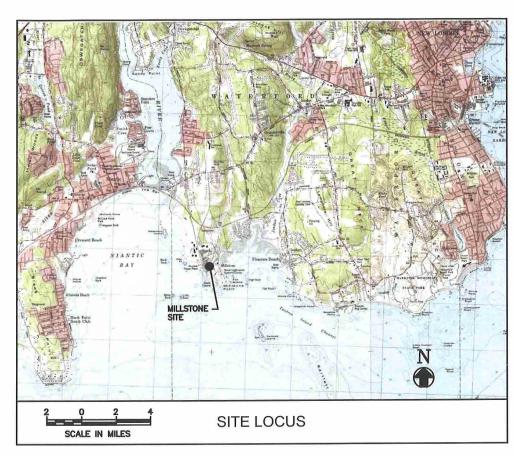
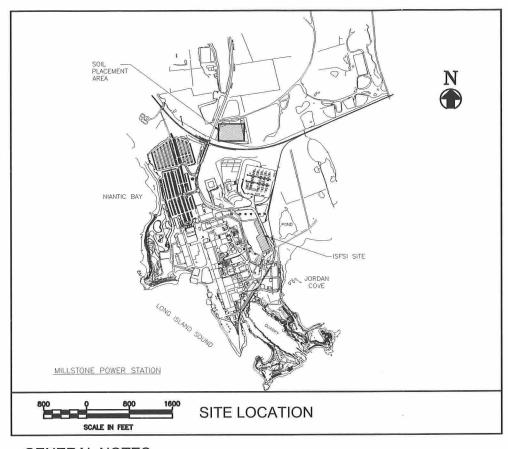
MILLSTONE POWER STATION



	LIST OF DRAWINGS
NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS PLAN (PHASE -1)
3	REVISED GRADING PLAN AND DRAINAGE SYSTEM (FULL BUILD-OUT)
4	STORMWATER DRAINAGE DETAILS
5	EROSION AND SEDIMENT CONTROL PLAN (FULL BUILD-OUT)
6	EROSION AND SEDIMENT CONTROL DETAILS
7	SOIL PLACEMENT AREA PLAN AND NOTES



GENERAL NOTES:

- 1. VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929.
- 2. 250 FOOT GRID BASED ON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM.
- 3. BASE PLAN USED FOR ALL DRAWING IS FROM DOMINION NUCLEAR CONNECTICUT DATED FEBRUARY 18, 2004 AND TITLED "25205 59007, ISFSI FINAL GRADING AND DRAINAGE PLAN. BASE PLAN WAS PROVIDED ELECTRONICALLY BY DOMINION AS CAD FILE 59007. SCALE 1" = 40'
- 4. OTHER MAP REFERENCES INCLUDE: "NORTHEAST NUCLEAR ENERGY CO., MILLSTONE STATION, SITE PLAN." SCALE 1" = 100', DATED 08/03/99 AND "THE CONNECTICUT LIGHT & POWER CO., BERLIN, CONNECTICUT" PROJECT: MILLSTONE POINT, SCALE: 1" = 200', SHEET 1 OF 2 AND 2 OF 2"
- 5. CERTAIN EXISTING CONDITIONS, INCLUDING CERTAIN UTILITIES, ARE NOT INDICATED ON THE PLANS FOR CLARITY AND SECURITY REASONS. THESE PLANS ARE NOT TO BE USED FOR UTILITY CLEARANCE PURPOSES.
- 6. POTENTIAL UTILITY INTERFERENCES WILL BE CONFIRMED PRIOR TO CONSTRUCTION. THE ALIGNMENT OF THE PROPOSED OR EXISTING UTILITIES MAY BE ADJUSTED TO AVOID IDENTIFIED INTERFERENCES.

THESE DRAWINGS ARE FOR THE PURPOSE
OF CONNECTICUT SITING COUNCIL AND TOWN OF
WATERFORD REVIEW.

