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Letter of Transmittal

Attention: Mr. Ed Mussler, P.E.
NCDENR - Solid Waste Section
217 W. Jones St
Raleigh, NC 27603

Date: 8-27-13

Re: Sanford Transfer Station – Waste Industries – Permit Application
3290 McDonald Drive
Sanford, NC

Delivered by: Hand UPS Mail Fedex Courier Other

We are transmitting the following items:

- Prints Copy of Letter Specifications Application Mylars Report
 Plans Shop Drawings Calculations As Built Check Other

| No. | Date | Copies | Items to be Transmitted |
|-----|---------|--------|-------------------------|
| 1 | 8-27-13 | 2 | Plan Sets |
| 2 | 8-27-13 | 2 | Application Packages |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

These are transmitted as checked below:

- For Approval For Review Approved as Submitted
 For Your Use Corrected Prints Approved as Noted
 As Requested Copies for Distribution Copies for Approval

Remarks: Solid Waste Permit Application - Sanford Transfer Station for Waste Industries.

Note: Unless revision block states “Released for Construction”, all plans enclosed are to be considered “Preliminary” and “Not for Construction”, and are provided for permitting, information and bidding use only.

Cc: File

Signed:

BARNARD ENGINEERING, P.C.

Civil • Environmental • Geotechnical

August 27, 2013

Mr. Ed Mussler, P.E.
Permitting Branch Head
North Carolina Department of Environment and Natural Resources
Solid Waste Division
217 West Jones St.
Raleigh, NC 27603

Re: Proposed Waste Industries Sanford Transfer Station
Sanford, Lee County, NC

Dear Mr. Mussler,

We are forwarding this letter and associated attachments as application for a new Transfer Station to be located in Sanford, North Carolina. Waste Industries was awarded the collection contract for the City of Sanford earlier this year, and as part of that contract, committed to building a new transfer station. The Transfer Station facility will include a 6,000 square foot transfer station, a scale house / office, a scale, parking areas for employees, route collection trucks, transfer trailers and additional areas for maneuvering. The facility will be owned and operated by Waste Industries. We are currently working with the City to obtain the required Special Use Permit and expect issuance by the middle of September.

The proposed Transfer Station is to be located at 3290 McDonald Drive, Sanford, North Carolina. The property is identified by tax parcel id number 9651-96-5089-00 and consists of 5.44 Acres with a light industrial zoning classification. A second parcel is also included and will be recombined with the above parcel to create a single parcel. The second parcel is identified by parcel id number 9661-05-0902-00 and consists of 2.96 acres. The first Parcel is within the City Limits of Sanford and the second is currently in the City's Extraterritorial Jurisdiction. The parcel is being voluntarily annexed into the City.

The facility will accept MSW from Lee, Moore, Chatham, Wake, Harnett and surrounding counties that are within the accepting landfill's service area. The waste will be taken to the Sampson County Landfill in Roseboro, North Carolina. Daily tonnages may range from 100 to 500 tons per day with an average of 150 tons per day.

Access to the site will be from McDonald Drive, a City of Sanford maintained street. McDonald Drive is a cul-de-sac street that connects to Wilson Road, a NCDOT maintained highway. Incoming waste will arrive at the site from either direction on Wilson Road. Outbound waste will use Wilson Road to Access either US Highway 421 or N.C. Highway 87.

We contacted NCDOT's local office regarding the need for a traffic study. Based upon the traffic count we supplied to NCDOT, no improvements to the local streets are warranted. A copy of the letter from NCDOT is attached.

A paved driveway will connect from McDonald Drive to a new scale house / office. A single 70-ft x 10-ft above ground scale will be installed adjacent to the scale house to weigh trucks for financial transactions and tracking waste tonnages. Once beyond the scale house, the access drive will be paved with either asphalt or gravel, depending upon the outcome of the SUP and Variance process with The City of Sanford. Parking areas for collection trucks and transfer trailers will be asphalt paved. Concrete paved approach slabs will be provided in front of the transfer station, both at the tipping floor and the loading tunnel.

Site access will be controlled by a chain link fence surrounding the property with a gate at the entrance to the facility. Landscaping buffers will be provided in certain areas to provide visual screening.

Signage will be provided at the gate to inform customers of acceptable wastes, hours of operation, contact information and other required information.

The scale house will be a modular structure with a small office, a break room and restrooms for employees. The building will be ADA accessible. The building will be equipped with telephone and internet access for business and safety purposes.

The Transfer Station will be a 6,000 square foot partial grade separation style facility. The tipping floor is 8-feet higher than the loading pit floor. A lift-over wall located along the loading pit provides protection for the transfer trailers and safety for facility employees. The remainder of the tipping floor is surrounded by 10-foot tall push walls to allow for waste storage and building protection. All of the walls are plated with steel plates to provide long-term wear protection. The lift-over wall is plated with steel on the top as well to provide additional wear protection. Additional steel plates will be attached to the top of each push wall and the building frame to keep waste from falling between the push wall and the building skin. A deflector plate will be installed in the loading pit above the transfer trailers to assist in loading the trailers.

The floor of the transfer station consists of two separate floors. The first, lower floor, is a structural floor designed to accept the loads from the collection trucks and the wheel loader. The second floor is a sacrificial floor installed above the structural floor. This floor is intended as a wear surface to protect the structural floor from damage. As the facility ages, the sacrificial floor can be replaced wholly or in sections without compromising the structural integrity of the building. This two floor system will also be installed in the loading pit.

A liquid management system will be incorporated into the building design through several design features. First, the tipping floor is sloped from the outside towards the center of the lift-over wall. Scupper holes located in the base of the wall allow liquids to drain into the loading tunnel. The floor of the loading tunnel is sloped to two trench drains which collect the liquids and direct them to the sanitary sewer system. Second, a two foot by 6-inch high mountable

“speed bump” will be poured at the entrance to the tipping floor and the loading tunnel. This “speed bump” will prevent leachate from draining out of the building.

