

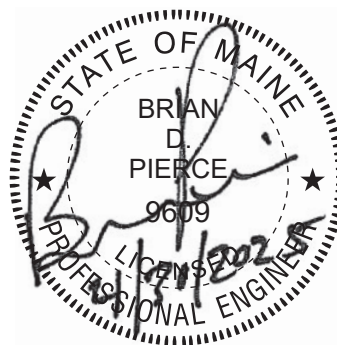


POST-CLOSURE MONITORING AND MAINTENANCE PLAN DOLBY LANDFILL FACILITY EAST MILLINOCKET, MAINE

Prepared for

MAINE BUREAU OF GENERAL SERVICES
Augusta, Maine

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**POST-CLOSURE MONITORING AND MAINTENANCE PLAN
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE**

1.0 INTRODUCTION AND PURPOSE

This Post-Closure Monitoring and Maintenance Plan (PCMMP and/or Plan) was prepared for the Dolby Landfill Facility (Facility) in general accordance with Chapter 401, Section 6 of the Maine Department of Environmental Protection's (MEDEP) Solid Waste Management Rules. This Plan is intended for use by the Maine State Department of Administrative and Financial Services (DAFS) – Bureau of General Services (BGS), BGS' post-closure landfill operator (i.e., the landfill operator), and MEDEP for the post-closure care of the Facility. Given that the Dolby Landfill Facility is closed to waste placement and each of the landfills at the Facility has received final cover, this Plan also serves as the Facility's Operations Manual.

DAFS owns the Dolby Landfill Facility and BGS is responsible for the Facility's overall operation. The Facility is located approximately 2-1/2 miles northwest of East Millinocket, Maine on Route 157. The Facility consists of three landfills: Dolby I, Dolby II, and Dolby III. Each landfill contains non-hazardous solid wastes generated from pulp and papermaking activities, woodland operations, biomass burning, and general mill and municipal trash collection. A copy of the MEDEP Board Order approved Solid Waste License – Final Closure (#S-000796-WO-AO-N) for the Facility is provided in Appendix A.

The Dolby II and Dolby III Landfills are contiguous and have a combined area of approximately 130 acres. The Dolby I Landfill has an area of approximately 20 acres and is located approximately 0.25 miles south of Dolby II and III. Figure 1-1 shows the location of the Facility and the landfill areas relative to major local landmarks. In the summer of 2016, Phase 1 of the Dolby III cover upgrade was completed. Phase 2 of the cover upgrade was completed in 2022, Phase 3 was completed in 2023, and Phase 4 (the final phase) was completed in 2024. The cover upgrade includes placement of a geomembrane over the entire Dolby III Landfill surface. Final closure of the Dolby II Landfill occurred in 1999 by placement of a soil cover over the lateral extent of that waste mass. The Dolby I Landfill was closed more than 30 years ago with a soil cover and is not subject to the requirements of this Plan unless specifically stated.

The Facility is supported by a lined leachate storage pond, a leachate pump station, and a leachate transport pipeline. Leachate and groundwater discharge from the Dolby II and Dolby III Landfill areas are collected by a system of perforated pipes and connecting manholes located along the perimeter of Dolby II and Dolby III, and by a groundwater/leachate collection layer beneath a portion of the Dolby III waste mass. The collected groundwater and leachate flows to the leachate storage pond (henceforth, the leachate pond) and from there the leachate is pumped via the pump station and leachate transport pipeline to the Town of East Millinocket's wastewater treatment plant (WWTP) (approximately 3.25 miles

to the south). Figure 1-1 shows the general location of the leachate transport pipeline and the Town's WWTP. Appendix B includes engineering drawings for the leachate management infrastructure.

A network of groundwater monitoring wells and surface water monitoring points are in place at the Facility and are routinely sampled and analyzed for water quality. The water quality monitoring and follow-up reporting is performed in accordance with an existing Environmental Monitoring Plan for the Facility prepared in 2012 (i.e., the 2012 EMP). The EMP is on file with the MEDEP and BGS.

The purpose of this PCMMP is to provide the landfill owner and the landfill operator with written guidance for the monitoring and maintenance of the Dolby Landfill Facility during its post-closure life. The remainder of this Plan describes responsibilities related to: performing inspections and maintenance of the Facility; site safety and emergency procedures; leachate management; water quality monitoring; and general management of the Facility. All persons assisting with the post-closure activities for the Dolby Landfill Facility must be familiar with the contents of this Plan and the need to maintain and monitor the Facility's environmental performance during the post-closure period.

A copy of this PCMMP and other relevant plans for the Facility are on file with BGS and are available upon request. This Plan will be revised as necessary; all changes must be coordinated through BGS and no change can be implemented until approved by the MEDEP.

NOTES

1. BASE MAP FROM GOOGLE EARTH PHOTO DATED SEPTEMBER 16, 2022.
2. MANHOLE PIPE LOCATIONS FROM SQUAW BAY CORPORATION DRAWING DATED 4/25/95. LOCATIONS ARE APPROXIMATE.

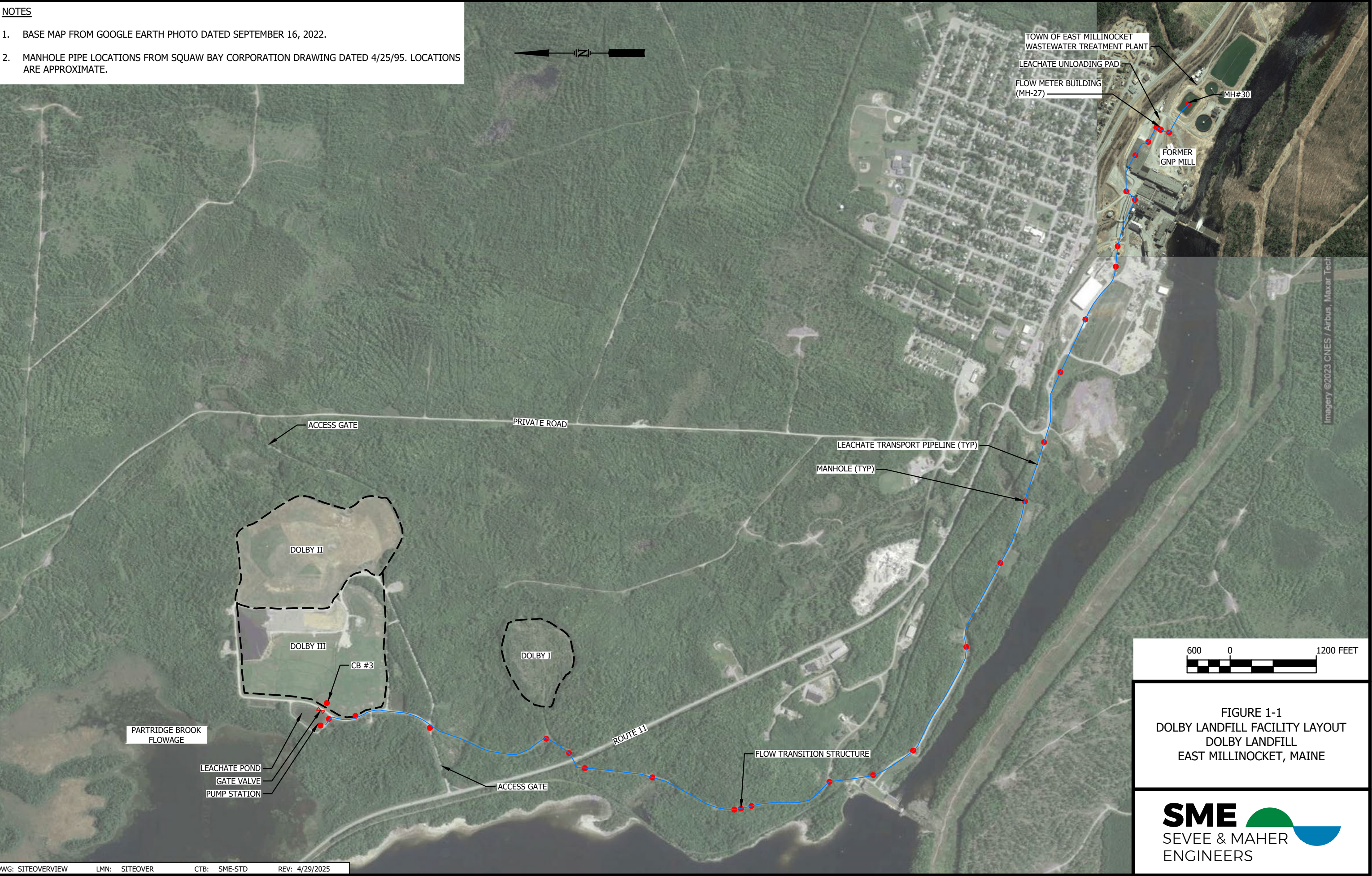


FIGURE 1-1
DOLBY LANDFILL FACILITY LAYOUT
DOLBY LANDFILL
EAST MILLINOCKET, MAINE



2.0 SITE ACCESS AND SECURITY

The Dolby Landfill Facility has two access ways for vehicles. The main access is a combination paved and gravel roadway connecting to Highway Route 157, approximately 0.3 miles away from the southwestern-most point of the Dolby III Landfill. A secondary, lesser-used, access road to the Facility exists near the southeastern-most point of the Dolby II Landfill. The secondary access road consists of a 0.4-mile-long gravel roadway that connects to a network of privately-owned woodland roadways. Both the main and secondary access roads are gated and locked. The main access road is plowed and sanded during the winter to provide vehicle access to the leachate pond and pump station.

The perimeter of the leachate pond is surrounded by a chain link fence and locking gate. The pump station control building (next to the leachate pond) has a locking steel door and the hatchway to the pump station's wet well is also lockable. A Conex Box was placed beside the pump station in 2022. The Conex Box is used to store various equipment for maintaining the leachate pond pump station and leachate transport line. The Conex Box replaced the office trailer that was permanently removed from the Landfill Facility in 2022. The Conex Box has a lockable door. The leachate pond, pump station, and Conex Box are within the overall limits of the gated/locked landfill Facility.

3.0 SITE SAFETY

All personnel working at the Dolby Landfill Facility will follow applicable state and federal safety and health rules and regulations. Should a medical and/or ambulance emergency occur at the Facility, first aid services are available in the nearby Town of East Millinocket and can be requested by dialing 911.

This PCMMP does not constitute a Health and Safety Plan for activities performed at the Dolby Landfill Facility. All persons performing maintenance and/or monitoring at the Facility will be responsible for having and maintaining their own health and safety plans and shall comply with all applicable state and federal safety and health rules and regulations.

3.1 Safety Equipment

Routine safety equipment at the site includes such items as first aid kits and fire extinguishers. Specialty equipment includes explosive gas meters, hydrogen sulfide (H₂S) meters, and lockout–tagout equipment. All vehicles associated with construction work performed at the Facility will be equipped with a first aid kit and fire extinguisher; in addition, a first aid kit is available at the leachate pump station. Specialty breathing apparatus and air monitoring equipment will be used for entry into any confined space associated with the leachate management system. Confined space entry procedures and use of the associated specialty equipment will be limited to Occupational Safety and Health Administration (OSHA) trained personnel only.

On occasion, odors can be emitted from gas vents installed in the landfill cover system and/or from the landfill surface. When such odors are detected, personnel/equipment should be moved away from the odor and the landfill operator should be notified. The landfill operator will arrange for measurement of hydrogen sulfide, explosive gas, and other potentially odorous compounds in the air so that appropriate safety action can be taken.

Cell phones and/or two-way radios may be used by all personnel working at the Facility for timely communication of emergencies.

3.2 Fire Prevention

In the closed condition, the landfill surfaces are mostly open grassland. Because locked gates control vehicular traffic to the Facility and because public access is limited, risk of an accidental grass fire is low. Common practice is to keep vehicles off the landfill surface except for mowing and cover repair. Should a fire occur, firefighting services are available from the Town of East Millinocket by dialing 911.

3.3 Emergency Notifications

Any emergency condition occurring at the Dolby Landfill Facility will be reported on a same-day basis to the landfill operator. The landfill operator will in turn notify BGS and MEDEP within 48 hours.

4.0 LANDFILL FACILITY INSPECTIONS

Post-closure inspection of the Dolby Landfill Facility will consist of the following:

Semi-annual General Inspection of the Facility will be performed by a qualified engineer knowledgeable of the Facility's leachate management infrastructure, mechanical/electrical elements, cover construction, and water quality monitoring network. The semi-annual visits will be coordinated with BGS and MEDEP such that group participation in the visits can occur if desired. The general inspections will consist mainly of visual observations and will typically be completed in the early summer and late fall. Specific items observed and evaluated as part of each general inspection include:

- Erosion and erosion control systems on and around the landfills;
- Condition of the vegetative cover;
- Condition of the drainage systems, ditches, sedimentation ponds, and other stormwater controls;
- Access roads and gates;
- Leachate storage pond, pump station, and leachate transport system;
- Visible sections of the leachate transport pipeline and manholes; and
- Safety equipment and signage.

Each general inspection will also include completion of an observation report describing the condition of items listed above. A sample observation report is included in Appendix C. Each completed observation report will be forwarded to BGS for review and subsequent submittal to MEDEP and will become part of an annual report for the Facility (see Section 1.0 for annual reporting).

Every three years, one general inspection will also include an observation report describing the condition of the accessible leachate manholes/catch basins positioned along the perimeter of the Dolby II and Dolby III manholes.

Topographic Aerial Surveys of the landfill surfaces will be performed once per five years to help detect areas of total and differential settlement that could suggest potential areas of future runoff ponding and/or slope movement. The surveys will be coordinated with mowing of the landfill surfaces to afford best practical photo resolution. Each aerial survey will include a report describing the changes observed from the aerial survey and any related comments or recommendations pertaining to the landfill's geotechnical performance. The report will be forwarded to BGS for review and subsequent submittal to MEDEP and will be included in the annual report.

For years 2025, 2026, and 2027 the semi-annual general site inspections will be increased to three times per year so as to visually monitor the vegetative cover growth and drainage following completion of the Dolby III cover upgrade.

Weekly visual inspections of the Dolby II and Dolby III Landfills and the Leachate Pond will be completed by a field engineer knowledgeable of the facilities systems. The weekly visits will include collecting leachate flow data from site recorders, confirming the leachate pond pumps and underdrain pump are functioning, and visually inspecting the ground surface along the length of the leachate transport pipeline. In the spring of the year, the weekly visits will be increased to four to five times per week until it is concluded that the leachate flow can be managed by the leachate pond and pump station without the threat of pond overtopping or the need for hauling leachate by tank-truck. A report for each weekly inspection will be prepared and will become part of the annual report. A weekly report form is provided in Appendix C.

Once per year (typically early summer), each manhole along the leachate transport pipeline will be opened and visually inspected. In the event ground or surface water has entered the manhole(s), the water will be removed so visual inspection of the pipe connections and air-release valves can be performed. The results of the manhole inspections will be included in the annual report for the Facility. No entry into the manholes will be permitted; the visual inspections will be conducted from the ground surface only.

5.0 STORMWATER INSPECTIONS AND MONITORING

Formal stormwater inspections and stormwater monitoring is no longer performed at the Dolby Landfill Facility. In 2019, MEDEP issued a Notice of Termination to BGS indicating the then in-place Multi-Sector General Permit for the Dolby Landfill was no longer needed (MEDEP to BGS letter dated September 20, 2019). Informal stormwater inspections are conducted as part of the weekly landfill visits.

6.0 LEACHATE MANAGEMENT

The Dolby Landfill Facility includes buried piping that collects leachate and groundwater from the perimeter of the Dolby II and Dolby III Landfills, as well as piping that collects leachate and groundwater from a portion of the Dolby III base area. Leachate (including groundwater) collected by the piping system flows to the on-site, lined, leachate storage pond. Leachate is pumped from the leachate pond through a transport pipeline to the Town of East Millinocket's WWTP. The leachate pumping is measured on an ongoing basis. The leachate quality is monitored twice per year as described in Section 7.0 of this Plan.

6.1 Leachate Pond, Pump Station, and Transport Pipeline

The leachate pond was constructed in 2007 and includes primary and secondary High-Density Polyethylene (HDPE) liners with a geocomposite leak detection layer between them. A geosynthetic clay liner (GCL) underlies the secondary HDPE liner and is in turn underlain by a 12-inch-thick compacted clay liner. Leachate flows into the leachate pond through a 24-inch HDPE inlet pipe and leachate flows out of the pond (to the pump station wet well) through a 12-inch HDPE outlet pipe. Engineering drawings for the leachate pond and associated infrastructure are provided in Appendix B. There is an underdrain system for control of potential groundwater uplift pressures below the compacted clay liner. Groundwater collected in the underdrain is pumped into the leachate pond and is treated as leachate. The underdrain pump is float controlled and operates frequently each day.

The following tables present the leachate pond's volume as related to various water depths and features of the pond. The maximum capacity of the leachate pond can be achieved by damming the pond's emergency spillway with sandbags.

TABLE 6-1
LEACHATE POND VOLUME

Leachate Depth Relative to Pond Bottom (ft)	Leachate Surface Elevation (ft)	Approximate Leachate Volume in Pond (gallons)
1	345.0	198,000
2	346.0	619,000
3	347.0	1,081,000
4	348.0	1,578,000
5	349.0	2,109,000
5.5	349.5	2,389,000
6.5	350.5 (Emergency Spillway Invert)	2,978,000
7.5	351.5 (Top of Pond Liner)	3,616,000

TABLE 6-2

LEACHATE POND FEATURE AND CORRESPONDING LEACHATE POND VOLUME

Pond Feature	Approximate Leachate Volume in Pond (gallons)	Volume Remaining Relative to Emergency Spillway Invert (gallons)
Bottom of 24-inch pond inlet pipe	178,000	2,800,000
24-inch pond inlet pipe flowing half full	576,000	2,403,000
Top of 24-inch pond inlet pipe	1,034,000	1,944,000
Painted (white) line 2 feet below emergency spillway invert	1,838,000	1,140,000
Emergency spillway invert	2,978,000	0

During non-freezing weather, the leachate pond level is maintained as low as practical to maximize the holding capacity of the pond in the event of an extreme precipitation event. It should be noted that the leachate pond was sized to store leachate generated by the Facility when it was actively operating. At that time, runoff from the open waste areas flowed directly to the leachate pond. Leachate generation by the closed Facility has been measured to be significantly less than that when the Facility was open.

A two-foot freeboard line, as measured from the invert of the emergency spillway, is painted (white color) on the leachate pond's primary liner and the leachate level in the pond should not go above the white line during normal operation. In the event the freeboard line becomes submerged, the landfill operator will contact BGS, who will in turn contact MEDEP. BGS and MEDEP will then decide if leachate trucking to the Town of East Millinocket's WWTP is needed to avoid potential leachate pond overtopping.

During freezing weather, the leachate level in the leachate pond should be maintained approximately 6 inches above the top of the 24-inch-diameter inlet pipe (from Dolby III) to help protect the pond's inlet and outlet pipes from ice damage.

6.2 Leachate Pump Station and Transport Pipeline

A leachate pump station and wet well are positioned adjacent to the leachate pond. Two pumps in the wet well convey leachate through approximately 6,500 linear feet of 8-inch-diameter HDPE force main to a transition structure (i.e., high-point structure). From the transition structure, the leachate flows through approximately 13,300 linear feet of 10-inch-diameter HDPE gravity main (including an inverted siphon) to the Town of East Millinocket's WWTP.

The leachate pump station includes a flow meter and mechanical chart recorder (circular paper) to document the volume of leachate pumped and the level of leachate in the wet well. Figure 1-1 shows the location of the leachate pump station and transport pipeline. Twenty-seven manholes are positioned along the leachate transport pipeline. The manholes provide access to the pipeline for cleaning. Five of

the manholes include air release valves for the pipeline which automatically expel air (in the pipeline) when leachate is flowing.

The pump station is equipped with two 600-gallon per minute (gpm) submersible pumps that operate in parallel. Pump #1 is activated/deactivated by floats that sense the leachate pond level; the other pump (Pump #2) serves as a standby pump that is manually operated when high leachate pond inflows are occurring. The leachate pumps are equipped with running time meters and pump discharge pressure meters. The running time and discharge pressure are also recorded by the pump station's chart recorder and are used to estimate the leachate volume pumped. In the event the measured and calculated leachate flow rates vary by more than 20 percent, the landfill operator will investigate the cause of the volume discrepancy, which, among other things, could be a sign of leakage from the leachate transport pipeline. The leachate pumps are known as Pump #1 and Pump #2; Pump #1 was rebuilt in 2022 and Pump #2 was rebuilt in 2013. Pump #1 had a motor seal replaced in 2024.

A leachate flow meter is also located in the gravity main, approximately 600 feet upstream of East Millinocket's WWTP. This flow meter also uses a circular chart recorder. The circular paper charts at both recorder locations are typically changed by the landfill operator at 3- to 4-day intervals. Data from the completed charts are reduced and tabulated as flows, which are included in the annual report. A digital camera also photographs the leachate flow meter data once per hour and the photos are uploaded at the beginning of each month for comparison to the chart recorder flow data

The flow meter near the East Millinocket WWTP is positioned in an insulated wooden shed located approximately 400 feet from East Millinocket's WWTP. The shed is heated during cold weather and needs to be checked routinely for freezing interior temperatures. The shed has a lower level that requires confined space entry, if accessed. The digital camera, which is used to monitor the flow meter, also monitors the shed's interior temperature.

A leachate dumping pad is located adjacent to the south and west sides of the shed. The leachate dumping pad is connected by a gravity pipeline to the leachate transport line. The leachate dumping pad is used to empty tank-trucks when leachate hauling from the Dolby Facility is necessary.

6.3 Leachate Pond Leak Detection Monitoring

A geocomposite leak detection layer exists between the primary and secondary leachate pond liners. A stone-filled collection sump is positioned at the south (i.e., low) end of the leak detection layer. All liquid collected in the leak detection layer drains to the sump. A 6-inch pipe connects the sump to the pump station. The 6-inch pipe contains a small submersible pump that is activated by an electronic water level sensor in the sump. Flow from the submersible pump (i.e., flow from the leak detection layer sump) is recorded before being discharged to the wet well. The flow rate from the leak detection pump, flow total,

sump water level, and pump running time are stored by a programmable control panel housed in the pump station. The stone thickness in the leak detection sump is 12 inches. The leak detection pump activates when the water level in the sump is at 10 inches. The pump turns off when the sump water level reaches zero.

The leak detection sump level and pump activity are reviewed and recorded each time the pump station chart recorder is changed. Should the leak detection pump activate, BGS will be notified. The landfill operator will record flow measurements from the leak detection layer and determine if the Action Leakage Rate (ALR) (i.e., 20 gallons per acre per day [gpad]), for the leachate pond has been exceeded. Small-diameter tubing is also connected to the leak detection sump to allow sampling and analysis of the leak detection water, if desired.

In the event the leakage into the leak detection layer exceeds the ALR, BGS will notify MEDEP. As soon as weather conditions allow, the landfill operator will drain the leachate pond and visually inspect the surface of the primary liner and repair any damaged areas that could have contributed to the leak.

The ALR represents the rate of leakage into the leak detection layer that will trigger interaction between BGS and the MEDEP to determine the appropriate response action. An Action Leakage Rate/Response Action Plan for the leachate pond is provided in Appendix D to this Plan. In the event an ALR response action occurs, a follow-up report will be prepared for submission to the MEDEP; the report will summarize the results of the response action and will include recommendations relative to future leak detection monitoring.

In 2021, the ALR for the leachate pond was exceeded. As follow-up to the exceedance, the leachate pond primary liner was cleaned and inspected in 2023, the pipe penetrations into and out of the leachate pond were inspected, re-caulked, and re-banded. Subsequent leak detection monitoring indicated the ALR continued to be exceeded and MEDEP was alerted to that condition. The ALR exceedance has continued since 2021 and MEDEP is aware of the condition.

As of 2012, water collected in the leachate pond underdrain system was (and continues to be) pumped to the leachate pond pump station for subsequent treatment as leachate. In 2021, water quality monitoring of the underdrain system was initiated using the underdrain manhole as the sampling point. Water quality monitoring of the underdrain has shown presence of several constituents common to leachate.

6.4 Leachate Pond Underdrain Monitoring

The leachate pond liner system is underlain by an underdrain layer that discharges to a manhole located west of the leachate pond's perimeter. A float actuator pump is positioned in the manhole and pumps the underdrain water to the leachate pond's pump station as needed to maintain low water levels in the

underdrain layer. The underdrain is important to limit occurrence of water pressures below the liner system and collect any potential leakage through the leachate pond's liner system. The underdrain should be operational at all times. Typically, a replacement underdrain pump is stored in the Conex Box beside the leachate pond pump station. It is imperative the underdrain pump be operational when leachate levels in the pond are purposely lowered (e.g., for non-freezing weather and for leachate pond cleaning).

6.5 Leachate Pond Level Increase Above Two-foot Freeboard Line

The following procedures will be taken to control the leachate level in the leachate pond if the two-foot freeboard line (i.e., the white line) is exceeded. It should be noted that the procedures herein are an adaptation of similar procedures set forth in the 2012 Operating Manual for the Dolby III Landfill, which is on file with BGS). These procedures consider that during the post-closure period, it is very unlikely that a weather event will occur to cause the two-foot freeboard line to be exceeded. The leachate pond was originally sized to contain runoff from multiple acres of active waste area, which is not the case since both the Dolby II and Dolby III Landfills are final covered.

- In preparation for forecasted heavy rain or snowmelt, the landfill operator will clear all debris from the leachate pond's outlet pipe rack/screen and operate the leachate pumps manually until the pond is dropped to an acceptable level. Care will be taken to avoid running the leachate pumps dry and risking possible pump damage.
- The landfill operator will contract a tank-truck operator to mobilize sufficient tank-trucks and pumps to remove excess leachate from the leachate pond and haul the leachate to the Town of East Millinocket's WWTP. As of 2017, Thornton Construction of Milford, Maine is on call for leachate hauling. Thornton Construction can be reached via cell at 207.827.0352. Standard practice is to contact Thornton Construction (or similar) annually before the spring thaw and confirm that leachate hauling assistance is available. The Town of East Millinocket's WWTP operator is also contacted before the spring runoff to verify the procedures necessary for unloading the leachate tank-trucks. The contact phone number for the WWTP is 207.447.1452.
- If potential exceedance of the two-foot freeboard line becomes apparent, the landfill operator will monitor the leachate pond level at least four times per day to determine if leachate hauling is necessary. As part of the monitoring, sandbags can be placed in the emergency spillway to block potential overflows. Closing the emergency spillway with sandbags should be a last resort to prevent the leachate pond from overtopping and should not be used to avoid leachate hauling.
- As soon as the leachate level reaches the painted freeboard line (located two feet below the invert of the emergency spillway), the landfill operator will contact BGS to request initiation of leachate hauling. BGS and the landfill operator will collectively decide if mobilization of leachate hauling equipment is necessary. Once initiated, the leachate hauling will continue as long as necessary to

reach the end of the runoff event and will not be terminated until the leachate level in the pond is at least 6 inches below the invert of the emergency spillway and falling.

- If the leachate pond level increase cannot be controlled by pumping and hauling, measures will be implemented to also pump leachate into the #3 sediment pond. For this action to occur, the outlet for the #3 sediment pond will first be blocked in order to retain as much leachate as possible in the #3 sediment pond before overtopping occurs. Once the leachate level in the leachate pond is at least 6 inches below the invert of the emergency spillway, and falling, the water in the #3 sediment pond will be pumped back to the leachate pond. BGS and MEDEP will identify any mitigation necessary for the #3 sediment pond once all leachate has been removed from it.

6.6 Leachate Pond Overflow

In the event of a leachate pond overflow and/or when an overflow of the #3 sediment pond occurs (if that pond is being used to temporarily hold leachate), the following measures can be taken to hasten the stoppage of overflow.

- Increase the number of hauling vehicles and the haul frequency

The leachate pumping via the transport pipeline and leachate hauling can be performed on an around-the-clock schedule, if necessary. Additional tank-trucks for hauling leachate may need to be mobilized. The expanded hauling schedule will be initiated prior to any leachate pond overflow or #3 sediment pond overtopping.

- Visual inspections and specific conductivity monitoring

All areas overtopped by leachate (i.e., the emergency spillway and #3 sediment pond) will be routinely inspected during and after the overtopping to identify areas of potentially immediate erosion threats and/or structural deficiencies. If an immediate threat is noted, corrective measures will be taken. If leachate is released to the environment, frequent specific conductivity measurements of the outflow will be recorded to assist with evaluation of any potential impact.

- Shut-off the inflow to the leachate pond via the gate valve located between the leachate pond and catch basin CB #3.

This measure will provide some temporary storage of leachate within the landfill's leachate collection piping but will cause a potential risk to slope stability of the Dolby III Landfill's cover system, especially along the Landfill's western toe. This measure should be the last to be implemented and avoided if possible.

6.7 Pump Station Failure

In the event of a pump station failure, leachate can be stored in the leachate pond. If the pump station failure will be for an extended period of time or, if the pond level exceeds the two-foot freeboard line, portable pumps and leachate hauling trucks can be mobilized to maintain the leachate pond level below the two-foot freeboard line.

6.8 Leachate Pond Cleaning and Pump Station Maintenance

Sediment collected in the leachate pond will be periodically removed and the pond liner will be visually inspected. The final phase of the Dolby III cover upgrade was completed in the fall of 2024. In the future, it is expected that sediment accumulation in the leachate pond will become minimal, thereby reducing the need for frequent cleaning and sediment removal. When leachate pond cleaning is necessary, the activities will include washdown of the leachate pond's primary liner and visual inspection of the primary liner's surface for possible points of leakage. Care will be taken during the leachate pond cleaning to avoid causing any damage to the liner. The leachate pond liner inspection will also include the inlet and outlet pipe penetrations. For purposes of scheduling and minimizing damage to the leachate pond liner, the leachate pond will be cleaned at 5-year intervals. The leachate pond was last cleaned in 2023. It should be noted that leachate pond cleaning results in several truck-loads of sediment that needs disposal. Historically the sediments were disposed in the Dolby III Landfill, which is no longer available due to final covering. The resulting sediments will be disposed off-site at a licensed landfill facility.

The leachate pump station wet well will be cleaned and inspected at the same time as the leachate pond. A report of the leachate pond and wet well cleaning, with photographs and recommendations, will be prepared and submitted to BGS as part of the annual report for the Facility.

Periods of low leachate generation, times following leachate pond cleaning and pipeline cleaning events often provide good opportunities to perform pump station maintenance. At those times, the leachate pumps and their associated control equipment can be inspected for wear and necessary parts replaced. As of April 2025, the leachate pumps consist of Flygt Model CP-3170-MT submersible pumps. The #2 pump was rebuilt in 2013 and Pump #1 was rebuilt in 2022. A seal in the #1 pump was replaced in 2024. The #1 pump is located closest to the pump station control house. Each pump has an output of approximately 600 gallons per minute (gpm) and when operated in tandem the pumps have a combined output of approximately 700 gpm.

The leachate pond underdrain is equipped with a 230-volt, 1/2 horse-power submersible pump. A replacement pump is located in the Conex Box beside the leachate pond pump station.

CAUTION: Anyone working in the pump station wet well or the underdrain wet well shall follow confined space entry procedures.

6.9 Leachate Transport Pipeline Cleaning

The leachate transport pipeline from the leachate pond to the East Millinocket WWTP will be cleaned when the combined pumping flow rate in the pipeline drops below 450 gpm. A report of the pipeline cleaning will be prepared and submitted to BGS. Engineering drawings for the leachate transport pipeline are presented in Appendix B. Water and sediment from the pipeline cleaning are delivered by vac-truck to the leachate dumping pad beside the flow meter shed near the East Millinocket WWTP. Historically the leachate pipeline has been fully or partially cleaned on an annual basis. As of April 2025, the leachate pond pumps are each pumping in excess of 575 gpm indicating pipeline cleaning can be delayed until at least 2026.

Often times, cleaning of the low-spots only along the leachate transport pipeline is adequate to restore the leachate pump flows. Appendix B includes the locations of low spots (i.e., where sediment collects) along the length of the pipeline. For planning purposes, full cleaning of the pipeline will be done at five year intervals. The last full pipeline cleaning occurred in 2023 and the last low-spot pipeline cleaning occurred in 2024.

Each time the leachate pipeline is cleaned the force main connecting the leachate pond underdrain pump to the leachate pond pump station wet well will also be cleaned.

7.0 ENVIRONMENTAL MONITORING

Environmental monitoring for the Dolby Landfill Facility during the post-closure period will consist of sampling and analysis of groundwater, surface water, leachate, and landfill gas at a number of existing monitoring points. The environmental monitoring is used to evaluate performance of the Facility relative to potential threats to public health and safety as well as threats to the environment. The Environmental Monitoring Plan (i.e., the 2012 EMP) for the Dolby Landfill Facility was revised in March 2024 and is on file at MEDEP and BGS. Any changes to the EMP will be approved by MEDEP before implementation.

7.1 Groundwater, Surface Water, and Leachate Monitoring

Twenty-one groundwater monitoring locations, six surface water locations, three leachate monitoring locations, and the leachate pond underdrain for the Dolby Facility are sampled and analyzed twice per year. The monitoring points are listed by identification code in Table 7-1 and their site locations are shown on Figure 7-1. The EMP describes the methods, materials, chemical parameters, analyses, and reporting associated with the sampling and analysis of the monitoring points. The underdrain sampling point (i.e., UDLP) was added in 2021 and follows the same monitoring schedule and parameter list as the monitoring wells.

TABLE 7-1

WATER QUALITY MONITORING LOCATIONS

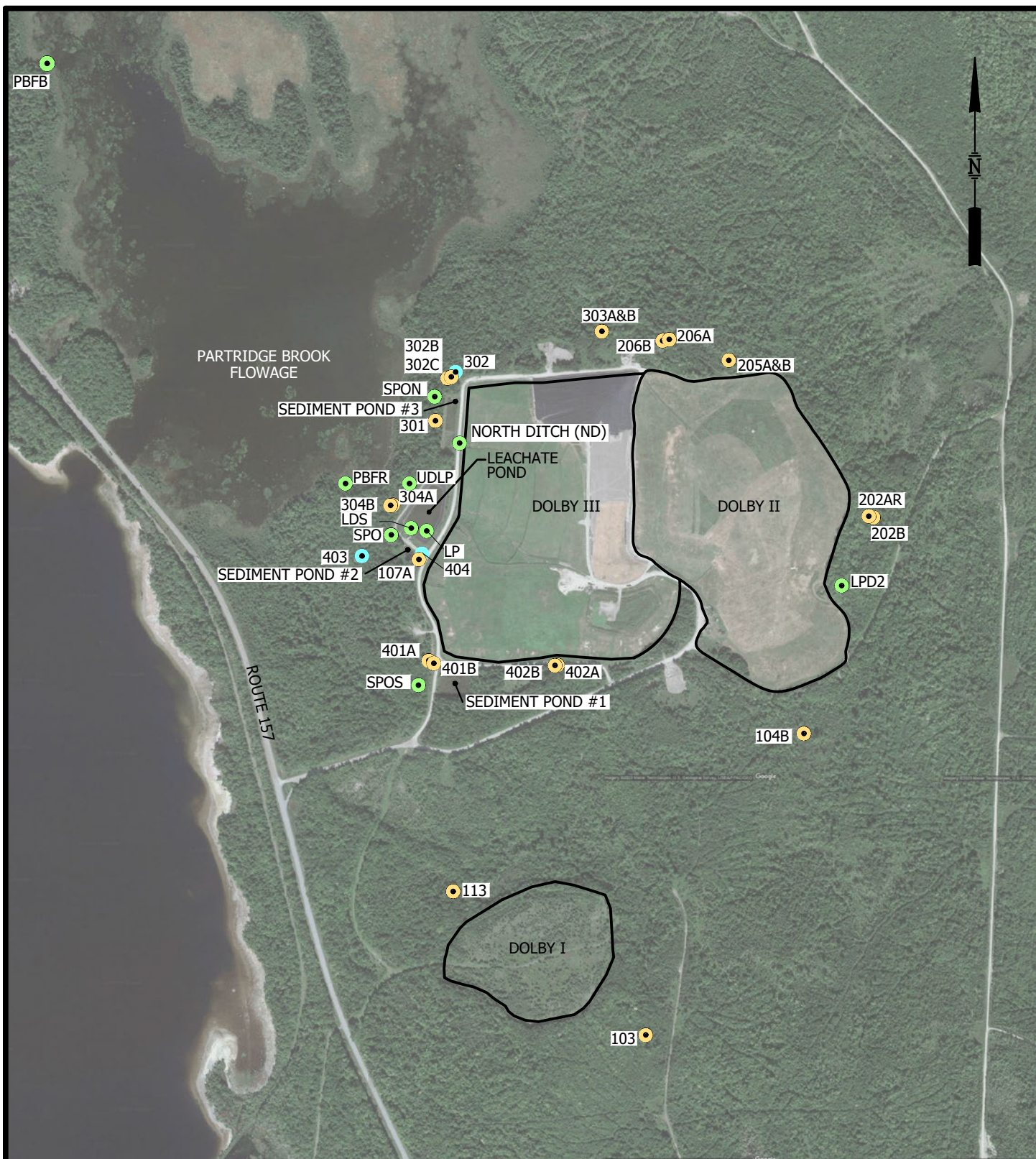
<u>GROUNDWATER MONITORING WELLS</u>		
<u>DOLBY III</u>		
MW-107A	MW-304A	MW-402A
MW-301	MW-304B	MW-402B
MW-302B	MW-401A	
MW-302C	MW-401B	
<u>DOLBY II</u>		
MW-104B	MW-205B	MW-303B
MW-202AR	MW-206A	
MW-202B	MW-206B	
MW-205A	MW-303A	
<u>DOLBY I</u>		
MW-103	MW-113	

<u>SURFACE WATER SAMPLING LOCATIONS</u>	
PBFB	Partridge Brook Flowage – Background
PBFR	Partridge Brook Flowage – Revised location beginning 2012
ND	North Ditch
SPO	Siltation Pond Outlet
SPON	Siltation Pond North
SPOS	Siltation Pond South

UDLP – Underdrain for leachate pond (collected from manhole on the western side of the leachate pond).	
--	--

FIELD PARAMETERS from MW – 103 and MW – 113, which are monitoring wells associated with Dolby I	
---	--

<u>LEACHATE SAMPLING LOCATIONS</u>	
LP	Leachate Pond South of Dolby III
LPD2	Leachate Pond East of Dolby II
LDS	Leachate Pond Leak Detection Sump



AERIAL PHOTO DATED SEPTEMBER 16, 2022

LEGEND

- GROUNDWATER WELLS
- SURFACE WATER SITES
- PIEZOMETER



FIGURE 7-1
WATER QUALITY
MONITORING LOCATIONS
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

7.2 Landfill Gas Monitoring

Manhole, enclosed surface structures, and a former groundwater monitoring well are routinely monitored for the presence of landfill gas (i.e., hydrogen sulfide and explosive gas) at the Dolby Landfill Facility. The locations consist of several manholes spaced along the perimeter of the landfill (i.e., CB#3, CB#21, CB#22, CB#39, CB#43, and CB#45), one former groundwater monitoring well (107B), the Conex Box, the leachate pond pump station, and the associated wet well. The gas monitoring locations are shown on Figure 7-2. Several of the gas monitoring locations will be eliminated as a result of the Dolby III cover upgrade. The eliminated locations consist of leachate catch basins that will be permanently removed from access due to the Dolby III Landfill cover upgrade. The Phase 3 and Phase 4 cover upgrade projects were completed in the fall of 2023 and 2024, respectively. Following the completion of the cover upgrade projects, only groundwater monitoring well (107B), the Conex Box, the pump station, pump station wet well, and catch basins (CB#3, CB#39, CB#43, and CB#45) remain available for gas monitoring. The EMP for the Dolby Landfill Facility describes the frequency, methods, monitoring equipment, and reporting associated with sampling and analysis of the gas locations.

\\server\dfs\Koc\Do\ACAD\Water\Sample\Sites\Aerial-2006.dwg 3/24/2017 2:26:11 PM .it



AERIAL IMAGE FROM GOOGLE EARTH,
DATED APRIL 28, 2016.



LEGEND




-  GAS SAMPLE LOCATIONS
-  EXISTING MANHOLE/CATCH BASIN
-  FLOW DIRECTION OF LEACHATE COLLECTION SYSTEM

FIGURE 7-2
GAS MONITORING LOCATIONS
DOLBY LANDFILL
EAST MILLINOCKET, MAINE

SME
Sevee & Maher Engineers, Inc.

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8.0 POST-CLOSURE MONITORING AND MAINTENANCE

The final cover systems for the Dolby II and Dolby III Landfills are visually monitored as part of the semi-annual general inspections (see Section 4.0). Common elements of these inspections are to identify landfill surface areas where: ponding of water on the landfill cover is occurring; cover soil erosion is occurring; stress of the vegetative layer is observed; animal burrows are present; and where any other features are visible that could affect the cover integrity.

The Landfill cover is mowed every other year to prevent growth of deep-rooted, woody plant species. Starting in 2020, the surfaces of both Dolby II and Dolby III were mowed annually as an experiment to understand if annual mowing will reduce winter snow accumulation (i.e., drifting) on the landfill surfaces. The intent was to minimize drifting and infiltration of snowmelt as a means to reduce spring leachate flows sufficient to avoid leachate trucking. As of 2025, all portions of the Dolby II and Dolby III Landfills have received final cover and infiltration into the underlying waste mass has been reduced. Spring flows into the leachate pond have not required trucking of leachate to the East Millinocket WWTP for several years. Beginning summer 2025, the mowing schedule will return to biennial mowing of the landfill covers. The mowing program will be performed such that the Dolby II Landfill is mowed one year and the Dolby III Landfill is mowed the following year.

9.0 RECORD KEEPING AND REPORTING

Records maintained for the Dolby Landfill Facility pertain mainly to the volume of leachate sent to treatment, leachate pumping flow and pressure statistics, general inspection reports, and documentation of physical maintenance and repair of the Facility. Water quality and gas monitoring results will be submitted to MEDEP following each monitoring episode as described in the EMP. An annual report for the Facility will be prepared and submitted to MEDEP. The annual report will include leachate pumping records, visual inspection summaries, documentation of maintenance and repair of infrastructure, and discussion of unforeseen events that were identified and dealt with during the annual reporting period. A list of the cleaning and inspection activities and the associated frequency for completing those activities is shown in Table 9-1. The water quality monitoring results will also be included in the annual report along with an interpretation of those results as related to MEDEP standards and site trends.

**TABLE 9-1
CLEANING AND INSPECTION FREQUENCY**

Activity ¹	Frequency	Last Completed (relative to 2025)
Clean and Inspect Leachate Pond Liner	Every 5 years ²	2023
Clean and Inspect Leachate Pipeline - Low-spots	Every 1 to 2 years ³	2024
Clean and Inspect Leachate Pipeline - Full Length	Every 5 years ⁴	2023
Inspect Leachate Pipeline Manholes	Annually	2024
Inspect Leachate Pond Pumps	Annually	2024
Inspect Dolby II and Dolby III Manholes	Once every 3 years	2024
Inspect Dolby II and Dolby III Cover Systems	Twice per year ⁵	2024
Inspect Landfills and General Facility	Once per week ^{6, 7}	2024
Inspect Leachate Pipeline Route	Monthly ⁶	2024
Mow Dolby II Landfill	Every other year ⁸	2024
Mow Dolby III Landfill	Every other year ⁸	partial 2024
Topographic Survey of Dolby II and Dolby III Landfills	Once per 5 years ⁹	2022
<p>Notes:</p> <p>¹ A memo documenting completion of each activity will be included in the Annual Report for the Dolby Landfill Facility.</p> <p>² Actual year of cleaning will be based on observations of sediment build-up on pond liner and discussions with BGS and MEDEP.</p> <p>³ Low-spot cleaning frequency can be modified based on flow output of leachate pond pumps.</p> <p>⁴ Full cleaning frequency may be adjusted based on leachate pump output.</p> <p>⁵ For 2025, 2026, 2027 three cover system inspections will be performed each year to give extra attention to new vegetative cover and surface water drainage measures for Dolby III Landfill.</p> <p>⁶ Inspection of landfill surfaces and pipeline route will not be performed when ground surface is snow covered.</p> <p>⁷ Once per week inspection will be increased to 4 to 5 times per week during spring thaw conditions.</p> <p>⁸ Mowing will include tree trimming along leachate pipeline route, landfill access road, and leachate pond as needed.</p> <p>⁹ Topographic survey will be coordinated with Dolby III mowing.</p>		

10.0 POST-CLOSURE MONITORING AND MAINTENANCE COST ESTIMATE

The following table of estimated post-closure monitoring and maintenance costs was prepared for a post-closure duration of 30 years (i.e., 2025 through 2055). The table reflects the Schedules and frequencies of cleaning and inspection activities summarized in Tabel 9-1, as well as the water quality monitoring described in Section 5.0.

TABLE 10-1

ESTIMATED POST-CLOSURE MONITORING AND MAINTENANCE COSTS

Period of Interest	Inspections	Leachate Infrastructure Cleaning	Water Quality Monitoring ⁴	Site Maintenance ⁵	Engineering Support ⁶
2026					
2027					
2028					
2029					
2030					
2031-2055 (ave)					
Notes: ¹ All costs shown are based on 2024 dollars. No cost of electricity for leachate handling is included in the estimate. ² Costs in table follow activities and frequency/schedule described in PCMMP. ³ Final frequency/schedule of leachate pond and pipeline cleaning/inspection will be predicated on observed sediment build up and could change. ⁴ Assumes no increase or decrease in water quality monitoring locations, parameters of analysis, or monitoring frequency. ⁵ Includes mowing, plowing, and access road maintenance. ⁶ Includes oversight of subcontractors, interaction with owner and regulatory agencies, quality control, project management, and administration. ⁷ Does not include unforeseen repairs to site infrastrutre (such as leachate pump repair/replacement). ⁸ Does not include unforeseen leachate hauling. ⁹ 2031-2055 costs are an average cost based on estimated costs for 2026 through 2030. ¹⁰ Assumes no additional cover upgrade to occur in 30-year post-closure period. If Dolby I or Dolby II receives a cover upgrade, monitoring and maintenance costs could increase for the duration of the cover upgrade(s).					

REFERENCES

Sevee & Maher Engineers, Inc., 2012. Environmental Monitoring Plan, Dolby Landfill, April 2012.
(Revised April 2024)

Sevee & Maher Engineers, Inc., 2012. Landfill Operating Manual, Dolby III Landfill, April 2012.

APPENDIX A

MEDEP LICENSE FOR DOLBY FACILITY



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

BOARD ORDER

IN THE MATTER OF

STATE OF MAINE, ACTING THROUGH THE)	SOLID WASTE
DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL)	LICENSE
SERVICES, BUREAU OF GENERAL SERVICES)	
EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE)	
DOLBY LANDFILL FACILITY)	
#S-000796-WO-AO-N)	FINAL CLOSURE
(APPROVAL WITH CONDITIONS))	

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act*, 38 M.R.S. §§1301 to 1319-Y; the *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2 (last amended October 19, 2015); and the *Solid Waste Management Rules: General Provisions*, 06-096 CMR 400 (last revised April 6, 2015); *Landfill Siting, Design and Operation*, 06-096 CMR 401 (last revised April 12, 2015); and *Water Quality Monitoring, Leachate Monitoring, and Waste Characterization*, 06-096 CMR 405 (last revised April 12, 2015), the Department of Environmental Protection ("Department") has considered the application of the STATE OF MAINE, acting through the Department of Administrative and Financial Services, Bureau of General Services, with its supportive data, agency review comments, staff summary, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

- A. Application: The Department of Administrative and Financial Services, Bureau of General Services ("DAFS/BGS") has applied for a license to close an existing paper mill landfill facility in East Millinocket.
- B. History:
- (1) On June 13, 1984, the Great Northern Paper Company ("GNP") received Department approval to construct and operate the Dolby III landfill (Department license #L-000796-07-A-N).
 - (2) The Dolby III landfill occupies approximately 72 acres and has been operated in stages consisting of 17 waste cells. Operations are currently in Cell 16.

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- (3) The originally-approved waste streams were wastewater sludges, woodroom/woodyard waste, wood ash, and general rubbish from GNP's Millinocket and East Millinocket paper mills and municipal solid waste from the local communities. The disposal of municipal solid waste was discontinued in 1993 in response to new federal solid waste regulations. The site also includes the Dolby I and Dolby II landfills, which have been filled to licensed capacity and are closed. Dolby I, II and III are hereinafter collectively referred to as the Dolby Landfill Facility.
- (4) On April 28, 2003, the Department approved the transfer from GNP of all solid waste licenses, and other Department licenses, associated with the Dolby Landfill Facility to Katahdin Paper Company LLC ("KPC").
- (5) On August 30, 2011, the Maine State Planning Office ("SPO") acquired the Dolby Landfill Facility and related properties from KPC. On September 28, 2011, the Department approved the transfer of all solid waste licenses (Department license #S-000796-WR-AJ-T), and other Departmental licenses, associated with the Dolby Landfill Facility to the SPO from KPC.
- (6) Since the issuance of the aforementioned transfer license, the SPO has been dissolved and responsibilities for the oversight and operation of the Dolby Landfill Facility have been turned over to the DAFS/BGS.

C. Summary of Proposal: The DAFS/BGS is proposing to close the remaining open portions of Dolby III and upgrade the cover system of previously closed areas of Dolby II and Dolby III in several phases over the next few years. The entire project is hereinafter referred to as the Dolby Landfill Cover Upgrade Project. An Application for Landfill Closure entitled Dolby Landfill Cover Upgrade - Phase I (hereinafter "Application" or "Dolby Landfill Cover Upgrade Project - Phase I") was prepared by Sevee & Maher Engineers, Inc. and is dated April 2016. The Department accepted the Application as complete for processing on April 27, 2016.

2. TITLE, RIGHT, OR INTEREST

The Dolby Landfill Facility site is approximately 436 acres in size. The DAFS/BGS has submitted an executed copy of the Acquisition Agreement, dated August 30, 2011, that conveyed the property that the Dolby Landfill Facility is located on from KPC to the SPO. The SPO was dissolved in 2011 and ownership of the Dolby Landfill Facility was

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transferred to the DAFS/BGS by PL 2011, c. 655; thereby, establishing the DAFS/BGS as the owner/operator of the facility.

The Department finds that the DAFS/BGS has submitted sufficient evidence of title, right, or interest with respect to the property proposed for use.

3. NOTICE OF INTENT

The DAFS/BGS has provided documentation of the publication of a "Notice of Intent to File" and has documented notification of abutters as required by 06-096 CMR 2. The Notice of Intent to File was published in the March 19-20, 2016 edition of the Bangor Daily News.

The Department finds that the DAFS/BGS has complied with all of the public notice requirements of 06-096 CMR 2.

4. FINANCIAL ABILITY AND ASSURANCE

The DAFS/BGS has allocated approximately \$12 million for the proposed closure/cover system upgrade at the Dolby Landfill Facility. The funds for the Dolby Landfill Cover Upgrade Project were included in the 2016-2017 State of Maine biennial budget (PL 2015, c. 267 Part M). The Dolby Landfill is a state-owned facility and is not subject to the financial assurance requirements of 06-096 CMR 400(11) of Maine's *Solid Waste Management Rules* ("Department Rules").

The Department finds that the DAFS/BGS has provided adequate evidence of financial ability and assurance for the proposed Dolby Landfill Cover Upgrade Project.

5. TECHNICAL ABILITY

The DAFS/BGS has retained Sevee & Maher Engineers, Inc. ("SME") of Cumberland, Maine to assist with the design, construction management and oversight of the Dolby Landfill Cover Upgrade Project. SME was formed in 1985 to provide civil and environmental services to private and public sectors. Services provided by SME include siting, design, permitting, and operation of solid waste landfills. Personnel from SME have been involved with various aspects of the design and operation of the Dolby Landfill Facility since the mid 1980's. SME provided information regarding the technical ability of its personnel who will be utilized to design, manage, and oversee the construction of the Dolby Landfill Cover Upgrade Project. The DAFS/BGS and SME will also work with earthworks and geosynthetics contractors experienced in landfill cover construction to complete the project. Post-closure care and maintenance of the

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facility will continue to be provided by the DAFS/BGS using personnel familiar with the site.

The Department finds that the DAFS/BGS has demonstrated technical ability for the proposed Dolby Landfill Cover Upgrade Project.

6. LIABILITY INSURANCE

The DAFS/BGS is a public entity and is exempt from the liability insurance requirements of 06-096 CMR 400(10).

The Department finds that the DAFS/BGS is exempt from the liability insurance requirements of 06-096 CMR 400(10) of the Department Rules.

7. SURFACE WATER QUALITY AND FLOODING

Stormwater from the Dolby Landfill site is managed in accordance with the facility's Stormwater Pollution Plan and is in compliance with the Maine Multi-Sector General Permit Sector L. In general, surface water from the site flows towards the Partridge Brook Flowage, which then flows into Dolby Pond. Partridge Brook Flowage is not listed as an impaired water body. Stormwater management for the facility includes 3 separate sediment/detention ponds that are positioned near the downslope perimeter of the Dolby III landfill. Runoff from the closed landfill areas and access roads enter grass and stone lined ditches that flow into the sediment/detention ponds. Discharges from each sediment/detention pond flow into level spreaders and then become sheet flow into the adjacent wooded areas.

Since the Dolby III landfill ceased operations prior to reaching its permitted final waste grade, the proposed final grading plan will have sideslopes that are flatter in some areas than previously expected. The proposed cover upgrades will also utilize existing cover material to re-establish a vegetative cover surface that will mimic the current cover conditions in terms of stormwater runoff from the site. SME proposes no changes to the site's current Stormwater Management Plan with respect to the proposed cover system upgrade. However, during each phase of the cover system upgrade, a stormwater analysis will be performed to verify the capacity requirements of the site's existing structures and to design the necessary temporary and permanent erosion control measures required for the proposed cover upgrades. Based upon the stormwater analysis for the Phase 1 cover upgrade area, the emergency spillway of Sedimentation Pond #3 will be modified. Modifications include the installation of a riprap-lined emergency spillway and outlet pipe riprap protection.

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The Department finds that the proposed Dolby Landfill Cover Upgrade Project will not have an unreasonable adverse effect on surface water quality and will not unreasonably cause or increase flooding on-site or on adjacent properties nor create an unreasonable flood hazard to any structure.

8. EROSION AND SEDIMENTATION CONTROL

The proposed Dolby Landfill Cover Upgrade Project will occur within the limits of the existing landfill footprint and will minimize the disturbance of any native soils. The design and implementation of all erosion control measures associated with the proposed project will be conducted in accordance with the Maine Erosion and Sediment Control Practices Field Guide for Contractors, March 2015, or its equivalent. Suitable erosion control measures will be in-place prior to disturbance of the existing soil cover associated with the proposed project. A comprehensive Erosion and Sedimentation Control Plan has been prepared by SME and was submitted as part of the Application.

The Department finds that the DAFS/BGS has adequately addressed erosion and sediment control for the proposed Dolby Landfill Cover Upgrade Project and has demonstrated that the proposed project will not cause unreasonable sedimentation or erosion of soil.

9. FACILITY BACKGROUND AND PROJECT DESCRIPTION

The Dolby II and Dolby III landfills are non-secure landfills that collect leachate and groundwater-containing leachate. The Dolby II and Dolby III landfills have a combined size of approximately 135 acres and were permitted by the Department in 1978 and 1984, respectively. Originally, the waste streams included municipal solid wastes from the Towns of Millinocket, East Millinocket and Medway, and wastewater treatment sludge and various pulp and papermaking residuals from the GNP mills. Over the years, the Department has approved disposal of a number of different wastes streams, including, but not limited to, the following: wood waste; boiler ash; wood ash; coal ash; demolition debris ash; asbestos-containing materials; oil-contaminated soils; lime grit; waste sulfur; ink sludge; and solid waste from Baxter State Park and GNP Woodland Operations.

Cover materials have been previously placed on all of Dolby II and a majority of Dolby III. In an effort to significantly reduce the volume of leachate generated at the Dolby Landfill Facility, the DAFS/BGS plans to close the remainder of Dolby III and upgrade the cover system of previously closed areas of Dolby III and portions of previously closed areas of Dolby II. The proposed cover system upgrades will significantly limit precipitation infiltration into the waste; thereby, reducing leachate generated at the site. The objective of reducing the leachate generated at the site is to minimize future costs

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associated with the transportation and treatment of leachate from the facility that will be paid for by the taxpayers of Maine.

10. SITE ASSESSMENT REPORT

Consistent with Department Rules, the DAFS/BGS is exempt from conducting an additional site investigation for closure as long as the site was previously characterized and water quality monitoring is conducted in accordance with the requirements of 06-096 CMR 405. Previous site investigations including a study conducted by E.C. Jordan in 1981 have documented the hydrogeologic conditions at the Dolby Landfill Facility. In December 2015, SME conducted an investigation to better define the bedrock surface and groundwater divide in the vicinity of Dolby II. This investigation was performed to establish the proposed cover upgrade work limits on Dolby II that would provide the greatest long-term benefit in terms of reducing leachate generation and subsequent collection, conveyance and treatment costs. Results of the December 2015 investigation were submitted, along with interpretive bedrock and phreatic surface maps for this portion of the landfill site, as part of the Application.

A facility water quality monitoring program consisting of groundwater, surface water and leachate sampling and testing has been conducted triannually with the data submitted in the annual reports.

The Department finds that the DAFS/BGS has completed a site investigation for closure and site assessment report that adequately supports the design of the proposed final cover system and that the DAFS/BGS conducts water quality monitoring in accordance with Department Rules.

11. ENGINEERING DESIGN AND REPORT

- A. Closure Design: The DAFS/BGS has submitted a proposed cover system design, prepared by SME and dated March 29, 2016. The proposed Dolby Landfill Cover Upgrade Project is to occur in phases of approximately 25 acres in size over a 4 to 5 year period. The first phase, Phase I, will include a majority of the remaining open areas of Dolby III (i.e., Cells 15 and 16) and other areas in the southwest portion of Dolby III. Other phases will follow sequentially as detailed on Figure 1-2, Conceptual Closure Sequence, submitted in the Application. The Application details the approximate amount of acreage to be covered in each construction season and is as follows: for Dolby III, Summer 2016 – 25 acres, Summer 2017 – 24 acres and Summer 2018 – 23 acres; and for Dolby II, Summer 2019 – 25 acres.

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Approximately 38 acres of the existing Dolby II cover system will not be upgraded. The cover system upgrade design will incorporate existing topsoil, cover soil, and sand drainage material previously placed at the site to the extent possible. A soil re-use plan has been submitted to describe how existing soils will be re-used within Phase I of the proposed Dolby Landfill Cover Upgrade Project. The proposed cover system upgrade includes, from the bottom up, the following components: a minimum 6-inch gas collection system (i.e., sand and gas vent piping); a 40-mil high density polyethylene ("HDPE") textured geomembrane; a drainage geocomposite and cover system drainage pipes; a 14-inch cover soil layer; a 4-inch vegetative soil layer; and miscellaneous permanent erosion control measures (i.e., erosion control mats, rip rap, etc.).

- B. Stability and Settlement Assessment and Monitoring: Slope stability of the proposed cover system was evaluated relative to the materials and material interfaces which will comprise the proposed cover system. Slope stability factors of safety ("FOS") were calculated using soil and geosynthetic material properties considered representative of the materials available to the project and which are consistent with geotechnical literature and accepted engineering practices. Soil and geosynthetic material properties utilized within the slope stability analyses will be verified during construction.

The slope stability calculations indicate that a stable cover system configuration will be maintained during the closure and post-closure periods. The FOSs for the proposed final cover system were calculated to be consistently greater than 1.3 and 1.5 for static construction/operational and post-closure conditions, respectively, and consistently greater than 1.1 and 1.5 for seismic construction/operational and post-closure conditions, respectively. All of the calculated slope stability FOSs meet or exceed the required minimum FOSs specified in 06-096 CMR 401(2)(F)(1) of the Department Rules.

Settlement of the proposed cover systems during the post-closure period was evaluated by SME. The calculations show that: 1) the as-placed cover grades are expected to change minimally during the post-closure period and the cover system drainage is not expected to be affected and 2) the HDPE geomembrane will maintain its integrity and performance at the maximum predicted settlements. The minimal amount of settlement calculated for Phase I is largely predicated on the minor regrading and filling that will be performed to construct the proposed cover system and that much of the waste in Phase I has been in place for several years. It is expected that only a small amount of settlement will occur during the post-closure period due to long-term waste degradation and waste compression.

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- C. Water Balance: Leachate volumes collected and treated from the Dolby Landfill Facility have averaged approximately 74.2 million gallons per year ("MGY") over the past 5 years. SME estimates that the leachate generation rate from the Dolby Landfill Facility will be reduced to less than 7 MGY with the placement of a geomembrane cover over the portions of Dolby II and Dolby III that contribute to the facility's leachate collection system. The resistance to infiltration and runoff characteristics of the proposed cover system has been evaluated using the Hydrogeologic Evaluation of Landfill Performance ("HELP") model. The HELP model evaluation shows that the proposed cover system will meet the intent of the Department Rules by minimizing the infiltration of precipitation into the landfill after closure.
- D. Leachate Management Plan: The Dolby Landfill Cover Upgrade Project will not involve changes in the site's current leachate collection system, leachate storage pond, or leachate transport system. The proposed cover system construction will be performed in discrete sections that will allow stormwater runoff to be managed properly. Areas of waste which are uncovered during the construction process will be contained using temporary berms constructed from existing cover soil to isolate the open areas and manage impacted runoff from these areas to the greatest practical extent. Impacted runoff will be diverted and/or pumped to various perimeter manholes adjacent to the work area for collection and subsequent treatment.
- E. Gas Management Plan: SME recognizes the potential for degradation of the landfill waste and has estimated the gas generation for the portion of the landfill that will be closed by Phase I of the Dolby Landfill Cover Upgrade Project. SME used historical as-built drawings and available annual reports to estimate the waste thickness and the types of waste placed in this area of the landfill. The Landfill Gas Emissions Model ("LandGEM") was used to predict the quantity of gas that could be generated and the emission rate of non-methane organic compounds ("NMOC") from Phase I. Gas collection pipe spacing and passive vent locations necessary to relieve gas pressures generated by the waste and maintain cover stability were determined using standard design methods. The gas calculations indicate that the NMOC emission rate from Phase I will be below the 50 megagrams per year threshold described in 06-096 CMR 401(5)(I)(6)(c) of the Department Rules. As such, SME states that no additional gas control measures for the Dolby Landfill Cover Upgrade Project - Phase I other than passive gas collection and venting are necessary.

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Gas monitoring will be performed during construction when modifications to the landfill interior manholes are made to accommodate placement of the geomembrane.

The Department finds that the proposed final cover system will maintain its integrity and performance under the maximum predicted settlement, minimize infiltration of precipitation into the landfill after closure, and adequately manage landfill gas; provided that, an engineering report is submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

12. QUALITY ASSURANCE PLAN

A Construction Quality Assurance (CQA) Plan, prepared by SME and dated April 2016, addressing the construction quality assurance for placement of final cover materials for the Dolby Landfill Cover Upgrade Project - Phase I has been developed and submitted with the Application. The CQA plan outlines the characterization of the cover system's physical properties to determine its ability to achieve the project's performance criteria; defines procedures for cover placement; defines tests and frequency of testing to assure the construction of the cover meets or exceeds design criteria; and provides a method for documenting the cover placement. Geosynthetics and soil components will be inspected, tested, and certified by qualified CQA personnel independent of the Owner and Contractor.

The Department finds that the DAFS/BGS will implement adequate construction quality assurance measures to assure that design specifications and performance requirements for all facility components are met during construction of the Dolby Landfill Cover Upgrade Project; provided that, a CQA Plan is submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

13. CONSTRUCTION CONTRACT BID DOCUMENTS

The DAFS/BGS has submitted *Contract Documents and Construction Specifications, Dolby Landfill Cover System Upgrade – Phase I (Documents)*, prepared by SME and dated April 2016. The Documents include drawings, technical specifications, and contract administrative documents for the Dolby Landfill Cover Upgrade Project - Phase I. The Documents describe the proposed project and the means and methods for the installation of the final cover systems.

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The Department finds that the construction contract bid documents were adequately prepared and meet the requirements of 06-096 CMR 401(5)(L); provided that, construction contract bid documents, including drawings, technical specifications, and contract administrative documents are submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

14. POST-CLOSURE MONITORING AND MAINTENANCE

An Environmental Monitoring Plan (EMP), dated April 2011, was previously submitted and approved by the Department. The EMP meets the requirements of 06-096 CMR 405 and will be the basis for the post-closure water quality monitoring program for the Dolby Landfill Facility. Provisions for groundwater, surface water, leachate and gas monitoring are outlined in the EMP. Specific procedures for the inspection and maintenance of facility components are outlined in the facility Operating Manual, dated April 2012. Slope stability and settlement monitoring of the proposed cover systems will be routinely conducted during the post-closure period. This monitoring will consist of visual inspections of the completed cover system and periodic topographical surveys for comparison to the cover surface elevations at the time of construction completion. Post-closure slope stability and settlement monitoring will be conducted annually unless conditions are encountered that warrant more frequent monitoring. The post-closure monitoring and maintenance plan will need to be revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project.

Groundwater monitoring data shows that groundwater quality at monitoring well ("MW") 301, MW-302B and MW-302C has deteriorated over time. Data shows that these wells generally began to experience increasing trends for several parameters in the year 2000. The exact cause of increasing trends is unknown; however, completion of the Dolby Landfill Cover Upgrade Project is expected to help mitigate these impacts. The EMP includes a requirement for the ongoing statistical analysis of the monitoring data, using statistical tests approved by the Department, to evaluate trends in groundwater quality. The results of the ongoing evaluation will be provided in the annual report.

SME has submitted a June 23, 2016 letter proposing to evaluate the effectiveness of the Dolby Landfill Cover Upgrade Project relative to improving groundwater quality 5 years after the substantial completion of construction activities of the Dolby Landfill Cover Upgrade Project. Completion of the Dolby Landfill Upgrade Project is scheduled to occur during 2019.

The Department finds that the DAFS/BGS has adequately addressed post-closure monitoring and maintenance for the Dolby Landfill Facility; provided that: (1) the post-

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closure monitoring and maintenance plan is revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project and is submitted for Department review and approval at least 30 days prior to substantial completion of construction activities within the Dolby Landfill Cover Upgrade Project - Phase I and (2) five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, the DAFS/BGS submits to the Department, for review and approval, an evaluation of water quality data from MW-301, MW-302B and MW-302C. If there has been no improvement in the water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS must submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality data from MW-301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval. Once the Corrective Action Plan has been approved by the Department, the plan must be implemented within one year of approval.

15. FINAL USE/PERMANENT RECORD

The DAFS/BGS proposes to maintain the property that the landfill is on as open space. Permanent buildings will not be placed within 100 feet of the landfill. Currently, there are no specific plans for final use of the Dolby Landfill Facility.

Following the completion of the Dolby Landfill Cover Upgrade Project, the DAFS/BGS will prepare and record in the Penobscot County Registry of Deeds information and necessary deed restrictions to provide notice to prospective purchasers and a public record of the location of the Dolby II and Dolby III landfills. The DAFS/BGS will also provide a copy of the record information and necessary deed restrictions to the Department as required by 06-096 CMR 401(5)(B)(4). The final cover or other components of the containment systems or the functioning of the monitoring systems may not be disturbed without the written approval of the Department.

The Department finds that the DAFS/BGS has provided for the permanent record related to the Dolby Landfill Facility.

BASED on the above Findings of Facts, and subject to the CONDITIONS listed below, the Department makes the following CONCLUSIONS:

1. The DAFS/BGS has submitted evidence of sufficient title, right, or interest with respect to the property proposed for use.
2. The DAFS/BGS has complied with all of the public notice requirements of 06-096 CMR 2 and 400.

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3. The DAFS/BGS has provided adequate evidence of financial and technical ability to design, construct, operate, maintain, close and accomplish post-closure care of the solid waste facility in a manner consistent with all applicable requirements.
4. The DAFS/BGS is exempt from the liability insurance requirements of 06-096 CMR 400(10).
5. The Dolby Landfill Cover Upgrade Project will not unreasonably cause or increase flooding and will have no unreasonable effect on surface water. The DAFS/BGS has adequately addressed stormwater management for the proposed project.
6. The Dolby Landfill Cover Upgrade Project will not cause unreasonable sedimentation or erosion of soil. The DAFS/BGS has adequately addressed erosion and sedimentation control for the proposed project.
7. The DAFS/BGS has completed a site assessment report that adequately supports the design of the proposed final cover system and conducts water quality monitoring in accordance with the Department Rules.
8. The proposed final cover system will maintain its integrity and performance under the maximum predicted settlement, minimize infiltration of precipitation into the landfill after closure, and adequately manage landfill gas.
9. The DAFS/BGS has proposed a final cover system design meeting the requirements of the Department Rules; provided that, an engineering report, a CQA Plan and the construction contract bid documents, including drawings, technical specifications, and the contract administrative documents are submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.
10. The DAFS/BGS has provided for post-closure monitoring and maintenance in accordance with Department Rules; provided that: (1) the post-closure monitoring and maintenance plan is revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project and is submitted for Department review and approval at least 30 days prior to substantial completion of construction activities within the Dolby Landfill Upgrade Project - Phase I and (2) five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, an evaluation of water quality data from MW-301, MW-302B and MW-302C is submitted for Department review and approval. If there has been no improvement in the water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS must submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality from MW-

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301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval. Once the Corrective Action Plan has been approved by the Department, the plan must be implemented within one year of approval.

11. The DAFS/BGS has provided for the permanent record related to the site.
12. The Dolby Landfill Cover Upgrade Project will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health and welfare, or create a nuisance.

THEREFORE, the Department APPROVES the above noted application of the STATE OF MAINE, DEPARTMENT OF ADMINISTRATIVE and FINANCIAL SERVICES, BUREAU OF GENERAL SERVICES, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:


1. The Standard Conditions of Approval, a copy attached as Appendix A.
2. The invalidity or unenforceability of any provision, or part thereof, of this license shall not affect the remainder of the provision or any other provisions. This license shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
3. At least 3 months prior to the commencement of construction of each subsequent phase, the DAFS/BGS shall submit an engineering report, a CQA Plan and the construction contract bid documents including drawings, technical specifications, and the contract administrative documents to the Department for review and approval.
4. At least 30 days prior to substantial completion of construction activities within the Dolby Landfill Cover Upgrade Project - Phase I, the DAFS/BGS shall submit to the Department, for review and approval, a revised post-closure monitoring and maintenance plan to reflect changes associated with the Dolby Landfill Cover Upgrade Project.
5. Five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, the DAFS/BGS shall submit to the Department, for review and approval, an evaluation of water quality data from MW-301, MW-302B and MW-302C. If there has been no improvement in water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS shall submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality data from MW-301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval.

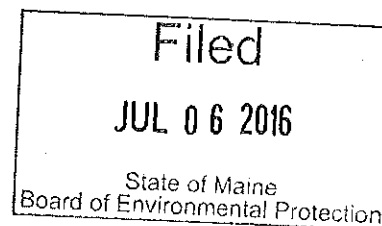
STATE OF MAINE, ACTING THROUGH THE	14	SOLID WASTE
DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL)		LICENSE
SERVICES, BUREAU OF GENERAL SERVICES)		
EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE)		
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Once the Corrective Action Plan has been approved by the Department, the plan shall be implemented within one year of approval.

DONE AND DATED AT AUGUSTA, MAINE, THIS 30th DAY OF June, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 
Paul Mercer, Commissioner



PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: April 7, 2016

Date of application acceptance: April 27, 2016

Date filed with the Board of Environmental Protection:

xlp80430/lsp



Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE LANDFILL LICENSES

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL. VIOLATIONS OF THE CONDITIONS UNDER WHICH A LICENSE IS ISSUED SHALL CONSTITUTE A VIOLATION OF THAT LICENSE AGAINST WHICH ENFORCEMENT ACTION MAY BE TAKEN, INCLUDING REVOCATION.

1. **Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the licensee. Any consequential variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
2. **Compliance with All Applicable Laws.** The licensee shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
3. **Compliance with All Terms and Conditions of Approval.** The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. **Transfer of License.** The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.
5. **Initiation of Construction or Development Within Two Years.** If the construction or operation of the solid waste facility is not begun within two years of issuance or within 2 years after any administrative and judicial appeals have been resolved, the license lapses and the licensee must reapply to the Department for a new license unless otherwise approved by the Department.
6. **Approval Included in Contract Bids.** A copy of the approval must be included in or attached to all contract bid specifications for the solid waste facility.
7. **Approval Shown to Contractors.** Contractors must be shown the license by the licensee before commencing work on the solid waste facility.
8. **Background of key individuals.** A licensee may not knowingly hire as an officer, director or key solid waste facility employee, or knowingly acquire an equity interest or debt interest in, any person convicted of a felony or found to have violated a State or federal environmental law or rule without first obtaining the approval of the Department.



Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE LANDFILL LICENSES

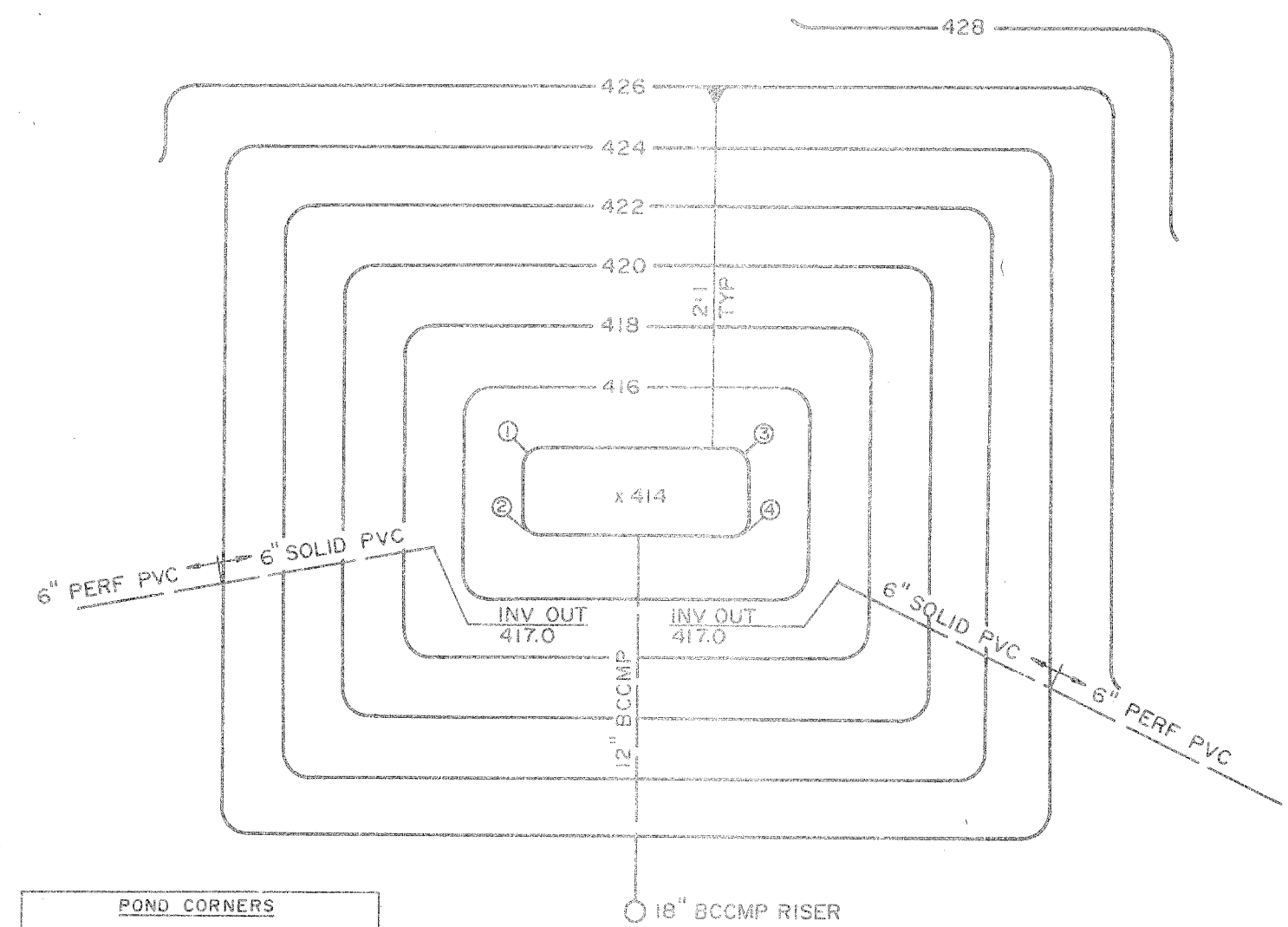
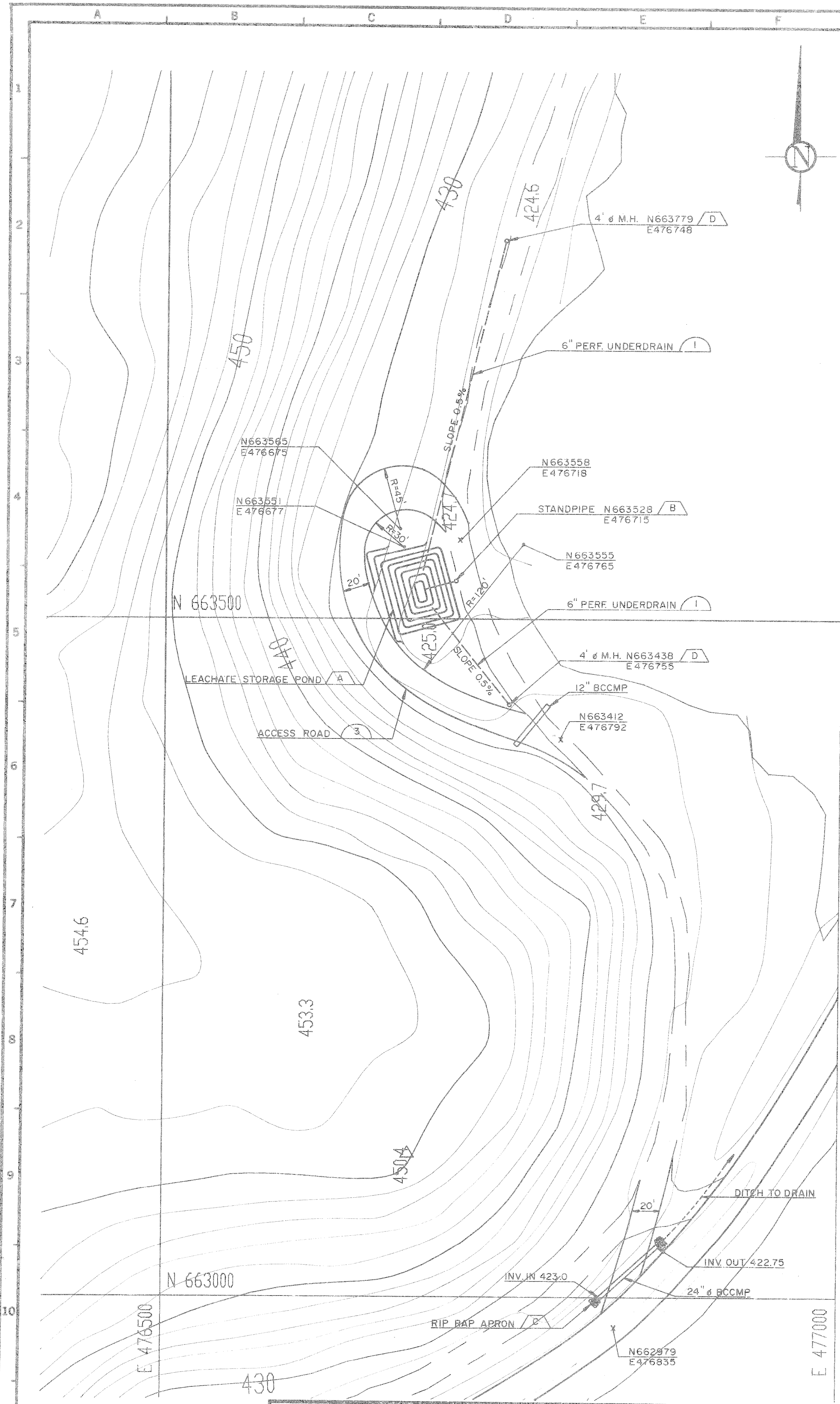
9. **Fees.** The licensee must comply with annual license and annual reporting fee requirements of the Department's rules.
10. **Recycling and Source Reduction Determination for Solid Waste Disposal Facilities.** This condition does not apply to the expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling.

The solid waste disposal facility shall only accept solid waste that is subject to recycling and source reduction programs, voluntary or otherwise, at least as effective as those imposed by 38 M.R.S. Chapter 13.

11. **Deed Requirements for Solid Waste Disposal Facilities.** Whenever any lot of land on which an active, inactive, or closed solid waste disposal facility is located is being transferred by deed, the following must be expressly stated in the deed:
 - A. The type of facility located on the lot and the dates of its establishment and closure.
 - B. A description of the location and the composition, extent, and depth of the waste deposited.
 - C. The disposal location coordinates of asbestos wastes must be identified.

APPENDIX B

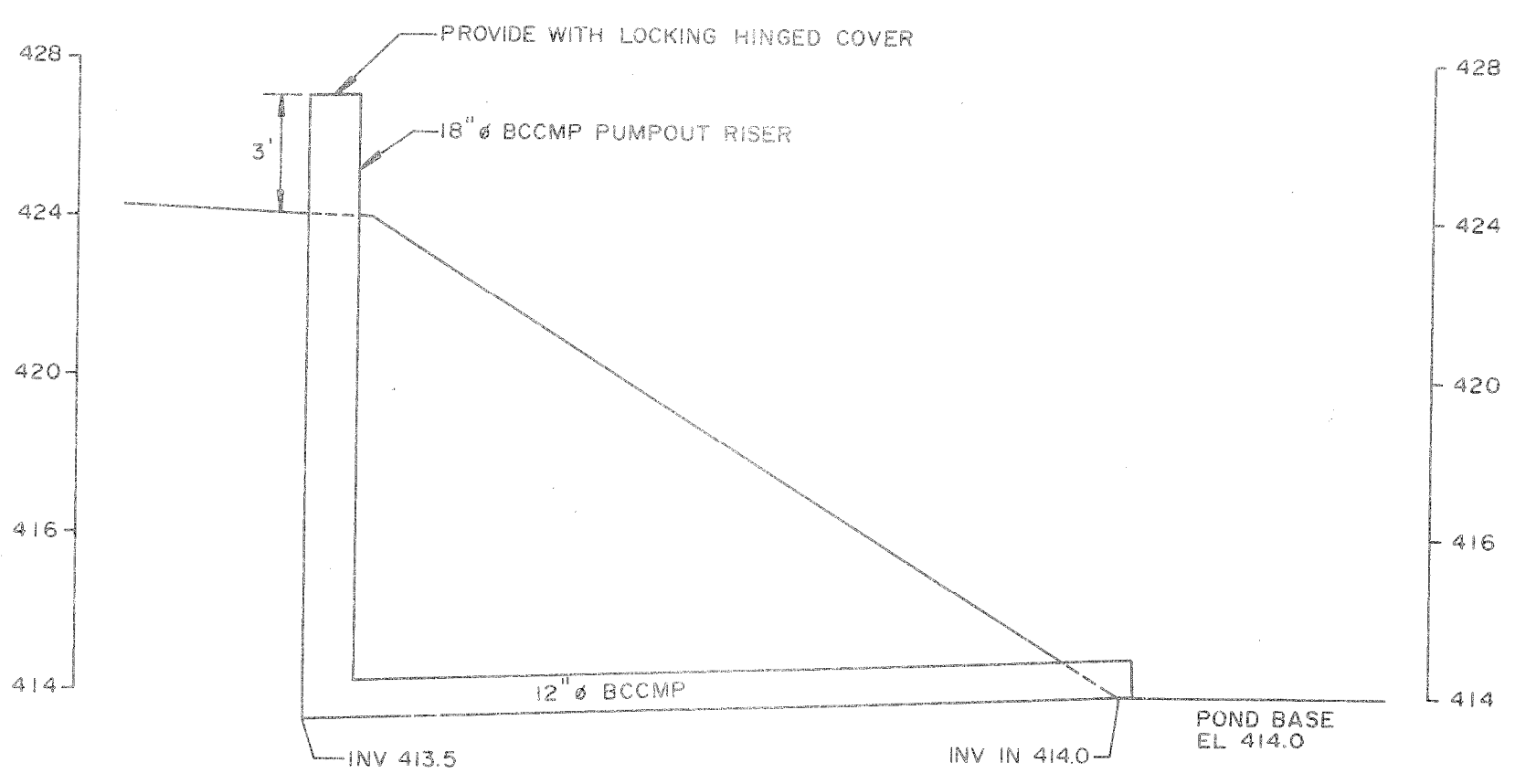
ENGINEERING DRAWINGS FOR DOLBY LANDFILL FACILITY (This Appendix is supplied via compact disk)



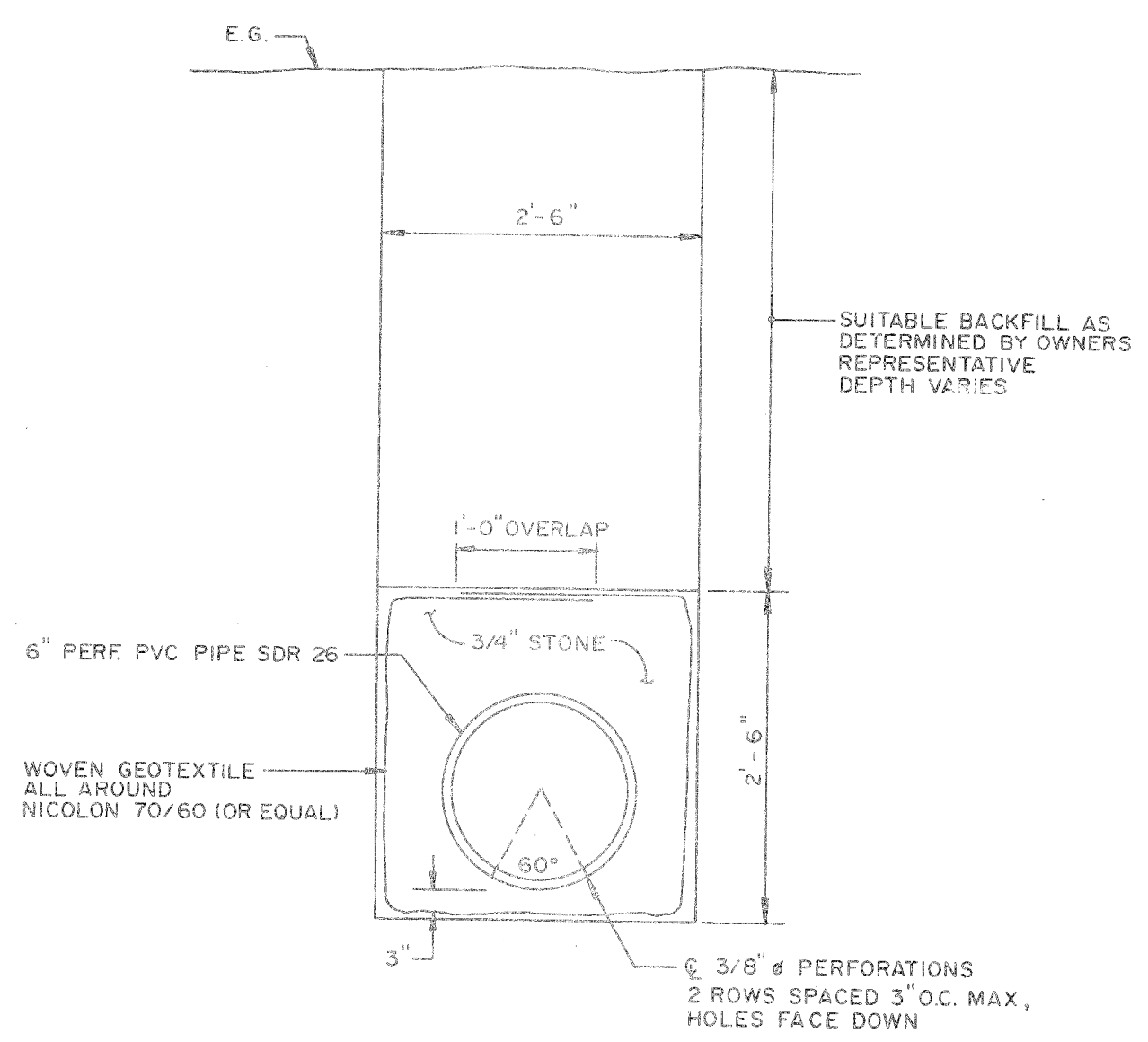
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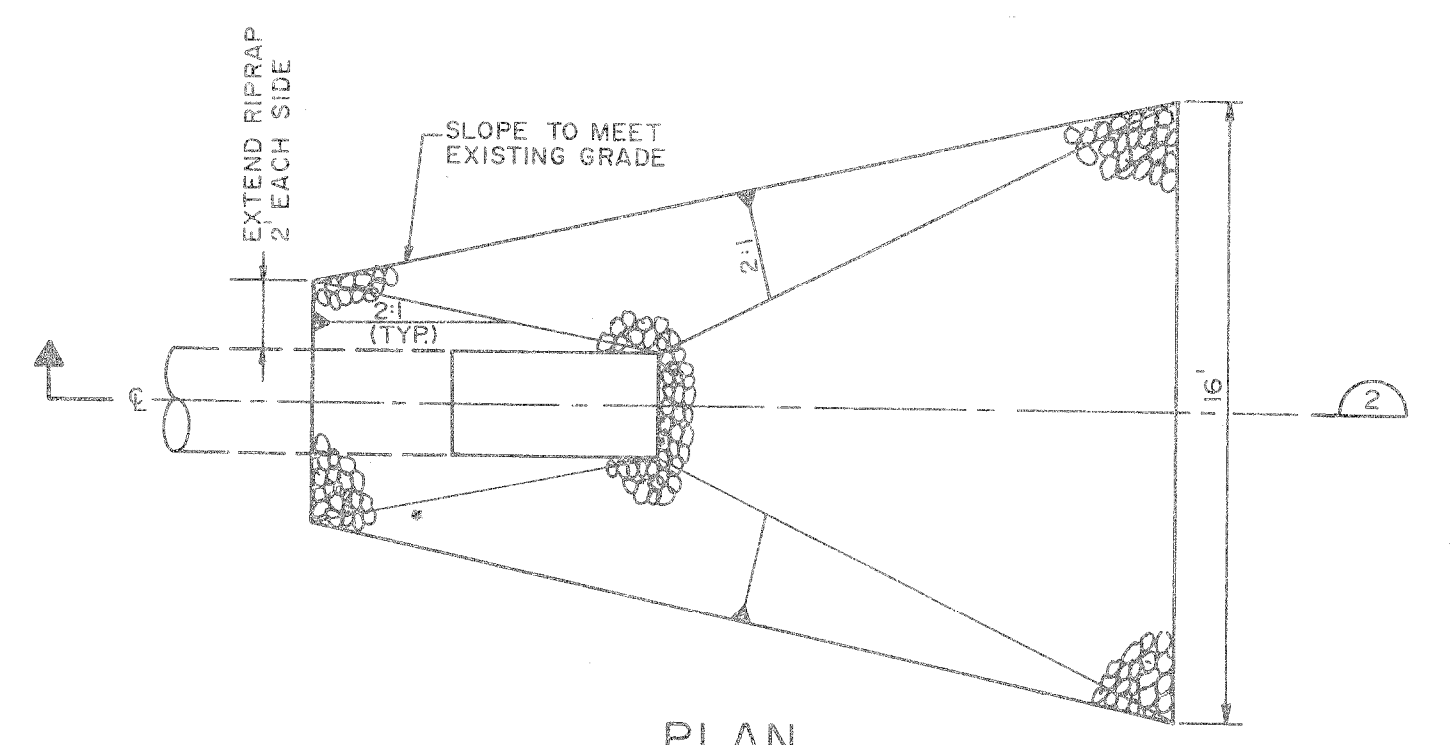
LEACHATE STORAGE POND / A
N.T.S.