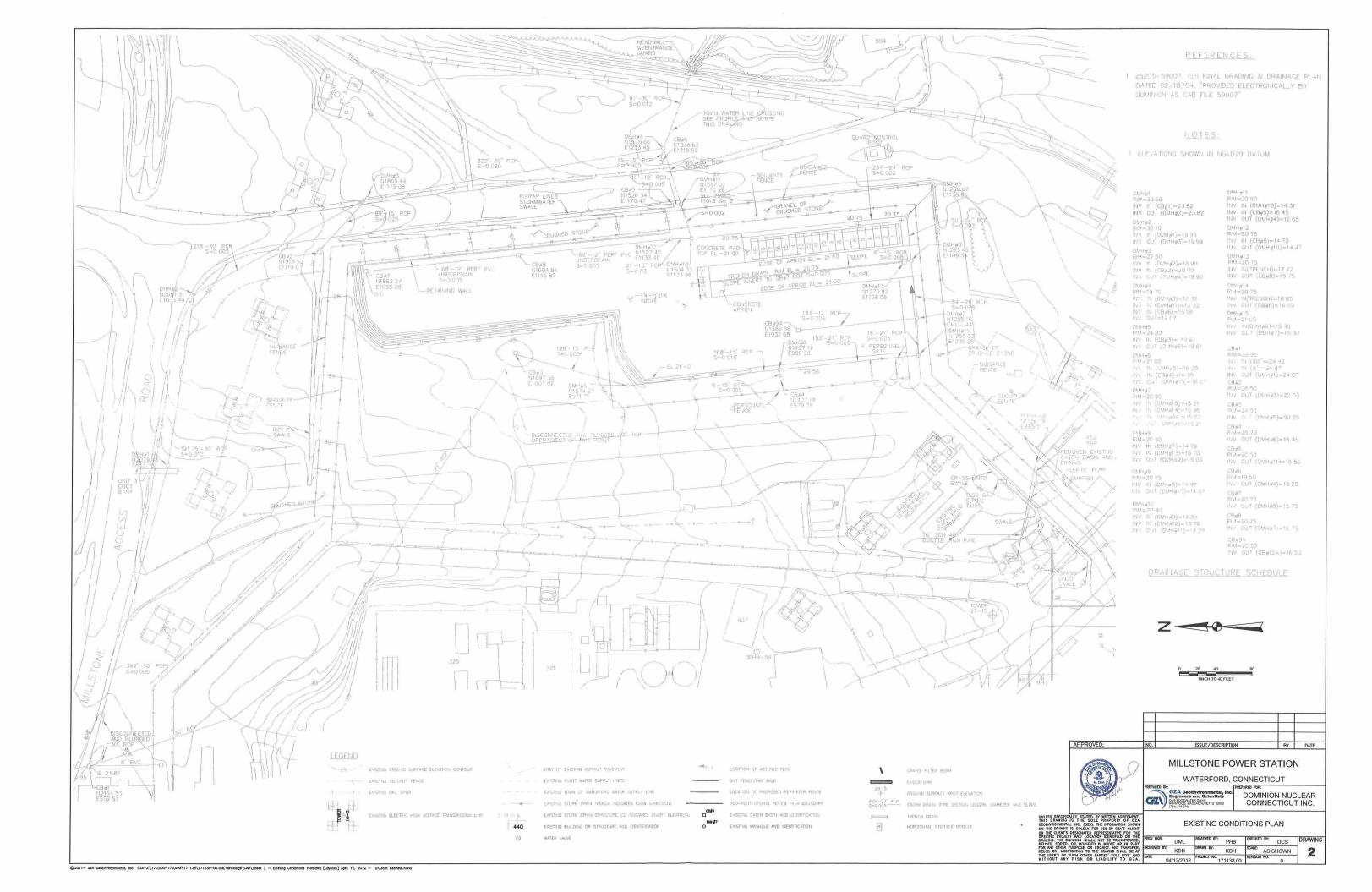
REVISIONS TO ORIGINAL DESIGN
Independent Spent Fuel Storage Installation (ISFSI)
Dominion Nuclear Connecticut Inc.
Waterford, Connecticut

