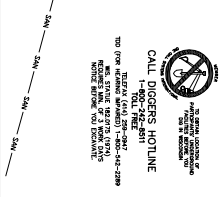
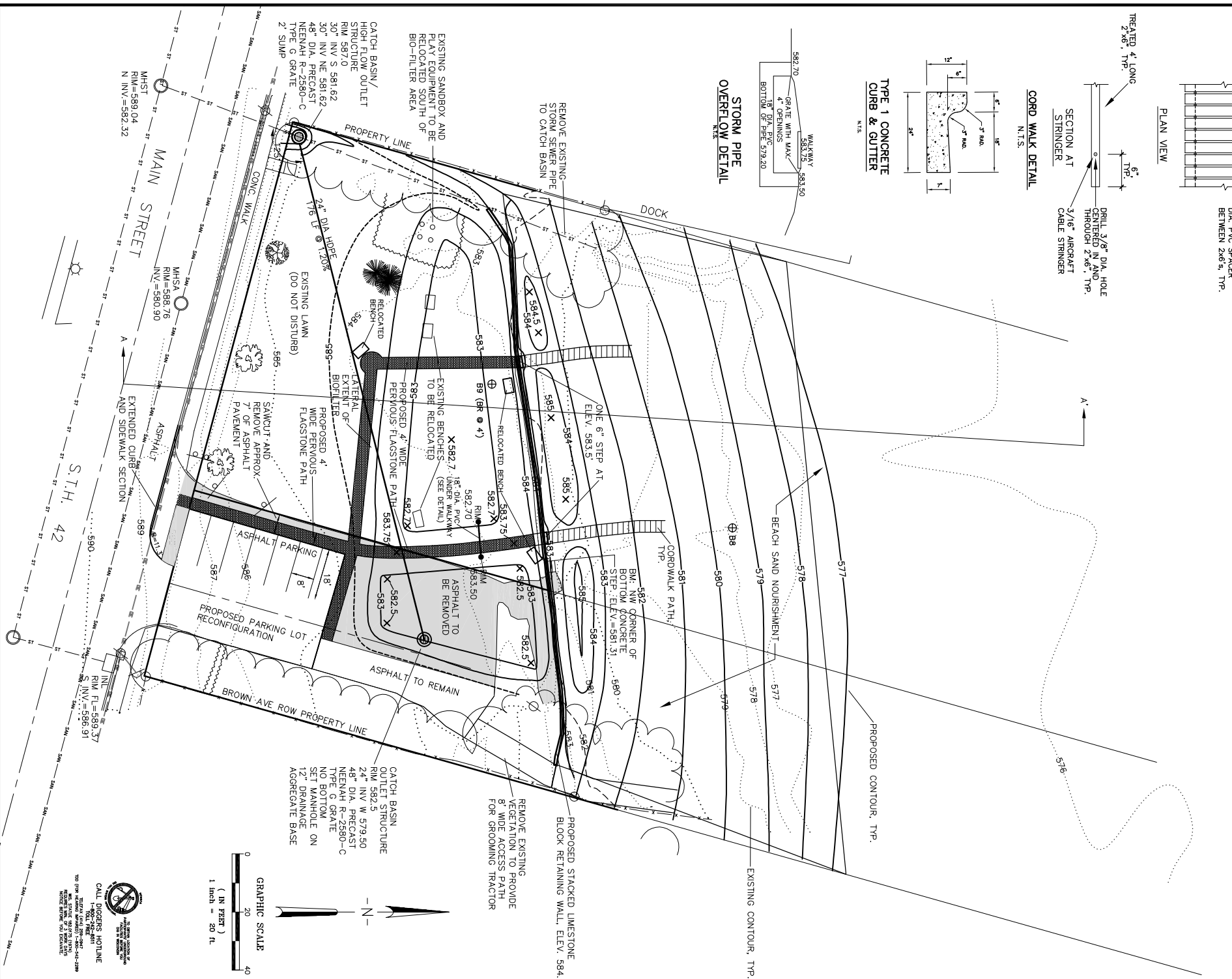
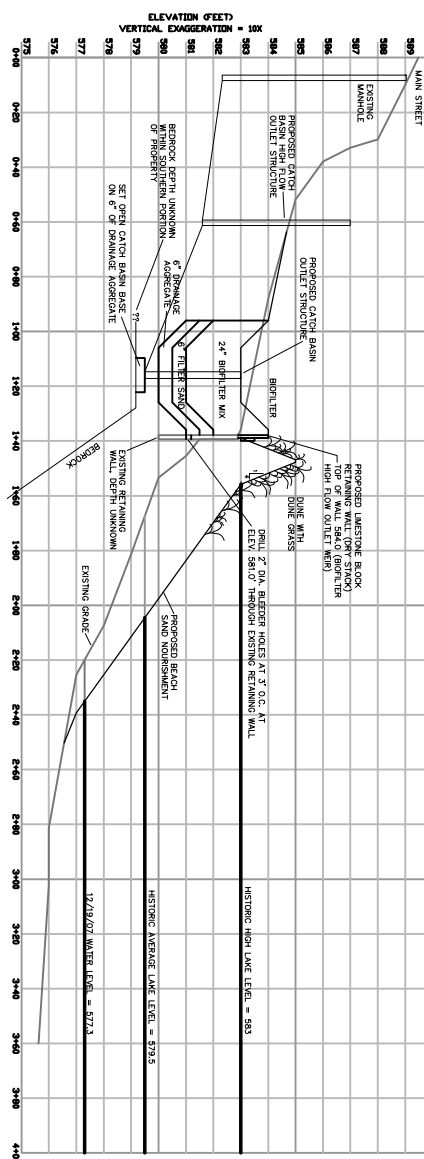