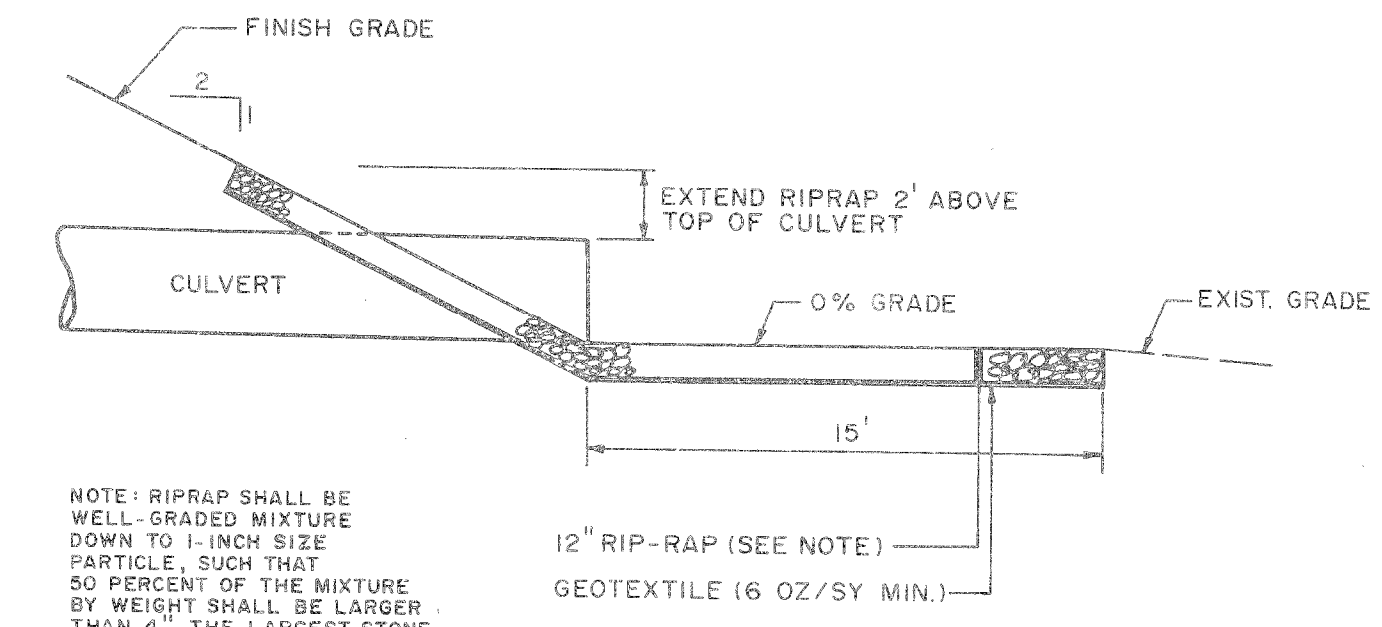
STANDPIPE / B
N.T.S.



PERF. LEACHATE UNDERDRAIN / 1
N.T.S.

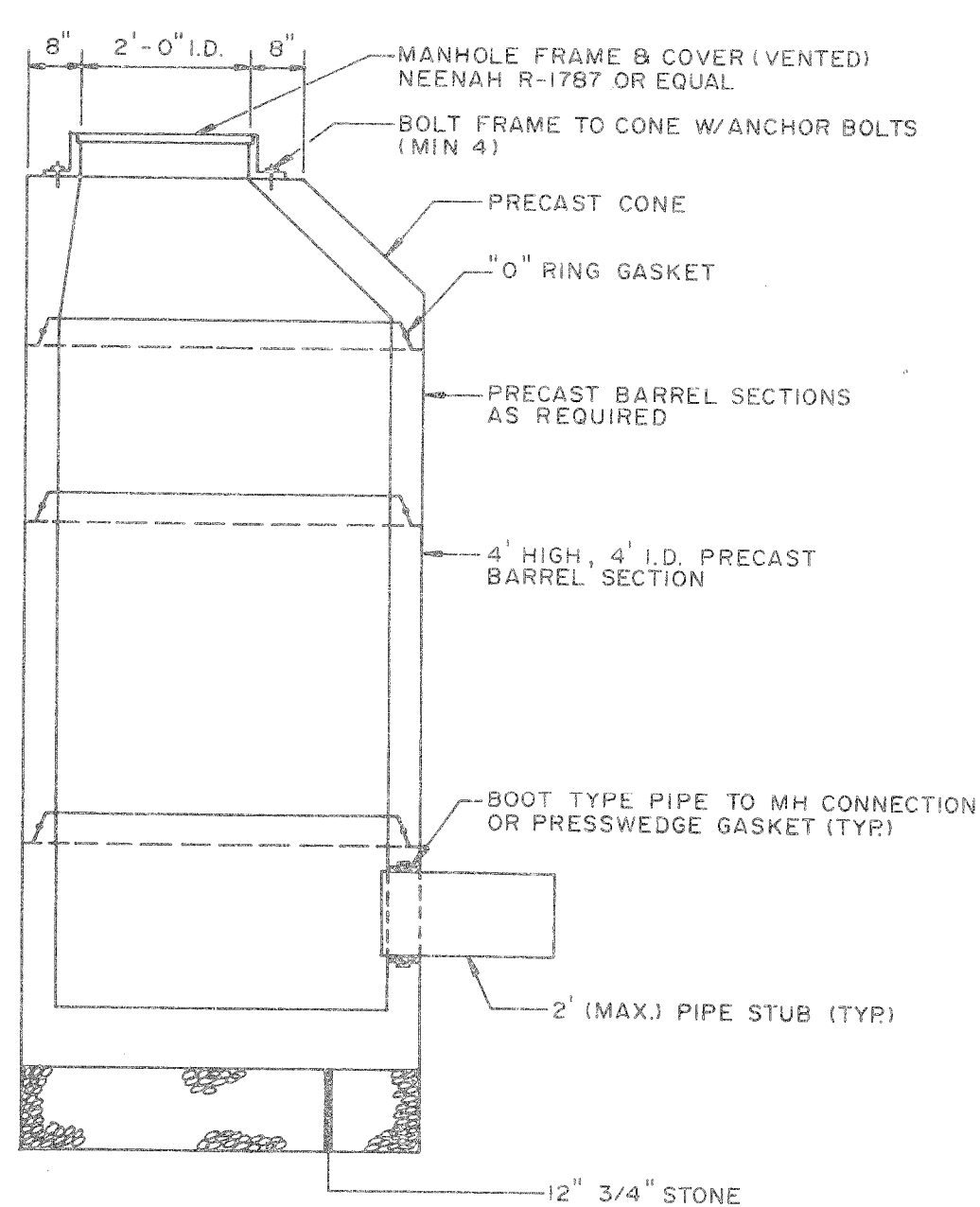


PLAN
N.T.S.

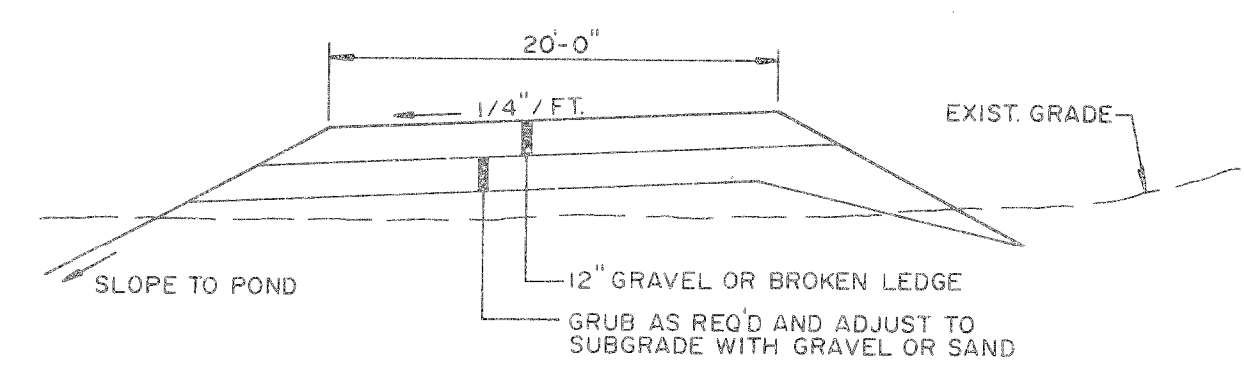


SECTION 2
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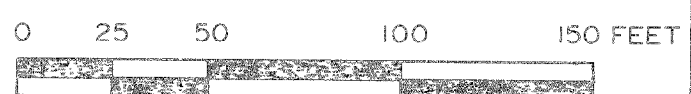
RIP RAP APRON / C



TYPICAL LEACHATE TRANSPORT MANHOLE / D
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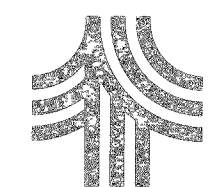
ACCESS ROAD / 3
N.T.S.



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPVD	JOB NO.
				12/90	RECORD DRAWING				

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

OWN	PF	11/90
CRD	MAH	11/90
CHKD		
CORR		
APPVD		
ISSUE CODE		
C-CONST		
SCALE AS SHOWN		



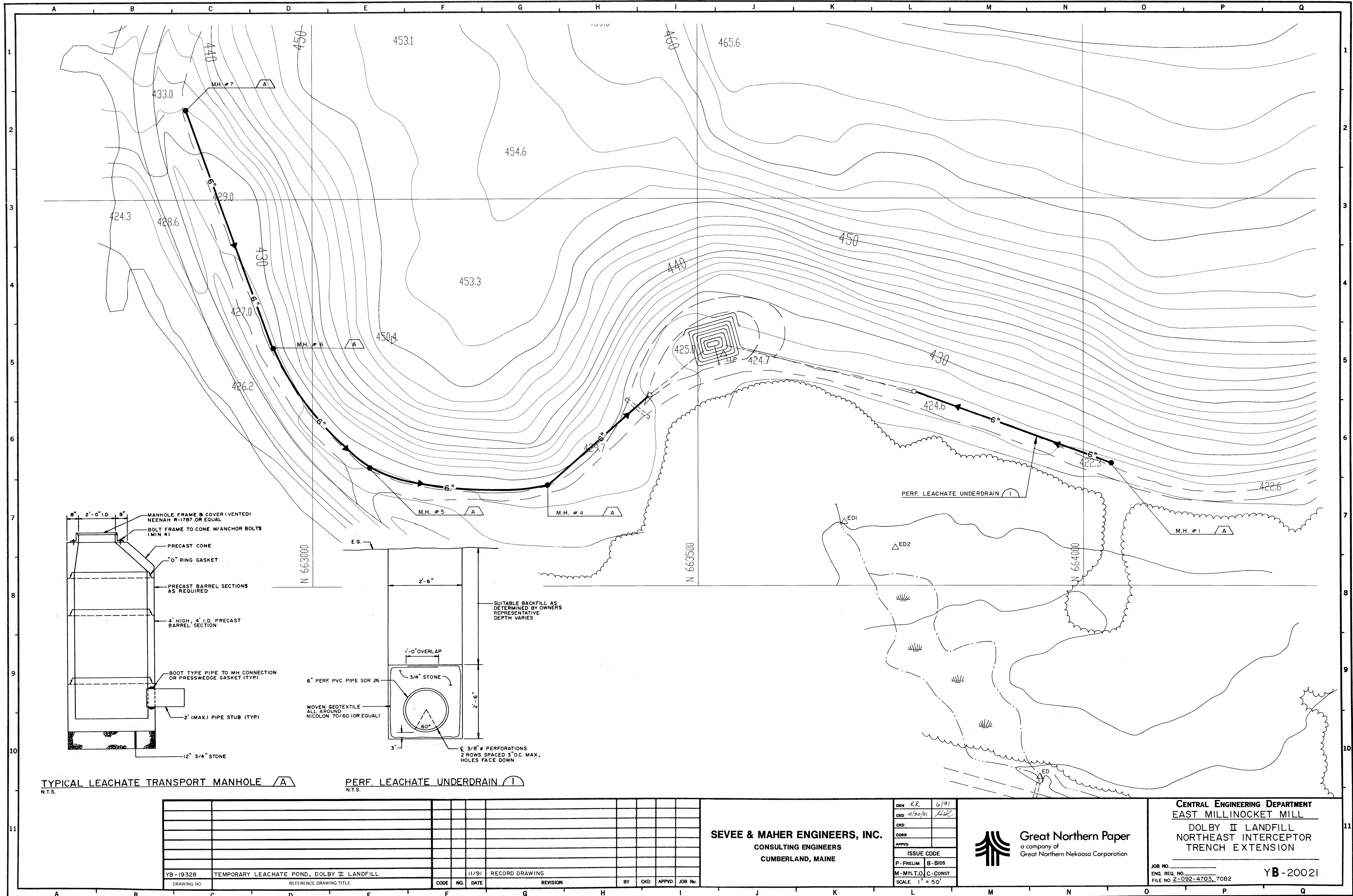
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

TEMPORARY LEACHATE POND
DOLBY II LANDFILL

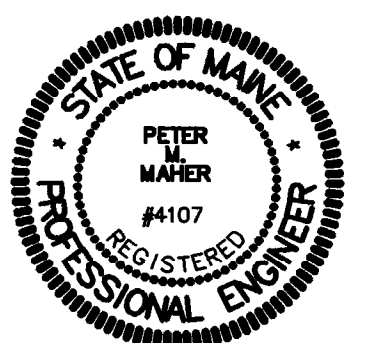
JOB NO. 94552
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-19328



SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-23586
2	SYMBOLS & ABBREVIATIONS	YB-23587
3	SITE LOCATION PLAN	YB-23588
4	SITE DEVELOPMENT PLAN	YB-23589
5	DOLBY II NORTH SITE DEVELOPMENT PLAN	YB-23590
6	DOLBY II SOUTH SITE DEVELOPMENT PLAN	YB-23591
7	FINAL GRADING PLAN	YB-23592
8	SECTIONS & DETAILS	YB-23593

1996



SEVEE & MAHER ENGINEERS, INC. CONSULTING ENGINEERS CUMBERLAND CENTER, MAINE	DRN	PAF	 BOWATER Great Northern Paper	EAST OPERATION	
	CHK	GHC		DOLBY II LANDFILL REGRADING COVER SHEET	
	CHK				
	CORR				
	APPVD				
	ISSUE CODE				
P - Prelim	B - Bids	JOB NO. <u>67996</u> ENG. REQ. NO. _____ FILE NO. <u>2-092-47037082</u>			
M - MH T.O.	C - Const.	YB-23586			
SCALE					

SYMBOLS

EXISTING		PROPOSED		EXISTING		PROPOSED	
	NORTH ARROW (MAGNETIC)		STONE WALL			MANHOLE	
	NORTH ARROW (PLAN NORTH)		DRAINAGE COURSE (WITH DIRECTION)			CATCH BASIN	
	CONTOUR LINES		EDGE OF WATER			WATER VALVE	
	SPOT ELEVATION (GRADE)		WATER ELEVATION (GROUND OR SURFACE)			HYDRANT	
	EXISTING GROUND		FENCE LINE (WOOD)			UTILITY POLE	
	SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT.		FENCE LINE (WIRE)			CLEAN OUT STRUCTURE	
	PROPERTY LINE OR R.O.W.		RETAINING WALL			UNDERGROUND GAS MAIN	
	PROPERTY LINE W/ BEARING AND DISTANCE		GUARD RAIL			UNDERGROUND TELEPHONE LINE	
	CONSTRUCTION BASELINE		BUILDING AND STRUCTURES			UNDERGROUND ELECTRICAL LINE	
	BOUNDARY LINE (State, County, Municipality)		SLOPE RATIO (HORIZONTAL TO VERTICAL)			OVERHEAD ELECTRICAL LINE	
	SURVEY MONUMENT		SLOPES (WITH SLOPE RATIO)			SANITARY SEWER (SIZE & TYPE)	
	SURVEY IRON		EDGE OF TRAVELED WAY			FORCE MAIN (SIZE & TYPE)	
	DRILL HOLE, PK, OR STAKE		CUT OR FILL LINE			WATER MAIN (SIZE & TYPE)	
	WOODS OR BRUSH LINE		CLEARING LIMIT LINE			STORM DRAIN (SIZE & TYPE)	
	INDIVIDUAL TREE (Deciduous)		BITUMINOUS PAVEMENT			UNDERDRAIN (SIZE & TYPE)	
	INDIVIDUAL TREE (Coniferous)		CONCRETE			CULVERT	
	TREE, TO BE REMOVED		TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER			RAILROAD	
	MARSH AREA		TEST PIT AND NUMBER			SILTATION FENCE	
						PERIMETER DRAIN (SIZE & TYPE)	
						LEACHATE TRANSPORT (SIZE & TYPE)	
						LEACHATE COLLECTION (SIZE & TYPE)	
						LEAK DETECTION, SIZE & TYPE	

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 85 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR
CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR
DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE
FOLLOWING GRADATION:

SIEVE DESIGNATION	PERCENT PASSING BY WEIGHT
1 INCH	100
1/4 INCH	<5

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM WORK AREA PRIOR TO PLACING THE EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDING.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K)

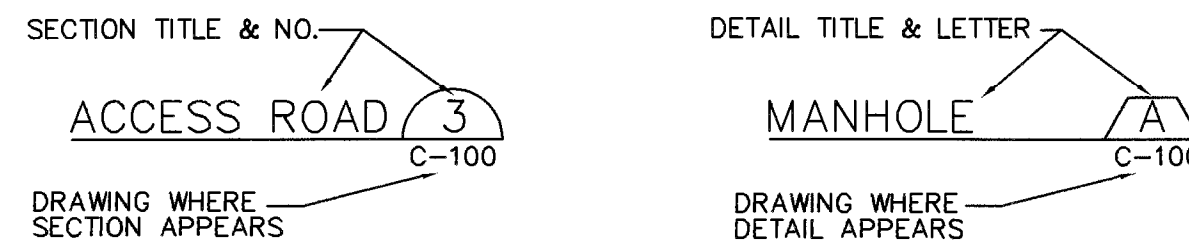
10 LBS PER UNIT		
SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF
3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION



A.C.C.M.P.	ASPHALT COATED C.M.P.	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	P.C.	POINT ON CURVE
A.C.P.	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HP	HORSEPOWER	P.D.	PERIMETER DRAIN
AC	ACRE	DEG OR °	DIAMETER	HYD	HYDRANT	P.I.	POINT OF INTERSECTION
ALUM	ALUMINUM	DEPT	DEPTH			P.T.	POINT OF TANGENT
APPD	APPROVED	DI	DUCTILE IRON	I.D.	INSIDE DIAMETER	PERF	PERFORATED
APPROX	APPROXIMATE	DIA OR Ø	DIAMETER	IN OR "	INCHES	PSI	POUNDS PER SQUARE INCH
ASB	ASBESTOS	DIM	DIMENSION	INV	INVERT	PVC	POLYVINYL CHLORIDE
ASPH	ASPHALT	DIST	DISTANCE	INV. EL	INVERT ELEVATION	PVMT	PAVEMENT
AUTO	AUTOMATIC	DN	DOWN				
AUX	AUXILIARY	DR	DRAIN	LB	POUND	QTY	QUANTITY
AVE	AVENUE	DWG	DRAWING	LC	LEACHATE COLLECTION		
AZ	AZIMUTH	EA	EACH	LD	LEAK DETECTION	R.O.W.	RIGHT OF WAY
		EG	EXISTING GROUND OR GRADE	LOC FT.	LINEAR FEET	RAD	RADIUS
		ELEC	ELECTRIC	LOC	LOCATION	REQD	REQUIRED
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	EL	ELEVATION	LT	LEACHATE TRANSPORT	RT	RIGHT
B.M.	BENCHMARK	ELB	ELBOW	M.H.	MANHOLE	RTE	ROUTE
BIT	BITUMINOUS	EQUIP	EQUIPMENT	M.J.	MECHANICAL JOINT	S	SLOPE
BLDG	BUILDING	EST	ESTIMATED	MATL	MATERIAL	SCH	SCHEDULE
BOT	BOTTOM	EXC	EXCAVATE	MAX	MAXIMUM	SF	SQUARE FEET
BRG	BEARING	EXIST	EXISTING	MFR	MANUFACTURE	SHT	SHEET
				MIN	MINIMUM	STA	STATION
C.B.	CATCH BASIN			MISC	MISCELLANEOUS	SY	SQUARE YARD
CEM	CENTER	F.G.	FINISH GRADE	MON	MONUMENT	TAN	TANGENT
CEM. LIN.	CEMENT LINED	FBRGL	FIBERGLASS	N.T.C.	NOT IN THIS CONTRACT	TOT	TOTAL DYNAMIC HEAD
C.M.P.	CORRUGATED METAL PIPE	FON	FOUNDATION	N.T.S.	NOT TO SCALE	TEMP	TEMPORARY
C.O.	CLEAN OUT	FLEX	FLEXIBLE	N/F	NOW OR FORMERLY	TYP	TYPICAL
CF	CUBIC FEET	FLG	FLANGE	NO. OR #	NUMBER	V	VOLTS
CFS	CUBIC FEET PER SECOND	FLR	FLOOR	O.C.	ON CENTER	W	WITH
CI	CAST IRON	FPS	FEET PER SECOND	O.D.	OUTSIDE DIAMETER	W/O	WITHOUT
CL	CLASS	FT OR '	FEET			YD	YARD
CONC	CONCRETE	FTG	FOOTING				
CONST	CONSTRUCTION	GA	GAUGE				
CONTR	CONTRACTOR	GAL	GALLON				
CTR	CENTER	GALV	GALVANIZED				
CY	CUBIC YARD	GPM	GALLONS PER MINUTE				
		GPD	GALLONS PER DAY				
		GPM	GALLONS PER MINUTE				



DRAWING NO.						CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

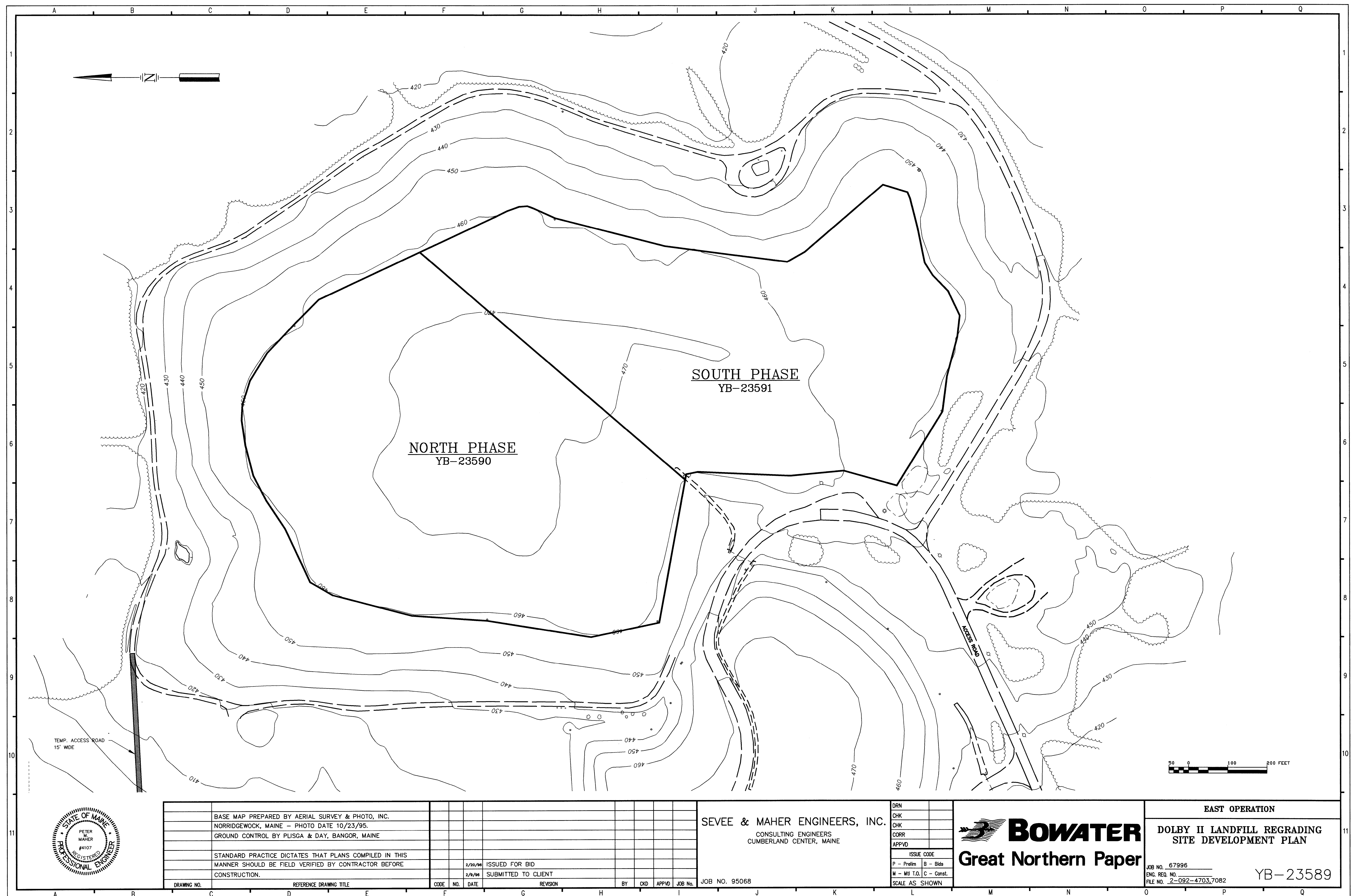
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CHK	GHC
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE AS SHOWN	

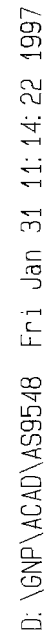


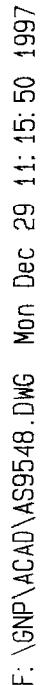
EAST OPERATION
DOLBY II LANDFILL REGRADING SYMBOLS & ABBREVIATIONS

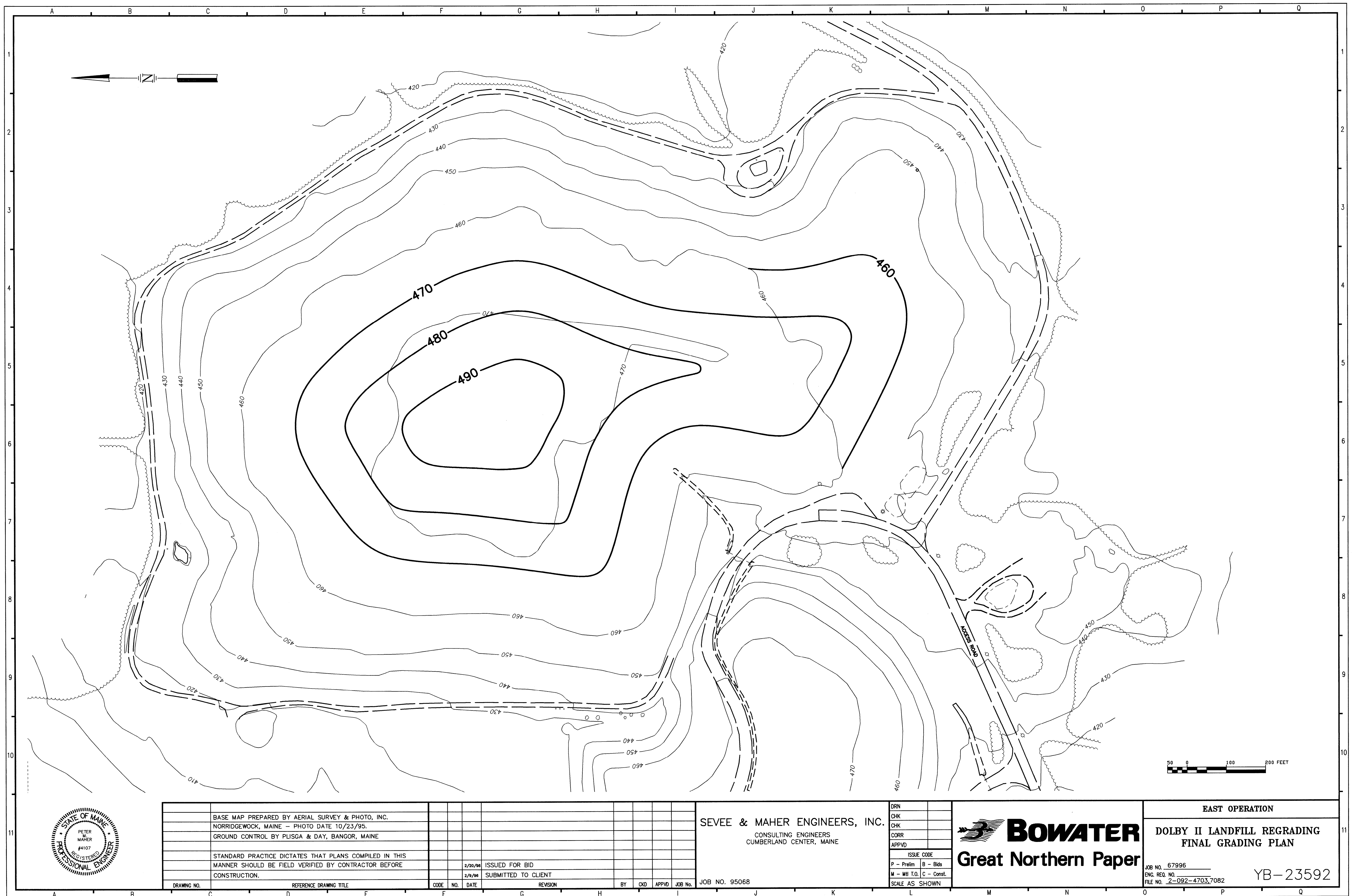
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ENG. REQ. NO. _____
FILE NO. 2-092-4603,7082

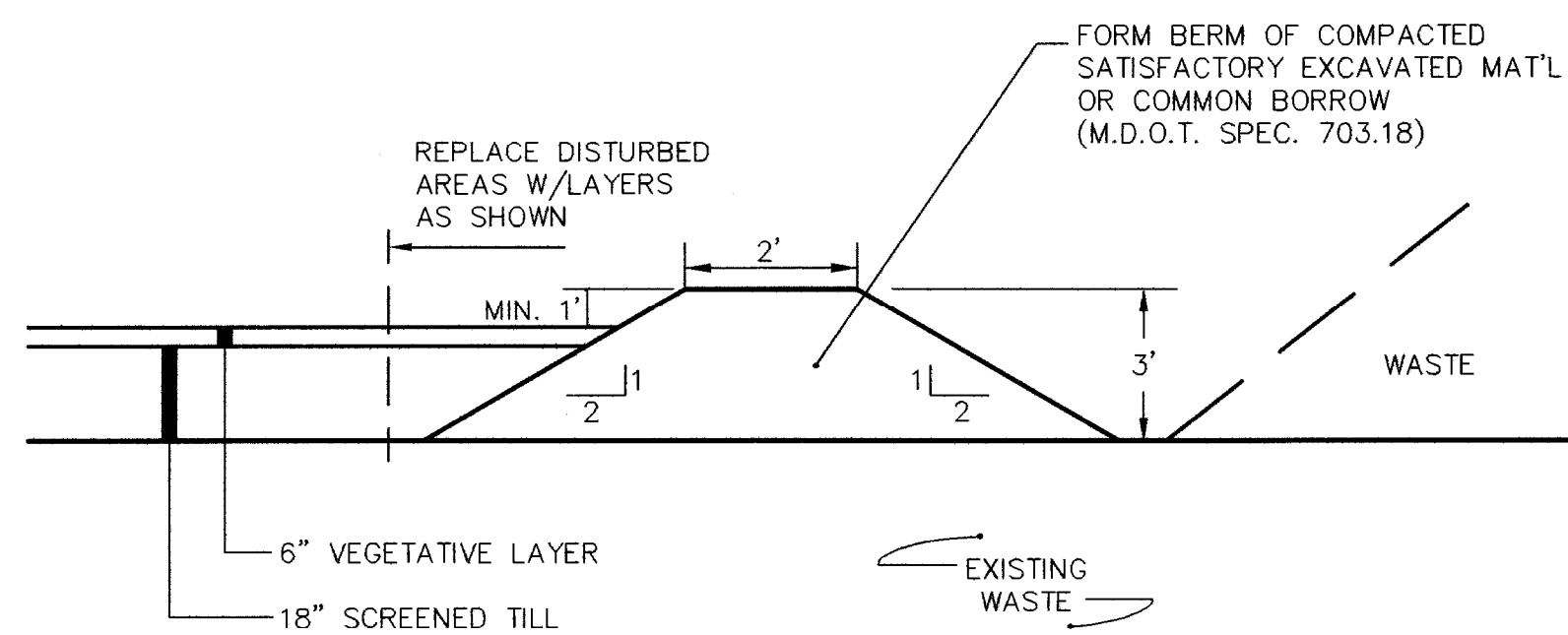
YB-23587



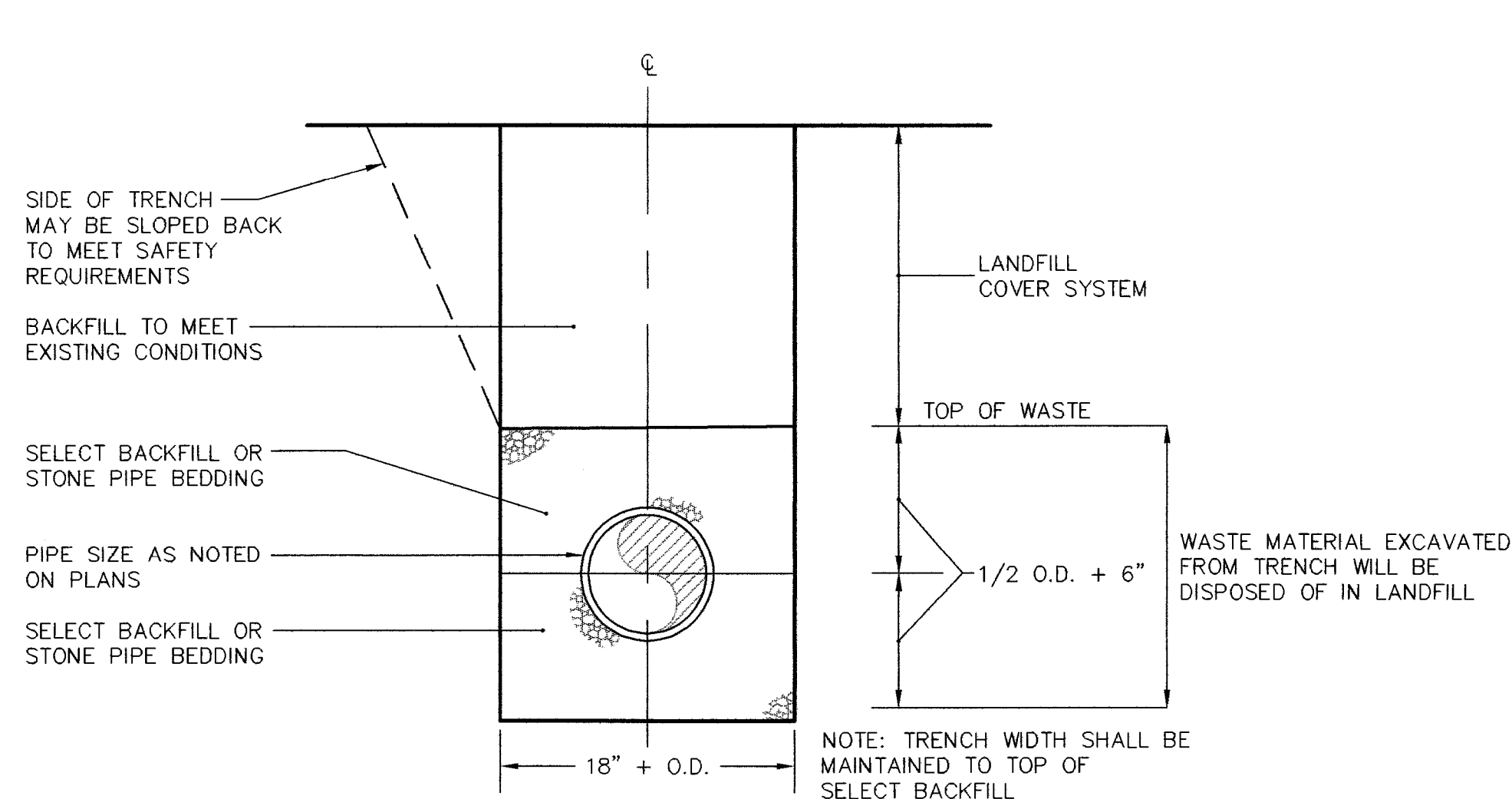




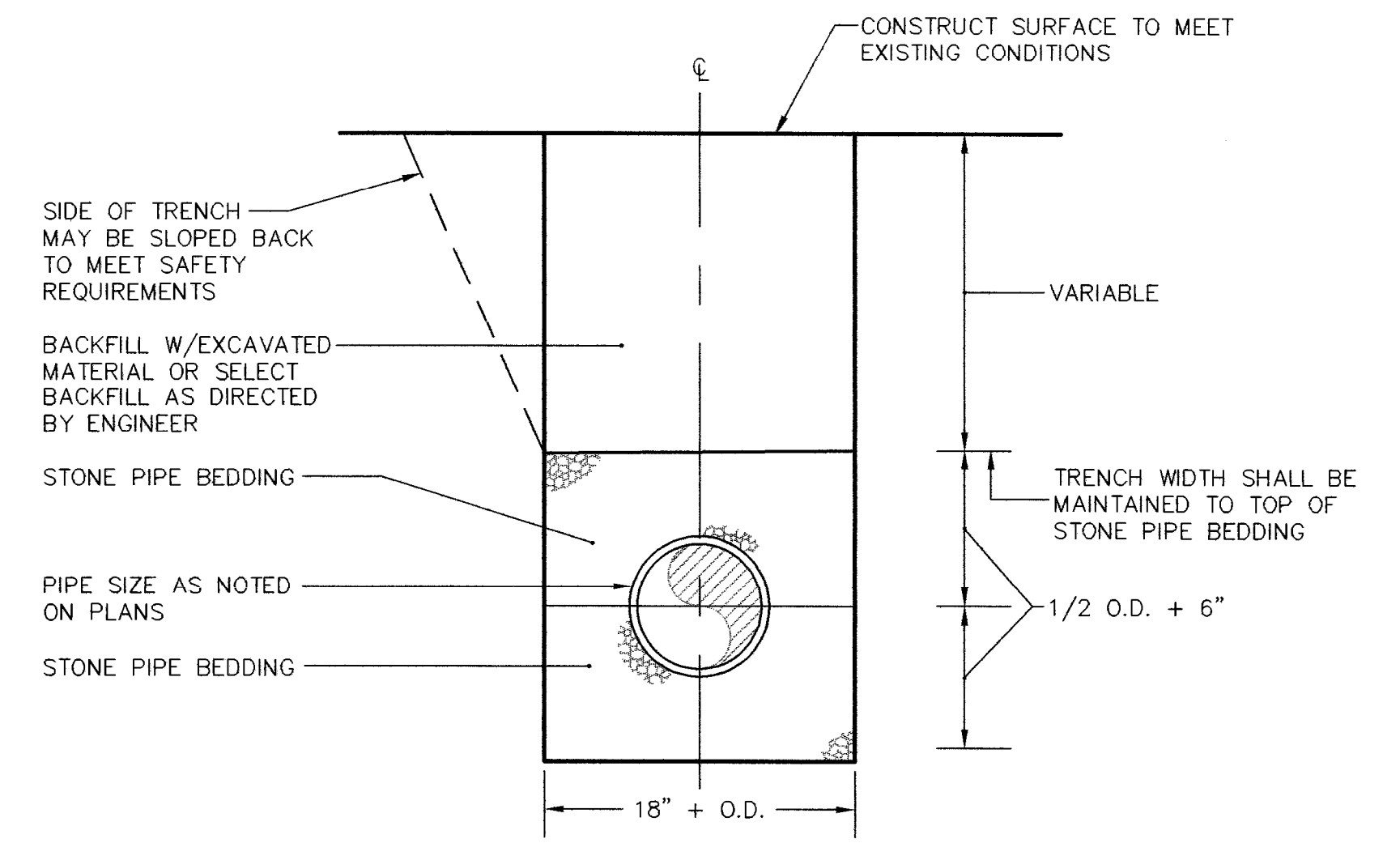




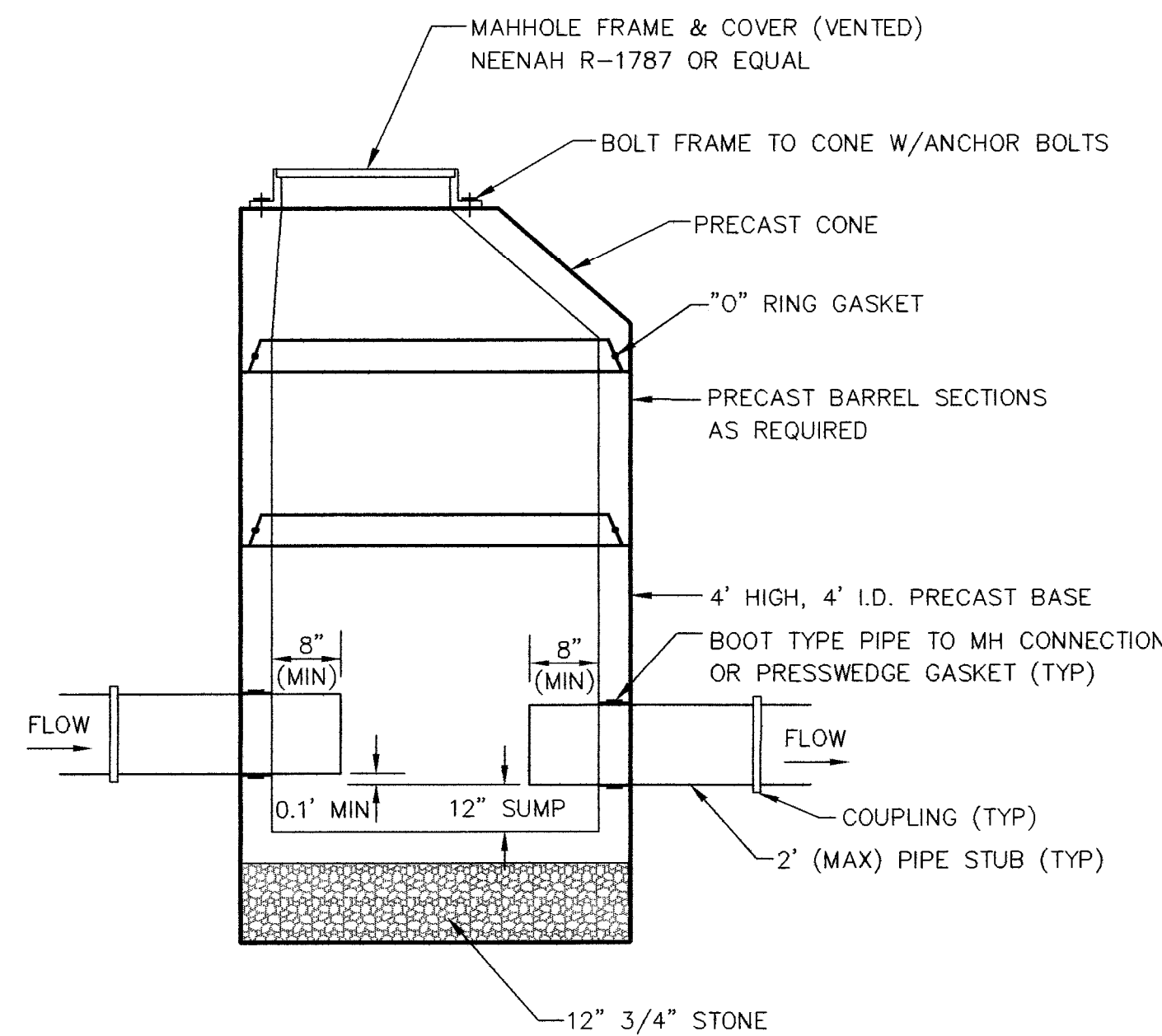
DIKE SECTION 1
NTS YB-23590
YB-23591



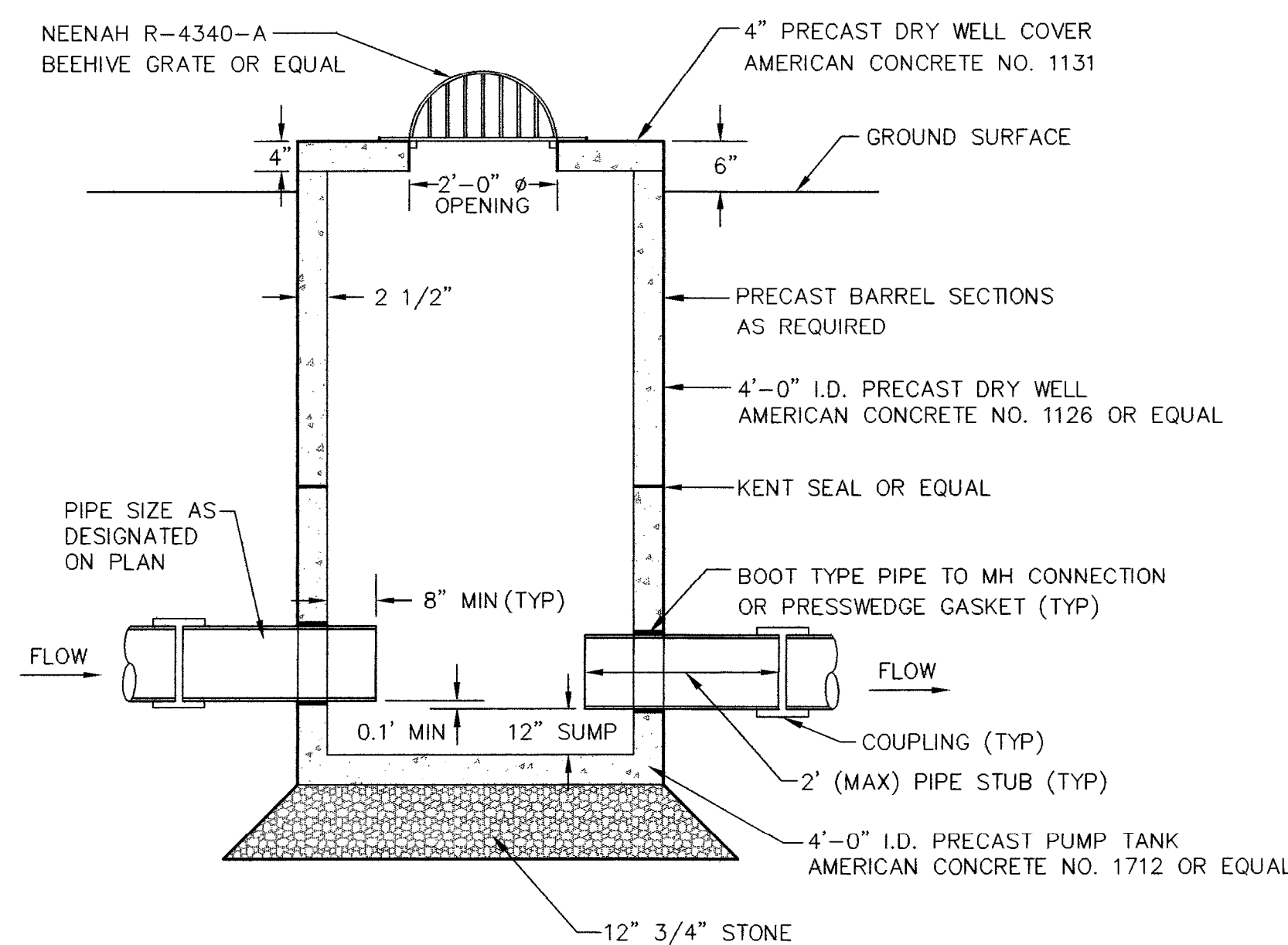
SIDESLOPE PIPE TRENCH 2
NTS YB-23590
YB-23591



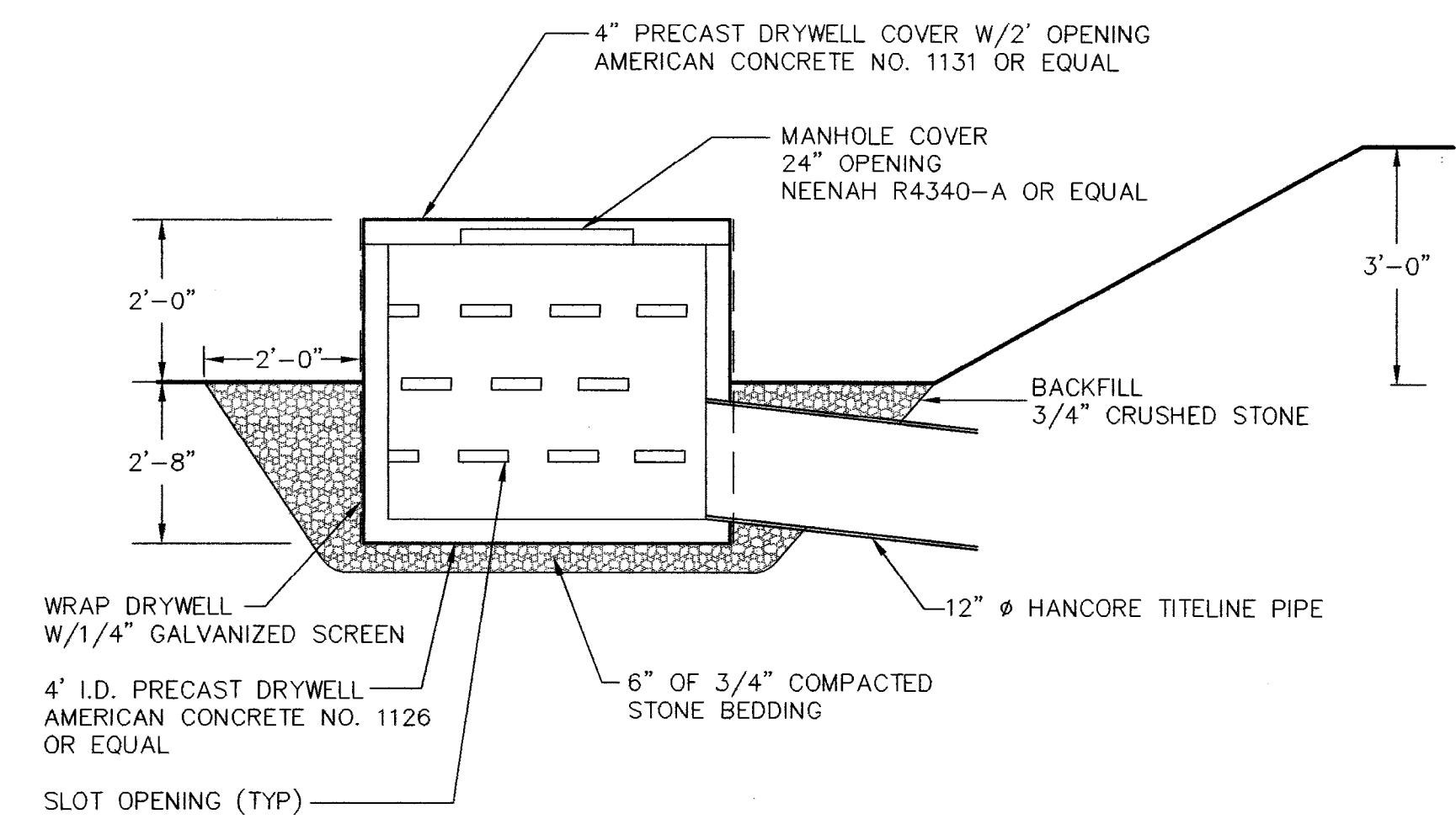
LEACHATE COLLECTION MAIN PIPE TRENCH 3
NTS YB-23590
YB-23591



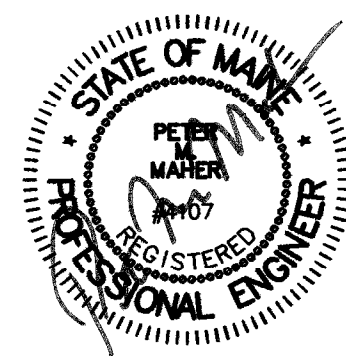
TYPICAL MANHOLE A
NTS YB-23590
YB-23591



CATCH BASIN B
NTS YB-23590
YB-23591



DRAINAGE MANHOLE C
NTS YB-23590
YB-23591



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB NO.
				1/16/97	RECORD DRAWING				
				2/20/96	ISSUED FOR BID				
				2/9/96	SUBMITTED TO CLIENT				

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

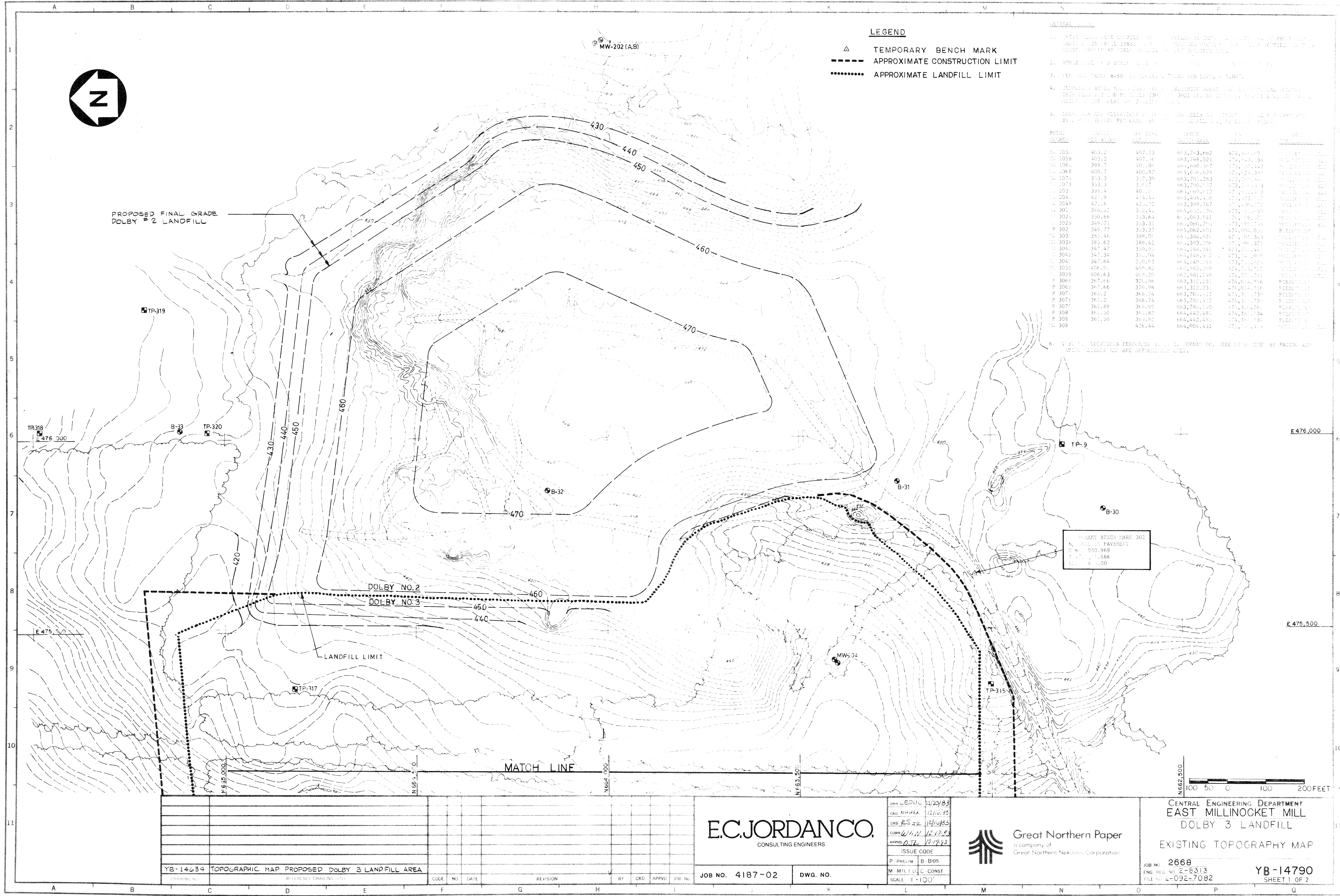
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CHK	
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE AS SHOWN	

BOWATER
Great Northern Paper

EAST OPERATION
DOLBY II LANDFILL REGRADING
SECTIONS & DETAILS

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23593



▲ TEMPORARY BENCH MARK
 - - - - - APPROXIMATE CONSTRUCTION LIMIT
 • • • • • APPROXIMATE LANDFILL LIMIT

POINT	COAST	OFF GALE	CURT	SEA	PORT
SURFACE	SEA AREA	SEA AREA	SEA AREA	SEA AREA	SEA AREA
M 1055	463.2	407.23	663,763,662	474,581,669	PIZZA/PIZZA
M 1058	463.2	407.56	663,766,521	474,543,138	PIZZA/PIZZA
M 1064	399.7	401.06	664,666,567	474,564,443	PIZZA/PIZZA
M 1068	400.7	400.97	664,666,628	474,524,380	PIZZA/PIZZA
M 1074	333.3	337.30	663,762,283	473,566,566	PIZZA/PIZZA
M 1078	333.3	337.7	663,760,157	473,566,566	PIZZA/PIZZA
M 1083	399.5	399.4	664,666,612	474,564,443	PIZZA/PIZZA
M 204	42.9	424.45	663,666,568	474,564,443	PIZZA/PIZZA
M 2048	42.6	424.42	663,399,767	474,564,443	PIZZA/PIZZA
M 301	368.33	322.44	664,662,200	473,566,566	PIZZA/PIZZA
M 302a	390.66	333.64	663,663,941	474,564,443	PIZZA/PIZZA
M 3029	349.71	333.31	663,666,793	473,566,566	PIZZA/PIZZA
P 302	349.77	333.37	663,662,601	474,564,443	PIZZA/PIZZA
P 303	385.46	389.09	663,384,072	474,564,443	PIZZA/PIZZA
P 303a	382.62	389.42	663,399,766	474,564,443	PIZZA/PIZZA
P 304	391.4	391.4	664,666,568	474,564,443	PIZZA/PIZZA
P 304a	367.34	333.04	664,666,567	474,564,443	PIZZA/PIZZA
P 304c	367.64	330.93	664,666,568	474,564,443	PIZZA/PIZZA
M 3053a	406.94	409.82	662,666,269	474,564,443	PIZZA/PIZZA
M 3058	406.63	409.26	662,661,740	474,564,443	PIZZA/PIZZA
P 3064	267.66	376.96	663,331,231	474,564,443	PIZZA/PIZZA
P 3065	367.66	376.96	663,331,231	474,564,443	PIZZA/PIZZA
P 3071	363.2	368.74	663,765,447	474,564,443	PIZZA/PIZZA
P 3075	363.2	368.74	663,765,447	474,564,443	PIZZA/PIZZA
P 3077	363.89	365.89	663,765,447	474,564,443	PIZZA/PIZZA
P 308	361.30	366.82	664,442,485	474,564,443	PIZZA/PIZZA
P 308	361.30	366.82	664,442,485	474,564,443	PIZZA/PIZZA
M 309	426.44	426.44	664,664,443	474,564,443	PIZZA/PIZZA

6. TEST FIRE LOCATIONS PERFORMED BY L. C. JORDAN CO. WERE DETERMINED BY PACING AND
APPROXIMATE AND ARE APPROXIMATE ONLY.

E 476,000

E 475,500

200 FEB

E.C.JORDAN CO
CONSULTING ENGINEERS



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a company of
Great Northern Nekeosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL

EXISTING TOPOGRAPHY MAP

OB NO 2668
ENG. REQ. NO. 2-8313
FILE NO 2-092-7082

YB-1479C
SHEET 1 OF 2

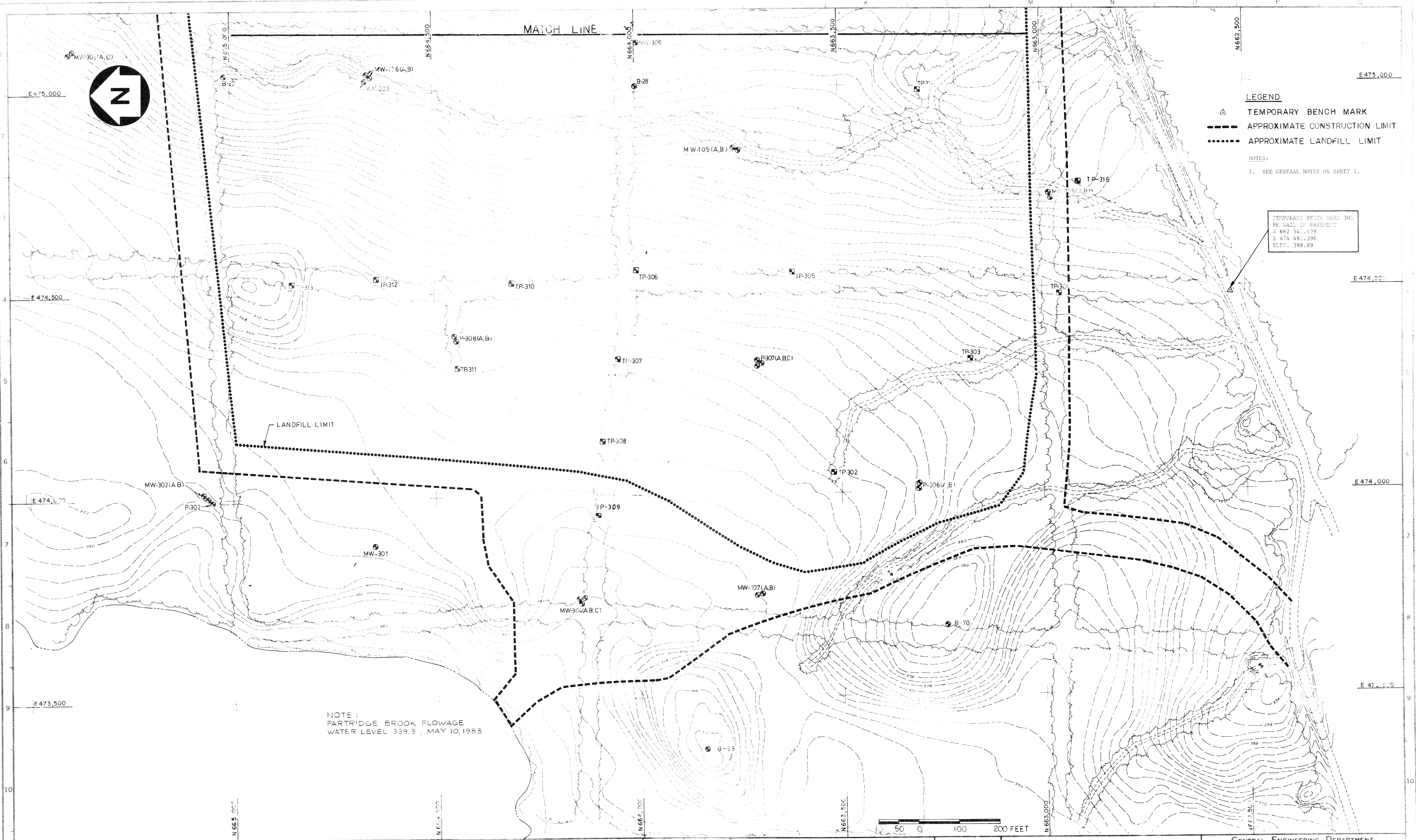
YB-14634	TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA
DRAWING NO.	REFERENCE DRAWING TITLE

JOB NO. 4187-02

DWG. NO

DRN	LEDUC	11/20/83
CKD	MAHER	12/10/83
CKD	RS JR	12/10/83
CORR	W.F.N	12-17-83
APPRVD	OJL	12-19-83
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTL P.O.	C - CONST	
SCALE 1"=100'		

ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL. E.O.	C - CON.
SCALE 1"=100'	



- LEGEND**
- △ TEMPORARY BENCH MARK
 - APPROXIMATE CONSTRUCTION LIMIT
 - APPROXIMATE LANDFILL LIMIT

NOTES:

1. SEE GENERAL NOTES ON SHEET 1.

TEMPORARY BENCH MARK 301
PK NAIL IN PAVEMENT
N 662 541.539
E 474 481.596
ELEV. 399.89


NOTE:
PARTRIDGE BROOK FLOWAGE
WATER LEVEL 339.3, MAY 10, 1983

YB-14634	TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA
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E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

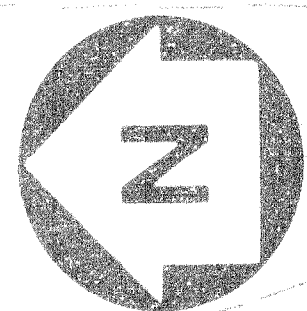
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CRD MAHER	12/16/83
CRD RST	12/14/83
CRD WEN	12-17-83
APPVD OJL	12-19-83
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL T.O. C. CONST	
SCALE 1"=100'	

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Great Northern Nekaosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
EXISTING TOPOGRAPHY MAP

JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-092-7082

YB-14790
SHEET 2 OF 2



CARRY TYPE 2 DIVERSION DITCH AROUND END OF ROAD AND CONNECT TO TYPE 1 DITCH AT WEST SIDE OF ROAD

DIKE AND DRAINAGE DIVERSION DITCH SEE DWG. YB-14794 FOR TYPICAL SECTION

TYPE 2 DIVERSION DITCH

PIPE STUB W/TEMP CAP

CB NO. 1
N 664051.8
E 474233.2

RIM ELEV. 360.5
INV. IN 356.0
INV. OUT 355.8

PERF LEACHATE COLLECTION MAIN

CB NO. 2
N 664081.7
E 474033.1

RIM ELEV. 358.0
INV. IN 351.0
INV. OUT 350.5

PIPE STUB W/TEMP CAP

CB NO. 3
N 663849.7
E 473936.0

RIM ELEV. 356.5
INV. IN 349.0
INV. OUT 345.3

PERF LEACHATE COLLECTION MAIN

CB NO. 4
N 663847.3
E 473821.7

RIM ELEV. 356.3
INV. IN 349.5
INV. OUT 347.0

PERF LEACHATE COLLECTION MAIN

CB NO. 5
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 6
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 7
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 8
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 9
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 10
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 11
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 12
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 13
N 663812.6
E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

CB NO. 14
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E 473888.8

RIM ELEV. 352.0
INV. IN 346.0
INV. OUT 340.1

PERF LEACHATE COLLECTION MAIN

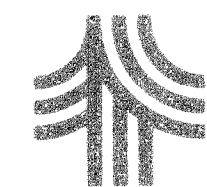
- NOTES:
- BOULDERS ENCOUNTERED IN THE ROADWAY AREA SHALL BE DISPOSED OF ALONG THE EDGES OF THE ROAD OUTSIDE THE DITCH LINES.
 - BOULDERS ENCOUNTERED IN THE LEACHATE POND AREA SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE POND AND ROADWAY.
 - BOULDERS ENCOUNTERED IN THE LANDFILL AREA WHICH REQUIRE REMOVAL FOR THE INSTALLATION OF UNDERDRAINS, STORM DRAINAGE FACILITIES AND DIKE CONSTRUCTION SHALL BE DISPOSED OF IN THE DESIGNATED WASTE AREA.
 - EXISTING TOPOGRAPHY ENLARGED PHOTOGRAMMETRICALLY FROM TOPOGRAPHIC MAPPING PROVIDED BY JAMES W. SMALL COMPANY. SEE REFERENCE DRAWING NO. YB-14634.
 - WASTE AND STOCKPILE AREAS SHALL BE GRADED, SEEDED, AND MULCHED.

50 25 0 50 100 FEET

DRAWING NO.	TOPOGRAPHIC MAP PROPOSED DOLEY 3 LANDFILL AREA	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
YB-14794									4187-02

E.C. JORDAN CO.
CONSULTING ENGINEERS

DRN 515KUP 11/4/83
CHKD 11/15/83
CHKD 11/15/83
CHKD 11/15/83
CHKD 11/15/83
APPROV 11/15/83
ISSUE CODE
P-PRELIM B-BIDS
M-MULTI C-CONST
SCALE 1"=50'

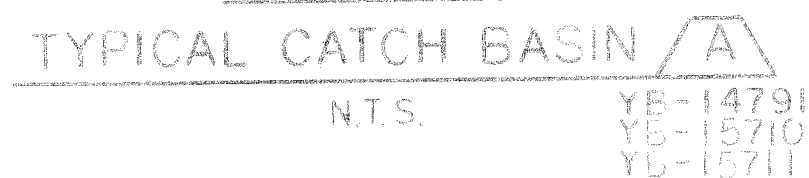


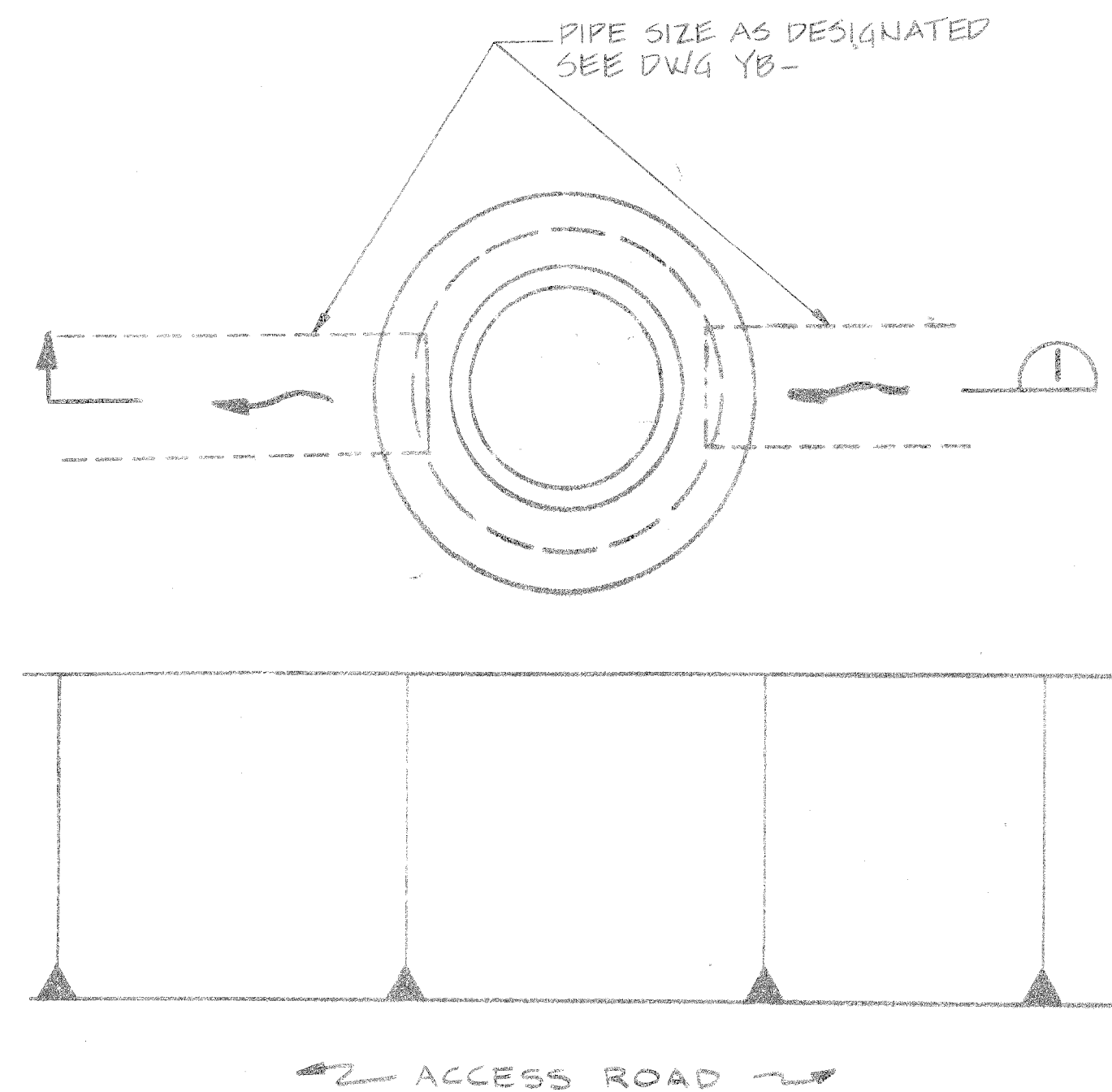
Great Northern Paper
a company of
Great Northern Nekeosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLEY 3 LANDFILL
SITE DEVELOPMENT PLAN
FIRST YEAR

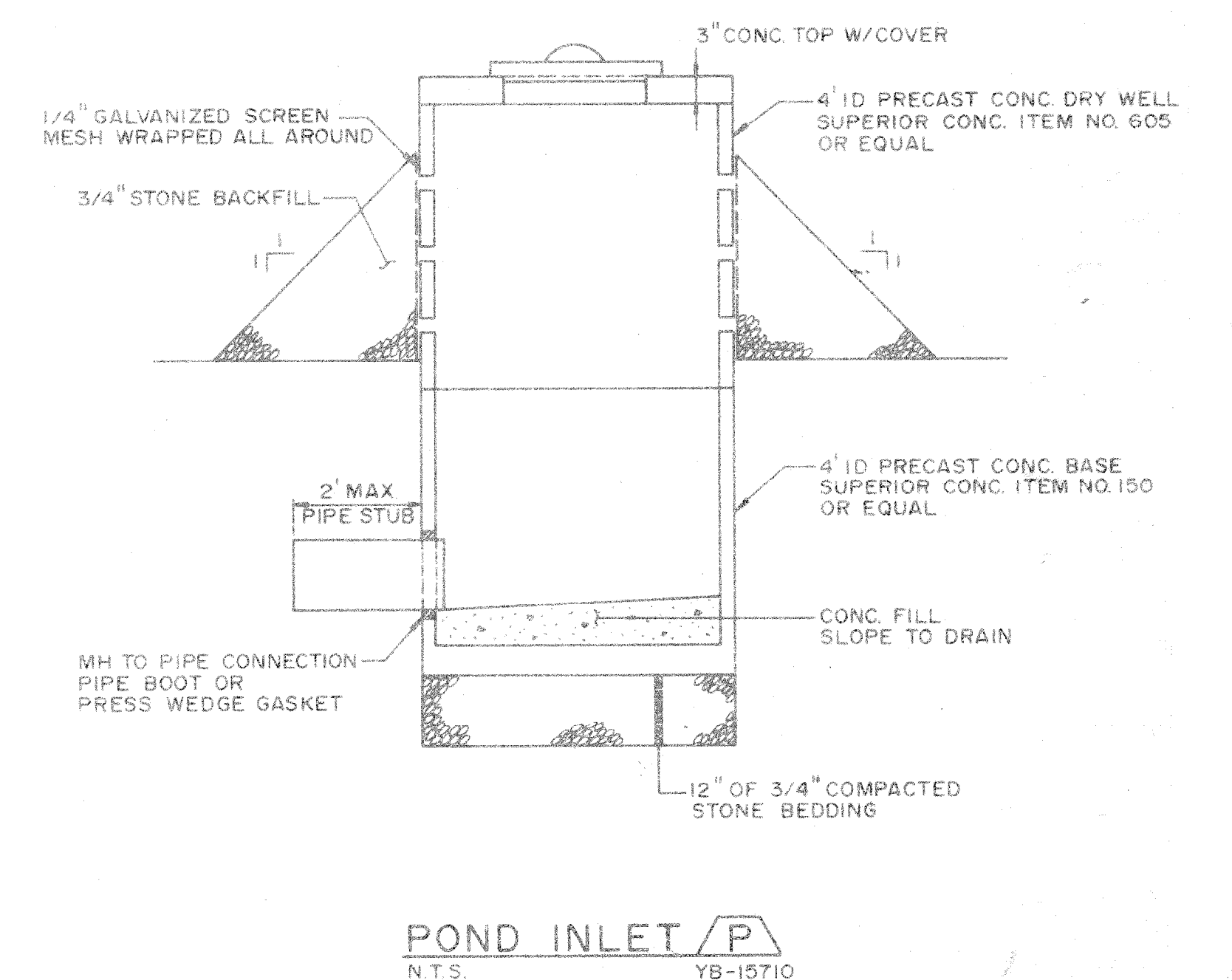
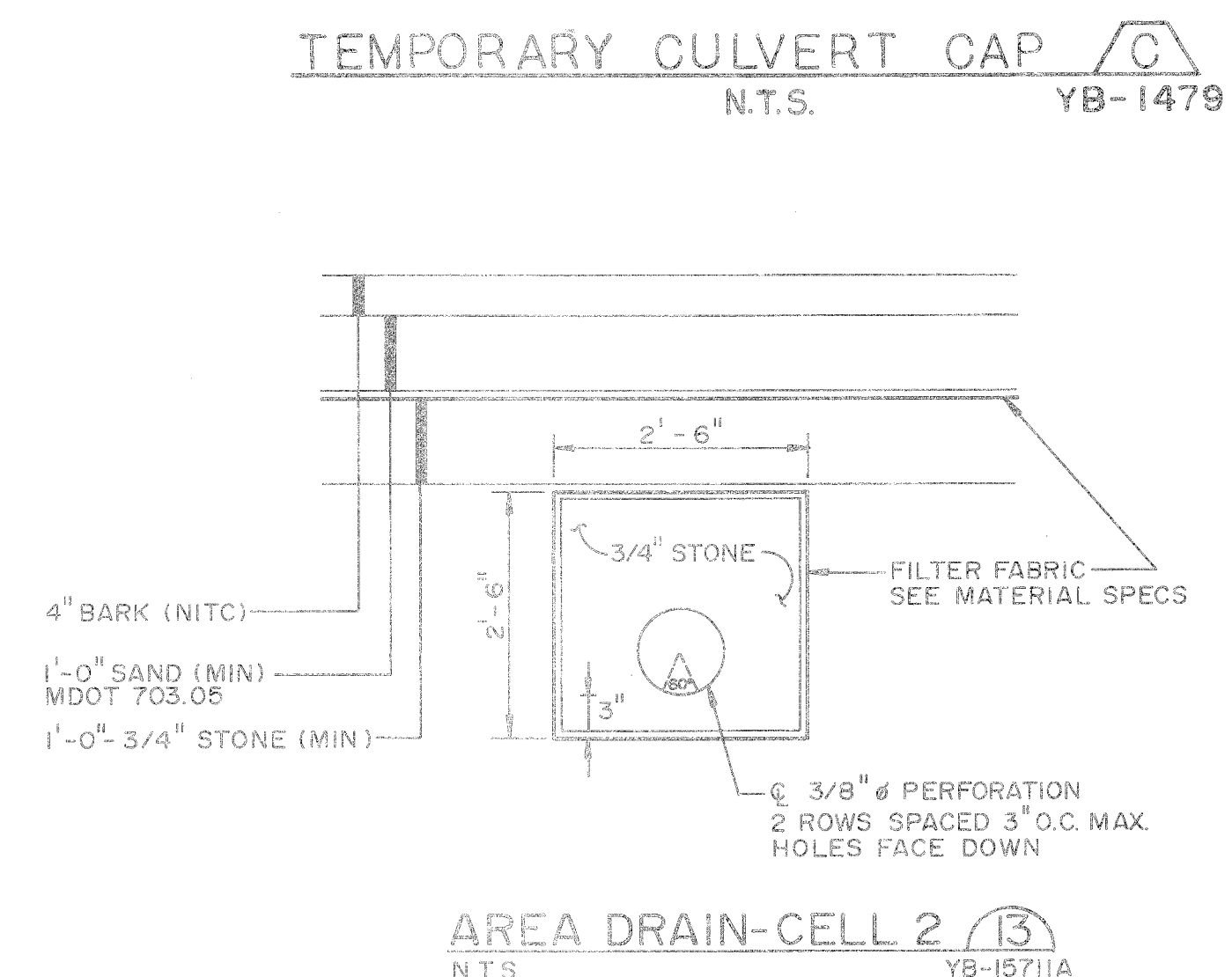
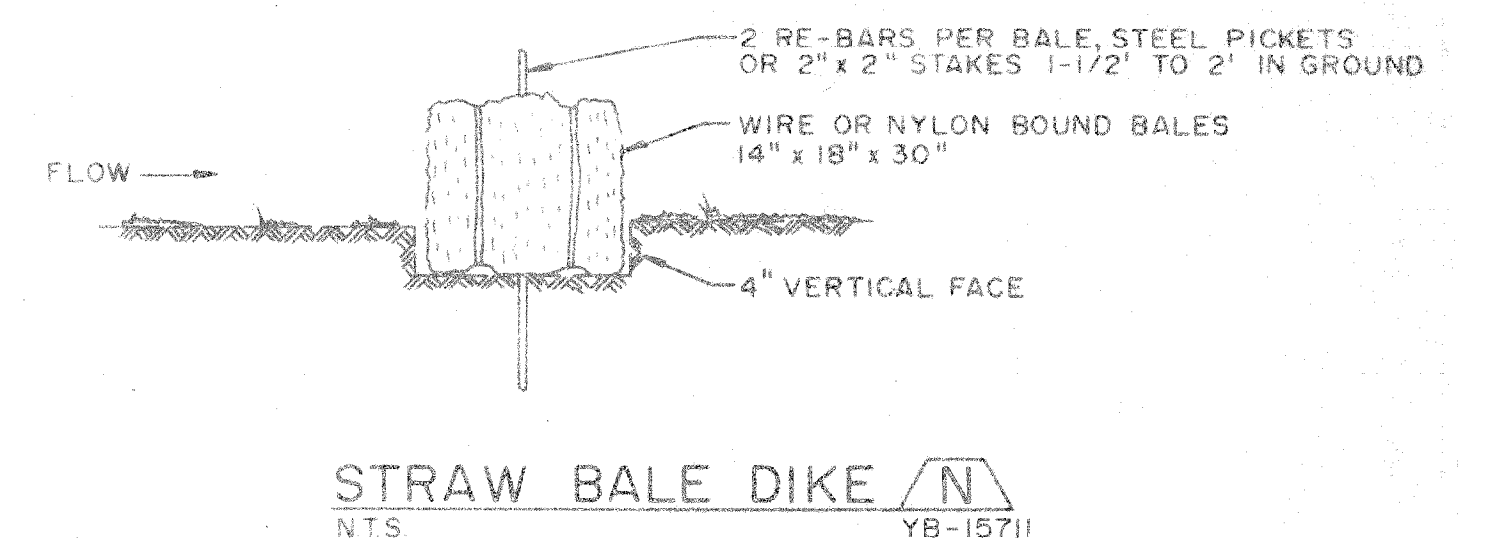
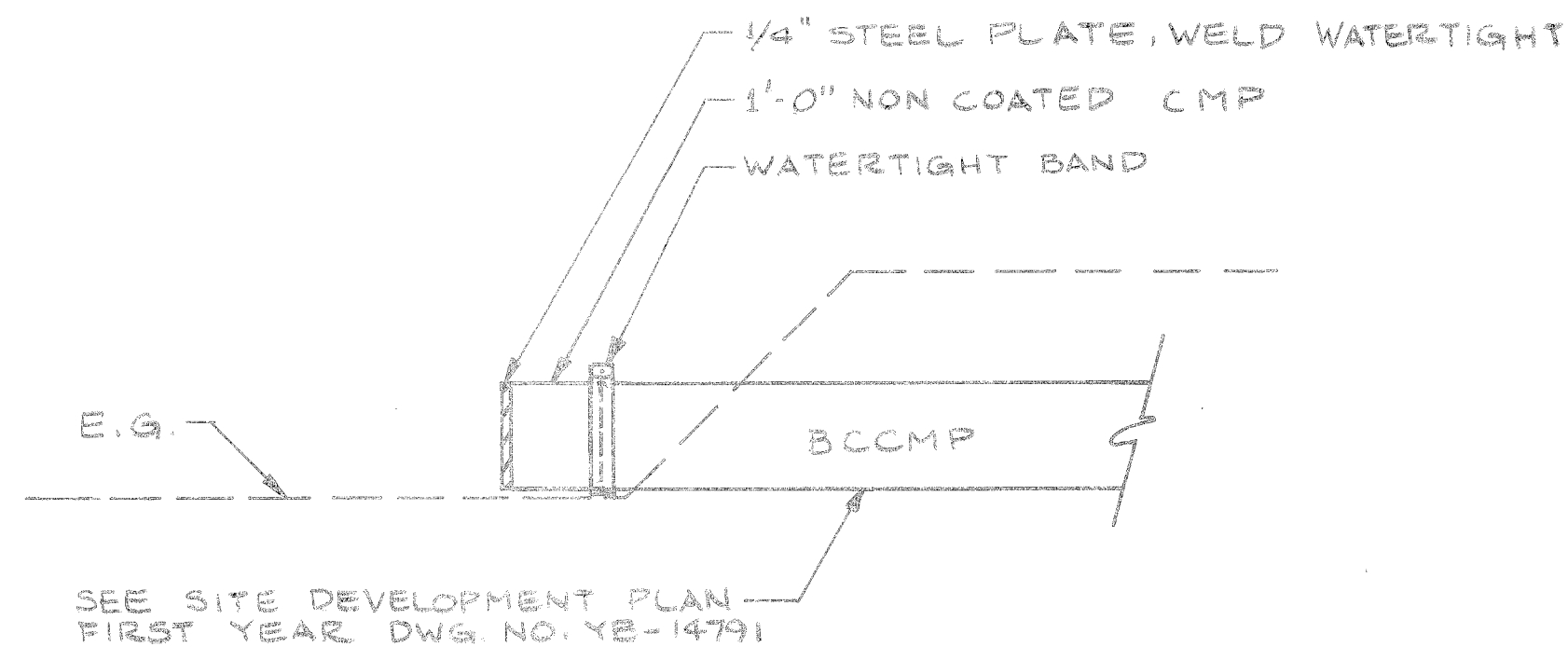
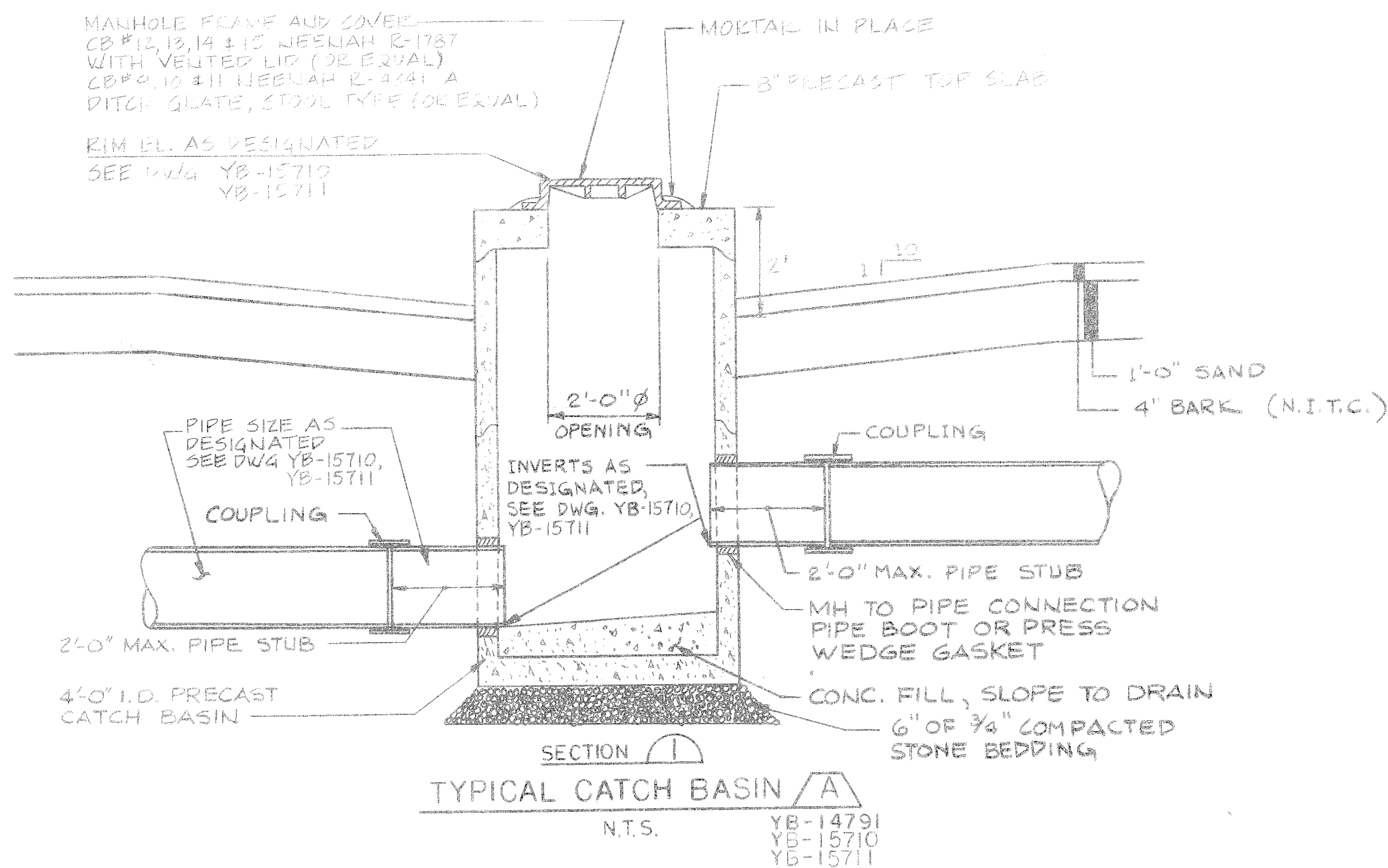
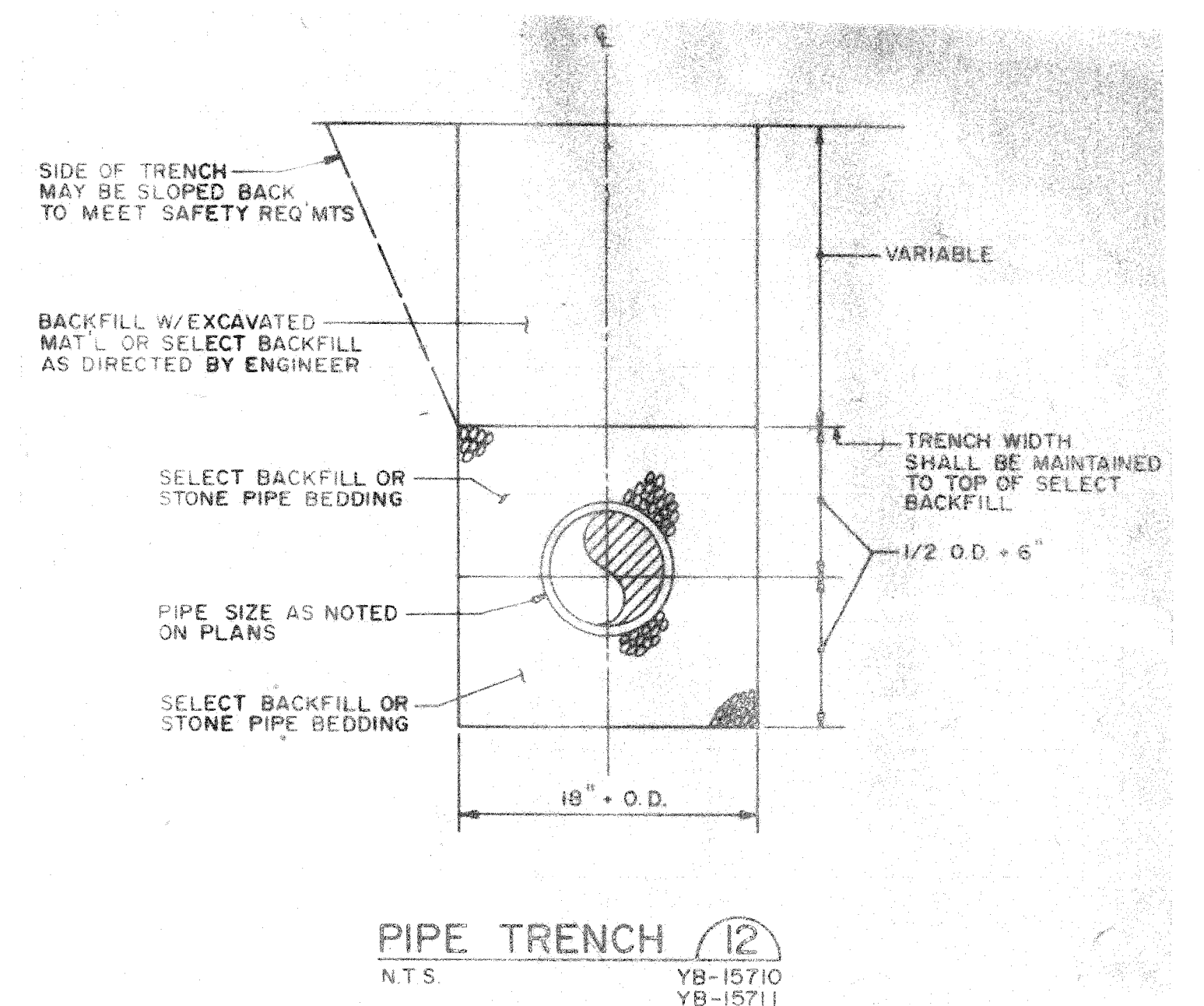
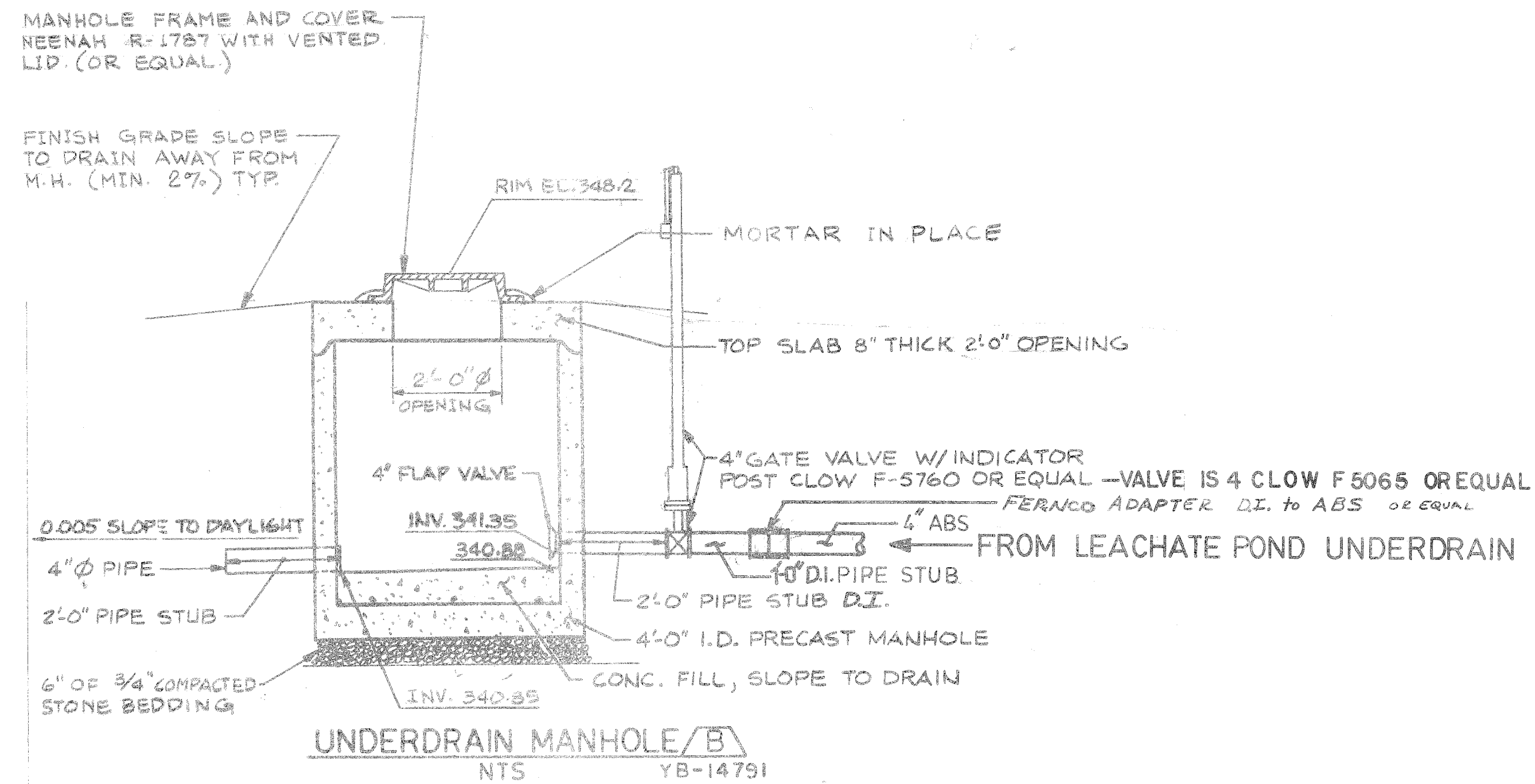
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ENG. REQ. NO. 2-8313
FILE NO. 2-002-7082