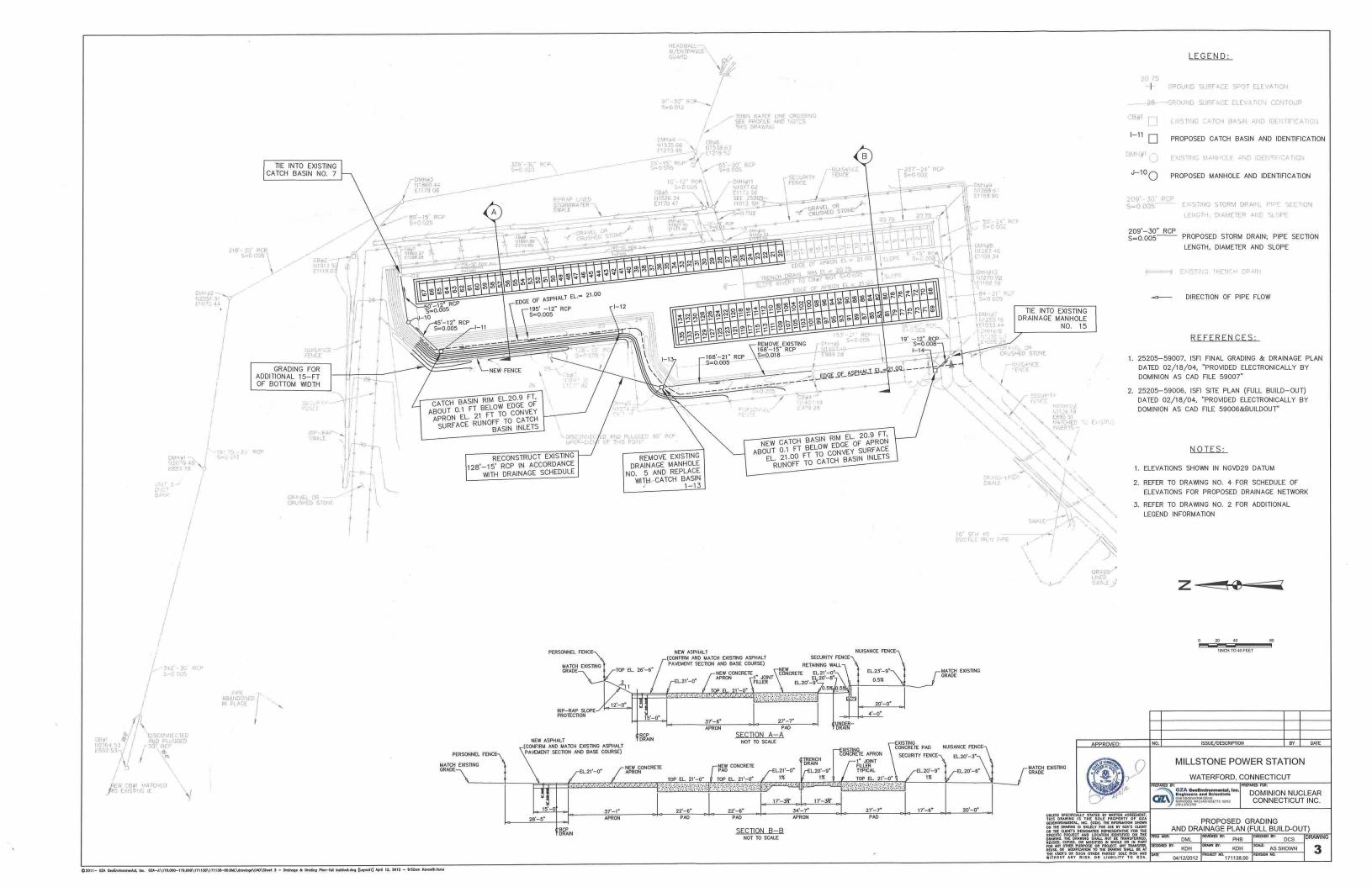
MILLSTONE POWER STATION
WATERFORD, CONNECTICUT

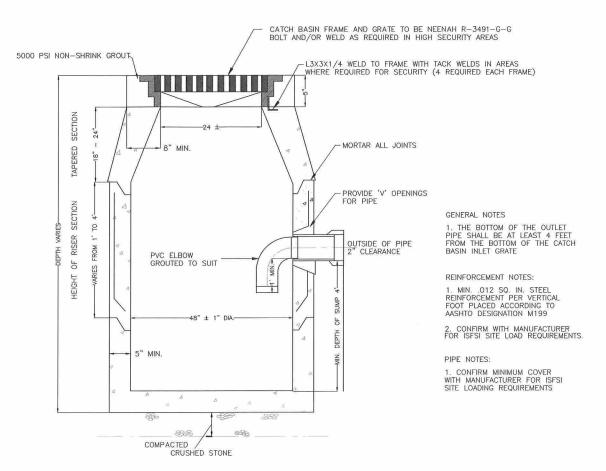
COVER SHEET

FREPARED BY:
CZA GeeEnvironmental, Inc.,
Engineers and Scientists
Registron Medical Connecticut
CONNECTICUT, INC.
PROJ MORT DMI. REVENED BY: PHB CHECKED BY: DCS DRAWING

2012- GZA GeoEnvironmental, Inc.







CATCH BASIN DETAIL NOT TO SCALE

PROP. J-10 RIM=20.9 INV. IN (I-11)=16.63 INV. OUT (CB#7)=16.63

PROP. I-11 RIM=20.9 INV. IN (I-12)= 16.86 INV. OUT (J-10)=16.86

RIM=20.9 INV. IN (CB#3)=17.00 INV. OUT (DMH#6)=16.91

PROP. I-12 RIM=20.9 INV. OUT (I-11)=17.84

PROP. I-14 RIM=20.9 INV. IN (I-13)= 15.35 INV. OUT (DMH#7)=15.35

