste or residue from recycling operations must be transferred off-site within seven days.

Haulers will transport collected materials in transfer trailers to one of the disposal facilities listed in Table 2-2 below. These facilities are primarily located in New York and each of the disposal facilities is authorized to handle the material or recyclables.

Since the facility is not limited to a finite capacity, the facility site life is not specified. Operations will continue for an indefinite period as long as the facility holds current operating permit. The site life of the transfer station building is expected to be approximately 50 years or longer subject to proper maintenance and repair.

2.2 Machinery and Equipment

The table below provides a description of the major types of mobile equipment that is used at the transfer station, as well as major items of fixed equipment used to support the operation of the facility. It should be noted that the types of equipment listed in Table 2-1 are typical, and the listed equipment may be replaced by equal equipment should maintenance be required, the equipment breaks down, etc.

Table 2 - 1 - Equipment List

Item (Qty)	Manufacturer	Model No.	Function
Mobile Equipment			
Wheel Loader (1)	CAT	938H	Pushing material, loading material, compaction
Skid Steer (1)	John Deere	JD 320	Pushing material, loading material, cleaning floor and pavement areas
Excavator (1)	CAT	323	Loading material, compaction
Yard Horse (2)	Capacity	TJ 6500 and TJ 700	Moving empty and loaded trailers around on site
Fixed Equipment			
Scale (1)	Mettler - Toledo	N/A	Truck weighing
Note: The equipment listed in this table may be replaced with equal equipment should the listed equipment require maintenance, the equipment breaks down, etc.			

2.3 Transfer Plan

The waste material is typically transported to the site by material collection vehicles and is unloaded by tipping into the designated MSW/C&D transfer tip/sort floor shown on Figure 3. Material tipped onto the tipping floor is loaded into trailers with the loader and excavator.

Waste material is loaded into transfer containers for transport offsite to an approved disposal facility. Trucks accessing the site for transport of waste material, enter the site via the main access point on Boat Street as shown on Figure 1. After these trailers enter the site, they proceed to the transfer trailer staging area. Empty trailers are maneuvered into the loading bay with on-site yard horse and when the transfer trailer is fully loaded, it will be tarped and staged prior to leaving the site. The outbound scale operator

documents the quantity of material in the truck, the trucking company's name and identification number, and other appropriate information. The volume of inbound and outbound trucks may vary based upon the daily material flow conditions. Each transfer trailer holds on average approximately 26.5 tons of MSW/C&D.

Recyclable material is typically transported to the site by material collection vehicles and is unloaded by tipping into (1) one of the (2) two designated tip/sort/storage areas shown on Figure 3. This material is loaded into transfer containers for transport offsite to an approved recycling facility. Trucks accessing the site for transport of material to recycling facilities enter the site via the main access point on Boat Street as shown on Figure 1. The outbound scale operator documents the quantity of material in the truck, the trucking company's name and identification number, and other appropriate information. Each transfer trailer holds on average approximately 15 tons of old corrugated cardboard and 10 tons of single stream recyclable material. Each outbound roll off holds on average approximately 3 tons of metal material and currently is taken next door to the neighboring metal recyclers within the limits of the Port.

All materials will be disposed of at a permitted disposal or recycling facility, primarily those listed in Tables 2-2 and 2-3, below. All receiving facilities for solid waste and C&D will be located within New York State.

Table 2 - 2 - Disposal Facilities

Name of Facility	Address	Type of Material
Green Ridge RDF	424 Peters Road Gansevoort, New York 12831	MSW, C&D
High Acres Landfill	425 Perinton Parkway Fairport, New York 14450	MSW, C&D
Chaffee Landfill	10860 Olean Rd Chaffee, New York 14030	MSW, C&D
Wheelabrator Hudson Falls LLC	61 River St Hudson Falls, New York 12839	MSW
MSW = Putrescible Material C&D = C&D Debris		