YB-14794

YB-14793-A



PLAN



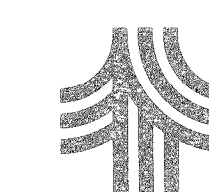
DRAWING NO	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHK	APP'D	JOB NO.
		C	10/20/01		RECORD DRAWING				
		C	7/14/07		NOT IN THIS CONTRACT				
		C	5/24/07		GENERAL REVISION FOR JOB # 94473 CELL 2				

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

DESIGN	MS/RUC	12/1/83
CHKD	MAHER	12/16/83
CHKD	PS-TE	12/16/83
CORR	W/RN	12-17-83
APP'D	O.J.L.	12-19-83
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTLT. O.C. CONST		
SCALE AS NOTED		

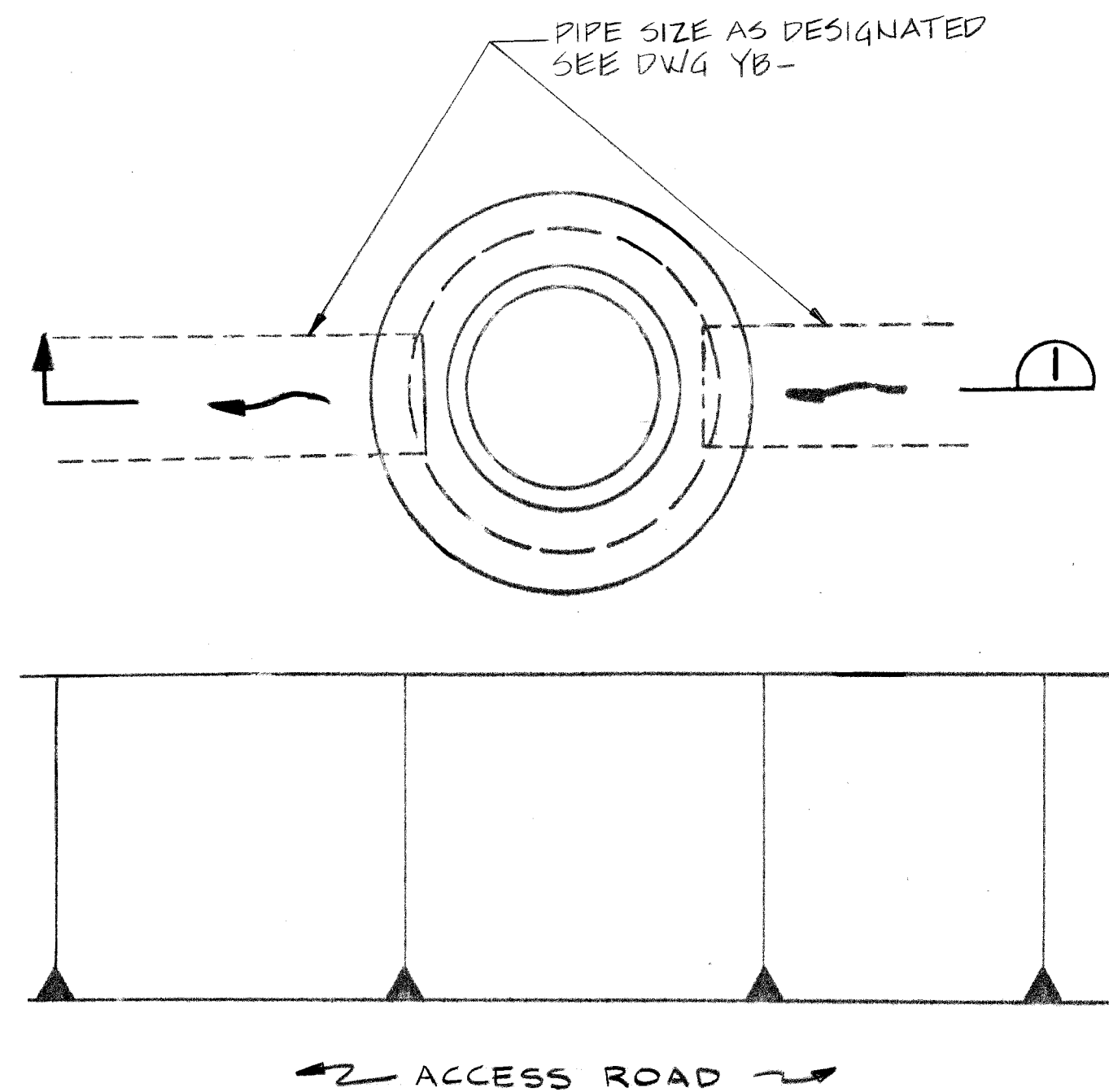


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Great Northern Nekeosa Corporation

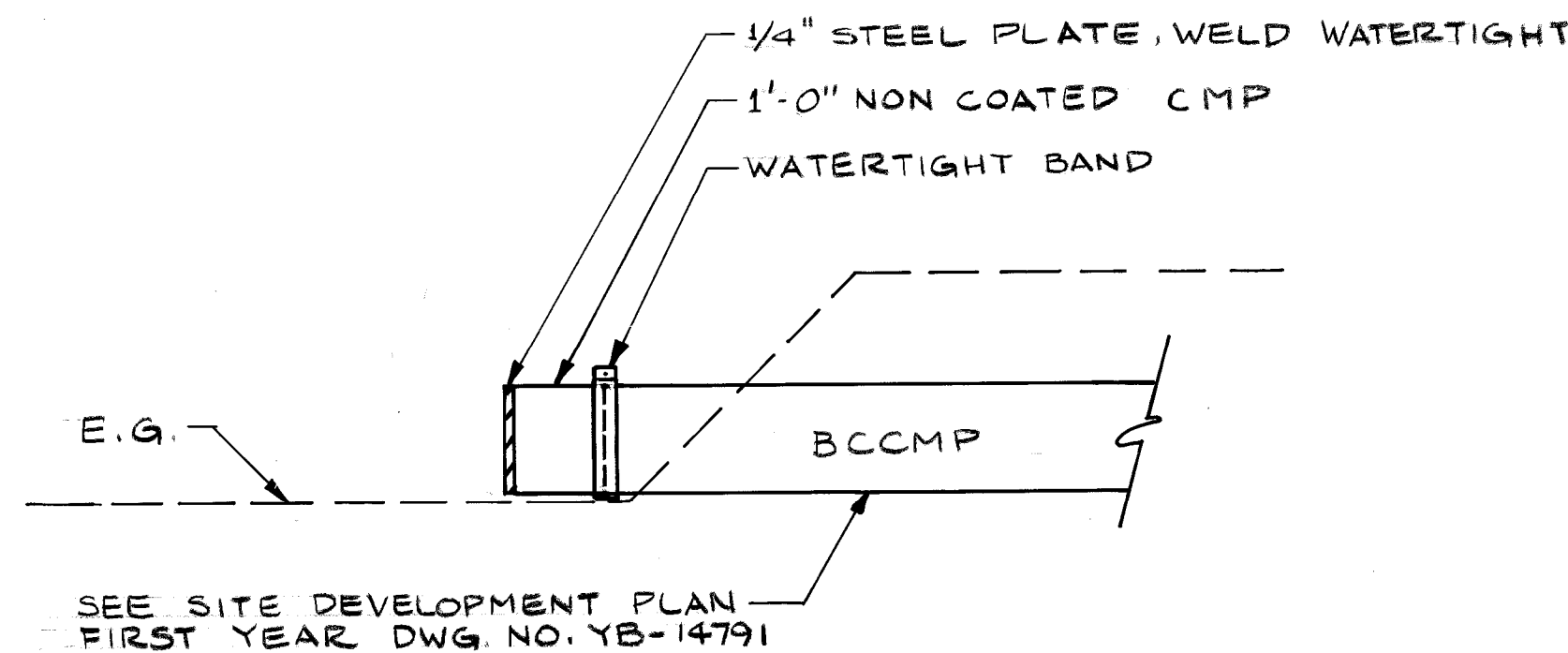
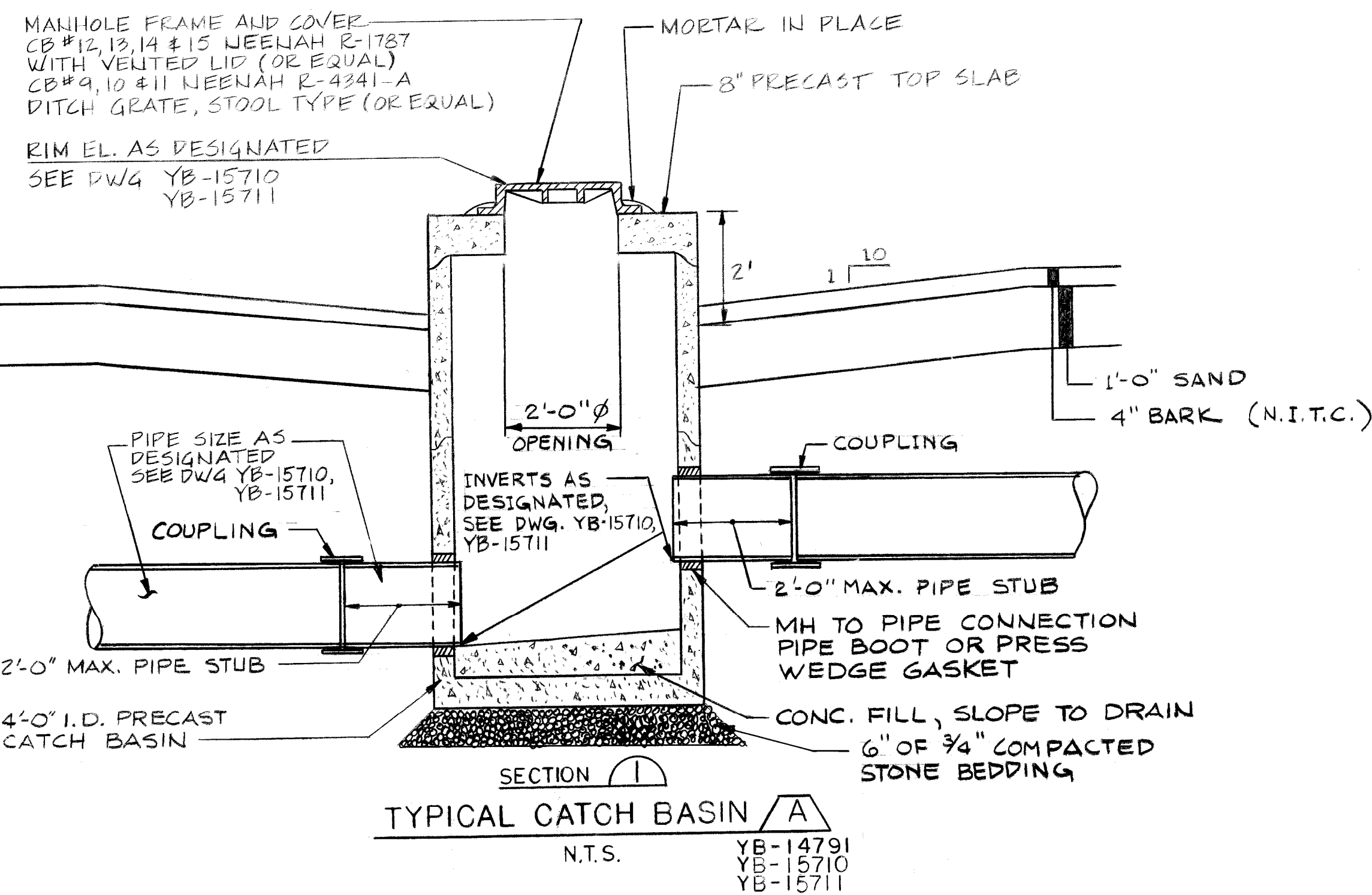
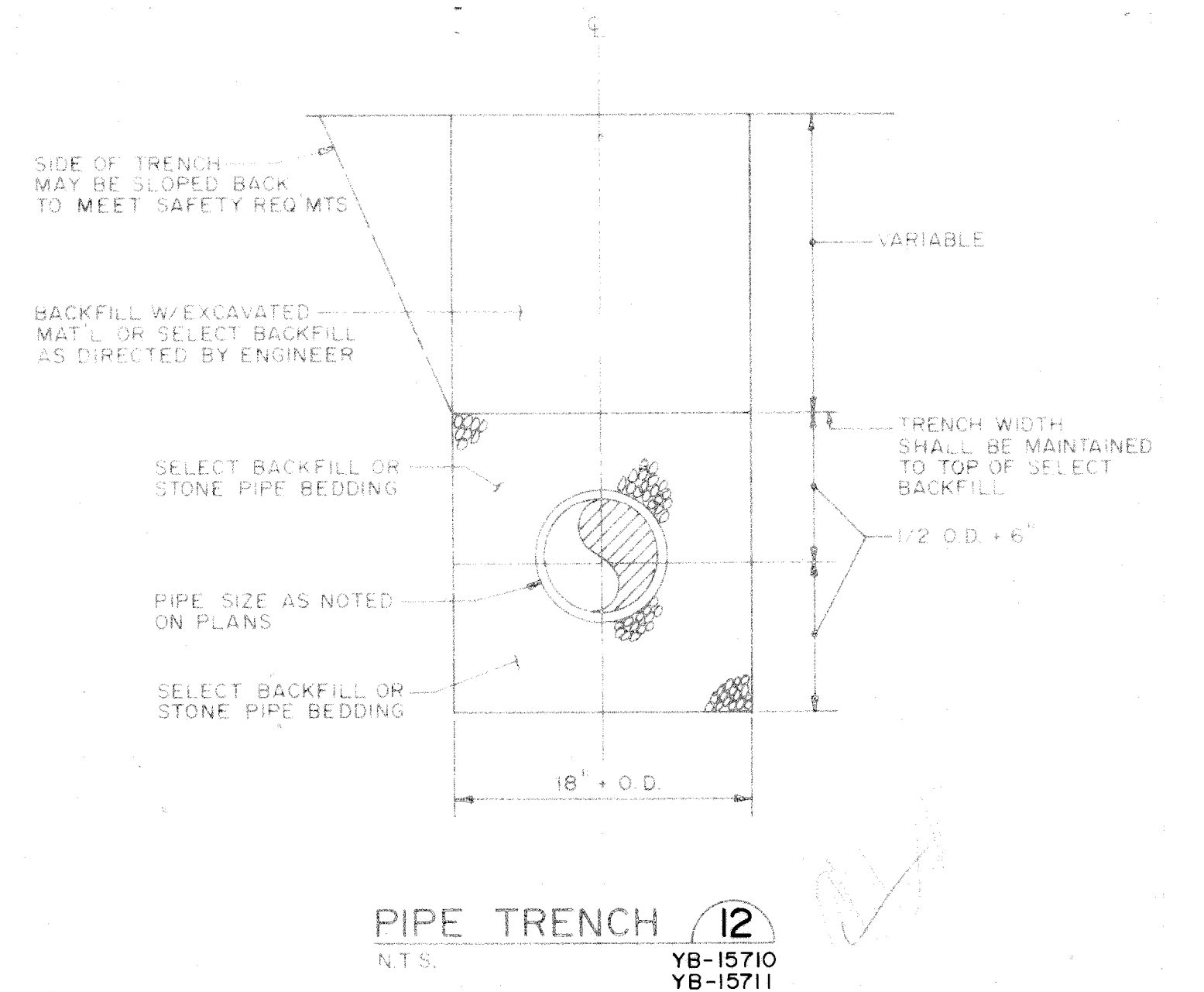
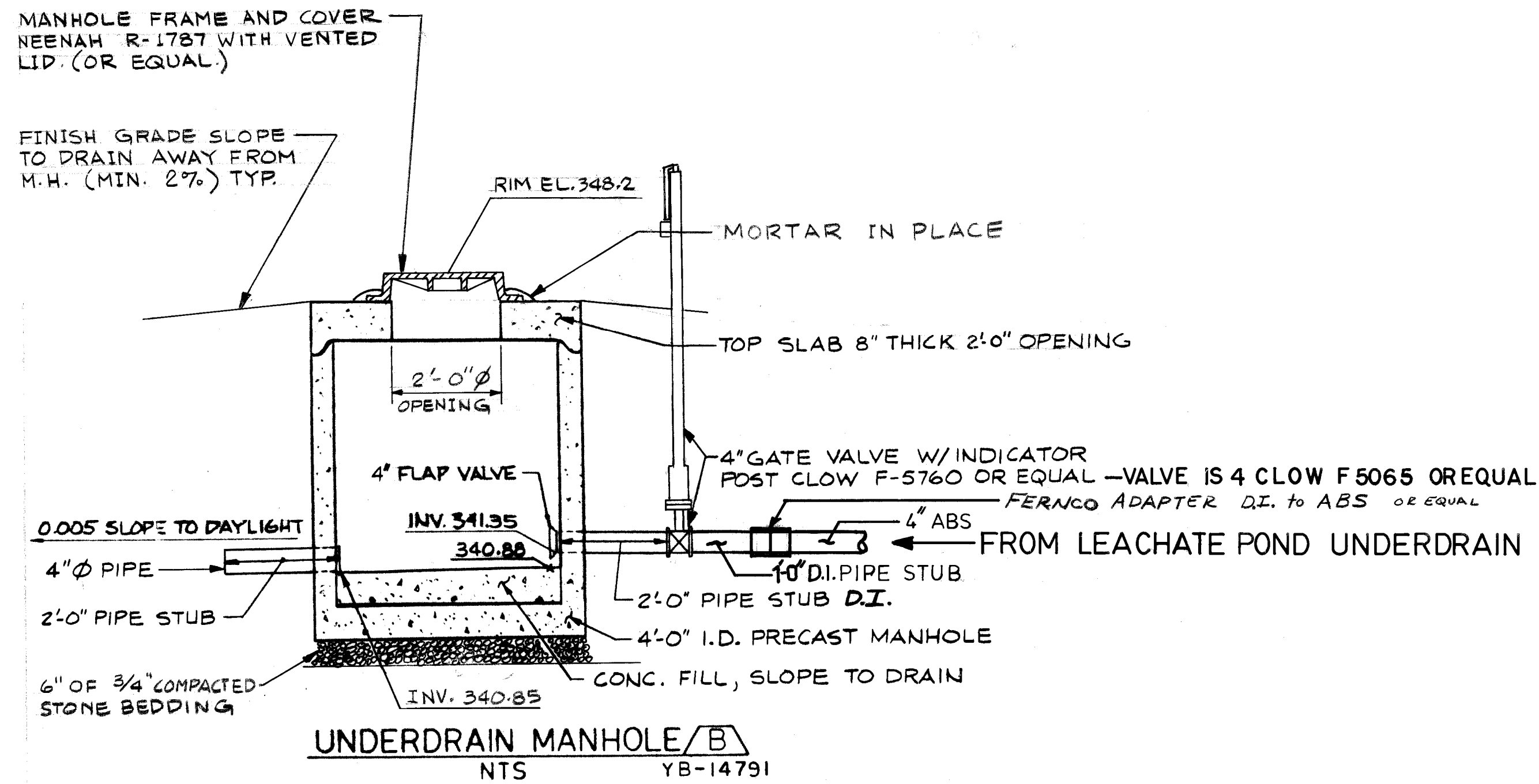
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

JOB NO. 2668
ENG. REG. NO. 2-8313
FILE NO. 2-092-7082

YB-14793-B

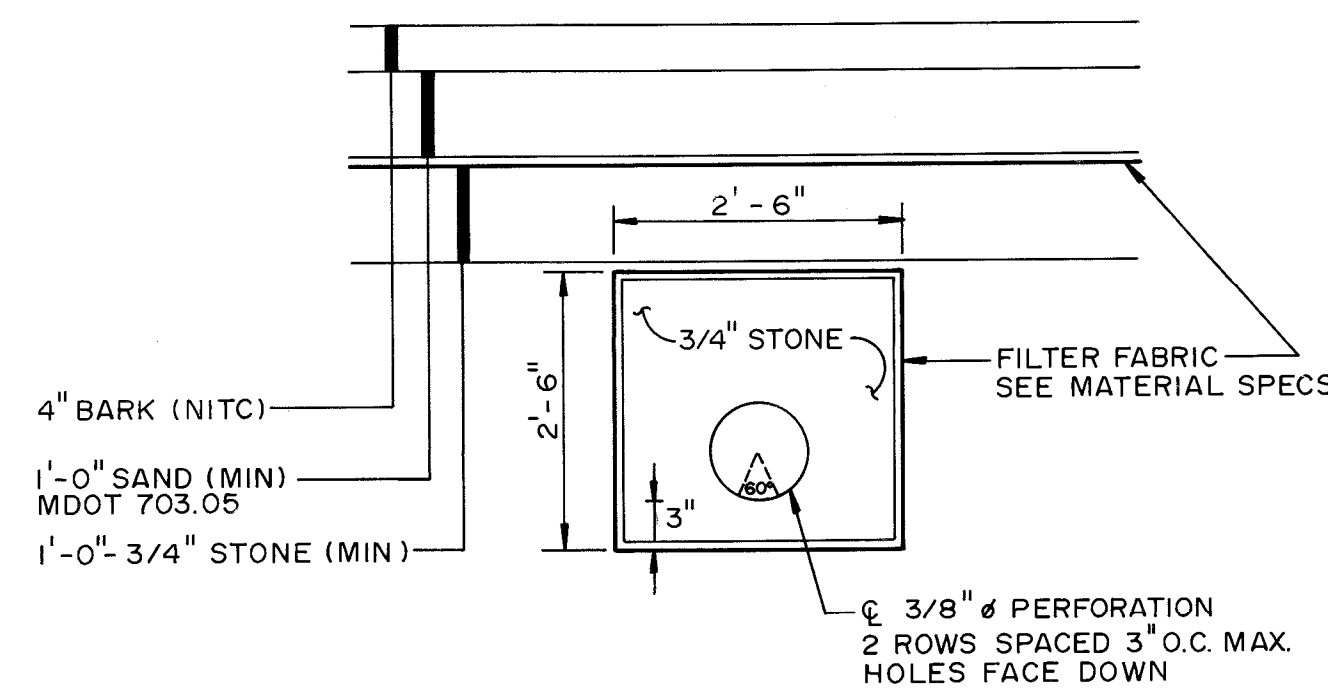


PLAN



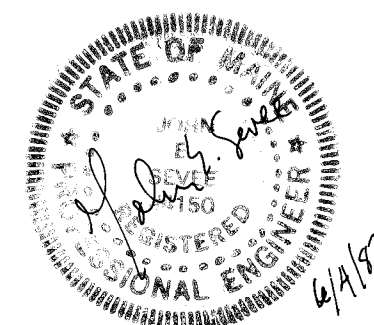
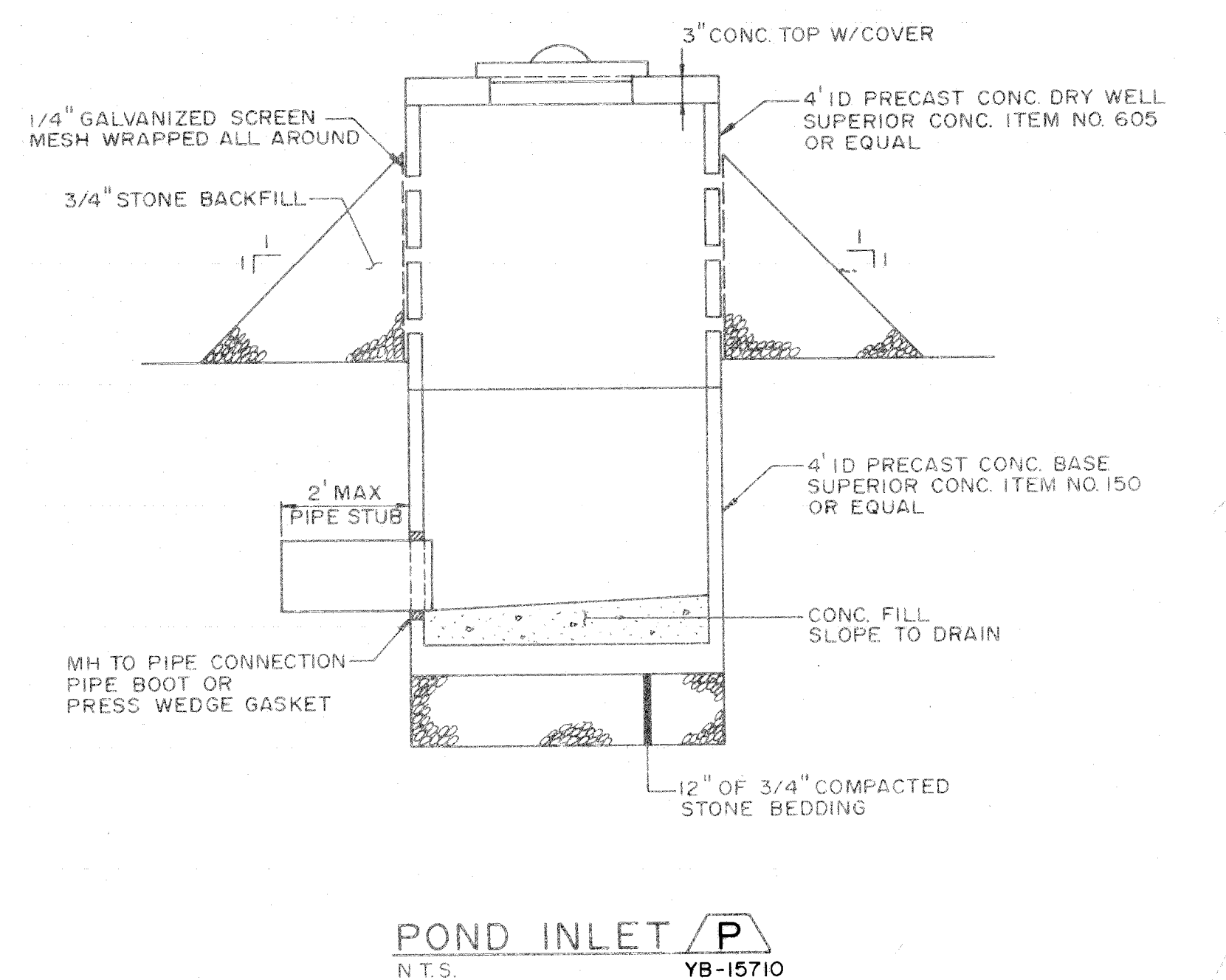
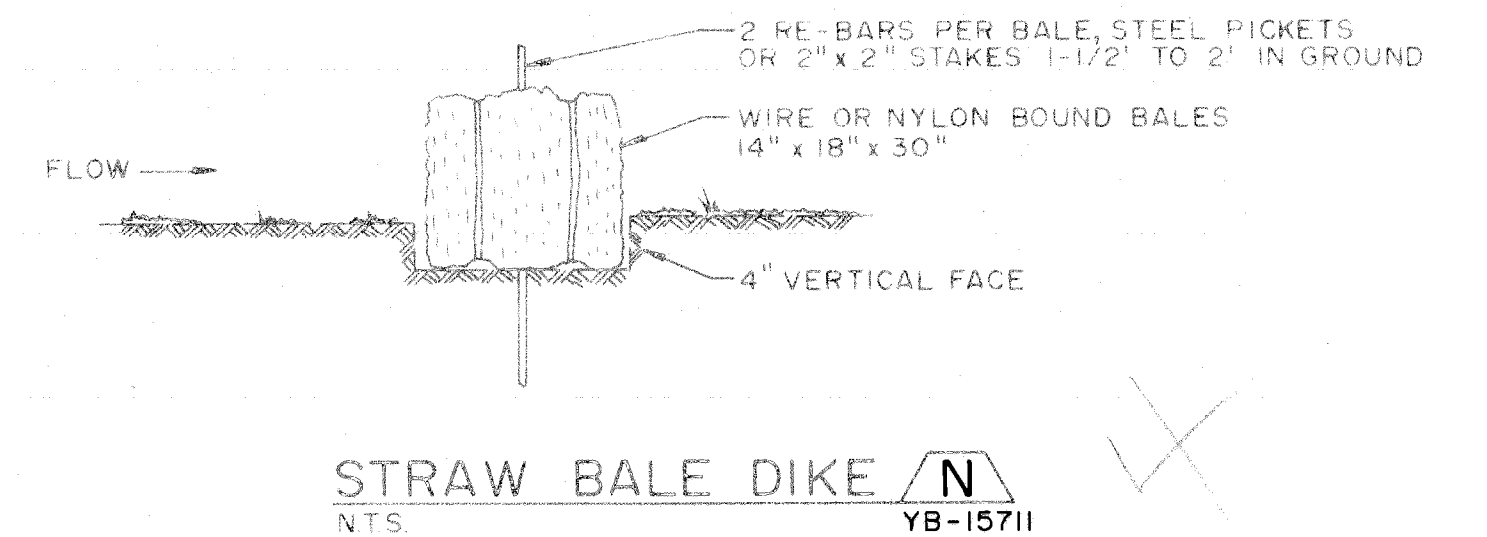
TEMPORARY CULVERT CAP / C

NTS. YB-14791



AREA DRAIN-CELL 2 / 13

NTS. YB-15711A



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPVD	JOB NO.
		C	C	11/20/87	RECORD DRAWING	MHC	BR2		94473
		C	B	11/14/87	NOT IN THIS CONTRACT	MHC	BR2		94473
		C	A	5/24/87	GENERAL REVISION FOR TOP # 94473 CELL 2	MHC	ECJ		94473

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

DRN MB/RDC	12/1/83
CKD MAHER	12/16/83
CKD RSTL	12/16/83
CONR WJAN	12-17-83
APPRO D.J.L.	12-19-83
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTLT.O.	C - CONST
SCALE AS NOTED	



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Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

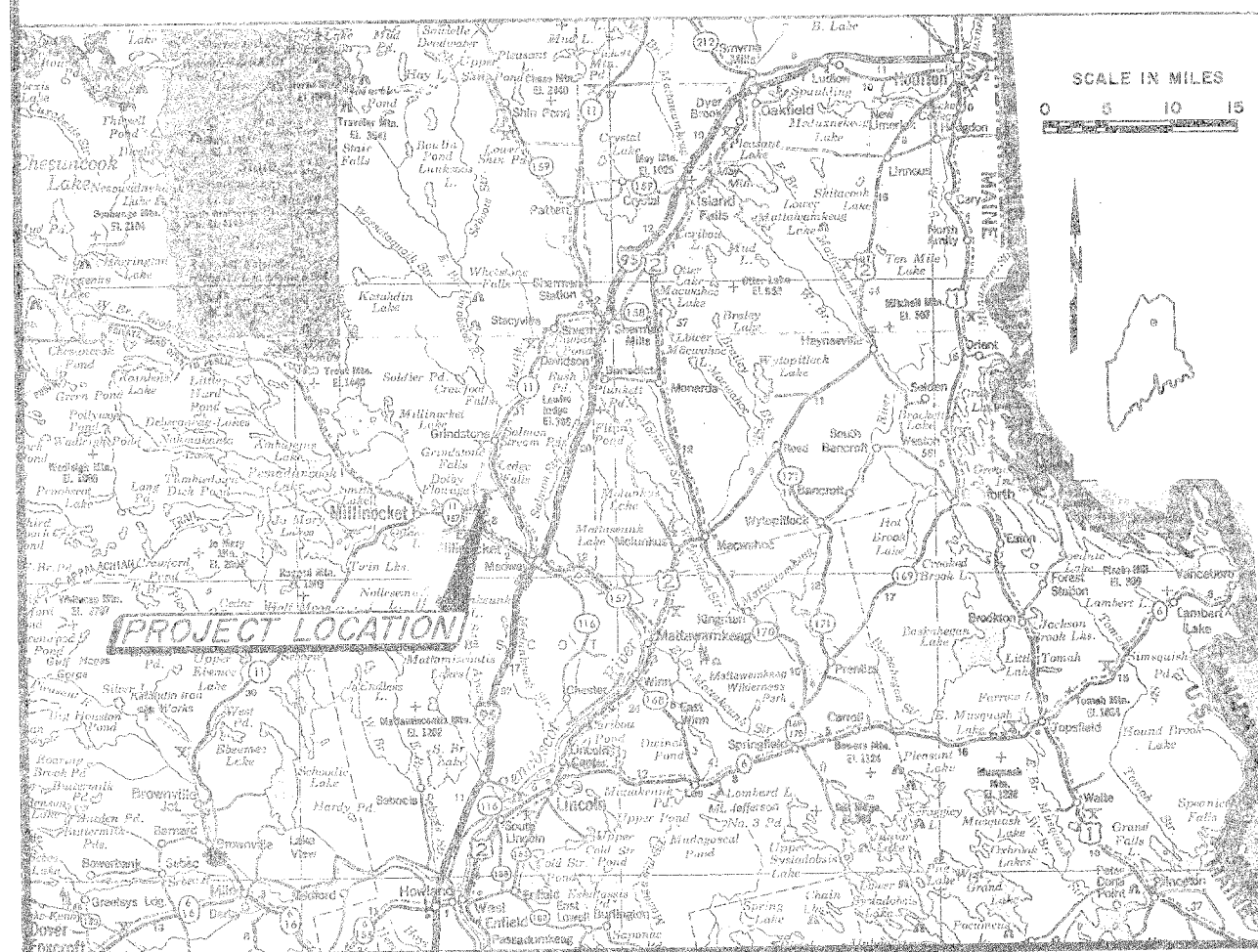
JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-092-7082

YB-14793-C

GREAT NORTHERN PAPER CO. MILLINOCKET, MAINE


DOLBY 3 LANDFILL CELL 2 CONSTRUCTION

TITLE		DRAWING NO.	SHEET NO.
COVER SHEET		YB-15709	
DOLBY 3 LANDFILL	SYMBOLS, ABBREVIATIONS AND GENERAL NOTES	YB-14788A	
DOLBY 3 LANDFILL	CELL 2, SITE LOCATION PLAN	YB-15710	SHEET 1 OF 2
DOLBY 3 LANDFILL	CELL 2, SITE LOCATION PLAN	YB-15710	SHEET 2 OF 2
DOLBY 3 LANDFILL	SITE DEVELOPMENT PLAN CELL 2	YB-15711	
DOLBY 3 LANDFILL	LANDFILL AREA DRAINAGE DETAILS	YB-14793A	
DOLBY 3 LANDFILL	ACCESS ROAD TYPICAL SECTIONS AND DETAILS	YB-14794B	
DOLBY 3 LANDFILL	SITE DEVELOPMENT DETAILS	YB-14796A	



SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

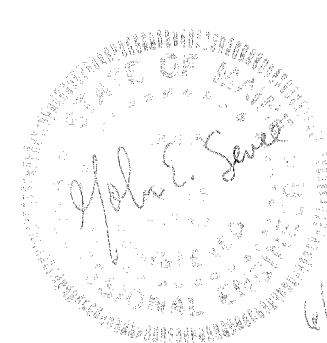
1987

 Great Northern Paper a company of Great Northern Paper Corporation	CENTRAL ENGINEERING DEPARTMENT EAST MILLINOCKET MILL
	DOLBY 3 LANDFILL COVER SHEET
JOB NO. 94473 ENG. REG. NO. 2-8816 FILE NO. 2-092-4703,7082	YB-15709

GENERAL NOTES

The diagram illustrates the correct use of section and detail callouts in technical drawings. It consists of three parts:

- Top Part:** Shows a horizontal line with a break in the middle. A section line (two parallel lines) is drawn perpendicular to the line, with the number '3' inside the break. An arrow points from the section line to the text 'SECTION IDENTIFICATION NO.' above it. Below the line, the text 'DRAWING NO. WHERE SECTION APPEARS' is written, with an arrow pointing to the line itself.
- Middle Part:** Shows a horizontal line with a break in the middle. A section line (two parallel lines) is drawn perpendicular to the line, with the number '3' inside the break. An arrow points from the section line to the text 'SECTION IDENTIFICATION NO.' above it. Below the line, the text 'DRAWING NO. WHERE SECTION APPEARS' is written, with an arrow pointing to the line itself.
- Bottom Part:** Shows a horizontal line with a break in the middle. A detail line (two parallel lines) is drawn perpendicular to the line, with the letter 'A' inside the break. An arrow points from the detail line to the text 'DETAIL IDENTIFICATION NO.' above it. Below the line, the text 'DRAWING NO. WHERE DETAIL APPEARS' is written, with an arrow pointing to the line itself.



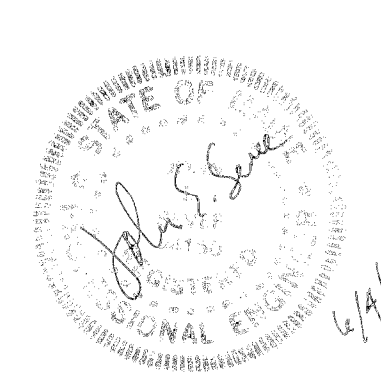
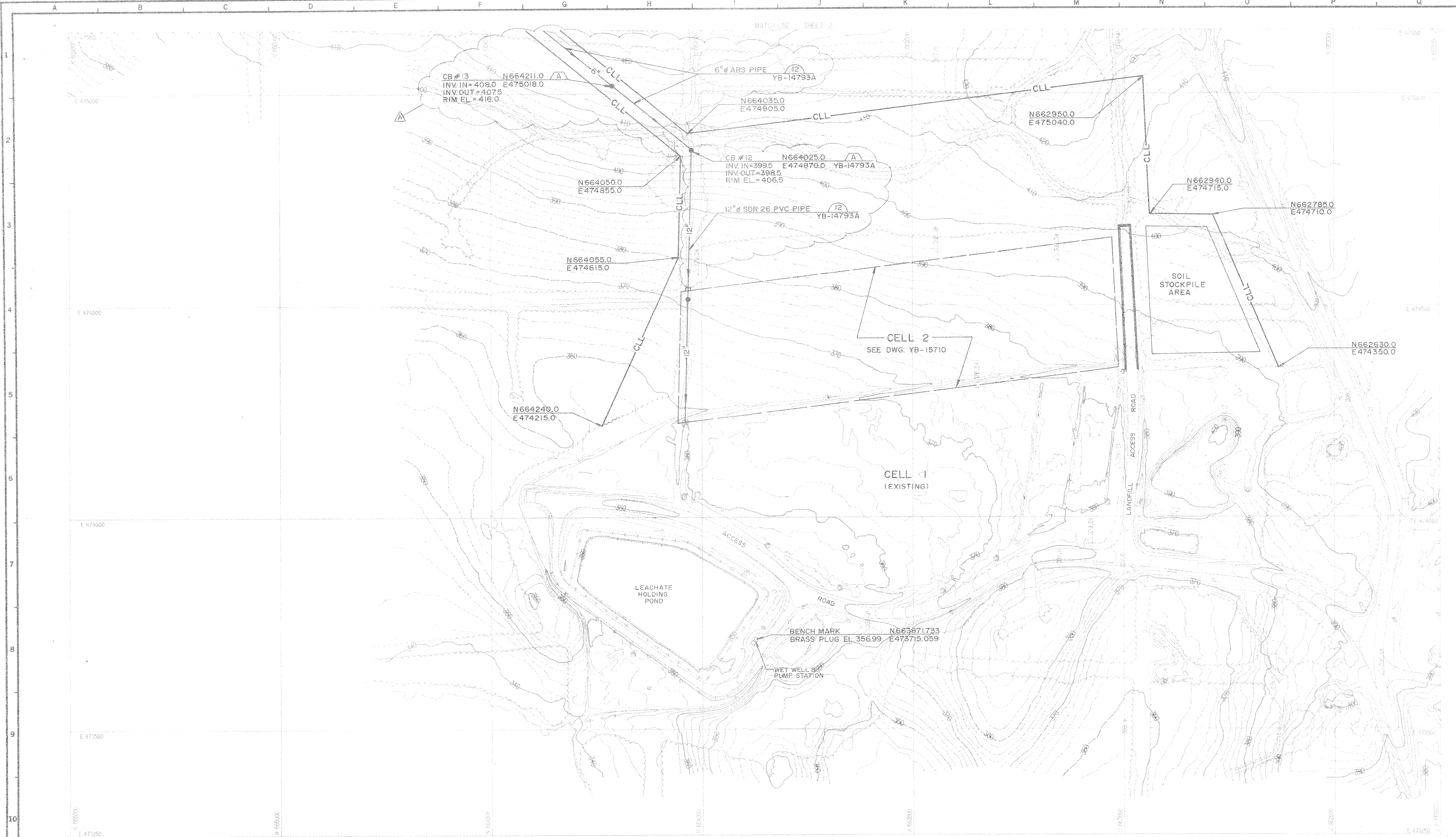
E.C. JORDAN CO.
CONSULTING ENGINEERS



CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SYMBOLS, ABBREVIATIONS,
AND GENERAL NOTES

2668
2-8313
2-092-7062

YB-14788-A

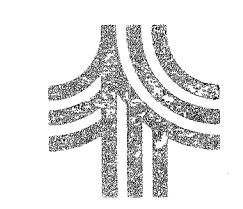


DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
		C	A	7/10/87	NOT IN THIS CONTRACT				

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

DRN	PAT	6-4-87
CRD	MHC	6-4-87
CRD	ECB	6-3-87
CORR	WRN	6-3-87
APPROV		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTLT.O.	C - CONST	
SCALE 1" = 100'		

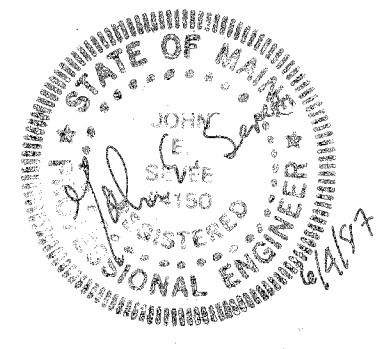
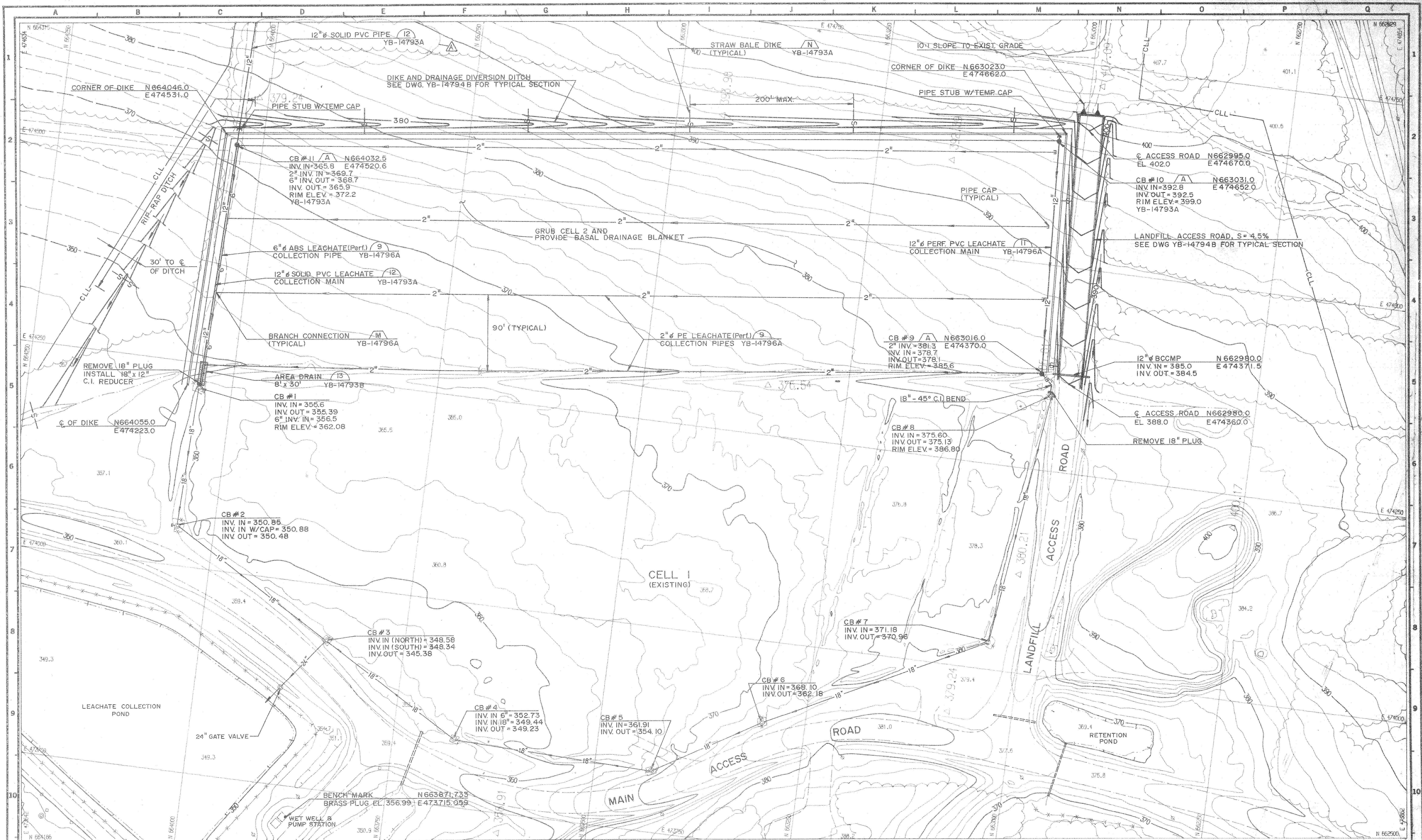


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CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
CELL 2
SITE LOCATION PLAN

JOB NO. 94473
ENG. REG. NO. 2-8516
FILE NO. 2-092-4703, 7082

YB-15710A
SHEET 1 OF 2



YB-15263	DOLBY 3 LANDFILL AREA TOPOGRAPHIC SURVEY & DIGITIZATION AS OF 12-5-85	CODE	NO.	DATE	REVISION	BY	CHKD	APPRD	JOB NO.
		C	A	7/10/87	RECORD DRAWING				
		C	A	7/10/87	NOT IN THIS CONTRACT				

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

DRAWN PAF 6-4-87
CHKD JHC 6-4-87
CORR ECS 6-3-87
CORR JAH 6-3-87

ISSUE CODE
P - PRELIM B - BIDS
M - MTL. T.O. C - CONST
SCALE 1" = 50'

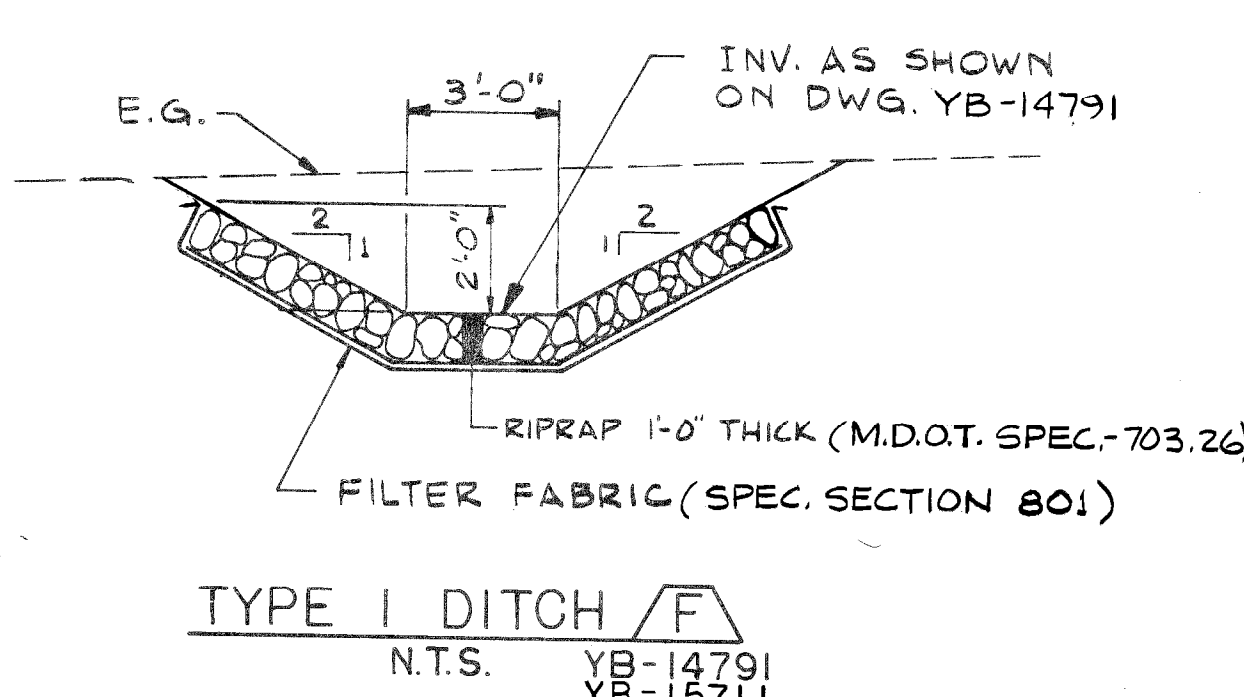
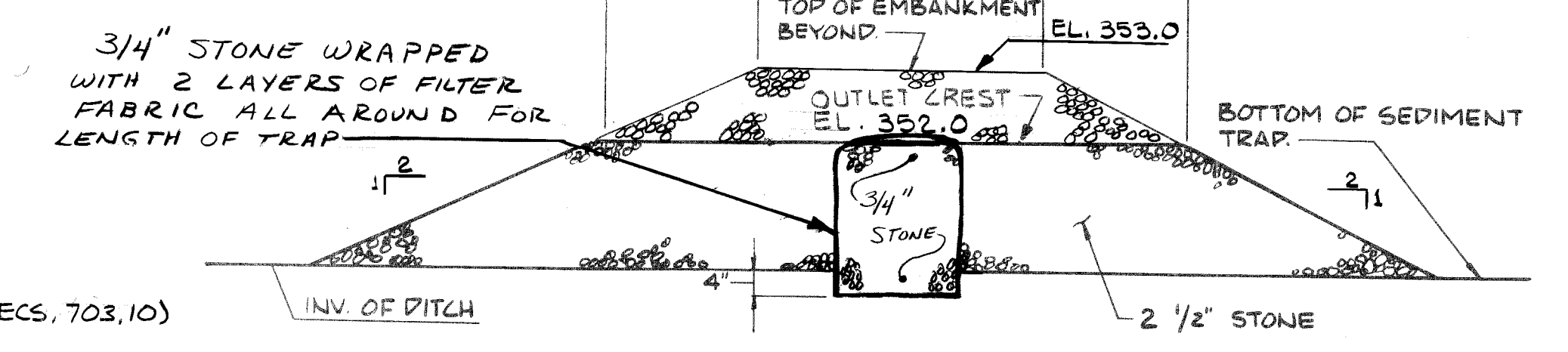
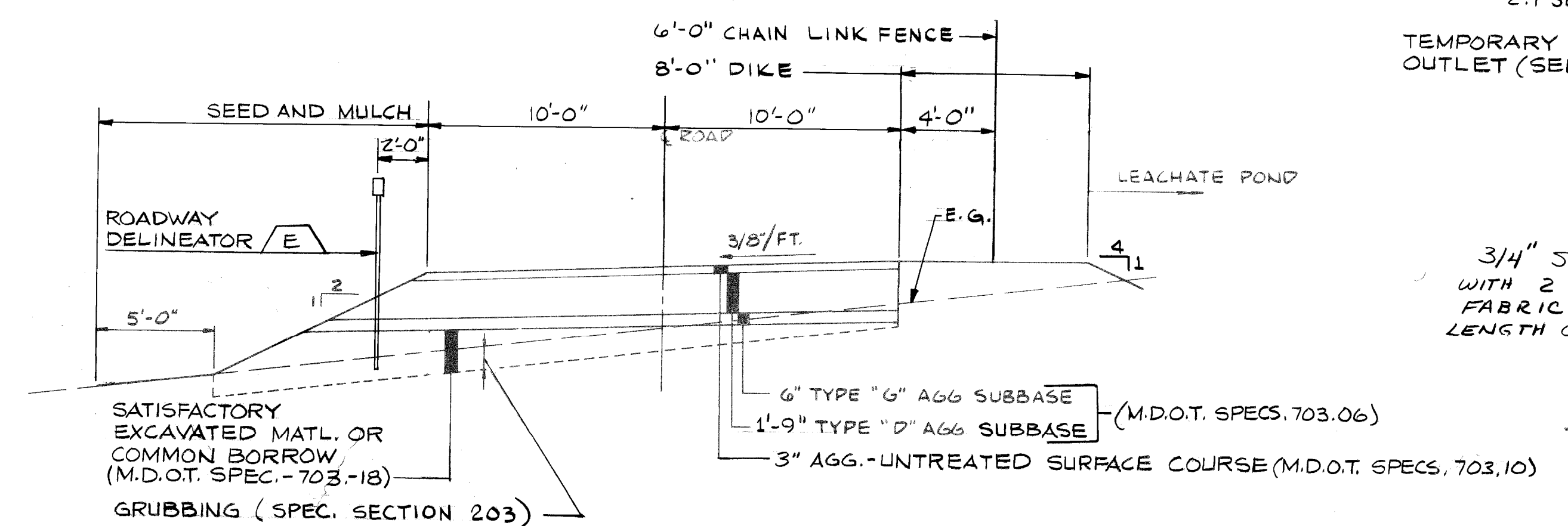
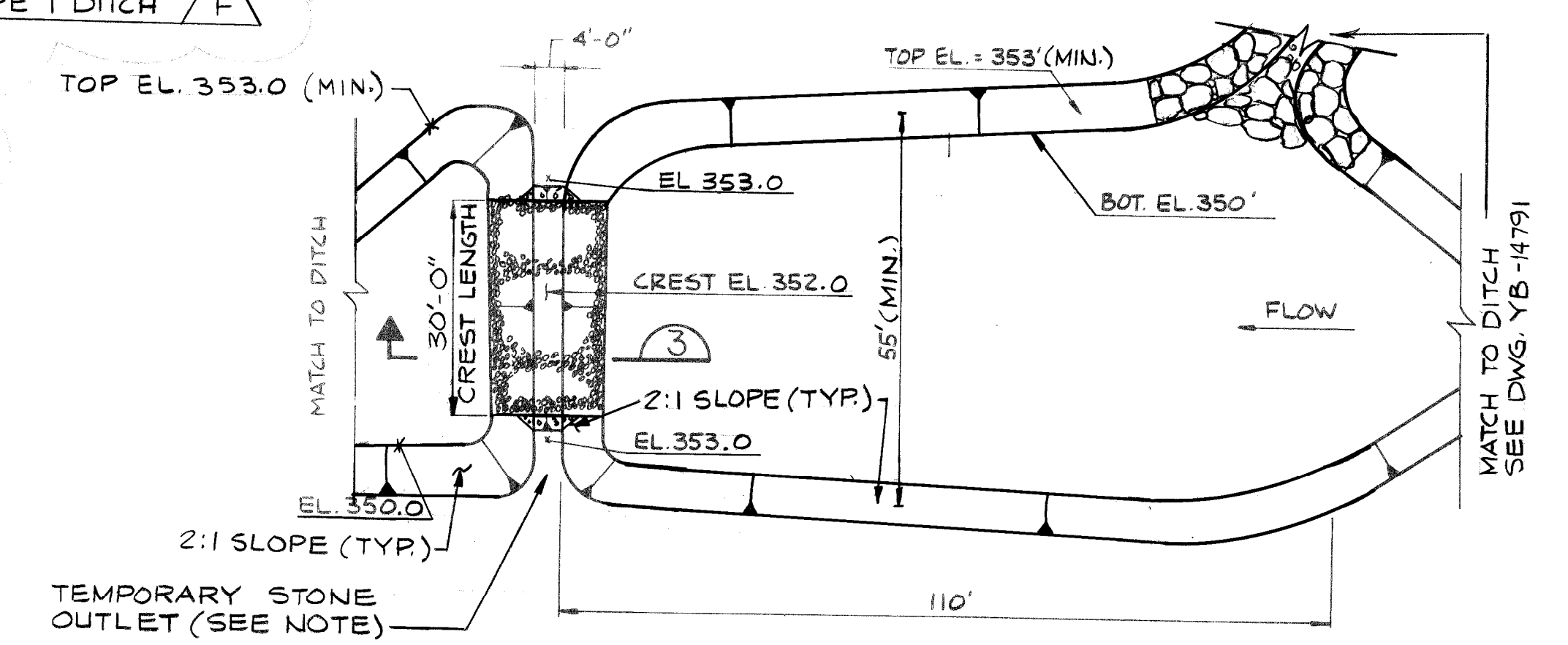
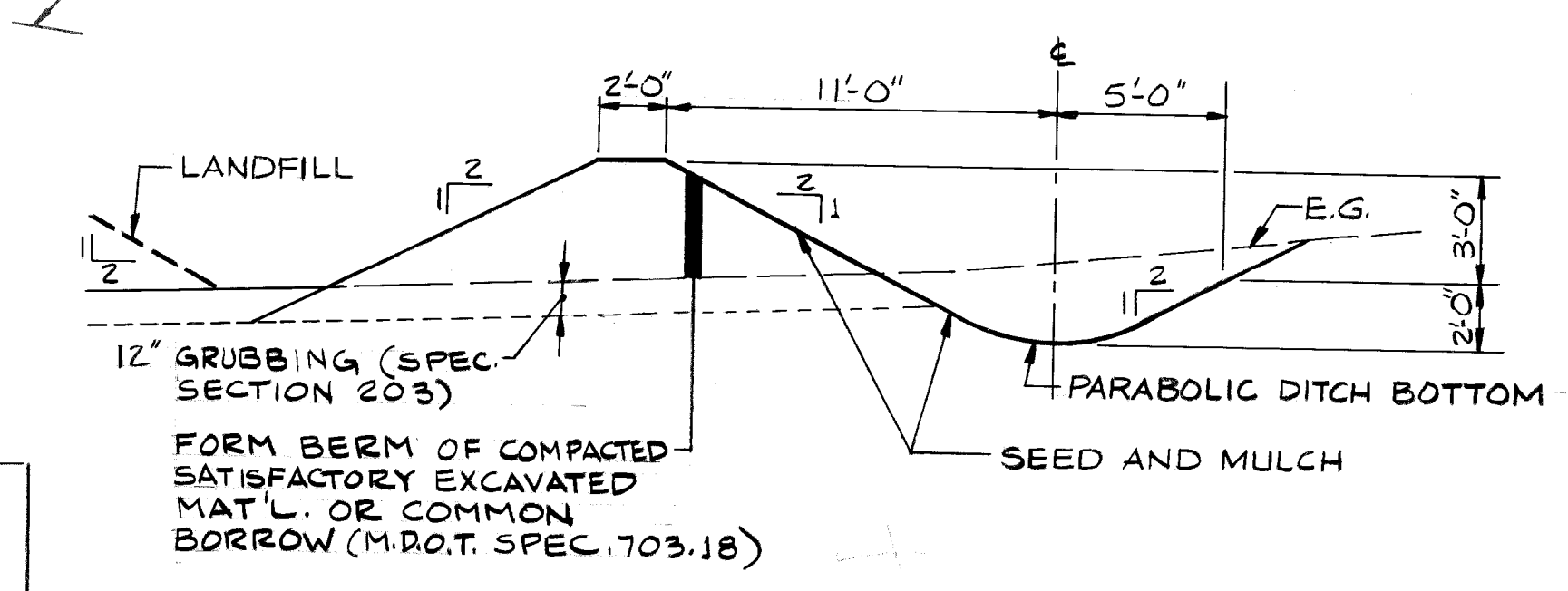
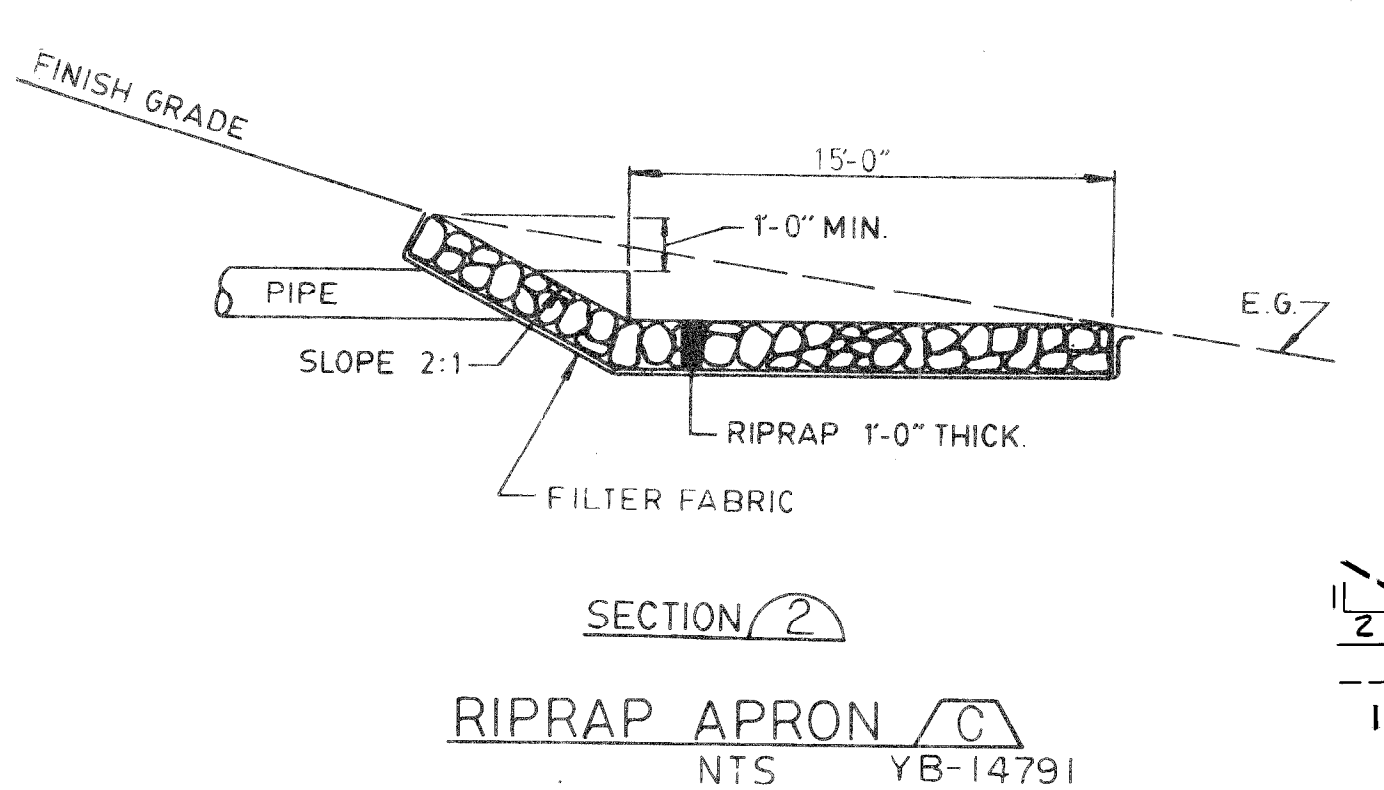
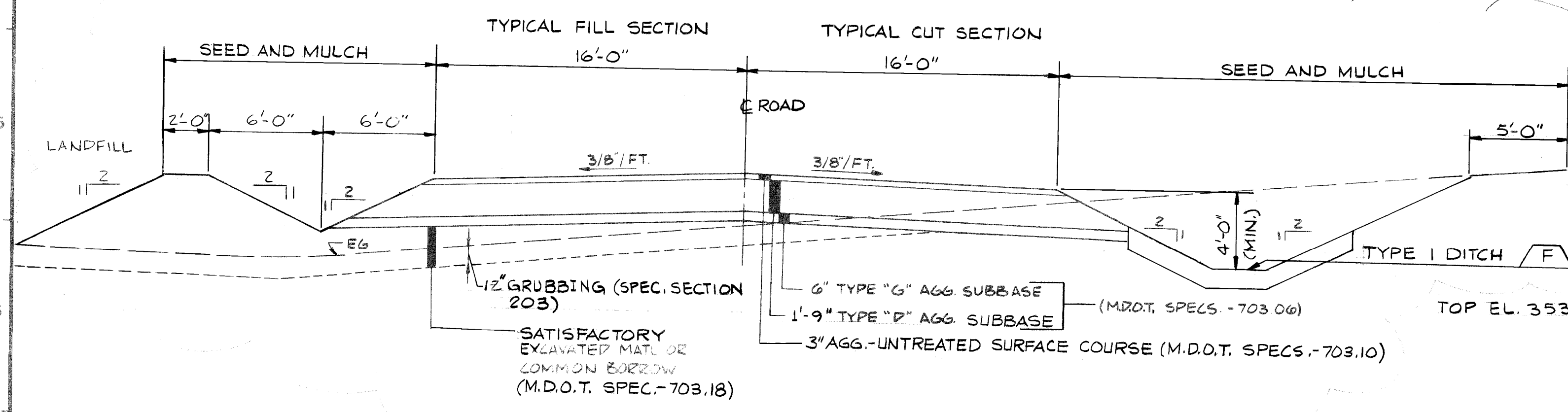
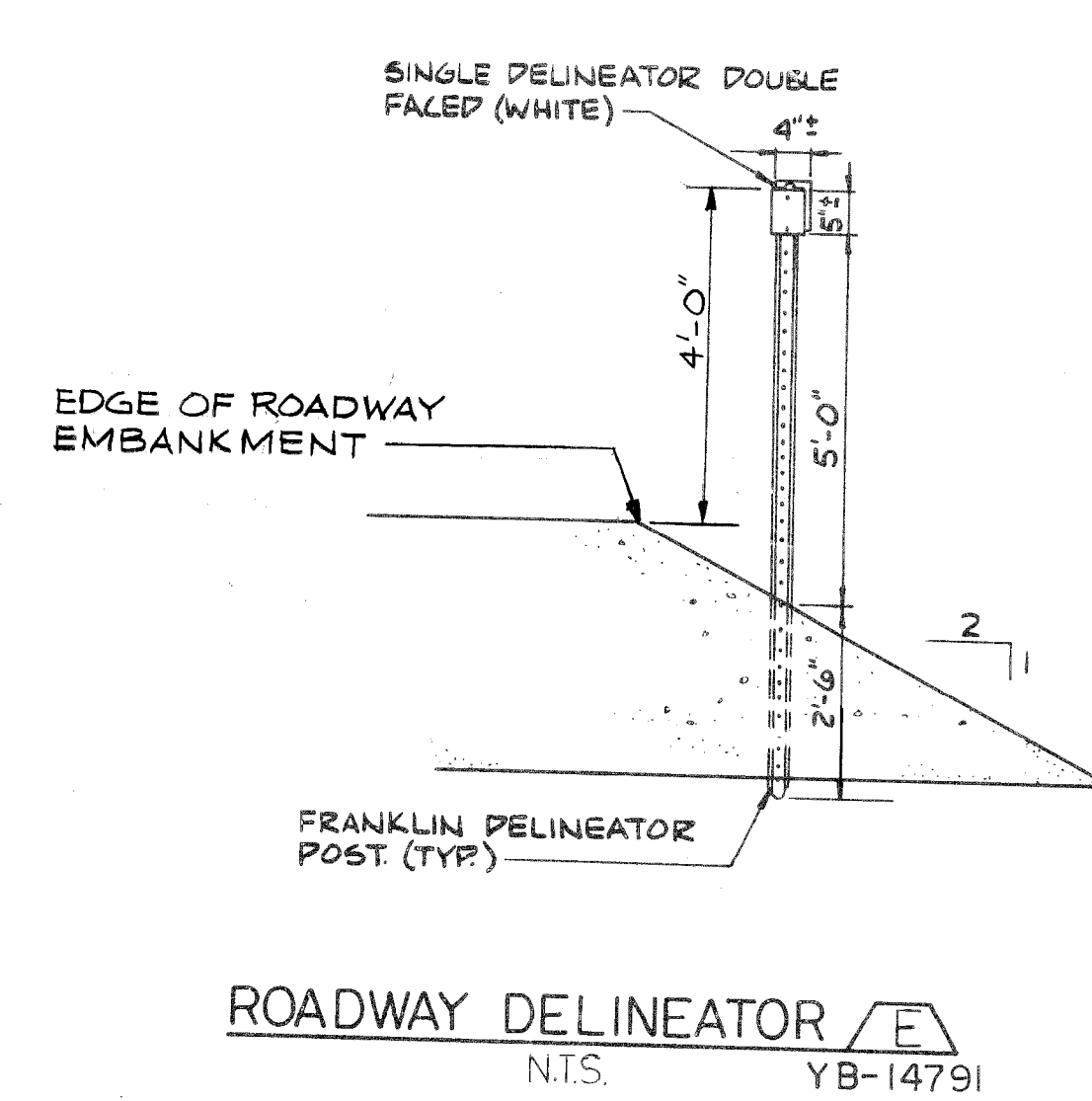
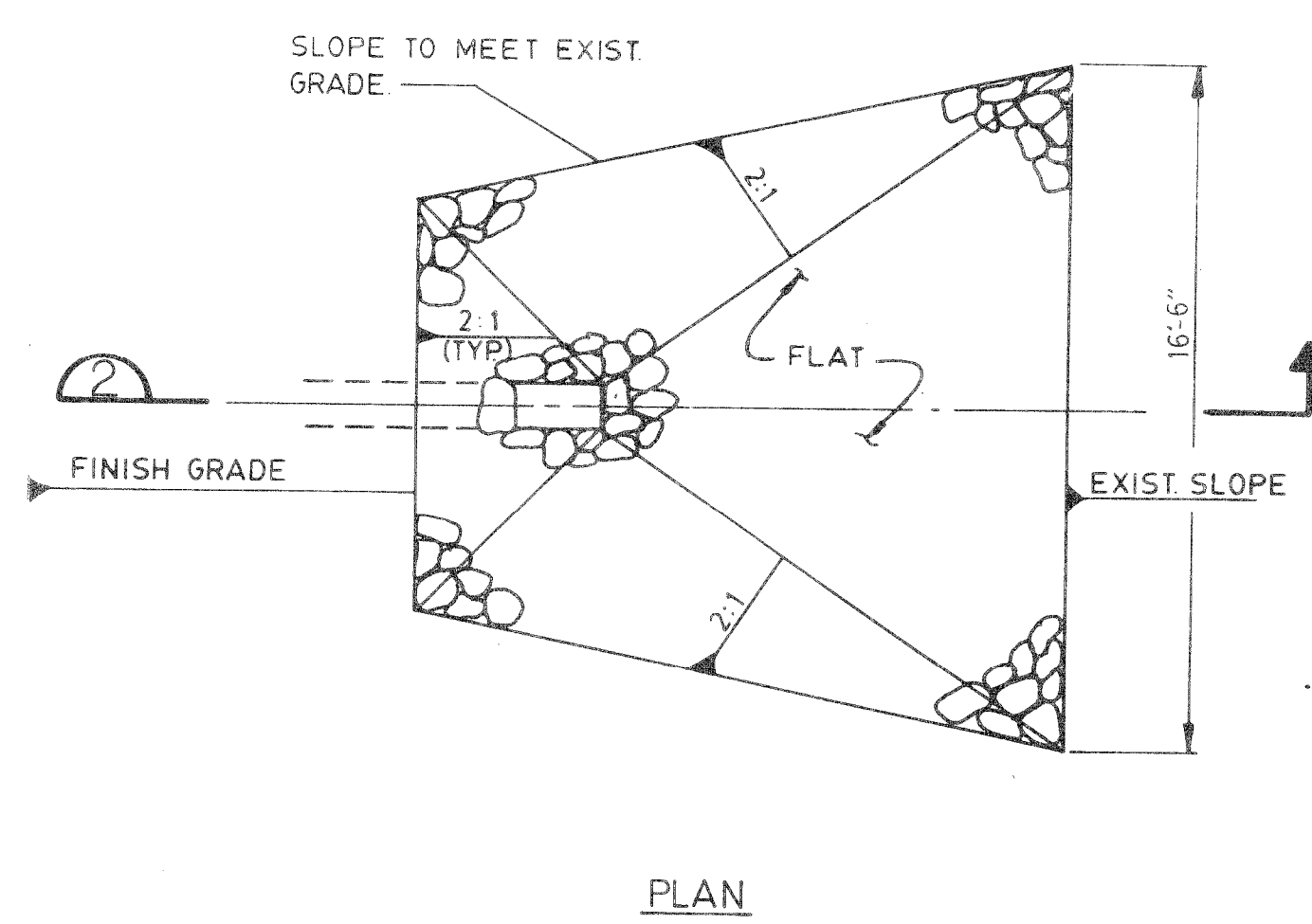
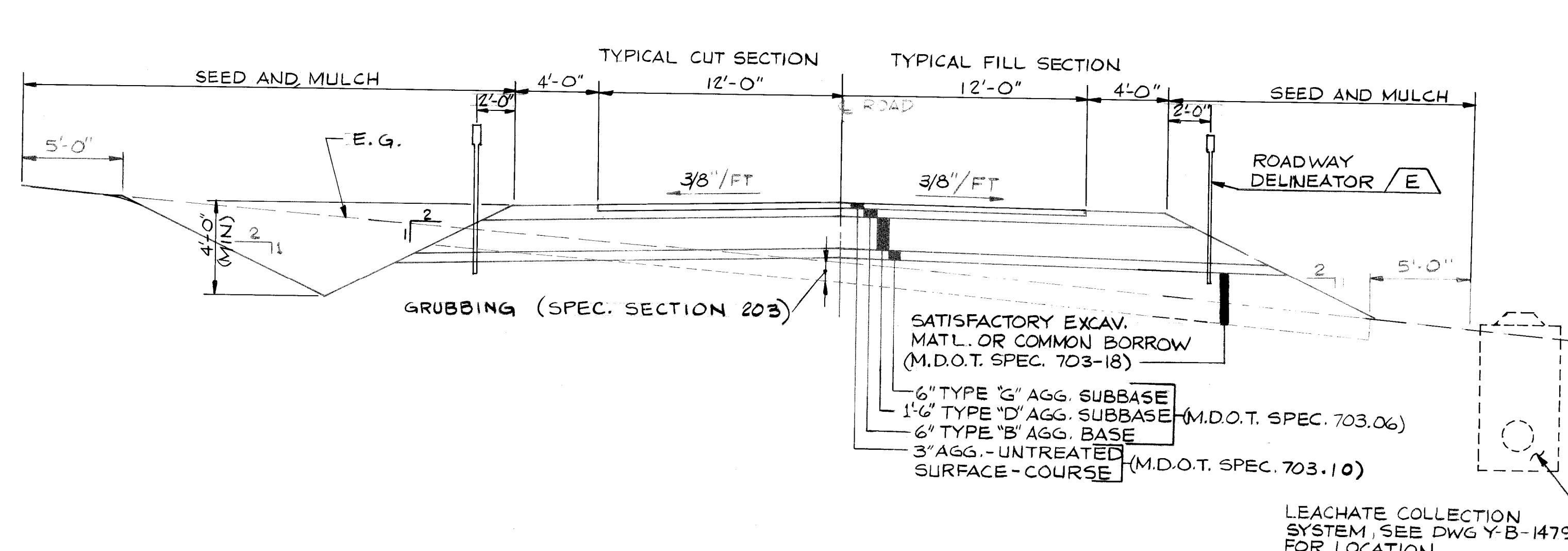
JOB NO. 8717

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Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SITE DEVELOPMENT PLAN
CELL 2

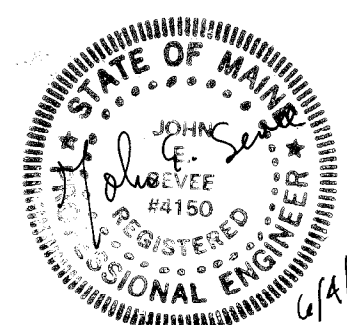
JOB NO. 94473
ENG. REQ. NO. 2-8516
FILE NO. 2-092-7082

YB-15711A



NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIPRAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.

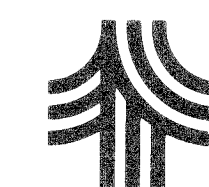
STONE OUTLET SEDIMENT TRAP
N.T.S. YB-14791



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
		C	B	5/24/87	GENERAL REVISION FOR JOB #44473 CELL 2	WJN	ECS	WJN	44473
		V	C	10/15/87	NOTES & 3/4" STONE AND FILTER FABRIC	WJN	WJN	WJN	2668

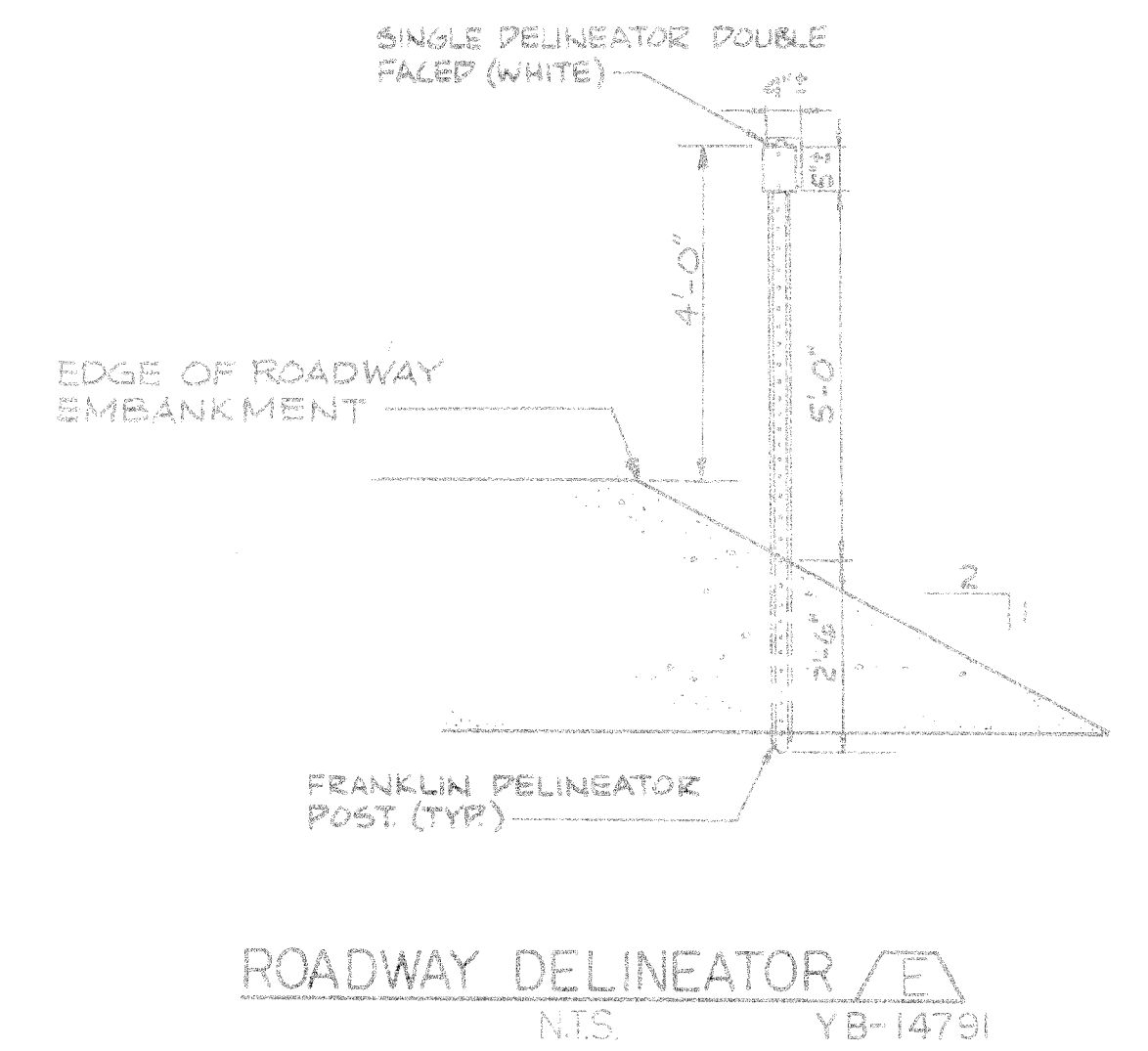
SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS

DRN LEDUC	10/12/83
CHK MAHER	12/14/83
CHK RSSE	12/16/83
CONR WJN	12/18/83
APPROV OJL	12/19/83
ISSUE CODE	
P. PRELIM	B. BIDS
M. MTL. O. C. CONST.	
SCALE	NOTED

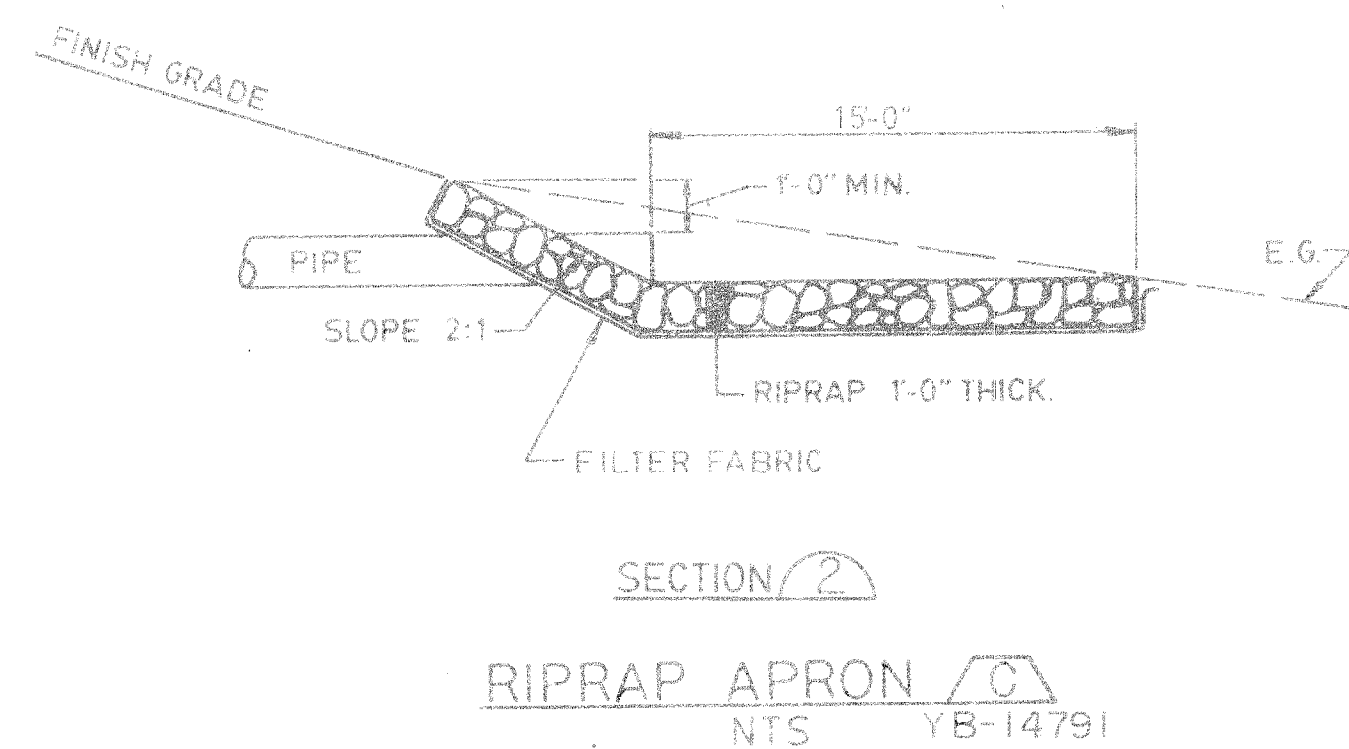


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Great Northern Nekeosa Corporation

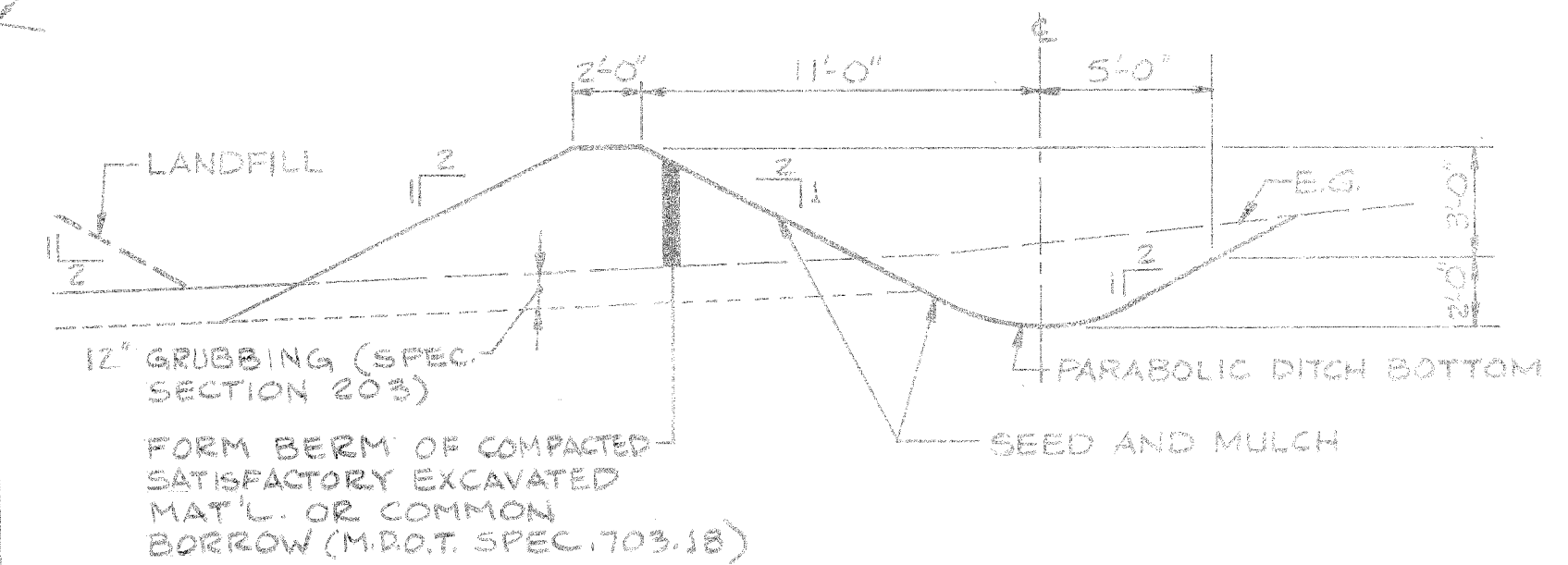
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
ACCESS ROAD
TYPICAL SECTIONS & DETAILS
JOB NO. 2668
ENG. REG. NO. 2-8313
FILE NO. 2-092-7082
YB-14794-B



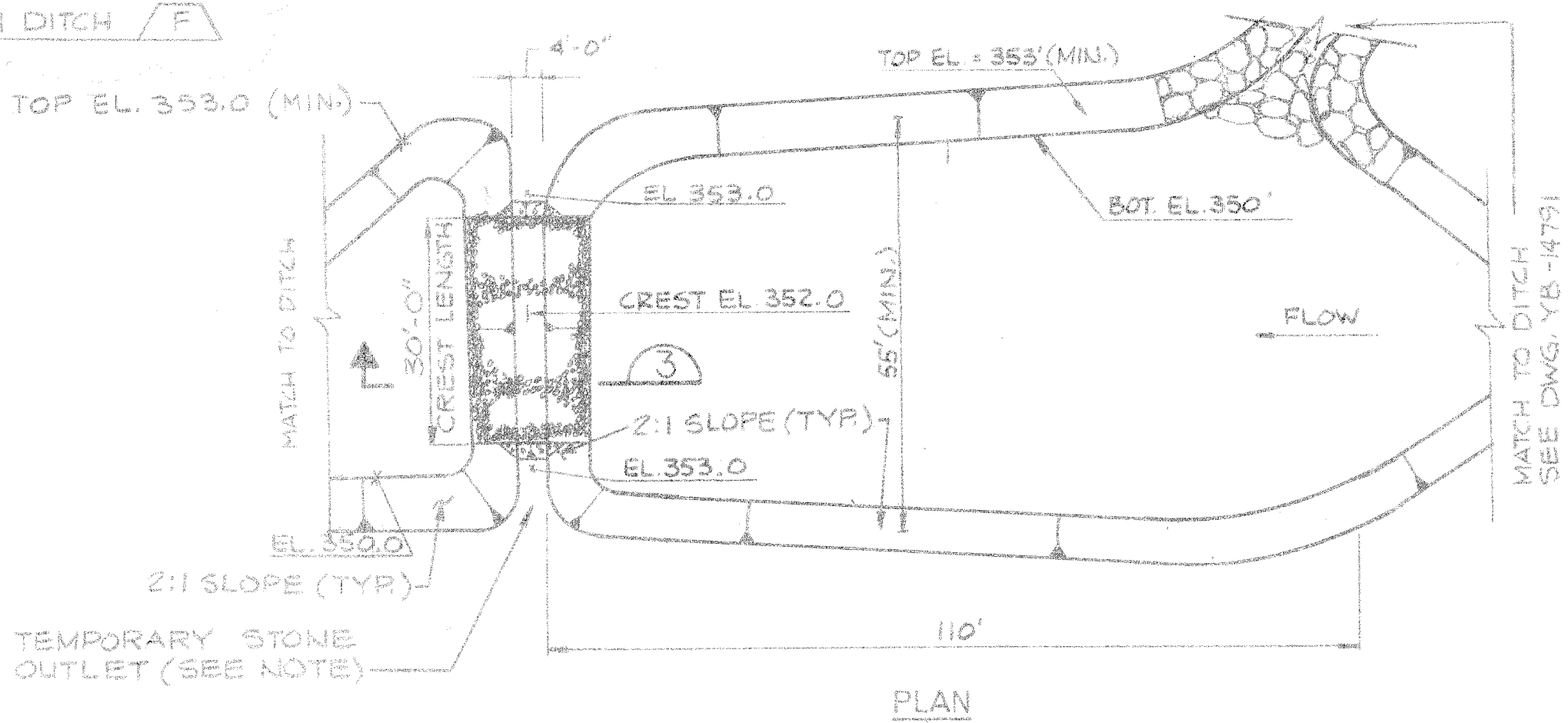
PLAN



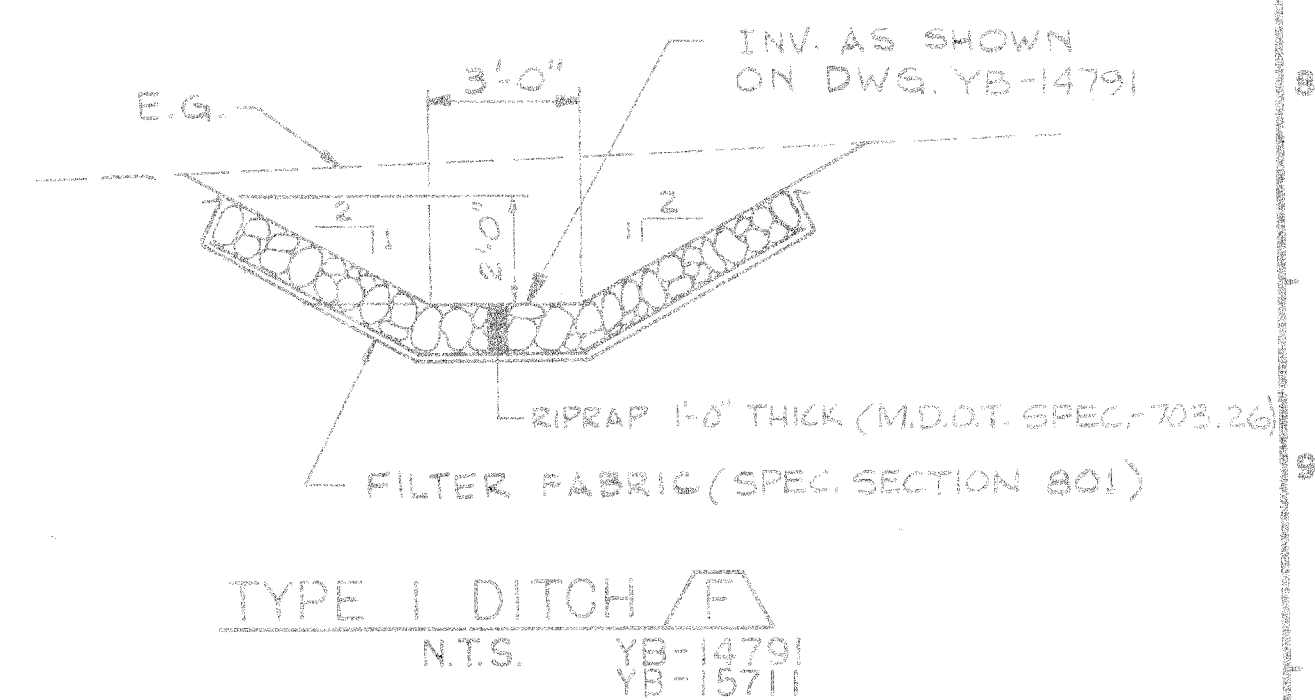
RIPRAP APRON 
NTS YB-14791



TYPICAL SECTION
DIKE AND TYPE 2 DRAINAGE DITCH
SCALE: 1" = 5'



PLAN



STONE OUTLET SEDIMENT TRAP 
NTS YB-14791

NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIPRAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.