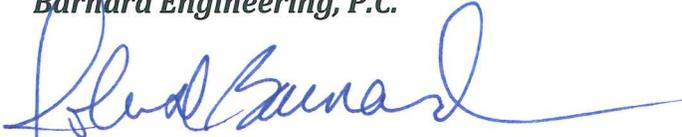
The trench drains in the loading tunnel drain by gravity through 8-inch diameter piping to a 1500 gallon oil/water separator then on to the City of Sanford Sanitary Sewer System for treatment and disposal.

The site will be connected to the public water system to provide potable water for site usage. Water will be available in the break room for employee use, and at the Transfer Station for wash down.

We have attached a full set of Civil Site Drawings, a copy of the proposed Operations Plan and a copy of the letter from NCDOT regarding the Traffic Study. Please contact us if you need further information or clarification.

Sincerely,

Barnard Engineering, P.C.

A handwritten signature in blue ink, appearing to read "John D. Barnard", with a long horizontal flourish extending to the right.

John D. Barnard, P.E.
Principal

Operations Manual

**Sanford Transfer Station
Sanford, North Carolina**

Prepared for:

**Waste Industries
Raleigh, North Carolina**



August, 2013

BARNARD ENGINEERING, P.C.
Civil • Environmental • Geotechnical

SANFORD TRANSFER STATION

OPERATIONS MANUAL

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ATTACHMENTS

| | |
|--------------|--------------------------|
| Set of Plans | Sanford Transfer Station |
|--------------|--------------------------|

SECTION 1.0

GENERAL FACILITIES OPERATIONS

1.1 OVERVIEW

This Operations Manual was prepared for operations of the Sanford Transfer Station located at 3290 McDonald Drive, Sanford N.C. as shown in Figure 1. The facility will be is authorized under a North Carolina Department of Environment and Natural Resources (NCDENR) Permit which, at the time of this plan preparation is being applied for and reviewed. The facility is owned and will be operated by Waste Industries.

The proposed site layout is depicted on Figure 2 and in more detail on the attached civil site plans titled "Sanford Transfer Station", prepared by Barnard Engineering, P.C., dated August 2013. A schematic layout of the building is included as Figure 3. Pertinent cross sections of the building are included as Figure 3A.

The information contained herein was prepared to provide personnel with an understanding of how the Design Engineer envisioned that the completed facility would be operated. While deviations from the operations outlined here may be acceptable, they should be reviewed and approved by the Design Engineer.

All personnel involved with the management or supervision of the facility shall review the documents and update them as needed. A copy of this Operations Manual will be kept at the facility and will be available for use at all times.

1.2 CONTACT INFORMATION

All correspondence and questions concerning the operation of the Sanford Transfer Station should be directed to the appropriate company and regulatory personnel listed below. For fire or police emergencies dial 911.

1.2.1 Waste Industries (Owner/Operator)

Waste Industries
4621 Marracco Drive
Hope Mills, NC 28348
(910) 423-4122 Office
(910) 423-4125 Fax

Contact: Mr. Ted Habets

1.2.3 Barnard Engineering, P.C. (Design Engineer)
1534 Saratoga Blvd.
Indian Trail, NC 28079
Phone: 704-421-3067

Contact: John D. Barnard, P.E.
jbarnard@barnardengineeringpc.com

1.2.4 North Carolina Department of Environment and Natural Resources

North Carolina DENR- Raleigh Central Office
217 W. Jones St.
Raleigh, NC 27603
Phone: (919) 707-8200

Division of Waste Management (DWM)- Solid Waste Section

1.3 ACCESS CONTROL

Limiting access to the facility is important for the following reasons:

- Unauthorized and illegal dumping of waste materials is prevented.
- Trespassing, and potential injury is discouraged.
- The risk of vandalism is greatly reduced.

The facility entrance is gated and all customers must check in at the Scale house.

1.3.1 Physical Restraints

The site is accessed through the McDonald Drive cul-de-sac, as shown **on the attached plans**. Scales and a (modular) scale house are provided near the entrance. All waste will be weighed prior to being processed on the site. The entrance has a gate which will be securely locked during non-operating hours.

1.3.2 Security

Frequent inspections of gates and fences will be performed by facility personnel. Evidence of trespassing, vandalism, or illegal operation will be reported to the Operator and/or Owner.

1.4 SIGNAGE

A prominent sign(s) containing the information required by the Division of Waste Management (DWM) will be placed at the main facility entrance. This sign(s) will provide information on operating hours, operating procedures, and acceptable wastes. Additional signage will be provided as necessary within the facility to distinctly distinguish the roadway to the transfer station. Service and maintenance roads for use by operations personnel will be clearly marked and barriers (e.g., traffic cones, barrels, etc.) will be provided as required. This is a private facility, not open to the public; however, contractual arrangements with other solid waste collection companies may allow them access to the facility.

1.5 COMMUNICATIONS

The scale house/office is equipped with telephones in case of emergency and for the conduct of day-to-day business. Emergency telephone numbers are displayed in the scale house and district office.

1.6 FIRE AND SAFETY

1.6.1 Fire Control

The facility is located within the City of Sanford fire district. The primary policy for fire control will be to evacuate the facility, notify the City of Sanford fire department and await their response. In case of minimal fire, 10 ABC fire extinguishers are mounted on both levels of the transfer station facility. All Waste Industries vehicles carry (2) 10 ABC fire extinguishers. A local fire extinguisher company periodically inspects and services the fire extinguishers and conducts training for all Waste Industries personnel.

1.6.2 Safety

All aspects of the operation of the facility were developed with the health and safety of operations staff, customers, and neighbors in mind. Prior to commencement of operations, a member of the operating staff will be designated site safety officer. This individual, together with the facility's management will modify the site safety and emergency response program to remain consistent with National Solid Waste Management Association and Occupational Safety and Health Administration (OSHA) guidance.