**GREEN BAY**



**BEACH CROSS SECTION A-A'**



**BOILER AND SOIL LABORATORY SPECIFICATIONS**

- 1.01 WORK INCLUDED**
- A. TOPSOIL
  - B. BOILER SOIL MIX
  - C. DRAINAGE AGGREGATE LAYER
  - D. GEOTEXTILE
- 1.02 QUALITY ASSURANCE**
- THESE TESTS SHALL BE PERFORMED ON MATERIAL PRIOR TO SHIPMENT TO THE SITE WITH A MINIMUM OF ONE TEST PER MATERIAL TYPE AND FOR EVERY CARLOAD.
- A. ASTM C 117 AND C 136 TESTS ON SAND USED FOR PLANTING SOIL MIX AND FOR SAND USED AS A FILTER BENEATH THE BOILER SOIL MIX.
  - B. UNSATURATED WATER CONTENT TESTS ON BOILER SOIL MIX.
  - C. ASTM D 2434 FOR FALLING HEAD ASTM D2434 FOR HYDRAULIC CONDUCTIVITY OF THE BOILER SOIL MIX.
  - D. ASTM D 2922 FOR PLAIN HEAD ASTM D2922 FOR HYDRAULIC CONDUCTIVITY OF THE BOILER SOIL MIX.
  - E. LOSS ON DRYING FOR TOP SOIL.
- 1.03 SUBMITTALS**
- RESULTS OF LABORATORY TESTS PERFORMED ON REPRESENTATIVE MATERIALS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO DELIVERY TO THE SITE.
- A. COMPOST TEST RESULTS (TOP CLASSIFICATION, ORGANIC MATTER, PH).
  - B. DRAINAGE AGGREGATE WETS SPECIFICATION.
  - C. CERTIFICATION THAT THE DRAINAGE AGGREGATE WETS SPECIFICATION.
  - D. RESULTS FROM TESTS ON SAME SOURCE AND PRODUCTION PROCESS WITHIN LAST 12 MONTHS ON ANY OTHER MATERIALS.
  - E. RESULTS FROM TESTS IDENTIFIED IN SECTION 1.02.
- TABLE 1 - PRODUCTS**
- 2.01 BOILER SOIL MIX**
- A. THE BOILER SOIL SHALL CONSIST OF A MIXTURE OF SAND, TOPSOIL, AND WATER COMPOST THAT IS SUITABLE FOR INITIAL AND LONG-TERM PLANTING. THE MIXTURE SHALL BE SUITABLE FOR PLANTING AND MAINTAIN HYDRAULIC CONDUCTIVITY. MANUFACTURER'S DATA SHEET SHALL BE SUBMITTED WITH THE PROPORTIONS QUANTIFIED IN TABLE 1. THE MIXTURE SHALL HAVE A PH IN THE RANGE OF 6.0 TO 7.0. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS.
- TABLE 2 - PRODUCTS**
- 2.01 BOILER SOIL MIX**
- APPROX. 40% ADJUST AS NEEDED FOR PERFORMANCE
- | COMPOST | APPROX. 40% ADJUST AS NEEDED FOR PERFORMANCE |
|---------|--|
| TOPSOIL | 10 TO 15% F. LOAM TEXTURE                    |
|         | 15 TO 20% F. SANDY LOAM TEXTURE              |
|         | 20 TO 25% F. LOAMY SAND TEXTURE              |
|         | 30 TO 45%                                    |
- COMPOST**
- ADJUSTMENTS TO PROPORTIONS SHALL BE MADE TO MEET HYDRAULIC CONDUCTIVITY REQUIREMENTS. FIBRIC FEAT, OPSOIL, LIME, NITRENTS, OR OTHER ADDITIVES MAY BE ADDED AS NEEDED TO SUPPORT PLANT GROWTH AND/OR MAINTAIN HYDRAULIC CONDUCTIVITY. MANUFACTURER'S DATA SHEET SHALL BE SUBMITTED WITH THE PROPORTIONS QUANTIFIED IN TABLE 1. THE MIXTURE SHALL HAVE A PH IN THE RANGE OF 6.0 TO 7.0. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS. THE MIXTURE SHALL BE DELIVERED TO THE SITE IN A MINIMUM OF 100 CUBIC YARDS.

