STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

NORTH PORT PROPERTY
33RD STREET
GULFPORT, MISSISSIPPI

PROJECT NO. 9397.08

PREPARED FOR:

MS STATE PORT AUTHORITY
2510 14TH STREET
GULFPORT MISSISSIPPI

PREPARED BY:

COVINGTON
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REGISTERED PROFESSIONAL ENGINEER
14192
11/12/10
STATE OF MISSISSIPPI

December 2010
Revised: January 5, 2011

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APPENDIX A – INSPECTION & MONITORING FORMS

I PROJECT DESCRIPTION:

A limestone base parking area with two (2) asphalt entrances off 33rd Street will be constructed to provide parking for vehicles and moving stock from the Mississippi State Port during storm events. The limestone base parking area will drain to a sediment/detention pond, which will discharge into an on-site wetlands area north of the sediment/detention pond (See P2). The subject project area is approximately 32 acres and is located adjacent to 33rd Street in Gulfport, Mississippi (See P1). In its present state, the subject project area is undeveloped, with brush piles and grassy vegetation.

***SOILS – SOILS ON THE SUBJECT PROPERTY ARE COMPRISED OF APPROXIMATELY 42% HARLESTON FINE SANDY LOAM, 39% PLUMMER SANDY LOAM, AND 19% ATMORE SILT LOAM.**

II CONTROLS:

A. **TEMPORARY VEGETATIVE CONTROLS:** All disturbed areas that will be left undisturbed for more than 14 days, will be temporarily seeded with annual rye, browntop millet, oats and/or winter wheat. The temporary seeding should be done within 7 days of disturbing these areas.

B. **PERMANENT VEGETATIVE CONTROLS:** All disturbed areas not scheduled to receive fill, limestone or asphaltic concrete paving or sod, will be permanently seeded once final grades are established. Seeding will be done with a mixture per acre of Rye Grass (30 lbs.) and Common Bermuda (55 lbs.) Mulch or blown hay will be placed on all side slopes after seeding. Commercial fertilizer should be provided and applied per project specifications.

C. **STRUCTURAL CONTROLS:** Silt fencing and hay bales will be installed in accordance with the plans and details (See P3 and P4) until sufficient vegetation have been established. Sediment filters will be installed and maintained at all times. Silt fencing and hay bales shall be removed once permanent cover is established and once approved for removal by Engineer.

D. **HOUSEKEEPING PRACTICES:** All equipment maintenance and repair will be performed offsite. A dumpster will be placed at a central location on site for easy access. Portable sanitary facilities will be provided for construction workers.

E. **POST CONSTRUCTION/STORM WATER MANAGEMENT MEASURES:** Flow attenuation using sediment/detention ponds shall be used to control sediment in storm water after construction is complete (See P9). Rip rap will be used as an energy disperser at the outlet of the sediment/detention pond (See P8 and P9).

III IMPLEMENTATION SEQUENCE:

A. Install silt fence and hay bales as shown on plans (See P3 and P4). Install construction entrance as shown on plans (See P3 and P4).

B. Construct one (1) sediment/detention pond including an emergency spillway. Install outfall structure with outlet protection (See P5 – P9)

C. Construct drainage ditches and drainage structures (See P5 – P8).

D. Seed and mulch all disturbed areas not receiving sod or limestone or asphaltic concrete pavement.

E. All work will comply with Sections 02260 – Storm Water Pollution Prevention Plan and 02270 – Erosion Control of the Project Specifications prepared by Lanier & Associates (Engineer).

IV MAINTENANCE PLAN:

A. Check all disturbed areas and erosion and sediment controls measures after each significant rainfall (0.5" or greater) but not less than once per week. Fill out inspection report forms provided in Appendix A. Make needed repairs within 24 hours. Remove sediment from silt fence when accumulated sediment has reached 50 percent height of silt fence. Replace non-functional silt fence. Maintain all vegetated areas to provide proper ground cover. Reseed, fertilize, and mulch as needed. **Note: Provide copy of report to Engineer within 48 hours of inspection.**

B. When a disturbed area will be left undisturbed for 14 days or more, the appropriate temporary or permanent vegetative practices shall be implemented within seven calendar days.

C. Sediment basin(s)/pond(s) will be inspected weekly for excessive siltation build up. Fill out inspection report form provided in Appendix A. When sediment levels reach 25% percent of the outfall structure's height, sediment will be removed to original bottom of pond. **Note: Provide copy of report to Engineer within 48 hours of inspection.**

V OTHER CONTROL METHODS:

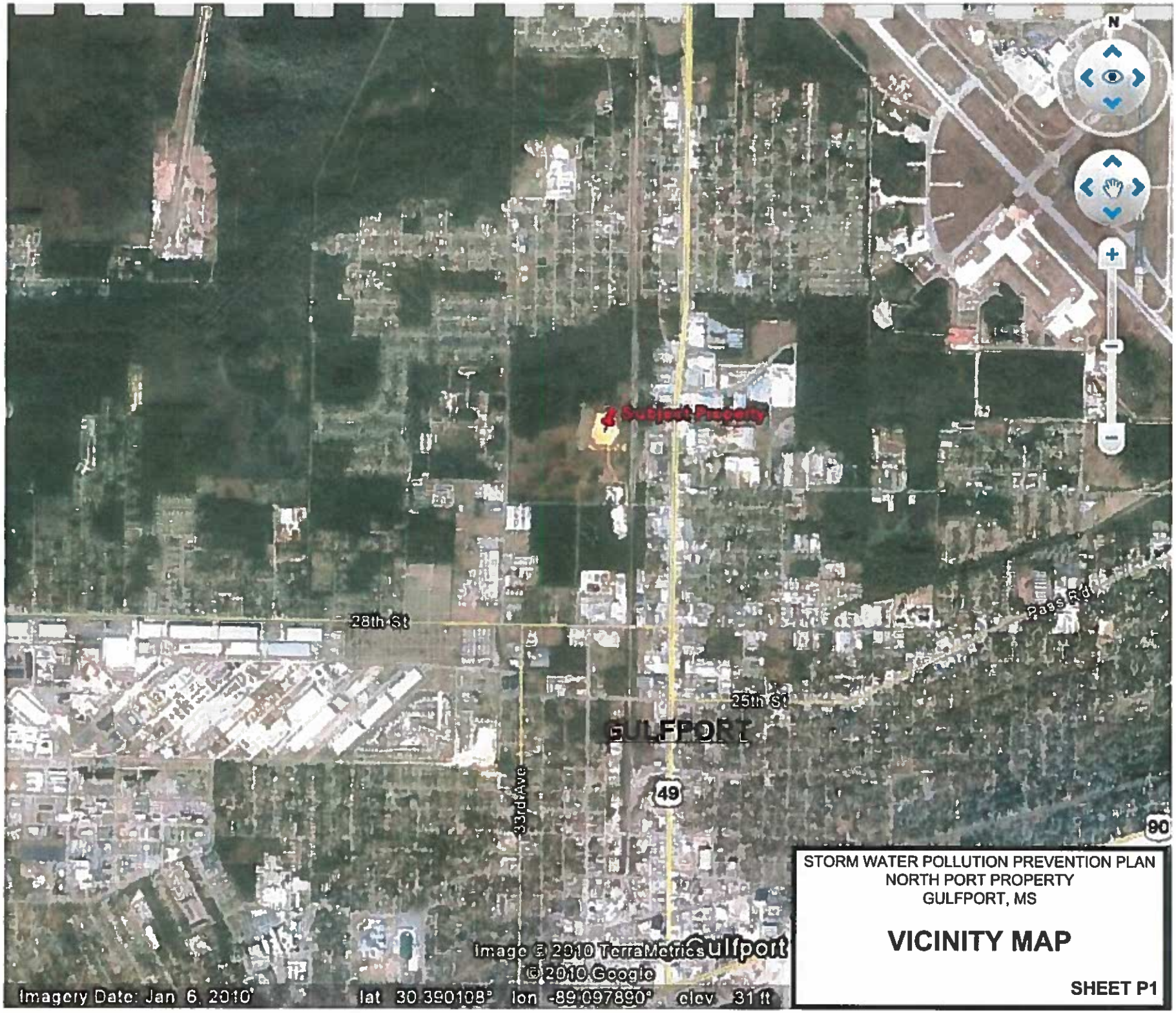
A. Construction involving earthwork or dirt hauling and placement will be limited to "Dry Periods".