Safety equipment provided includes equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. All personnel will be encouraged to complete the American Red Cross Basic First Aid Course. Other safety requirements as designated by the Owner will also be implemented.

1.7 SEVERE WEATHER CONDITIONS

Unusual weather conditions can directly affect the operation of the facility. Some of these weather conditions and recommended operational procedures are as follows.

1.7.1 Ice Storms

An ice storm can make access to the facility dangerous, prevent movement and, thus, may require closure of the facility until the ice is removed or has melted.

1.7.2 Heavy Rains

Exposed soil surfaces can create a muddy situation in some portions of the facility during rainy periods. The control of drainage and use of crushed stone on unpaved roads should provide all-weather access for the site and promote drainage away from critical areas. In areas where the aggregate surface is washed away or otherwise damaged, new aggregate should be used for repair.

1.7.3 Electrical Storms

The open areas of the facility are susceptible to the hazards of an electrical storm. If necessary, operations will be temporarily suspended during such an event. To guarantee the safety of all field personnel, refuge will be taken in the on-site buildings or in rubber-tired vehicles.

1.7.4 Windy Conditions

The tipping area is covered and contained. However, excessively windy conditions may cause some wind-blown waste issues. Facility operations during a particularly windy period may include temporary employees to police wind-blown waste.

1.7.5 Severe Storms

In the event of hurricane, tornado, or severe winter storm warning issued by the National Weather Service, facility operations may be temporarily suspended until the warning is lifted.

1.8 EQUIPMENT REQUIREMENTS

The Owner will maintain on-site equipment required to perform the necessary transfer activities. Periodic maintenance of all equipment, and minor and major repair work, will be performed at designated maintenance zones. Off-site preventative maintenance and repairs is also possible, depending on the specific situation.

1.9 PERSONNEL REQUIREMENTS

At least one member of the supervisory staff will be experienced in the management of transfer station operations. Each facility employee will go through an annual training course (led by supervisory staff). As part of this training, personnel learn to recognize loads which may contain prohibited wastes.

1.10 HEALTH AND SAFETY

All aspects of the transfer station operations were developed with the health and safety of the operating staff, customers, and neighbors in mind. Prior to commencement of operations of the facility, a member of the operating staff will be designated as site safety officer. This individual, together with the facility's management, will modify the site safety and emergency response program to remain consistent with applicable Occupational Safety and Health Administration (OSHA) guidance.

Safety equipment provided includes equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. Facility personnel will be encouraged to complete the American Red Cross Basic First Aid Course. Other safety requirements as designated by the Owner will also be implemented.

Each facility employee will go through annual training course in health and safety (led by supervisory staff). All training shall be documented and attested to by signatures of the trainer and trainee. The following are some general recommendations for the health and safety of workers at the Sanford Transfer Station.

1.10.1 Personal Hygiene

The following items are recommended as a minimum of practice:

- Wash hands before eating, drinking, or smoking.
- Wear personal protective equipment as described in **Section 1.10.2**.
- Wash, disinfect, and bandage ANY cut, no matter how small it is. Any break in the skin can become a source of infection.
- Keep fingernails closely trimmed and clean (dirty nails can harbor pathogens).

1.10.2 Personal Protective Equipment

Personal Protective Equipment (PPE) must be evaluated as to the level of protection necessary for particular operating conditions and then made available to facility employees. The list below includes the PPE typically used and/or required in a solid waste management facility workplace.

- Safety shoes with steel toes.
- Reflective Vests.
- Hard Hats, when not in a piece of equipment or truck.
- Noise reduction protection should be used in areas where extended exposure to continuous high decibel levels is expected.
- Disposable rubber latex or chemical resistant gloves for handling and/or sampling of waste materials.
- Dust filter masks

Following use, PPE's should be disposed of or adequately cleaned, dried, or readied for reuse.

1.10.3 Mechanical Equipment Hazard Prevention

The loaders and other equipment should be operated with care and caution. All safety equipment such as horns, backup alarms, and lights should be functional. A Lockout-Tagout program shall be used to identify equipment in need or under repair and insure that operation is "off-limits" prior to maintenance or repair. All operators shall be trained in the proper operation of equipment.

1.10.4 Employee Health and Safety

Some general safety rules are:

- Consider safety first when planning and conducting activities.
- Review the equipment Operation & Maintenance Manual prior to attempting repairs/changes.
- Remember the buddy system in case of repair of mechanical equipment.
- Clearly post emergency contact phone numbers.
- Provide easy and visible access to the Right To Know materials.
- Provide easy and visible access to the first aid kit and fire extinguishers.

1.10.5 Physical Exposure

Facility personnel may come in contact with the fluids, solids, and airborne constituents found at the transfer. Routine training should be conducted regarding the individual and collective materials used in the facility and their associated hazards. Training concerning safe work practices around these potential exposures should use equipment and proper disposal procedures.

1.10.6 Material Safety Data Sheets

Material Safety Data Sheets (MSDS) shall be collected on every waste (if available) that enters the facility. Information shall also be made available for all chemicals stored on site. MSDS sheets shall be stored in a location with all other Right-To-Know information for the site.

1.11 UTILITIES

Electrical power, water, and telephone will be provided at the scale house. Water and electrical power will be available at the Transfer Station Building. Restrooms for site employees will be provided at the site in the scale house.

1.12 RECORD KEEPING PROGRAM

The Owner will maintain the following records in an operating record at the landfill:

- A. Waste inspection records (see **Section 2.4**);
- B. Daily tonnage records – including source of generation, scale certifications;
- C. Waste determination records;
- D. List of generators and haulers that have attempted to dispose of restricted wastes;
- E. Employee training procedures and records of training completed;
- F. Leachate management records (see **Section 3.3.3**);
- G. Annual facility reports;
- H. Cost estimates for financial assurance documentation.

The operating record will be kept up to date by the Owner or his designee. It will be presented upon request to the Division of Waste Management for inspection. A copy of this **Operations Manual** will be kept at the facility and will be available for use at all times.