Table 2 - 3 - Recycling Facilities

Name of Facility	Address	Type of Material
Ben Weitsman of Albany	300 Smith Boulevard Albany, New York 12202	Metal
Sierra Processing	865 SO. Pearl St Albany, New York 12207	OCC, SSR
WM Ft. Edward	12 Wing St Fort Edward, New York 12828	OCC, SSR
ReCommunity Recycling	508 Fishkill Avenue Beacon, New York 12508	OCC, SSR
WM Recycle America	4550 Steelway Boulevard South Liverpool, New York 13090	OCC, SSR
WM Recycle America	Springfield MRF, 84 Bernie Ave Springfield, MA	OCC, SSR
WM Recycle America	Automated Material Handling Tremont Street Springfield, MA	OCC, SSR
SSR = Single Stream Recyclables OCC = Old Corrugated Cardboard		

2.4 Unloading and Loading Areas

The transfer station is a steel frame building designed over a concrete floor slab. There are four overhead doors on the east side of the transfer station building, with two providing access to the MSW/C&D tipping floor, one that provides access to the transfer trailer load out pit and one that provides access to the recyclables/tip/sort/storage floor. In addition, there are two overhead doors on the north and south side of the building providing access to the transfer load out pit and one overhead door on the south side of the building that provide access to the recyclable's tip/sort floor.

Collection vehicles back into one of four bays in the transfer station to unload onto the tip floor. Each truck will pass through high-speed overhead doors, which will open to gain entrance and then close once the truck is within the building. Once unloading is completed, each truck will pull forward and exit the facility through high-speed overhead doors, which will once again open and close, with the truck then proceeding over to the scale. Concrete push walls are constructed across the width of the transfer station within the loadout areas as shown on (Figure 3). The push wall assists the mobile equipment to transfer waste deposited on the tipping floor into the containers staged in the MSW/C&D loadout area.

Waste and recyclable materials are containerized and stored separately in the eastern portion of the building. This area is of adequate size to accommodate sufficient open space for all necessary maneuvering and loading.

The floor of the building is sloped toward a floor drain that is used to collect any incidental liquids that may be associated with the tipped loads. The sump is located between the Recyclables tipping floor and the MSW loadout area and is pumped to the sewer for disposal, as needed.

Facility personnel observe incoming loads of material to accurately document the type and amount of incoming material. A truck scale is available on the site to obtain load weights for incoming waste and recyclables.

The facility is equipped with two wall mounted ventilation fans for use if needed to remove built up exhaust from operating equipment.

National Fire Protection Association (NFPA 13) guidelines and New York State Fire Code indicate that the transfer station structure requires an automatic sprinkler system for fire suppression, as the building use is storage (S-1) and the footprint is 19,659 square feet.

2.5 Facility Drainage and Water Supply System

Facility features and operational procedures are designed to prevent introduction of material into the surface or groundwaters of the State. Material is unloaded, processed, and loaded onto trailers within a building designed to prevent escape of solid waste or MSW leachate into the environment. In addition, tarps are placed on the trailers before they leave the enclosed areas to prevent the escape of the material from the trailers and to minimize potential odors. Receiving and processing areas are swept or vacuumed daily after operations.

The facility holds a General Industrial State Pollution Discharge Elimination System (SPDES) permit for discharge of stormwater from the site. In order to maintain compliance with this permit, the facility performs compliance inspections and monitoring.

The water supply for the facility is provided by the Port of Albany.

2.6 On-Site Roads

The transfer station access road layout was planned to accommodate the expected traffic flow, including peak flow, in a safe and efficient manner. The relatively low traffic levels at the site do not typically require the queuing of trucks at the site entrance. To discourage the queuing of trucks outside of the facility entrance prior to the facility opening, signs will be posted notifying drivers that queuing is not allowed. Violators will be subject to a temporary or permanent ban from use of the facility, if necessary. Should queuing of trucks be required during operating hours, a designated area within the site boundaries labeled Hauling Facility Parking shown on Figure 2 provides sufficient queuing capacity.