	C	B	5/26/89	GENERAL REVISION FOR JOB #94473 CELL 2	AJC	ECC	WDA	9447
✓	C	A	10/5/89	NOTES & 3/4" STONE AND FILTER FABRIC	ESSJ		WDA	9447
CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.	

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

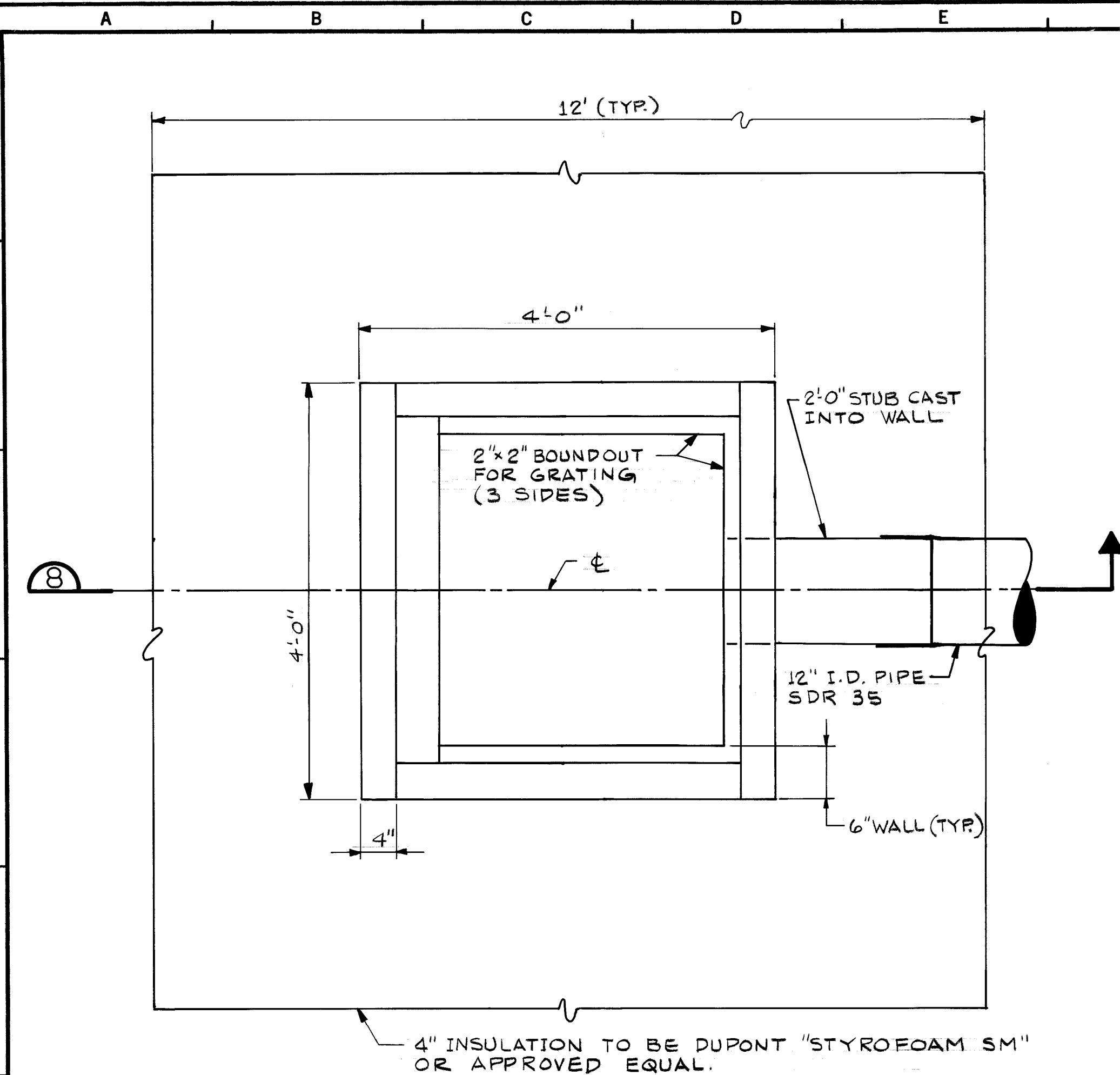
DATE	LEDUC	10/12/83
CRD	MAHER	12/16/83
CRD	RSER	12/16/83
CDR	WAN	12/17/83
APPROV	OJL	12-19-83
ISSUE CODE		
P-PRELIM	B-BIDS	
M-MT. TO	C-CONST	
SCALE NOTED		

Great Northern Paper
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Great Northern Nekoosa Corporation

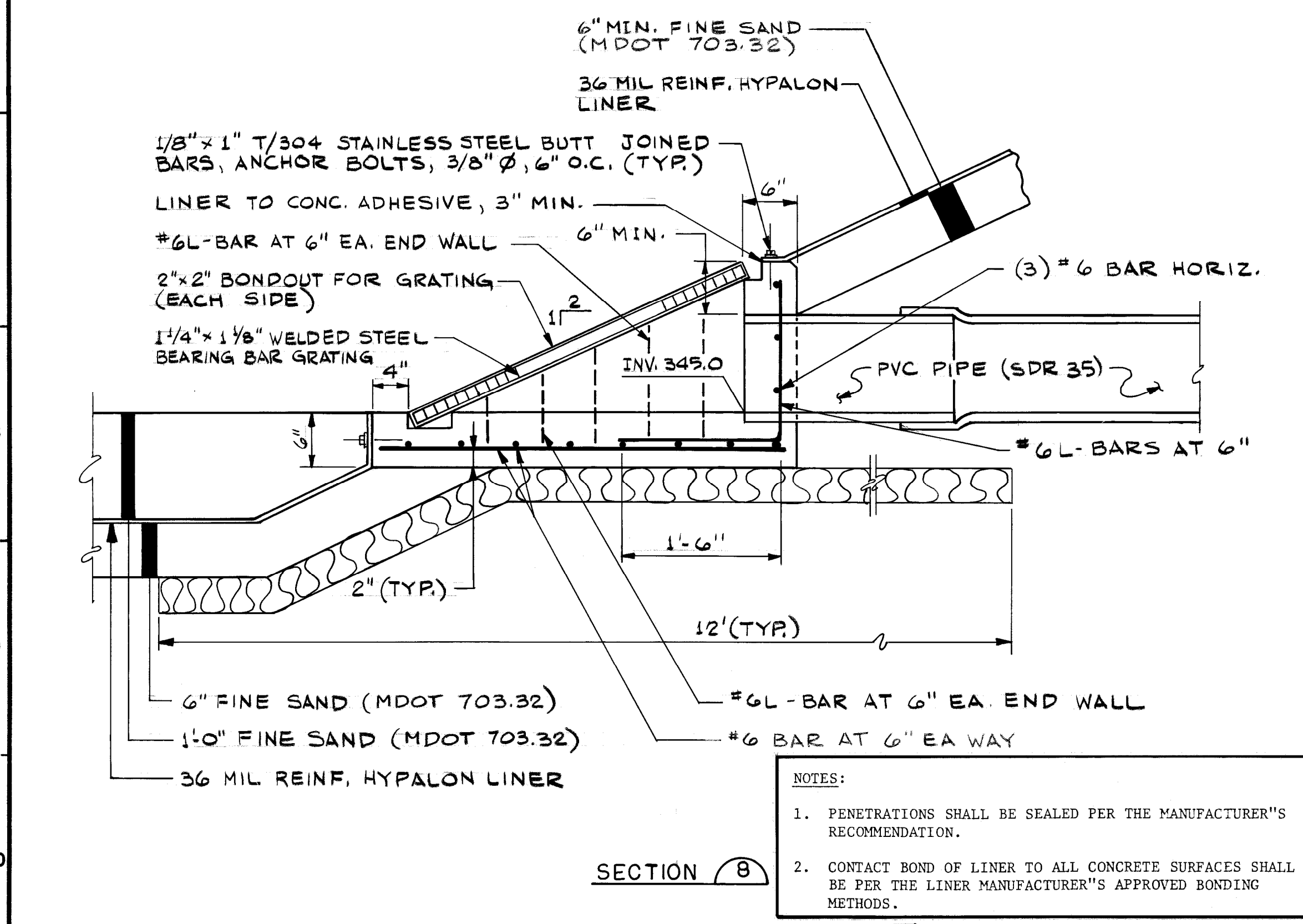
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLEY 3 LANDFILL
ACCESS ROAD
TYPICAL SECTIONS & DETAILS

D. 2669
REG. NO. 2-6313
NO. 2-092-7062

YB-14794-B

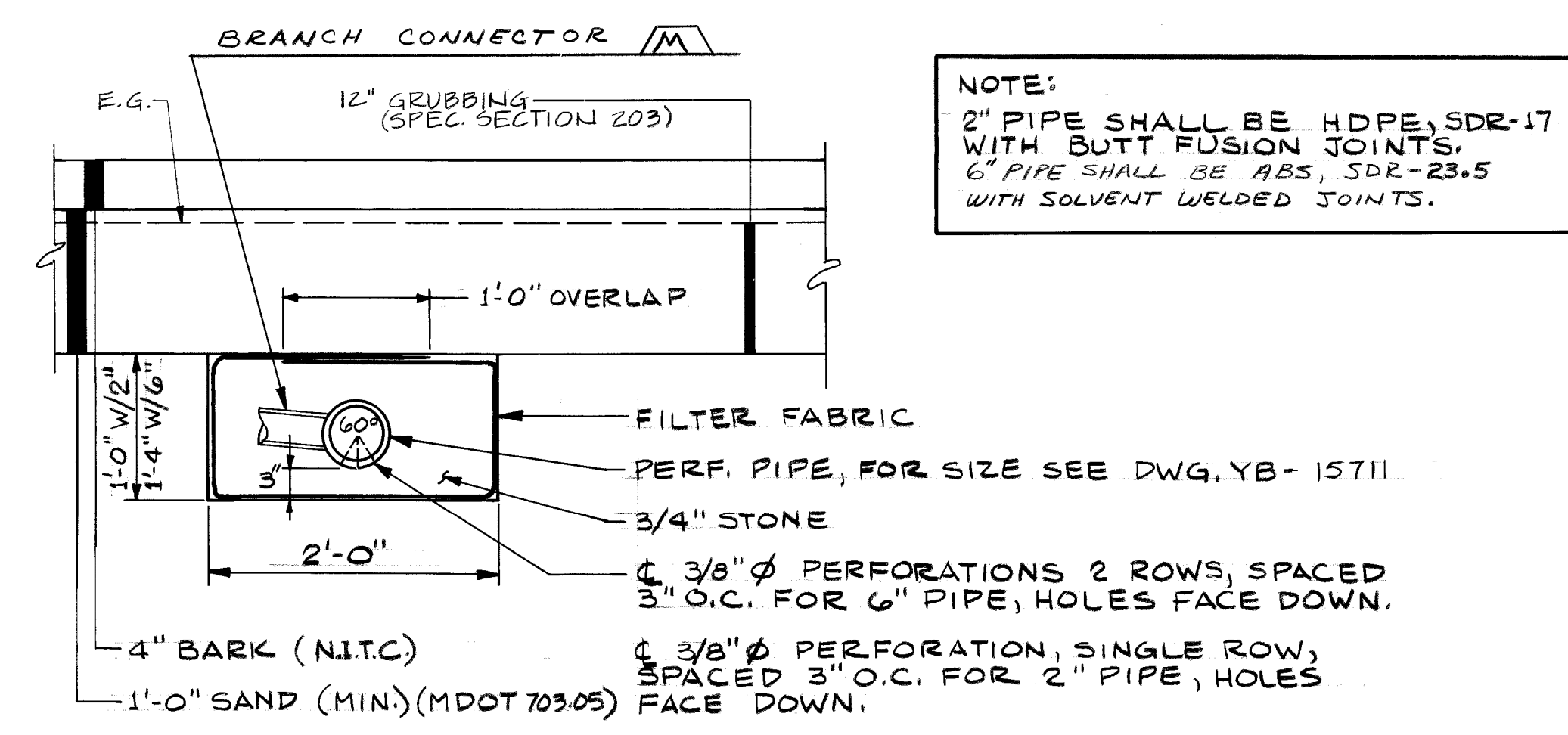


PLAN



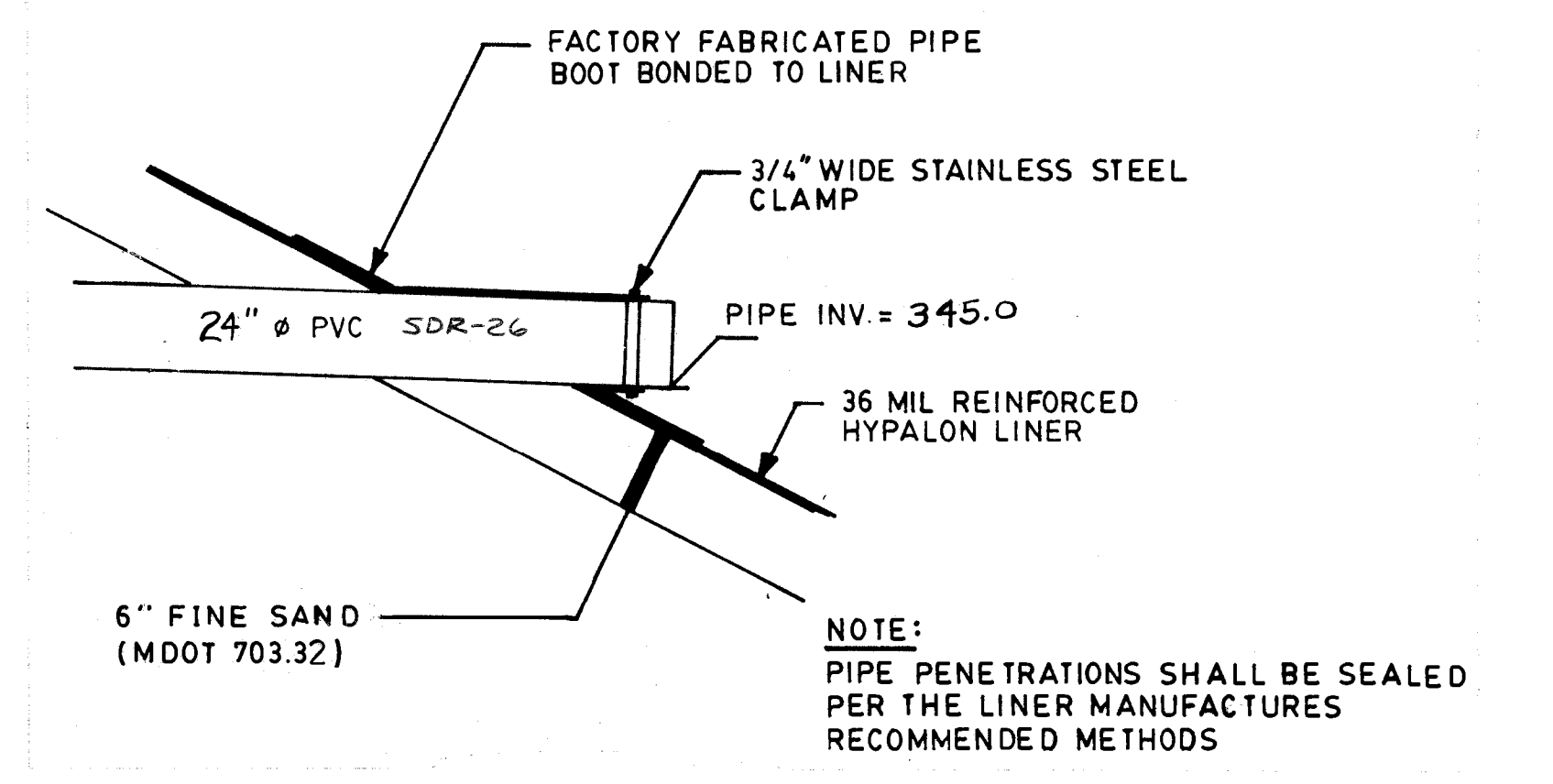
OUTLET STRUCTURE (TYP) **K**
SCALE: 1"=1'-0" YB-14791

- NOTES:
1. PENETRATIONS SHALL BE SEALED PER THE MANUFACTURER'S RECOMMENDATION.
 2. CONTACT BOND OF LINER TO ALL CONCRETE SURFACES SHALL BE PER THE LINER MANUFACTURER'S APPROVED BONDING METHODS.



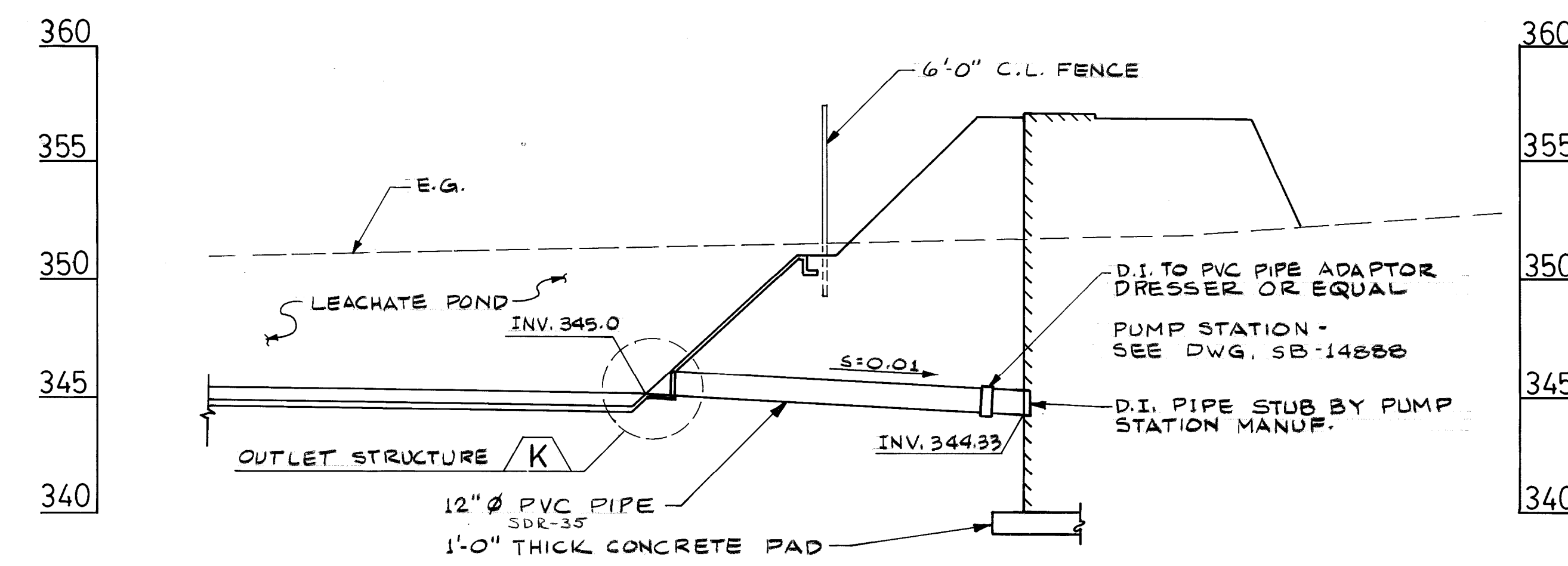
NOTE:
2" PIPE SHALL BE HDPE, SDR-17 WITH BUTT FUSION JOINTS.
6" PIPE SHALL BE ABS, SDR-23.5 WITH SOLVENT WELDED JOINTS.

2-IN. 6-IN. LEACHATE COLLECTION PIPES **9**
SCALE: 1"=1'-0" YB-14791 YB-15711

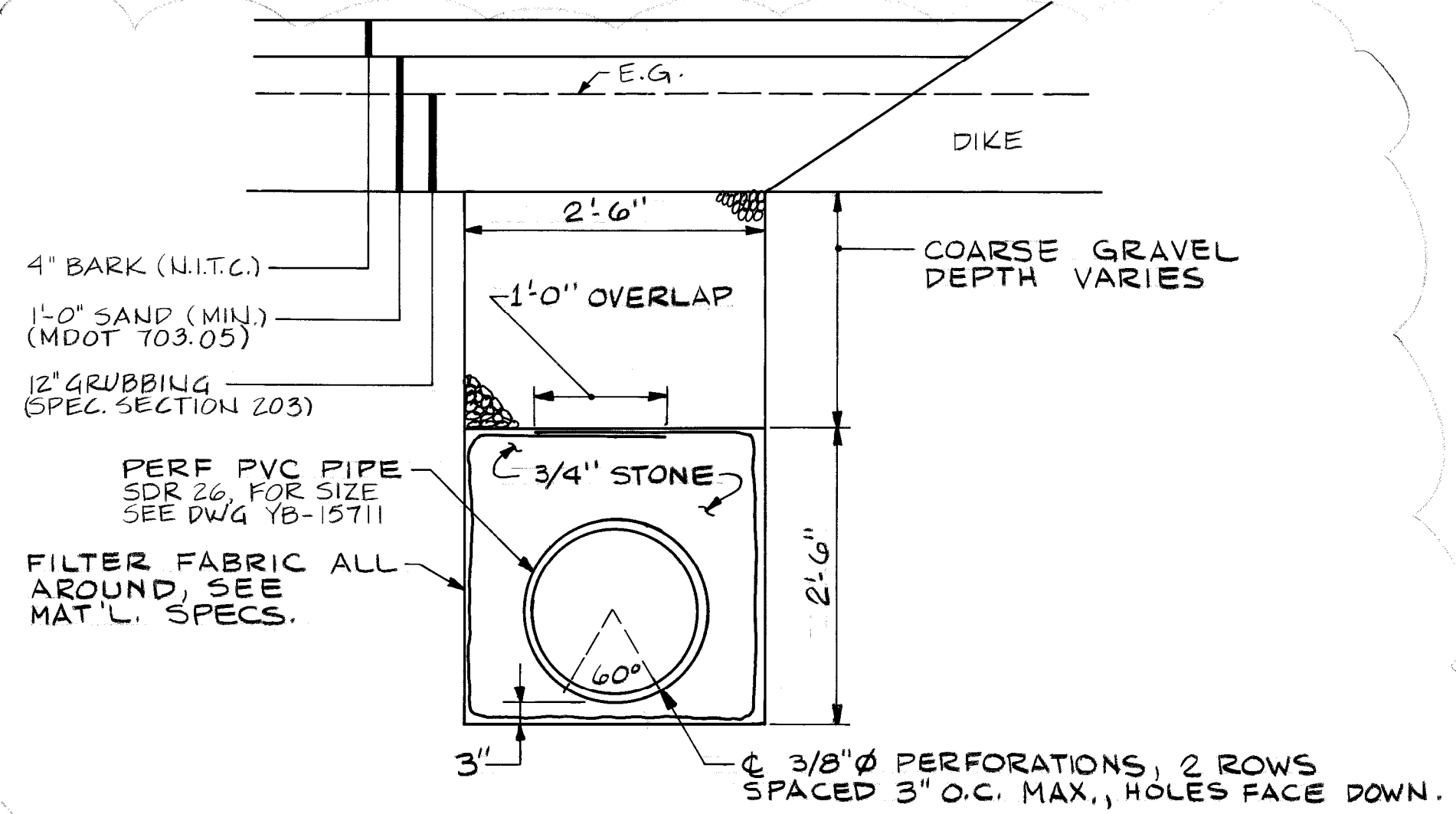


POND INLET AND PIPE BOOT **L**
N.T.S. YB-14791

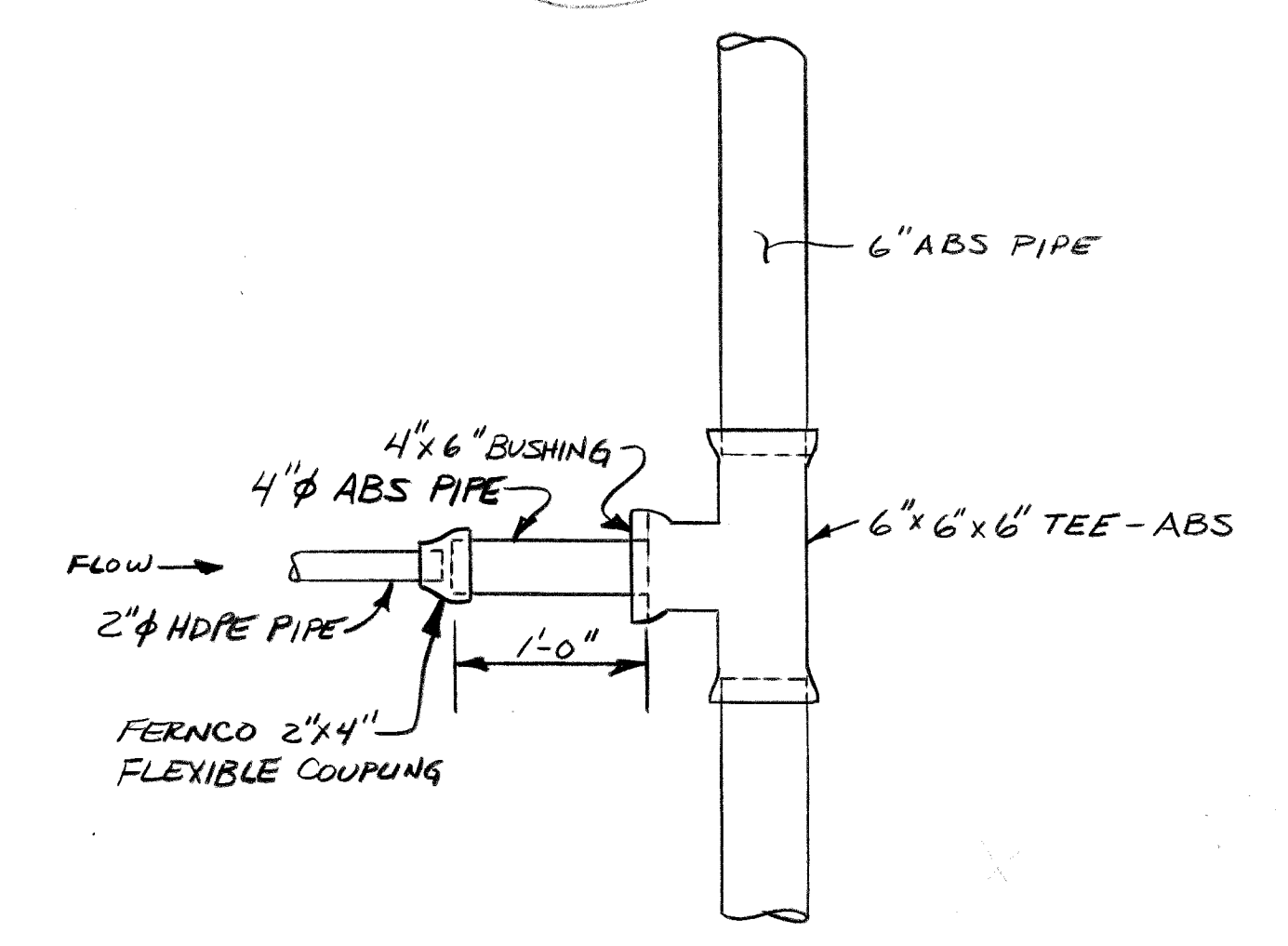
- NOTES:
- 2" PIPE HDPE SDR-17 W/BUTT FUSION JOINTS
 - 4" PIPE ABS SDR-23.5 W/SOLVENT JOINTS
 - 6" PIPE ABS SDR-23.5 W/SOLVENT JOINTS
 - 12" PIPE PVC SDR-35
 - 18" PIPE PVC SDR-26
 - 24" PIPE PVC SDR-26
 - GATE VALVES - CLOW F5065 MECH. JOINT, NON RISING STEM FOR 4" & 24" PIPE OR EQUAL
 - INDICATOR POST - CLOW F5760 OR EQUAL
 - 12" PIPE PVC SDR-26



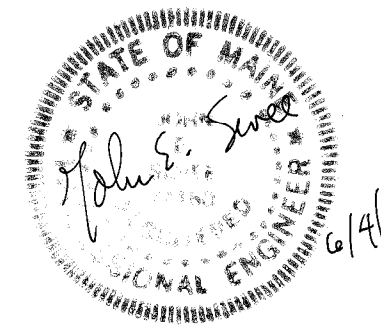
PUMP STATION AND INLET PIPE **10**
SCALE: HORIZ. 1"=20' VERT. 1"=5' YB-14791



PERF. LEACHATE COLLECTION MAIN **11**
YB-14791 YB-15711



BRANCH CONNECTOR **M**
N.T.S. YB-15711



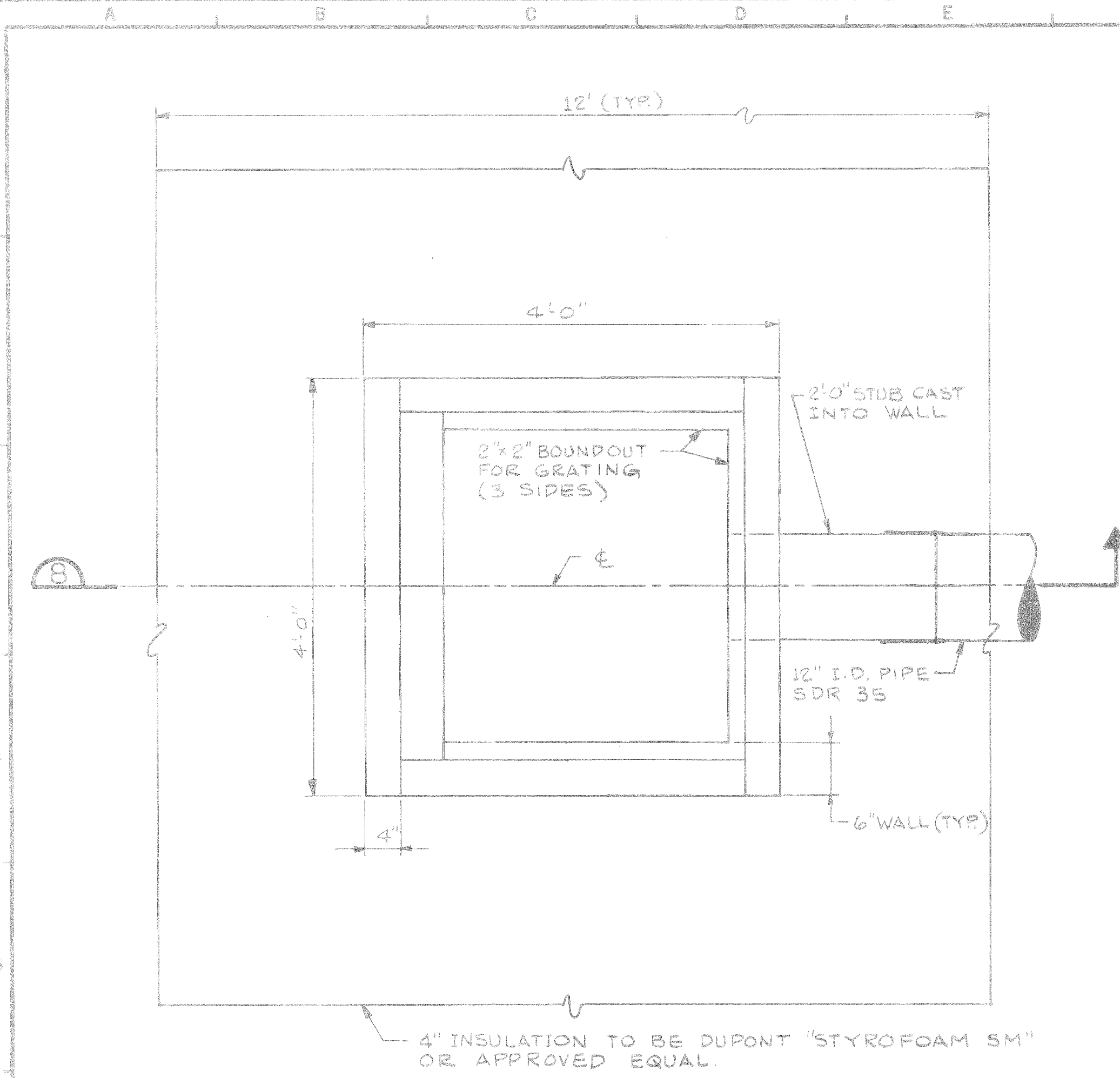
DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPRD	JOB NO.
		C	A	5/26/87	GENERAL REVISION FOR JOB #94473 CELL 2	ECJ	WBN	94473	

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS
JOB NO. 4187-02 DWG. NO.

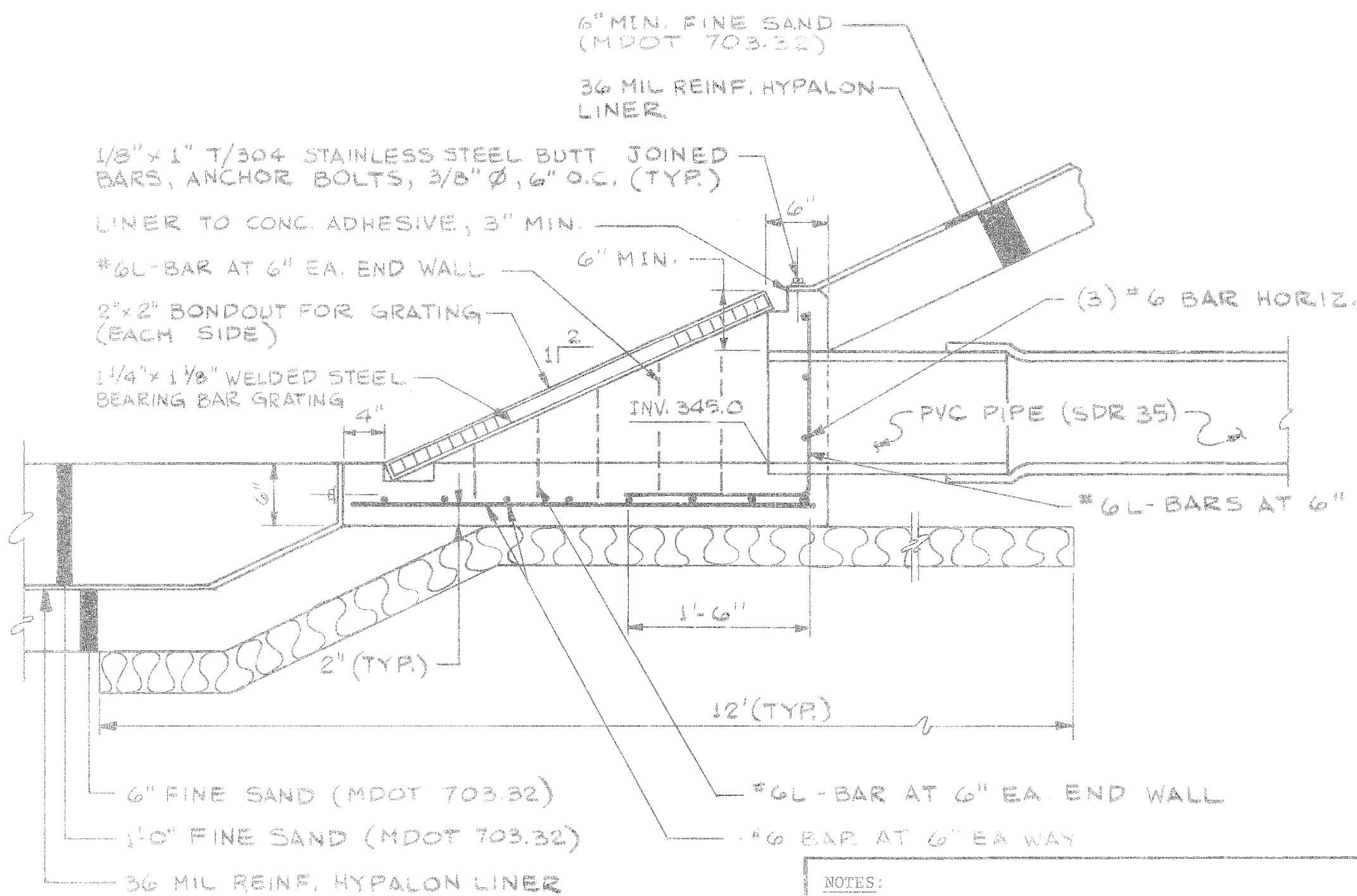
DRN	2-8313	11/22/83
CKD	MAHER	12/16/83
CKD		
CORR		
APPRD		
ISSUE CODE		
P-PRELIM	B-BIDS	
M-MTLT.O.C-CONST		
SCALE	NOTED	



CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SITE DEVELOPMENT
DETAILS
JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-0927082
YB-14796-A

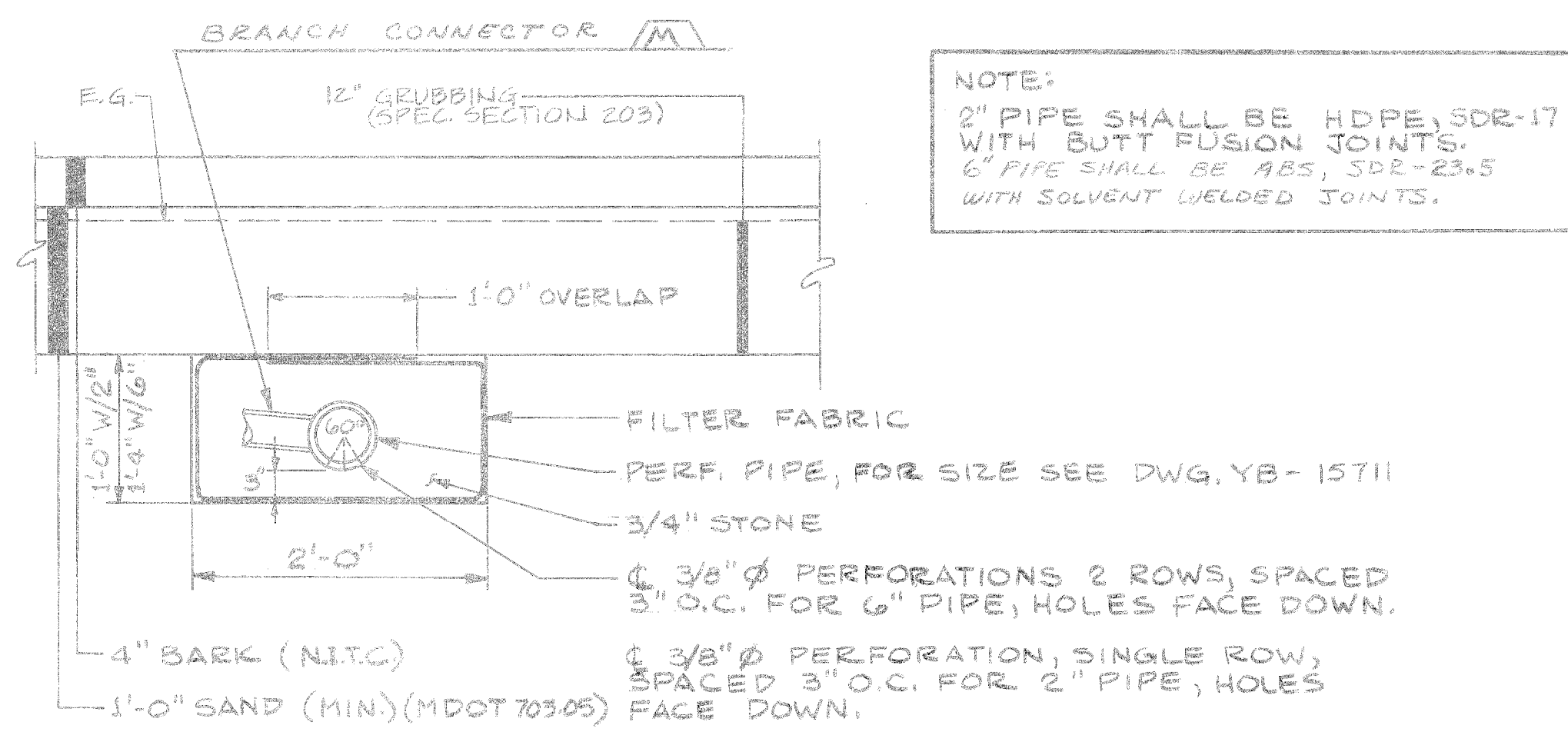


PLAN

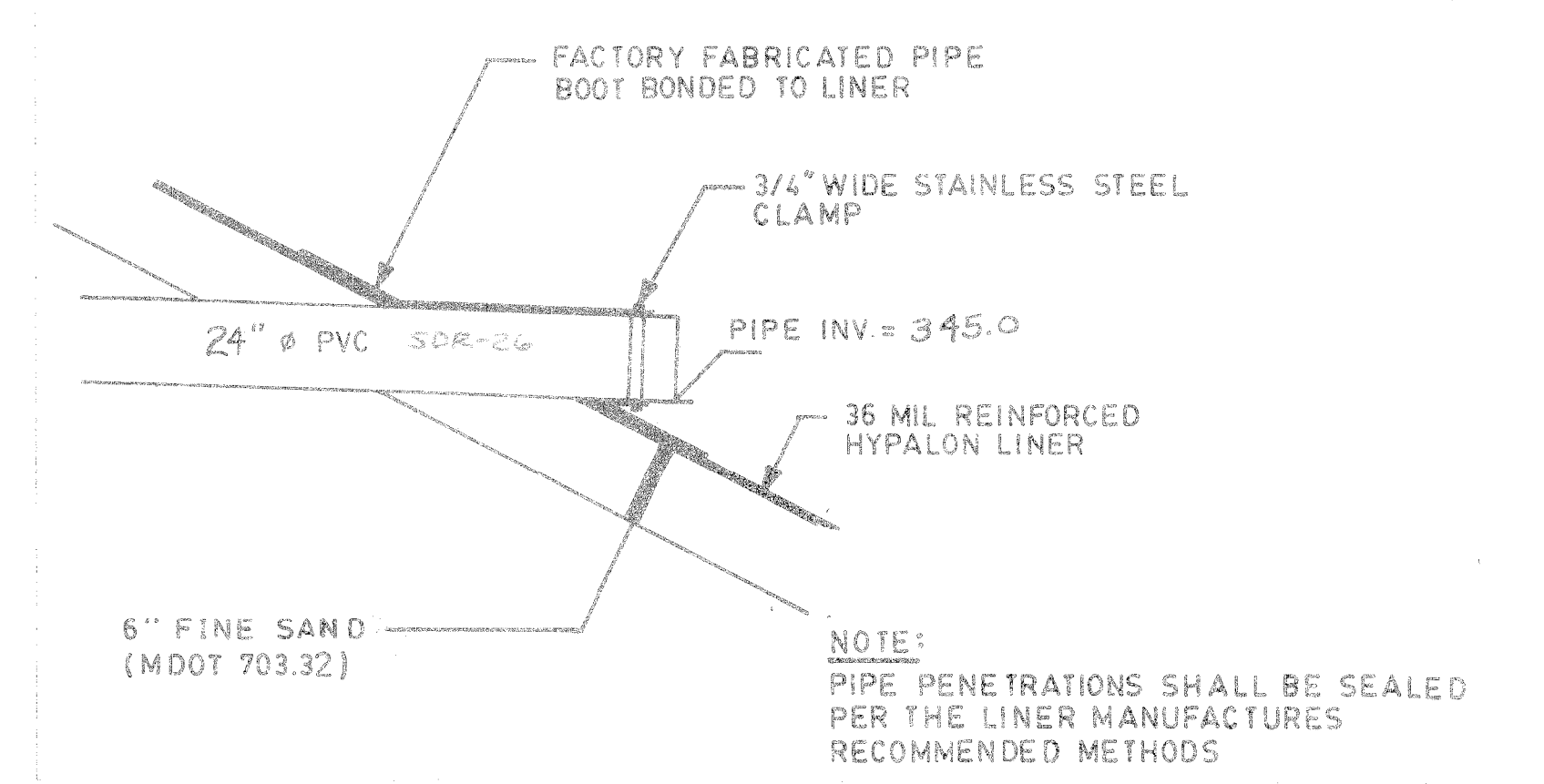


SECTION 8

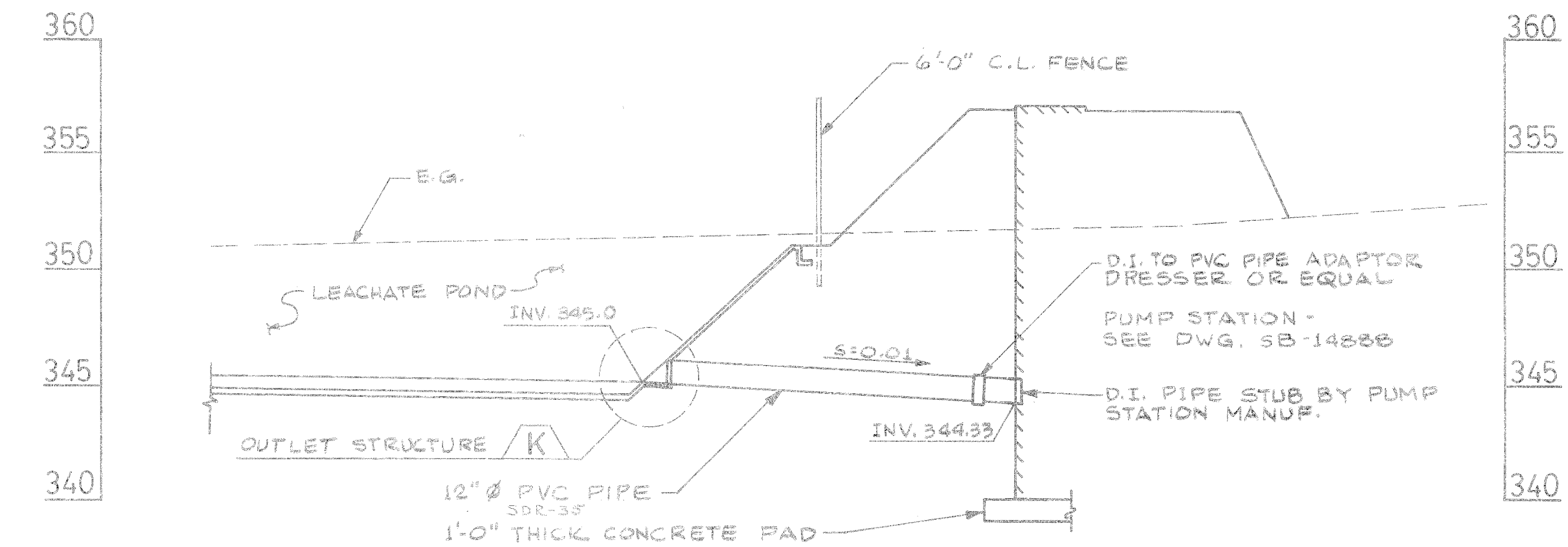
OUTLET STRUCTURE (TYP.) K
SCALE: 1"=1'-0" YB-14791



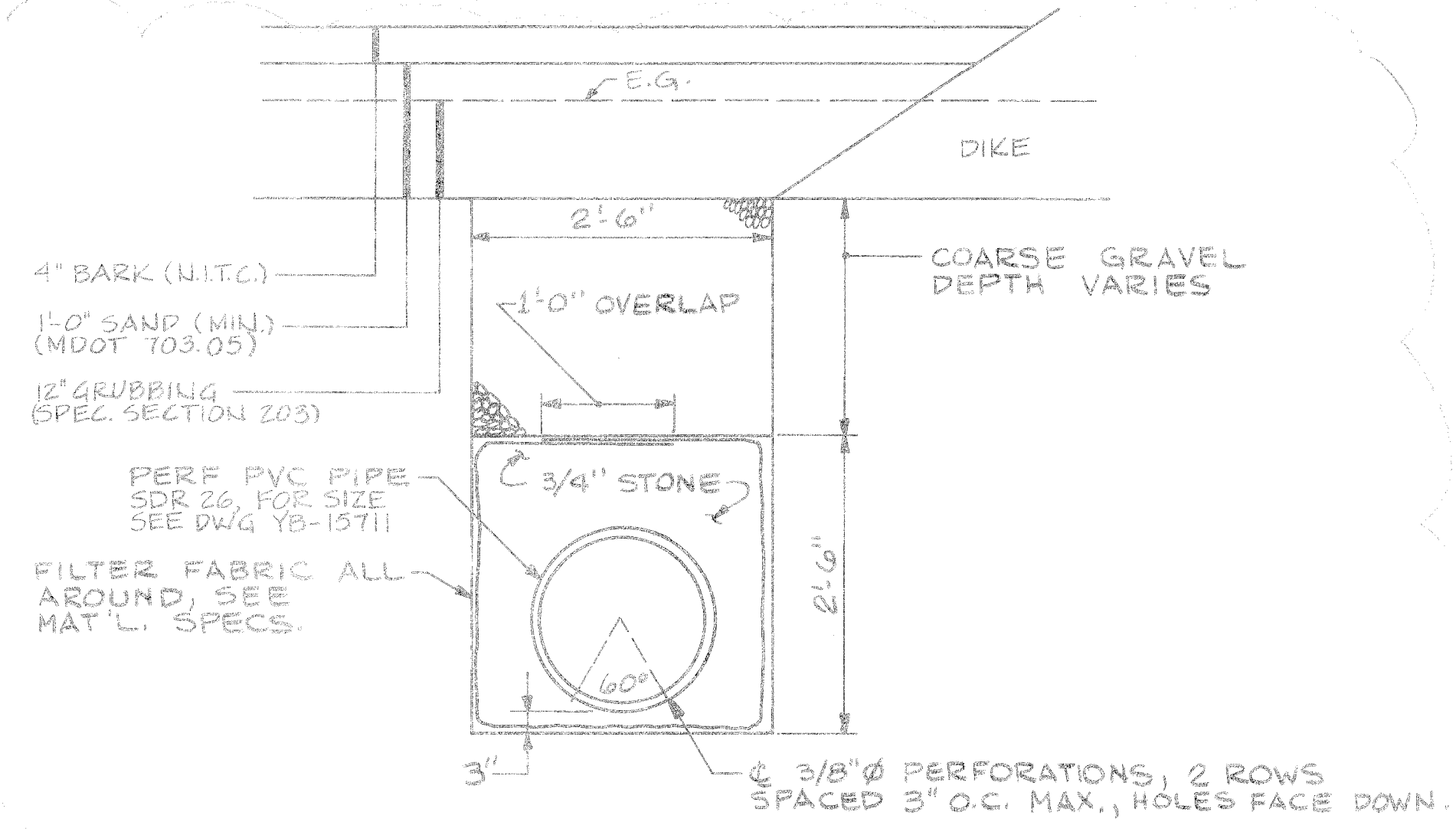
2-IN. 6-IN. LEACHATE COLLECTION PIPES 9
SCALE: 1"=1'-0" YB-14791 YB-15711



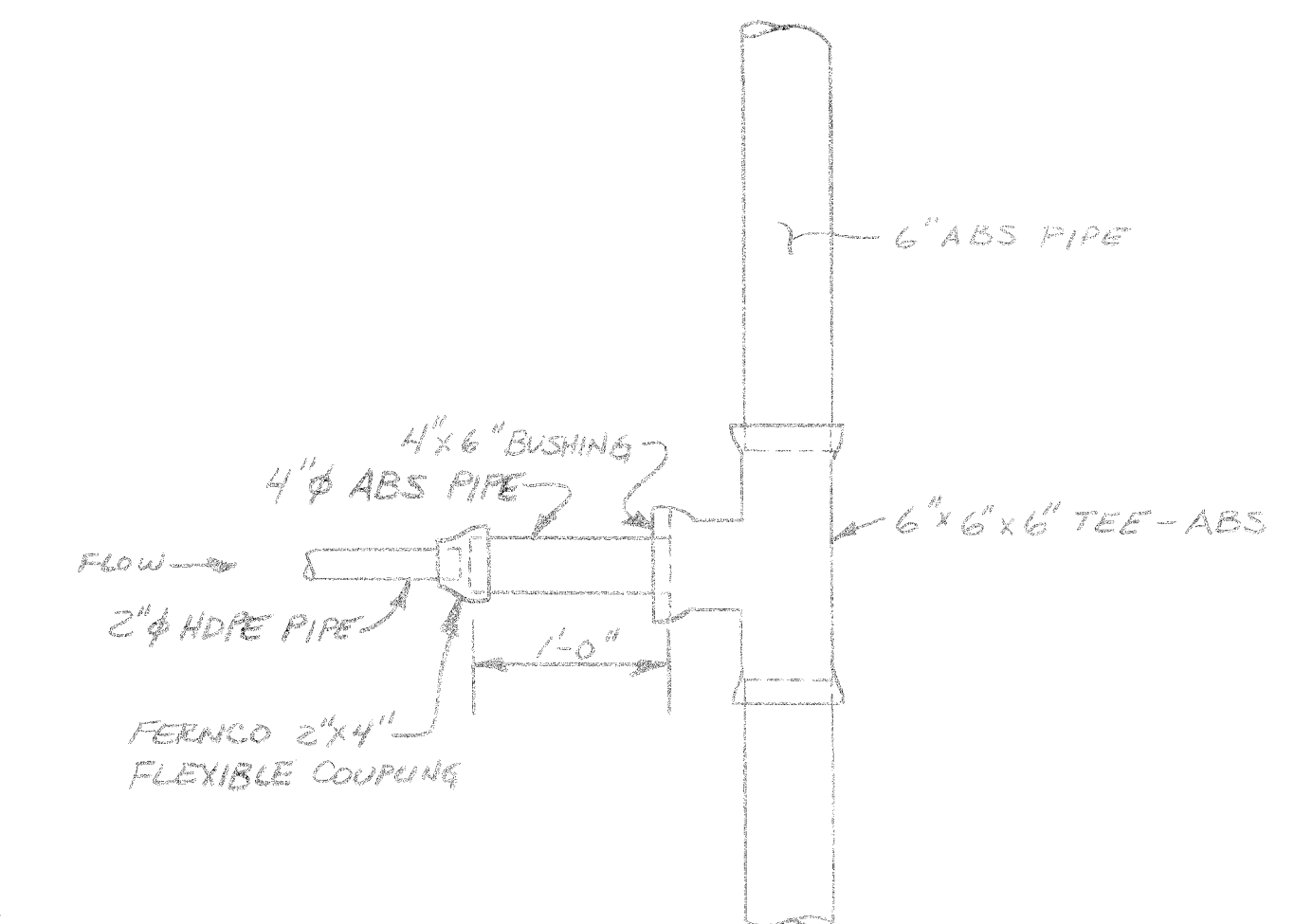
POND INLET AND PIPE BOOT N.T.S. YB-14791



PUMP STATION AND INLET PIPE 10
SCALE: HORIZ. 1"=20' VERT. 1"=5' YB-14791



PERF. LEACHATE COLLECTION MAIN 11
YB-14791 YB-15711



BRANCH CONNECTOR M N.T.S. YB-15711

- NOTES:
1. PENETRATIONS SHALL BE SEALED PER THE MANUFACTURER'S RECOMMENDATION.
 2. CONTACT BOND OF LINER TO ALL CONCRETE SURFACES SHALL BE PER THE LINER MANUFACTURER'S APPROVED BONDING METHODS.

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPRD	JOB NO.
		C	A	5/26/07	GENERAL REVISION FOR JOB # 94475 CELL 2	YHC	ECJ	WJN	94475

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

EC.JORDANCO.
CONSULTING ENGINEERS

DRN	B.J.D.	11/22/83
CRD	MAHER	12/16/83
CHKD		
DOBR		
APPRD		
ISSUE CODE		
P-PRELIM	B-BIDS	
M-MLT.O.	C-CONST	
SCALE	NOTED	

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SITE DEVELOPMENT
DETAILS

JOB NO. 2668
ENG. REG. NO. 2-8313
FILE NO. 2-0927082

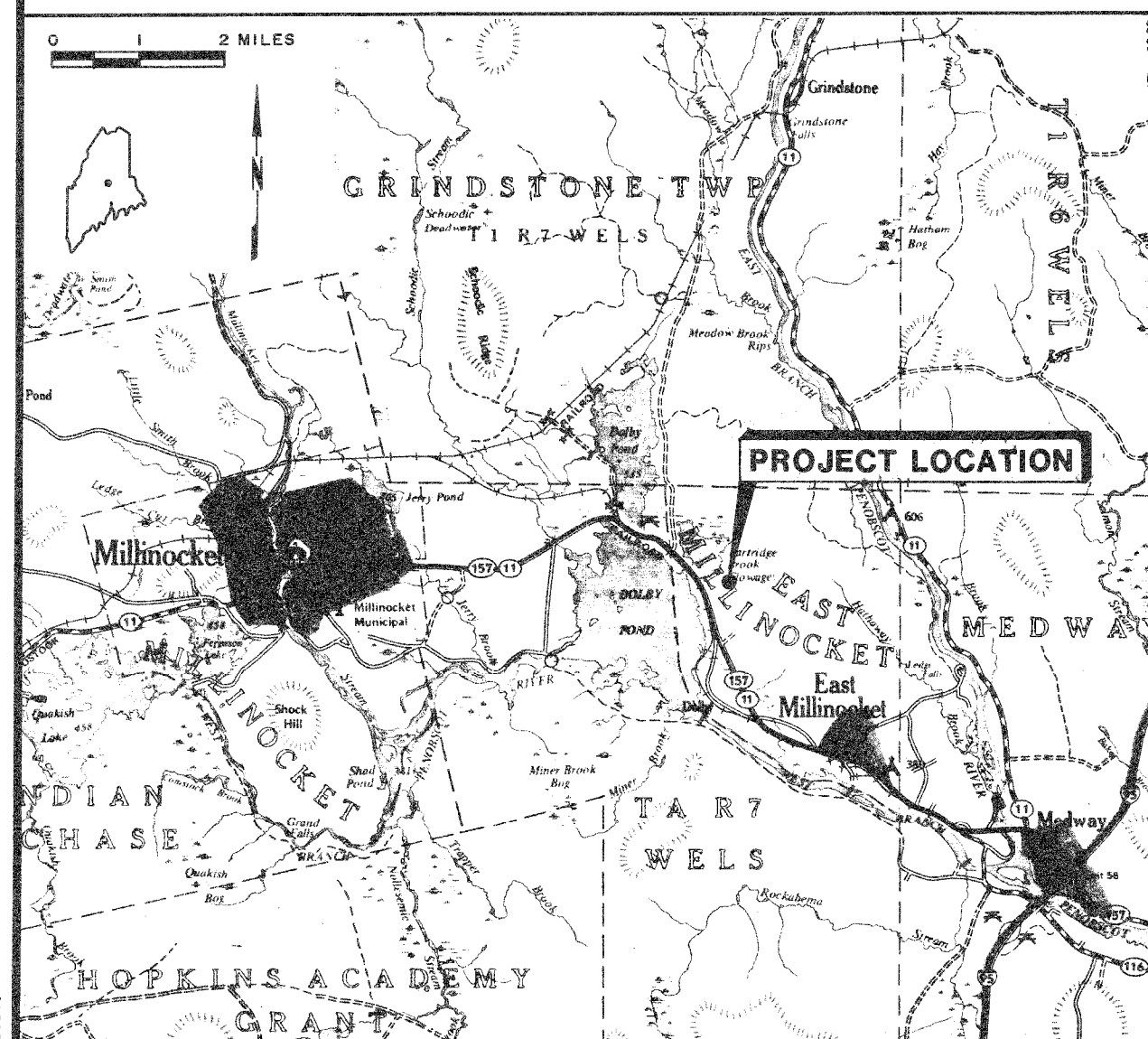
YB-14796-A

GREAT NORTHERN PAPER CO. MILLINOCKET, MAINE

DOLBY 3 LANDFILL CELL 3 CONSTRUCTION

RECORD DRAWINGS

<u>TITLE</u>	<u>DWG. NO.</u>
COVER SHEET	YB-15911
DOLBY 3 LANDFILL SYMBOLS & ABBREVIATIONS	YB-15912
DOLBY 3 LANDFILL SITE LOCATION PLAN	YB-15913
DOLBY 3 LANDFILL SITE DEVELOPMENT PLAN	YB-15914
DOLBY 3 LANDFILL SECTIONS & DETAILS	YB-15915



SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

1988



Great Northern Paper
a company of
Great Northern Nekeosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
COVER SHEET

JOB NO. _____
ENG. REG. NO. 2-8627
FILE NO. 2-092-4703, 7082

YB-15911

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
NORTH ARROW (TRUE)		STONE WALL		TEST PIT & NUMBER	
NORTH ARROW (MAGNETIC)		DRAINAGE COURSES W/DIRECTION & DITCH		CLEAN OUT STRUCTURES	
NORTH ARROW (PLAN NORTH)		EDGE OF WATER		MANHOLE	
25 63 25.56 CONTOUR LINES		WATER ELEVATION (GROUND OR SURFACE)		WATER VALVE	
SPOT ELEVATION (GRADE)		ROCK OUTCROP OR LEDGE		HYDRANT	
EXISTING GROUND (PROFILES & SECTIONS)		FENCE LINE (WOOD)		TELEPHONE OR POWER POLE	
SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT		FENCE LINE (WIRE)		CATCH BASIN	
CONSTRUCTION BASELINE		RETAINING WALL (TYPE)		UNDERGROUND GAS MAIN & SIZE	
PROPERTY OR DEED LINE (NOT SURVEYED)		GUARD RAIL		UNDERGROUND TELEPHONE CABLE / CONDUIT	
PROPERTY LINE W/BEARING & DISTANCE		BUILDING & STRUCTURES		UNDERGROUND ELECTRIC CABLE / CONDUIT	
ROADS, EASEMENTS OR RIGHT OF WAY LINE		STEPS W/ TYPE (WOOD / CONCRETE)		OVERHEAD ELECTRICAL LINE	
BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)		SLOPE RATIO (HORIZONTAL TO VERTICAL)		SANITARY SEWER, SIZE & TYPE	
SURVEY MONUMENT		SLOPES (W/SLOPE RATIO)		FORCE MAIN, SIZE & TYPE	
SURVEY IRON (FOUND)		EDGE OF TRAVELED WAY (TYPE)		WATER MAIN, SIZE & TYPE	
DRILL HOLE, PK OR STAKE		CUT OR FILL LINE		STORM DRAIN, SIZE & TYPE	
WOODS OR BRUSH LINE		CONSTRUCTION LIMIT LINE		UNDERDRAIN, SIZE & TYPE	
INDIVIDUAL TREE (DECIDUOUS)		BITUMINOUS PAVEMENT		CULVERT, SIZE & TYPE	
INDIVIDUAL TREE (CONIFEROUS)		GRAVEL ROAD		RAILROAD	
TREE, TO BE REMOVED		CONCRETE		SILTATION FENCE	
MARSH AREA		TEST BORING, MONITORING WELL OR PROBE & NUMBER			

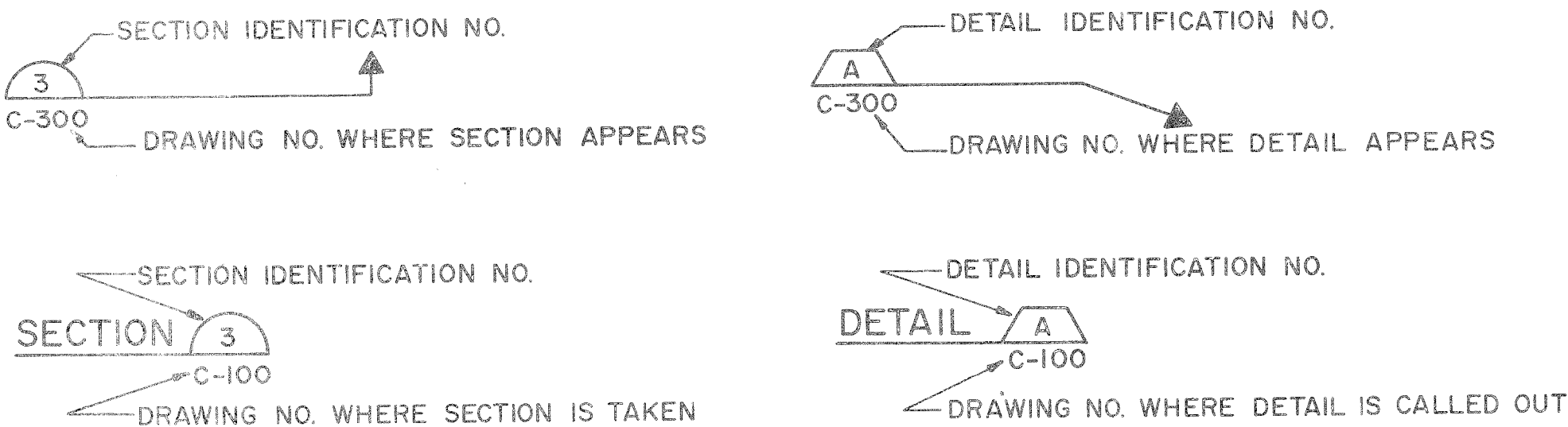
PIPE SCHEDULE

2" HDPE SHALL BE SDR 17 WITH BUTT FUSED JOINTS.
6" PVC SHALL BE SDR 21 WITH PUSH-ON JOINTS.
12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINTS.

ABBREVIATIONS

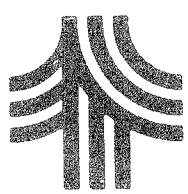
A.C.C.M.P.	ASPHALT COATED C.M.P.	CONC	CONCRETE	PFS	FEET PER SECOND	NO.	NUMBER
A.C.P.	ASBESTOS CEMENT PIPE	CONST	CONSTRUCTION	PT OR	FEET	O.C.	ON CENTER
AC	ACRES	CONTR	CONTRACTOR	FTG	FOOTING	O.D.	OUTSIDE DIAMETER
AGG	AGGREGATE	CTR	CENTER	GA	GAUGE	P.C.	POINT OF CURVE
ALUM	ALUMINUM	CY	CUBIC YARD	GAL	GALLON	P.I.	POINT OF INTERSECTION
APPD	APPROVED	D	DEGREE OF CURVE (ARC DEF.)	GALV	GALVANIZED	P.T.	POINT OF TANGENT
APPROX	APPROXIMATE	DBL	DOUBLE	GPD	GALLONS PER DAY	PERF	PERFORATED
ASB	ASBESTOS	DEG OR	DEGREE	GPM	GALLONS PER MINUTE	PSI	POUNDS PER SQUARE INCH
ASPH	ASPHALT	DEPT	DEPARTMENT	HDPE	HIGH DENSITY POLYETHYLENE	PVC	POLYVINYL CHLORIDE
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	DI	DUCTILE IRON	HP	HORSEPOWER	PVHT	PAVEMENT
AUTO	AUTOMATIC	DIA OR	DIAMETER	HYD	HYDRANT	QTY	QUANTITY
AUX	AUXILIARY	DTM	DIMENSION	I.D.	INSIDE DIAMETER	R.O.W.	RIGHT OF WAY
AVE	AVENUE	DIST	DISTANCE	IN OR "	INCHES	RAD	RADIUS
AVG	AVERAGE	DN	DOWN	INV	INVERT	REQD	REQUIRED
AZ	AZIMUTH	DR	DRAIN	INV. EL.	INVERT ELEVATION	RT	RIGHT
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	DRG	DRAWING	LB	POUND	ROUTE	ROUTE
B.M.	BENCH MARK	EA	EACH	LIN. FT.	LINEAR FEET	S	SLOPE
BIT	BITUMINOUS	EG	EXISTING GROUND	LOC	LOCATION	SCH	SCHEDULES
BLDG	BUILDING	ELEC	ELECTRIC	LT	LEFT	SF	SQUARE FEET
BOT	BOTTOM	ELL	ELBOW	N.H.	NAMHOLE	SHT	SHEET
BRG	BEARING	EQUIP	EQUIPMENT	M.J.	MECHANICAL JOINT	STA	STATION
C.B.	CATCH BASIN	EST	ESTIMATED	MATL	MATERIAL	SY	SQUARE YARD
C.H.P.	CORRUGATED METAL PIPE	EXC	EXCAVATE	MAX.	MAXIMUM	TAN	TANGENT
C.O.	CLEAN OUT	EXIST	EXISTING	MFR	MANUFACTURE	TDB	TOTAL DYNAMIC HEAD
CEM. LIN.	CEMENT LINED	F.G.	FINISH GRADE	MIN.	MINIMUM	TEMP	TEMPORARY
CEW	CENTRAL ANGLE OF CURVE	FBRGL	FIBERGLASS	MISC	MISCELLANEOUS	TYP	TYPICAL
CF	CUBIC FEET	FDM	FOUNDATION	MON	MONUMENT	V	VOLTS
CFS	CUBIC FEET PER SECOND	FLEX	FLEXIBLE	N.I.T.C.	NOT IN THIS CONTRACT	N/H	NORTH
CI	CAST IRON	FLG	FLANGE	N.T.S.	NOT TO SCALE	H/O	HITHOUT
CL	CLASS	FLR	FLOOR	N/F	NOT OR FORMERLY	YD	YARD

VIEW MARKERS & IDENTIFICATION



SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

JOB NO. 8804



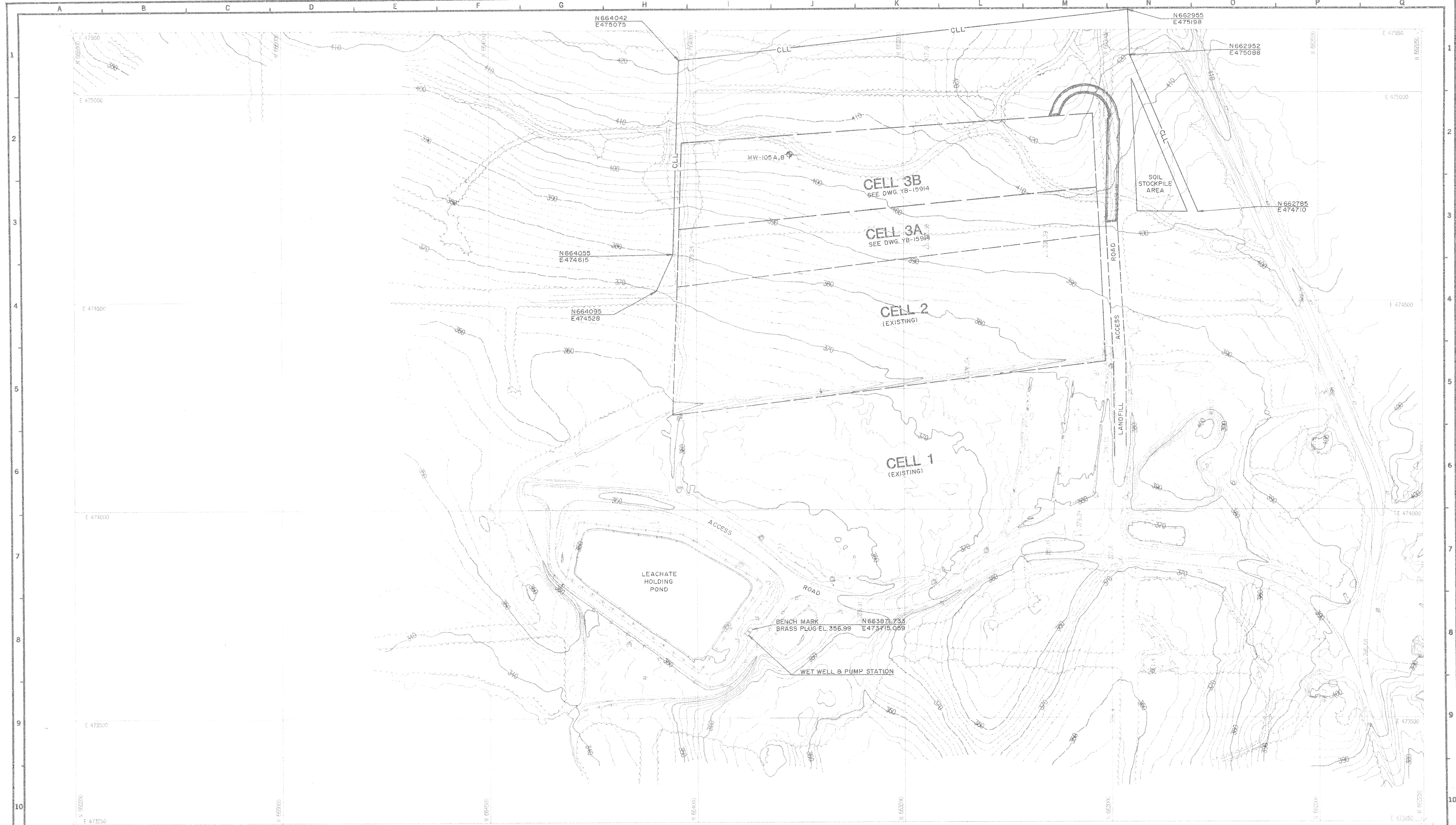
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SYMBOLS & ABBREVIATIONS

JOB NO. 2-8627
ENG. REG. NO. 2-8627
FILE NO. 2-092-4703, 7082

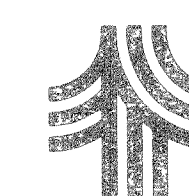
YB-15912

[illegible]

SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

JOB NO. 8804

DRN	P.A.F.	3/88
CDD	Long Code	3/88
CDD		
CONR		
APPVD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTLT.O.	C - CONST	
SCALE 1" = 100'		



Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE LOCATION PLAN

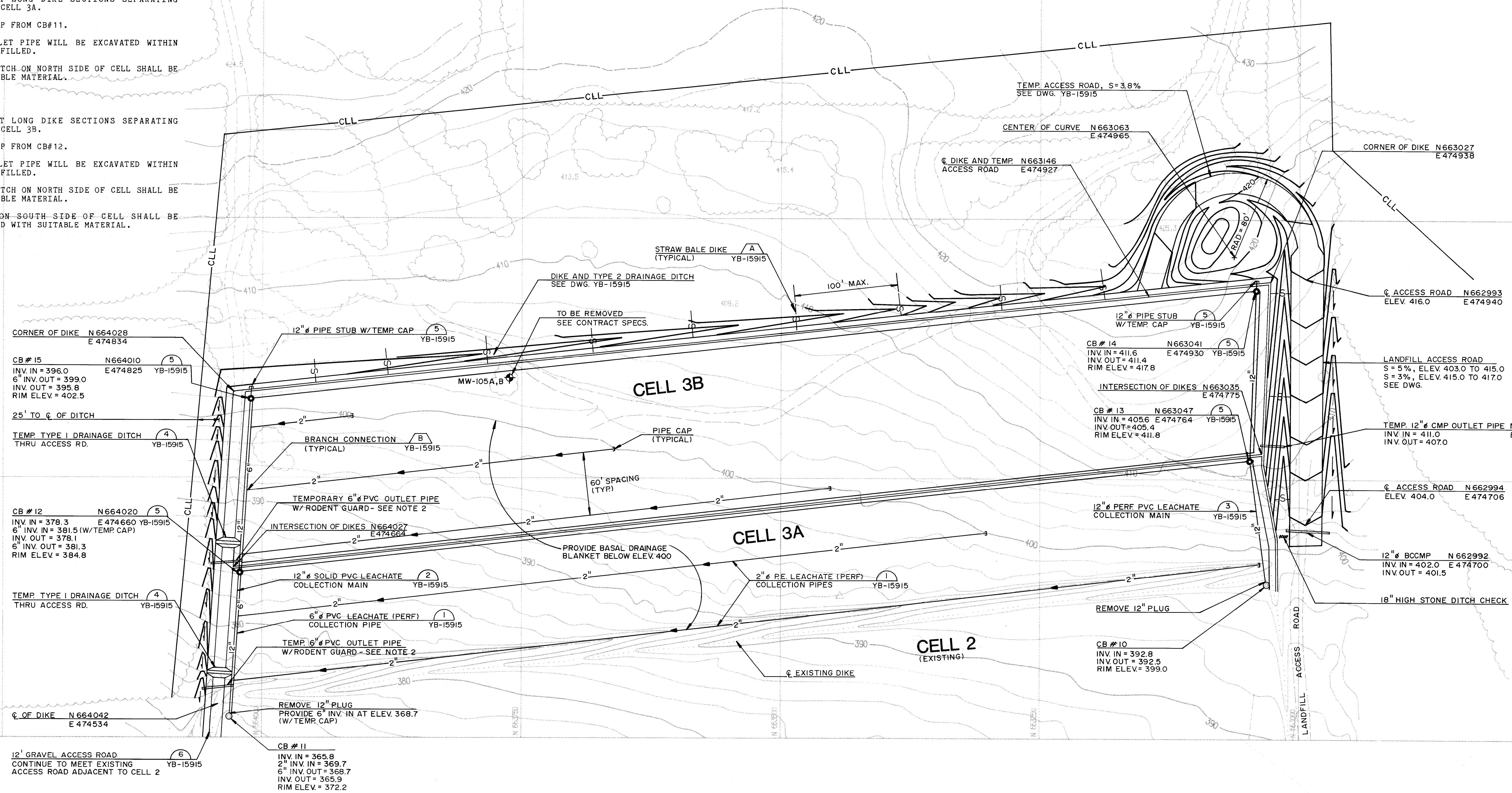
JOB NO. _____
ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703 7082

1. RODENT GUARD SHALL CONSIST OF 1/2" MESH GALVANIZED SCREEN CLAMPED TO OUTLET OF PIPE.
2. 6-INCH PIPE CAPS SHALL BE FERNCO QC106 PIPE CAPS OR EQUIVALENT.

CELL 3A

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#10 AND CB#11 FROM CELL 3A.
2. REMOVE 6-INCH PIPE CAP FROM CB#11.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.

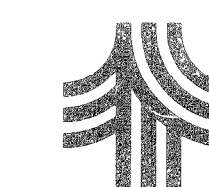
1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#12 AND CB#13 FROM CELL 3B.
2. REMOVE 6-INCH PIPE CAP FROM CB#12.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
5. TEMPORARY CULVERT ON SOUTH SIDE OF CELL SHALL BE REMOVED AND BACKFILLED WITH SUITABLE MATERIAL.

[illegible]

SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

JOB NO. 8804

DRN	PAF.	3/88
CKD	Hy Cote	3/88
CKD		
CORR.		
APPVD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MYLT.O.	C - CONST	
SCALE 1" = 50'		



Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE DEVELOPMENT PLAN

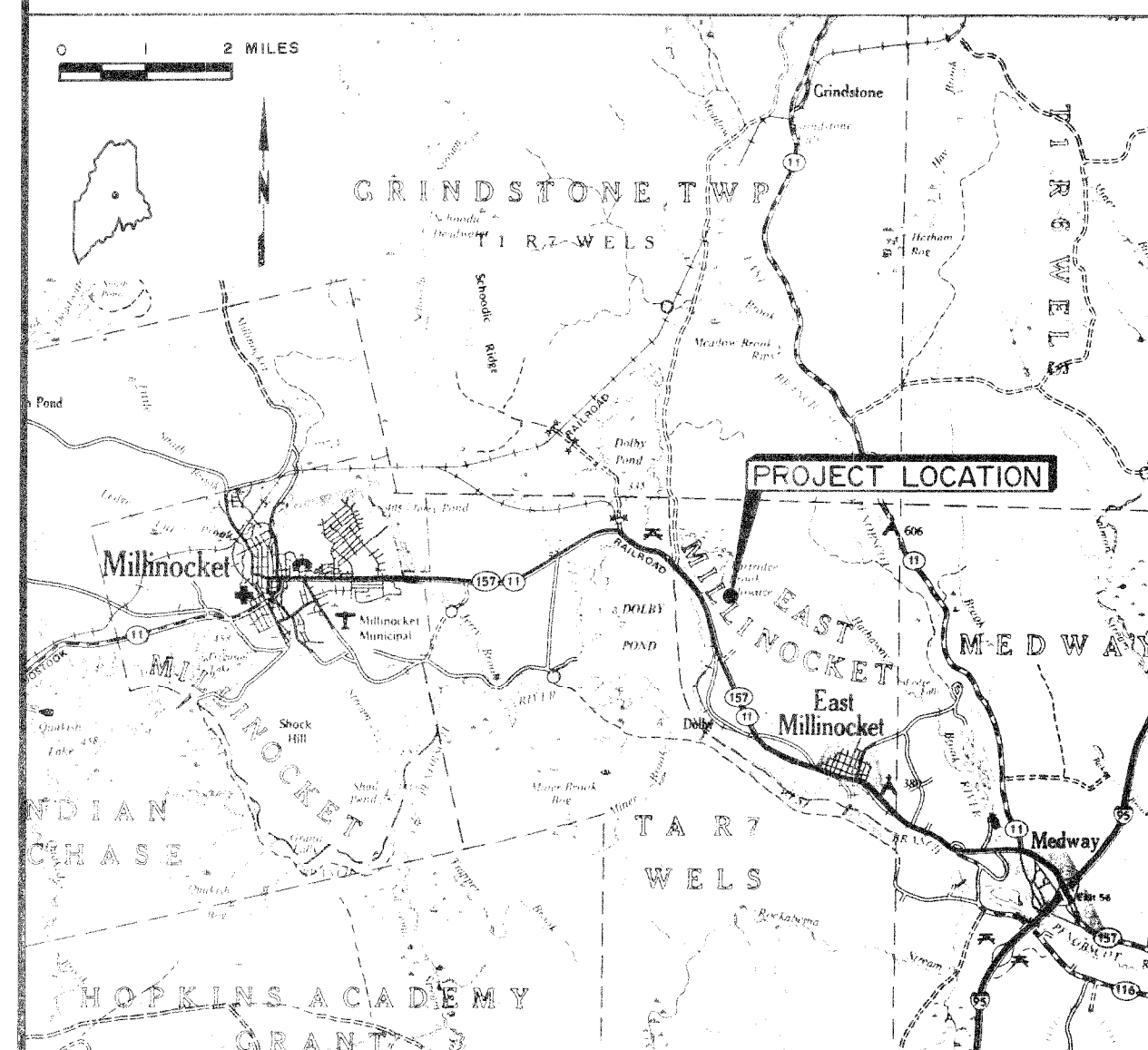
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ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703, 7082

YB-15914

YB-15915

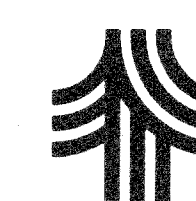
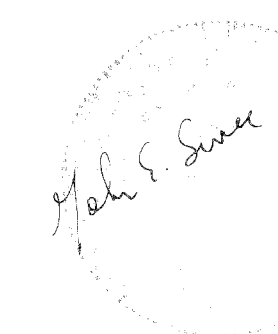
GREAT NORTHERN PAPER CO. MILLINOCKET, MAINE

DOLBY III LANDFILL CELL 4 CONSTRUCTION



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

1989



Great Northern Paper
a company of
Great Northern Nekeosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 4
COVER SHEET

JOB NO. 94528
ENG. REG. NO.
FILE NO. 2-092-4703, 7082

YB-19000

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
NORTH ARROW (TRUE)	NORTH ARROW (MAGNETIC)	NORTH ARROW (PLAN NORTH)	CONTOUR LINES	SPOT ELEVATION (GRADE)	EXISTING GROUND (PROFILES & SECTIONS)
SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT	CONSTRUCTION BASELINE	PROPERTY OR DEED LINE (NOT SURVEYED)	PROPERTY LINE W/BEARING & DISTANCE	ROADS, EASEMENTS OR RIGHT OF WAY LINE	BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)
SURVEY MONUMENT	SURVEY IRON (FOUND)	DRILL HOLE, PK OR STAKE	WOODS OR BRUSH LINE	INDIVIDUAL TREE (DECIDUOUS)	INDIVIDUAL TREE (CONIFEROUS)
TREE, TO BE REMOVED	MARSH AREA	STONE WALL	DRAINAGE COURSES W/DIRECTION & DITCH	EDGE OF WATER	WATER ELEVATION (GROUND OR SURFACE)
ROCK OUTCROP OR LEDGE	FENCE LINE (WOOD)	FENCE LINE (WIRE)	RETAINING WALL (TYPE)	GUARD RAIL	BUILDING & STRUCTURES
STEPS W/TYPE (WOOD/CONCRETE)	SLOPE RATIO (HORIZONTAL TO VERTICAL)	SLOPES (W/SLOPE RATIO)	EDGE OF TRAVELED WAY (TYPE)	CONSTRUCTION LIMIT LINE	BITUMINOUS PAVEMENT
GRAVEL ROAD	CONCRETE	TEST BORING, MONITORING WELL OR PROBE & NUMBER	TEST PIT & NUMBER	CLEAN OUT STRUCTURES	MANHOLE
WATER VALVE	HYDRANT	TELEPHONE OR POWER POLE	CATCH BASIN	UNDERGROUND GAS MAIN & SIZE	UNDERGROUND TELEPHONE CABLE/CONDUIT
UNDERGROUND ELECTRIC CABLE/CONDUIT	OVERHEAD ELECTRICAL LINE	SANITARY SEWER, SIZE & TYPE	FORCE MAIN, SIZE & TYPE	WATER MAIN, SIZE & TYPE	STORM DRAIN, SIZE & TYPE
UNDERDRAIN, SIZE & TYPE	CULVERT, SIZE & TYPE	RAILROAD	SILTATION FENCE		

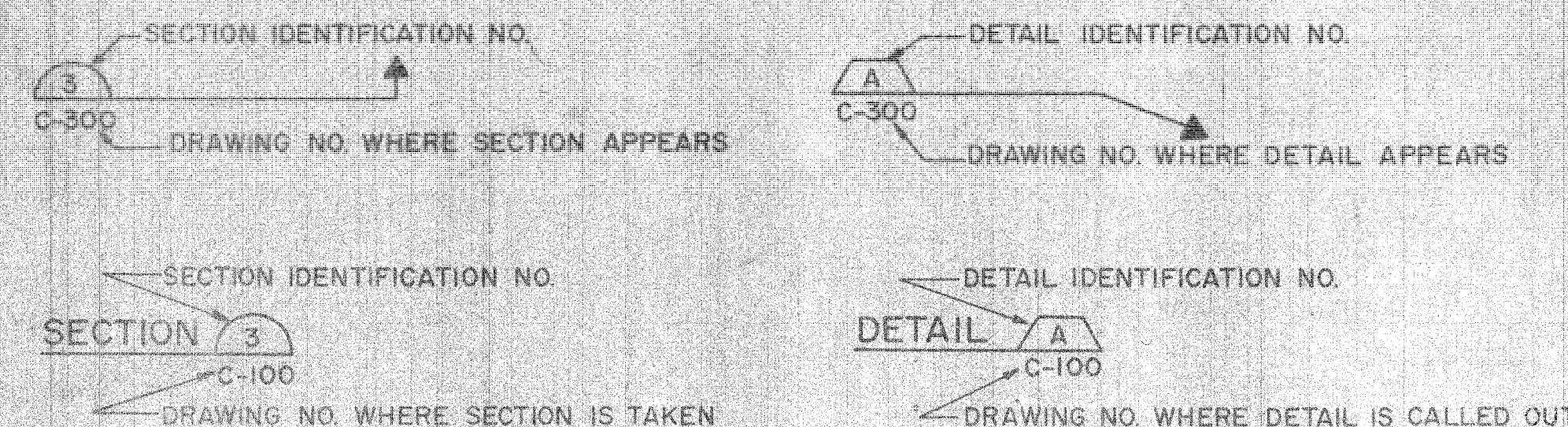
PIPE SCHEDULE

12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINTS.

ABBREVIATIONS

A.C.H.F.	ASPHALT COATED C.H.F.	CONC.	CONCRETE	FEET	FEET PER SECOND	NO.	NUMBER
A.C.P.	ASBESTOS CEMENT PIPE	CONCT.	CONSTRUCTION	FT. OR	FEET	O.C.	ON CENTER
AG	AGGREGATE	CONTR.	CONTRACTOR	FTO	FOOTING	O.D.	OUTSIDE DIAMETER
AGG.	AGGREGATE	CTR	CENTER	GA	GAGE	P.C.	POINT OF CURVE
ALON	ALUMINUM	QY	CUBIC YARD	GAL	GALLON	P.I.	POINT OF INTERSECTION
APD	APPROVED	D	DEGREE OF CURVE (AND DEF.)	GALV.	GALVANIZED	P.T.	POINT OF TANGENT
APPROX.	APPROXIMATE	D.O.B.	DITCH	SPD	SQUARE PER DAY	PERF.	PERFORATED
ASB	ASBESTOS	D.O.R.	DRAIN	SPM	SQUARE PER MINUTE	PFT	POLYETHYLENE FIBER TUBING
ASPH	ASPHALT	DEPT	DEPARTMENT	MSH	MILS	PVC	POLYVINYL CHLORIDE
AT2 C.H.F.	ALUMINUM TYPE 2 C.H.F.	DI	DISTANCE	HP	HORSEPOWER	PWT	PAVEMENT
AUTO	AUTOMATIC	DIA OR	DIAMETER	HVD	HYDRAULIC	QTY	QUANTITY
AW	AUXILIARY	DIW	DISTANCE	T.D.	INSIDE DIAMETER	R.O.W.	RIGHT OF WAY
AVE	AVENUE	DIST	DISTANCE	IN OR	INCHES	RAD	RADIUS
AVG	AVERAGE	DN	DOWN	INV	INVERT	REQD	REQUIRED
AZ	AZIMUTH	DR	DRAIN	INV. EL.	INVERT ELEVATION	RT	RIGHT
B.C.C.H.F.	BITUMINOUS COATED C.H.F.	DWG	DRAWING	LB	POUND	RTE	ROUTE
B.M.	BENCH MARK	EA	EXISTING GROUND	LB. FT.	POUND FEET	SLOPE	SLOPE
BIT	BITUMINOUS	EG	EXISTING GROUND	LOC	LOCATION	SQ	SQUARE
BLDG	BUILDING	ELCD	ELECTRIC	LT	LEFT	SQ. FT.	SQUARE FEET
BOT	BOTTOM	ELL	ELEVATION	N.H.	MANHOLE	SRT	STREET
BRG	BRASS	ROD	ROD	M.J.	MECHANICAL JOINT	STA	STATION
C.B.	CATCH BASIN	EST	ESTIMATED	MATL	MATERIAL	SY	SQUARE YARD
C.H.F.	CORROGATED METAL PIPE	EXC	EXCAVATE	MAX	MAXIMUM	TAN	TANGENT
C.O.	CLEAN OUT	EXIST	EXISTING	MFR	MANUFACTURE	TDB	TOTAL DYNAMIC HEAD
CEN. LTR.	CENTRAL LINE	F.G.	FIRE GRADE	MIN	MINIMUM	TEMP	TEMPORARY
CEN	CENTRAL ANGLE OF CURVE	FRGL	FIBERGLASS	MISC	MISCELLANEOUS	TYP	TYPICAL
CF	CUBIC FEET	FLX	FLEXIBLE	MON	MONUMENT	V	VOLTS
CFD	CUBIC FEET PER SECOND	FLG	FLANGE	N.T.S.	NOT TO SCALE	W	WATTS
CI	CAST IRON	FLR	FLOOR	N.T.S.	NOT TO SCALE	W/O	WITHOUT
CL	CLASS			N/E	NORTH OR FORMERLY	YD	YARD

VIEW MARKERS & IDENTIFICATION



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 8932

Great Northern Paper
a company of
Great Northern Nekeusa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 4
SYMBOLS & ABBREVIATIONS

JOB NO. 94528
ENG. RES. NO.
FILE NO. 2-092-4703-7082

YB-19001



YB-15914 DOLBY III LANDFILL, CELLS 3A AND 3B, SITE DEVELOPMENT PLAN RECORD DRAWING		REFERENCE DRAWING TITLE CODE NO. DATE		REVISION BY CHKD APPR'D JOB NO.		JOB NO. 8932		SEVEE & MAHER ENGINEERS, INC. CUMBERLAND, MAINE		CORR. PAF 8/89 CHKD <i>PAF</i> 8/89 CHKD <i>BLK</i> 11/1/89 CORR. APP'D ISSUE CODE P. PRELIM B. BIDS M. MTL. O. C. CONST. SCALE 1" = 50'		Great Northern Paper a company of Great Northern Nekeosa Corporation		CENTRAL ENGINEERING DEPARTMENT EAST MILLINOCKET, MAINE DOLBY III LANDFILL CELL 4 SITE DEVELOPMENT PLAN JOB NO. 24588 FILE NO. 2-082431-1082 YB-15914	
		RECORD DRAWING SOIL SAMPLE POINTS ADDED CATCH BASIN MODIFICATIONS & RE. SEAL MANHOLE ELEVATIONS RELEASED FOR CONSTRUCTION		C 2-9-90 B 2-9-90 A 1-4-90 C 10/89		SOIL SAMPLE POINTS ADDED CATCH BASIN MODIFICATIONS & RE. SEAL MANHOLE ELEVATIONS RELEASED FOR CONSTRUCTION		<i>APC</i> <i>APC</i> <i>APC</i> <i>APC</i> <i>APC</i>		8/89 8/89 11/1/89 		 		 	



E.G.