SECTION 2.0 WASTE HANDLING OPERATIONS

2.1 OVERVIEW

This section describes the required waste handling operations for the Sanford Transfer Station facility. The solid waste processed through the Transfer Station could be a portion of the waste stream generated in Lee, Moore, Chatham, Wake, Harnett and surrounding counties. The waste stream will consist of Municipal Solid Waste (MSW).

2.2 ACCEPTABLE WASTES

2.2.1 MSW Transfer Station

Only the waste as defined by 15A NCAC 13A .0101(36) may be received at the Transfer Station. Employees are trained to recognize unacceptable and hazardous materials and to properly segregate and dispose of them.

2.3 PROHIBITED WASTES

2.3.1 MSW Transfer Station

Only wastes as defined in **Section 2.2.1** above may be accepted in the MSW transfer station. Industrial wastewater sludges, asbestos and commercial animal waste (i.e. animal shelter waste) will not be transferred through this facility. No other wastes may be accepted including the following wastes:

- Whole Scrap Tires
- Used Oil
- White Goods
- Lead Acid Batteries
- Yard Waste
- Discarded computer equipment
- Oyster shells
- Rigid plastic containers
- Aluminum cans

In addition, operating criteria prohibit other materials from receipt by the MSW transfer station. These materials are:

- Hazardous waste as defined by 15A NCAC 13A .0101(11), including hazardous waste from conditionally exempt small quantity generators.

- Polychlorinated biphenyls (PCB) wastes as defined in 40 CFR 761 with the exception of trace amounts found in materials such as consumer electronics.
- Bulk or non-containerized liquid wastes unless the waste is household waste other than septic waste and waste oil; or the waste is leachate or gas condensate derived from the MSW landfill unit. A liquid determination will be performed by the standard Paint Filter test.
- Containers holding liquid wastes unless the waste is household waste.

2.4 WASTE SCREENING PROGRAMS

To assure that prohibited wastes are not entering the facility, screening programs will be implemented. Waste received at both the scale house entrance and waste taken to the tipping area will be screened by trained personnel. These individuals have been trained to spot indications of suspicious wastes, including: hazardous placarding or markings, liquids, powders or dusts, sludges, bright or unusual colors, drums or commercial size containers, and chemical" odors. Screening programs for visual and olfactory characteristics of prohibited wastes are an ongoing part of the facility operation.

2.4.1 Waste Receiving and Inspection

All vehicles must stop at the scale house located in proximity to the entrance of the facility, and visitors are required to sign-in. All waste transportation vehicles are weighed and the content of the load assessed. The scale attendant(s) requests from the driver of the vehicle a description of the waste it is carrying to ensure that unacceptable waste is not allowed into the facility. The attendant(s) then visually check the vehicle as it crosses the scale. Signs informing users of the acceptable and unacceptable types of waste are posted at the scale house. Once passing the scales, the vehicles are routed to the appropriate area of the Transfer Station.

Vehicles will be randomly selected for screening on a regular basis, depending on personnel available. At least one vehicle per week will be randomly selected by inspection personnel. A random truck number and time will be selected (e.g., the tenth load after 10:00 a.m.) on the day of inspections. However, in the event that suspicious materials are spotted in any waste load, that load will be inspected further.

Vehicles selected for inspection are to be directed to an area on the tipping floor where the vehicle will be unloaded. Waste is carefully spread using suitable equipment. An attendant trained to identify wastes that are unacceptable inspects the waste discharged at the screening area. If unacceptable waste is found, the entire load will be isolated, reloaded, and the generator/hauler will be logged and escorted out of the facility.

For unacceptable wastes that are non-hazardous, the Owner will then notify officials of the Division of Waste Management (see **Section 1.2.2**) within 24 hours of attempted disposal of unacceptable waste to determine the proper course of action. The hauler is responsible for removing unacceptable waste from the facility property.

If no unacceptable waste is found, the load will be loaded into the transfer trailer. All random waste inspections will be documented by operations staff.

In addition to random waste screening described above, waste unloaded on the tipping floor face will be inspected by the equipment operators, trained to spot unacceptable wastes, before and during loading into the transfer trailer, Any suspicious looking waste will be reported immediately to the designated primary inspector for further evaluation.

2.5 FACILITY OPERATIONS

2.5.1 Operating Capacity

The Operating capacity for the transfer area is estimated to be up to approximately 500 tons per day of MSW.

2.5.2 Service Area

The solid waste processed through the Transfer Station will be a portion of the waste stream generated in Lee, Moore, Chatham, Wake, Harnett and surrounding counties.

2.5.3 Disposal Facility

The Sampson County landfill will be the primary disposal site. Waste prohibited or requiring special handling at the receiving landfills will not be allowed into the Transfer Station.

2.5.4 Personnel Requirements

The anticipated personnel requirements for operation and maintenance of the Transfer Station are listed in the following table.

| Description | Primary Function (Allocation) |
|---------------------------------------|---|
| 1) Site Manager/Scale house Attendant | Overall management of the facility. Receiving and weight for incoming loads |
| 3) Operators (1 or 2) | Management of tipping floor |
| 4) Commercial Drivers (Varies)* | Transfer of MSW Waste |
| 5) Labor (1 to 2) | General labor and operational staff around the site |

* Commercial drivers subject to change in response to actual volume of waste received.

2.5.5 Equipment Requirements

The anticipated equipment requirements for operation and maintenance of the site are listed in the following:

- (1) Wheel loader
- (2) Various sizes of sealed transfer trailers
- (3) 100,000 lb. certified truck scale at facility entrance

2.5.5 **Building Features**

The anticipated building features of the Transfer Station are listed in the following table.

| Description | MSW |
|---|-----|
| 1) Roof | Yes |
| 2) Sides (3) | Yes |
| 3) Concrete Floor | Yes |
| 4) Leachate Collection | Yes |
| 5) Ventilation | Yes |
| 6) Water Supply | Yes |
| 7) Lighting | Yes |
| 8) Interior Office & Bathrooms | No |
| 9) Explosive Gas Monitoring | Yes |
| 10) Communications (Telephone, Radios, Cell Phones) | Yes |
| 11) Fire Suppression/Sprinkler System | No |
| | |

2.6 TRANSFER OPERATIONS

2.6.1 **Access**

Traffic will be clearly directed to the appropriate area of the Transfer Station. Traffic speed on the site should be less than 10 MPH. Rutting of gravel roadway surfaces must be repaired by placement of additional gravel on the roadway and not solely by grading the rut. This will maintain the separator geotextile placed below all gravel roadway surfaces.