Incoming collection vehicles will primarily enter the Port of Albany via the Church Street entrance, turn right onto Boat Street then left into the transfer station entrance. All transfer trailers exiting the site will turn right onto Boat Street, then left onto Church Street and proceed to interstate I-787. In the event that collection vehicles are accessing the Port of Albany from local collection routes to the west, these will enter the Port of Albany via the South Port Road entrance, proceed on Smith Blvd and turn left onto Boat Street to access the facility. Typical travel routes are depicted on Figure 1.

Vehicular ingress and egress to the site is via Boat Street. Incoming vehicles enter from either direction off of Boat Street. Drivers will stop at the weigh scale and be directed by administrative staff where to proceed to unload incoming materials. Trucks return across the scales to determine the net weight of the deposited load. Outgoing vehicles exit via the same route as incoming vehicles.

On-site access roads are pavement and are designed with sufficient thickness to withstand the expected traffic volumes and loading for transfer station operations. Access roads will be maintained in a safe and passable condition for loaded transfer vehicles in all weather conditions. Road conditions are monitored by the facility manager and repaired as necessary by on-site staff. Staff also performs snow removal and de-icing of roads using sand and/or salt as needed.

3.0 Noise Assessment

It is not necessary to perform a Part 360 Noise Assessment as part of this permit modification as there will be no change in the permitted tons per day received at the facility or quantity or type of equipment operating. The site is located in a highly industrial area and the background noise from surrounding operations is expected to be above the noise generated by the transfer station operation.

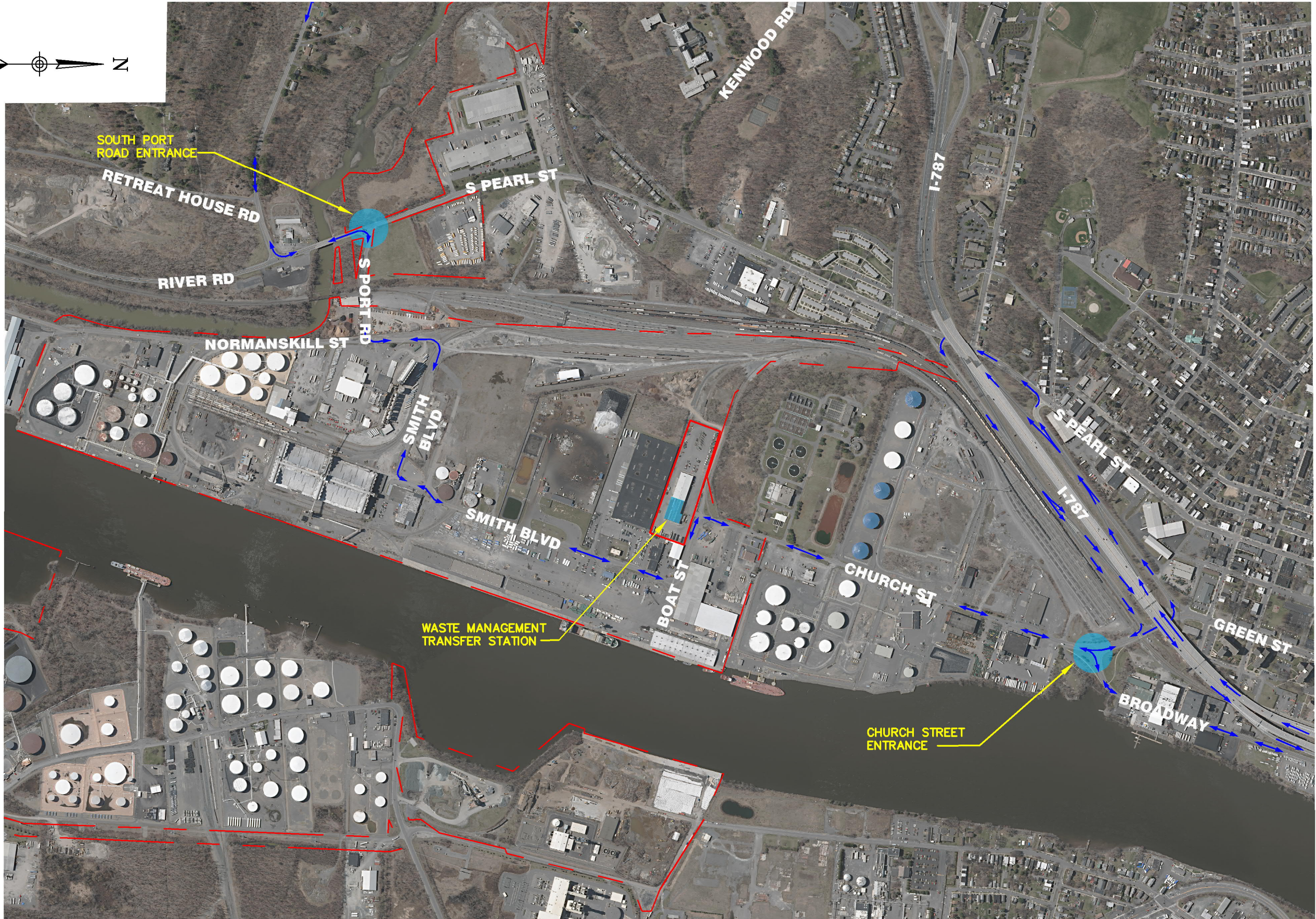
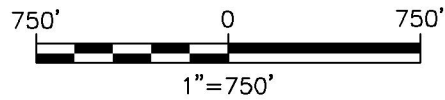
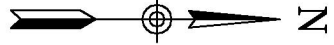
Figures