nental, Inc GZA-J:\170,000-179,999\171138\171138-00.DML\drawings\CAD\Sheet 4 - Drainage Datalis.dwg [LAYOUT 1] April 12, 2012 - 9:49am Kenneth.hunu

MODIFIED CB#3 RIM=24.50 PROPOSED INV. OUT (I-13)= 17.64

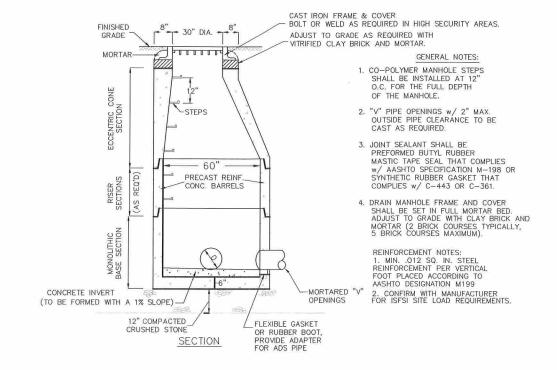
MODIFIED DMH#6 RIM=21.00 PROPOSED INV. IN (I-13)= 16.39 EXISTING INV. IN (CB#4)=16.39 EXISTING INV. OUT (DMH#15)=16.07

EXIST. DMH#15 RIM=21.00 PROPOSED INV. IN (I-14)=15.35 EXISTING INV. IN (DMH#6)=15.30 EXISTING INV. OUT (DMH#7)=15.30

EXIST. CB#7
RIM=20.9
PROPOSED INV. IN (J-10)= 16.38
EXISTING INV. OUT (CB#8)=16.38

NOTE: ELEVATIONS SHOWN IN FEET (NGVD 29 DATUM)