2.6.2 **General Procedures**

The transfer operations will be conducted in accordance with the approved Operation Plan and conditions of the Solid Waste Permit issued by the NC DENR DWM.

Facility operations are anticipated as follows:

1. Collection vehicles delivering waste to the facility will enter through the main entrance;
2. Pass through the scales and scale house for weight;
3. Continue along the access road until reaching the transfer station tipping area;
4. The attendant will direct vehicles, waiting to unload, to back into the facility through the entrance. Adequate area is available in front of the transfer area for drivers to queue their vehicles into a backing maneuver. Station operating personnel will be on the station floor to direct and guide the vehicles.
5. The vehicles will back onto the tipping floor to an area designated by the attendant.
6. Once the vehicle is in position, the waste load will be discharged directly onto the tipping floor. The Facility is equipped with 10-ft tall steel clad “push walls” as well as 4-ft tall “lift-over walls. These walls line the interior of the building and create temporary storage areas for the waste and a loading area for the transfer trailers.
7. A spotter will inspect the discharged waste before it is mixed with other waste on the tipping floor and pushed into the temporary storage area by a wheel loader.
8. When appropriate, the waste will be picked up by the wheel loader and loaded into open top transfer trailers, specifically designed for hauling MSW waste, located in the lower level of the Transfer Station.
9. Once loaded, the transfer trailers will be removed from the Transfer Station and tarped. It will then either be placed in a parking spot to wait for a road tractor, or if a road tractor is available, the loaded trailer will be hauled from the site immediately.

A site plan is shown on Figure 2.

SECTION 3.0

ENVIRONMENTAL MANAGEMENT

3.1 OVERVIEW

This section reviews the overall environmental management tasks required for the successful operation of the facility.

3.2 SURFACE WATER CONTROL

Proper control of surface water at the transfer area will accomplish the following goals:

- Prevent the run-on of surface water into waste handling area(s);
- Prevent the run-off of surface water that has come into contact with the waste (i.e. leachate);
- Limit the erosion caused by surface waters; and
- Limit sediments carried off-site by surface waters.

The design of the building and site protects surface and ground water from contamination through contact with waste. The tipping of the transfer station is isolated from the site by building walls, push walls, a rollover curb at the front of the building and the fact the site is graded to drain away from the building. Liquid from the waste and from washing down the building interior/ tipping floor is directed to collections sumps and then to the sanitary sewer system. The tipping floor is sloped to drain towards the lift over wall. Scupper holes in the wall allow water to flow to two floor drains. The loading pit floor is also sloped to the floor drains. A schematic of the building with floor slopes is included on Figure 2.

Erosion and sedimentation control plans for the site have been provided to NC DENR, Raleigh Regional Office for review and approval. These plans describe engineered features and practices for preventing erosion and controlling sedimentation during construction of the site. The City of Sanford does not have a Phase 2 post construction storm water requirement at this time.

3.2.1 Erosion and Sedimentation Control

The facility design includes a temporary skimmer sedimentation basin located on the western property line. Surface water flows at the site generally convey site runoff to the pond. All site features should be inspected regularly for erosion damage and promptly repaired. Upon final site stabilization, this basin will be removed and stabilized.

3.3 LEACHATE MANAGEMENT

The leachate management system for the proposed Transfer Station consists of concrete tipping floor, collection drains, an oil/water separator and a direct connection to a sanitary sewer system.

3.3.1 Leachate Collection

As described above, leachate drains from the tipping floor through scupper holes in the lift over wall to drains in the load-out pit floor. Removable screens in the floor drains keep gross contaminants out of the piping and oil water separator. Piping directs the flow by gravity to an oil/water separator. The leachate then flows through gravity piping to the City of Sanford sanitary sewer

3.3.2 Inspections and Maintenance

The facility staff should inspect the drain pit screens on a regular basis and should remove gross contaminants as required. The oil/water separator should be inspected regularly and must be cleaned as required.

3.3.3 Record Keeping

Accurate records will be maintained at the facility in accordance with **Section 1.12**.