Figure 1

Regional Overview Map

Plotted: Oct 20, 2020 - 7:54AM SYR By: gmeverson
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\D\\1555000-1555999\\1555235\\1242.062.002_Port of Albany (ID 1555235).dwg

TRUE OR CALLED
NORTH



LEGEND



PROPOSED TRAFFIC FLOW PATTERN



PORT OF ALBANY PROPERTY LINE

WASTE MANAGEMENT OF NY, LLC
PORT OF ALBANY TRANSFER STATION
TRAFFIC REPORT
REGIONAL OVERVIEW MAP

**Barton
&Loguidice**

Date
OCTOBER 2020

Scale
1"=750'

Figure Number
FIGURE 1

Project Number
1242.062.002

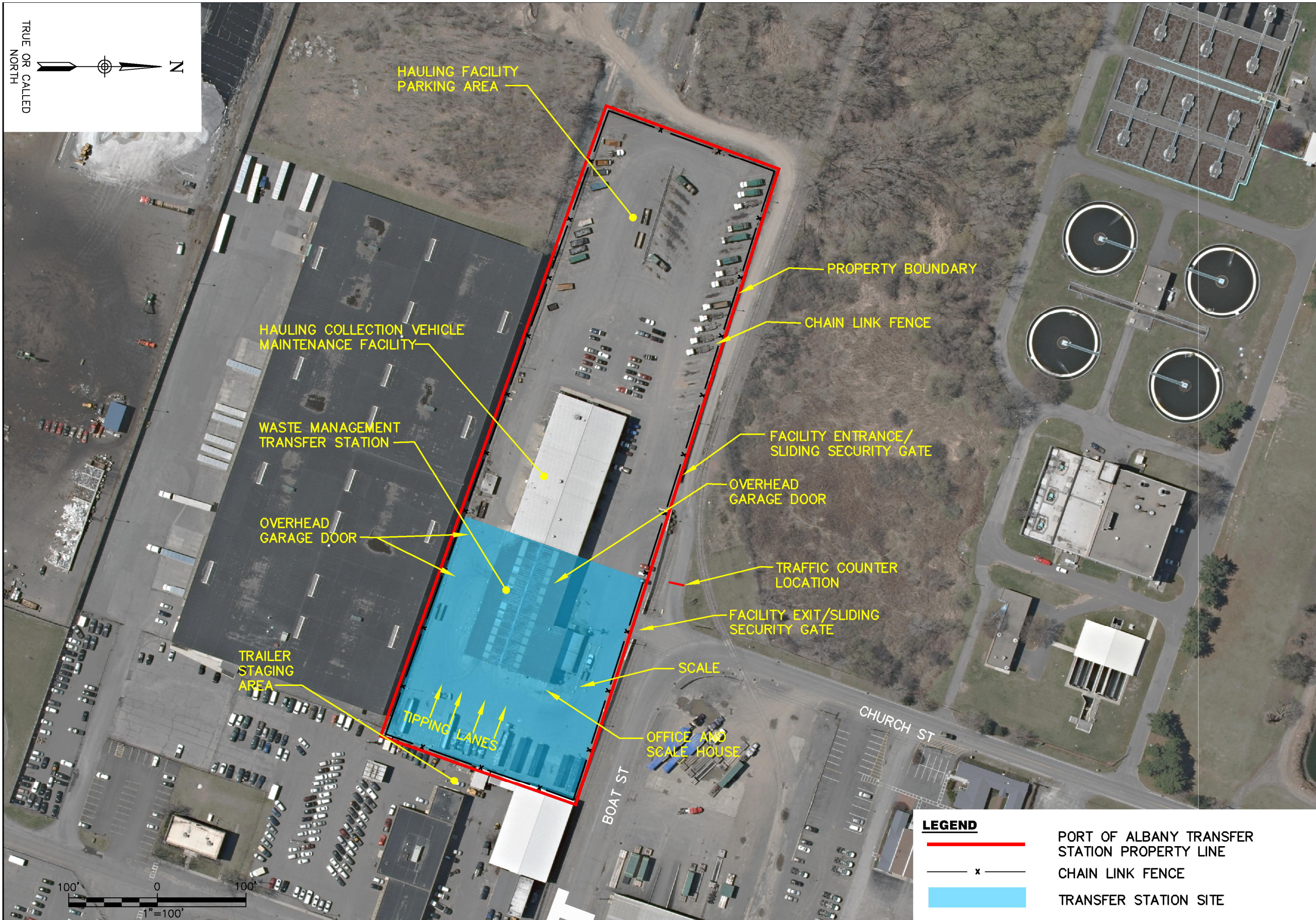
CITY OF ALBANY

ALBANY COUNTY, NEW YORK

Figure 2

Site Plan

Plotted: Oct 20, 2020 - 8:04AM SYR By: gmeverson
Z:\BL-Vault\02\18217AD2-1C71-4823-8927-99D5C4054147\0\1737000-1737999\1737937\1\1242.062.002_Site Figure (ID 1737937).dwg



WASTE MANAGEMENT OF NY, LLC PORT OF ALBANY TRANSFER STATION TRAFFIC REPORT SITE PLAN	Barton & Loguidice	Date OCTOBER 2020
		Scale 1"=100'
		Figure Number FIGURE 2
		Project Number 1242.062.002
ALBANY COUNTY, NEW YORK		CITY OF ALBANY