DIKE

2' - 6"

COARSE GRAVEL
DEPTH VARIES

1" O" OVERLAP

$\frac{3}{4}$ " STONE

G₁

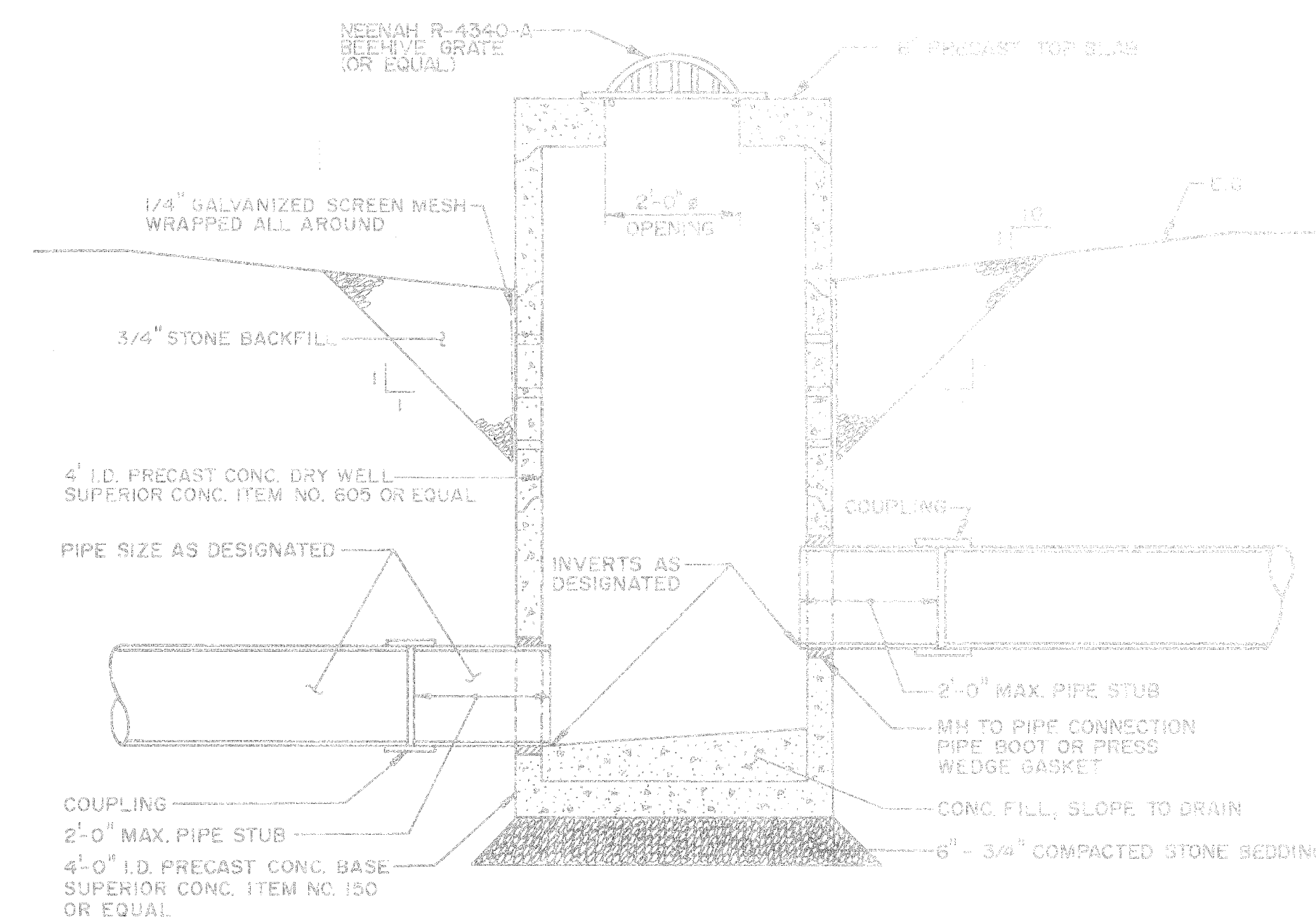
2' - 0"

60°

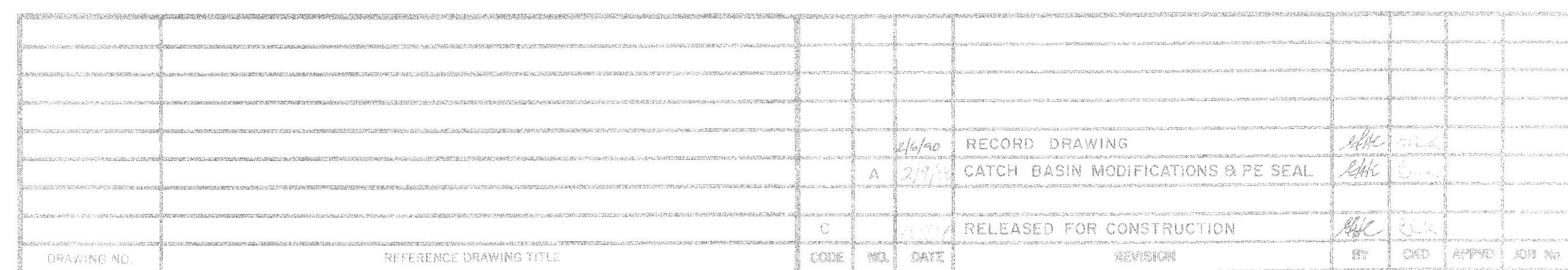
3"

6 3/8" Ø PERFORATIONS
2 ROWS SPACED 3" O.C. MAX.,
HOLES FACE DOWN

PERF. LEACHATE COLLECTION MAIN (1)



CATCH BASIN MODIFICATION (6)

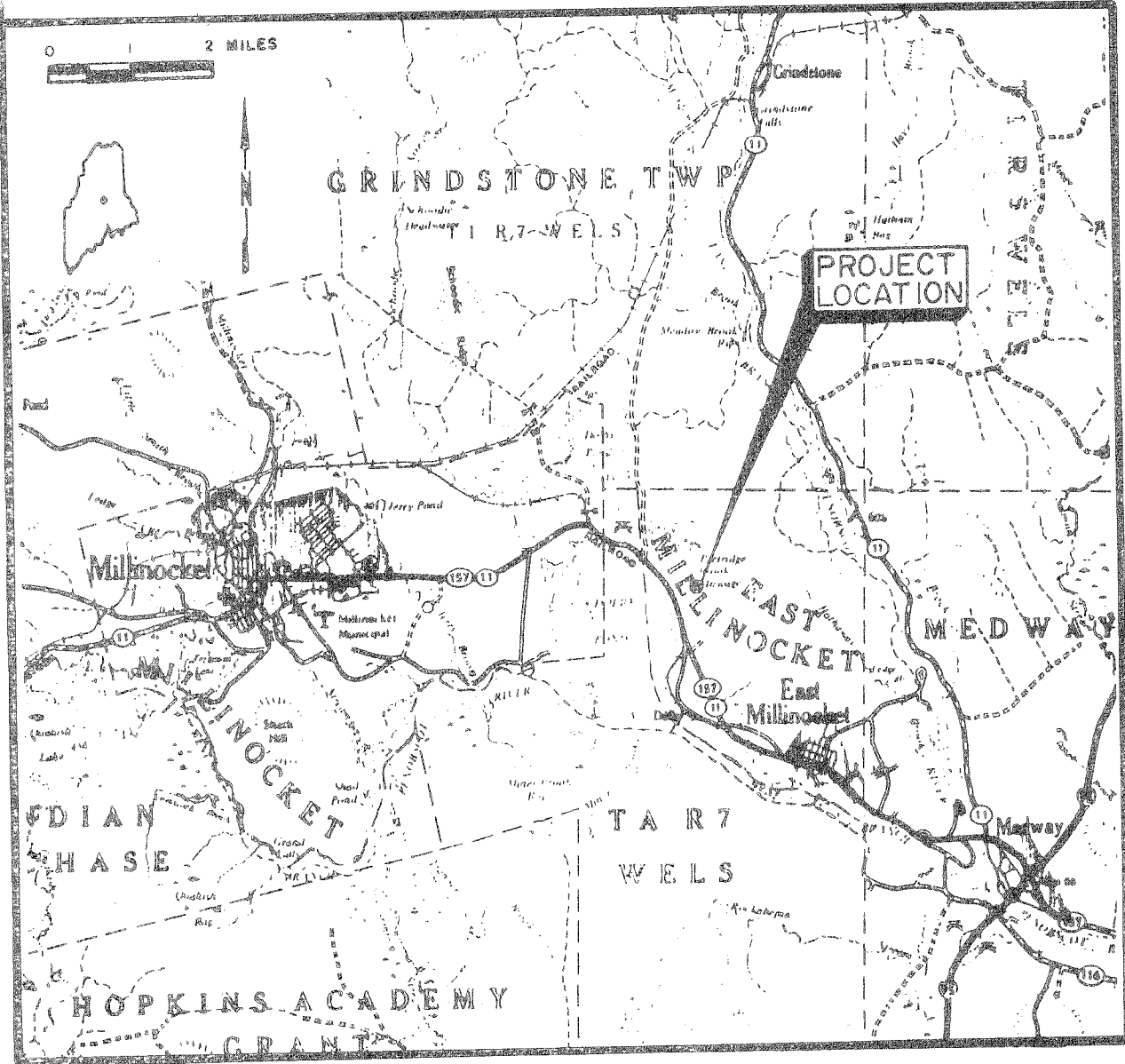


DATE	PAF	B/89
CRU	KE	B/89
COO	PK	1/1
COOR		
APPRO		
ISSUE CODE		
P-PRELIM	B-BIDS	
M-MILTD	C-CONST	
SCALE AS SHOWN		

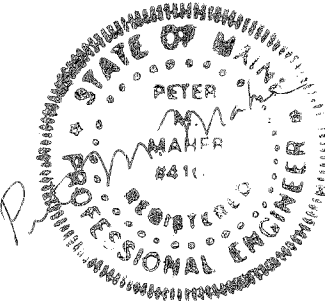


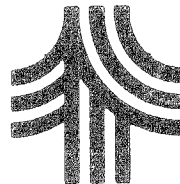
GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
MILLINOCKET, MAINE
DOLBY III LANDFILL
REMEDIAL ACTIONS CELLS 1 AND 2

SHT NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-19176
2	SYMBOLS & ABBREVIATIONS	YB-19177
3	SITE LOCATION PLAN	YB-19178
4	EXISTING TOPOGRAPHY PLAN - CELL 1	YB-19179
5	EXISTING TOPOGRAPHY PLAN - CELL 2	YB-19180
6	SECTIONS & DETAILS	YB-19181



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE
1990





Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
COVER SHEET

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4307, 7082

YB-19176

EXISTING		PROPOSED		EXISTING		PROPOSED	
	NORTH ARROW (TRUE)		STONE WALL		TP-103		TP-103 TEST PIT & NUMBER
	NORTH ARROW (MAGNETIC)		DRAINAGE COURSES W/DIRECTION & DITCH				CLEAN OUT STRUCTURES
	NORTH ARROW (PLAN NORTH)		EDGE OF WATER				MANHOLE
	CONTOUR LINES		WATER ELEVATION (GROUND OR SURFACE)				WATER VALVE
	SPOT ELEVATION (GRADE)		ROCK OUTCROP OR LEDGE				HYDRANT
	EXISTING GROUND (PROFILES & SECTIONS)		FENCE LINE (WOOD)				TELEPHONE OR POWER POLE
	SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT		FENCE LINE (WIRE)				CATCH BASIN
	CONSTRUCTION BASELINE		RETAINING WALL (TYPE)		8"		UNDERGROUND GAS MAIN & SIZE
	PROPERTY OR DEED LINE (NOT SURVEYED)		GUARD RAIL				UNDERGROUND TELEPHONE CABLE / CONDUIT
	PROPERTY LINE W/BEARING & DISTANCE		BUILDING & STRUCTURES				UNDERGROUND ELECTRIC CABLE / CONDUIT
	ROADS, EASEMENTS OR RIGHT OF WAY LINE		STEPS W/TYPE (WOOD / CONCRETE)		OE		OVERHEAD ELECTRICAL LINE
	BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)		SLOPE RATIO (HORIZONTAL TO VERTICAL)		12" ACP		SANITARY SEWER, SIZE & TYPE
	SURVEY MONUMENT		SLOPES (W/SLOPE RATIO)		8" PVC		FORCE MAIN, SIZE & TYPE
	SURVEY IRON (FOUND)		EDGE OF TRAVELED WAY (TYPE)		8" DI		WATER MAIN, SIZE & TYPE
	DRILL HOLE, PK OR STAKE		CUT OR FILL LINE		12" RCP		STORM DRAIN, SIZE & TYPE
	WOODS OR BRUSH LINE		CONSTRUCTION LIMIT LINE		8" PVC		UNDERDRAIN, SIZE & TYPE
	INDIVIDUAL TREE (DECIDUOUS)		BITUMINOUS PAVEMENT		12" BCCMP		CULVERT, SIZE & TYPE
	INDIVIDUAL TREE (CONIFEROUS)		GRAVEL ROAD				RAILROAD
	TREE, TO BE REMOVED		CONCRETE		S-S		SILTATION FENCE
	MARSH AREA		TEST BORING, MONITORING WELL OR PROBE & NUMBER				

ABBREVIATIONS

MATERIAL SPECIFICATIONS

SAND - MDOT SPECIFICATION 703.06b, TYPE F (AGGREGATE FOR SAND LEVELING) PERMEABILITY $\geq 1 \times 10^{-3}$ cm/sec

COVER SOIL - WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE. NO STONES GREATER THAN 4 INCHES IN DIAMETER (COMPACTED 85 PERCENT STANDARD PROCTOR)

TOP COVER SOIL - A MIXTURE OF WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE AND SECONDARY SLUDGE. NO STONES GREATER THAN 3 INCHES IN DIAMETER

SLUDGE - HOMOGENEOUS SECONDARY SLUDGE AS RECEIVED FROM MILL

MATERIAL TESTING SCHEDULE

BORROW SOURCE	TEST	FREQUENCY
COVER SOIL	GRAIN SIZE	4 TEST
	SAND	2 TEST
	SAND PERMEABILITY	2 TEST
ON-SITE		
COVER SOIL	GRAIN SIZE	1/2000 CY
	SAND	4 TEST
	SAND PERMEABILITY	1/5000 CY

TEST METHODS

GRAIN SIZE	ASTM D422
PERMEABILITY	ASTM D2434

VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION

3
C-300

SECTION TITLE & NO.

ACCESS ROAD 3

DRAWING WHERE SECTION OR DETAIL APPEARS

DRAWING WHERE SECTION IS TAKEN

DETAIL IDENTIFICATION & LETTER

MANHOLE A

DETAIL TITLE & LETTER

MANHOLE A

DRAWING WHERE DETAIL IS CALLED OUT

VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION

DETAIL IDENTIFICATION & LETTER

MANHOLE

SECTION TITLE & NO.

DETAIL TITLE & LETTER

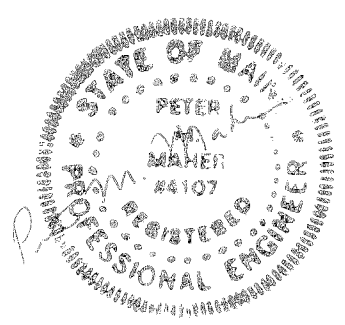
ACCESS ROAD

MANHOLE

DRAWING WHERE SECTION OR DETAIL APPEARS

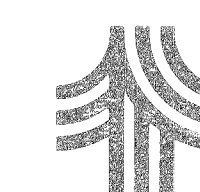
DRAWING WHERE DETAIL IS CALLED OUT

C.C.M.P.	ASPHALT COATED C.M.P.	C.M.P.	CORRUGATED METAL PIPE	DR	DRAIN	GPD	GALLONS PER DAY	MON	MONUMENT	SF	SQUARE FEET
A.C.P.	ASBESTOS CEMENT PIPE	C.O.	CLEAN OUT	DWG	DRAWING	GPM	GALLONS PER MINUTE	N.I.T.C.	NOT IN THIS CONTRACT	SHT	SHEET
AC	ACRE	CEW. LIN.	CEMENT LINED	EA	EACH	HDPE	HIGH DENSITY POLYETHYLENE	N.T.S.	NOT TO SCALE	STA	STATION
AGG	AGGREGATE	CEN	CENTRAL ANGLE OF CURVE	EG	EXISTING GROUND OR GRADE	HP	HORSEPOWER	N/F	NOW OR FORMERLY	SY	SQUARE YARD
ALUM	ALUMINUM	CF	CUBIC FEET	ELEC	ELECTRIC	HYD	HYDRANT	NO. OR #	NUMBER	TAN	TANGENT
APPD	APPROVED	CFS	CUBIC FEET PER SECOND	ELL	ELBOW	I.D.	INSIDE DIAMETER	O.C.	ON CENTER	TOH	TOTAL DYNAMIC HEAD
ASB	ASBESTOS	CI	CAST IRON	EQUIP	EQUIPMENT	IN OR *	INCHES	O.D.	OUTSIDE DIAMETER	TEMP	TEMPORARY
ASPH	ASPHALT	CL	CLASS	EST	ESTIMATED	INV	INVERT	P.C.	POINT OF CURVE	TYP	TYPICAL
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	CONC	CONCRETE	EXC	EXCAVATE	INV. EL.	INVERT ELEVATION	P.I.	POINT OF INTERSECTION	VOLTS	VOLTS
AUTO	AUTOMATIC	CONSTR	CONSTRUCTION	EXIST	EXISTING	LB	POUND	P.T.	POINT OF TANGENT	W/	WITHOUT
AUX	AUXILIARY	CTR	CENTER	F.G.	FINISH GRADE	LC	LEACHATE COLLECTION	PERF	PERFORATED	W/O	WITHOUT
AVE	AVENUE	CY	CUBIC YARD	FBGRL	FIBERGLASS	LD	LEAK DETECTION	PSI	POUNDS PER SQUARE INCH	YO	YARD
AVG	AVERAGE	D	DEGREE OF CURVE (ARC DEF.)	FDN	FOUNDATION	LIN. FT.	LINEAR FEET	PVC	POLYVINYL CHLORIDE		
AZ	AZIMUTH	DBL	DOUBLE	FLEX	FLEXIBLE	LOC	LOCATION	PVMT	PAVEMENT		
B.C.C.W.P.	BITUMINOUS COATED C.M.P.	DEG OR °	DEGREE	FLG	FLANGE	LT	LEFT	QTY	QUANTITY		
B.M.	BENCH MARK	DEPT	DEPTH	FLR	FLOOR	M.H.	MANHOLE	R.O.W.	RIGHT OF WAY		
BIT	BITUMINOUS	DI	DUCTILE IRON	FPS	FEET PER SECOND	M.J.	MECHANICAL JOINT	RAD	RADIUS		
BLDG	BUILDING	DIA OR Ø	DIAMETER	FT OR '	FEET	MATL	MATERIAL	REQD	REQUIRED		
BOT	BOTTOM	DIM	DIMENSION	FTG	FOOTING	GA	GAUGE	RT	RIGHT		
BRG	BEARING	DIST	DISTANCE	GAL	GALLON	MFR	MANUFACTURE	RTE	ROUTE		
C.B.	CATCH BASIN	DN	DOWN	GALV	GALVANIZED	MIN.	MINIMUM	S	SLOPE		



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DIRM	RLR	7/98
CRD	HHC	8/98
CRD		
CORR		
APPVD		
ISSUE CODE		
		B - BIDS
SCALE		



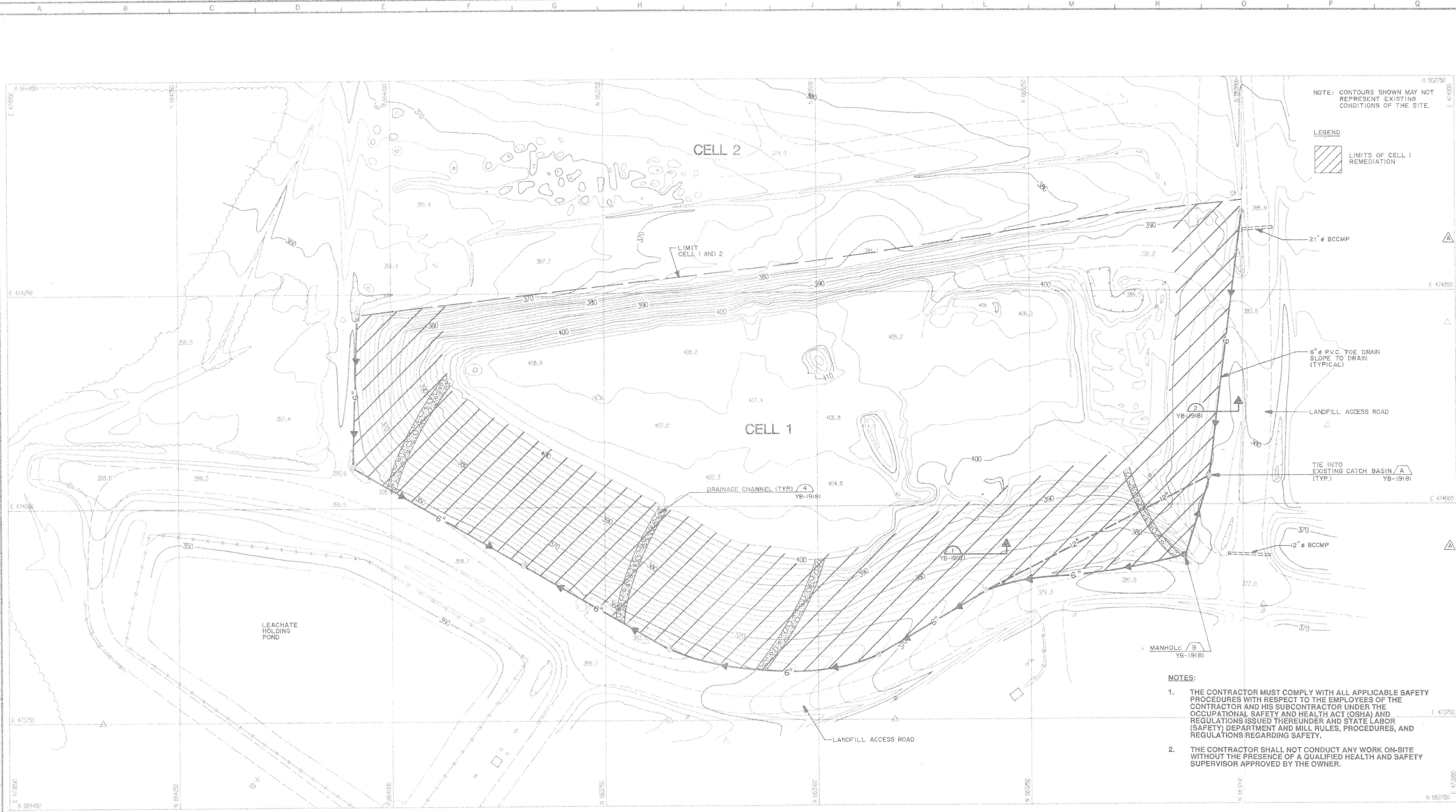
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SYMBOLS & ABBREVIATIONS

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

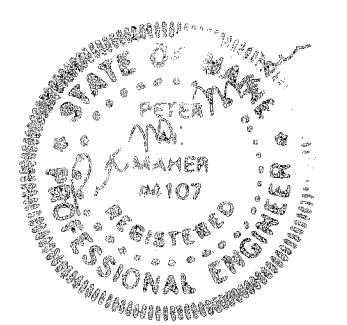
YB-19177



NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND
LIMITS OF CELL 1 REMEDIATION

- NOTES:
1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
 2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB No.
YB-15798	DOLBY III LANDFILL-CELL I, TOPOGRAPHIC SURVEY & DIGITIZ (9/4/87)	B	A	8/20/90	ISSUED FOR BID - ADDENDUM I	AMC			

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DRN	RLR	7/90
CKD	H. Gb	8/90
CKD		
CKD		
APPROV		
ISSUE CODE		
C-CONST		
SCALE 1" = 50'		



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CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS-CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 1

JOB NO.
ENG. REG. NO.
FILE NO. 2-092-4703, 7082

YB-19179

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL 1 REMEDIATION

CELL 2

LIMIT CELL 1 AND 2

CELL 1

DRAINAGE CHANNEL (TYP) YB-19181

21" Ø BCCMP

6" Ø P.V.C. TOE DRAIN SLOPE TO DRAIN (TYPICAL)

LANDFILL ACCESS ROAD

TIE INTO EXISTING CATCH BASIN (TYP.) YB-19181

12" Ø BCCMP

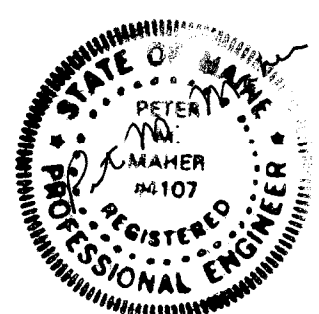
LEACHATE HOLDING POND

MANHOLE B YB-19181

LANDFILL ACCESS ROAD

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.



DRAWING NO.	DATE	BY	CHKD	APPD	JOB NO.
YB-15798	12/90	A			
DOLBY III LANDFILL-CELL I, TOPOGRAPHIC SURVEY & DIGITIZ.(9/4/87)	RECORD DRAWING				
ISSUED FOR BID - ADDENDUM I					

SEVEE & MAHER ENGINEERS, INC.

CUMBERLAND, MAINE

RLR 7/90
H. G. 8/90
ISSUE CODE
C-CONST
1" = 50'



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CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL


DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL I & 2
EXISTING TOPOGRAPHY PLAN - CELL I

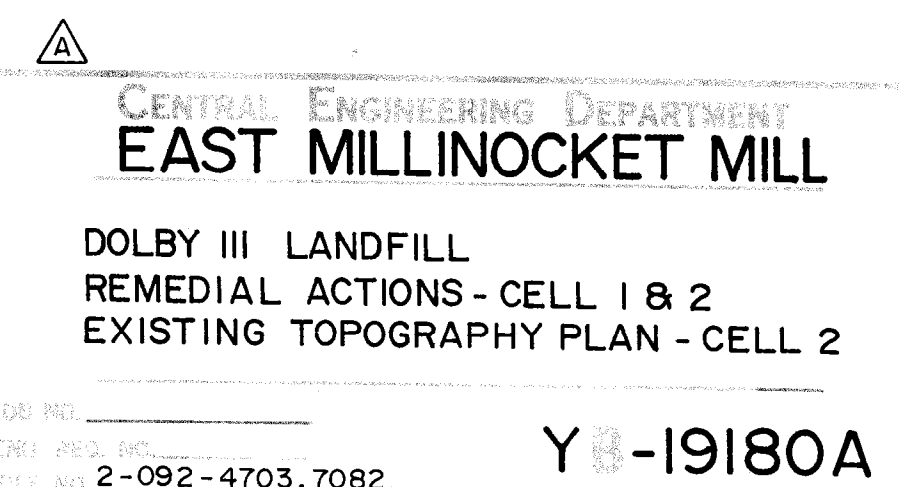
JOB NO.
2-092-4703, 7082

YB-19179A

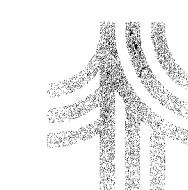
1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

LEGEND

 LIMITS OF CELL 2
REMEDIATION



DATE	RCE	7/90
NAME	A. Cote	8/90
PROJ		
COMP		
APPROV		
ISSUE CODE		
		D-CONST
SCALE 1"=50'		



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CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

Y0-19180A

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL 2 REMEDIATION

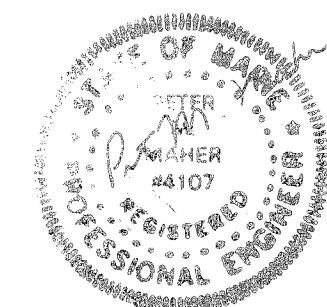
6" x 10' TOE DRAIN SLOPE TO DRAIN (TYPICAL)

TIE INTO EXISTING CATCH BASIN (TYP.)

12" x 6" RCCMP

LANDFILL ACCESS ROAD

TARGET AD
474091.30
662400.66
392.65
300' Offset



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPVD	JOB NO.
YB-15799	DOLBY III LANDFILL - CELL 2, TOPOGRAPHIC SURVEY & DIGITIZ (9/4/87)	B	A	8/20/90	ISSUED FOR BID - ADDENDUM 1				
				12/90	RECORD DRAWING				

SEVEE & MAHER ENGINEERS, INC.

CUMBERLAND, MAINE

DRN	RCE	7/90
CKD	M. G. G.	8/90
CHKD		
CORR		
APPVD		
ISSUE CODE		
C - CONST		
SCALE 1" = 50'		



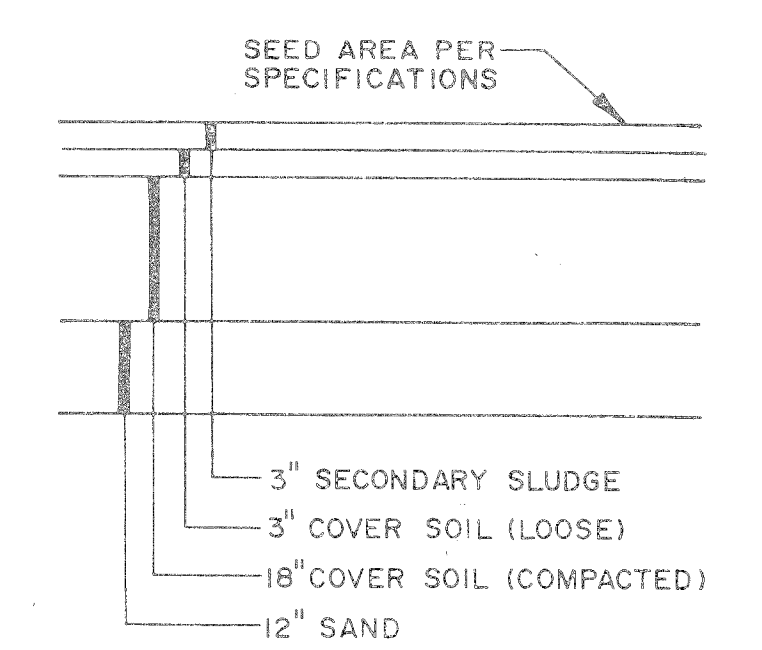
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CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

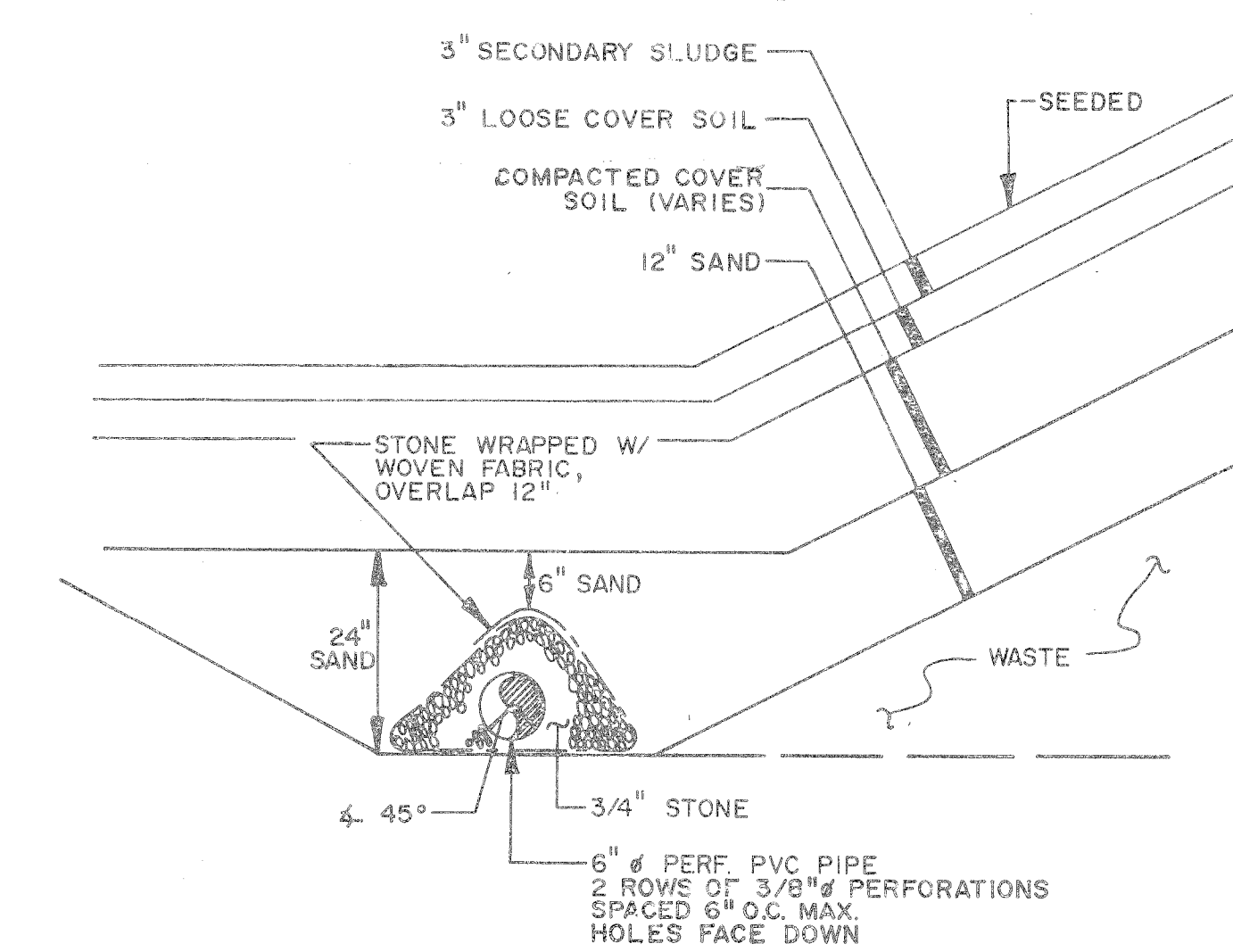
JOB NO.
ENG. REG. NO.
FILE NO. 2-092-4703,7082

YB-19180

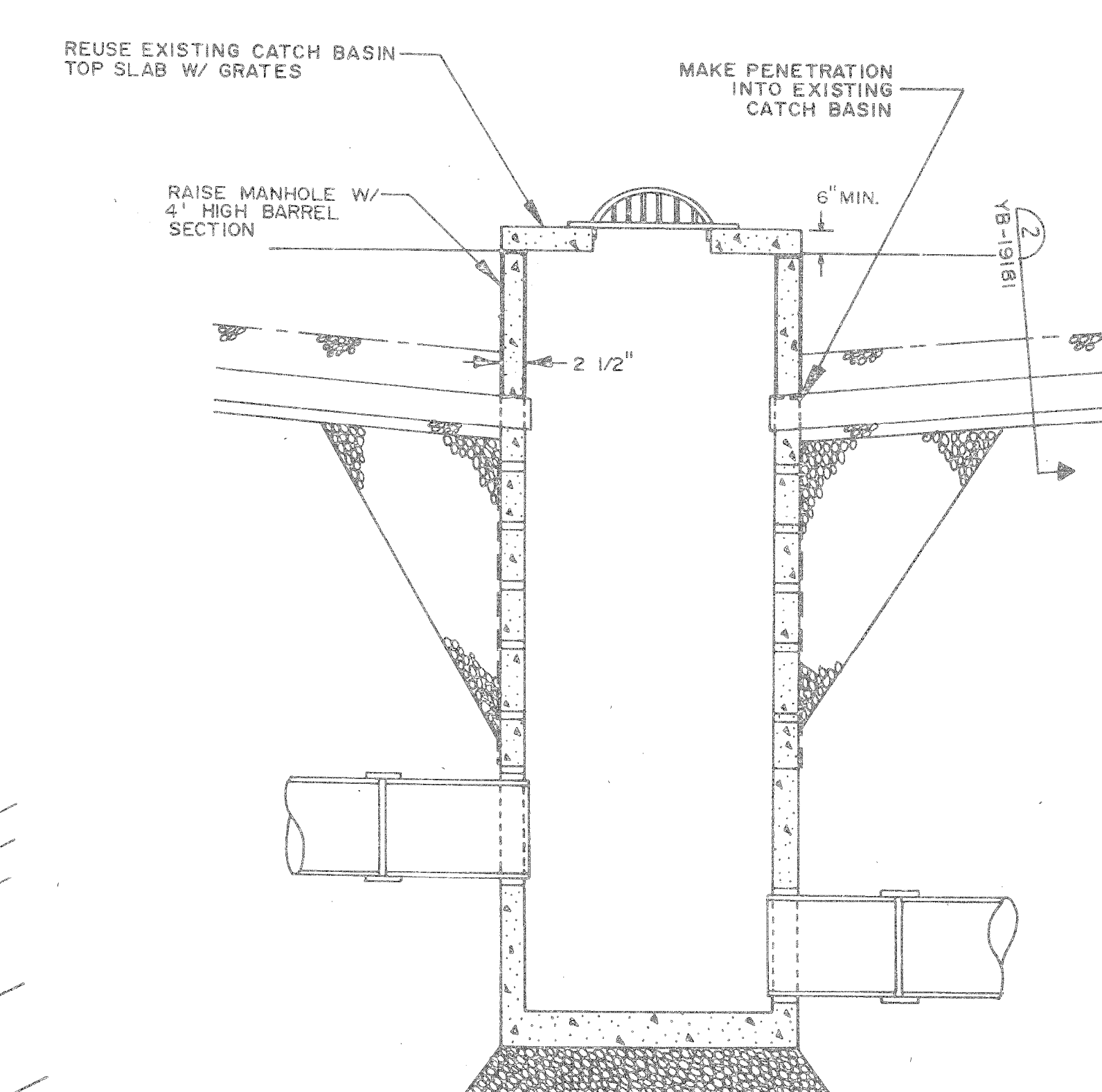


NOTE: SOUTHERN SIDE OF CELL 2 AND
ALONG ENTIRE FACE OF CELL 1
AS SHOWN ON EXISTING TOPOGRAPHY
PLANS.

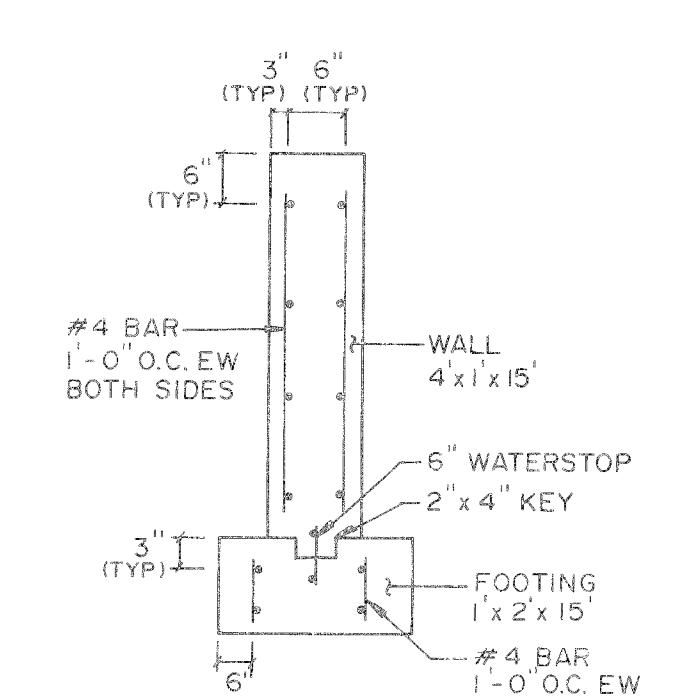
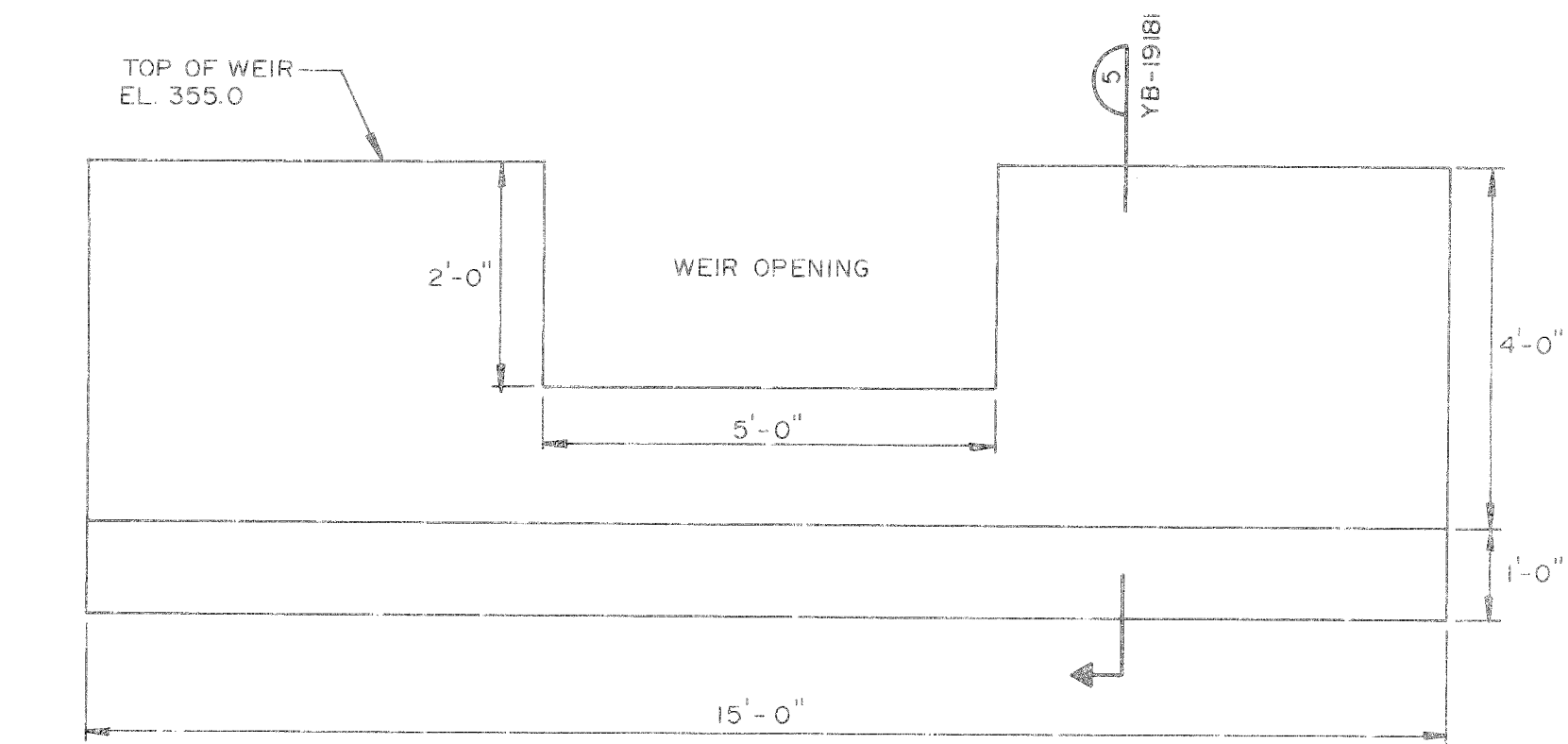
FINAL COVER SECTION 1
SCALE: 1" = 2'-0"



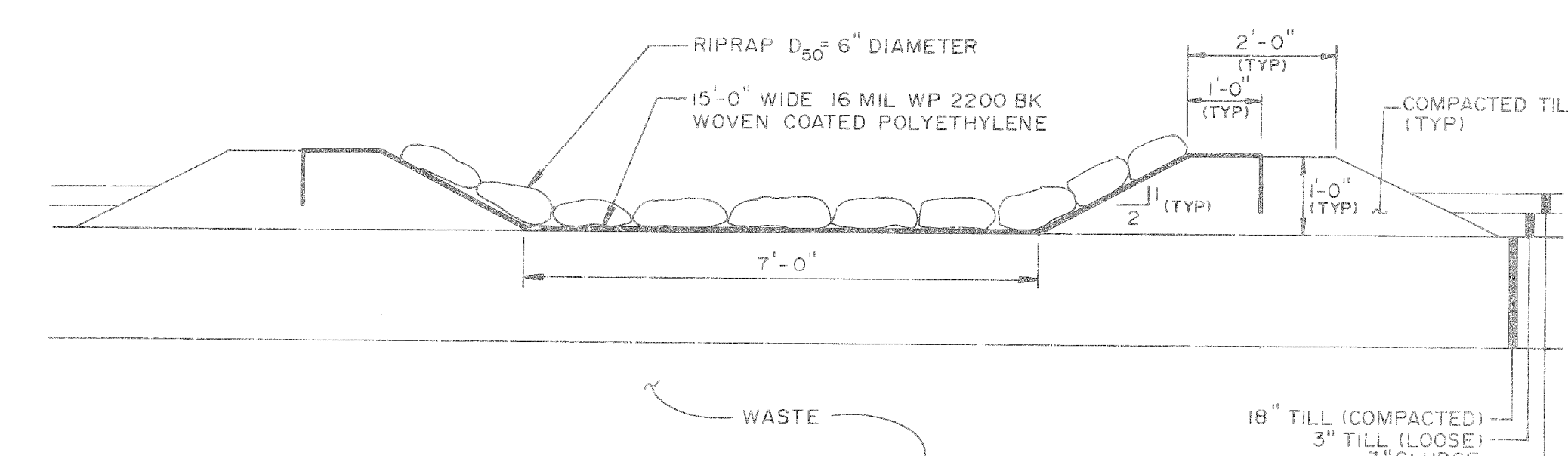
TOE DRAIN SECTION 2
N.T.S.



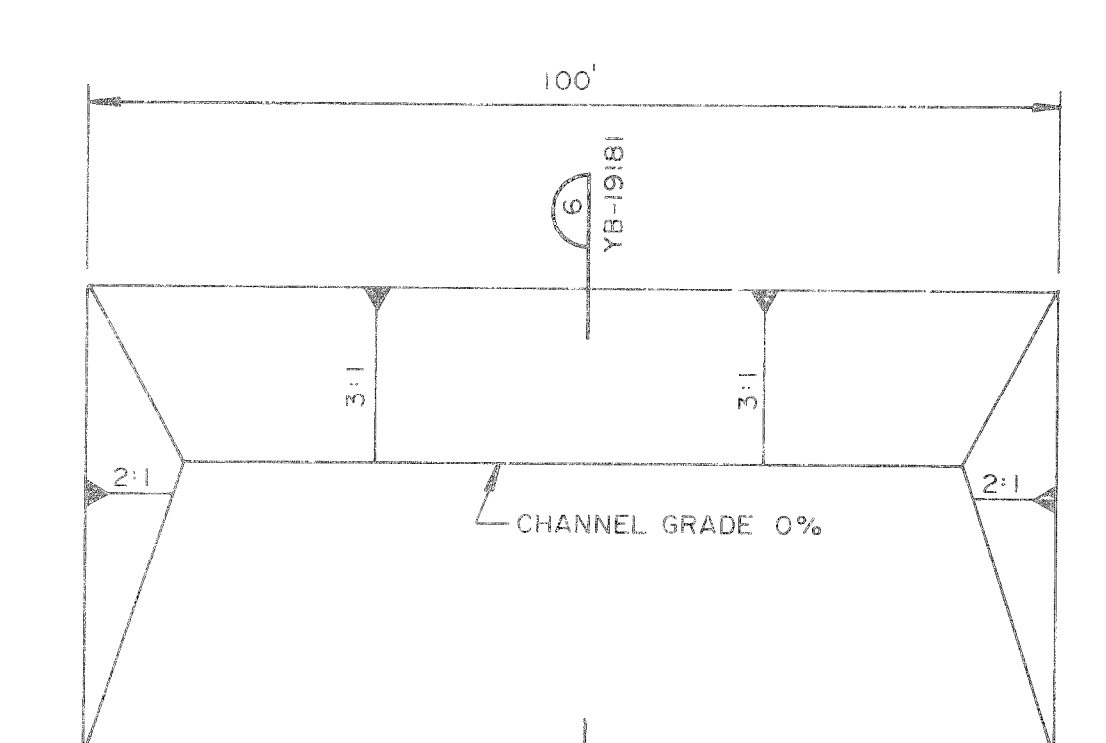
CATCH BASIN A
N.T.S. (EXISTING)



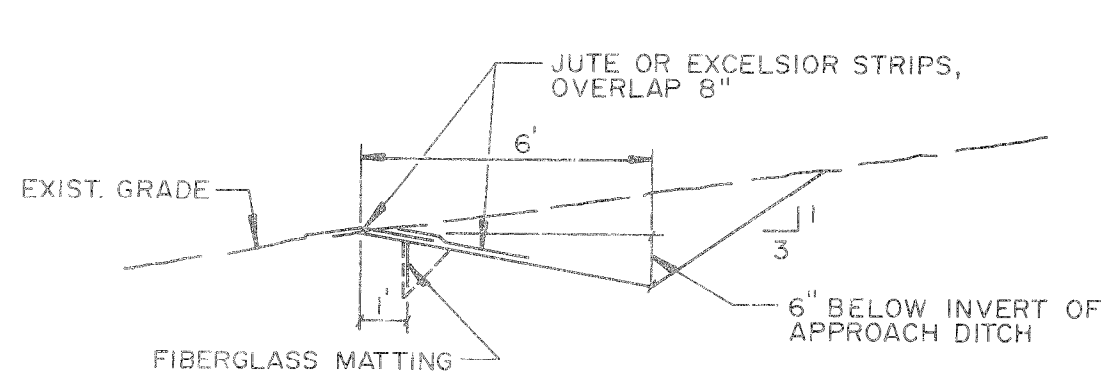
SECTION 5 WEIR DETAIL C
SCALE: 1" = 2'-0"



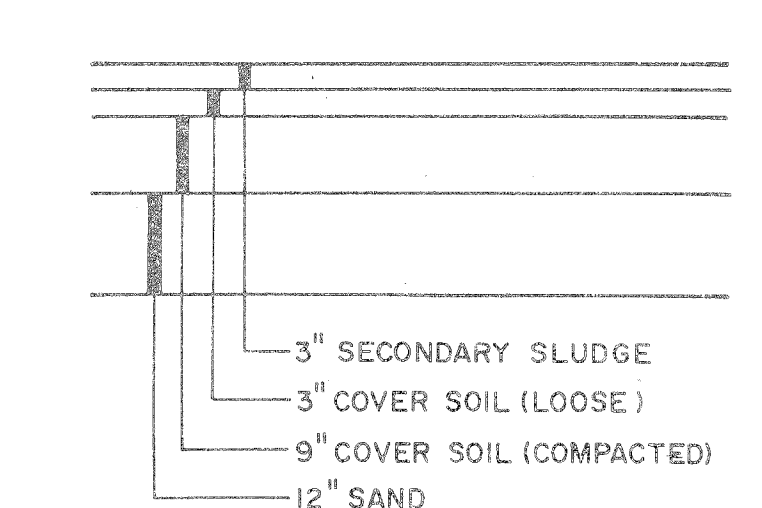
SIDESLOPE DRAINAGE CHANNELS 4
SCALE: 1" = 2'-0"



NOTE: LAST 20 FT. OF DRAINAGE DITCH NOT TO EXCEED 1% GRADE

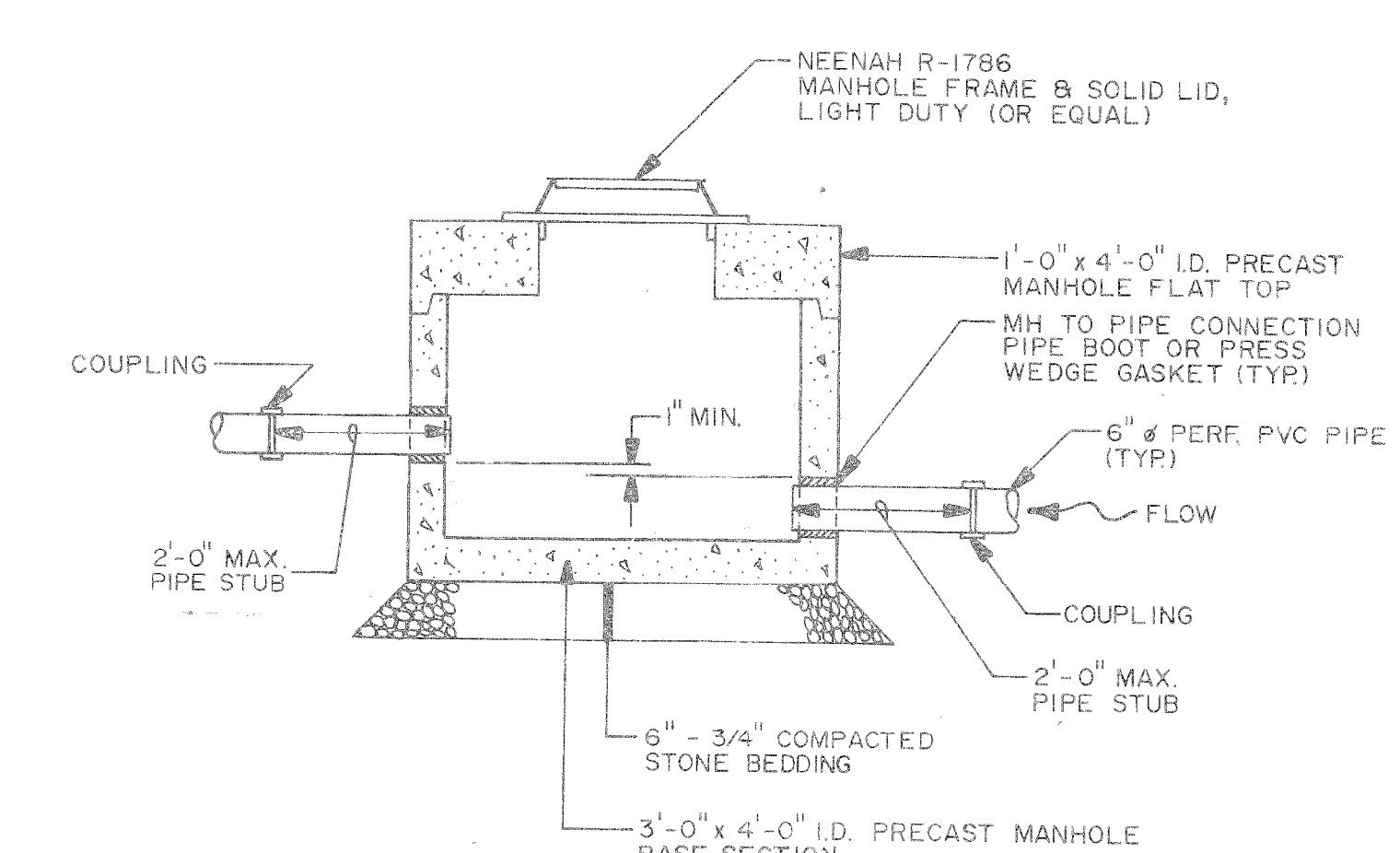


SECTION 6 LEVEL SPREADER D
N.T.S.

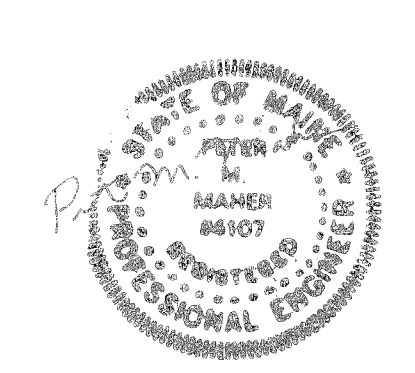


NOTE: NORTHERN SIDE OF CELL 2
SHOWN ON EXISTING TOPOGRAPHY
PLAN.

INTERMEDIATE SLOPE COVER SECTION 3
SCALE: 1" = 2'-0"



MANHOLE B
SCALE: 1" = 2'-0"



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
		B	A	8/20/90	ISSUED FOR BID - ADDENDUM I				
				12/90	RECORD DRAWING				

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DATE	7/90
CHKD	R. C. C.
APPV	
ISSUE CODE	
SCALE	AS SHOWN



CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SECTIONS & DETAILS

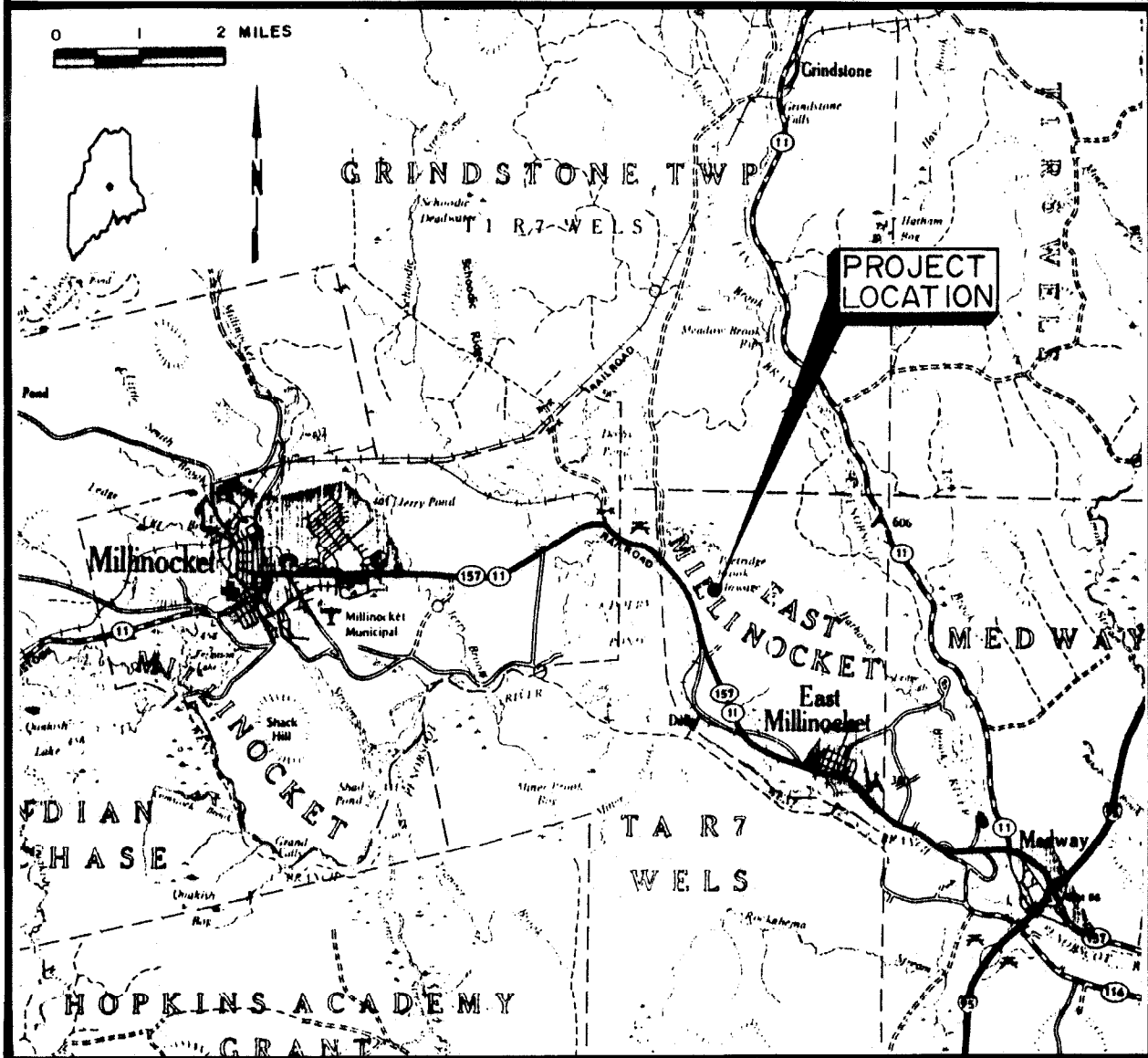
JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

YB-19181

GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
MILLINOCKET, MAINE
DOLBY III LANDFILL
FINAL COVER OF CELLS 3A, 3B AND 4

SHT NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-19167
2	SYMBOLS & ABBREVIATIONS	YB-19168
3	SITE LOCATION PLAN	YB-19169
4	EXISTING TOPOGRAPHY PLAN	YB-19170
5	SECTIONS & DETAILS	YB-19171

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE
1990



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Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER- CELLS 3A, 3B, & 4
COVER SHEET

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-19167

SYMBOLS

EXISTING		PROPOSED		EXISTING		PROPOSED	
	NORTH ARROW (TRUE)		STONE WALL		TP-103		TEST PIT & NUMBER
	NORTH ARROW (MAGNETIC)		DRAINAGE COURSES W/DIRECTION & DITCH				CLEAN OUT STRUCTURES
	NORTH ARROW (PLAN NORTH)		EDGE OF WATER				MANHOLE
	CONTOUR LINES		WATER ELEVATION (GROUND OR SURFACE)				WATER VALVE
	SPOT ELEVATION (GRADE)		ROCK OUTCROP OR LEDGE				HYDRANT
	EXISTING GROUND (PROFILES & SECTIONS)		FENCE LINE (WOOD)				TELEPHONE OR POWER POLE
	SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT		FENCE LINE (WIRE)				CATCH BASIN
	CONSTRUCTION BASELINE		RETAINING WALL (TYPE)				UNDERGROUND GAS MAIN & SIZE
	PROPERTY OR DEED LINE (NOT SURVEYED)		GUARD RAIL				UNDERGROUND TELEPHONE CABLE / CONDUIT
	PROPERTY LINE W/ BEARING & DISTANCE		BUILDING & STRUCTURES				UNDERGROUND ELECTRIC CABLE / CONDUIT
	ROADS, EASEMENTS OR RIGHT OF WAY LINE		STEPS W/ TYPE (WOOD / CONCRETE)				OVERHEAD ELECTRICAL LINE
	BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)		SLOPE RATIO (HORIZONTAL TO VERTICAL)				SANITARY SEWER, SIZE & TYPE
	SURVEY MONUMENT		SLOPES (W/ SLOPE RATIO)				FORCE MAIN, SIZE & TYPE
	SURVEY IRON (FOUND)		EDGE OF TRAVELED WAY (TYPE)				WATER MAIN, SIZE & TYPE
	DRILL HOLE, PK OR STAKE		CUT OR FILL LINE				STORM DRAIN, SIZE & TYPE
	WOODS OR BRUSH LINE		CONSTRUCTION LIMIT LINE				UNDERDRAIN, SIZE & TYPE
	INDIVIDUAL TREE (DECIDUOUS)		BITUMINOUS PAVEMENT				CULVERT, SIZE & TYPE
	INDIVIDUAL TREE (CONIFEROUS)		GRAVEL ROAD				RAILROAD
	TREE, TO BE REMOVED		CONCRETE				SILTATION FENCE
	MARSH AREA		TEST BORING, MONITORING WELL OR PROBE & NUMBER				

ABBREVIATIONS

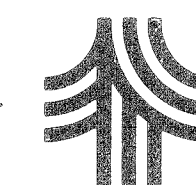
ABBREVIATIONS

A.C.C.M.P.	ASPHALT COATED C.M.P.	C.M.P.	CORRUPTED METAL PIPE	DR	DRAIN	GPD	GALLONS PER DAY	MON	MONUMENT	SF	SQUARE FEET
A.C.P.	ASBESTOS CEMENT PIPE	C.O.	CLEAN OUT	DWG	DRAWING	GPM	GALLONS PER MINUTE	N.I.T.C.	NOT IN THIS CONTRACT	SHT	SHEET
AC	ACRE	CEM. LIN.	CEMENT LINED	EA	EACH	HDPE	HIGH DENSITY POLYETHYLENE	N.T.S.	NOT TO SCALE	STA	STATION
AGG	AGGREGATE	CEN	CENTRAL ANGLE OF CURVE	EG	EXISTING	HP	HORSEPOWER	N/F	NOW OR FORMERLY	SY	SQUARE YARD
ALUM	ALUMINUM	CFS	CUBIC FEET	ELEC	ELECTRIC	HYD	HYDRANT	NO. OR #	ON CENTER	TAN	TANGENT
APPD	APPROVED	CF	CUBIC FEET PER SECOND	ELL	ELBOW	I.D.	INSIDE DIAMETER	O.C.	OUTSIDE DIAMETER	TDH	TOTAL DYNAMIC HEAD
APPROX	APPROXIMATE	CI	CAST IRON	EQUIP	EQUIPMENT	IN OR "	INCHES	O.D.	OUTSIDE DIAMETER	TEMP	TEMPORARY
ASB	ASBESTOS	CL	CLASS	EST	ESTIMATED	INV	INVERT	P.C.	POINT OF CURVE	TYP	TYPICAL
ASPH	ASPHALT	CONC	CONCRETE	EXC	EXCAVATE	INV. EL.	INVERT ELEVATION	P.I.	POINT OF INTERSECTION	V	VOLTS
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	CONST	CONSTRUCTION	EXIST	EXISTING	LB	POUND	P.T.	POINT OF TANGENT	W/	WITH
AUTO	AUTOMATIC	CONTR	CONTRACTOR	F.G.	FINISH GRADE	LC	LEACHATE COLLECTION	PERF	PERFORATED	W/O	WITHOUT
AUX	AUXILIARY	CTR	CENTER	FBRGL	FIBERGLASS	LD	LEAK DETECTION	PSI	POUNDS PER SQUARE INCH	YD	YARD
AVE	AVENUE	CY	CUBIC YARD	FDN	FOUNDATION	LIN. FT.	LINEAR FEET	PVC	POLYVINYL CHLORIDE		
AVG	AVERAGE	DBL	DEGREE OF CURVE (ARC DEF.)	FLEX	FLEXIBLE	LOC	LOCATION	PVMT	PAVEMENT		
AZ	AZIMUTH	FLG	DOUBLE	FLG	FLANGE	LT	LEFT	QTY	QUANTITY		
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	DEG OR °	DEGREE	FLR	FLOOR	M.H.	MANHOLE	R.O.W.	RIGHT OF WAY		
B.M.	BENCH MARK	DEPT	DEPTH	FPS	FEET PER SECOND	M.J.	MECHANICAL JOINT	RAD	RADIUS		
BIT	BITUMINOUS	DI	DUCTILE IRON	FT OR '	FEET	MATL	MATERIAL	REQD	REQUIRED		
BLDG	BUILDING	DIA OR Ø	DIAMETER	FTG	FOOTING	MAX.	MAXIMUM	RT	RIGHT		
BOT	BOTTOM	DIM	DIMENSION	GA	GAUGE	MFR	MANUFACTURE	RTE	ROUTE		
BRG	BEARING	DIST	DISTANCE	GAL	GALLON	MIN.	MINIMUM	S	SLOPE		
C.B.	CATCH BASIN	DN	DOWN	GALV	GALVANIZED	MISC	MISCELLANEOUS	SCH	SCHEDULE		

						GALVANIZED		MISC.		MISCELLANEOUS			

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DRN	RLR	7/90
CKD	8/90	8/90
CKD		
CORR		
APPVD		
ISSUE CODE		
B - BIDS		
SCALE		

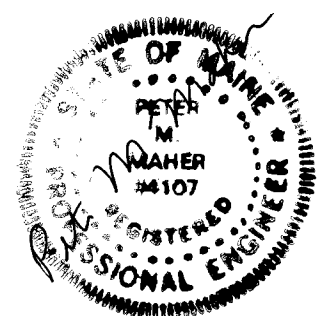


Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER- CELLS 3A, 3B, & 4
SYMBOLS & ABBREVIATIONS

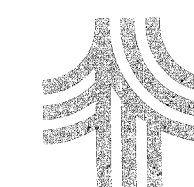
JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	RD.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
YB-15263	DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION								

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

CHN	RLR	7/90
CRD	H. Gite	8/90
CHKD		
CHKD		
APPROV		
ISSUE CODE		
B-810S		
SCALE 1" = 100'		



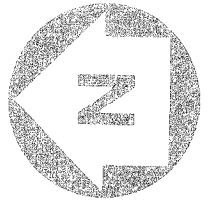
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703,7082

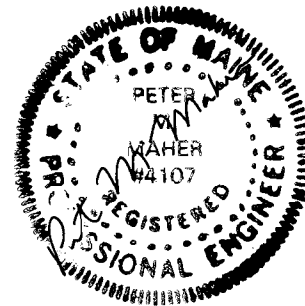
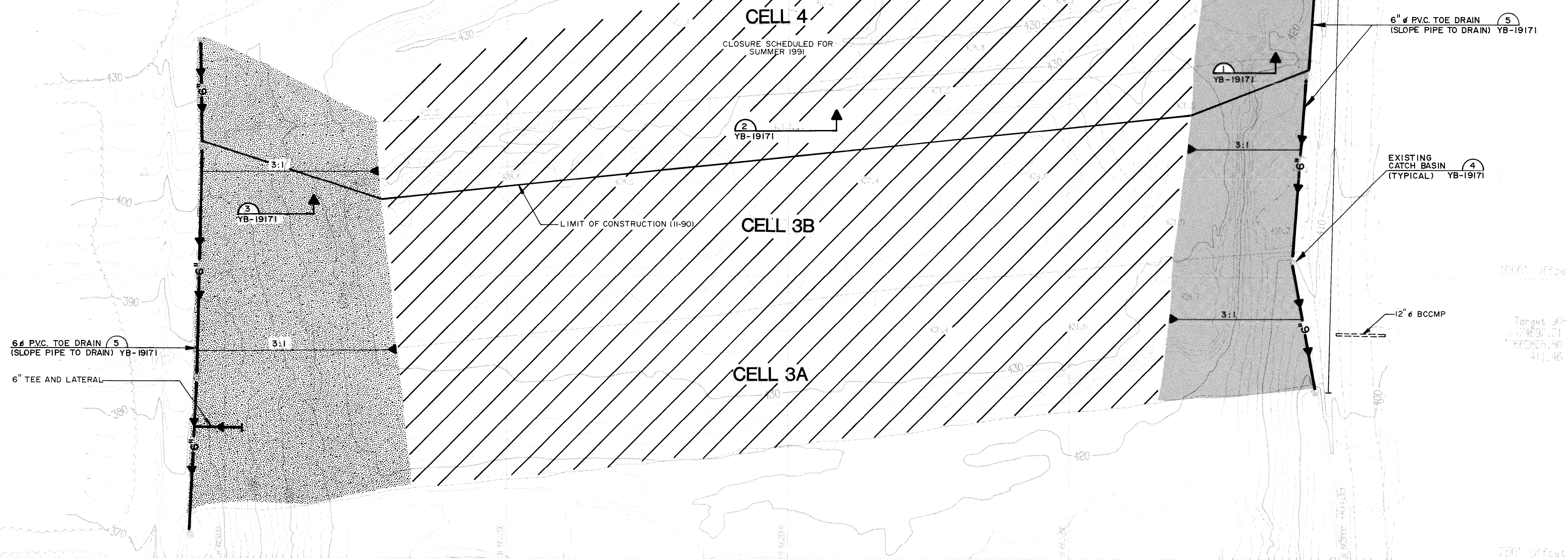
YB-19169



NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

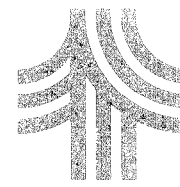
NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	JOB NO.
YB-16476	DOLBY III LANDFILL-CELLS 3A, 3B, & 4 TOPO. SURVEY & DIGITIZ.(4/18/90)	B	A	8/20/90	ISSUED FOR BID - ADDENDUM I				

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

OWN	RLR	7/90
DES	ALC	8/90
CHKD		
CONR		
APPRD		
ISSUE CODE		
C-CORST		
SCALE 1" = 50'		



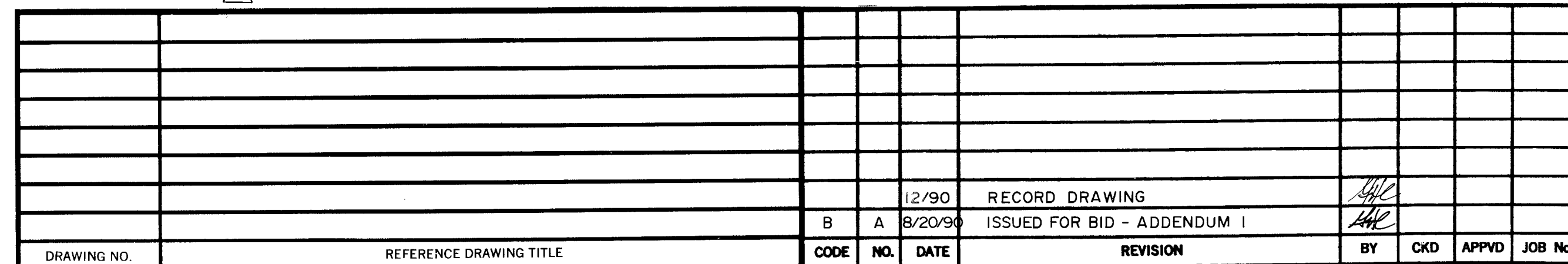
Great Northern Paper
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Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
EXISTING TOPOGRAPHY PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-19170



DRN	RLR	7/90
CKD	A. Cote	8/90
CKD		
CORR		
APPVD		
ISSUE CODE		
C - CONST		
SCALE AS SHOWN		

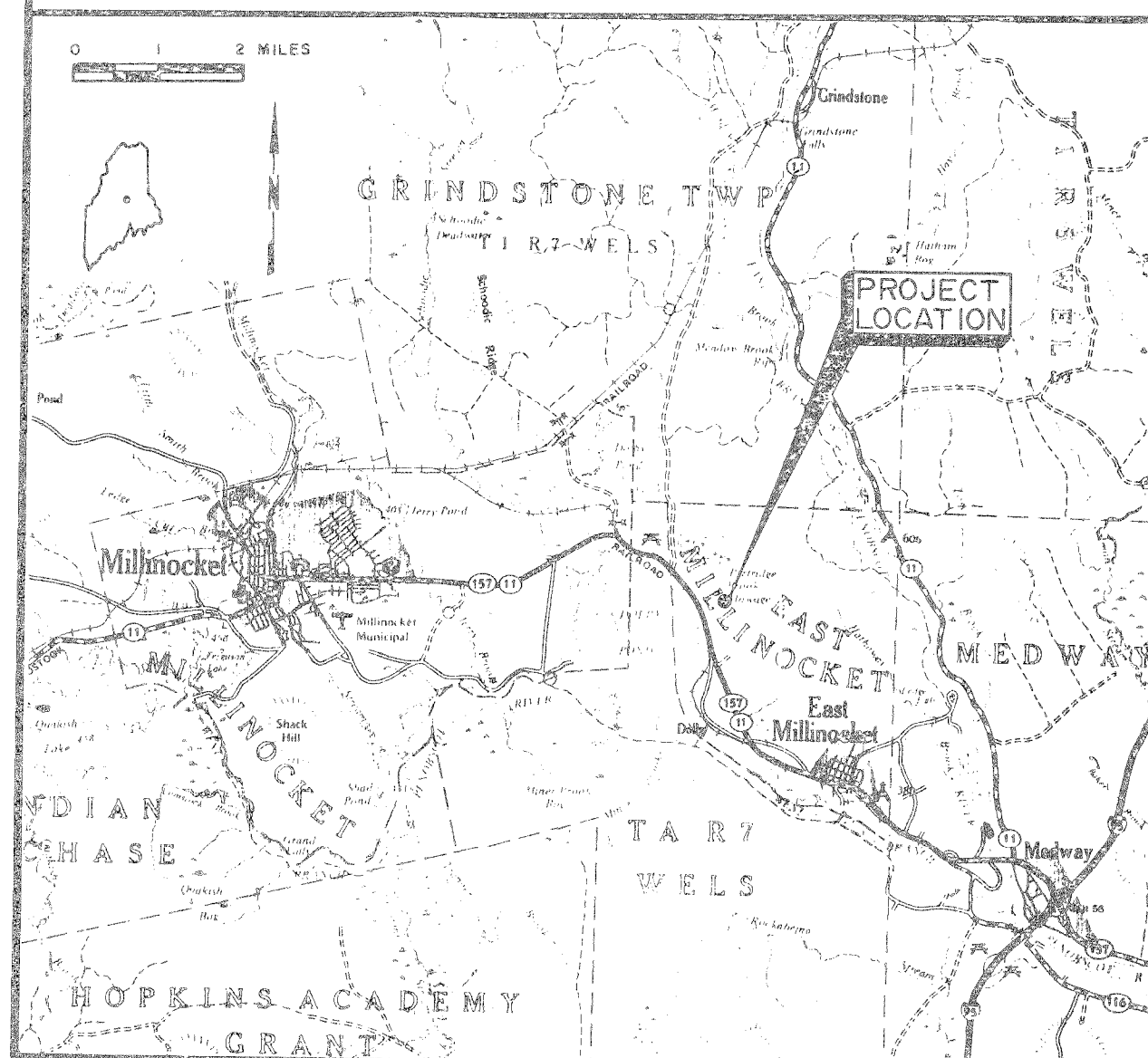


JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

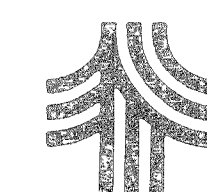
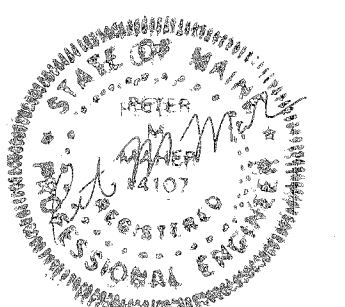
YB-19171

GREAT NORTHERN PAPER CO. MILLINOCKET, MAINE DOLBY III LANDFILL CELL 5 CONSTRUCTION

SHT NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-19086
2	SYMBOLS & ABBREVIATIONS	YB-19087
3	SITE LOCATION PLAN SHEET 1 OF 2	YB-19088
4	SITE LOCATION PLAN SHEET 2 OF 2	YB-19088
5	SITE DEVELOPMENT PLAN	YB-19089
6	SECTIONS & DETAILS	YB-19090
7	FINAL GRADING PLAN	YB-19091 (N.I.T.C.)



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE
1990



Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
COVER SHEET

JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-19086

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED

ABBREVIATIONS

A.C.C.M.P.	ASPHALT COATED C.M.P.	C.M.P.	CORRUGATED METAL PIPE	DR	DRAIN	GPD	GALLONS PER DAY	MON	MONUMENT	SF	SQUARE FEET
A.C.P.	ASBESTOS CEMENT PIPE	C.O.	CLEAN OUT	DWG	DRAWING	GPM	GALLONS PER MINUTE	N.I.T.C.	NOT IN THIS CONTRACT	SHT	SHEET
AC	ACRE	CEM. LIN.	CEMENT LINED	EA	EACH	HDPE	HIGH DENSITY POLYETHYLENE	N.T.S.	NOT TO SCALE	STA	STATION
AGG	AGGREGATE	CEN	CENTRAL ANGLE OF CURVE	EG	EXISTING GROUND OR GRADE	HP	HORSEPOWER	N/F	NOW OR FORMERLY	SY	SQUARE YARD
ALUM	ALUMINUM	CF	CUBIC FEET	ELEC	ELECTRIC	HYD	HYDRANT	NO. OR #	NUMBER	TAN	TANGENT
APPD	APPROVED	CFS	CUBIC FEET PER SECOND	ELL	ELBOW	I.D.	INSIDE DIAMETER	O.C.	ON CENTER	TDH	TOTAL DYNAMIC HEAD
APPROX	APPROXIMATE	CI	CAST IRON	EQUIP	EQUIPMENT	IN OR "	INCHES	O.D.	OUTSIDE DIAMETER	TEMP	TEMPORARY
ASB	ASBESTOS	CL	CLASS	EST	ESTIMATED	INV	INVERT	P.C.	POINT OF CURVE	TYP	TYPICAL
ASPH	ASPHALT	CONC	CONCRETE	EXC	EXCAVATE	INV. EL.	INVERT ELEVATION	P.I.	POINT OF INTERSECTION	V	VOLTS
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	CONST	CONSTRUCTION	EXIST	EXISTING	LB	POUND	P.T.	POINT OF TANGENT	W	WITH
AUTO	AUTOMATIC	CONTR	CONTRACTOR	F.G.	FINISH GRADE	LC	LEACHATE COLLECTION	PERF	PERFORATED	W/O	WITHOUT
AUX	AUXILIARY	CTR	CENTER	FBRGL	FIBERGLASS	LD	LEAK DETECTION	PSI	POUNDS PER SQUARE INCH	YD	YARD
AVE	AVENUE	CY	CUBIC YARD	FDN	FOUNDATION	LIN. FT.	LINEAR FEET	PVC	POLYVINYL CHLORIDE		
AVG	AVERAGE	D	DEGREE OF CURVE (ARC DEF.)	FLEX	FLEXIBLE	LOC	LOCATION	PVMT	PAVEMENT		
AZ	AZIMUTH	DBL	DOUBLE	FLG	FLANGE	LT	LEFT	QTY	QUANTITY		
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	DEG OR °	DEGREE	FLR	FLOOR	M.H.	MANHOLE	R.O.W.	RIGHT OF WAY		
B.M.	BENCH MARK	DEPT	DEPARTMENT	FPS	FEET PER SECOND	M.J.	MECHANICAL JOINT	RAD	RADIUS		
BIT	BITUMINOUS	DI	DUCTILE IRON	FT OR '	FEET	MATL	MATERIAL	REQD	REQUIRED		
BLDG	BUILDING	DIA OR Ø	DIAMETER	FTG	FOOTING	MAX.	MAXIMUM	RT	RIGHT		
BOT	BOTTOM	DIM	DIMENSION	GA	GAUGE	MFR	MANUFACTURE	RTE	ROUTE		
BRG	BEARING	DIST	DISTANCE	GAL	GALLON	MIN.	MINIMUM	S	SLOPE		
C.B.	CATCH BASIN	DN	DOWN	GALV	GALVANIZED	MISC	MISCELLANEOUS	SCH	SCHEDULE		

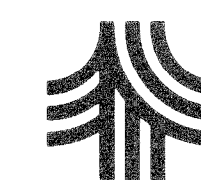
VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION	DETAIL IDENTIFICATION & LETTER

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

DRN	R/LR
CKD	44C
CKD	DXR
CORR	44C
APPVD	BAP
ISSUE CODE	B-BIDS
SCALE	



Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SYMBOLS & ABBREVIATIONS

JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

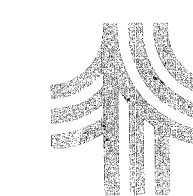
YB-19087

DRAWING NO.		REFERENCE DRAWING TITLE		CODE	NO.	DATE	DESIGNED BY	BY	CHK	APP'CD	DATE
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SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

DIRM	RLR	
CRG	MHC	5/19
CRG	DXE	5/3/9
COOR	DRR	5/3/9
APPNT	GAP	5/3/9
ISSUE CODE		
B-SIDS		
SCALE 1" = 100'		



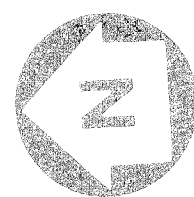
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SITE LOCATION PLAN

JOE NO. 94545
ENG. REQ. NO.
FILE NO 2-092-4793, 7082

YB-19088
SHEET 2 OF 2



OPERATION NOTES

CELL 4

- REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#16 AND CB#17 FROM CELL 5.