3.4 VECTOR CONTROL

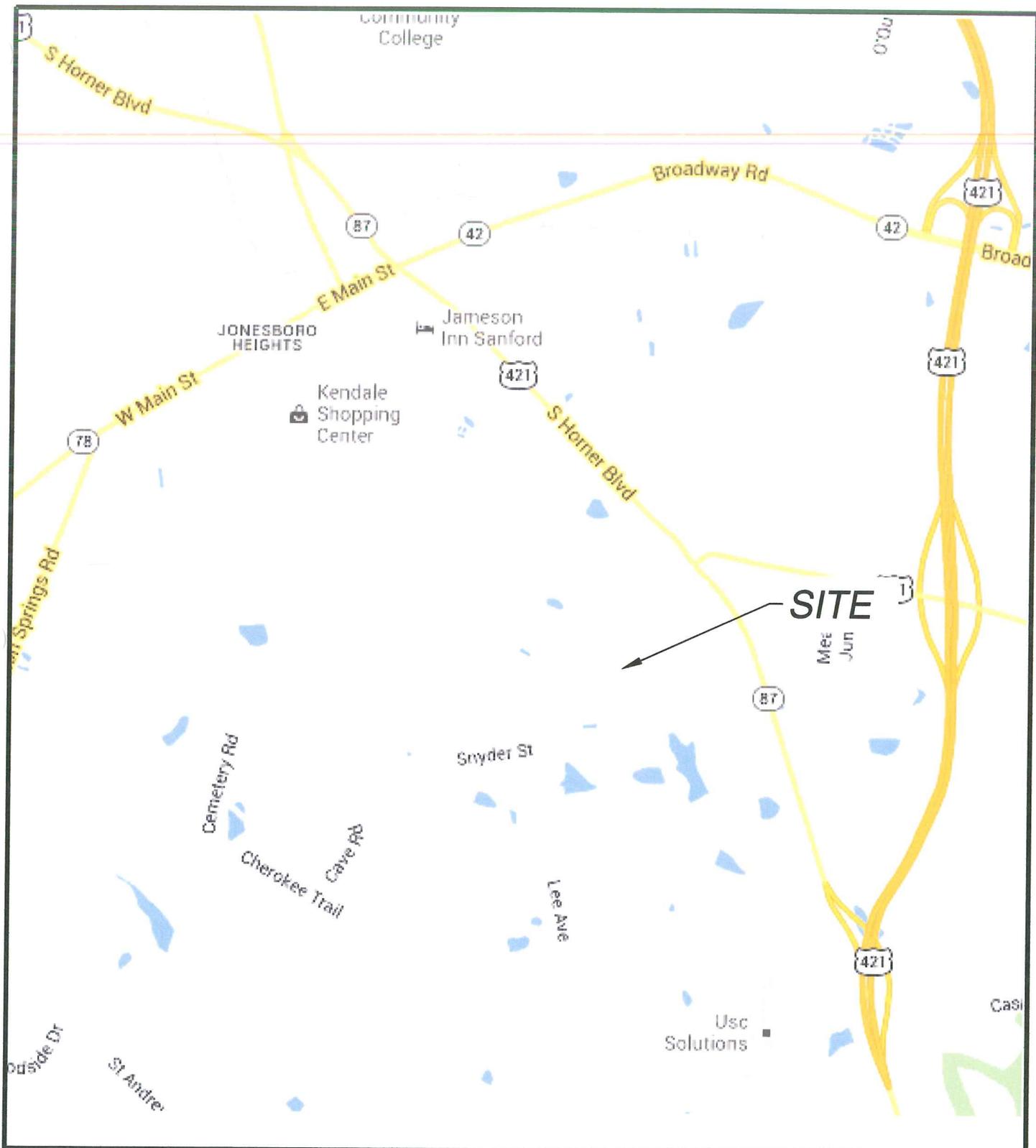
Vector control at the site will be handled primarily by proper housekeeping. Under normal operating conditions, all waste will be removed from the floor during the current operation shift. Except in an emergency, solid waste will not remain on-site for more than 48 hours. A local pest control contractor will be used to further control insects and rodents, if necessary. If vector control becomes a problem, additional measures will be taken to ensure the protection of human health.

3.5 ODOR CONTROL

Odorous or potentially odorous materials will be pushed into the transfer truck covered as soon as possible to avoid odor problems. Additionally, the transfer areas will be cleaned and swept daily and washed down weekly, at a minimum. If odor control becomes a problem, additional measures will be taken to ensure odor control.

3.6 DUST CONTROL

Dust related to waste hauler traffic on the access roads will be minimized by using a water truck or a sprinkler system to limit dust on the gravel portion of the road.



VICINITY MAP

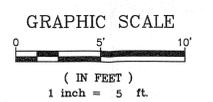
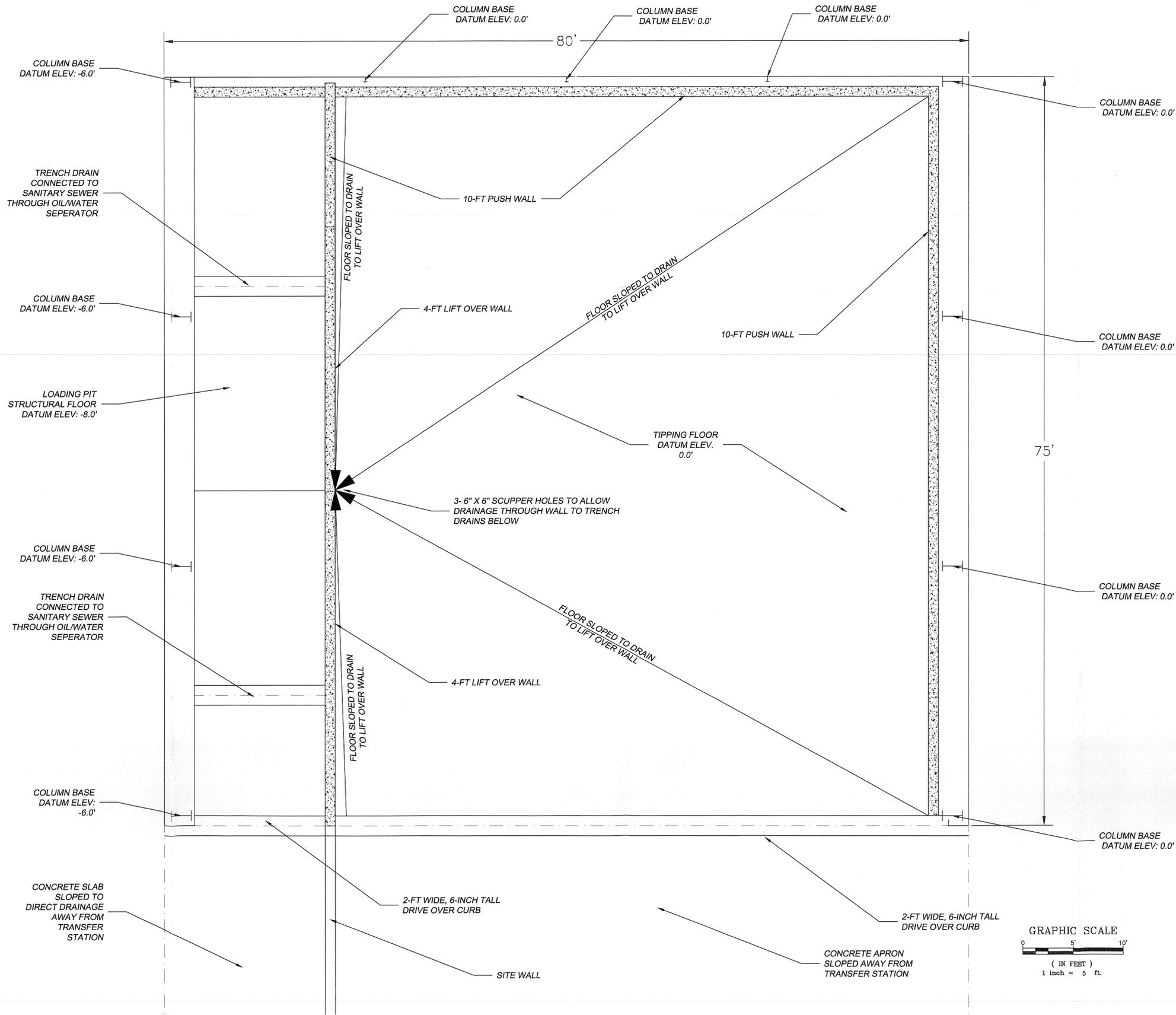
**SANFORD TRANSFER STATION
SANFORD, NC**