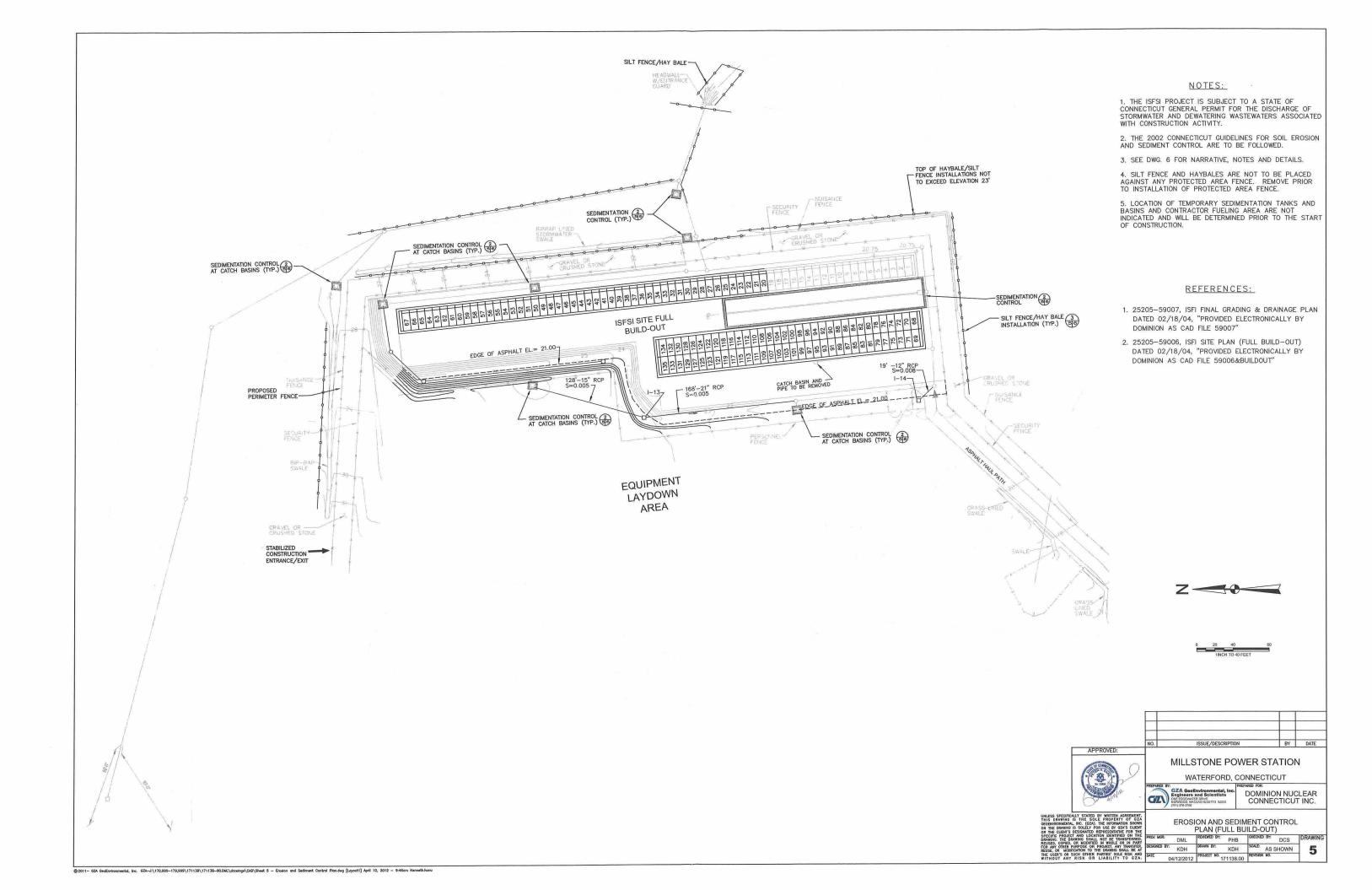
<u>DRAINAGE STRUCTURE SCHEDULE</u>



60" DIAMETER PRECAST DRAIN MANHOLE (DMH)

NOT TO SCALE





EROSION AND SEDIMENT CONTROL NARRATIVE

EROSION AND SEDIMENT CONTROL MEASURES

The following erosion and sediment control techniques are to be employed to minimize erosion and transport of sediment to resource areas during the earthwork and construction phases of the project.