CULVERT SCHEDULE

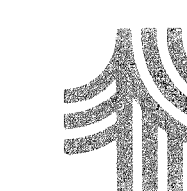
TYPE	DIAMETER	MIDPOINT CENTERLINE LENGTH	MIDPOINT CENTERLINE	
			NORTH COORD.	EAST COORD.
CULVERT #1 CMP	24"	40'	663005	475297
CULVERT #2 CMP	15"	40'	664018	475282
CULVERT #3 CMP	24"	40'	662800	475278

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APP'D	JOB NO.
YB-15914	DOLBY III LANDFILL, CELL 4, SITE DEVELOPMENT PLAN								

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

DRN	RUR
CKD	44C 5/30
CKD	DNE 5/3/90
COR	ABR 5/1/90
APP'D	GAP 5/9/90
ISSUE CODE	
B-BIDS	
SCALE 1" = 50'	



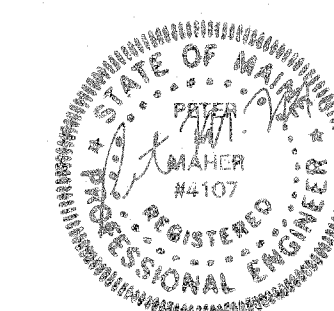
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

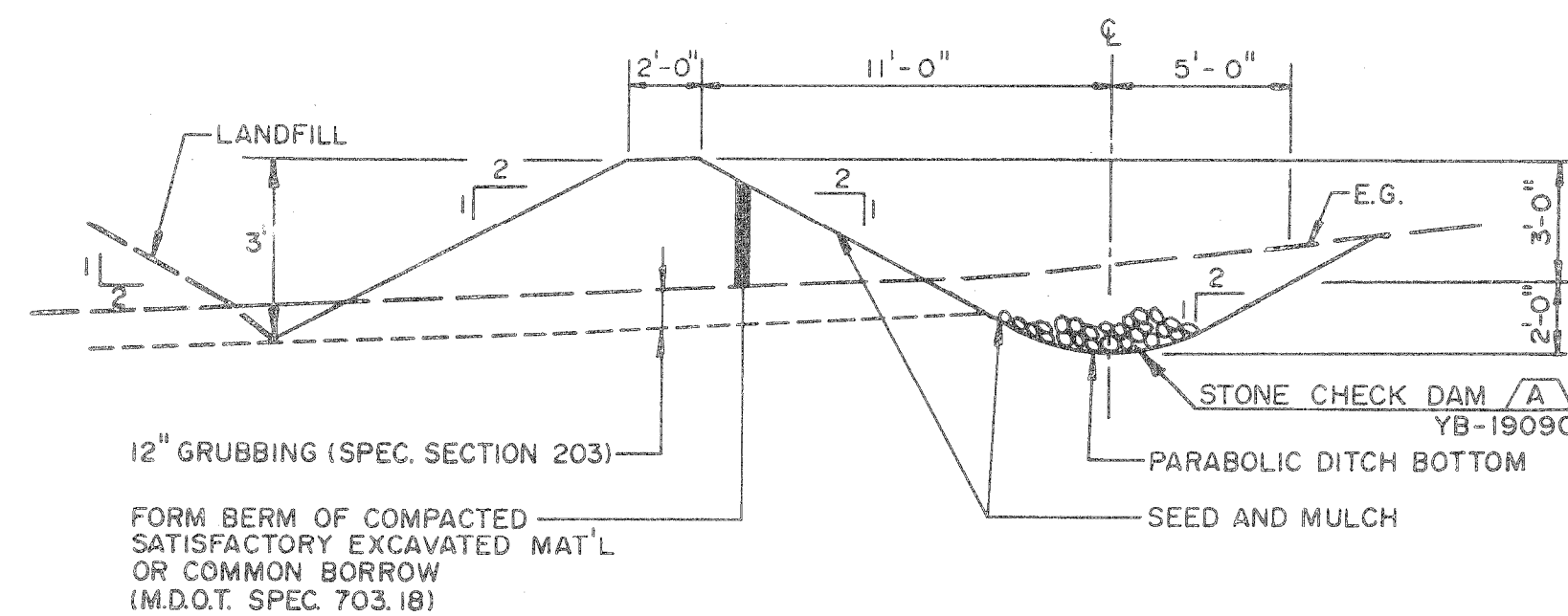
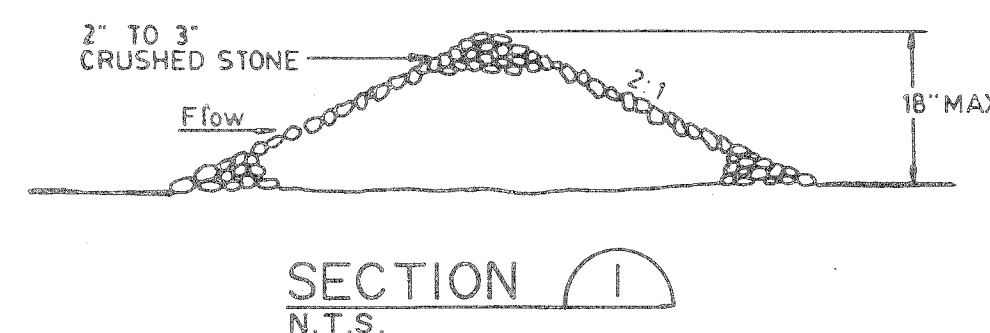
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SITE DEVELOPMENT PLAN

JOB NO. 94545
ENG. REG. NO.
FILE NO. 2-092-4703,7082

YB-19089

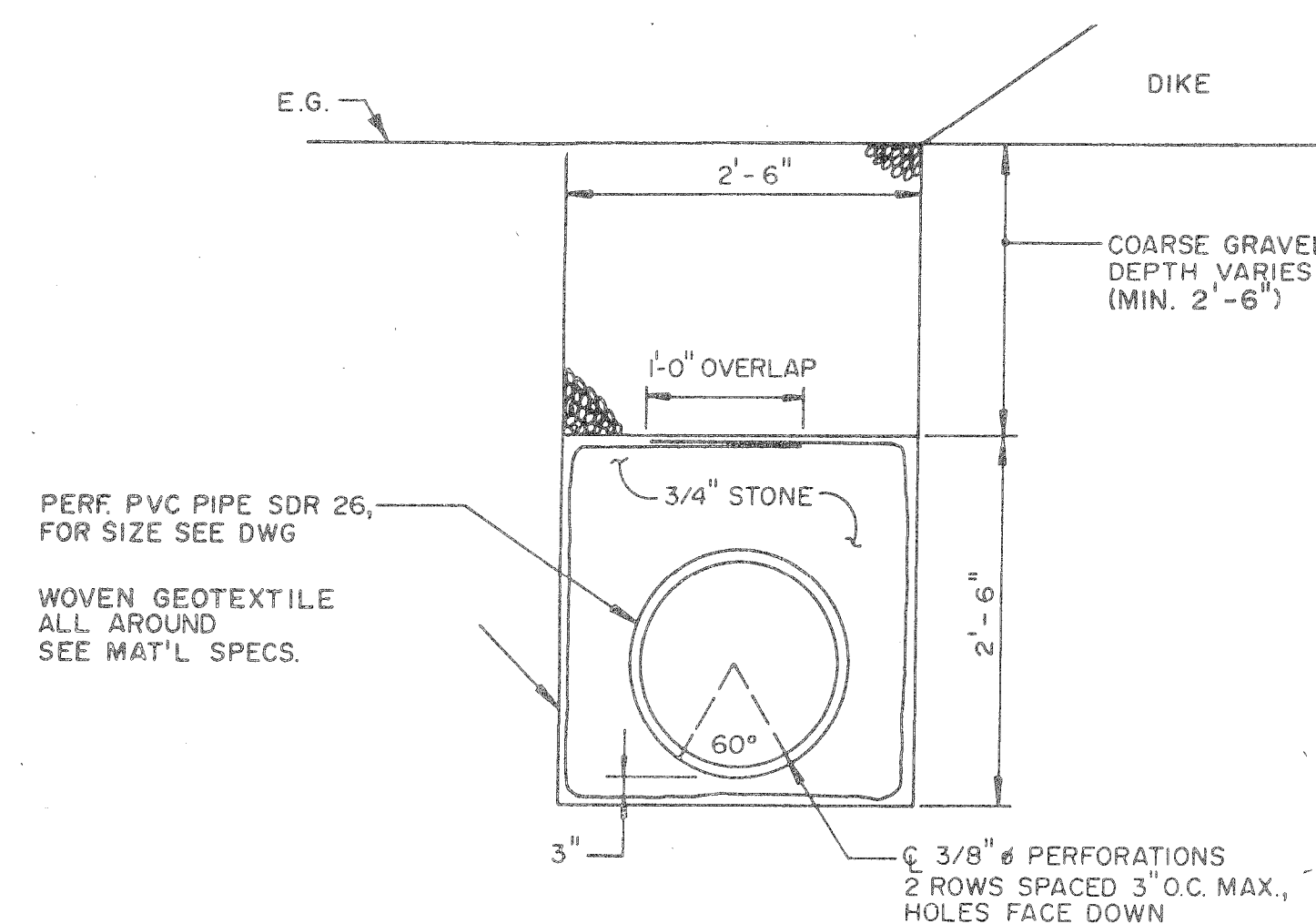




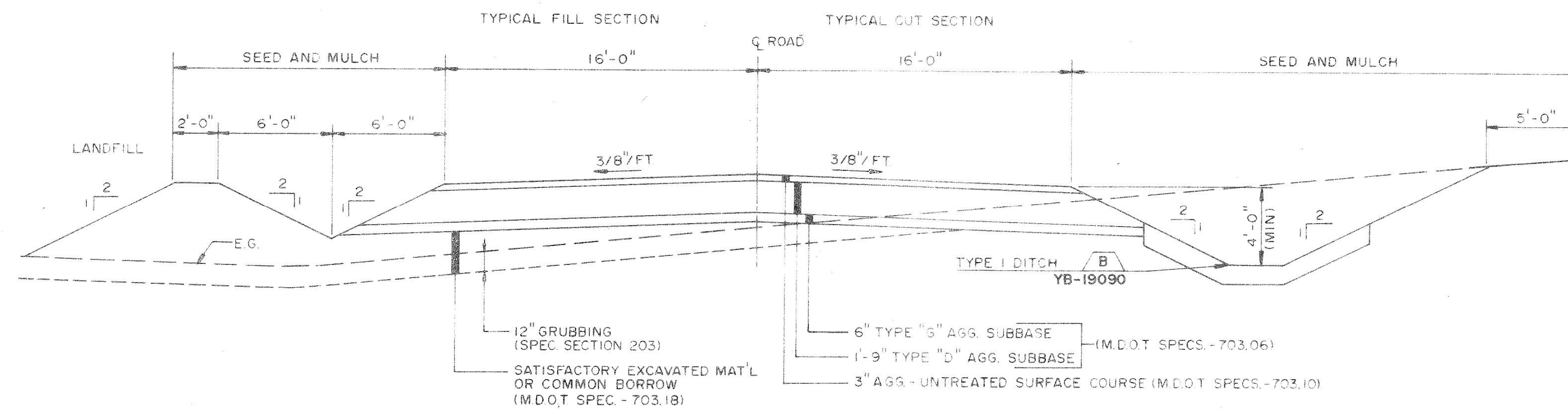
TYPICAL SECTION

DIKE AND TYPE 2 DRAINAGE DITCH (2)

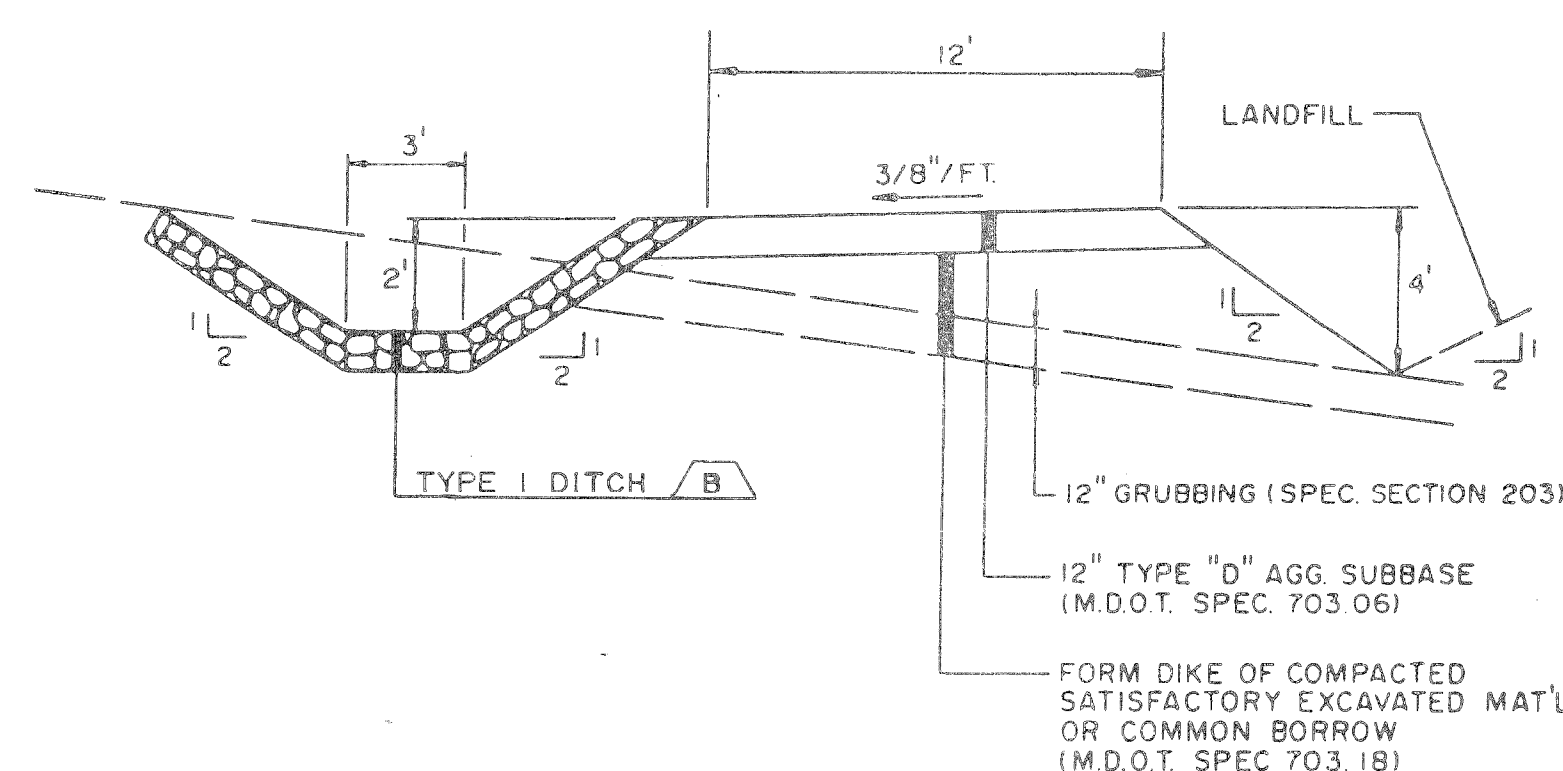
SCALE: 1" = 5' YB-19085



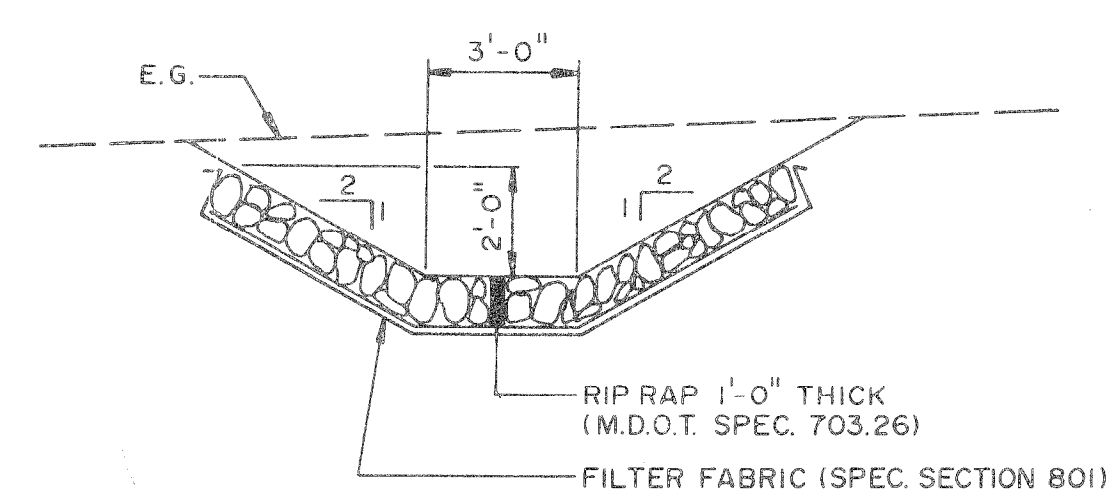
PERF. LEACHATE COLLECTION MAIN (7)
N.T.S. YB-19089



TYPICAL SECTION
LANDFILL ACCESS ROAD 3
N.T.S. YB-19089

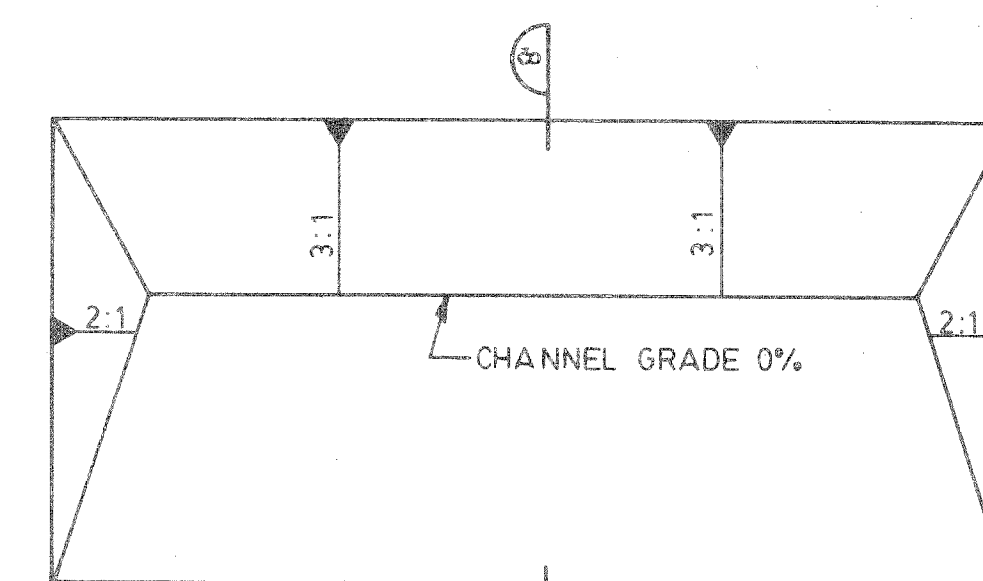


DIKE ACCESS ROAD 4
N.T.S. YB-1908



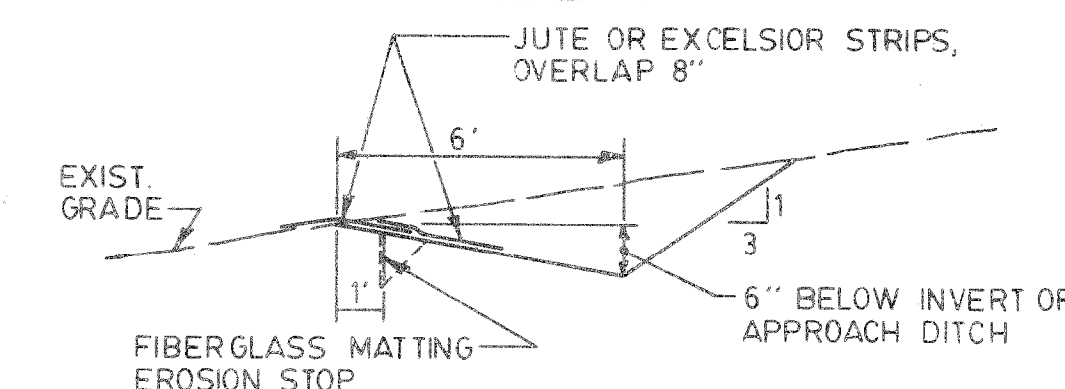
TYPE I DITCH  B
N.T.S. YB-1909C

NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE
ACCUMULATED SEDIMENT TO BE REMOVED AND
PLACED IN LANDFILL WHEN CONSTRUCTION
COMPLETE AND TRIBUTARY AREA IS STABILIZED
WITH VEGETATION. GRAVEL SURFACE OR RIP RAP
AREA TO BE SEEDED AND MULCHED WHEN
CONSTRUCTION COMPLETE.

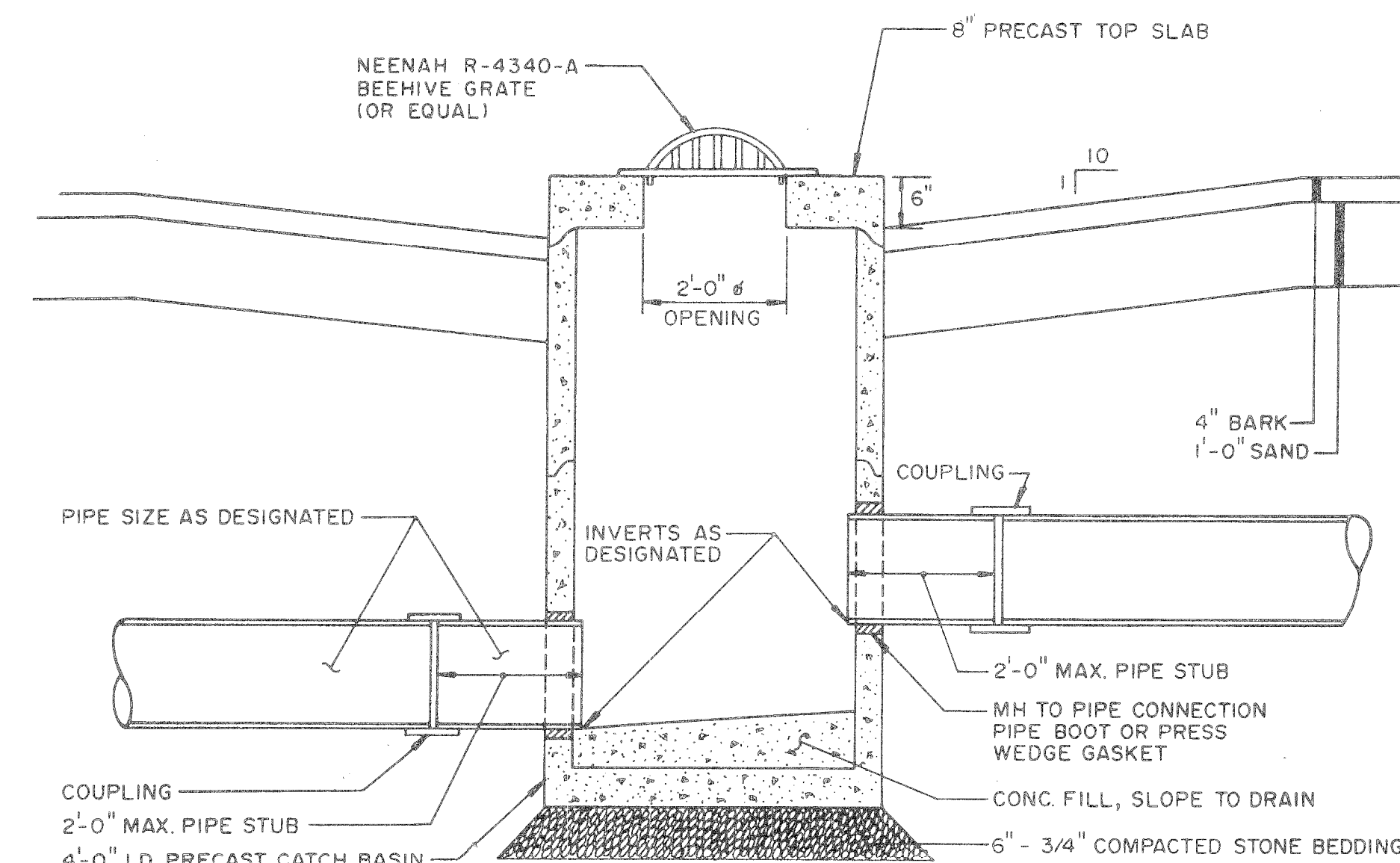


NOTE: LAST 20 FT. OF DRAINAGE DITCH NOT TO EXCEED 1% GRADE

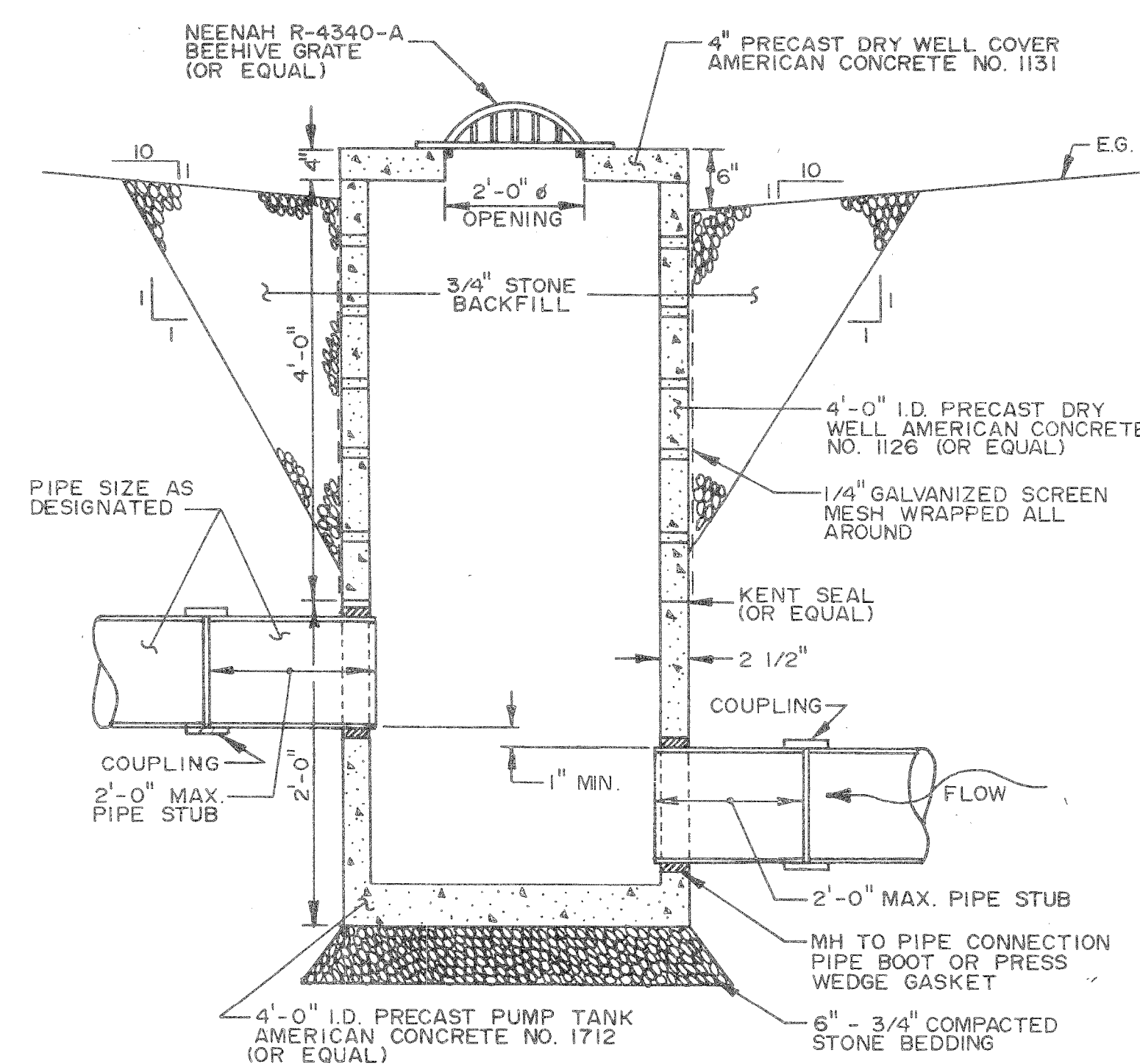
PLAN
SCALE: 1"=4'



SECTION 8
LEVEL SPREADER C
N.T.S. YB-1908



TYPICAL CATCH BASIN- (5)
N.T.S. (EXISTING) YB-1908



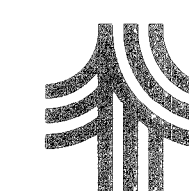
CATCH BASIN 6
N.T.S. YB-1908

[illegible]

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

DRN	RLR	
CKD	442	5/9
CKD	DKE	5/3/9
CORR	DPF	5/3/9
APPVD	BAP	5/3/9
ISSUE CODE		
B - BIDS		
SCALE AS SHOWN		



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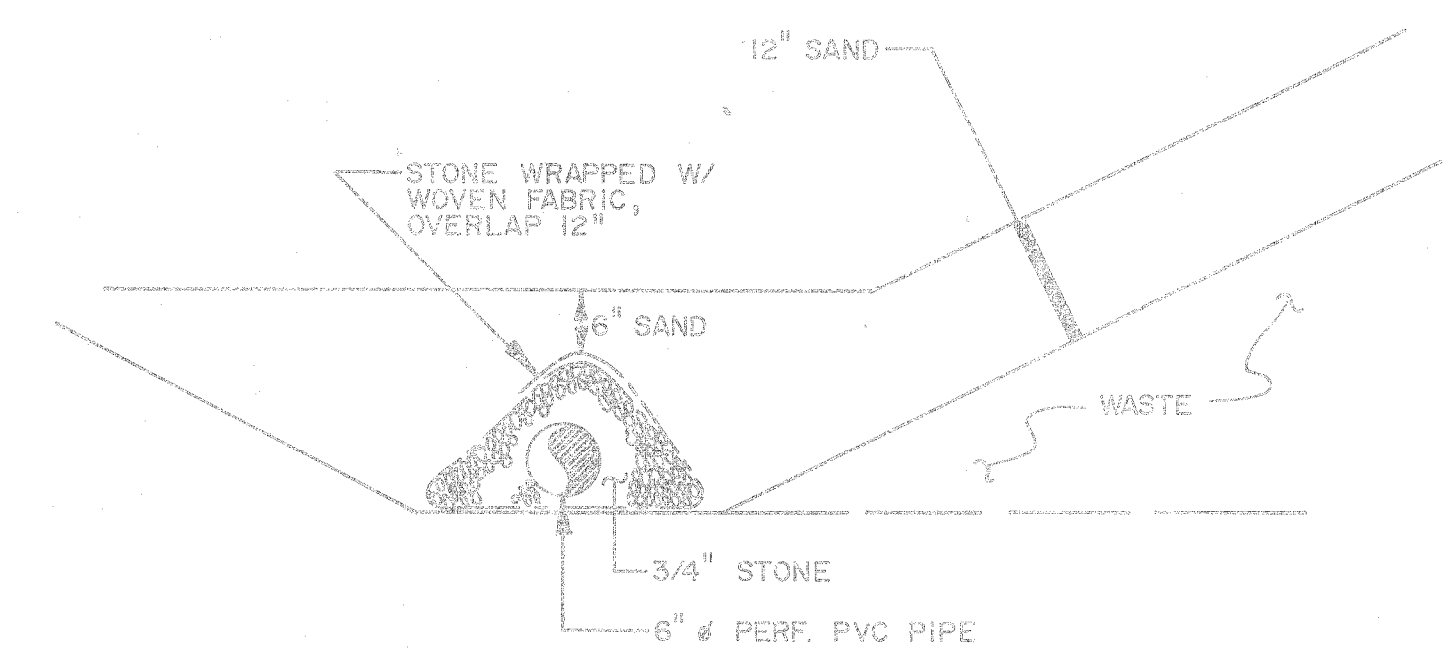
CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
SECTIONS & DETAILS

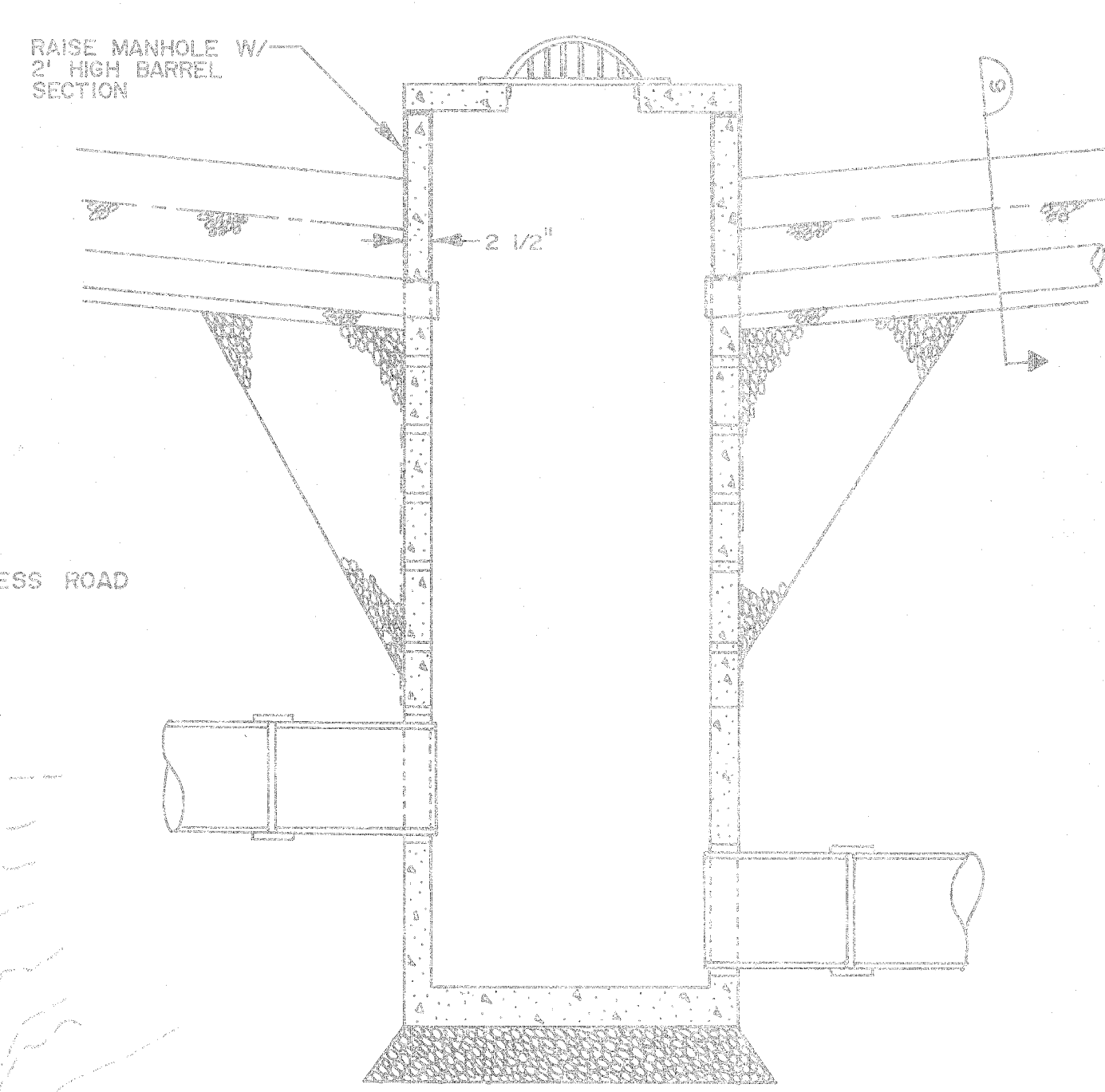
JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-19090





SECTION 9
N.T.S. YB-19091



CATCH BASIN 10
N.T.S. YB-19091

CELL 5

MODIFY C.B. FOR
FINAL COVER 10
YB-19091

FINAL COVER TOE DRAIN 9
(TYPICAL) YB-19091

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPROV	APP'D
YB-19050	DOLBY III LANDFILL, CELL 4, FINAL GRADING PLAN								

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

DATE	2/19/90
CHKD	2/19/90
APP'D	5/1/90
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL. T.O.	C - CONST.
SCALE	1" = 50'



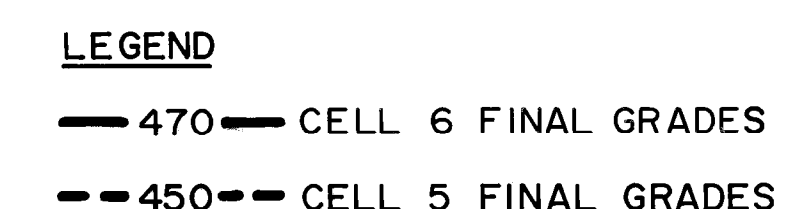
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
FINAL GRADING PLAN (N.T.C.)


JOB NO. 94545
ENC. REQ. NO.
FILE NO. 2-092-6703.7082

YB-19091





SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE



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Great Northern Nekoosa Corporation

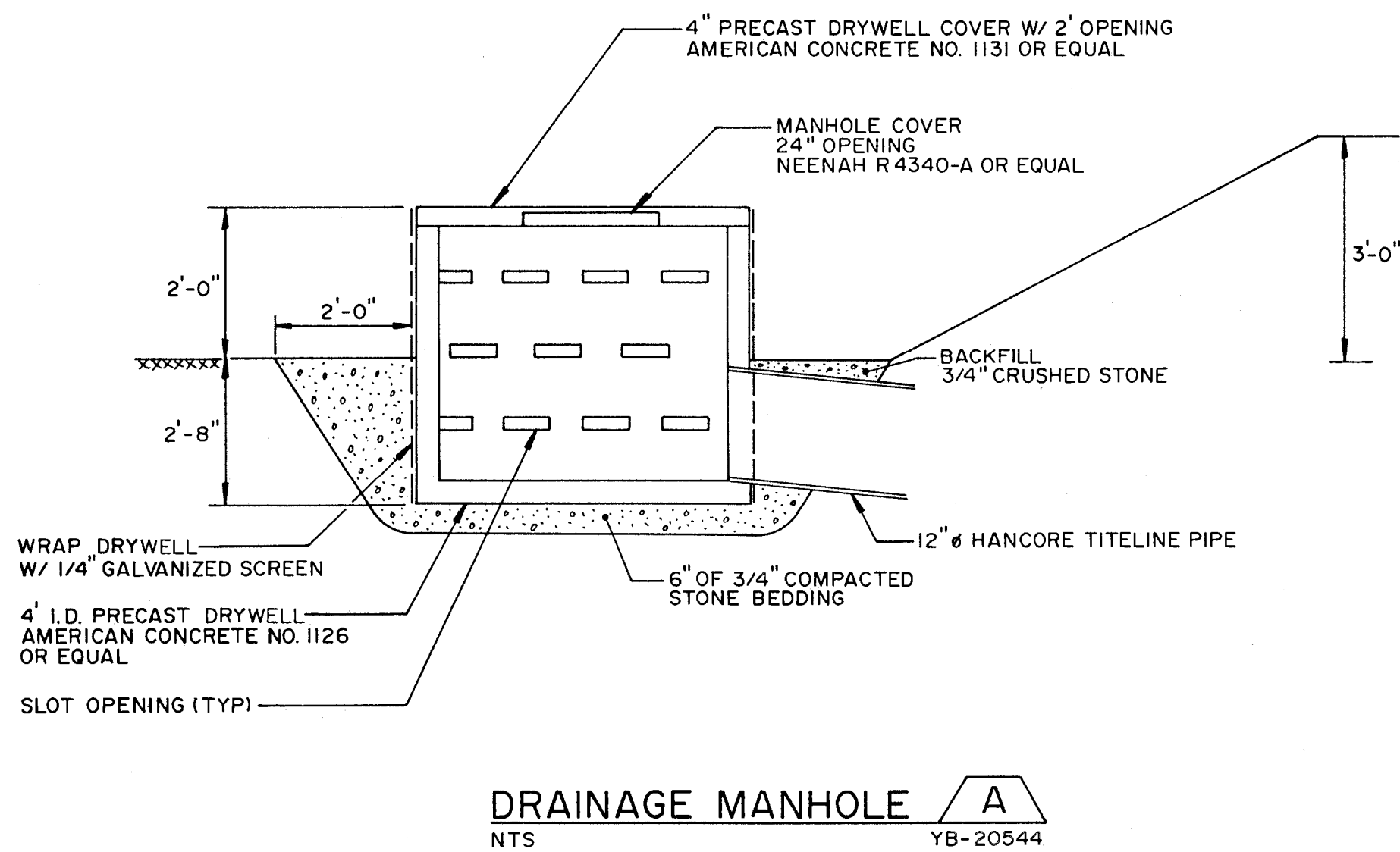
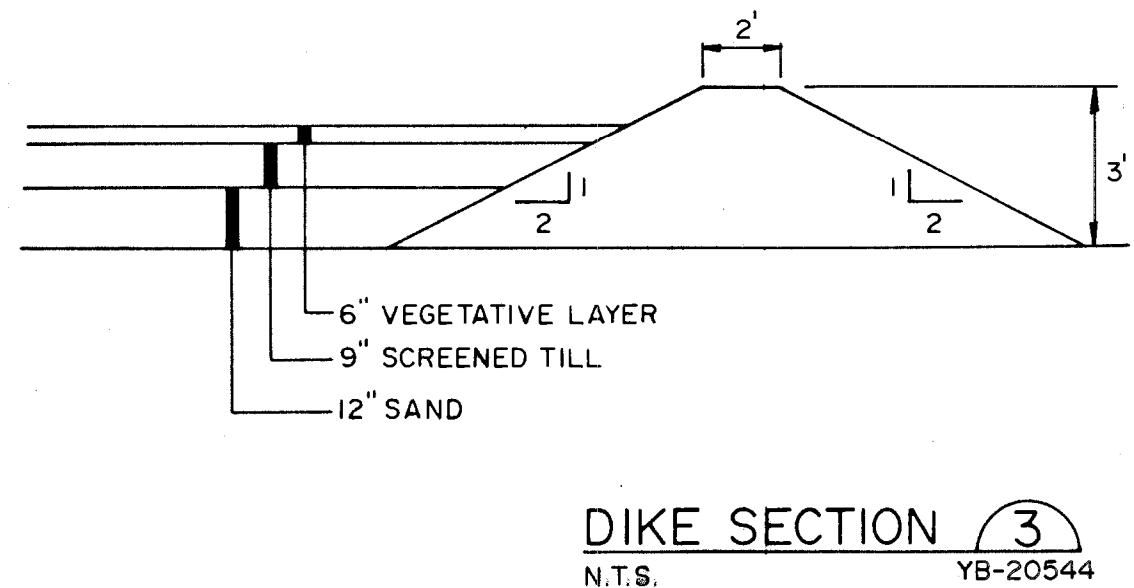
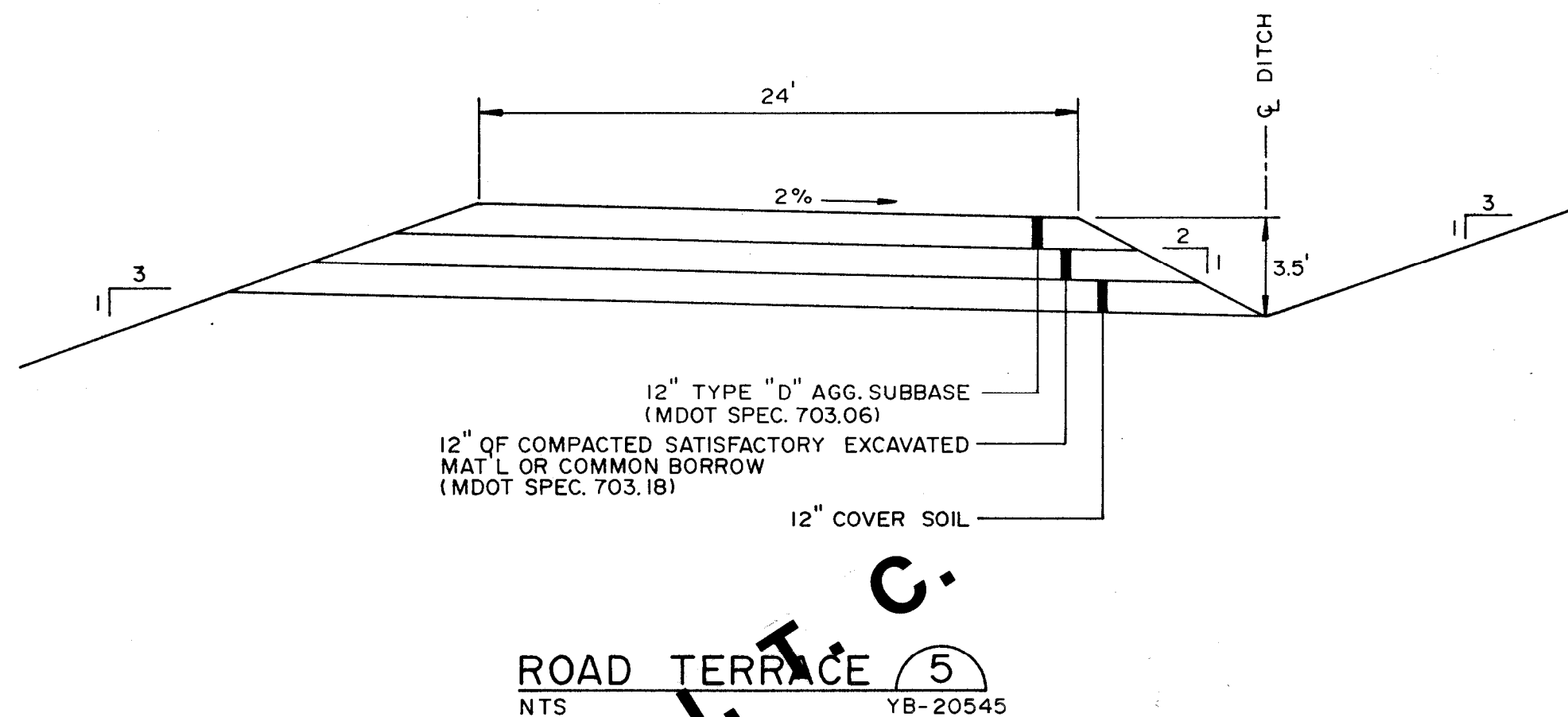
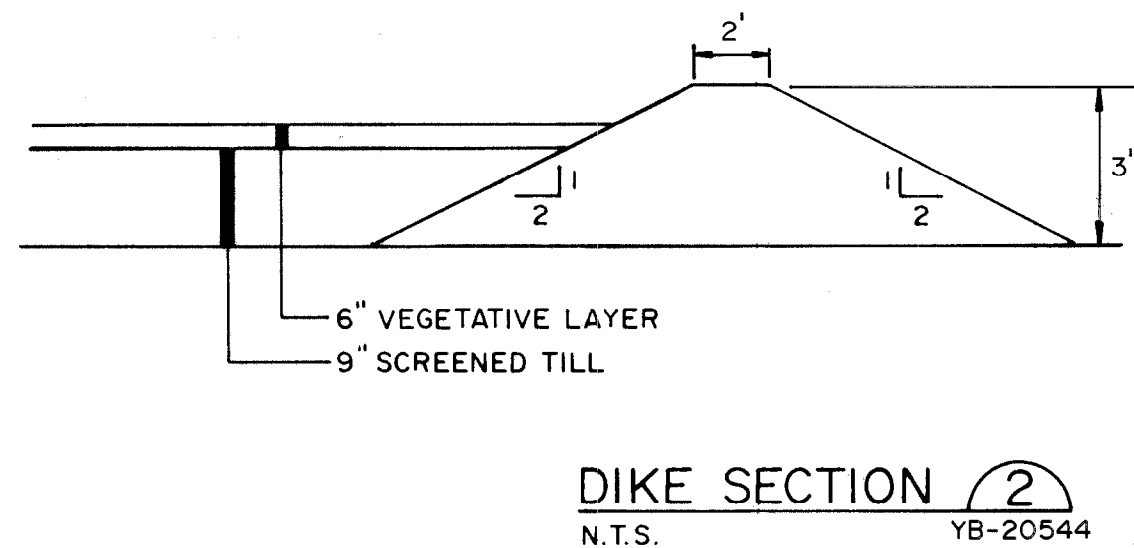
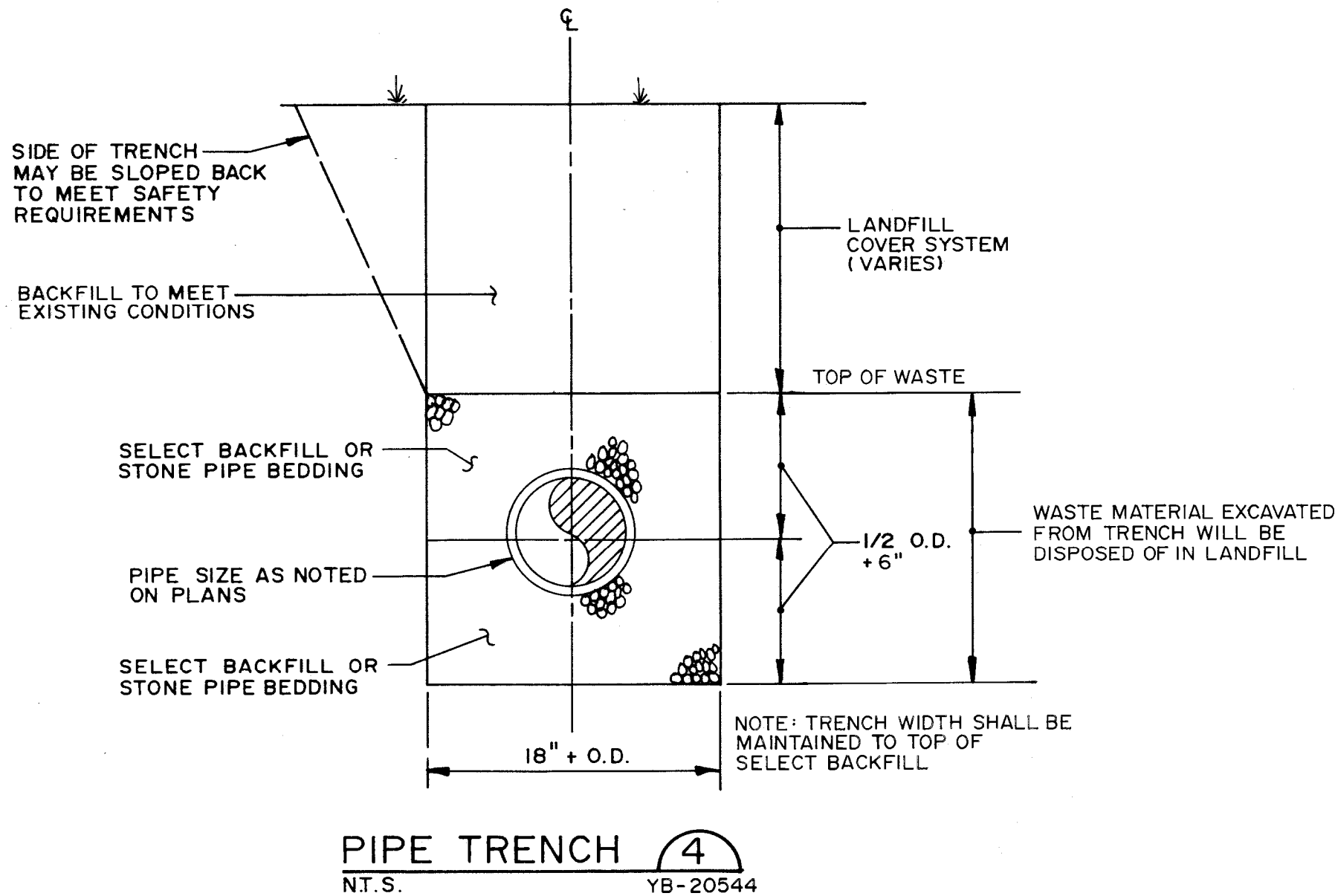
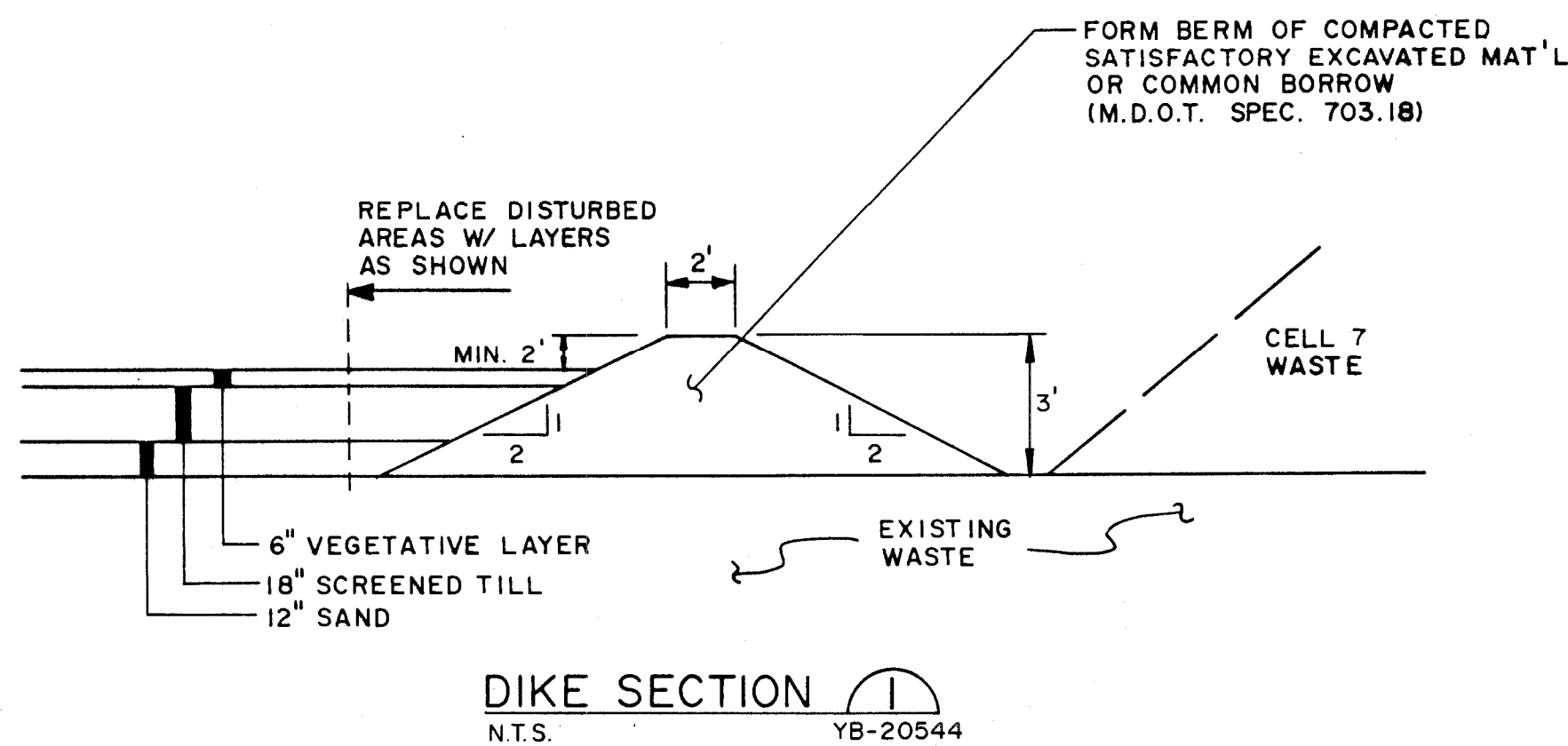
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 6
FINAL GRADING PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

YB-20023





GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

SIEVE DESIGNATION	PERCENT PASSING BY WEIGHT
1 INCH	100
1/4 INCH	≤ 5

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 7 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

MATERIAL QUANTITIES:

GRUBBING	17,000 CY
DIKE SOIL	1,600 CY
12" DIA. PIPE	355 LF
3/4" STONE	74 CY
DRYWELLS WITH COVERS, GRATES & FRAMES	2

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

DRN	PAF	9-92
CKD	AHC	9-92
CKD		
CORR		
APPRD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTLT.O.	C - CONST	
SCALE N.T.S.		

BOWATER

GREAT NORTHERN PAPER, INC.

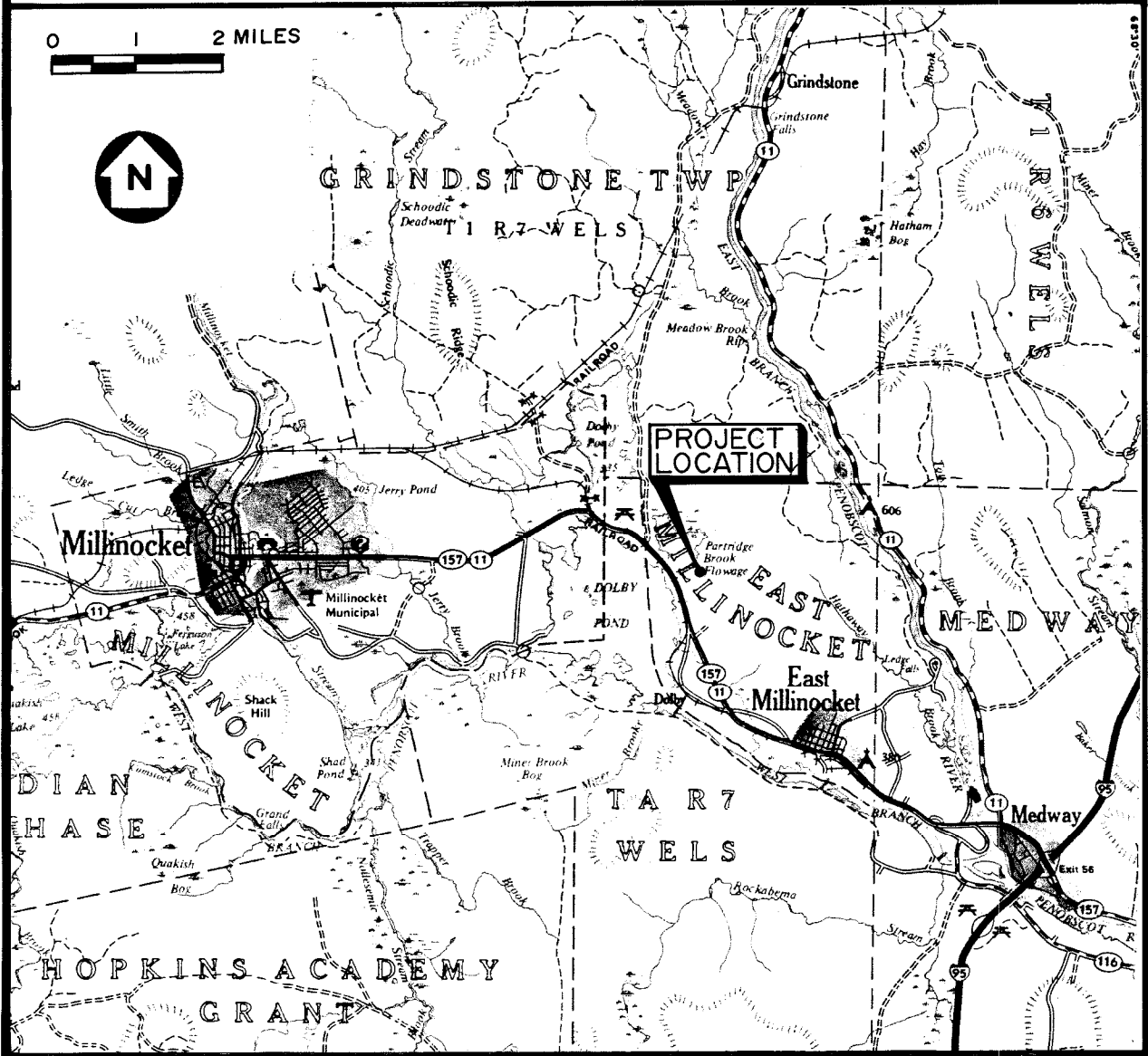
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION
DOLBY III LANDFILL
CELL 7
DETAILS, SECTIONS &
MATERIAL SPECIFICATIONS

JOB NO. 92051
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703.7082

Y B-20546

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER INCORPORATED
MILLINOCKET, MAINE
DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION

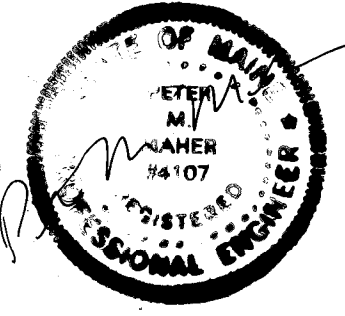
SHT NO.	TITLE	DWG NO.
1	COVER SHEET	YB-21000
2	SYMBOLS & ABBREVIATIONS	YB-21001
3	SITE LOCATION PLAN	YB-21002
4	CELL 8 - SITE DEVELOPMENT PLAN	YB-21003
5	CELL 9 - SITE DEVELOPMENT PLAN	YB-21004
6	CELLS 6 & 8 - FINAL GRADING PLAN	YB-21005
7	SECTIONS & DETAILS	YB-21006



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE
1993



GREAT NORTHERN PAPER, INC.



CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
COVER SHEET

JOB NO. _____
ENG. REG. NO. _____
FILE NO. 2-092-4703.7082

YB-21000

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
					TEST PIT & NUMBER
					CLEAN OUT STRUCTURES
					MANHOLE
					WATER VALVE
					HYDRANT
					TELEPHONE OR POWER POLE
					CATCH BASIN
					UNDERGROUND GAS MAIN & SIZE
					UNDERGROUND TELEPHONE CABLE / CONDUIT
					UNDERGROUND ELECTRIC CABLE / CONDUIT
					OVERHEAD ELECTRICAL LINE
					SANITARY SEWER, SIZE & TYPE
					FORCE MAIN, SIZE & TYPE
					WATER MAIN, SIZE & TYPE
					STORM DRAIN, SIZE & TYPE
					UNDERDRAIN, SIZE & TYPE
					CULVERT, SIZE & TYPE
					RAILROAD
					SILTATION FENCE

A.C.C.M.P.	ASPHALT COATED C.M.P.	C.M.P.	CORRUGATED METAL PIPE	DR	DRAIN	GPD	GALLONS PER DAY	MON	MONUMENT	SF	SQUARE FEET
A.C.P.	ASBESTOS CEMENT PIPE	C.O.	CLEAN OUT	DWG	DRAWING	GPM	GALLONS PER MINUTE	N.I.T.C.	NOT IN THIS CONTRACT	SHT	SHEET
AC	ACRE	C.O. LIN.	CEMENT LINED	EA	EACH	HP	HIGH DENSITY POLYETHYLENE	N.T.S.	NOT TO SCALE	STA	STATION
AGG	AGGREGATE	CE	CENTRAL ANGLE OF CURVE	EC	EXISTING GROUND OR GRADE	HP	HORSEPOWER	N/F	NOW OR FORMERLY	SY	SQUARE YARD
ALUM	ALUMINUM	CF	CUBIC FEET	ELEC	ELECTRIC	HYD	HYDRANT	NO. OR #	NUMBER	TAN	TANGENT
APPD	APPROVED	CFS	CUBIC FEET PER SECOND	ELL	ELBOW	I.D.	INSIDE DIAMETER	O.C.	ON CENTER	TDH	TOTAL DYNAMIC HEAD
APPROX	APPROXIMATE	CI	CAST IRON	EQUIP	EQUIPMENT	IN OR "	INCHES	O.D.	OUTSIDE DIAMETER	TEMP	TEMPORARY
ASB	ASBESTOS	CL	CLASS	EST	ESTIMATED	INV	INVERT	P.C.	POINT OF CURVE	TYP	TYPICAL
ASPH	ASPHALT	CONC	CONCRETE	EXC	EXCAVATE	INV. EL.	INVERT ELEVATION	P.I.	POINT OF INTERSECTION	V	VOLTS
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	CONST	CONSTRUCTION	EXIST	EXISTING	LB	POUND	P.T.	POINT OF TANGENT	W/	WITH
AUTO	AUTOMATIC	CONTR	CONTRACTOR	F.G.	FINISH GRADE	LC	LEACHATE COLLECTION	PERF	PERFORATED	W/O	WITHOUT
AUX	AUXILIARY	CTR	CENTER	FBRGL	FIBERGLASS	LD	LEAK DETECTION	PSI	POUNDS PER SQUARE INCH	YD	YARD
AVE	AVENUE	CY	CUBIC YARD	FDN	FOUNDATION	LOC	LOCATION	PVC	POLYVINYL CHLORIDE		
AVG	AVERAGE	D	DEGREE OF CURVE (ARC DEF.)	FLEX	FLEXIBLE	LT	LEFT	PVMT	PAVEMENT		
AZ	AZIMUTH	DBL	DOUBLE	FLG	FLANGE	LT	LEFT	QTY	QUANTITY		
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	DEG OR °	DEGREE	FLR	FLOOR	M.H.	MANHOLE	R.O.W.	RIGHT OF WAY		
B.M.	BENCHMARK	DEPT	DEPARTMENT	FPS	FEET PER SECOND	M.J.	MECHANICAL JOINT	RAD	RADIUS		
BIT	BITUMINOUS	DI	DUCTILE IRON	FT OR '	FEET	MATL	MATERIAL	REQD	REQUIRED		
BLDG	BUILDING	DIA OR Ø	DIAMETER	FTG	FOOTING	MAX.	MAXIMUM	RT	RIGHT		
BOT	BOTTOM	DIM	DIMENSION	GA	GAUGE	MFR	MANUFACTURE	RTE	ROUTE		
BRG	BEARING	DIST	DISTANCE	GAL	GALLON	MIN.	MINIMUM	S	SLOPE		
C.B.	CATCH BASIN	DN	DOWN	GALV	GALVANIZED	MISC	MISCELLANEOUS	SCH	SCHEDULE		

ABBREVIATIONS

GENERAL NOTES:

- THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
- CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
- EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

SIEVE DESIGNATION	PERCENT PASSING BY WEIGHT
1 INCH	100
1/4 INCH	≤5

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 8 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

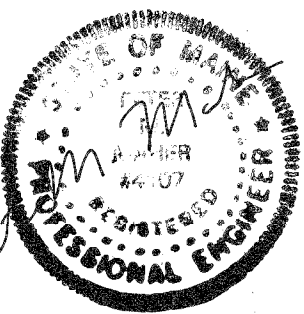
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDT 618.05 AND MDT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION	DETAIL IDENTIFICATION & LETTER
SECTION TITLE & NO.	DETAIL TITLE & LETTER
DRAWING WHERE SECTION IS TAKEN	DRAWING WHERE DETAIL IS CALLED OUT



SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

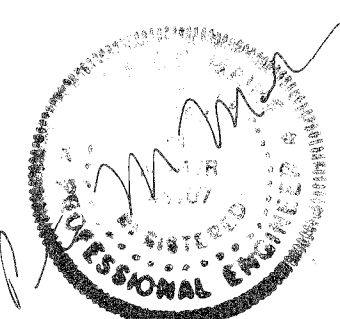
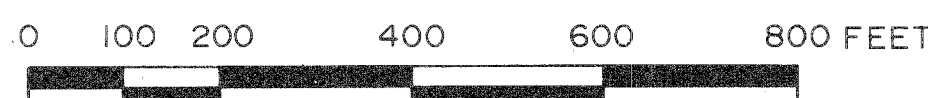


GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

YB-21001



SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

DRN	PAF	6/99
CKD	CHC	6/99
CKD		
CORR		
APPVD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTL T.O.	C - CONST	
SCALE 1" = 200'		

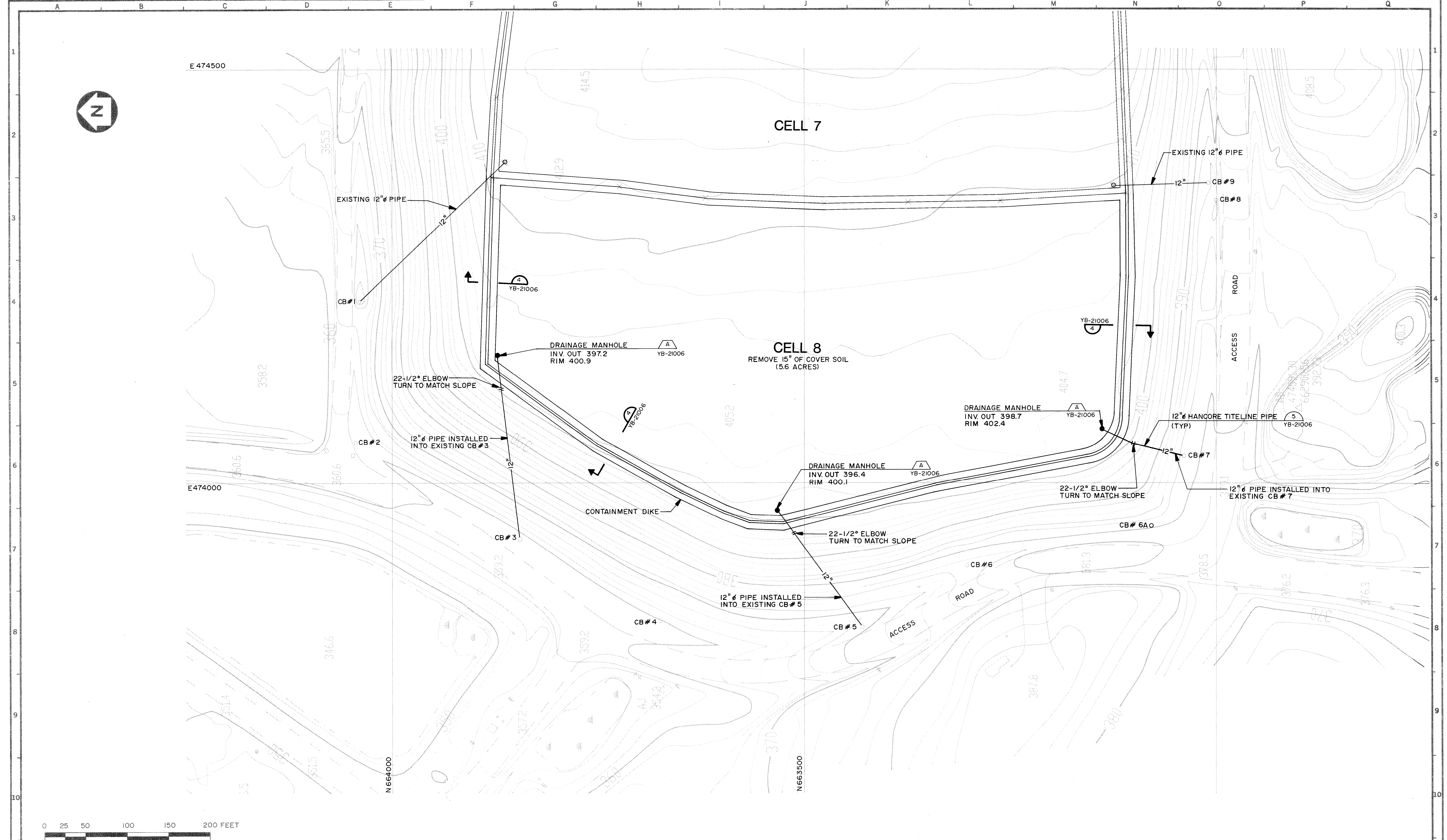

BOWATER
 GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SITE LOCATION PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21002



COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.	
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS	
FROM AERIAL PHOTOGRAPHS DATED 8/9/90	
DRAWING NO.	REFERENCE DRAWING TITLE
CODE	NO. DATE
B	1 8-4-93
REVISION	
BY CKD APPVD	
JOB NO.	

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

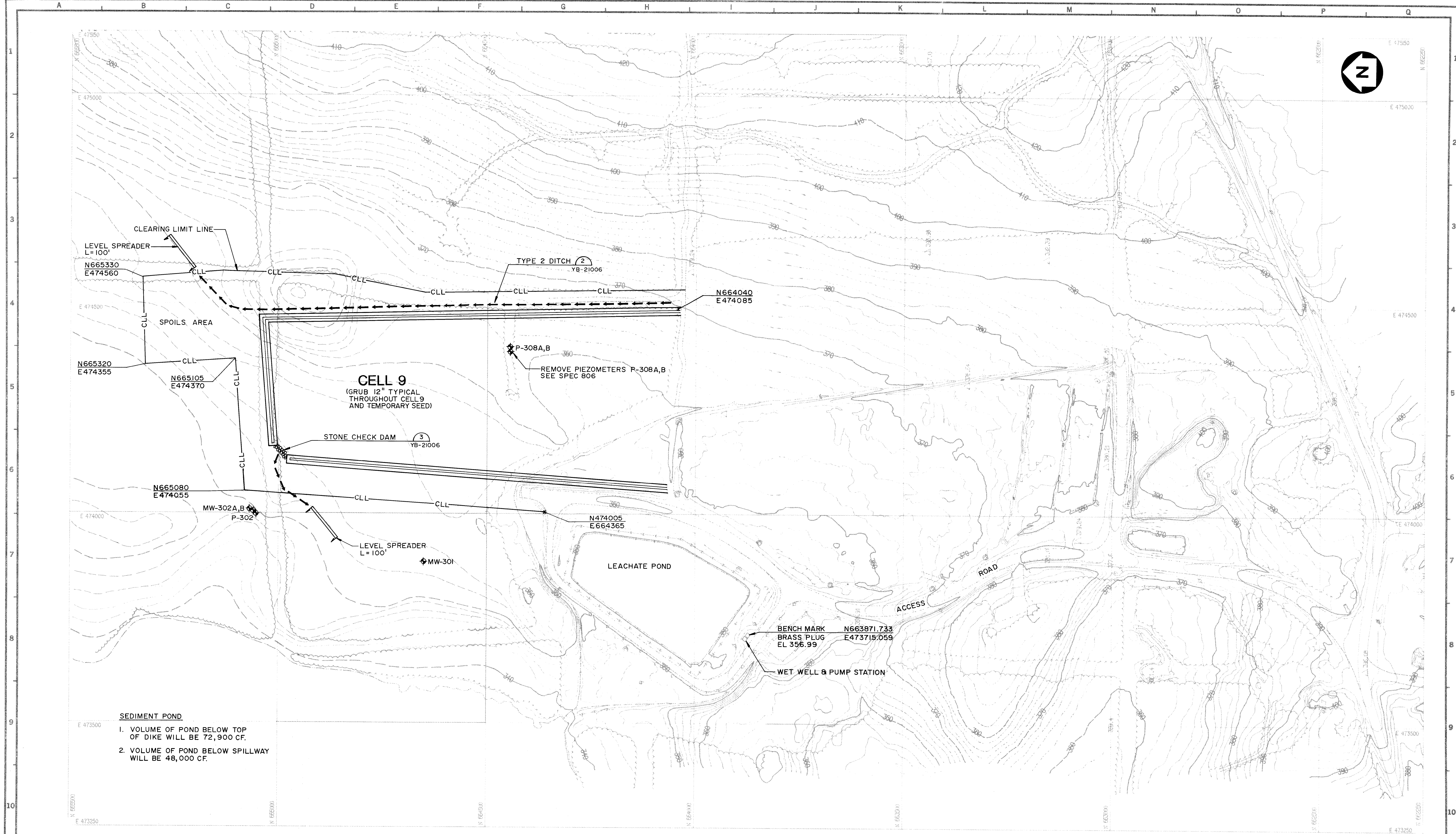
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CKD	MAH	6-93
CKD		
CORR		
APPVD		
ISSUE CODE		
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M - MTL T.O.	C - CONST	
SCALE 1" = 50'		

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 8
SITE DEVELOPMENT PLAN

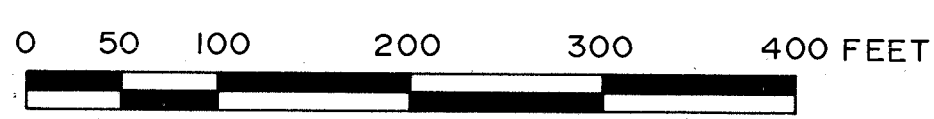
JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

YB-21003



SEDIMENT POND

1. VOLUME OF POND BELOW TOP OF DIKE WILL BE 72,900 CF.
2. VOLUME OF POND BELOW SPILLWAY WILL BE 48,000 CF.



YB-15263	DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION									
DRAWING NO.	REFERENCE DRAWING TITLE				CODE	NO.	DATE	REVISION	BY	CKD

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

CHKD	PAF	6-93
CKD	AKC	6-93
CKD		
CKD		
APPVD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTL T.O.	C - CONST	
SCALE 1" = 100'		

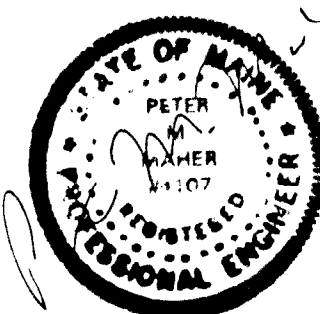
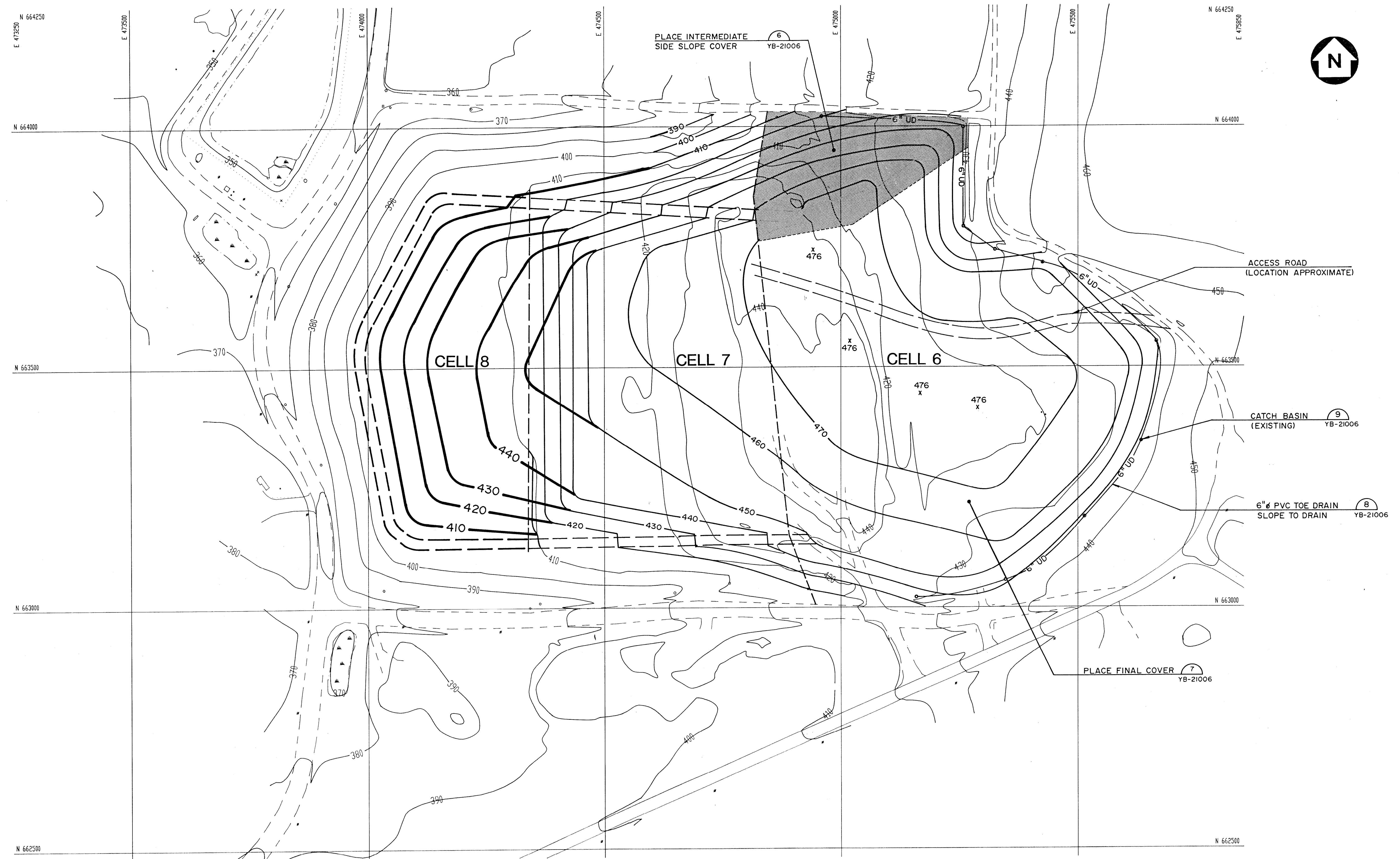


CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 9
SITE DEVELOPMENT PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21004

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SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

DRN	PAF	6-93
CKD	<i>State</i>	6-93
CKD		
CORR		
APPVD		
ISSUE CODE		
P - PRELIM	B - BIDS	
M - MTL T.O.	C - CONST	
SCALE 1" = 100'		


BOWATER

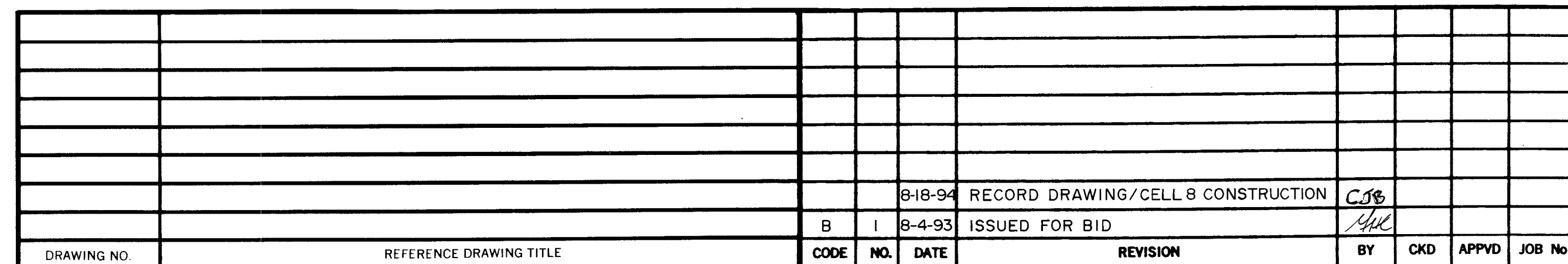
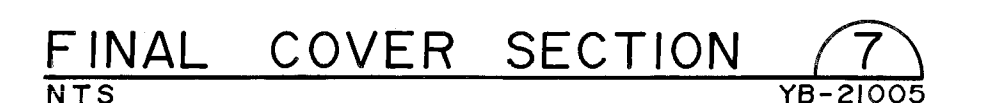
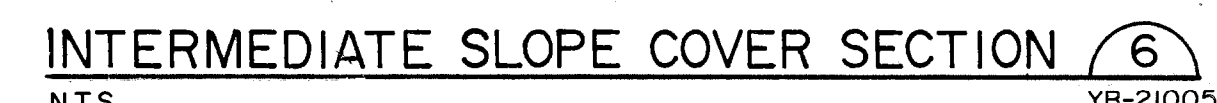
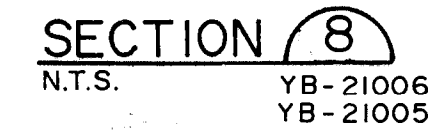
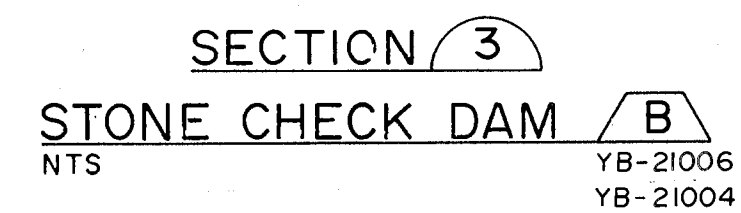
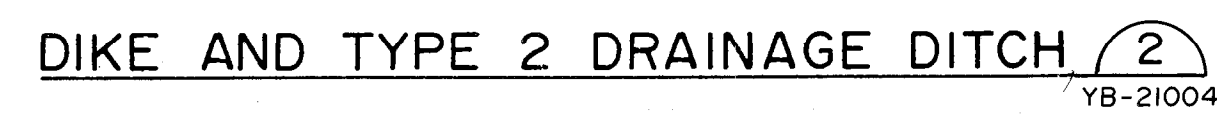
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE, CELL 8
FINAL GRADING PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21005



JOB NO. 93028



BOWATER
GREAT NORTHERN PAPER, INC.

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

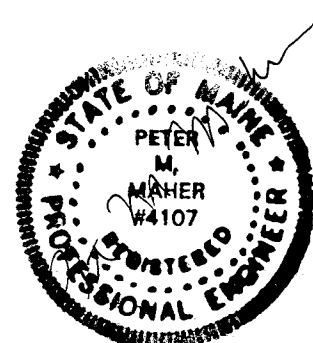
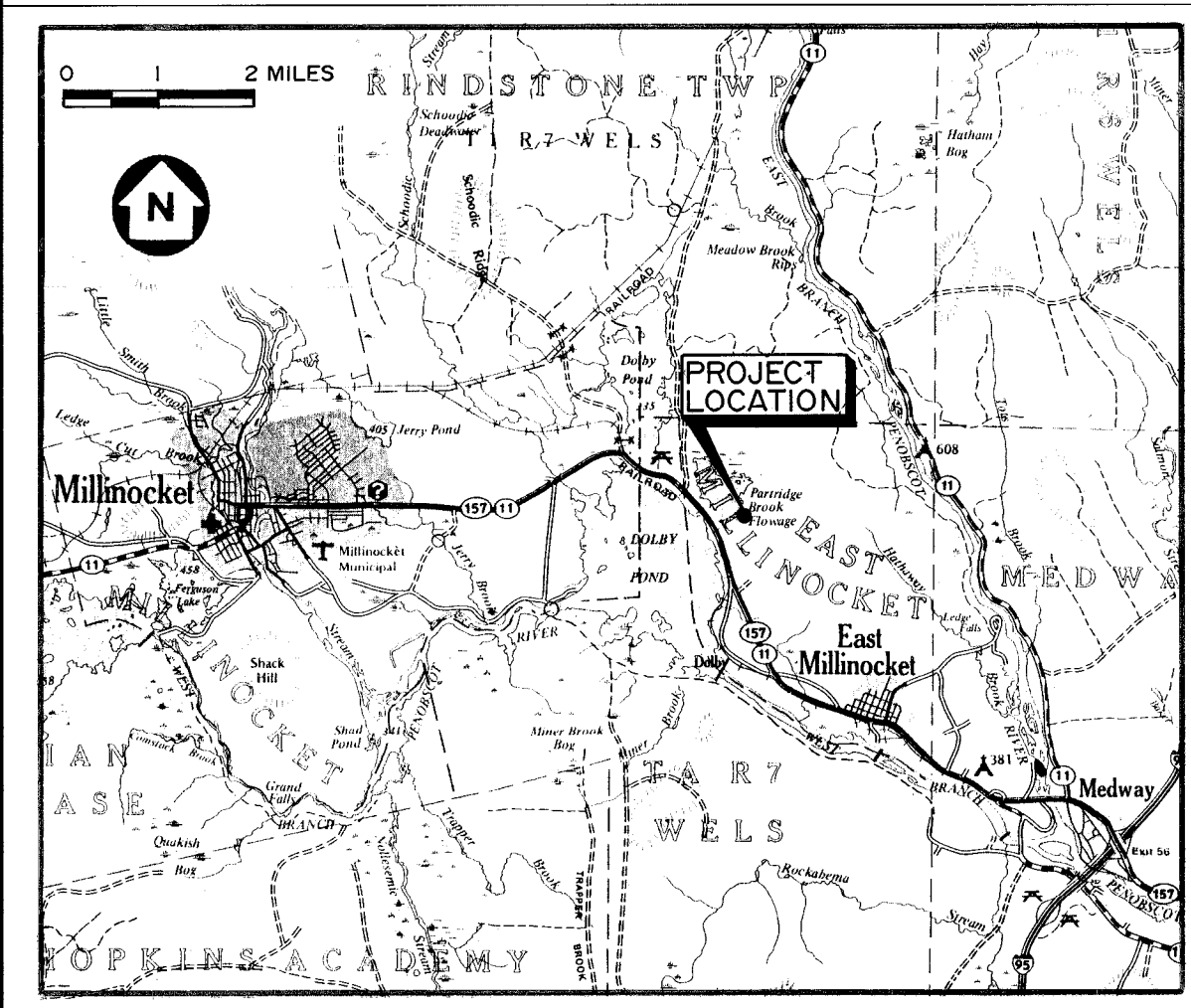
YB-21006

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER INCORPORATED
MILLINOCKET, MAINE
DOLBY III LANDFILL
CELL 9 CONSTRUCTION

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-23039
2	SYMBOLS & ABBREVIATIONS	YB-23040
3	SITE LOCATION PLAN	YB-23041
4	CELL 9 - SITE DEVELOPMENT PLAN	YB-23042
5	CELL 9 - FINAL GRADING PLAN	YB-23043
6	SECTIONS & DETAILS	YB-23044 SHEET 1 OF 2
7	SECTIONS & DETAILS	YB-23044 SHEET 2 OF 2

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

1994



RECORD DRAWING

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

DRN	
CHK	
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE	

 **BOWATER**
Great Northern Paper

EAST OPERATION	
DOLBY III LANDFILL CELL 9 CONSTRUCTION COVER SHEET	
JOB NO. 94654	YB-23039
ENG. REQ. NO.	
FILE NO. 2-092-4703,7082	

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED

ABBREVIATIONS

A.C.C.M.P.	ASPHALT COATED C.M.P.	C.M.P.	CORRUGATED METAL PIPE	DR	DRAIN	GPD	GALLONS PER DAY	MON	MONUMENT	SF	SQUARE FEET
A.C.P.	ASBESTOS CEMENT PIPE	C.O.	CLEAN OUT	DWG	DRAWING	GPW	GALLONS PER MINUTE	N.I.T.C.	NOT IN THIS CONTRACT	SHT	SHEET
AC	ACRE	CEM. LIN.	CEMENT LINED	EA	EACH	HDPE	HIGH DENSITY POLYETHYLENE	N.T.S.	NOT TO SCALE	STA	STATION
AGG	AGGREGATE	CEN	CENTRAL ANGLE OF CURVE	EG	EXISTING GROUND OR GRADE	HP	HORSEPOWER	N/F	NOW OR FORMERLY	SY	SQUARE YARD
ALUM	ALUMINUM	CFS	CUBIC FEET	ELEC	ELECTRIC	HYD	HYDRANT	NO. OR #	NUMBER	TAN	TANGENT
APPD	APPROVED	CL	CUBIC FEET PER SECOND	ELL	ELBOW	I.D.	INSIDE DIAMETER	O.C.	ON CENTER	TDH	TOTAL DYNAMIC HEAD
APPROX	APPROXIMATE	CONC	CAST IRON	EQUIP	EQUIPMENT	IN OR "	INCHES	O.D.	OUTSIDE DIAMETER	TEMP	TEMPORARY
ASB	ASBESTOS	CONST	CLASS	EST	ESTIMATED	INV	INVERT	P.C.	POINT OF CURVE	TYP	TYPICAL
ASPH	ASPHALT	CONTR	CONCRETE	EXC	EXCAVATE	INV. EL.	INVERT ELEVATION	P.I.	POINT OF INTERSECTION	V	VOLTS
AT2 C.M.P.	ALUMINUM TYPE 2 C.M.P.	CTR	CONSTRUCTION	EXIST	EXISTING	LB	POUND	P.T.	POINT OF TANGENT	W/O	WITH
AUTO	AUTOMATIC	CY	CONTRACTOR	F.G.	FINISH GRADE	LC	LEACHATE COLLECTION	PERF	PERFORATED	YD	WITHOUT
AUX	AUXILIARY	D	CENTER	FBRGL	FIBERGLASS	LD	LEAK DETECTION	PST	POLYVINYL CHLORIDE		YARD
AVE	AVENUE	DBL	CUBIC YARD	FDN	FOUNDATION	LTN. FT.	LINEAR FEET	PVC	PAVEMENT		
AVG	AVERAGE	DEG OR °	DEGREE OF CURVE (ARC DEF.)	FLEX	FLANGE	LOC	LOCATION	PVMT	QUANTITY		
AZ	AZIMUTH	DEPT	DEGREE	FLG	FLOOR	LT	LEFT	QTY	RIGHT OF WAY		
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	DIA OR Ø	DIAMETER	FLR	FEET PER SECOND	M.H.	MANHOLE	R.O.W.	RADIUS		
B.M.	BENCH MARK	DIM	DUCTILE IRON	FPS	FEET	M.J.	MECHANICAL JOINT	REQD	REQUIRED		
BIT	BITUMINOUS	DIST	DIAMETER	FT OR '	FOOTING	MATL	MATERIAL	RT	RIGHT		
BLDG	BUILDING	DN	DIMENSION	GA	GAUGE	MFR	MANUFACTURE	RTE	ROUTE		
BOT	BOTTOM		DISTANCE	GALV	GALLON	MIN.	MINIMUM	S	SLOPE		
BRG	BEARING		DOWN		GALVANIZED	MISC	MISCELLANEOUS	SCH	SCHEDULE		
C.B.	CATCH BASIN										

GENERAL NOTES:

- THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR, AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
- CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATION:

COMMON BORROW - MDOT SPECIFICATION - 703.18

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "D"

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "G"

ROADWAY SURFACE COURSE - MDOT SPECIFICATION - 703.10

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

PIPE BEDDING - THE PIPE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

BASAL BLANKET - MDOT SPECIFICATION - 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

6" AND 8" PVC PIPE - SDR 21

18" PVC PIPE - SDR 26

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 9 ROADWAY AND SEDIMENTATION POND AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE.

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION

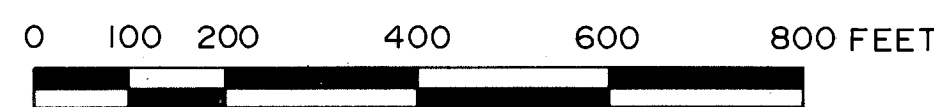
SECTION NO. & LOCATION	DETAIL IDENTIFICATION & LETTER
DRAWING WHERE SECTION OR DETAIL APPEARS	DRAWING WHERE DETAIL IS CALLED OUT
SECTION TITLE & NO.	DETAIL TITLE & LETTER
DRAWING WHERE SECTION IS TAKEN	DRAWING WHERE DETAIL IS CALLED OUT

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DRK	
CRD	
CRD	
CORR	
APPVD	
ISSUE CODE	
8-BIDS	
SCALE	

GREAT NORTHERN PAPER, INC.EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONSJOB NO. 94654
ENG. REG. NO.
FILE NO. 2-092-4703,7082

YB-23040

[illegible]

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

DRN	
CKD	
CKD	
CORR	
APPVD	
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL T.O.	C - CONST
SCALE 1" = 200'	

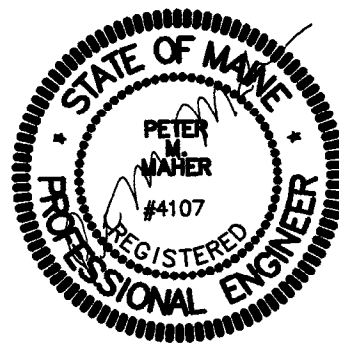

BOWATER
 GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SITE LOCATION PLAN

JOB NO. 94654
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-23041

D:\COMP\ACAD\CELLS\GMP\CELL9.MXD JUL 12 15:21:40 1995



25 0 50 100 FEET

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHKD	APPVD	JOB NO.
				7/95	RECORD DRAWING				
				9/8/94	ISSUED FOR BID				
				9/7/94	SUBMITTED TO CLIENT				

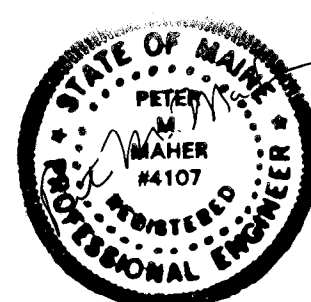
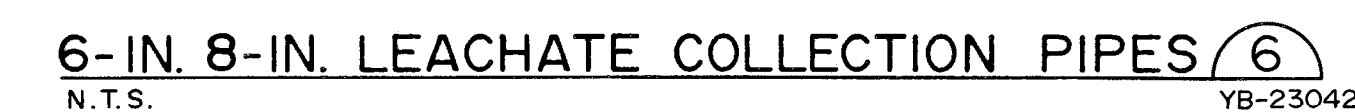
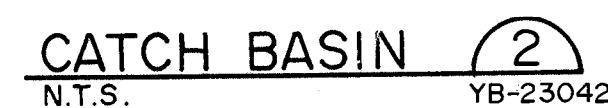
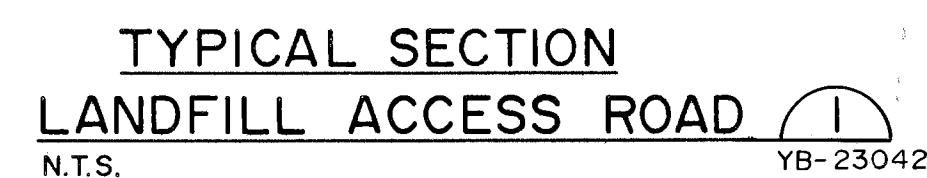
SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

DRN	
CHK	
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE AS SHOWN	

BOWATER
Great Northern Paper

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SITE DEVELOPMENT PLAN
JOB NO. 94654
ENG. REQ. NO. YB-23042
FILE NO. 2-092-4703.7082

[illegible]

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

DRN	
CKD	
CKD	
CORR	
APPVD	
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL T.O.	C - CONST
SCALE N.T.S.	

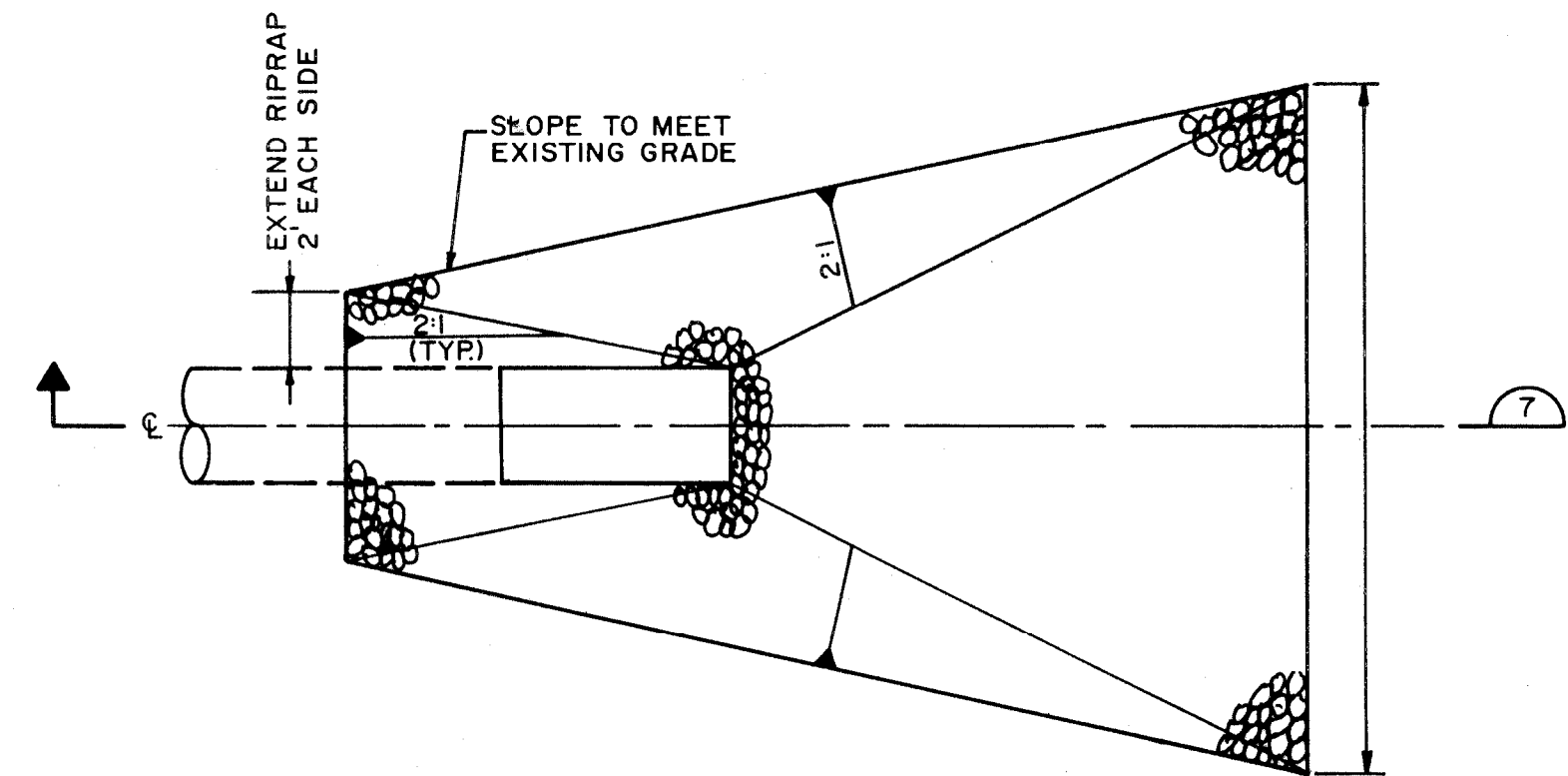

BOWATER
 GREAT NORTHERN PAPER, INC.