FIGURE-1

**WASTE INDUSTRIES
3301 BENSON DRIVE
RALEIGH, NC 27609**

BARNARD ENGINEERING, P.C.

1534 Saratoga Blvd. (704) 628-0344
 Indian Trail, NC 28079 (678) 232-8967
 www.barnardengineeringpc.com
 N.C. License No. C-3679



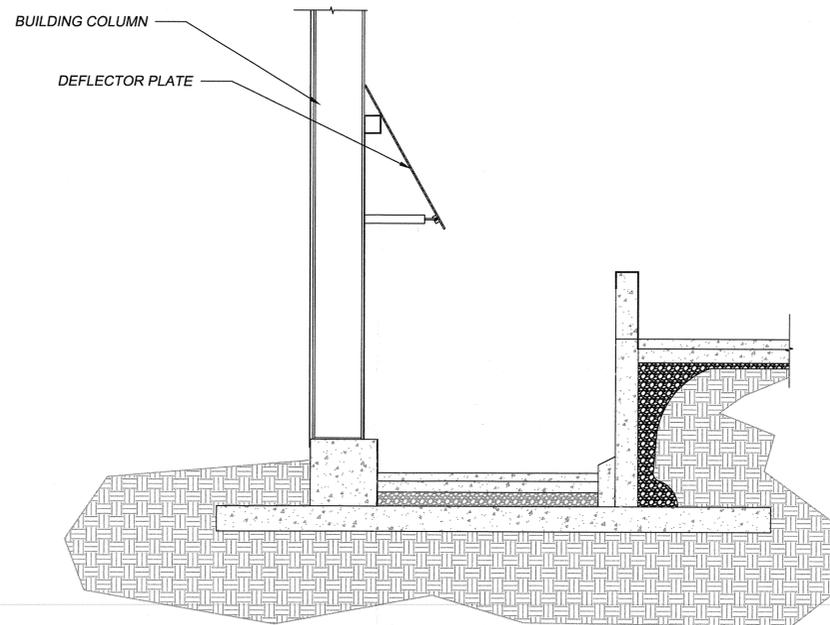
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SANFORD TRANSFER STATION
WASTE INDUSTRIES

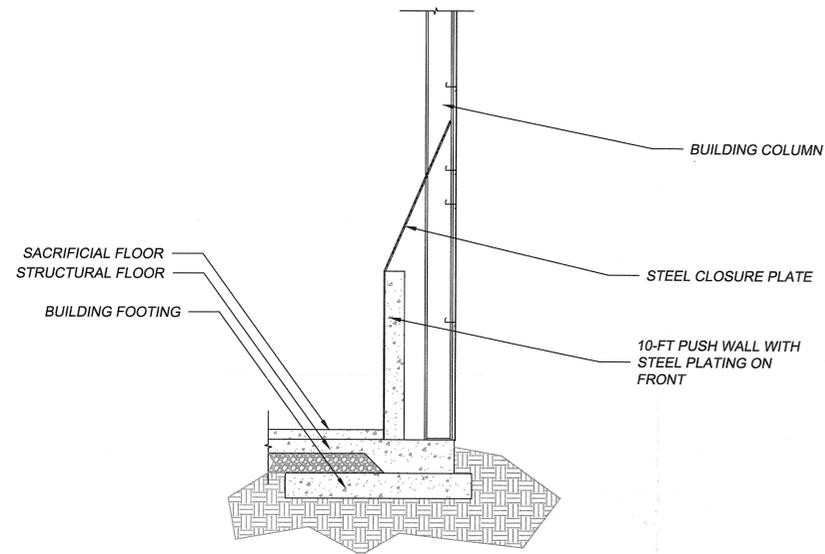
TRANSFER STATION SCHEMATIC FLOOR PLAN

| DESIGNED | DRAWN | CHECKED | JOB |
|----------|--------|-------------|--------|
| JDB | JDB | JDB | JDB |
| AS SHOWN | DATE | PROJECT NO. | 2013-5 |
| | 8/2013 | | |