SITE STRIPPING AND EXCAVATION

During the site stripping stage, existing pavement, gravel, rail spurs, etc. within the limits of the ISFSI Site are to be cleared and removed. Prior to any site stripping activities, silt fence and hay bale barriers are to be placed around the outer work perimeter. Disturbance is to be limited to those areas necessary to complete the proposed work.

The DALLY SILL FEINCE DARKIETS
Hay bale/Silt fence barriers are to be placed to trap sediment transported by runoff before it reaches the drainage system or leaves the construction site, in addition to areas where high runoff velocities or high sediment loads are expected. The silt fences and hay bale barriers are to be replaced as determined by periodic field inspections. Hay bales or silt fence should not be placed along the Protected Area fence.

CATCH BASIN INLET PROTECTION

Existing and newly constructed catch basins are to be protected with hay bale barriers (where appropriate) or silt sacks throughout construction.

Slope protection will be provided using silt fence/hay bale installations. If this erosion and sedimentation control method is ineffective, then the Contractor will install matting such as straw, jute, wood fiber, and/or plastic netting.

TEMPORARY SEDIMENT BASINS

TEMPORARY SEDIMENT BASINS
Temporary sediment basins will be designed either as excavations or bermed stormwater detention structures (depending on grading) that will retain runoff for a sufficient period of time to allow suspended soil particles to settle out prior to discharge. These temporary basins will be located based on construction needs as determined by the contractor in consultation with the Owner's resident engineer. A perforated riser surrounded by a crushed stone filter will be typically used to control discharge from the basin. Points of discharge from sediment basins will be stabilized to minimize erosion.

Stockpiles created during construction activities are to be surrounded with hay bales and silt fence. Other succeptable alternatives include gravel filter berms laid around the perimeter of the stockpile. Stormwater un-off is to be diverted away from stockpiles.

SLOPE STABILIZATION

SLOPE STABILIZATION

Stobilization of open slope surfaces is to be implemented within 14 days after grading or construction activities have temporarily or permanently ceased. Slope stabilization is to be used to minimize erosion on slopes of 3:1 or flatter. Establishment of temporary and permanent vegetative cover is to be established by hydro—seeding or sodding. Mulch is to be used after permanent seeding to protect soil from the impact of folling rain and to increase the capacity of the soil to absorb water. Non—vegetative slope stabilization is to include crushed stone and/or gravel surfacing, underlain by a geotextile separation fobric.

WINTER STABILIZATION

Any areas disturbed at any phase of on-site activity conducted during winter conditions will be temporarily stabilized with hand loid straw mulch, hydro-seeding, mulching, or erosion control blankets as necessary to control erosion during winter storm events.

CONSTRUCTION DEWATERING

CONSTRUCTION DEWALKING
Dewatering may be required for construction. Where possible, the wastewater discharge is to be infiltrated into the ground. However, the existing sails have limited infiltration capacity. Construction dewatering wastewater discharged to a surface water body is to be pre-treated for sediment removal by residing in a ractionation/sedimentation tank or temporary sediment basin prior to discharge.

CONSTRUCTION SITE ENTRANCE & EXIT

SUNDINCULION SIZE ENTRANCE & EXIL Stabilized construction entrance and exit are to be established at all permanent construction staging areas, ncluding the Soil Placement Area, to reduce the tracking of sediment from the construction site onto other areas of the Millstone Property and to public ways. Street sweeping is be used if the stabilized entrance and exit are not adequate to prevent sediment from being tracked onto the roads.

Standard dust control measures are to be used, such as use of water trucks, misting, mulch, or placement of calcium chloride. These measures are to be used when open dry areas of soil are anticipated on the itle. In addition, dust control measures are to be considered prior to clearing and grading activities, which an create the opportunity for large amounts of dust to be blown.