EAST OPERATION

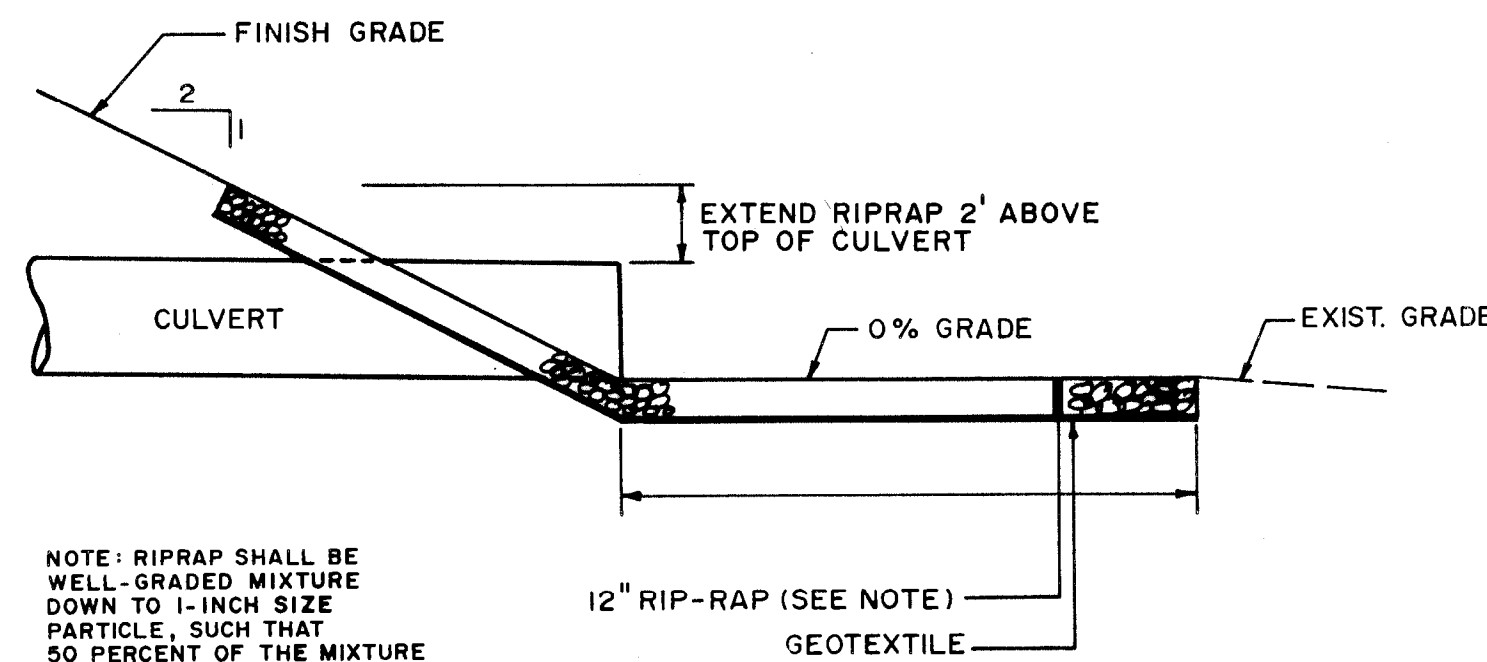
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94654
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-23044
SHEET 1 OF 2



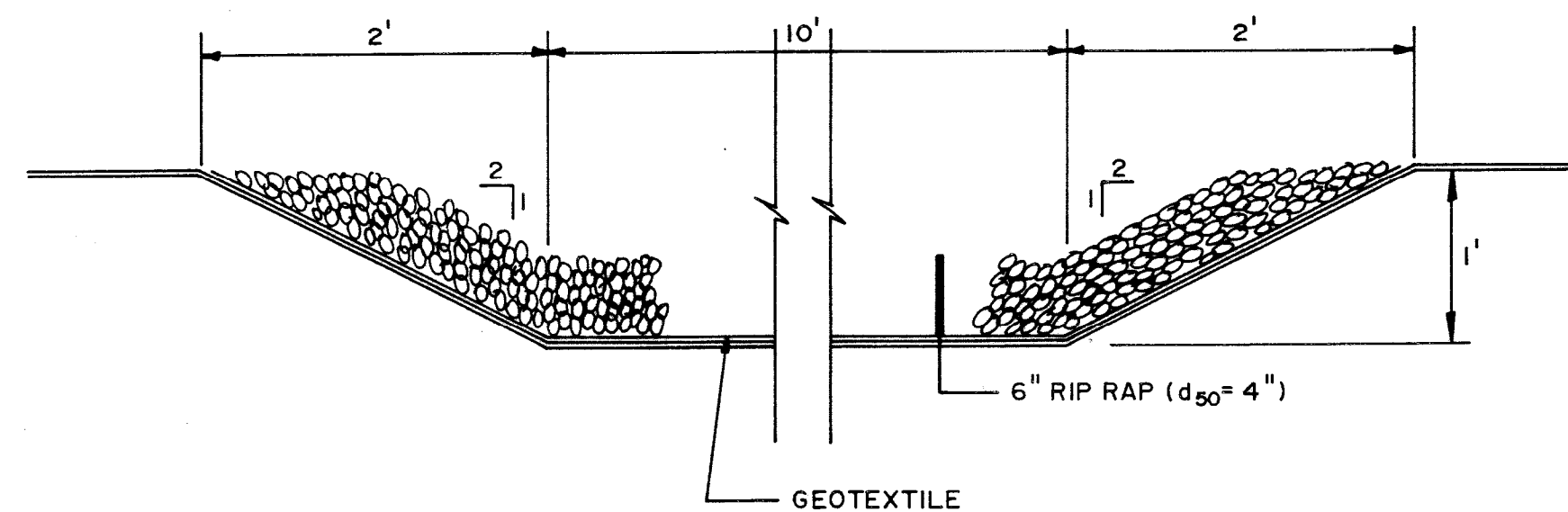
PLAN
N.T.S.



NOTE: RIPRAP SHALL BE WELL-GRADED MIXTURE DOWN TO 1-INCH SIZE PARTICLE, SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN 4."

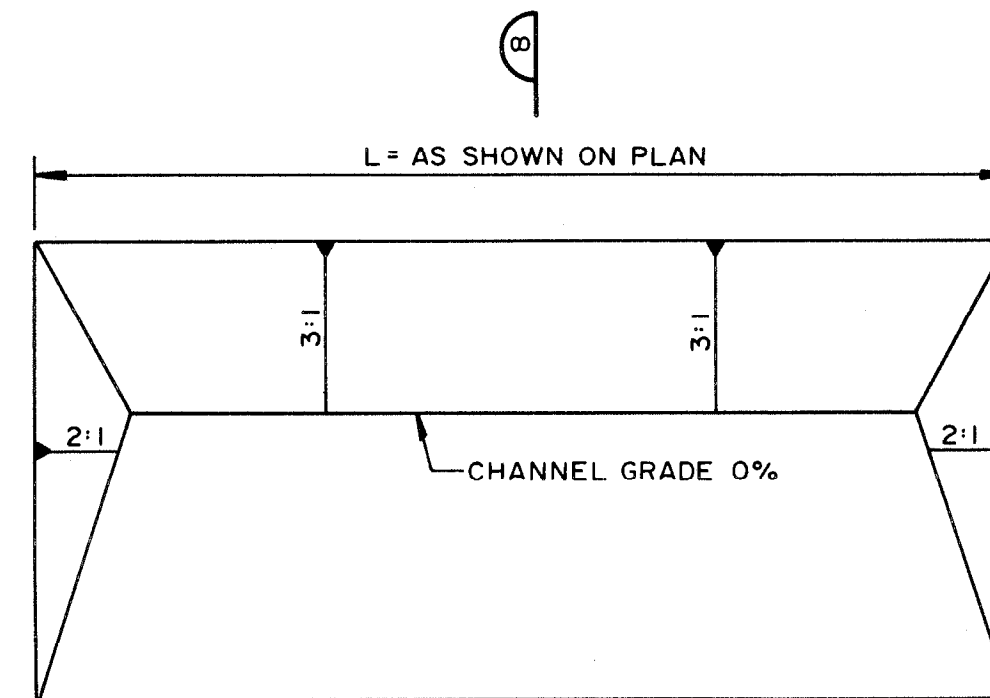
SECTION 7
N.T.S.

CULVERT W/ RIPRAP /B
YB-23042



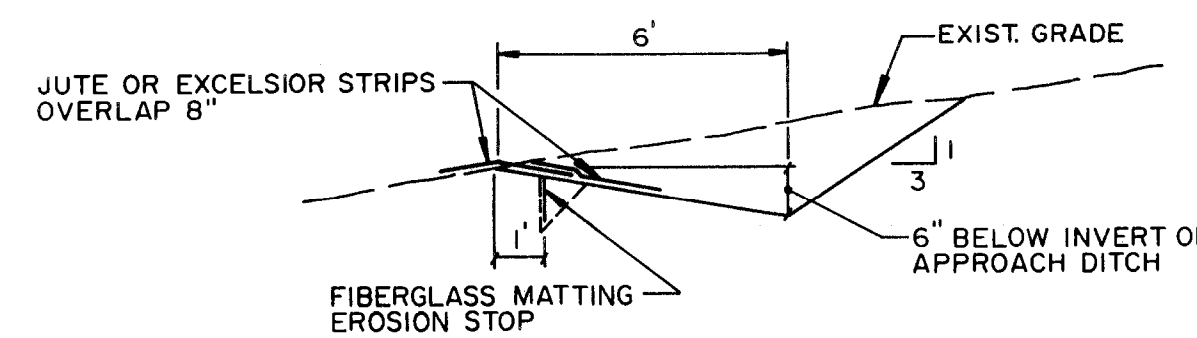
POND SPILLWAY /C
N.T.S.

YB-23042



NOTE: LAST 20 FT. OF DRAINAGE DITCH NOT TO EXCEED 1% GRADE
UNDISTURBED OUTLET

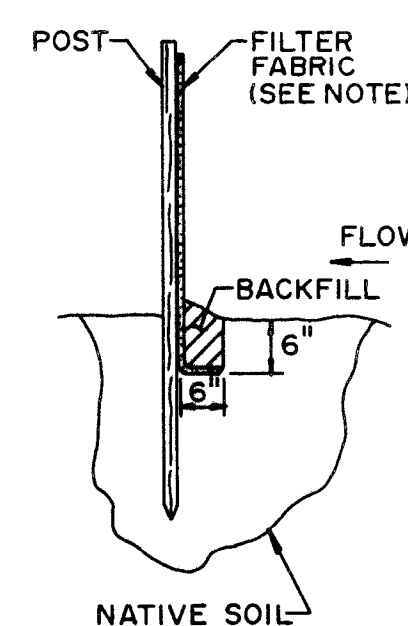
PLAN
N.T.S.



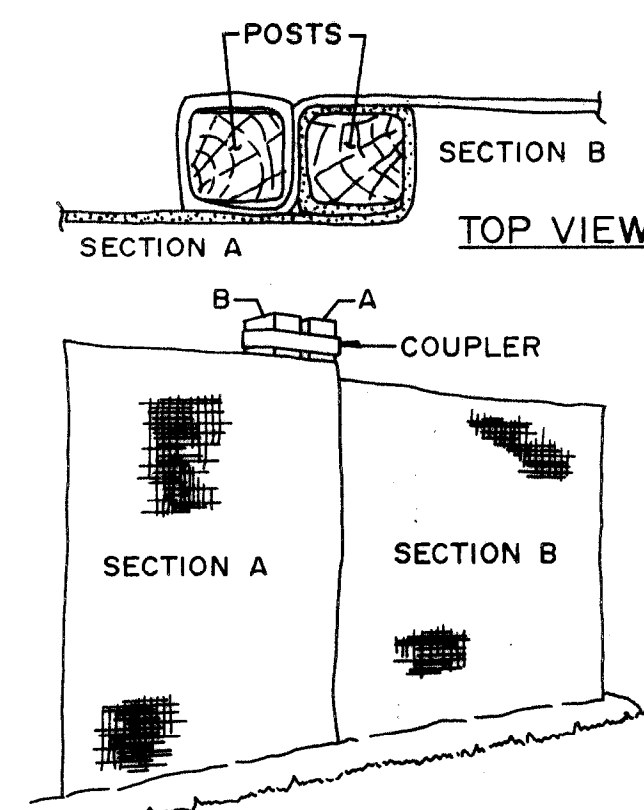
SECTION 8
N.T.S.

LEVEL SPREADER /D
YB-23042

NOTE: SILTATION FENCE SHALL BE ENVIROFENCE AS MANF. BY MIRAFI INC., PROPEX SILT STOP AS MANF. BY AMOCO FABRICS CO. OR EQUAL



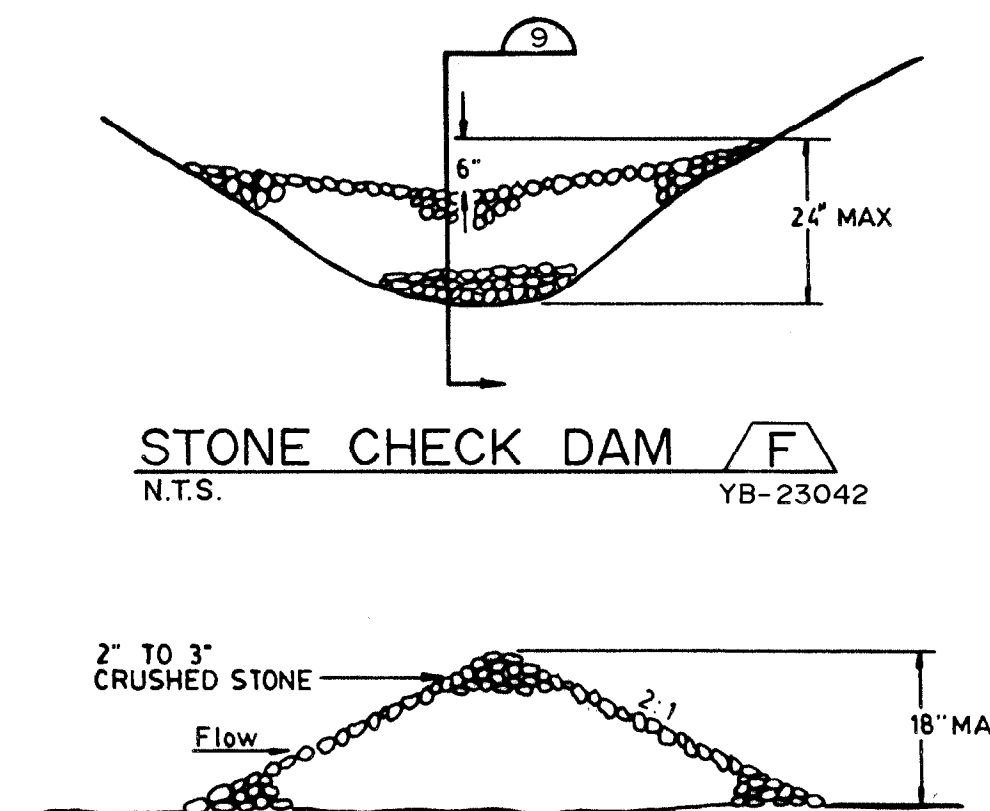
TOE-IN DETAIL



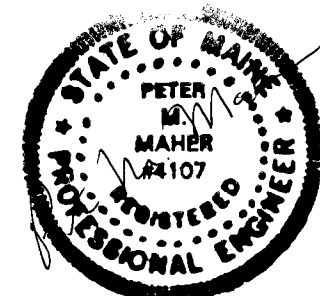
JOINING SECTIONS

SILTATION FENCE /E
N.T.S.

YB-23042



SECTION 9
N.T.S.



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB NO.
				7/95	RECORD DRAWING				
				9/8/94	ISSUED FOR BID				
				9/7/94	SUBMITTED TO CLIENT				

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

DRN	
CKD	
CKD	
CORR	
APPVD	
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL. T.O.	C - CONST
SCALE	N.T.S.

BOWATER
GREAT NORTHERN PAPER, INC.

EAST OPERATION

DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

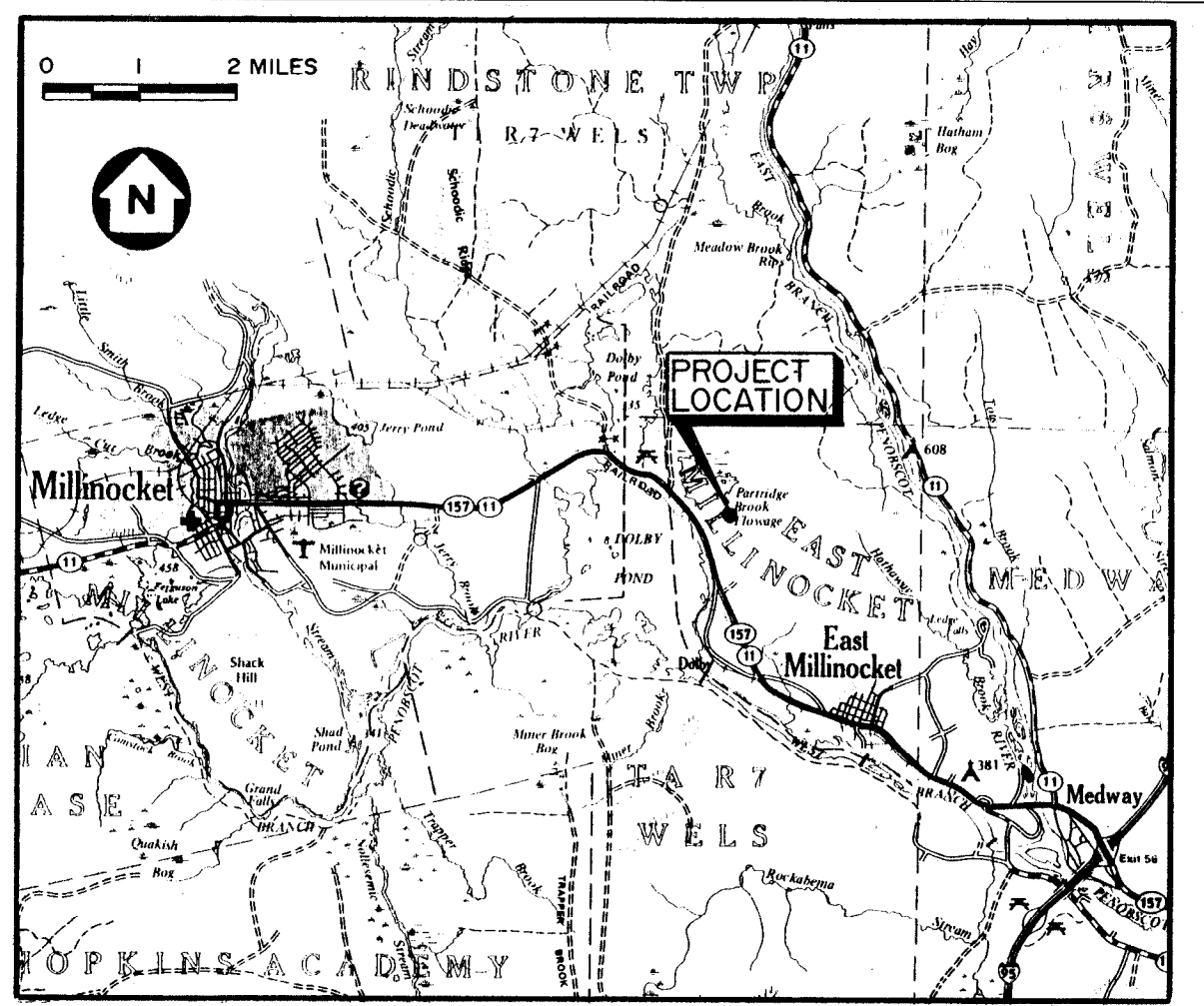
YB-23044
SHEET 2 OF 2

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER INCORPORATED
MILLINOCKET, MAINE
DOLBY III LANDFILL
CELL 10 CONSTRUCTION

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-23378
2	SYMBOLS & ABBREVIATIONS	YB-23379
3	SITE LOCATION PLAN	YB-23380
4	CELL 10 - SITE DEVELOPMENT PLAN	YB-23381
5	CELLS 7 & 8 CLOSURE - FINAL GRADING PLAN	YB-23382
6	CELL 10 - FINAL GRADING PLAN	YB-23383
7	SECTIONS & DETAILS	YB-23384 SHEET 1 OF 2
8	SECTIONS & DETAILS	YB-23384 SHEET 2 OF 2

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

1995



SEVEE & MAHER ENGINEERS, INC.

CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

DRN	
CHK	
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE	

 **BOWATER**
Great Northern Paper

EAST OPERATION

DOLBY III LANDFILL
CELL 10 CONSTRUCTION
COVER SHEET

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082
YB-23378

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW - MDOT SPECIFICATION 703.18
ROADWAY SUBBASE - MDOT SPECIFICATION 703.06 TYPE "D"
ROADWAY SUBBASE - MDOT SPECIFICATION 703.06 TYPE "G"
ROADWAY SURFACE COURSE - MDOT SPECIFICATION 703.10

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET - MDOT SPECIFICATION 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE - SDR 21

12" PVC PIPE - SDR 26

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 10 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

SECTION TITLE & NO.

ACCESS ROAD 3

C-100

DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER

MANHOLE A

C-100

DRAWING WHERE DETAIL APPEARS

JOB NO. 95019

**DOLBY III LANDFILL
CELL 10 CONSTRUCTION**

SYMBOLS & ABBREVIATIONS

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

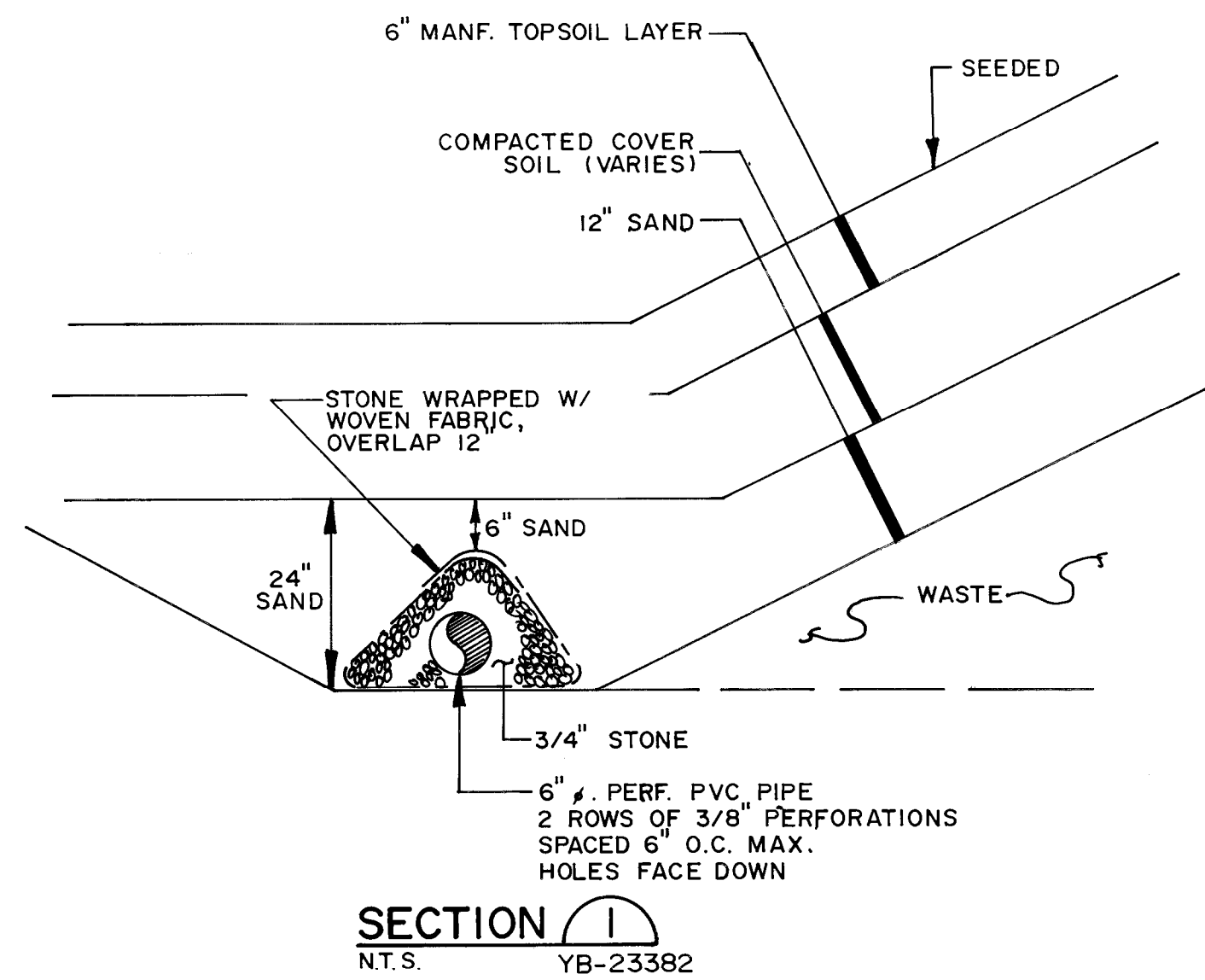
YB-23379

DRN	
CHK	
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mt'l T.O.	C - Const.
SCALE	

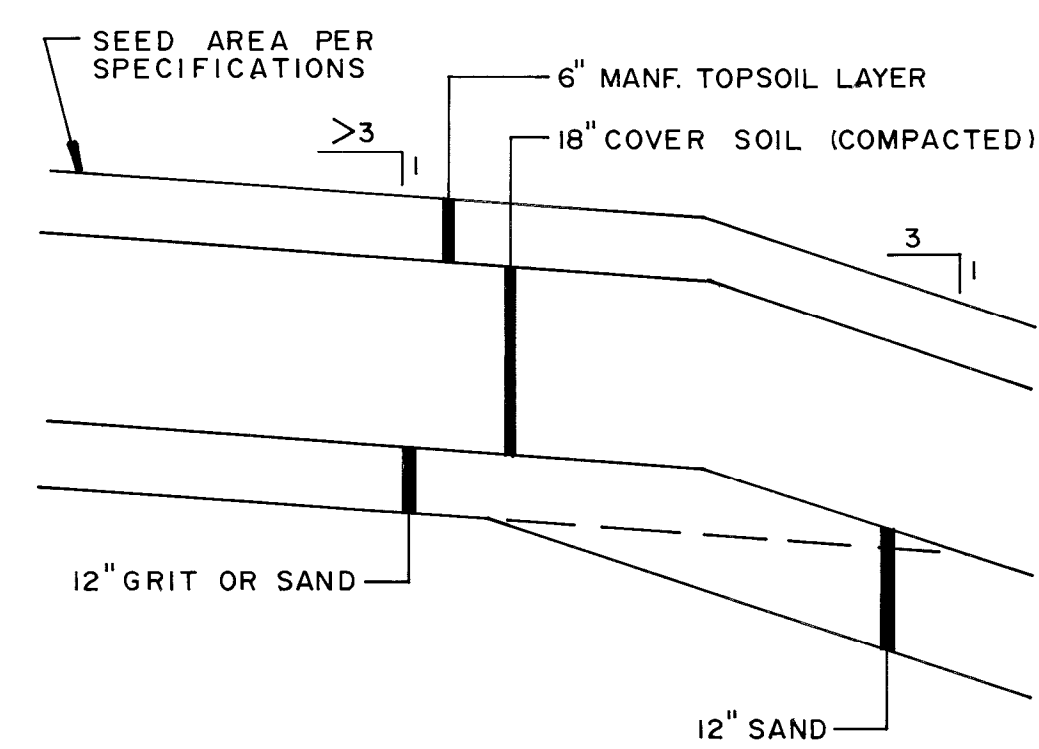




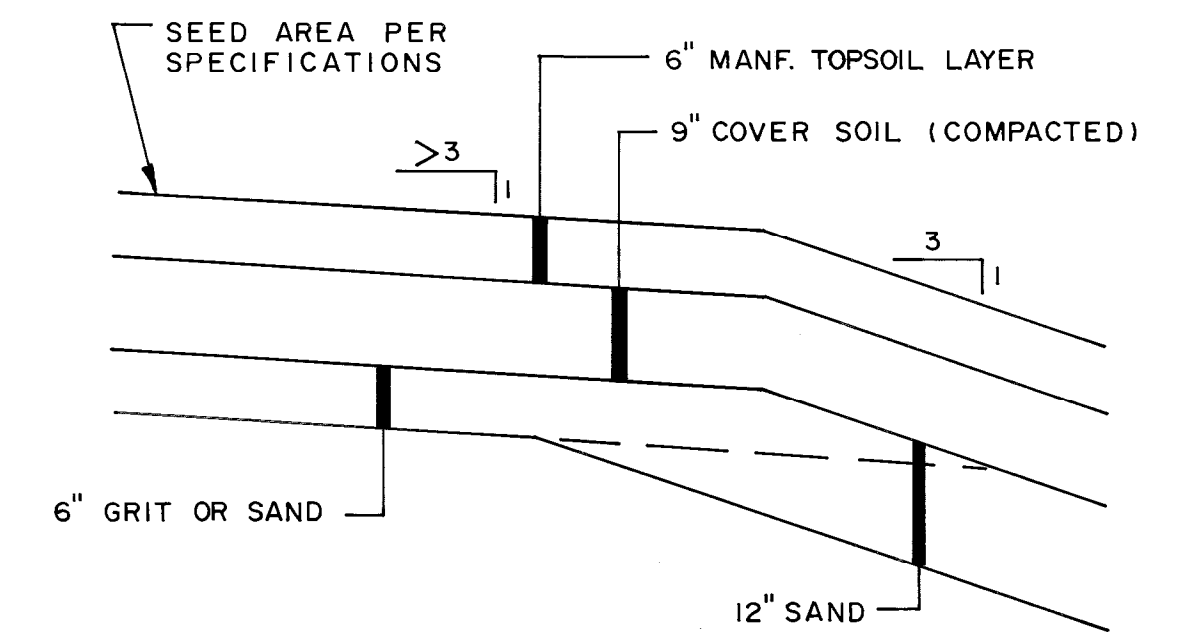




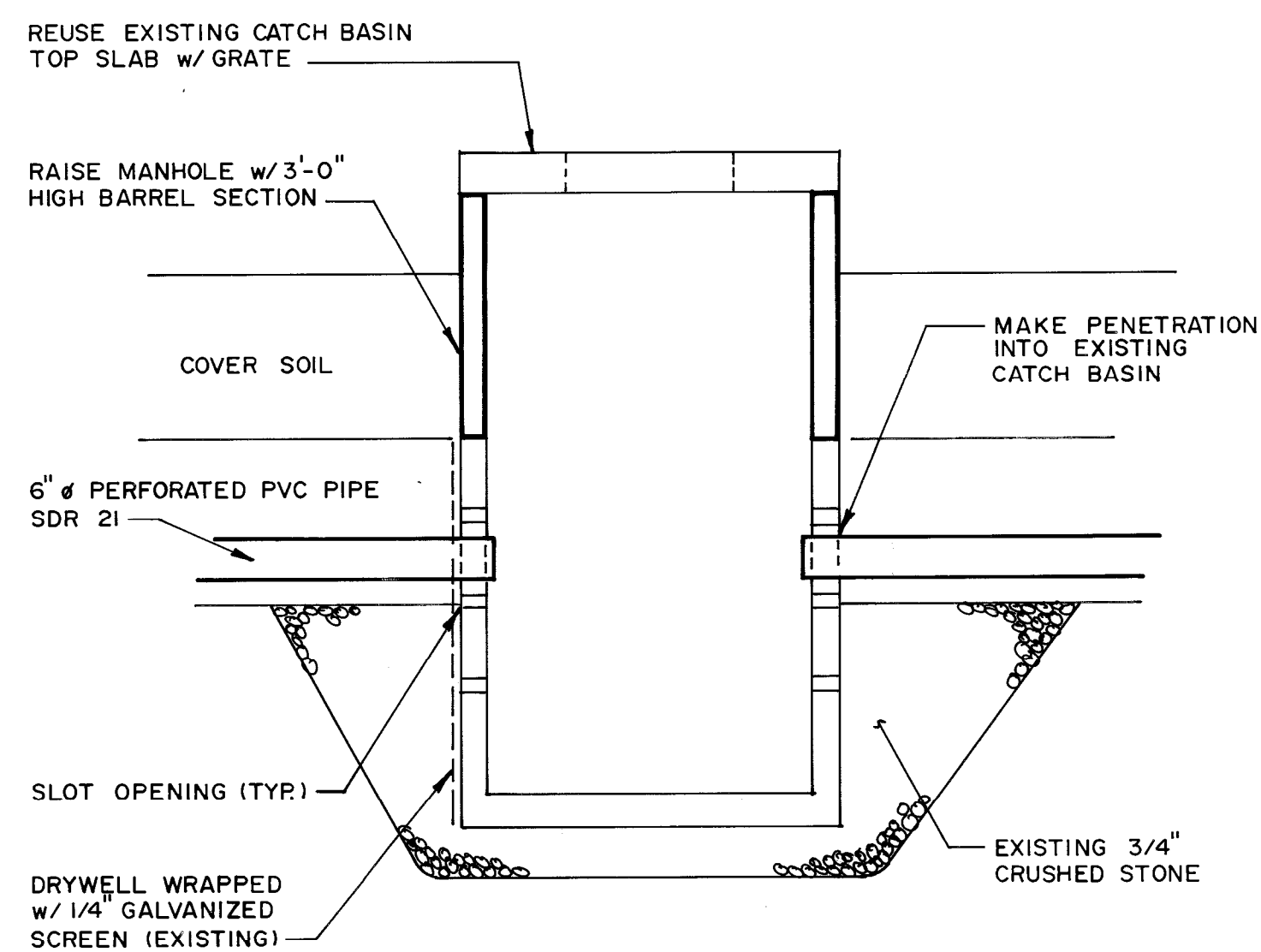
SECTION 1
N.T.S. YB-23382



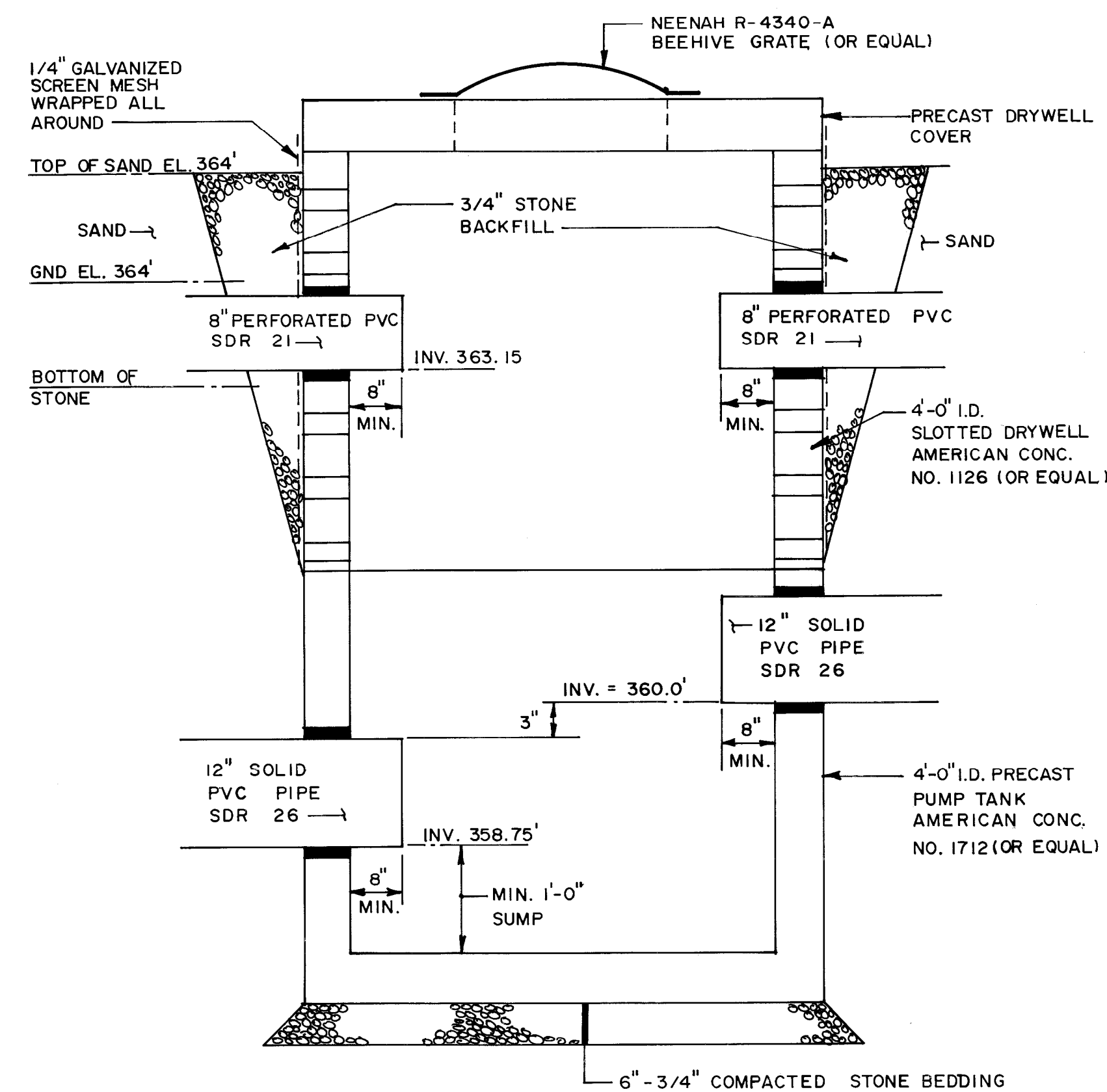
FINAL COVER SECTION 2
N.T.S. YB-23382



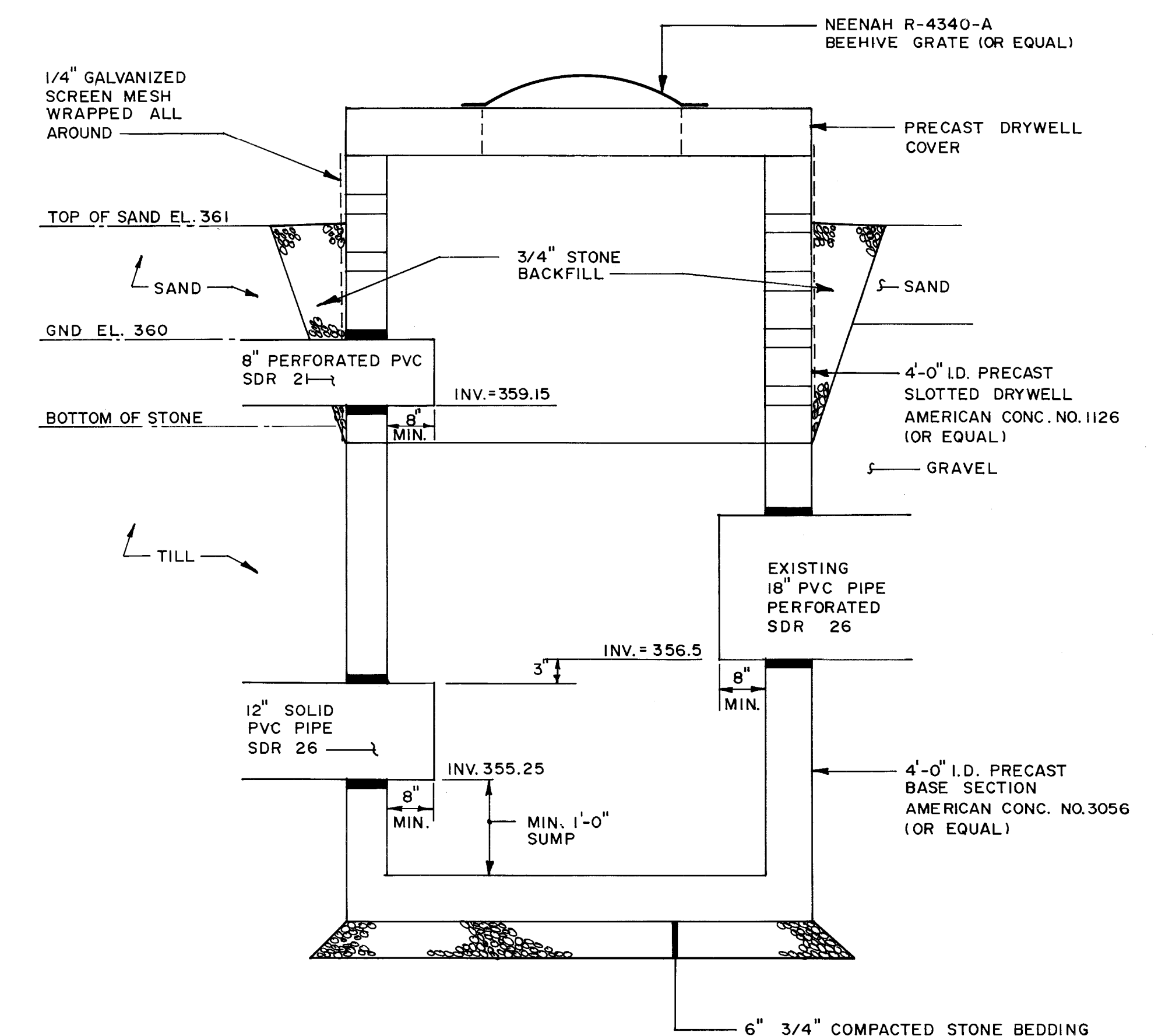
INTERMEDIATE SLOPE COVER SECTION 3
N.T.S. YB-23382



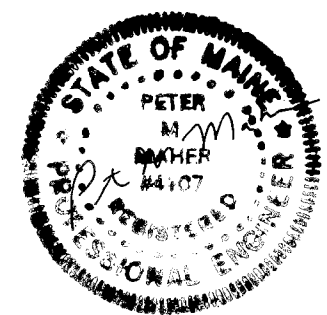
DRAINAGE MANHOLE 4
N.T.S. (EXISTING) YB-23382



CATCH BASIN # 32 A
N.T.S. YB-23381



CATCH BASIN # 31 B
N.T.S. YB-23381



DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHK	APPV	JOB NO.
		C		8/95	ISSUED FOR CONSTRUCTION				
		B		5/95	SUBMITTED FOR BID				

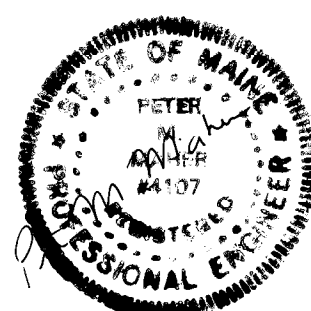
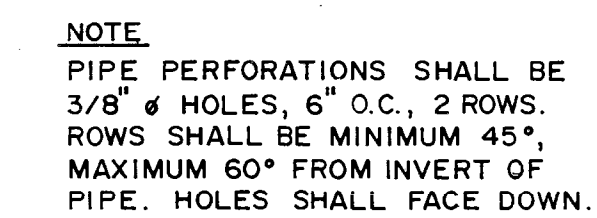
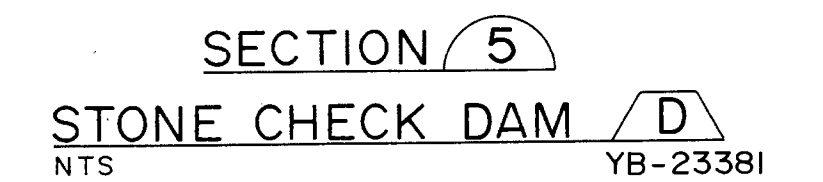
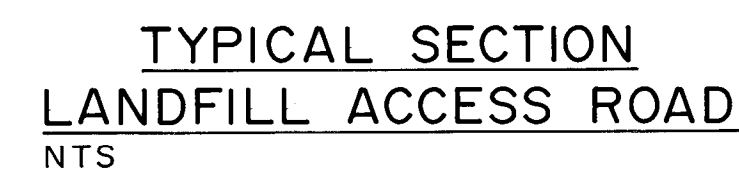
SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

DRN	HAM
CKD	AMC
CKD	
CORR	
APPV	
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL. O. C. CONST.	
SCALE	N.T.S.

BOWATER
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS
JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703.7082
YB-23384
SHEET 1 OF 2



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JOB NO. 95019

DRM	HAM
CKD	<i>SH</i>
CKD	
CORR	
APPVD	
ISSUE CODE	
P - PRELIM	B - BIDS
M - MTL T.O.	C - CONST
SCALE N.T.S.	

EAST OPERATION

DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94678
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

Y B-23384
SHEET 2 OF 2

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER INCORPORATED
MILLINOCKET, MAINE
DOLBY III LANDFILL
CELL 11 CONSTRUCTION

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-25219
2	SYMBOLS & ABBREVIATIONS	YB-25220
3	EXISTING CONDITIONS PLAN	YB-25221
4	CELL 11 - SITE DEVELOPMENT PLAN	YB-25222
5	FINAL GRADING PLAN	YB-25223
6	SECTIONS & DETAILS	YB-25224

SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine



DRN	MSB
CHK	GHC
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - Mtl T.O.	C - Const.
SCALE	NONE



EAST OPERATION	
DOLBY III LANDFILL CELL 11 CONSTRUCTION	
COVER SHEET	
JOB NO. 94744	YB-25219
ENG. REQ. NO.	
FILE NO. 2-092-7082	

99070.00

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SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
	NORTH ARROW (MAGNETIC)		STONE WALL		 MANHOLE
	NORTH ARROW (PLAN NORTH)		DRAINAGE COURSE (WITH DIRECTION)		 CATCH BASIN
	CONTOUR LINES		EDGE OF WATER		 WATER VALVE
	SPOT ELEVATION (GRADE)		WATER ELEVATION (GROUND OR SURFACE)		 HYDRANT
	EXISTING GROUND		FENCE LINE (WOOD)		 UTILITY POLE
	SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT.		FENCE LINE (WIRE)		 CLEAN OUT STRUCTURE
	PROPERTY LINE OR R.O.W.		RETAINING WALL		 UNDERGROUND GAS MAIN
	PROPERTY LINE W/ BEARING AND DISTANCE		GUARD RAIL		 UNDERGROUND TELEPHONE LINE
	CONSTRUCTION BASELINE		BUILDING AND STRUCTURES		 UNDERGROUND ELECTRICAL LINE
	BOUNDARY LINE (State, County, Municipality)		SLOPE RATIO (HORIZONTAL TO VERTICAL)		 OVERHEAD ELECTRICAL LINE
	SURVEY MONUMENT		SLOPES (WITH SLOPE RATIO)		 12" ACP
	SURVEY IRON		EDGE OF TRAVELED WAY		 8" PVC
	DRILL HOLE, PK, OR STAKE		CUT OR FILL LINE		 8" D.I.
	WOODS OR BRUSH LINE		CLEARING LIMIT LINE		 12" RCP
	INDIVIDUAL TREE (Deciduous)		BITUMINOUS PAVEMENT		 8" UD
	INDIVIDUAL TREE (Coniferous)		CONCRETE		 CULVERT
	TREE, TO BE REMOVED		TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER		 RAILROAD
	MAPPED WETLAND		TEST PIT AND NUMBER		 SILTATION FENCE
					 6" PD
					 6" LT
					 6" LC
					 6" LD
					 TERRACE DRAINAGE SWALE
					 4" GS
					 6" SWP

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE - SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 11 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDING.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

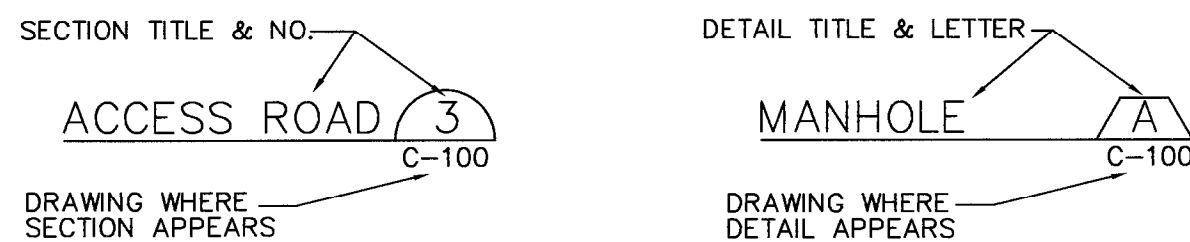
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

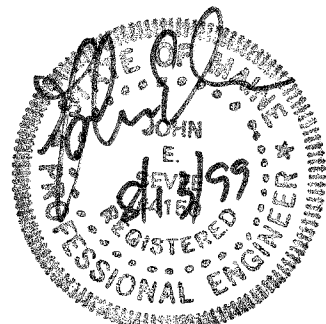
INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION



B.C.C.M.P.	ASPHALT COATED C.M.P.	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	P.C.	POINT ON CURVE
A.C.P.	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HP	HORSEPOWER	PD	PERIMETER DRIP
AC	ACRE	DEG OR °	DIAMETER	HYD	HYDRANT	P.I.	POINT OF INTERSECTION
AGG	AGGREGATE	DEPT	DEPTH			P.T.	POINT OF TANGENT
ALUM	ALUMINUM	DI	DUCTILE IRON	I.D.	INSIDE DIAMETER	PERF	PERFORATED
APPD	APPROVED	DIA OR Ø	DIAMETER	IN OR "	INCHES	PSI	POUNDS PER SQUARE
APPROX	APPROXIMATE	DM	DIMENSION	INV	INVERT	PVC	POLYVINYL CHLORIDE
ARMH	AIR RELEASE MANHOLE	DIST	DISTANCE	INV. EL	INVERT ELEVATION	PWMT	PAVEMENT
ASS	ASBESTOS	DN	DOWN				
ASPH	ASPHALT	DR	DRAIN	LB	POUND	QTY	QUANTITY
AUTO	AUTOMATIC	DWG	DRAWING	LC	LEACHATE COLLECTION		
AUX	AUXILIARY	EA	EACH	LD	LEAK DETECTION	R.O.W.	RIGHT OF WAY
AVE	AVENUE	EG	EXISTING GROUND OR GRADE	LN FT.	LINEAR FEET	RAD	RADIUS
AZMUTH	AZMUTH	ELEC	ELECTRIC	LOC	LOCATION	REQD	REQUIRED
		EL	ELEVATION	LT	LEACHATE TRANSPORT	RT	RIGHT
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	ELB	ELBOW	M.H.	MANHOLE	RTE	ROUTE
B.M.	BENCH MARK	EQUIP	EQUIPMENT	M.J.	MECHANICAL JOINT	S	SLOPE
BLT	BITUMINOUS	EST	ESTIMATED	MATL	MATERIAL	SCH	SCHEDULE
BUILDG	BUILDING	EXC	EXCAVATE	MAX	MAXIMUM	SF	SQUARE FEET
BOT	BOTTOM	EXIST	EXISTING	MFR	MANUFACTURE	SHT	SHEET
BRG	BEARING			MIN	MINIMUM	STA	STATION
				MISC	MISCELLANEOUS	SY	SQUARE YARD
				MON	MONUMENT		
CEN	CATCH BASIN	F.G.	FINISH GRADE			TAN	TANGENT
CEN	CENTER	FBRGL	FIBERGLASS			TOT	TOTAL DYNAMIC HEAD
CEN. LIN.	CEMENT LINED	FDN	FOUNDATION	N.I.T.C.	NOT IN THIS CONTRACT	TEMP	TEMPORARY
C.M.P.	CORRUGATED METAL PIPE	FLEX	FLEXIBLE	N.T.S.	NOT TO SCALE	TYP	TYPICAL
C.O.	CLEAN OUT	FLG	FLANGE	N/F	NOW OR FORMERLY		
CF	CUBIC FEET	FLR	FLOOR	NO. OR #	NUMBER	V	VOLTS
CFS	CUBIC FEET PER SECOND	FPS	FEET PER SECOND	O.C.	ON CENTER	W	WITH
CAST	CAST IRON	FT OR °	FEET OR DEGREE	O.D.	OUTSIDE DIAMETER	W/O	WITHOUT
CL	CLASS	FTG	FOOTING			YD	YARD
CONC	CONCRETE	GA	GAUGE				
CONST	CONSTRUCTION	GAL	GALLON				
CONTR	CONTRACTOR	GALV	GALVANIZED				
CTR	CENTER	GPD	GALLONS PER DAY				
CY	CUBIC YARD	GPM	GALLONS PER MINUTE				



SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

DRN	MSB
CHK	GHC
CHK	
CORR	
APPVD	
ISSUE CODE	
P – Prelim	B – Bids
M – Mtl T.O.	C – Const.
SCALE AS SHOWN	



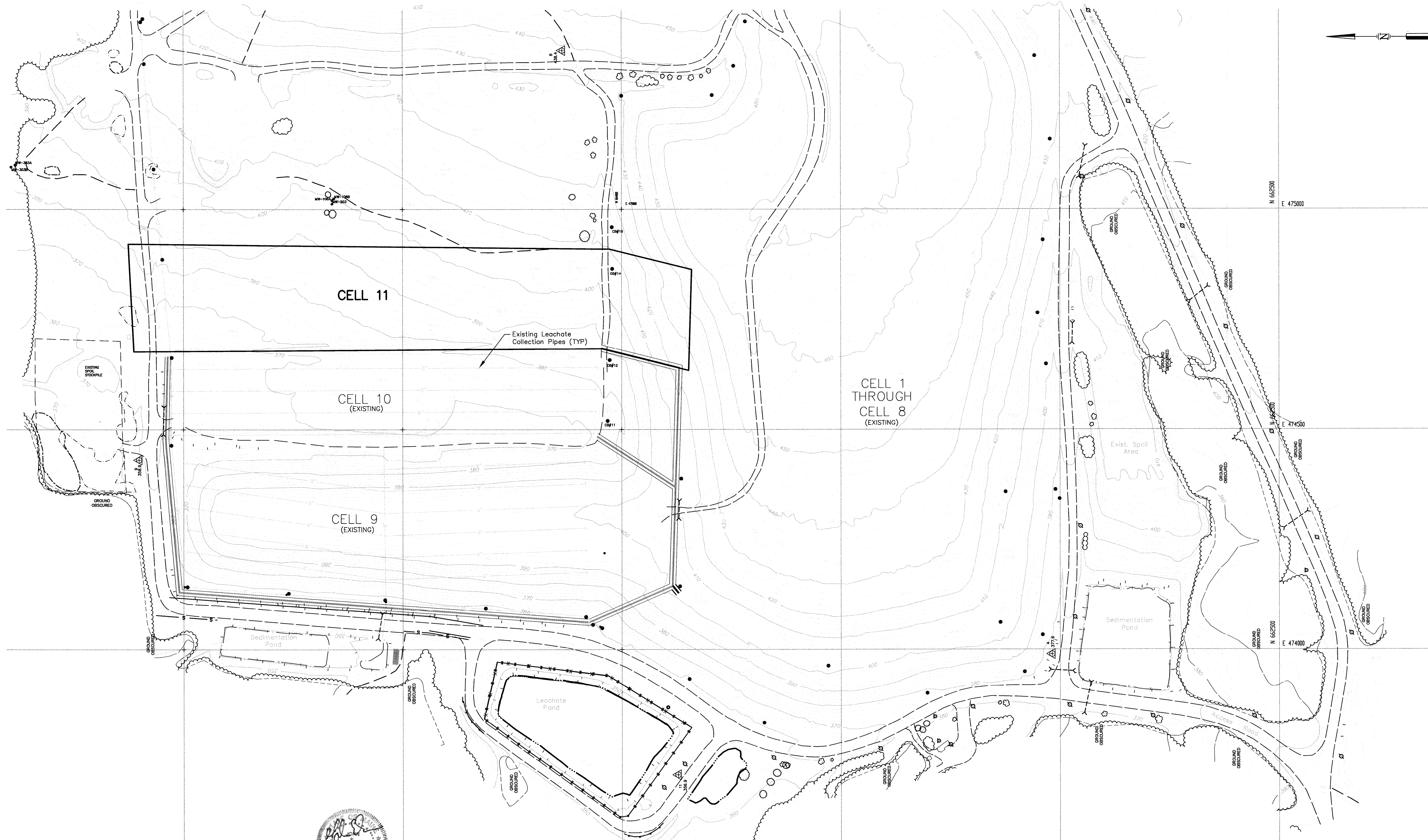
BOWATER
Great Northern Paper

CENTRAL ENGINEERING

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

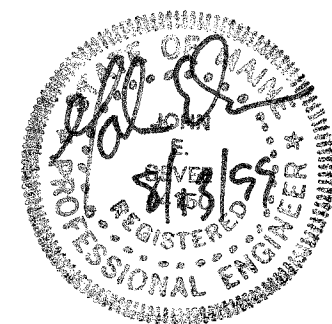
JOB NO. 94744
ENG. REQ. NO. _____
FILE NO. 2-092-7082

YB-25220



GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.
2. GROUND CONTROL PROVIDED BY PLUSGA & DAY, BANGOR, MAINE.
3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.



CODE	NO.	DATE	REVISION	BY	CHKD	APPVD	JOB NO.
		7/30/99	SUBMITTED TO CLIENT				JOB NO. 99070

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

DRN	MSB
CHK	GHC
CHK	
CORR	
APPVD	
ISSUE CODE	
P - Prelim	B - Bids
M - M.U. T.O.	C - Const.
SCALE AS SHOWN	

BOWATER
Great Northern Paper

EAST OPERATION

**DOLBY III LANDFILL
CELL 11 CONSTRUCTION**

EXISTING CONDITIONS PLAN
JOB NO. 34744
ENG. REQ. NO. YB-25221
FILE NO. 2-092-7082

GREAT NORTHERN PAPER, INC.
MILLINOCKET, MAINE
DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-25539
2	SYMBOLS & ABBREVIATIONS	YB-25540
3	EXISTING CONDITIONS PLAN	YB-25541
4	CELL 12 - SITE DEVELOPMENT PLAN	YB-25542
5	OPERATIONAL GRADING PLAN	YB-25543
6	SECTIONS & DETAILS (SHEET 1 OF 2)	YB-25544
7	SECTIONS & DETAILS (SHEET 2 OF 2)	YB-25544

SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB
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5	-			-	-							-	-					
4	-			-	-							-	-					
3	-			-	-							-	-					
2	-			6/8/00	C	ISSUED FOR CONSTRUCTION						-	-					
1	-			5/31/00	P	SUBMITTED TO CLIENT						-	-					

DRN	DRD	5/31/00
CHKD	GHC	5/31/00
APPVD		-
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE NONE		



CAD FILE: GNPCOV12.DWG

EAST OPERATION		
DOLBY III LANDFILL CELL 12 CONSTRUCTION CELL 10 CLOSURE COVER SHEET		
JOB NO.	94744	YB-25539
FILE NO.	2-092-7082	
LDC. NO.		

SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED

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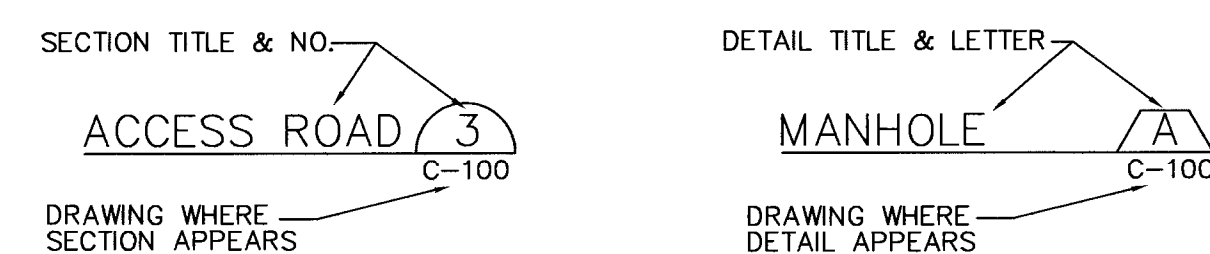
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INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION



A.C.C.M.P.	ASPHALT COATED C.M.P.	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	P.C.	POINT ON CURVE
A.C.P.	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HP	HORSEPOWER	PD	PERIMETER DRAIN
AC	ACRE	DEPT OR °	DIAMETER	HYD	HYDRANT	P.I.	POINT OF INTERSECTION
AOG	AGGREGATE	DI	DEPARTMENT	I.D.	INSIDE DIAMETER	P.T.	POINT OF TANGENT
ALUM	ALUMINUM	DIA OR Ø	DUCTILE IRON	INV	INCHES	PERF	PERFORATED
APPD	APPROVED	DIM	DIAMETER	INV. EL	INVERT ELEVATION	PSI	POUNDS PER SQUARE INCH
APPROX	APPROXIMATE	DIST	DIMENSION	LB	POUND	PVC	POLYVINYL CHLORIDE
ARMH	AIR RELEASE MANHOLE	DN	DISTANCE	LC	LEACHATE COLLECTION	PVMT	PAVEMENT
ASB	ASBESTOS	DR	DOWN	LD	LEAK DETECTION	QTY	QUANTITY
ASPH	ASPHALT	DWG	DRAIN	LOC	LOCATION	R.O.W.	RIGHT OF WAY
AUTO	AUTOMATIC	EA	DRAWING	LT	LEACHATE TRANSPORT	RAD	RADIUS
AUX	AUXILIARY	EG	EACH	M.H.	MANHOLE	REQD	REQUIRED
AVE	AVENUE	ELEC	EXISTING GROUND OR GRADE	M.J.	MECHANICAL JOINT	RT	RIGHT
AZ	AZIMUTH	EL	ELEVATION	MATL	MATERIAL	RTE	ROUTE
		ELB	ELBOW	MAX	MAXIMUM	S	SLOPE
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	EQUIP	EQUIPMENT	MFR	MANUFACTURE	SCH	SCHEDULE
B.M.	BENCH MARK	EST	ESTIMATED	MIN	MINIMUM	SF	SQUARE FEET
BIT	BITUMINOUS	EXC	EXCAVATE	MISC	MISCELLANEOUS	SHT	SHEET
BLDG	BUILDING	EXIST	EXISTING	MON	MONUMENT	STA	STATION
BOT	BOTTOM	F.G.	FINISH GRADE	N.T.C.	NOT IN THIS CONTRACT	SY	SQUARE YARD
BRG	BEARING	FBRGL	FIBERGLASS	N.T.S.	NOT TO SCALE	TAN	TANGENT
		FDN	FOUNDATION	N/F	NOW OR FORMERLY	TDH	TOTAL DYNAMIC HEAD
C.B.	CATCH BASIN	FLG	FLEXIBLE	NO. OR #	NUMBER	TEMP	TEMPORARY
CEN	CENTER	FLR	FLOOR	O.C.	ON CENTER	TYP	TYPICAL
CEN. LIN.	CEMENT LINED	FPS	FEET PER SECOND	O.D.	OUTSIDE DIAMETER	V	VOLTS
C.M.P.	CORRUGATED METAL PIPE	FT OR °	FEET OR DEGREE			W/	WITH
C.O.	CLEAN OUT	FTG	FOOTING			W/O	WITHOUT
CF	CUBIC FEET	GA	GALLON			YD	YARD
CF'S	CUBIC FEET PER SECOND	GALV	GALVANIZED				
CI	CAST IRON	GPD	GALLONS PER DAY				
CL	CLASS	GPM	GALLONS PER MINUTE				
CONC	CONCRETE						
CONST	CONSTRUCTION						
CONTR	CONTRACTOR						
CTR	CENTER						
CY	CUBIC YARD						

SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

DRN	DRD	5/31/00
CHKD	GHC	5/31/00
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	



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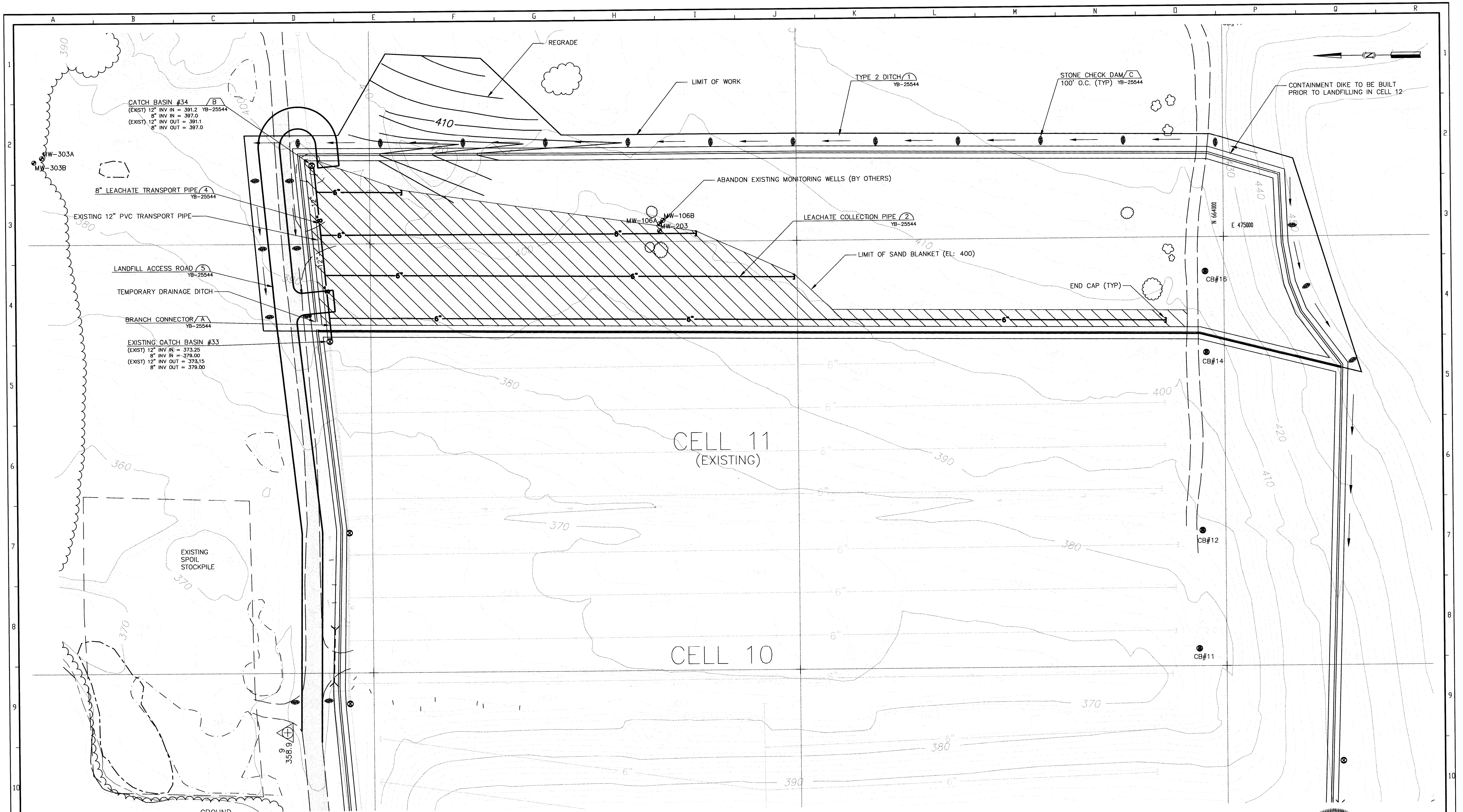
EAST OPERATION

DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE
SYMBOLS & ABBREVIATIONS

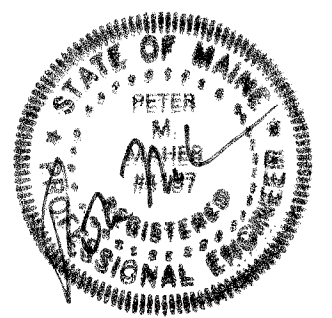
JOB NO. 94744
FILE NO. 2-092-7082
LIC. NO.

YB-25540

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CELL 12 OPERATION NOTES (PRIOR TO FILLING)
REMOVE 8 INCH CAP FROM CB #33.
REMOVE TEMPORARY 8 INCH OUTLET PIPE AND CAP PIPE TEE.
BACKFILL TEMPORARY DRAINAGE DITCH ON NORTH SIDE WITH SUITABLE MATERIAL.
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 4.
REMOVE EXISTING CATCH BASIN COVER ON CELL 4 (CB #16) AND REPLACE WITH
SOLID H-20 LOADING MANHOLE COVER.



REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REVISION	BY	CHKD	APPVD	JOB	CODE	DATE	REVISION	BY	CHKD	APPVD	JOB
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5	-		-	-												
4	-		-	-												
3	-		10/16/01	ASB	RECORD DRAWING											
2	-		6/8/00	C	ISSUED FOR CONSTRUCTION											
1	-		5/31/00	P	SUBMITTED TO CLIENT											

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 00044

DRN	DRD	5/31/00
CHKD	GHC	5/31/00
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	



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EAST OPERATION

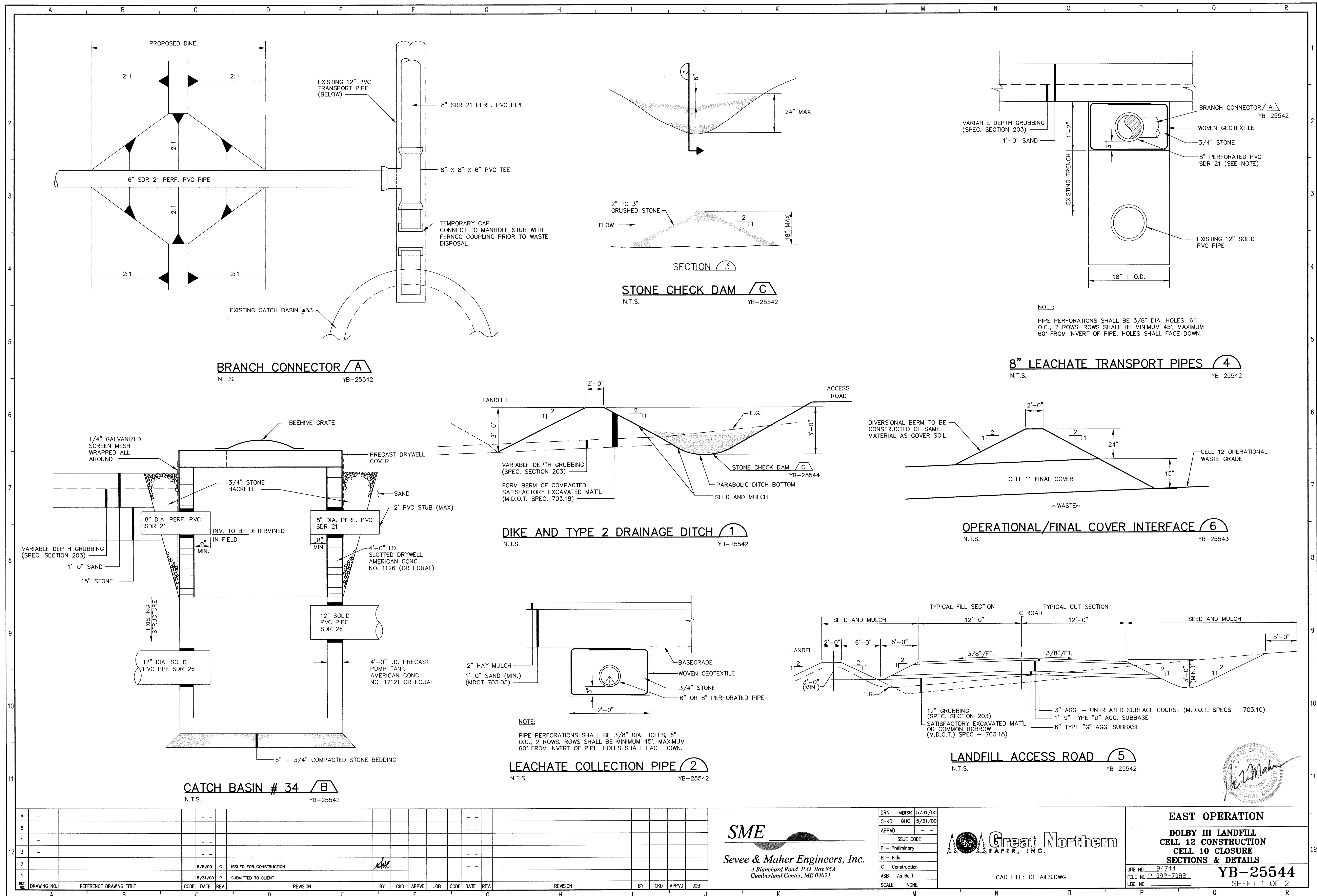
**DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE**

CELL 12 - SITE DEVELOPMENT PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25542

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REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB
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5	-			-	-													
4	-			-	-													
3	-			-	-													
2	-			6/8/00	C	ISSUED FOR CONSTRUCTION												
1	-			5/31/00	P	SUBMITTED TO CLIENT												

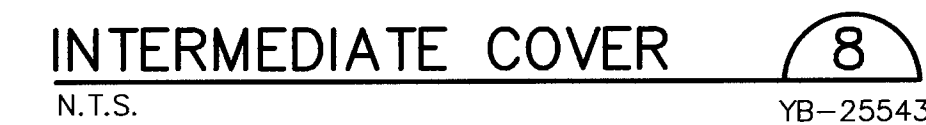
SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

DRN	MBISK	5/31/00
CHKD	GHC	5/31/00
APPVD	-	-
ISSUE CODE		
P	Preliminary	
B	Bids	
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ASB	As Built	
SCALE	NONE	



CAD FILE: DETAILS.DWG

EAST OPERATION		
DOLBY III LANDFILL		
CELL 12 CONSTRUCTION		
CELL 10 CLOSURE		
SECTIONS & DETAILS		
JOB NO.	94744	YB-25544
FILE NO.	2-092-7082	
LOC. NO.		
		SHEET 1 OF 2



SME

Sevee & Maher Engineers, Inc.
 4 Blanchard Road P.O. Box 85A
 Cumberland Center, ME 04021

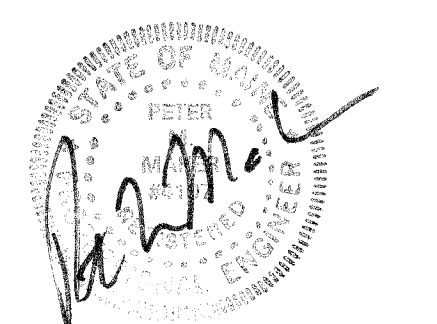
 **Great Northern**
PAPER, INC.

CAD FILE: DETAILS.DWG

**DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE
SECTIONS & DETAILS**

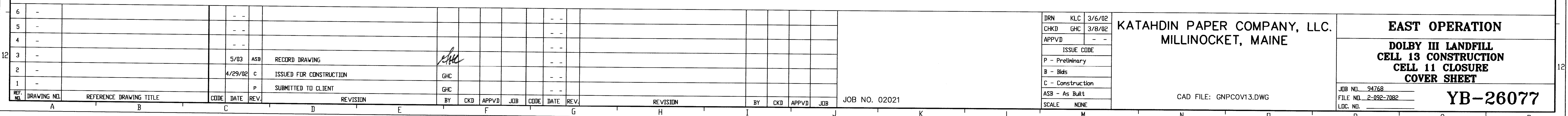
JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO. _____

YB-25544
SHEET 2 OF 2



SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-26077
2	SYMBOLS & ABBREVIATIONS	YB-26078
3	EXISTING CONDITIONS PLAN	YB-26079
4	CELL 13 – SITE DEVELOPMENT PLAN	YB-26080
5	OPERATIONAL GRADING PLAN	YB-26081
6	SECTIONS & DETAILS (SHEET 1 OF 3)	YB-26082
7	SECTIONS & DETAILS (SHEET 2 OF 3)	YB-26083
8	SECTIONS & DETAILS (SHEET 3 OF 3)	YB-26084

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine



SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW - MDOT SPECIFICATION 703.18

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

SAND BLANKET - MDOT SPECIFICATION 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PVC PIPE - SDR 35

6" PVC PIPE - SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 13 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO.

ACCESS ROAD (3)
C-100

DRAWING WHERE
SECTION APPEARS

DETAIL TITLE & LETTER

MANHOLE (A)
C-100

DRAWING WHERE
DETAIL APPEARS

A.C.C.M.P.	ASPHALT COATED C.M.P.	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	P.C.	POINT ON CURVE
A.C.P.	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HP	HORSEPOWER	PD	PERIMETER DRAIN
AC	ACRE	DEG OR °	DEGREE	HYD	HYDRANT	P.I.	POINT OF INTERSECTION
AGG	AGGREGATE	DIA OR #	DIAMETER	I.D.	INSIDE DIAMETER	P.T.	POINT OF TANGENT
ALUM	ALUMINUM	DIM	DIMENSION	IN OR "	INCHES	PERF	PERFORATED
APPD	APPROXIMATE	DIST	DISTANCE	INV	INVERT	PSI	POUNDS PER SQUARE INCH
APPROX	APPROXIMATE	DN	DOWN	INV. EL	INVERT ELEVATION	PVC	POLYVINYL CHLORIDE
ARMH	AIR RELEASE MANHOLE	DR	DRAIN	LB	POUND	PVMT	PAVEMENT
ASB	ASBESTOS	DWG	DRAWING	LC	LEACHATE COLLECTION	QTY	QUANTITY
ASPH	ASPHALT	EA	EACH	LD	LEAK DETECTION	R.O.W.	RIGHT OF WAY
AUTO	AUTOMATIC	EG	EXISTING GROUND OR GRADE	LN FT.	LINEAR FEET	RAD	RADIUS
AUX	AUXILIARY	ELEC	ELECTRIC	LOC	LOCATION	REQD	REQUIRED
AVE	AVENUE	EL	ELEVATION	LT	LEACHATE TRANSPORT	RT	RIGHT ROUTE
AZ	AZIMUTH	ELB	ELBOW	M.H.	MANHOLE	RTE	ROUTE
		EQUIP	EQUIPMENT	M.J.	MECHANICAL JOINT	S	SLOPE
B.C.C.M.P.	BITUMINOUS COATED C.M.P.	EST	ESTIMATED	MATL	MATERIAL	SCH	SCHEDULE
S.M.	BITUMINOUS	EXC	EXCAVATE	MAX	MAXIMUM	SF	SQUARE FEET
BLDG	BUILDING	EXIST	EXISTING	MFR	MANUFACTURE	SHT	SHEET
BOT	BOTTOM			MIN	MINIMUM	STA	STATION
BRG	BEARING			MISC	MISCELLANEOUS	SY	SQUARE YARD
				MON	MONUMENT	TAN	TANGENT
C.B.	CATCH BASIN	F.G.	FINISH GRADE			TDH	TOTAL DYNAMIC HEAD
CEN	CENTER	FBRGL	FIBERGLASS			TEMP	TEMPORARY
CEM. LIN.	CEMENT LINED	FDN	FOUNDATION	N.I.T.C.	NOT IN THIS CONTRACT	TYP	TYPICAL
C.M.P.	CORRUGATED METAL PIPE	FLX	FLEXIBLE	N.T.S.	NOT TO SCALE		
C.O.	CLEAN OUT	FLG	FLANGE	N/F	NOW OR FORMERLY		
CF	CUBIC FEET	FLR	FLOOR	NO. OR #	NUMBER		
CFS	CUBIC FEET PER SECOND	FPS	FEET PER SECOND	O.C.	ON CENTER	V	VOLTS
C	CAST IRON	FT OR '	FEET	O.D.	OUTSIDE DIAMETER	W/O	WITHOUT
CL	CLASS	FTG	FOOTING			YD	YARD
CONC	CONCRETE	GA	GAUGE				
CONSTR	CONSTRUCTION	GAL	GALLON				
CONTR	CONTRACTOR	GALV	GALVANIZED				
CTR	CENTER	GPD	GALLONS PER DAY				
CY	CUBIC YARD	GPM	GALLONS PER MINUTE				

SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

JOB NO. 02021

DRN	KLC	3/6/02
CHKD	GHC	3/8/02
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

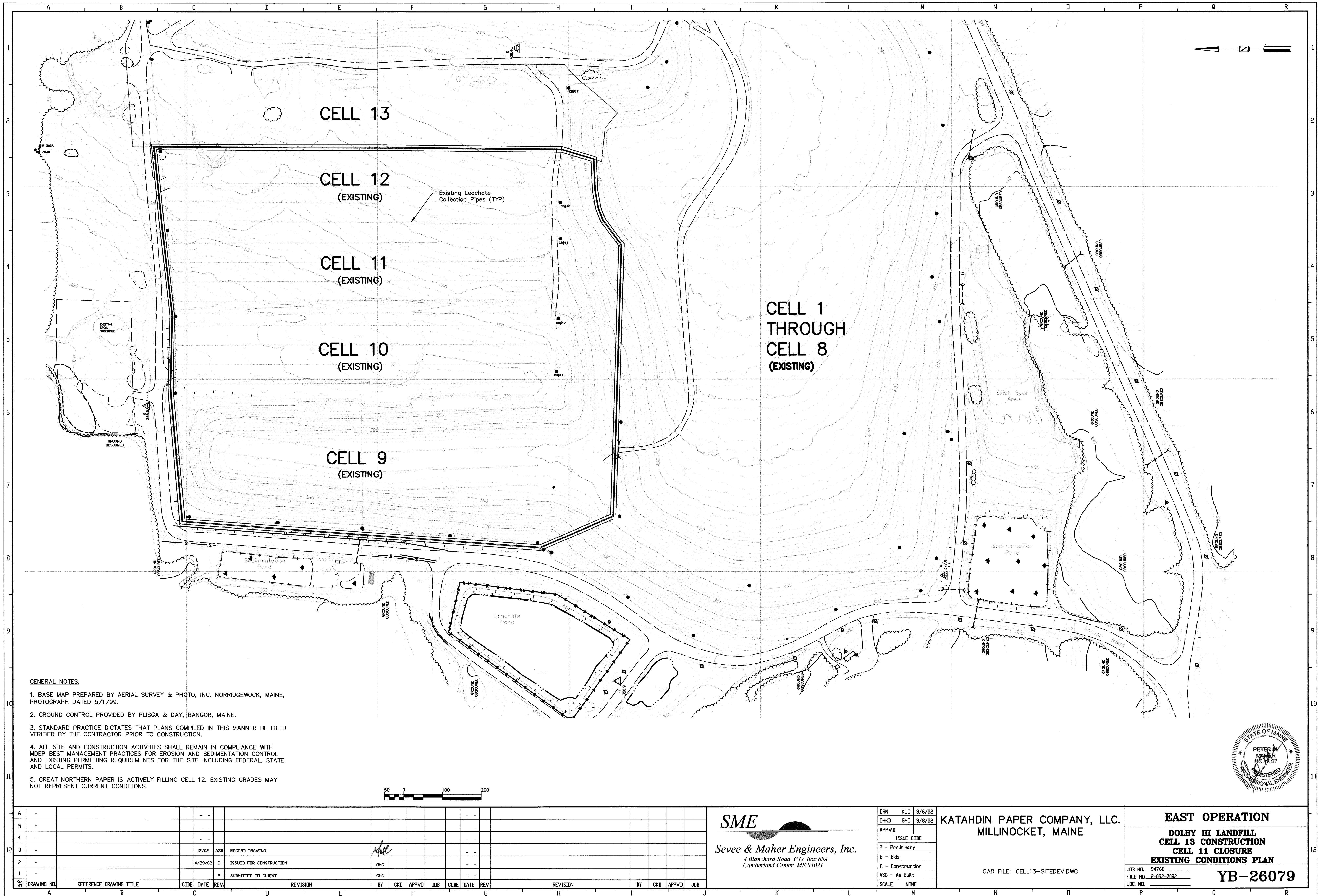
EAST OPERATION

DOLBY III LANDFILL
CELL 13 CONSTRUCTION
CELL 11 CLOSURE
SYMBOLS & ABBREVIATIONS

JOB NO. 94768
FILE NO. 2-092-7082
LIC. NO.

YB-26078

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GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.
2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.
3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.
5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 12. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.



REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB
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5	-			-	-													
4	-			-	-													
12	3			12/02	ASB	RECORD DRAWING												
2	-			4/29/02	C	ISSUED FOR CONSTRUCTION												
1	-				P	SUBMITTED TO CLIENT												

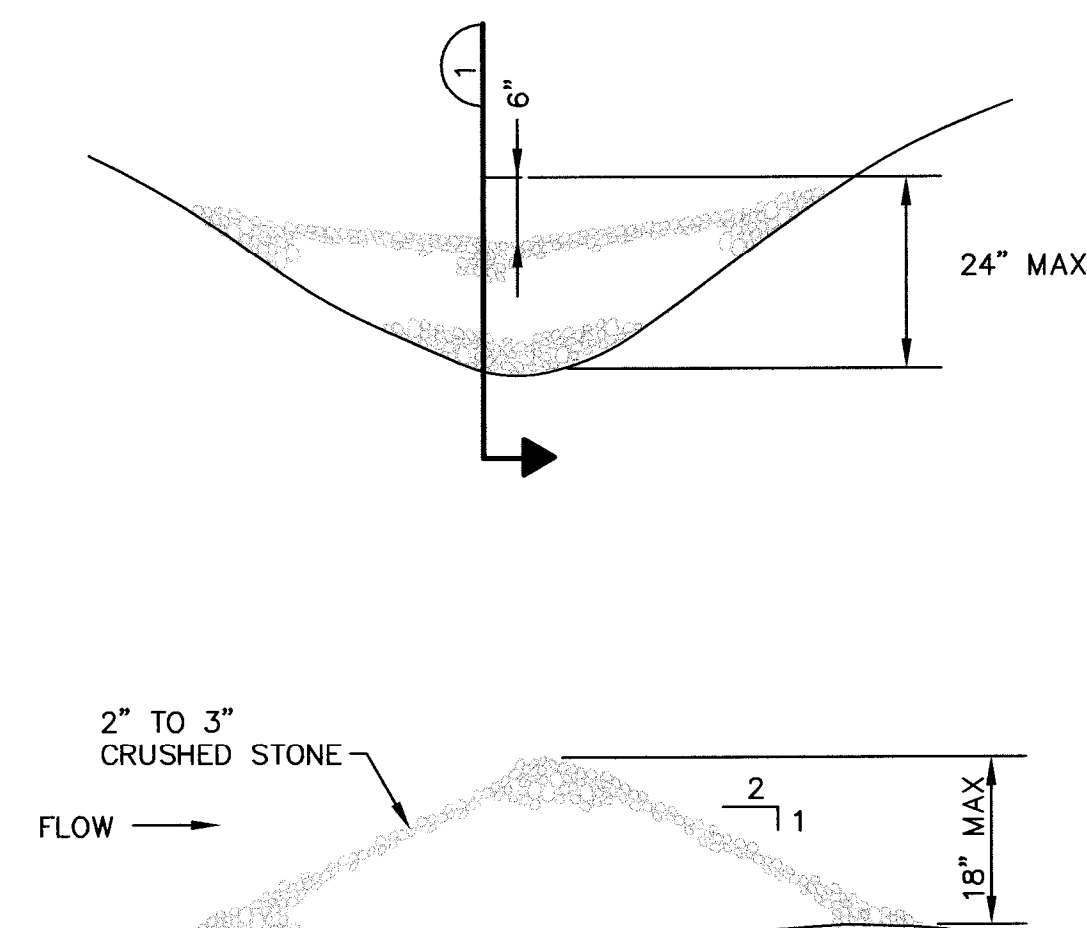
SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021



DRN	KLC	3/6/02
CHKD	GHC	3/8/02
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

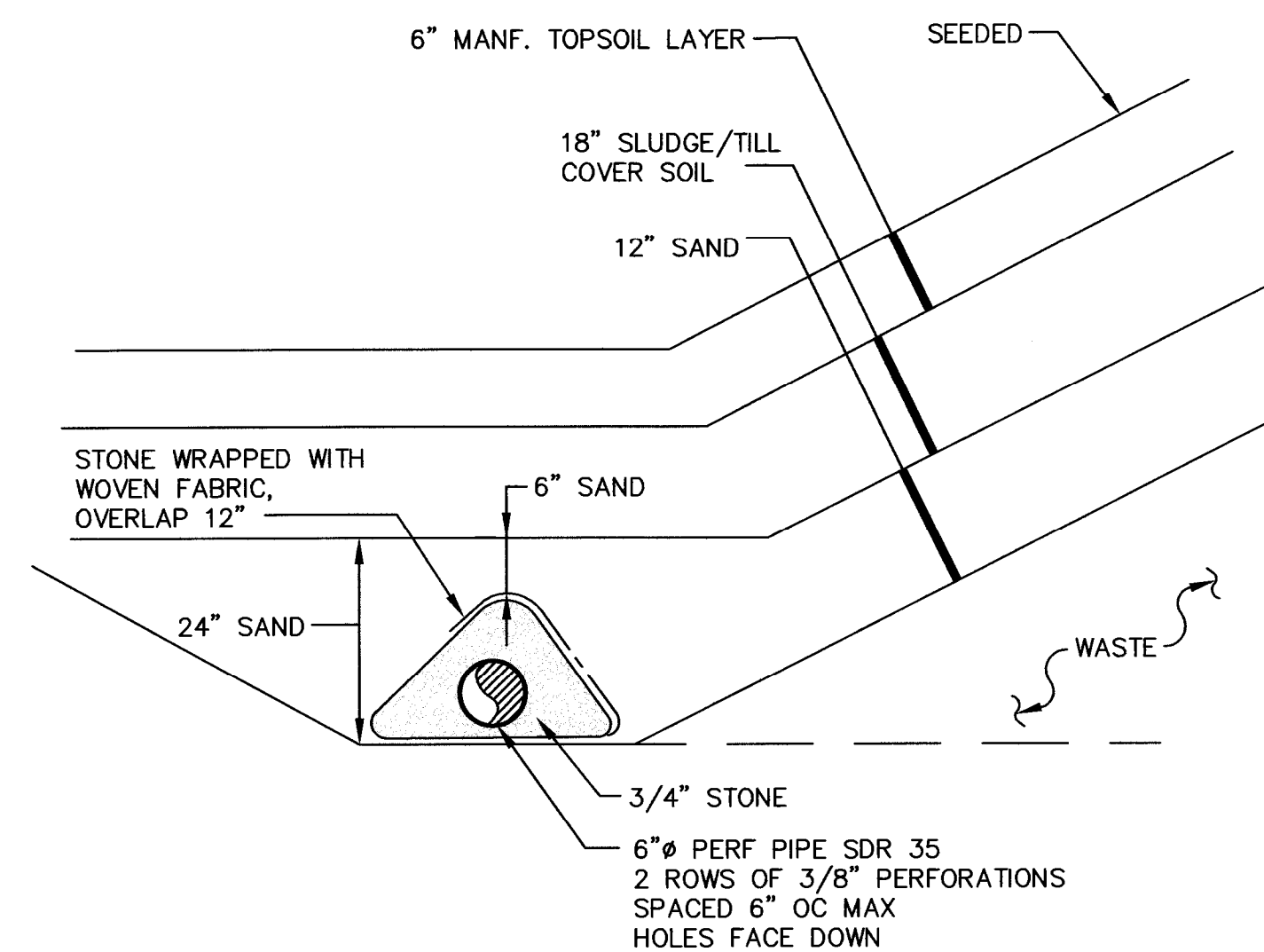
KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-SITEDEV.DWG

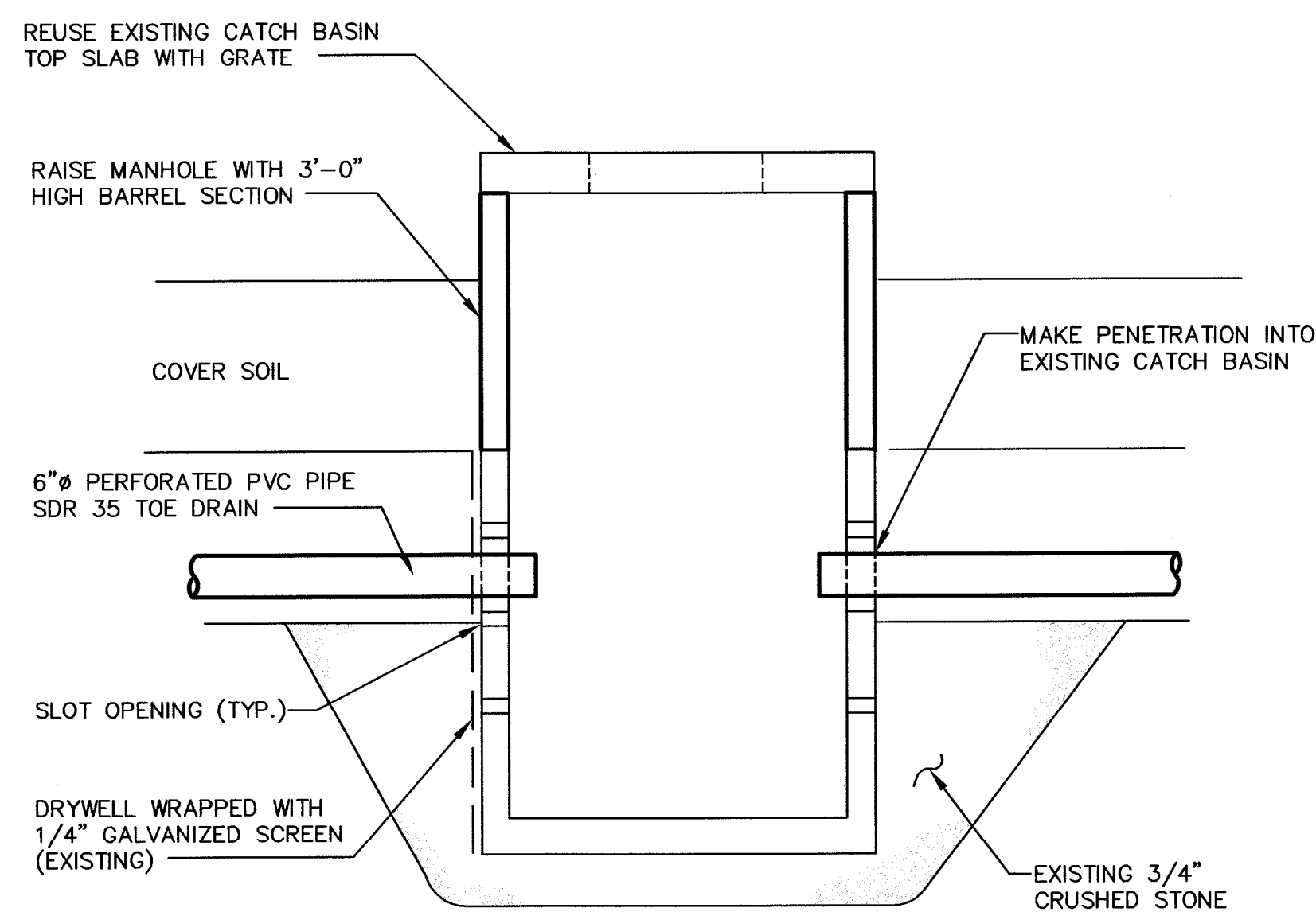
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DOLBY III LANDFILL	
CELL 13 CONSTRUCTION	
CELL 11 CLOSURE	
EXISTING CONDITIONS PLAN	
JOB NO. 94768	YB-26079
FILE NO. 2-092-7082	
LDC. NO.	