**REGULATION OF EROSION CONTROL METHODS**

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND THROUGHOUT THE CONSTRUCTION PERIOD.
2. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE D.O.T. EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OR MORE OF RAINFALL. INSPECTIONS SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION GIVEN TO SITE CONDITIONS.
4. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION MATERIAL.
5. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED AND NO LONGER SUSCEPTIBLE TO EROSION.
6. TRACKING OF SOIL SHALL BE PREVENTED FROM TOP OF ROAD OR LEAVING THE SITE BY THE TRACKED SOIL ON PAVED SURFACES SHALL BE REMOVED AT THE END OF EACH WORK DAY.
7. OVERLAND FLOW SHALL BE PREVENTED FROM LEAVING THE WORK SITE BY INSTALLING THE STORM DRAIN OR SILT FENCE PARALLEL TO THE CONTIGUOUS LOADED DOWNHILL FROM THE SITE.
8. THERE ARE DISCREPANCIES BETWEEN THESE DETAILS AND THE D.O.T. TECHNICAL STANDARDS FOR SEDIMENT AND EROSION CONTROL, THE MORE RESTRICTIVE REQUIREMENT SHALL BE FOLLOWED.

**BEACH UNDERSTAND SAND SPECIFICATIONS**

1. ALL VEGETATION AND DEBRIS SHOULD BE REMOVED FROM THE AREA OF THE PROPOSED BEACH UNDERSTAND SAND.
  2. BEACH UNDERSTAND SAND SHALL BE NATURAL UNDEVELOPED UNFERTILIZED OR UNWEEDED. THEREOF, PARTICLE SIZE SHALL CONFORM TO TABLE 3. THE AMOUNT OF MATERIAL PASSED THROUGH THE #200 SIEVE SHALL NOT EXCEED 5.0%.
- TABLE 3 - BEACH SAND PARTICLE SIZE DISTRIBUTION**
- | SIZE SIZE | PERCENT PASSING (BY WT.) | GRAIN SIZE DIAMETER (MILLIMETERS) |
|-----------|--------------------------|-----------------------------------|
| #10       | 100                      | 2.0                               |
| #20       | 100                      | 0.85                              |
| #40       | 100-90                   | 0.425                             |
| #60       | 100-30                   | 0.25                              |
| #100      | 100-10                   | 0.15                              |
| #200      | 45-0                     | 0.075                             |
| #300      | 5                        | 0.05                              |
- GENERAL NOTES**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF GIBRALTAR AND THE STATE OF WISCONSIN.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF GIBRALTAR AND THE STATE OF WISCONSIN.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF GIBRALTAR AND THE STATE OF WISCONSIN.
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  13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF GIBRALTAR AND THE STATE OF WISCONSIN.
  14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF GIBRALTAR AND THE STATE OF WISCONSIN.