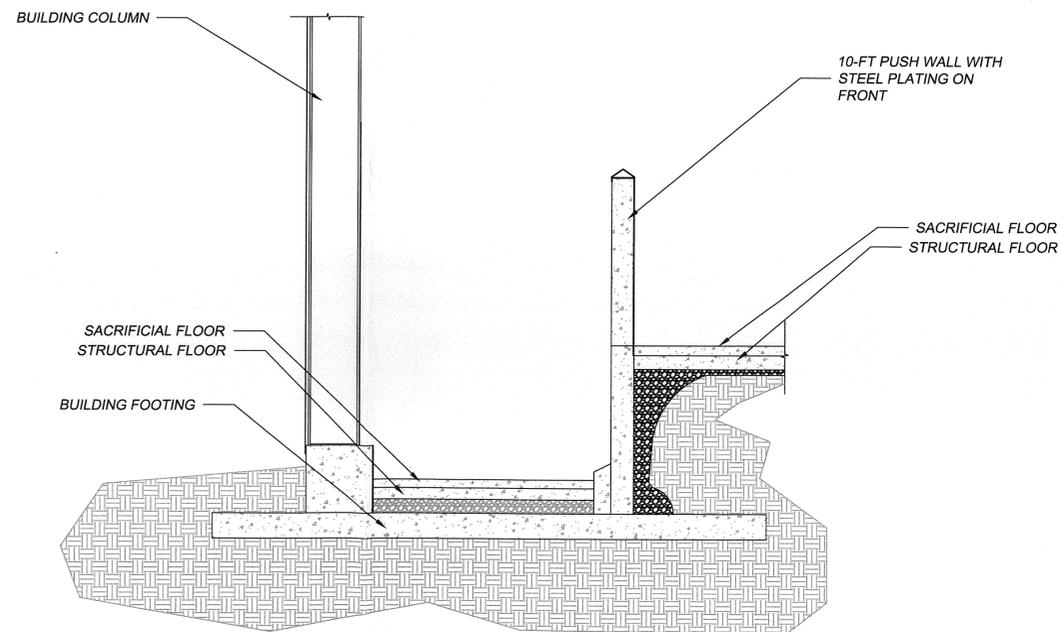
FIGURE 3



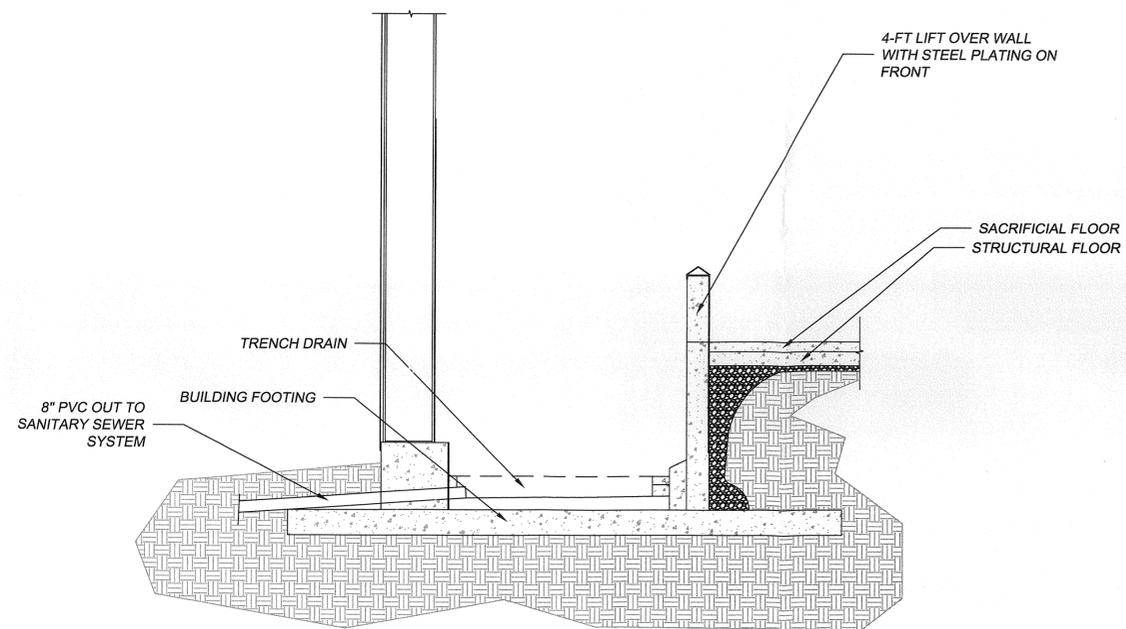
SECTION THROUGH LOADING PIT
AT 4-FT LIFT OVER WALL



SECTION THROUGH TIPPING FLOOR AT 10-FT PUSH WALL



SECTION THROUGH LOADING PIT
AT 10-FT PUSH WALL



SECTION THROUGH LOADING PIT
AT 4-FT LIFT OVER WALL
SHOWING DRAIN

BARNARD ENGINEERING, P.C.
1534 Saratoga Blvd., Indian Trail, NC 28079
(704) 421-3067
www.barnardengineering.com
N.C. License No. C-3679

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SANFORD TRANSFER STATION
WASTE INDUSTRIES

| DESIGNED | DRAWN | CHECKED | PROJECT NO. |
|----------|--------|---------|-------------|
| JDB | JDB | JDB | 2013-5 |
| SCALE | DATE | | |
| NTS | 8/2013 | | |

TRANSFER STATION SCHEMATIC
TYPICAL SECTIONS



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

August 14, 2013

LEE COUNTY

Mr. John D. Barnard, P.E.
Barnard Engineering, P.C.

Re: Sanford Transfer Station – McDonald Drive Sanford

Dear Mr. Barnard,

The North Carolina Department of Transportation has reviewed your request for access to Wilson Road (SR 1136) in Lee County and found that no improvements would be required on Wilson Road based on the trip information you provided.

Employee Trips: 12
Route Hauling Vehicle Trips: 8
Transfer Station Trips Inbound: 66
Tractor Trailer Loads Outbound: 14

It would be recommended that you improve the radius on McDonald Drive to help accommodate the truck traffic into your site.

Final approval for your site is dependent upon an approved driveway permit.

If you have any further questions, please feel free to contact me at (910) 944-7621.

Sincerely,

A handwritten signature in cursive script that reads "Marty C. Tillman".

Marty C. Tillman
District Engineer

Cc: File