EQUIPMENT FUELING Equipment fueling and other activities including petroleum, oil and other potentially hazardous substances is to be performed at a pre—approved, designated area with appropriate spill prevention and control measures. This area is to be located on an asphalt poved surface, away from catch basins and other drainage structures, within the Equipment Laydown Area. Portable secondary containment is to be used, and sorbent materials are to be placed around the perimeter of the fueling area, during all fueling activities.

The site is to be maintained in a clean and orderly fashion, ensuring that no litter, debris, building naterials, or similar materials are discharged to waters of the State. All dumpsters are to have covers and intact drain plugs (if applicable) or are to be staged in roofed areas to prevent dumpster/compactor leakage from entering stormwater. No building material residues (internal truck washes) are to be discharged to drainage systems or waters of the state.

INSPECTION AND MAINTENANCE
Qualified personnel, as determined by Dominion, are to inspect disturbed areas of the construction activity
that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit.
Inspection is to be performed at least once every seven (7) calendar days and within 24 hours of the end
of a storm that is 0.1 inches or greater. Where sites have been temporarily or finally stabilized, such
inspection is to be conducted at least once every month for three months

The focus of the inspection is to determine: 1) whether or not control measures were installed/performed The focus of the inspection is to determine: 1) whether or not control measures were installed/performed correctly; 2) whether or not there has been damage to measures since they were installed or performed; and 3) what should be done to correct any problems with the measures. Each measure is to be observed to determine if it is still effective. In some cases, specific measurements may be taken to determine if maintenance of the measures are required. For example, sediment depths may be measured to determine if cleaning or replacement is required.

SITE MANAGER
Prior to construction a Site Manager will be designated, who will be responsible for installation, monitoring, inspection and correction of erosion and sediment control measures.

REPORTING AND RECORD KEEPING

addition to the aforementioned inspection and maintenance procedures, the contractor is to keep a cord of the following information:

- record of the following information:

 1. The dates when major grading activities occur in a particular area;

 2. The dates when construction activities cease in an area, temporarily or permanently; and

 3. The dates when an area is stabilized, temporarily or permanently.

 4. A copy of the Stormwater Pollution Control Plan and all reports generated during construction activities are to be retained as required by regulation.

- SEQUENCE OF GRADING AND CONSTRUCTION ACTIVITIES
 The following provides recommendations for the general sequence of work:

 1. Install stabilized construction exits.

 2. Install perimeter hay bales and silt fence as necessary.

 3. Provide catch basin inlet protection at existing catch basins.

 4. Perform Stripping (removal of gravel surface) at ISFSI site.

 5. Provide protection for all stockpiles

 6. Prepare temporary sedimentation basins, as may be required.

 7. During stripping and excavation, install berms to collect site runoff as required.

 8. Implement other dewatering control measures (e.g. frac tanks with filters) as required

 9. Begin earthwork at the ISFSI site.

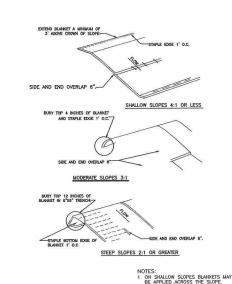
 10. In greas where flow is concentrated, install crushed stone or hay bale check dams.

 11. Upon completion of earthwork within the ISFSI Site, install remaining drainage structures.

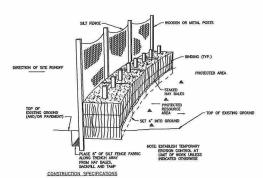
 12. Provide inlet protection at newly constructed catch basins and manholes.

 13. Construct concrete pads and aprons within ISFSI Site.

- Complete grading.
 Remove accumulated sediment from basins and other sediment control devices.
 Perimeter erosion control will remain in place until permanent stabilization has been achieved.
 Loam and seed soil placement area.