Figure 3

Transfer Station Floor Plan

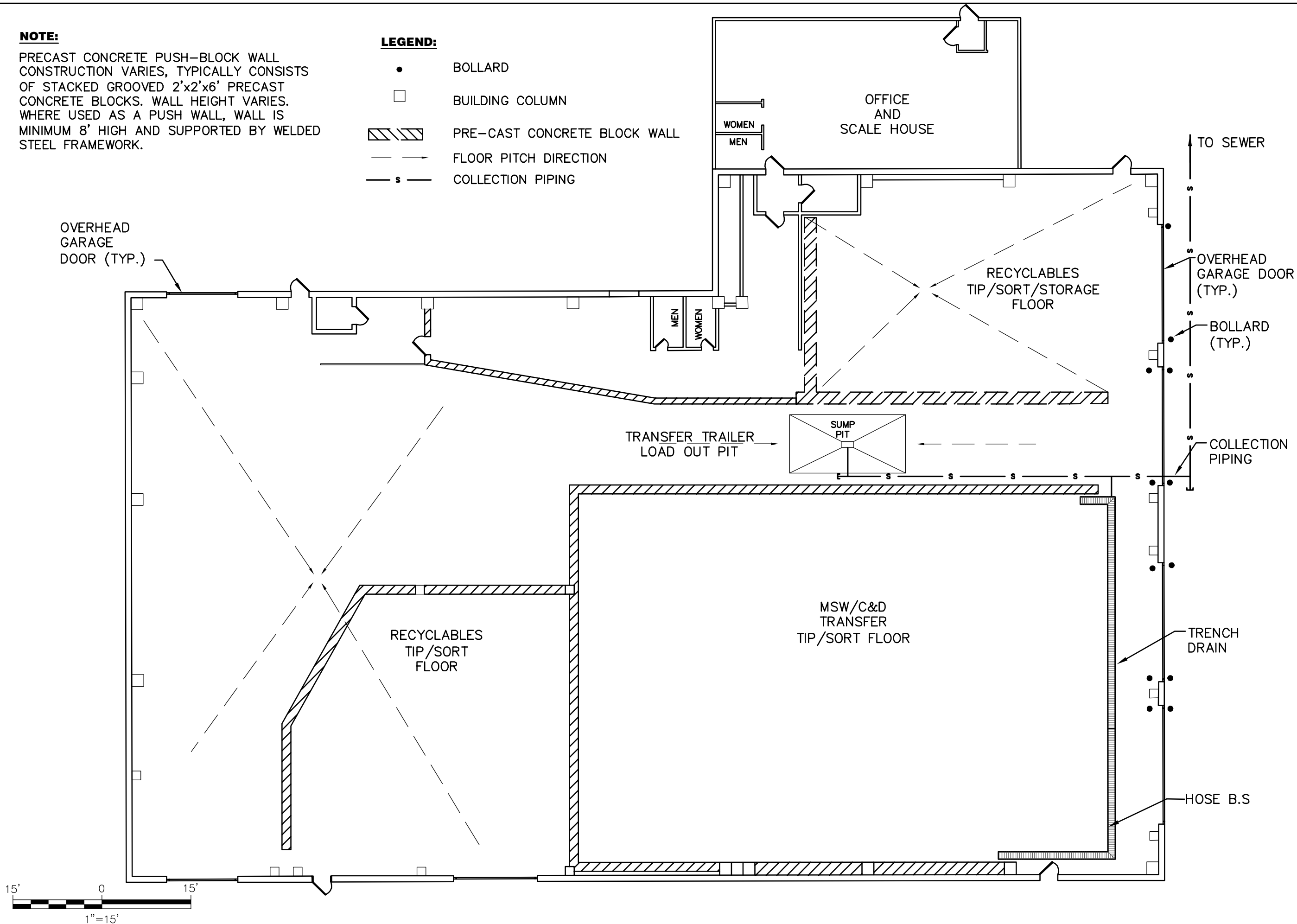
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NOTE:

PRECAST CONCRETE PUSH-BLOCK WALL CONSTRUCTION VARIES, TYPICALLY CONSISTS OF STACKED GROOVED 2'x2'x6' PRECAST CONCRETE BLOCKS. WALL HEIGHT VARIES. WHERE USED AS A PUSH WALL, WALL IS MINIMUM 8' HIGH AND SUPPORTED BY WELDED STEEL FRAMEWORK.

LEGEND:

- BOLLARD
- BUILDING COLUMN
- ▨ PRE-CAST CONCRETE BLOCK WALL
- FLOOR PITCH DIRECTION
- s — COLLECTION PIPING



WASTE MANAGEMENT OF NY, LLC
PORT OF ALBANY TRANSFER STATION
ENGINEERING REPORT
FLOOR PLAN

**Barton
&Loguidice**

Date
AUGUST 2019

Scale
1"=15'

Figure Number
FIGURE 3

Project Number
1242.062.002

CITY OF ALBANY

ALBANY COUNTY, NEW YORK

The experience to
listen
The power to
solveSM

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