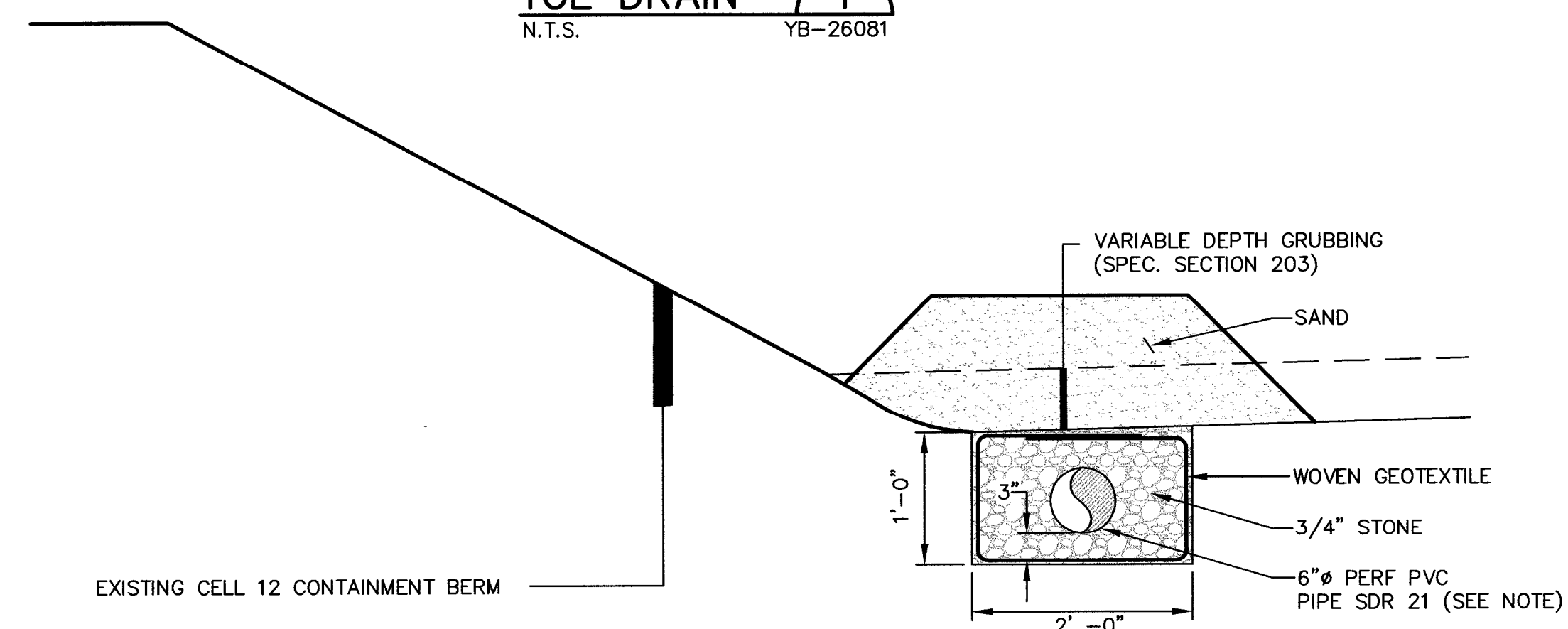
SECTION 
STONE CHECK DAM 
N.T.S. YB-26080



TOE DRAIN 1
N.T.S. YB-26081



RAISE CATCH BASIN /D/
N.T.S. (EXISTING) YB-26081

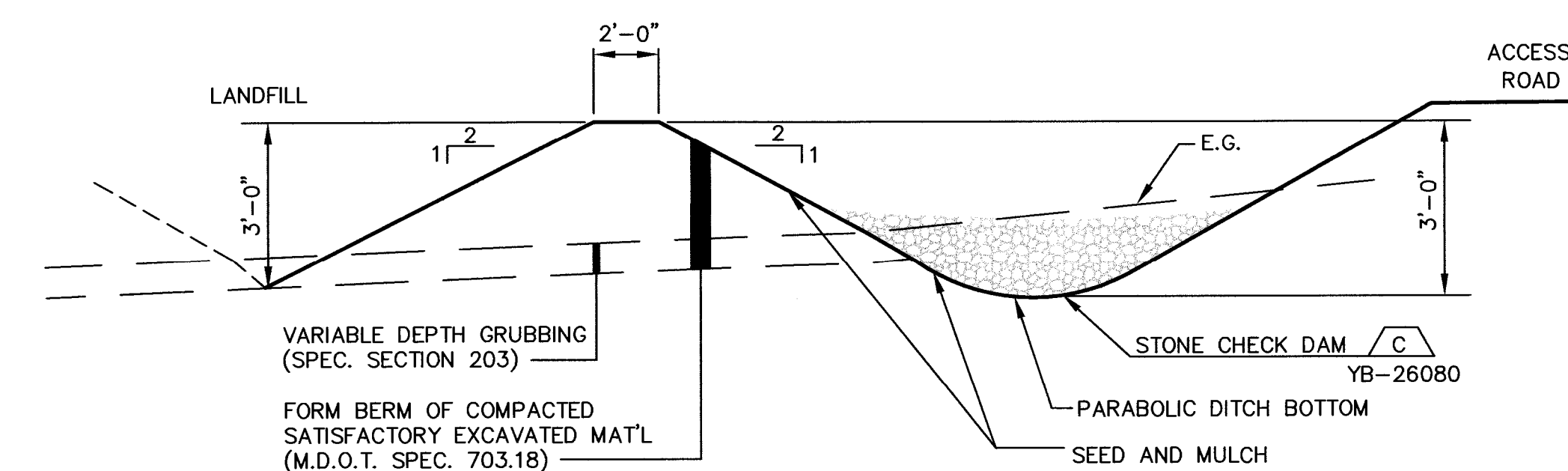


NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45", MAXIMUM 60" FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

6" LEACHATE COLLECTION PIPE 

N.T.S. YB-26080



DIKE AND TYPE 2 DRAINAGE DITCH 3
N.T.S. YB-26080

6	—			—	—					—	—									
5	—			—	—					—	—									
4	—			—	—					—	—									
3	—			5/03	ASB	RECORD DRAWING														
2	—			4/29/02	C	ISSUED FOR CONSTRUCTION	GHC													
1	—				P	SUBMITTED TO CLIENT	GHC													
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SME

Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 02021

DRN	KLC	3/6/0
CHKD	GHC	3/8/0
APPVD		- -
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE NONE		

02 KATAHDIN PAPER COMPANY, LLC.
02 MILLINOCKET, MAINE
-

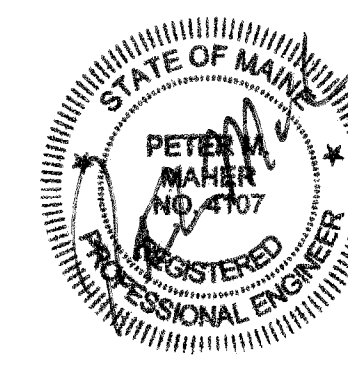
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EAST OPERATION

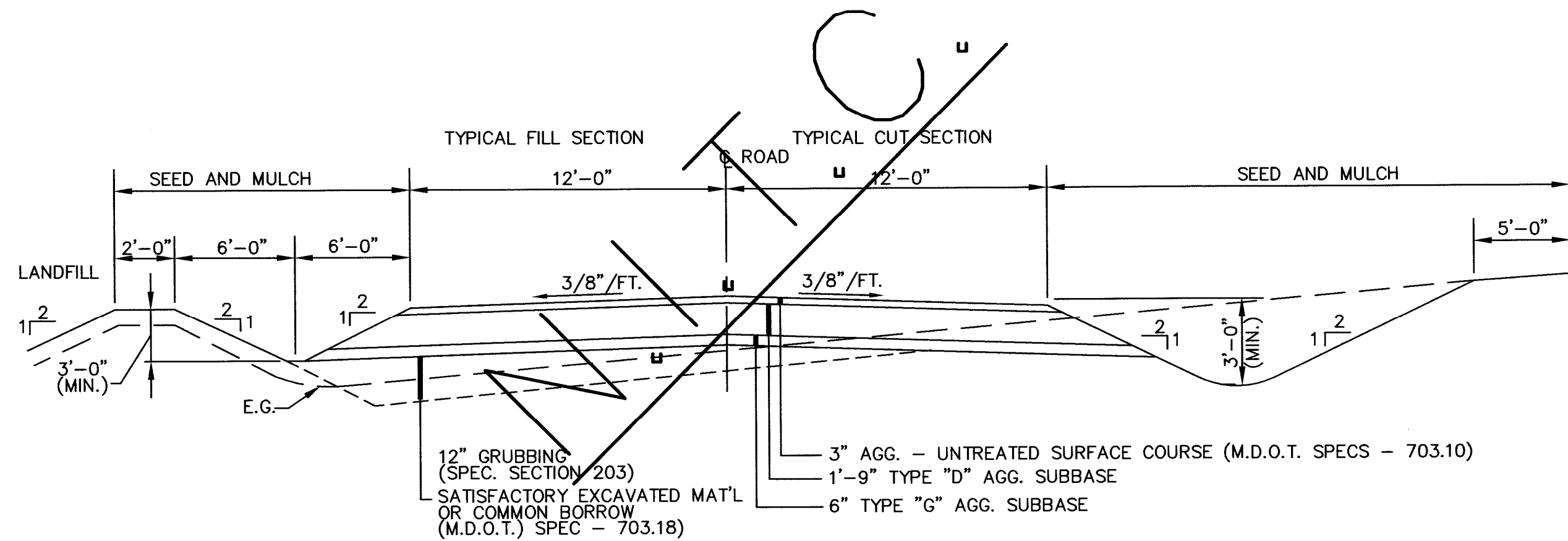
**DOLBY III LANDFILL
CELL 13 CONSTRUCTION
CELL 11 CLOSURE
SECTIONS & DETAILS**

JOB NO.	94768
FILE NO.	2-092-
LOC. NO.	

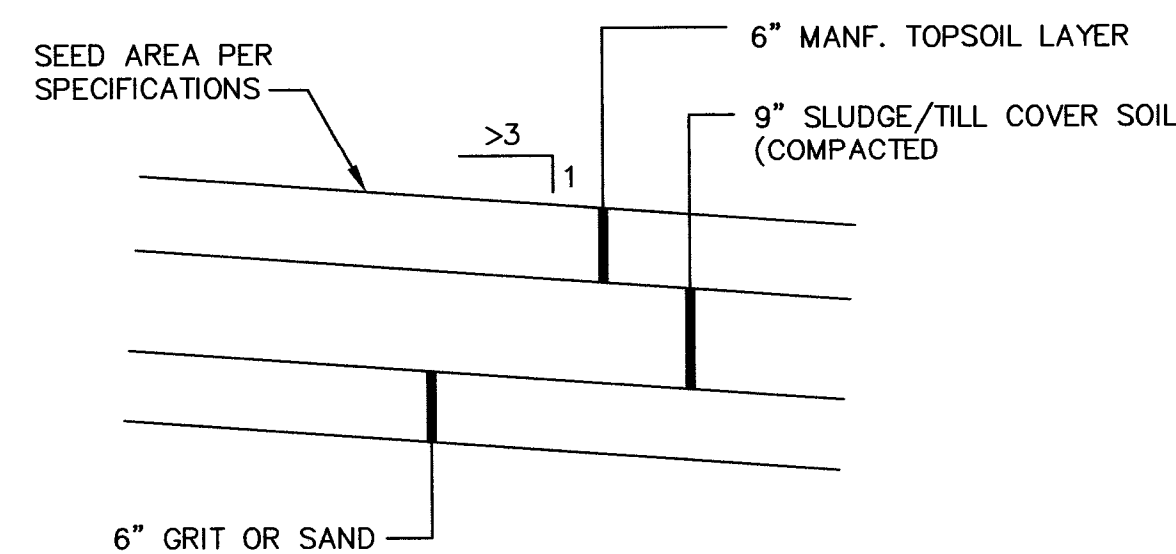
YB-26082
SHEET 1 OF 3



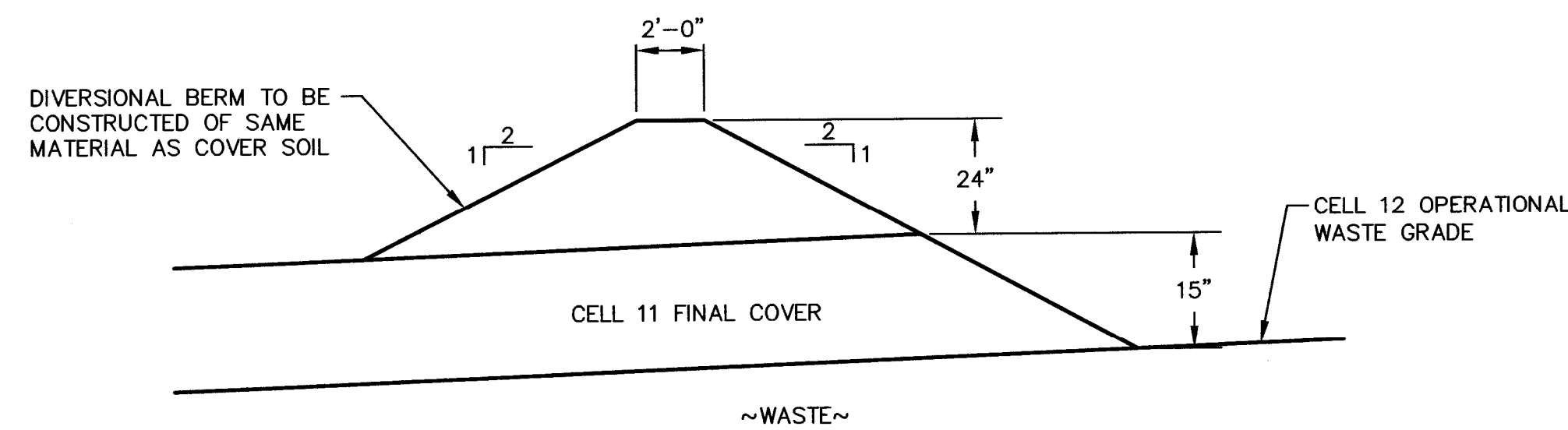
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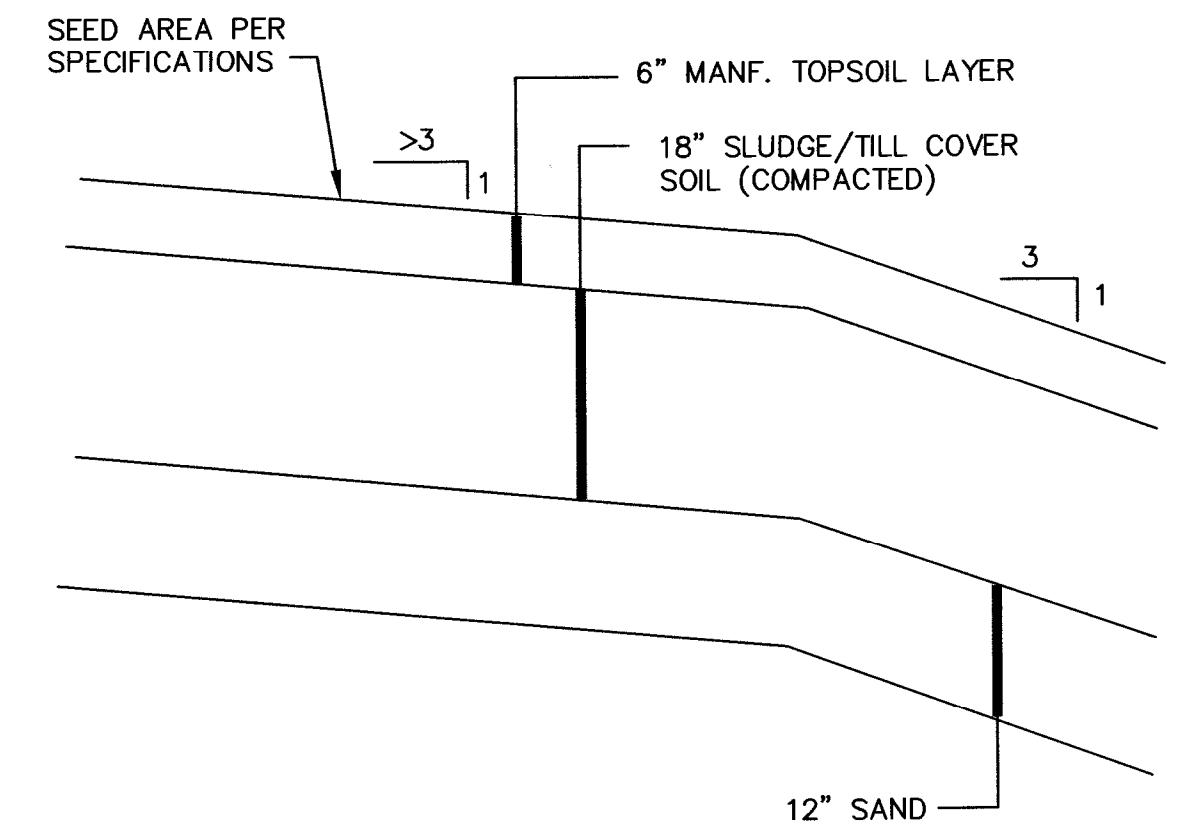
LANDFILL ACCESS ROAD (4)
N.T.S. YB-26080



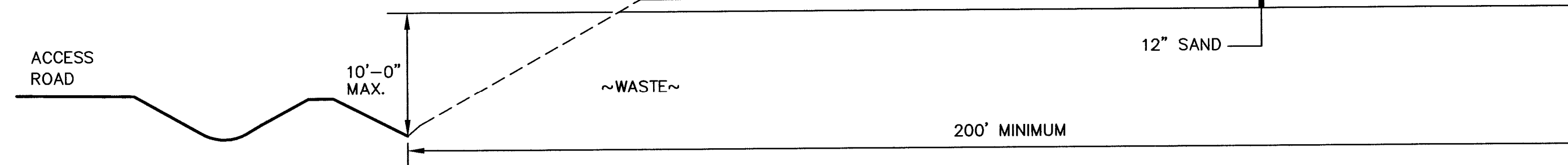
INTERMEDIATE COVER (7)
N.T.S. YB-26081



OPERATIONAL/FINAL COVER INTERFACE (5)
N.T.S. YB-26081



FINAL COVER (6)
N.T.S. YB-26081



NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH SLOPE OF CELL 13

SLOPE STABILIZING DRAINAGE SYSTEM (10)
N.T.S. YB-26081

REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB
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5	-			-	-													
4	-			-	-													
3	-			5/03	ASB	RECORD DRAWING												
2	-			4/29/02	C	ISSUED FOR CONSTRUCTION	GHC											
1	-				P	SUBMITTED TO CLIENT	GHC											

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

DRN	KLC	3/6/02
CHKD	GHC	3/8/02
APPVD	-	-
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

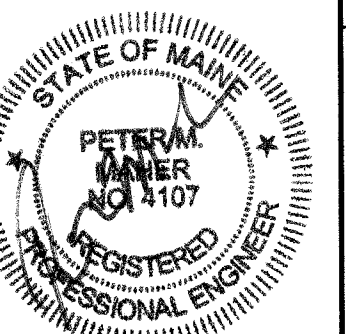
KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

EAST OPERATION
DOLBY III LANDFILL
CELL 13 CONSTRUCTION
CELL 11 CLOSURE
SECTIONS & DETAILS

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26083
SHEET 2 OF 3



KATAHDIN PAPER COMPANY LLC. EAST MILLINOCKET, MAINE DOLBY III LANDFILL CELL 14 CONSTRUCTION CELL 12 CLOSURE

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	YB-26159
2	SYMBOLS & ABBREVIATIONS	YB-26160
3	EXISTING CONDITIONS PLAN	YB-26161
4	SITE DEVELOPMENT PLAN	YB-26162
5	CELL 14 - OPERATIONAL GRADING PLAN	YB-26163
6	SECTIONS & DETAILS (SHEET 1 OF 3)	YB-26164
7	SECTIONS & DETAILS (SHEET 2 OF 3)	YB-26165
8	SECTIONS & DETAILS (SHEET 3 OF 3)	YB-26166

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Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB
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5	-			-	-													
4	-			-	-													
3	-			-	-													
2	-			7/12/04	C	ISSUED FOR CONSTRUCTION												
1	-			6/15/04	P	SUBMITTED TO CLIENT	GHC											

JOB NO. 04011.04

DRN	DRD	6/4/04
CHKD	GHC	6/14/04
APPVD	-	-
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE		
NONE		

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

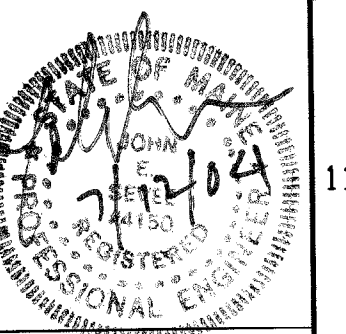
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EAST OPERATION

DOLBY III LANDFILL
CELL 14 CONSTRUCTION
CELL 12 CLOSURE
COVER SHEET

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB-26159



SYMBOLS

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED

GENERAL NOTES:

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SAND BLANKET - MDOT SPECIFICATION 703.05

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6" PVC PIPE - SDR 35

12" LEACHATE TRANSPORT PIPE - SOLID HANCOR TITELINE

SEED AND FERTILIZER:

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MATERIAL:

AGRICULTURAL GROUND LIME: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED: TALL FESCUE 50%
RED FESCUE 25%
RED TOP 5%
LADINO CLOVER 3%
ANNUAL RYEGRASS 8%

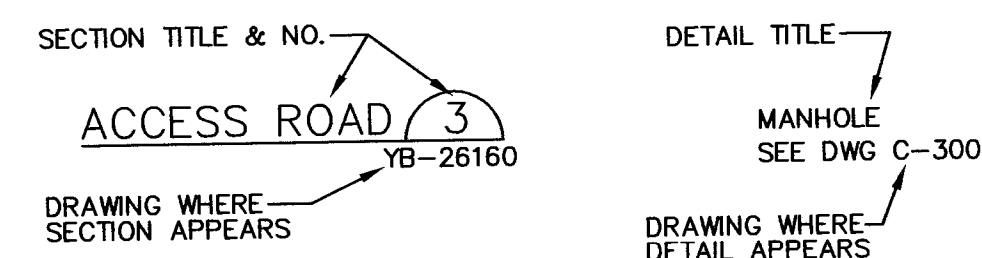
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION



ACOMP	ASPHALT COATED CMP	D	DBL	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	PERF	PERFORATED
AC	ASBESTOS CEMENT PIPE	DEPT	DEPT	DOUBLE	HORIZ	HORIZONTAL	PP	POWER POLE
AGG	AGGREGATE	DI	DI	DEGREE	HP	HORSEPOWER	PSI	POUNDS PER SQUARE INCH
ALUM	ALUMINUM	DIA	DIA	DUCTILE IRON	HYD	HYDRANT	PVC	POLYVINYL CHLORIDE
APPROX	APPROXIMATE	DN	DN	DUCTILE IRON	ID	INSIDE DIAMETER	PVMT	PAVEMENT
ARMH	AIR RELEASE MANHOLE	DR	DR	DUCTILE IRON	IN	INCHES	QTY	QUANTITY
ASB	ASBESTOS	DWG	DWG	DUCTILE IRON	INV	INVERT	RCP	REINFORCED CONCRETE PIPE
ASP	ASPHALT	EA	EA	DUCTILE IRON	INV EL	INVERT ELEVATION	ROW	RIGHT OF WAY
AUTO	AUTOMATIC	EG	EG	DUCTILE IRON	LD	LEAK DETECTION	RAD	RADIUS
AUX	AUXILIARY	EL	EL	DUCTILE IRON	LD	LEAK DETECTION	REQD	REQUIRED
AZE	AZIMUTH	ELB	ELB	DUCTILE IRON	LOC	LOCATION	RT	RIGHT
BCOMP	BITUMINOUS COATED CMP	ELC	ELC	DUCTILE IRON	LT	LEACHATE TRANSPORT	RTE	ROUTE
BM	BENCH MARK	ELT	ELT	DUCTILE IRON	LT	LEACHATE TRANSPORT	S	SLOPE
BLDG	BUILDING	EOP	EOP	DUCTILE IRON	LT	LEACHATE TRANSPORT	SCH	SCHEDULE
BOT	BOTTOM	EQU	EQU	DUCTILE IRON	LT	LEACHATE TRANSPORT	SF	SQUARE FEET
BRG	BEARING	EST	EST	DUCTILE IRON	LT	LEACHATE TRANSPORT	SHT	SHEET
BV	BALL VALVE	EXST	EXST	DUCTILE IRON	LT	LEACHATE TRANSPORT	SHH	SANITARY MANHOLE
CB	CATCH BASIN	FG	FG	DUCTILE IRON	LT	LEACHATE TRANSPORT	ST	STREET
CEM	CEMENT	FDN	FDN	DUCTILE IRON	LT	LEACHATE TRANSPORT	STA	STATION
CEM LIN	CEMENT LINED	FLG	FLG	DUCTILE IRON	LT	LEACHATE TRANSPORT	SY	SQUARE YARD
CMP	CORRUGATED METAL PIPE	FLR	FLR	DUCTILE IRON	LT	LEACHATE TRANSPORT	TAN	TANGENT
CO	CLEAN OUT	FT	FT	DUCTILE IRON	LT	LEACHATE TRANSPORT	TDH	TOTAL DYNAMIC HEAD
CF	CUBIC FEET	FT OR	FT OR	DUCTILE IRON	LT	LEACHATE TRANSPORT	TEMP	TEMPERARY
CFS	CUBIC FEET PER SECOND	FTG	FTG	DUCTILE IRON	LT	LEACHATE TRANSPORT	TYP	TYPICAL
CI	CAST IRON	GA	GA	DUCTILE IRON	LT	LEACHATE TRANSPORT	UD	UNDERDRAIN
CL	CLASS	GAL	GAL	DUCTILE IRON	LT	LEACHATE TRANSPORT	V	VOLTS
CONC	CONCRETE	GPM	GPM	DUCTILE IRON	LT	LEACHATE TRANSPORT	VA	VALVE ANCHORING TEE
CONSTR	CONSTRUCTION			DUCTILE IRON	LT	LEACHATE TRANSPORT	VERT	VERTICAL
CONTR	CONTRACTOR			DUCTILE IRON	LT	LEACHATE TRANSPORT		
CS	CURB STOP			DUCTILE IRON	LT	LEACHATE TRANSPORT		
CTR	CENTER			DUCTILE IRON	LT	LEACHATE TRANSPORT		
CU	COPPER			DUCTILE IRON	LT	LEACHATE TRANSPORT		
CY	CUBIC YARD			DUCTILE IRON	LT	LEACHATE TRANSPORT		

SME

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

JOB NO. 04011.04

DRN	DRD	6/4/04
CHKD	GHC	6/14/04
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

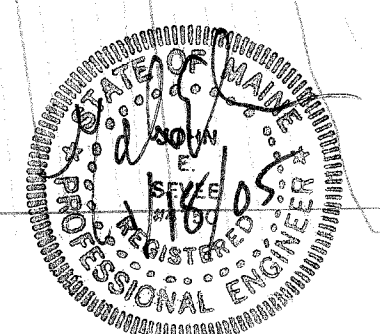
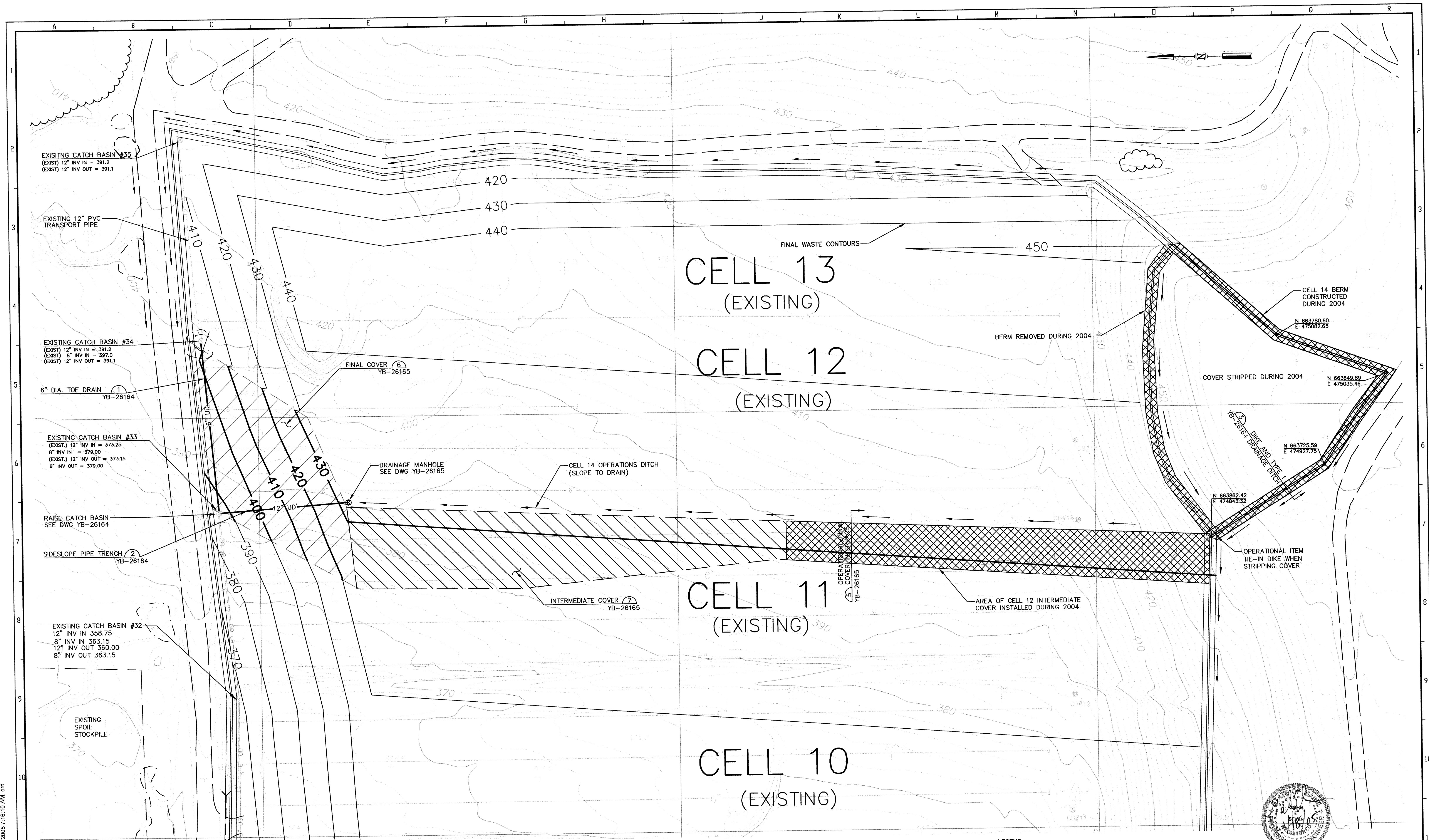
EAST OPERATION

DOLBY III LANDFILL
CELL 14 CONSTRUCTION
CELL 12 CLOSURE
SYMBOLS & ABBREVIATIONS

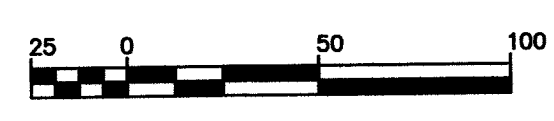
JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB-26160

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CELL 14 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 6.



REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CHKD	APPVD	JOB
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5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	1/18/05	C	ADDED 2004 CONSTRUCTION ACTIVITIES	GHK	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	7/12/04	C	ISSUED FOR CONSTRUCTION	GHK	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	6/15/04	P	SUBMITTED TO CLIENT	GHK	-	-	-	-	-	-	-	-	-	-	-

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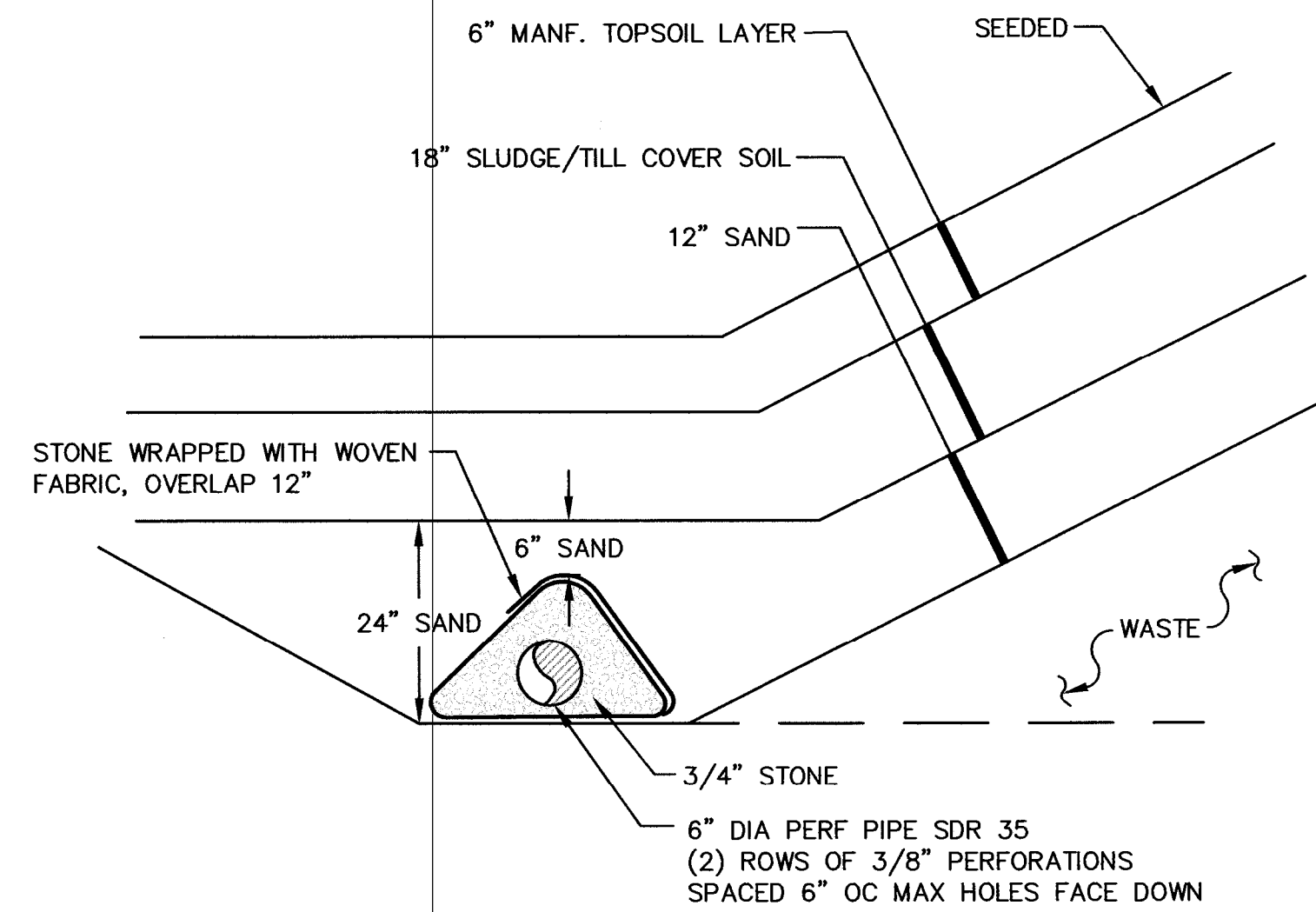
JOB NO. 04011.04

DRN	PAF	6/4/04
CHKD	GHC	6/14/04
APPVD		
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

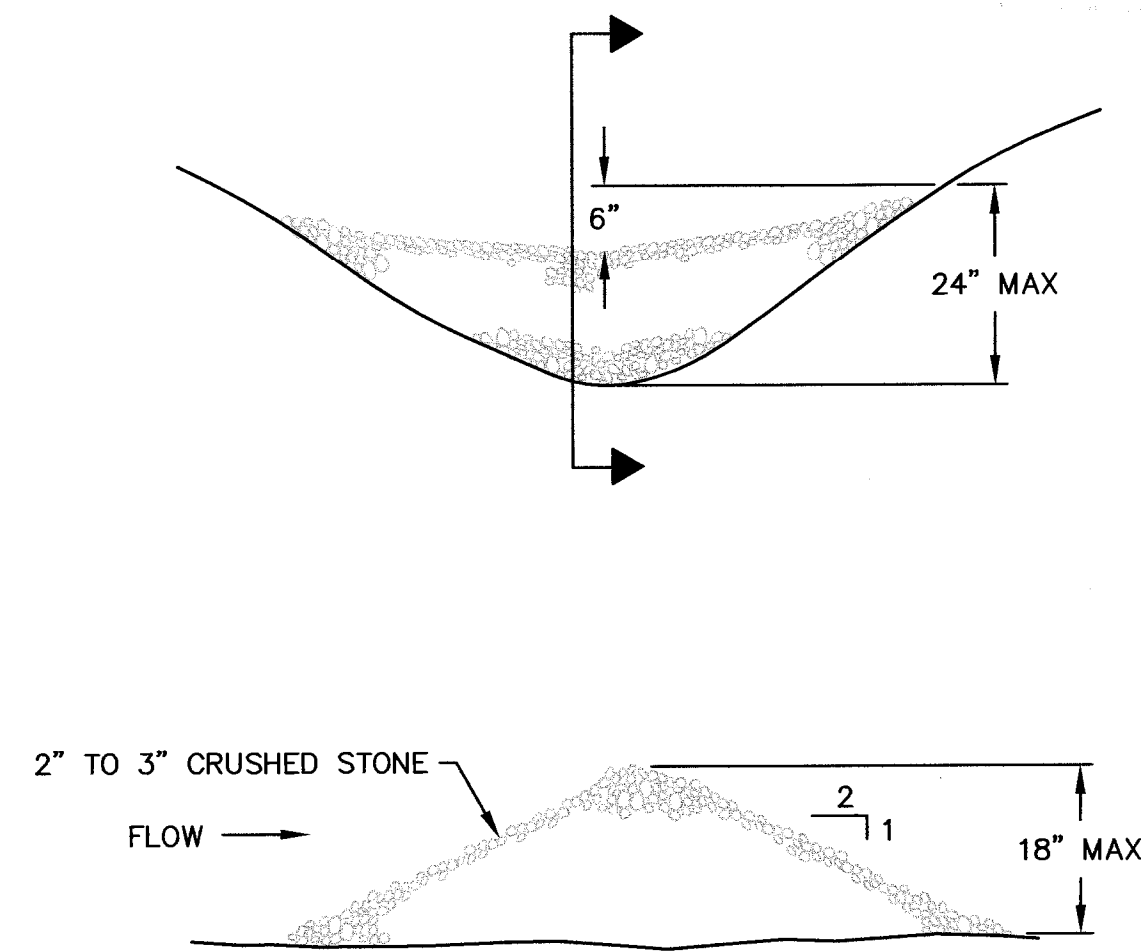
KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

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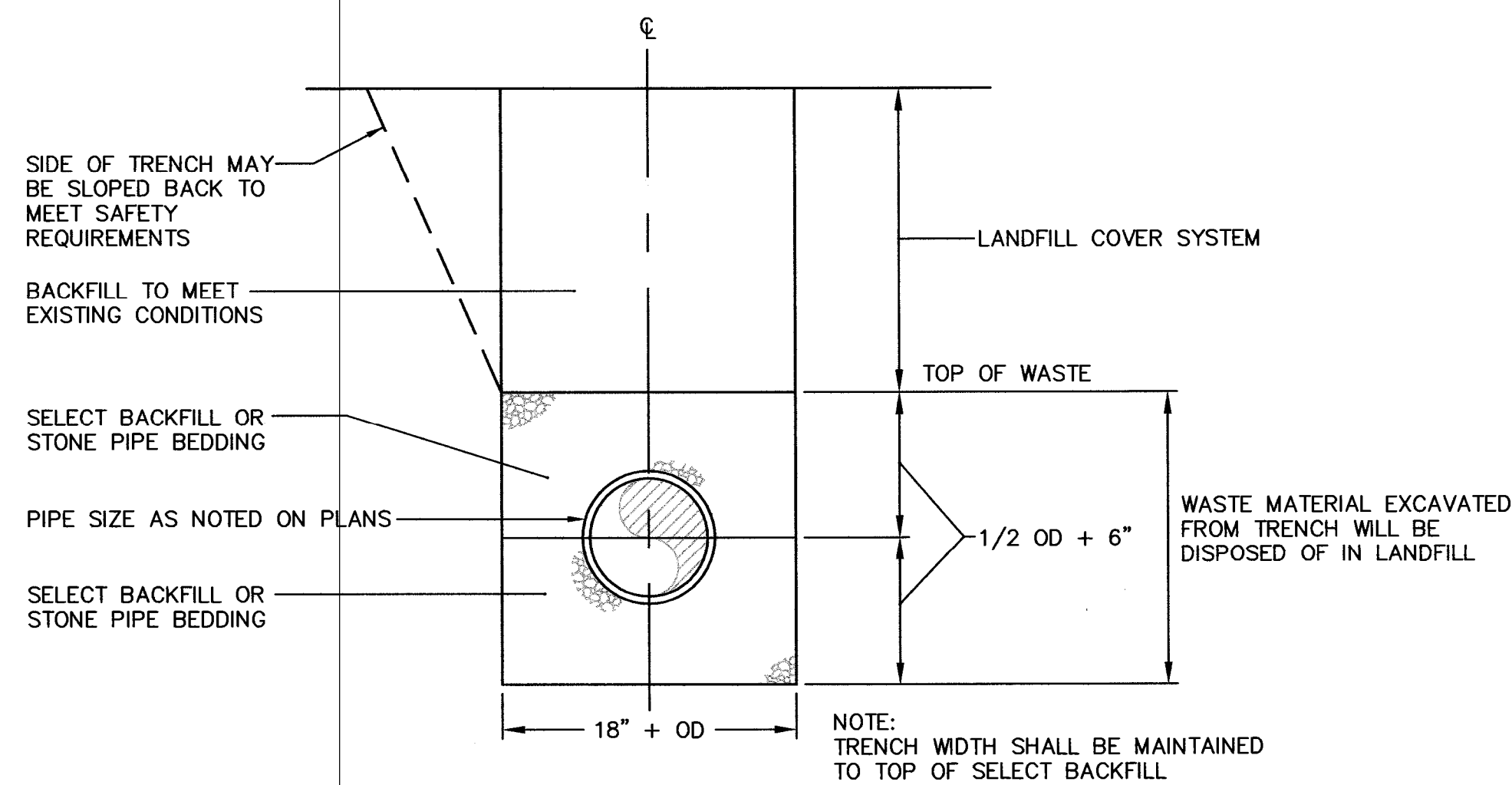
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DOLBY III LANDFILL		
CELL 14 CONSTRUCTION		
CELL 12 CLOSURE		
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JOB NO.	46226	
FILE NO.	2-092-7082	
LIC. NO.		
YB-26162A		



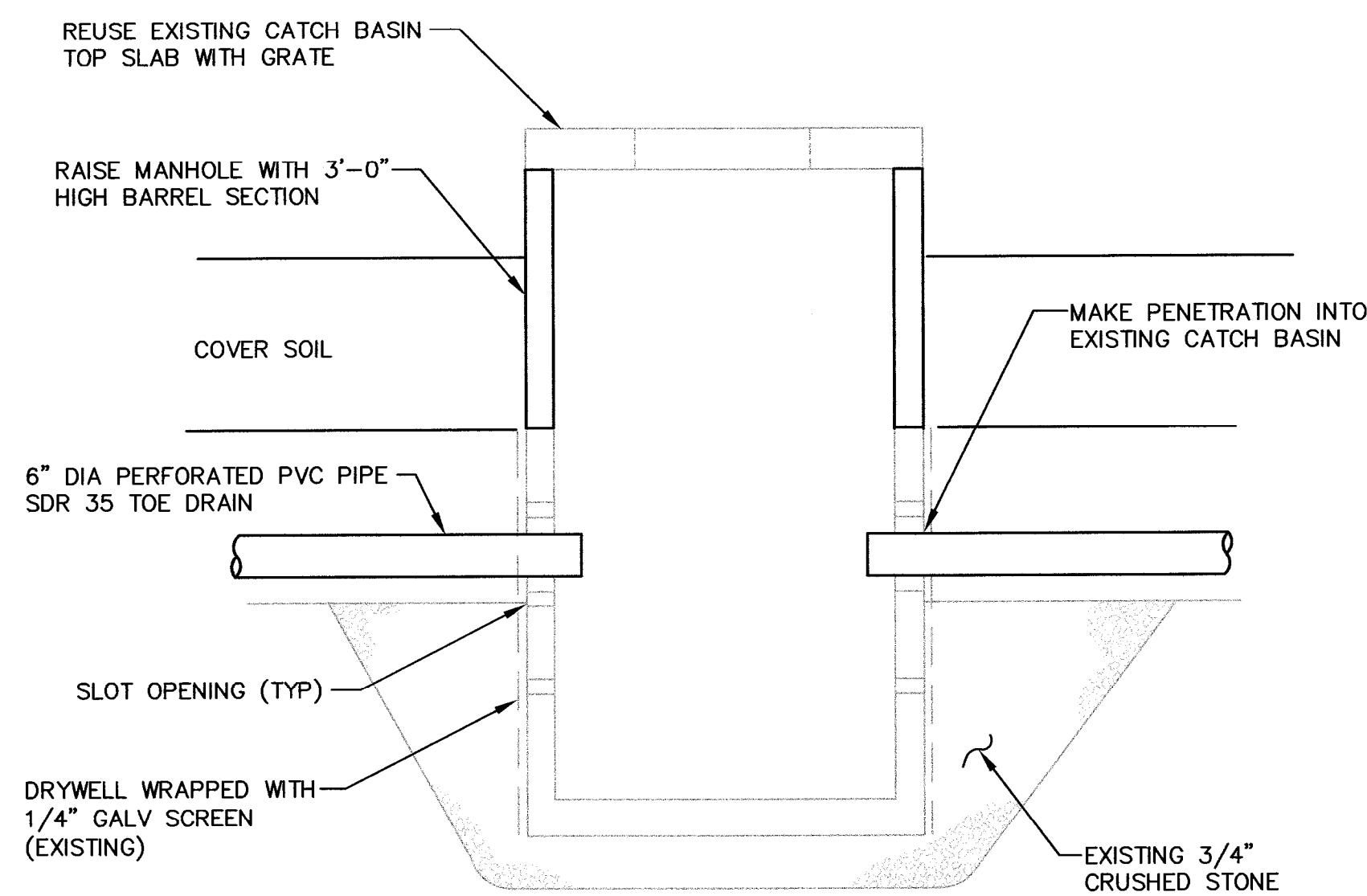
TOE DRAIN 1
NTS YB-26162



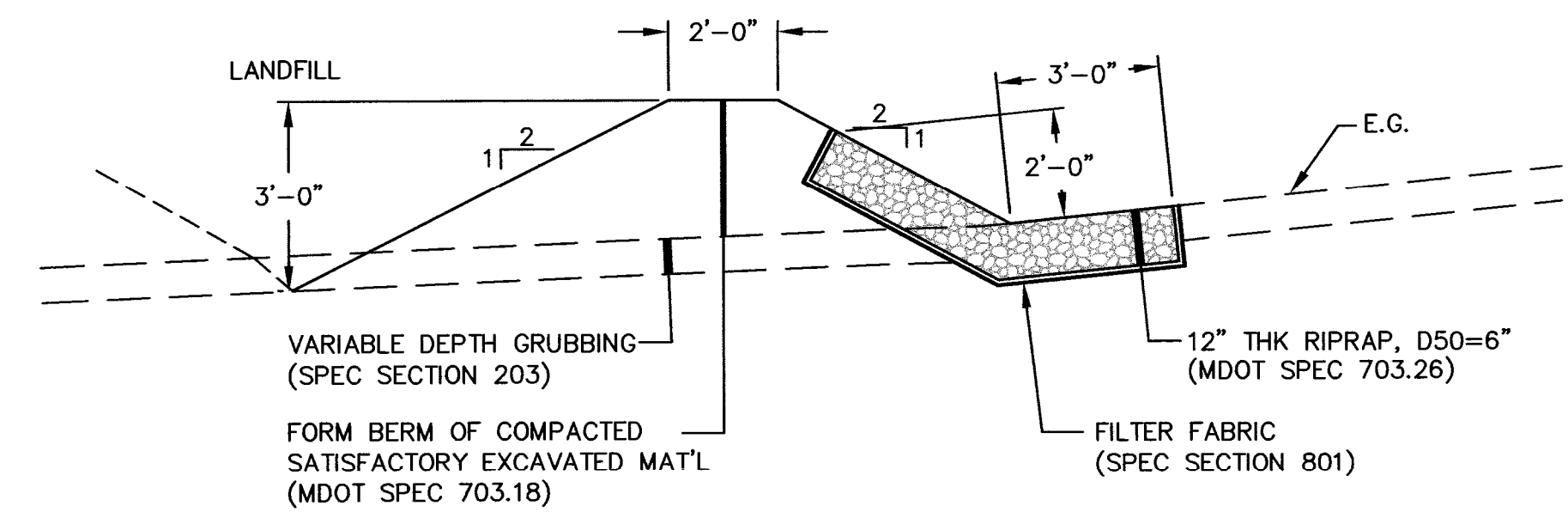
**SECTION
STONE CHECK DAM**
NTS



SIDESLOPE PIPE TRENCH 2
NTS YB-26162



RAISE CATCH BASIN
NTS (EXISTING)



DIKE AND TYPE 1 DRAINAGE DITCH 3
NTS YB-26162

REV. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	DESCRIPTION	BY	CHKD	APPVD	JOB	CODE	DATE	REV.	DESCRIPTION	BY	CHKD	APPVD	JOB
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5	-			-	-													
4	-			-	-													
3	-			-	-													
2	-			7/12/04	C	ISSUED FOR CONSTRUCTION	GHC											
1	-			6/15/04	P	SUBMITTED TO CLIENT												

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Cumberland Center, ME 04021
JOB NO. 04011.04

DRN	DRD	6/4/04
CHKD	GHC	6/14/04
APPVD	-	-
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
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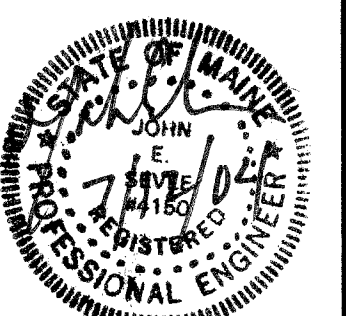
KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

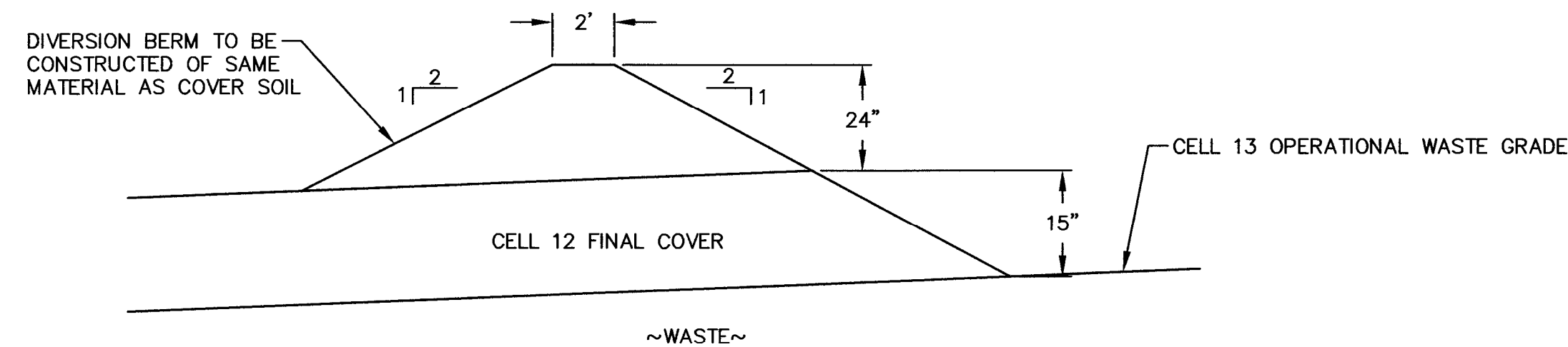
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EAST OPERATION
DOLBY III LANDFILL
CELL 14 CONSTRUCTION
CELL 12 CLOSURE
SECTIONS & DETAILS

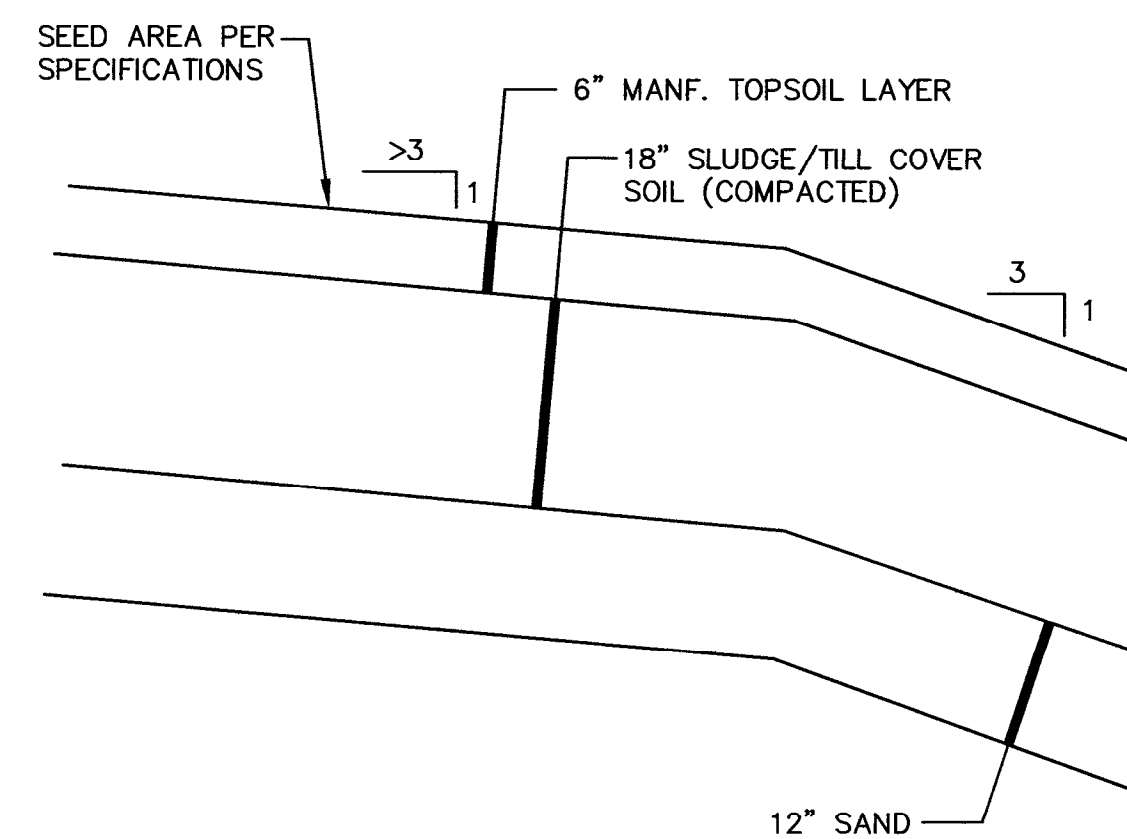
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FILE NO. 2-092-7082
LOC. NO.

YB-26164
SHEET 1 OF 3

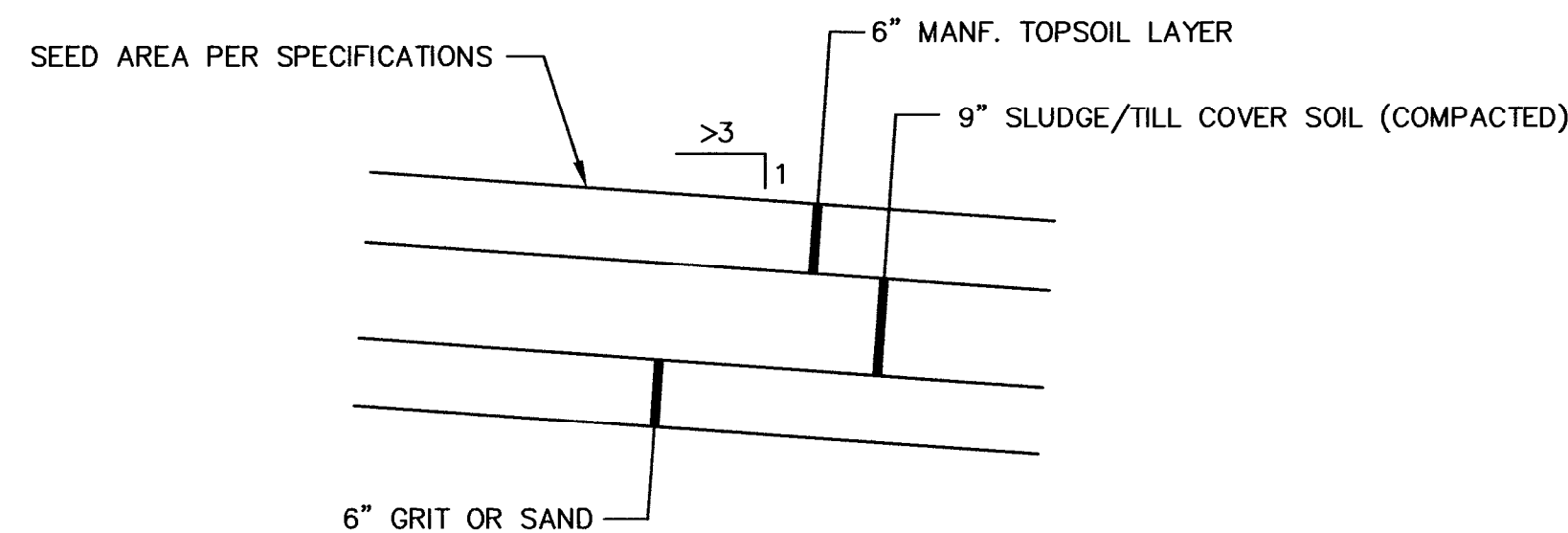




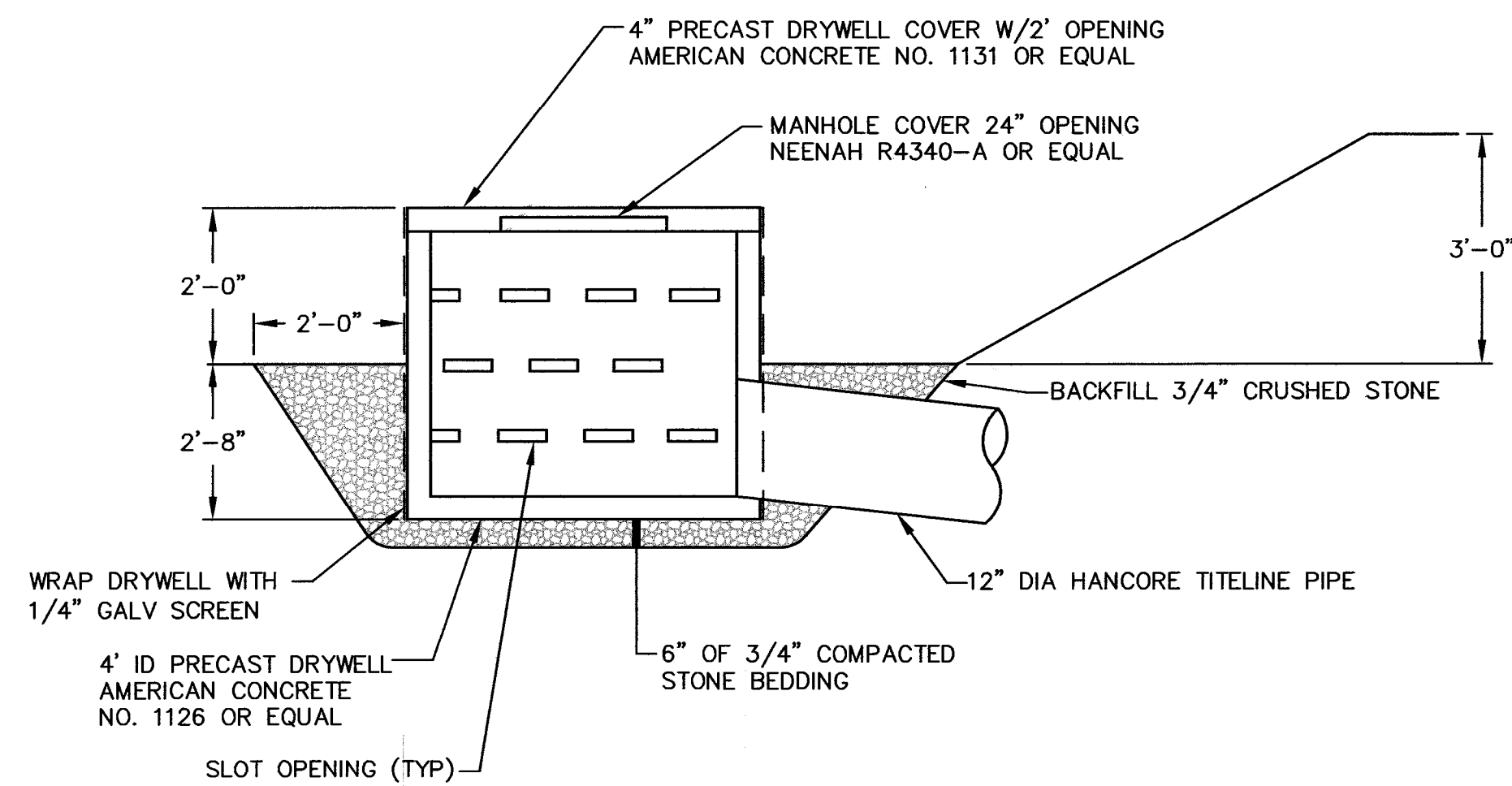
OPERATIONAL/FINAL COVER INTERFACE 5
NTS YB-26162



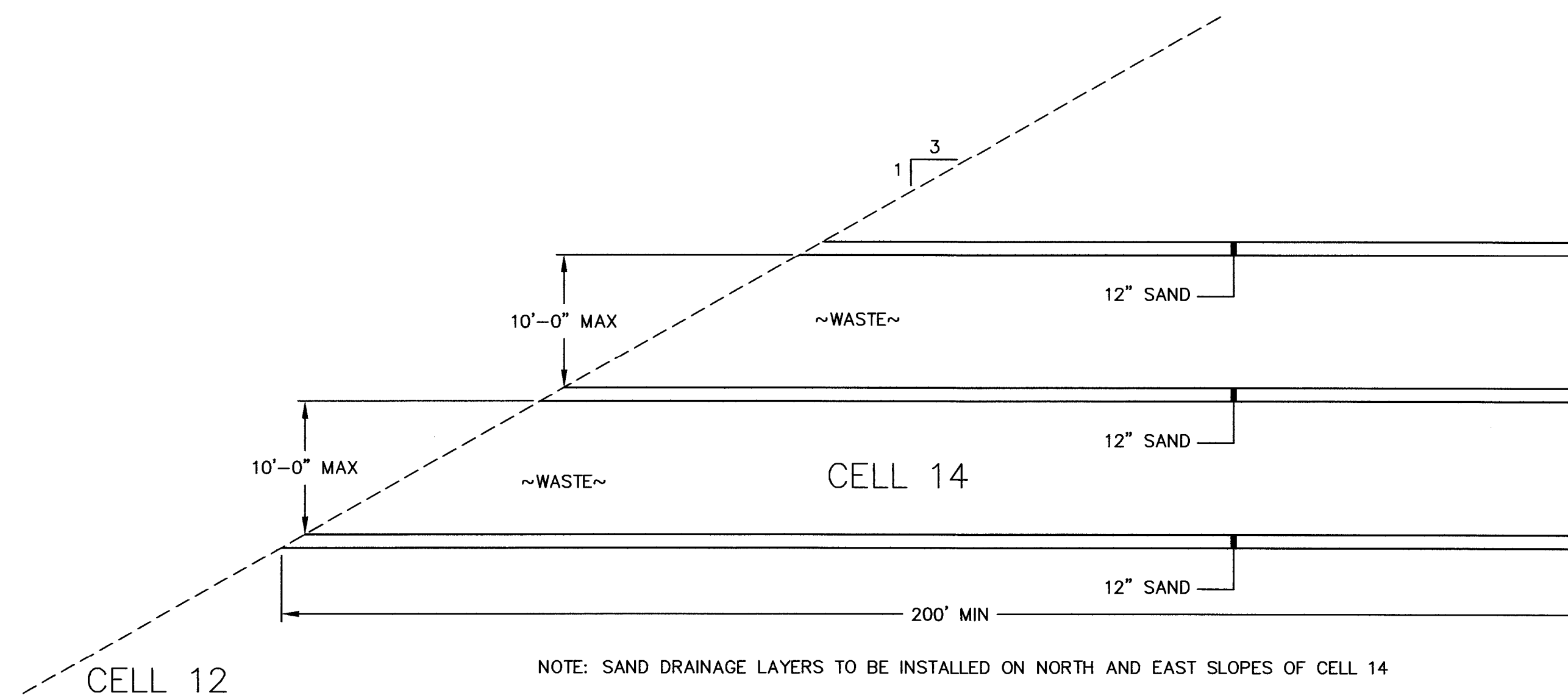
FINAL COVER 6
NTS YB-26162



INTERMEDIATE COVER 7
NTS YB-26162



DRAINAGE MANHOLE
NTS



NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH AND EAST SLOPES OF CELL 14

SLOPE STABILIZING DRAINAGE SYSTEM 10
NTS YB-26166

REF. NO.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB
6	-																	
5	-																	
4	-																	
3	-																	
2	-			7/12/04	C	ISSUED FOR CONSTRUCTION												
1	-			6/15/04	P	SUBMITTED TO CLIENT												

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JOB NO. 04011.04

DRN	DRD	6/4/04
CHKD	GHC	6/14/04
APPVD	-	-
ISSUE CODE		
P	Preliminary	
B	Bids	
C	Construction	
ASB	As Built	
SCALE	NONE	

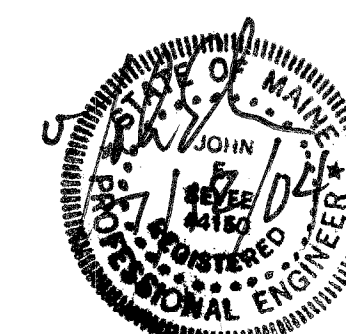
KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

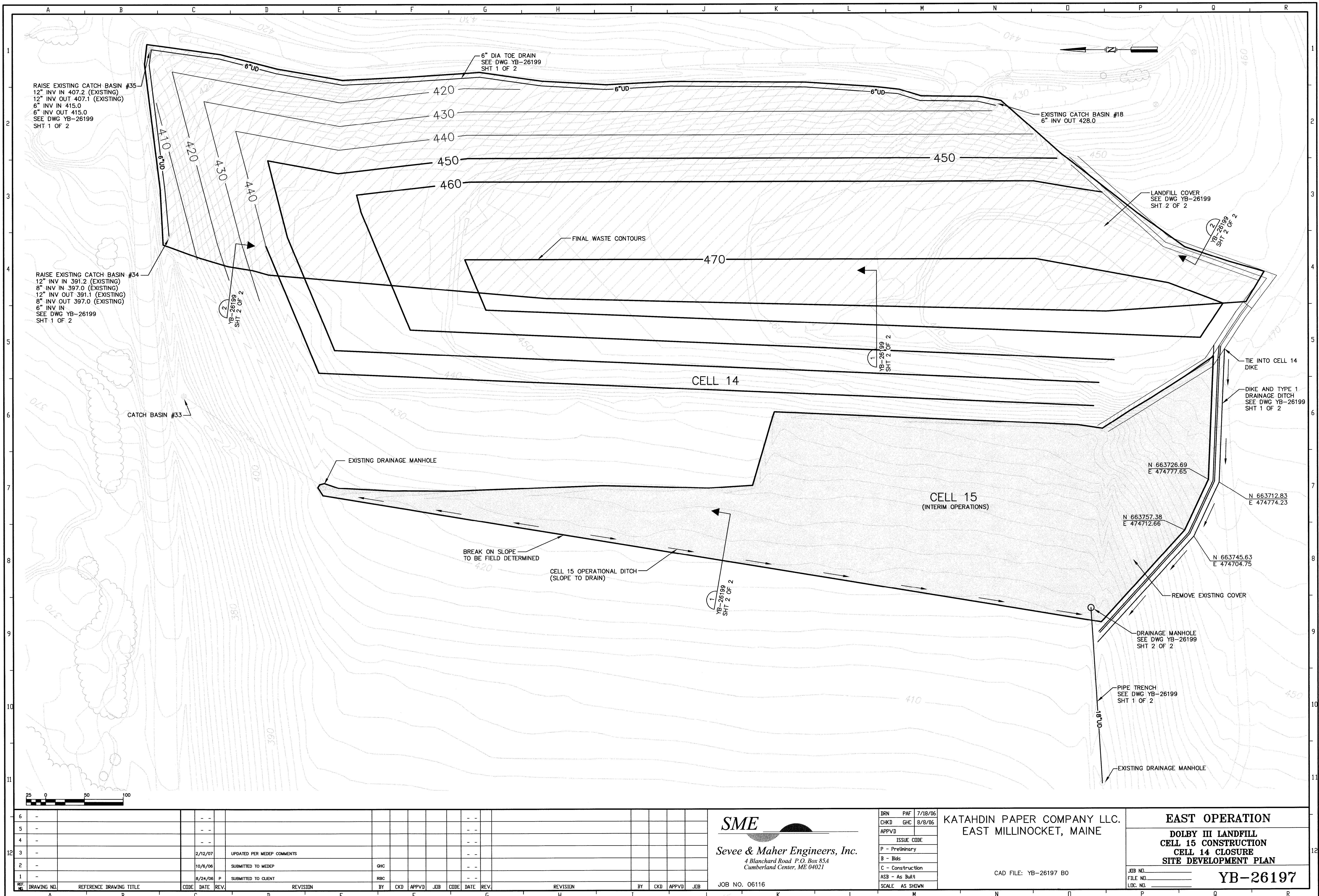
EAST OPERATION
DOLBY III LANDFILL
CELL 14 CONSTRUCTION
CELL 12 CLOSURE
SECTIONS & DETAILS

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

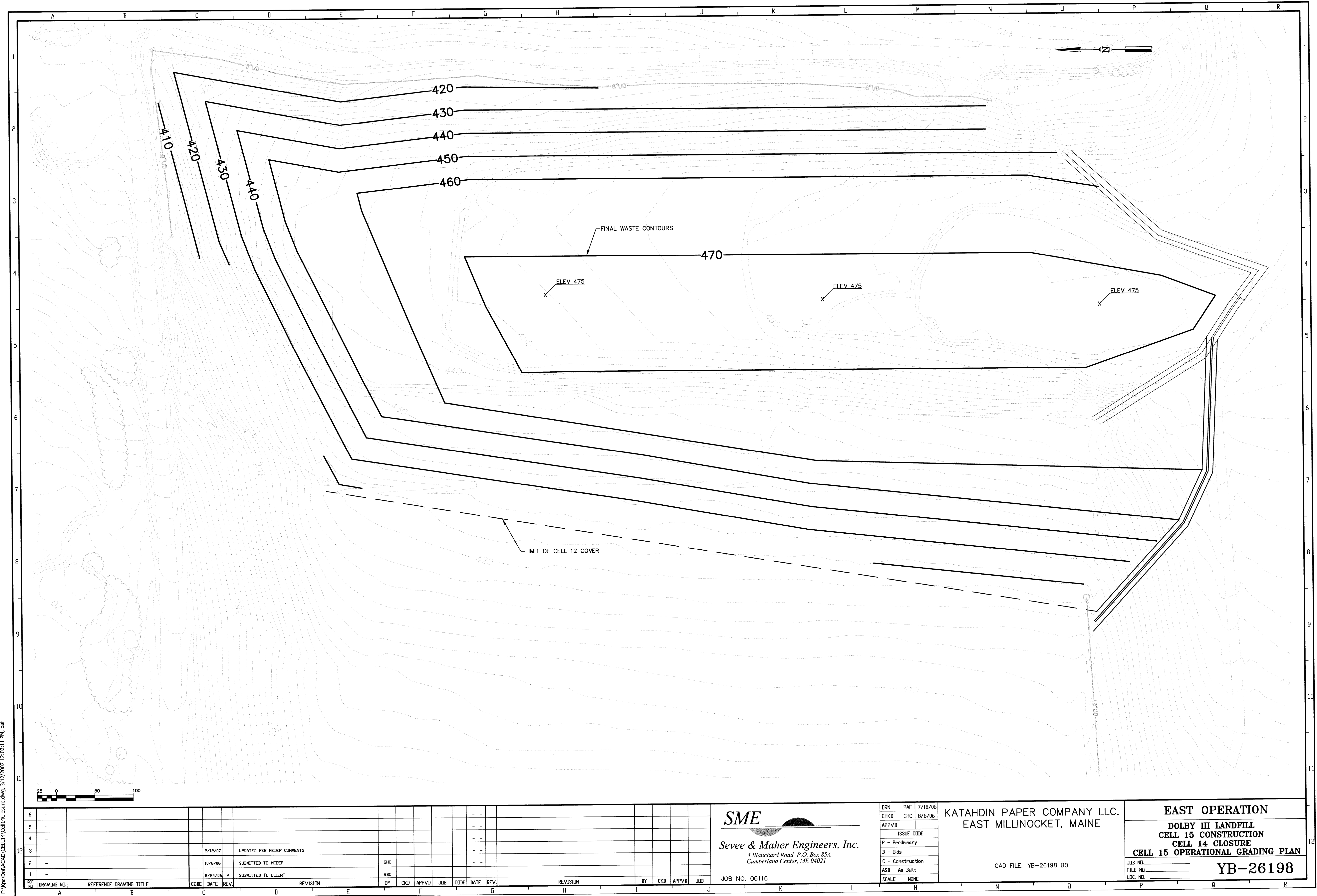
YB-26165
SHEET 2 OF 3



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REF.	DRAWING NO.	REFERENCE DRAWING TITLE	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB	CODE	DATE	REV.	REVISION	BY	CKD	APPVD	JOB
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5	-																	
4	-																	
3	-			2/12/07	P	UPDATED PER MEDEP COMMENTS												
2	-			10/6/06	P	SUBMITTED TO MEDEP	GHC											
1	-			8/24/06	P	SUBMITTED TO CLIENT	RBC											

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Cumberland Center, ME 04021

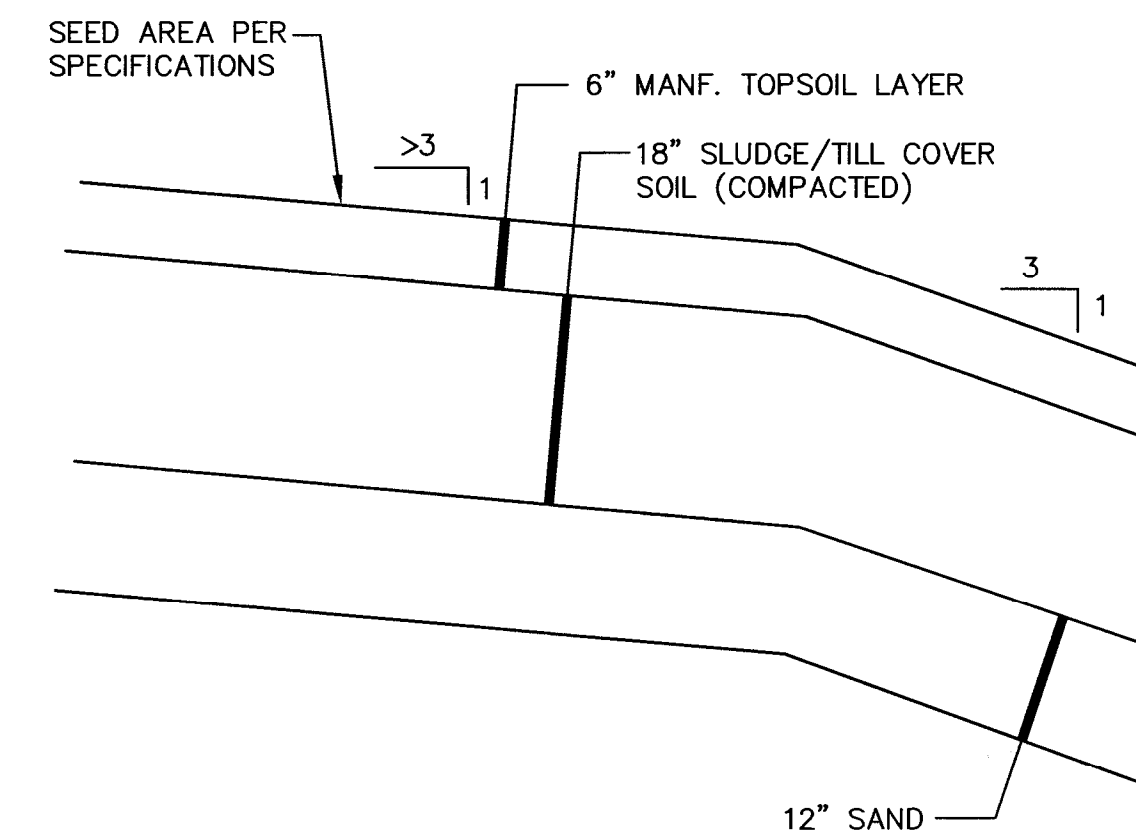
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CHKD	GHC	8/6/06
APPVD		
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE NONE		

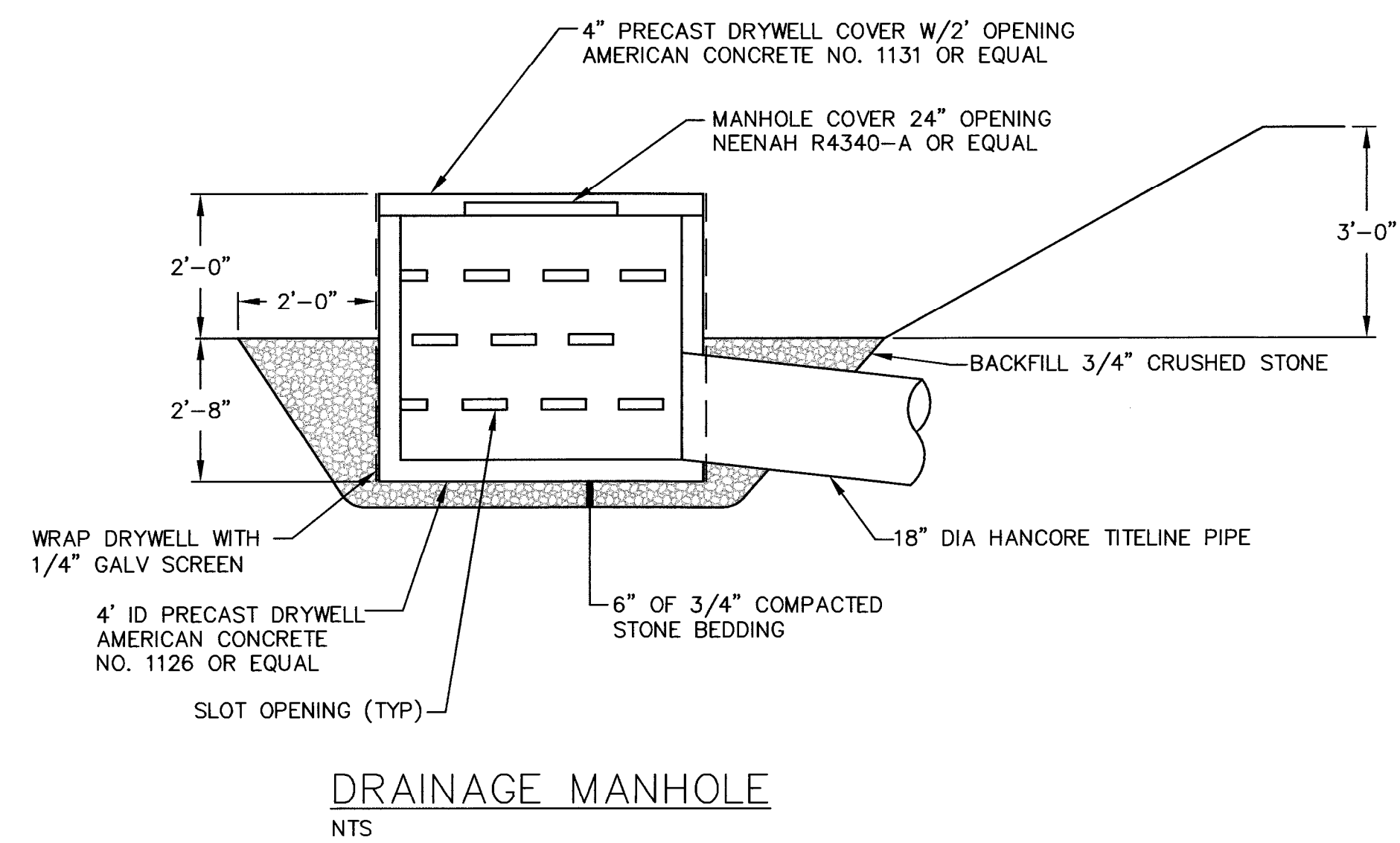
KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26198 B0

EAST OPERATION		
DOLBY III LANDFILL		
CELL 15 CONSTRUCTION		
CELL 14 CLOSURE		
CELL 15 OPERATIONAL GRADING PLAN		
JOB NO.		YB-26198
FILE NO.		
LOC. NO.		



SECTION 2
NTS YB-26197



DRAINAGE MANHOLE
NTS

[illegible]

DRN	DRD	8/11/0
CHKD	GHC	8/11/0
APPVD		- -
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE	NONE	

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26199 B1

EAST OPERATION

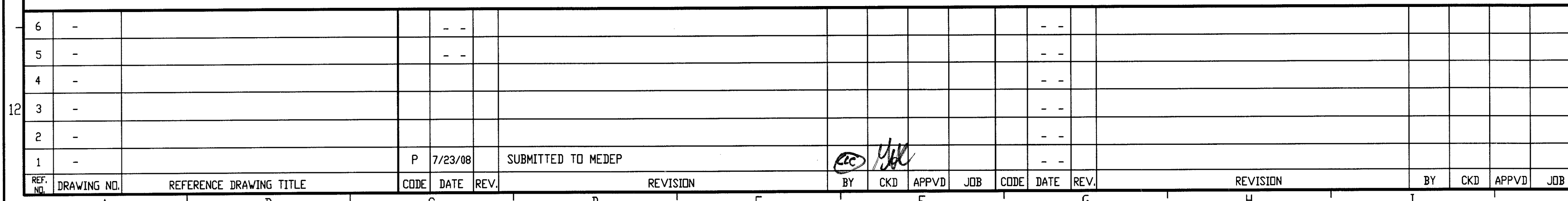
DOLBY III LANDFILL
CELL 15 CONSTRUCTION
CELL 14 CLOSURE
SECTIONS & DETAILS

JOB NO. _____
FILE NO. _____
LOC. NO. _____

YB-26199
SHEET 2 OF 2

SHT. NO.	TITLE	DWG. NO.
1	COVER SHEET	
2	SYMBOLS & ABBREVIATIONS	C-100
3	EXISTING CONDITIONS PLAN	C-101
4	SITE DEVELOPMENT PLAN	C-102
5	OPERATIONAL GRADING PLAN	C-103
6	SECTIONS & DETAILS (SHEET 1 OF 1)	C-300

Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine



Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

DRN	MSB	7/08
CHKD	GHC	7/08
APPVD		
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE	NONE	

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: COVERSHT.DWG

EAST OPERATION

DOLBY III LANDFILL
CELL 16 CONSTRUCTION
COVER SHEET

JOB NO. _____
FILE NO. _____
LOC. NO. _____

SYMBOLS

EXISTING		PROPOSED	EXISTING		PROPOSED	EXISTING		PROPOSED
		NORTH ARROW (TRUE)			DRAINAGE COURSE (WITH DIRECTION)		UG	UNDERGROUND GAS MAIN
		NORTH ARROW (MAGNETIC)			EDGE OF WATER		UT	UNDERGROUND TELEPHONE LINE
		NORTH ARROW (PLAN NORTH)			WATER ELEVATION (GROUND OR SURFACE)		UE	UNDERGROUND ELECTRICAL LINE
	25	CONTOUR LINES			FENCE LINE (WOOD)		OE	OVERHEAD ELECTRICAL LINE
	INV 25.56	SPOT ELEVATION (INVERT ELEVATION)			FENCE LINE (WIRE)		OT	OVERHEAD TELEPHONE LINE
		EXISTING GROUND			STONE WALL		12" SS	SANITARY SEWER
		SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT.			RETAINING WALL		8" FM	FORCE MAIN
		PROPERTY LINE OR R.O.W.			GUARD RAIL		8" W	WATER MAIN
	N35°-10'-10"W 251.17'	PROPERTY LINE W/ BEARING AND DISTANCE			BUILDING AND STRUCTURES		12" SD	STORM DRAIN
	0+00 1+00	CONSTRUCTION BASELINE		2 1" OR 2:1	SLOPE RATIO (HORIZONTAL TO VERTICAL)		8" UD	UNDERDRAIN
		BOUNDARY LINE (State, County, Municipality)		TOP OF SLOPE 2:1	SLOPES (WITH SLOPE RATIO)		6" PD	PERIMETER DRAIN
		SURVEY MONUMENT			CUT OR FILL LINE		6" LT	LEACHATE TRANSPORT
		SURVEY CONTROL			BITUMINOUS PAVEMENT		6" LC	LEACHATE COLLECTION
		PROPERTY PIN, DRILL HOLE, PK, OR STAKE			CONCRETE		6" LD	LEAK DETECTION
		WOODS OR BRUSH LINE		B-12 MW-12 P-12	TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER			REDUCER
		INDIVIDUAL TREE		TP-12	TEST PIT AND NUMBER			MECHANICAL CAP OR PLUG
		MAPPED WETLAND		SW-12	SURFACE WATER SAMPLE LOCATION			COUPLING
		GAS VENT			GAS EXTRACTION WELL			BEND
		GAS VENT (CAPPED)			MANHOLE			TEE
		CLEAN OUT STRUCTURE			CATCH BASIN			PIPE TO BE ABANDONED
		CULVERT			WATER OR GAS VALVE			RISER PIPE & INLET GRATE
		RAILROAD			HYDRANT			STORM GRATE
		SLOPE INCLINOMETER			AIR RELEASE VALVE			DRAINAGE INLET STRUCTURE
		VIBRATING WIRE SETTLEMENT CELL			SURGE RELEASE VALVE			UNDERDRAIN SUMP
		VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT			UTILITY POLE		SF	SILTATION FENCE
		VERTICAL DISPLACEMENT MONUMENT			LIGHT POLE		CLL	CLEARING OR CONSTRUCTION LIMIT LINE

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

SCREENED TILL - SHALL BE EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. SCREENED TILL SHALL BE GLACIAL TILL FREE OF FROZEN MATERIALS, PERISHABLE RUBBISH, PEAT, ORGANIC MATER, LARGE ROCK FRAGMENTS, OR OTHER UNSUITABLE MATERIAL AND SHALL BE SCREENED TO LESS THAN 4" IN DIAMETER WITH GREATER THAN 20 PERCENT FINES. THE FINAL SURFACE OF THE SCREENED TILL SHALL BE FREE FROM PROTRUDING ROCKS GREATER THAN 3" IN DIAMETER.

SAND - THE DRAINAGE SAND SHALL BE AGGREGATE FREE OF ORGANIC MATTER, DEBRIS, AND ROCK FRAGMENTS LARGER THAN 1 INCH IN DIAMETER. SAND SHALL MEET A GRADATION AND HYDRAULIC CONDUCTIVITY REQUIREMENT AS FOLLOWS:

<u>a. SIEVE DESIGNATION</u>	<u>PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE</u>
1/4"	60 - 100
#40	0 - 50
#200	0 - 7

b. REMOLDED HYDRAULIC CONDUCTIVITY (ASTM D 5084-90) MAXIMUM $\geq 1 \times 10^{-3}$ cm/sec

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PERFORATED HDPE UNDERDRAIN PIPE - SDR 21 - HDPE PIPE JOINTS SHALL BE BUTT-FUSION WELDED OR ELECTROFUSION COUPLED.

12" UNDERDRAIN/LEACHATE TRANSPORT PIPE - SOLID HANCOR TITELINE

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDDED.

MATERIAL:

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:	TALL FESCUE	59%
	RED FESCUE	25%
	RED TOP	5%
	LADINO CLOVER	3%
	ANNUAL RYEGRASS	8%

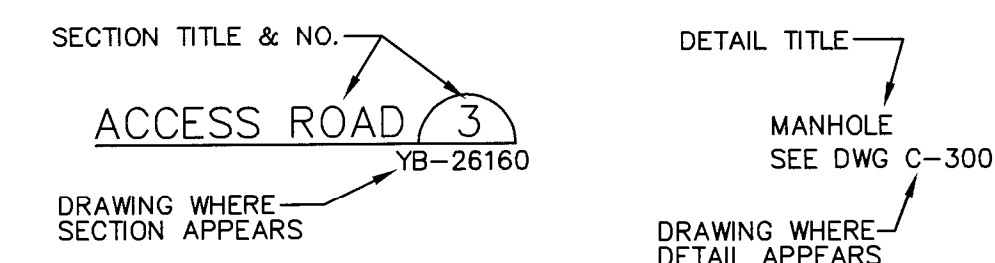
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

VIEW MARKERS & IDENTIFICATION



ACOMP	ASPHALT COATED CMP	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	PERF	PERFORATED
ACT	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HORIZ	HORIZONTAL	PP	POWER POLE
AC	ACRE	DEG OR °	DEGREE	HP	HORSEPOWER	PSI	POUNDS PER SQUARE INCH
AGG	AGGREGATE	DEPT	DEPTH	HYD	HYDRANT	PVC	POLYVINYL CHLORIDE
ALUM	ALUMINUM	DI	DUCTILE IRON	HYD		PWT	PAVEMENT
APPD	APPROVED	DIA OR Ø	DIAMETER	ID	INSIDE DIAMETER		
APPROX	APPROXIMATE	DIM	DIMENSION	IN OR "	INCHES	QTY	QUANTITY
	AIR RELEASE MANHOLE	DIST	DISTANCE	INV	INVERT		
ASB	ASBESTOS	DN	DOWN	INV EL	INVERT ELEVATION	RCP	REINFORCED CONCRETE PIPE
ASP	ASPHALT	DR	DRAIN	LB	POUND	ROW	RIGHT OF WAY
AUTO	AUTOMATIC	DWG	DRAWING	LC	LEACHATE COLLECTION	RAD	RADIUS
AUX	AUXILIARY	EA	EACH	LD	LEAK DETECTION	REQD	REQUIRED
AVE	AVENUE	EG	EXISTING GROUND OR GRADE	LF	LINEAR FEET	RT	RIGHT
AZ	AZIMUTH	ELEC	ELECTRIC	LOC	LOCATION	RTE	ROUTE
		EL	ELEVATION	LT	LEACHATE TRANSPORT	S	SLOPE
BCOMP	BITUMINOUS COATED CMP	ELB	ELBOW	MH	MANHOLE	SCH	SCHEDULE
BM	BENCH MARK	EOP	EDGE OF PAVEMENT	MJ	MECHANICAL JOINT	SF	SQUARE FEET
BIT	BITUMINOUS	EQUIP	EQUIPMENT	MATL	MATERIAL	SHT	SHEET
BLDG	BUILDING	EST	ESTIMATED	MAX	MAXIMUM	SMH	SANITARY MANHOLE
BOT	BOTTOM	EXCAV	EXCAVATE	MFR	MANUFACTURE	ST	STREET
BRG	BEARING	EXIST	EXISTING	MIN	MINIMUM	STA	STATION
BV	BALL VALVE	FG	FINISH GRADE	MISC	MISCELLANEOUS	SY	SQUARE YARD
CEN	CATCH BASIN	FBRGL	FIBERGLASS	MON	MONUMENT	TAN	TANGENT
CEN	CENTER	FDN	FOUNDATION			TDH	TOTAL DYCMM HEAD
CEN LIN	CEMENT LINED	FLEX	FLEXIBLE	NITC	NOT IN THIS CONTRACT	TEMP	TEMPORARY
COMP	CORRUGATED METAL PIPE	FLG	FLANGE	NTS	NOT TO SCALE	TYP	TYPICAL
CO	CLEAN OUT	FLR	FLOOR	N/F	NOW OR FORMERLY	UD	UNDERDRAIN
CFS	CUBIC FEET	FPS	FEET PER SECOND	NO OR #	NUMBER	V	VOLTS
C	CAST IRON	FT OR °	FEET OR °			VA	VALVE ANCHORING TEE
CL	CLASS	FTG	FOOTING	OC	ON CENTER	VERT	VERTICAL
CONC	CONCRETE	GA	GALUGE	OD	OUTSIDE DIAMETER		
CONST	CONSTRUCTION	GAL	GALLON	PC	POINT OF CURVE	WG	WATER GATE
CONTR	CONTRACTOR	GALV	GALVANIZED	PD	PERIMETER DRAIN	W/	WITH
CS	CURB STOP	GPD	GALLONS PER DAY	PI	POINT OF INTERSECTION	W/O	WITHOUT
CTR	CENTER	GPM	GALLONS PER MINUTE	PIV	POST INDICATOR VALVE		
CU	COPPER			PT	POINT OF TANGENT	YD	YARD
CV	CUBIC YARD						

SME

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Cumberland Center, ME 04021

DRN	MSB	7/08
CHKD	GHC	7/08
APPVD		
ISSUE CODE		
P - Preliminary		
B - Bids		
C - Construction		
ASB - As Built		
SCALE NONE		

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

EAST OPERATION

DOLBY III LANDFILL
CELL 16 CONSTRUCTION
SYMBOLS AND ABBREVIATIONS

CAD FILE: SYMSHT

JOB NO. _____
FILE NO. _____
LOC. NO. _____

C-100