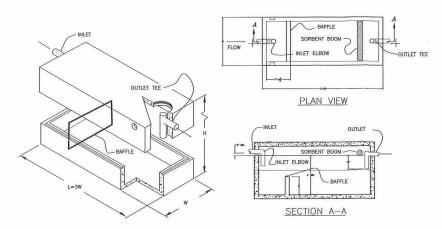
MATTING PROTECTION



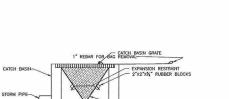
- BALES SHALL BE PLACED WHERE SPECIFIED ON DRAWINGS IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.

- 5. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

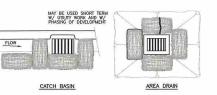
HAY BALE SILT FENCE BARRIER DETAIL



SEDIMENTATION TANK



CATCH BASIN INSERT



HAY BALES

BLOCK AND GRAVEL INLET BARRIERS

GRAVEL (12" MIN. DEPTH)

FINE WIRE MESH

AREA DRAIN GRAVEL FILTER OF 1" TO 1 1/2"

FINE WIRE MESH-

OVERFLOW FINE WIRE MESH

CURB INLET

18" MIN.

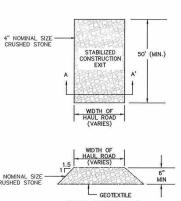
GRAVEL SLOPE

OPENINGS PERPENDICULAR TO FLOW.

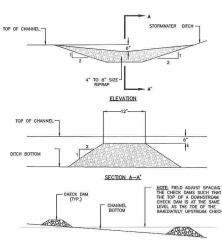
GRAVEL & WIRE MESH

CATCH BASIN INLET PROTECTION

RUNOFF WATER \



CROSS-SECTION A-A' STABILIZED CONSTRUCTION EXIT (TYPICAL)



DETAILS - ROCK CHECK DAM

GUIDELINES FOR PROPER DESIGN AND USE OF SEDIMENTATION TANKS INCLUDE:

SIZE TANKS TO ADEQUATELY HANDLE DEWATERING FLOWS.

TANKS SHOULD HAVE A MINIMUM DEPTH OF 4 FEET BELOW OUTLET PIPE.

PLACE THE PUMP DISCHARGE HOSE AT THE INLET END OF THE TANK, AS FAR AS POSSIBLE FROM THE TANK OUTLET TO ENSURE USE OF THE ENTIRE TANK LENGTH. INSTALL A 15-INCH-LONG 90° ELBOW ON THE PUMP DISCHARGE HOSE TO DIRECT THE FLOW TOWARD THE TANK BOTTOM.

PLACE A SORBENT BOOM IN THE TANK NEAR THE OUTLET TO AID IN REMOVING PETROLEUM PRODUCTS.

LOCATE THE INVERT OF THE OUTLET PIPE AT LEAST 3 INCHES BELOW INVERT OF THE INLET PIPE. HAVE THE OUTLET HOSE DISCHARGE DIRECTLY TO A CATCH BASIN OR OTHER DRAINAGE STRUCTURE

IF THE TANK HAS A CLOSED TOP, ADD ACCESS HATCHES AT BOTH INLET AND OUTLET ENDS FOR INSPECTION, SAMPLING AND CLEANING.

CLEAN TANKS WHEN SEDIMENT REACHES 1/4 OF THE TANK'S DEPTH OR WEEKLY, WHICHEVER COMES FIRST. TAKE TANKS OUT OF SERVICE WHEN THEY ARE BEING CLEANED. PLACE SEDIMENT REMOVED FROM THE TANK WITH OTHER MAREFUL EXCAVATED FROM THE SITE.

ENSURE THAT HOSES ARE NOT LEAKING AND THAT TANKS ARE NOT OVERFLOWING, THUS PREVENTING WATER FROM BYPASSING THE TANK AND ENTERING A DRAINAGE SYSTEM.





MILLSTONE POWER STATION WATERFORD, CONNECTICUT

DOMINION NUCLEAR GIAN Engineers as ONE EDGEWATER NORWOOD, MASS CONNCECTICUT INC.

EROSION AND SEDIMENT CONTROL

DESIGNED BY:

DCS DRAWING