B. One (1) construction entrance/exit to the site will be constructed in accordance with details (See P4).

C. Construction activity will comply with state and local waste disposal requirements.

FIGURES

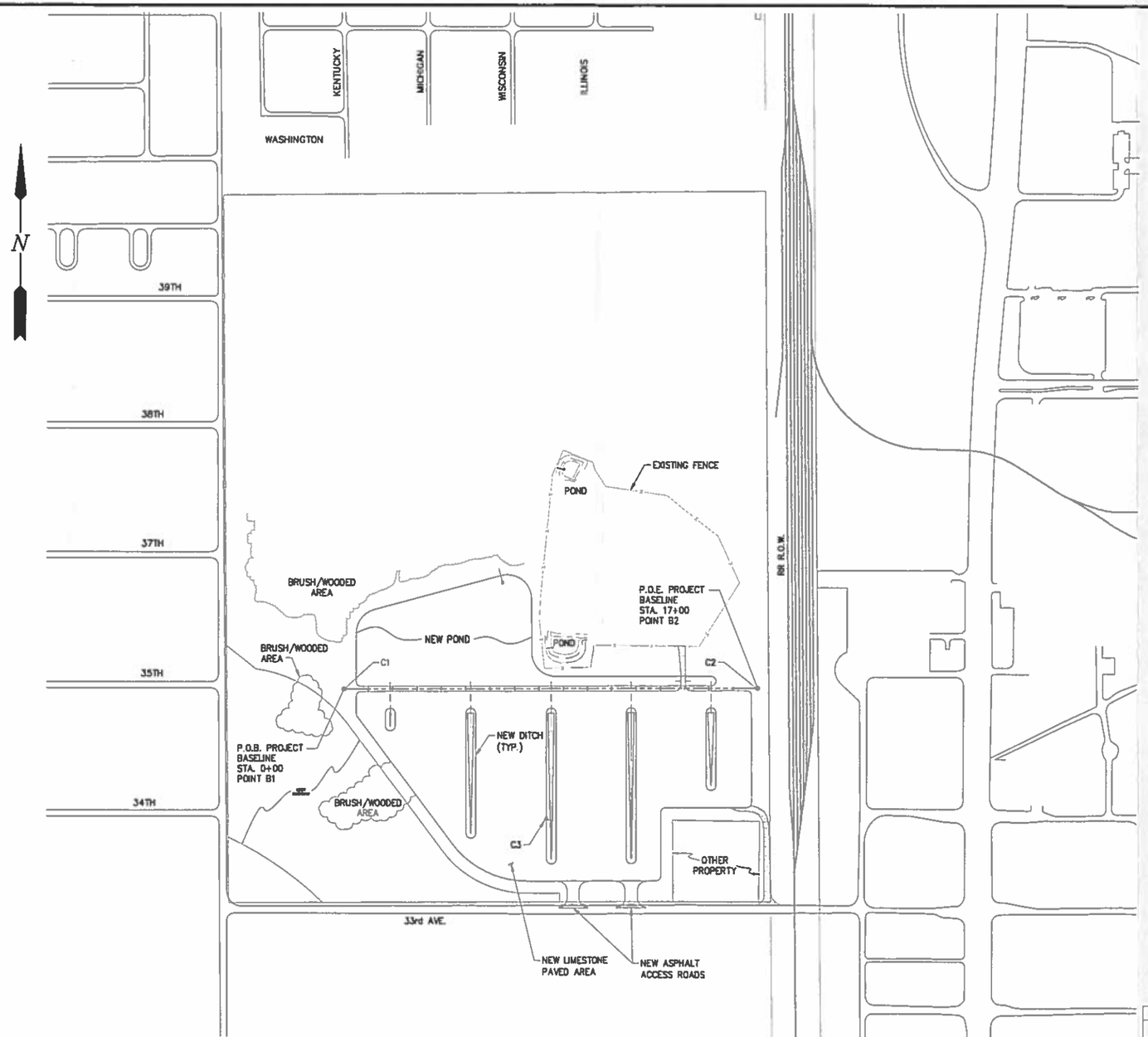
APPENDIX A
INSPECTION & MONITORING FORMS



STORM WATER POLLUTION PREVENTION PLAN
NORTH PORT PROPERTY
GULFPORT, MS

VICINITY MAP

SHEET P1



GENERAL LAYOUT

SCALE: 1"=250' (FULL SIZE ONLY)

SCALE IN FEET

250 125 0 250 500 750

NOTES

1. EXISTING CONSTRUCTION, UTILITIES, PROPERTY BOUNDARIES AND CONDITIONS SHOWN ARE SCHEMATIC. ACTUAL CONDITIONS MAY DIFFER. THE CONTRACTOR IS FULLY RESPONSIBLE FOR MAKING HIS OWN SITE EXAMINATION AND DETERMINING THE ACTUAL NATURE AND EXTENT OF EXISTING CONDITIONS AS NEEDED PRIOR TO UNDERTAKING THE WORK.
2. CONTRACTOR TO PROTECT EXISTING CONTROL POINTS.
3. DO NOT DISTURB EXISTING CONTROL POINTS.

PRELIMINARY FOR REVIEW ONLY
OCTOBER 21, 2010

PROJECT WORK POINTS & SURVEY CONTROL

POINT	NORTHING	EASTING	ELEVATION	POINT DESCRIPTION
BASELINE POINT B1	324723.50	899726.42	N/A	NOT A PHYSICAL POINT
BASELINE POINT B2	324729.10	901426.41	N/A	NOT A PHYSICAL POINT
CONTROL POINT C1	324720.45	899724.14	29.20	1/2" IRON ROD
CONTROL POINT C2	324731.35	901418.70	30.92	1/2" IRON ROD
CONTROL POINT C3	324191.66	900557.80	30.86	1/2" IRON ROD IN CONCRETE

LANIER & ASSOCIATES
CONSULTING ENGINEERS
INCORPORATED
NEW ORLEANS, LA • BEAUMONT, TX

REV.	DATE	BY	DESCRIPTION
B	10/21/10	JPL	REVISED FOR REVIEW
A	9/17/10	WGL	ISSUED FOR REVIEW

THIS PLAN HAS BEEN PREPARED UNDER MY CLOSE PERSONAL SUPERVISION. TO THE BEST OF MY KNOWLEDGE IT COMPLIES WITH ALL REQUIREMENTS.

DATE JULY '10
SCALE NOTED
DESIGN BNF
DRAWN WGL
CHECK
APPR'VD SCK
CAD NO 8374-G1

MISSISIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
GENERAL LAYOUT & SURVEY CONTROL

SHEET NO.
8374-10
P2

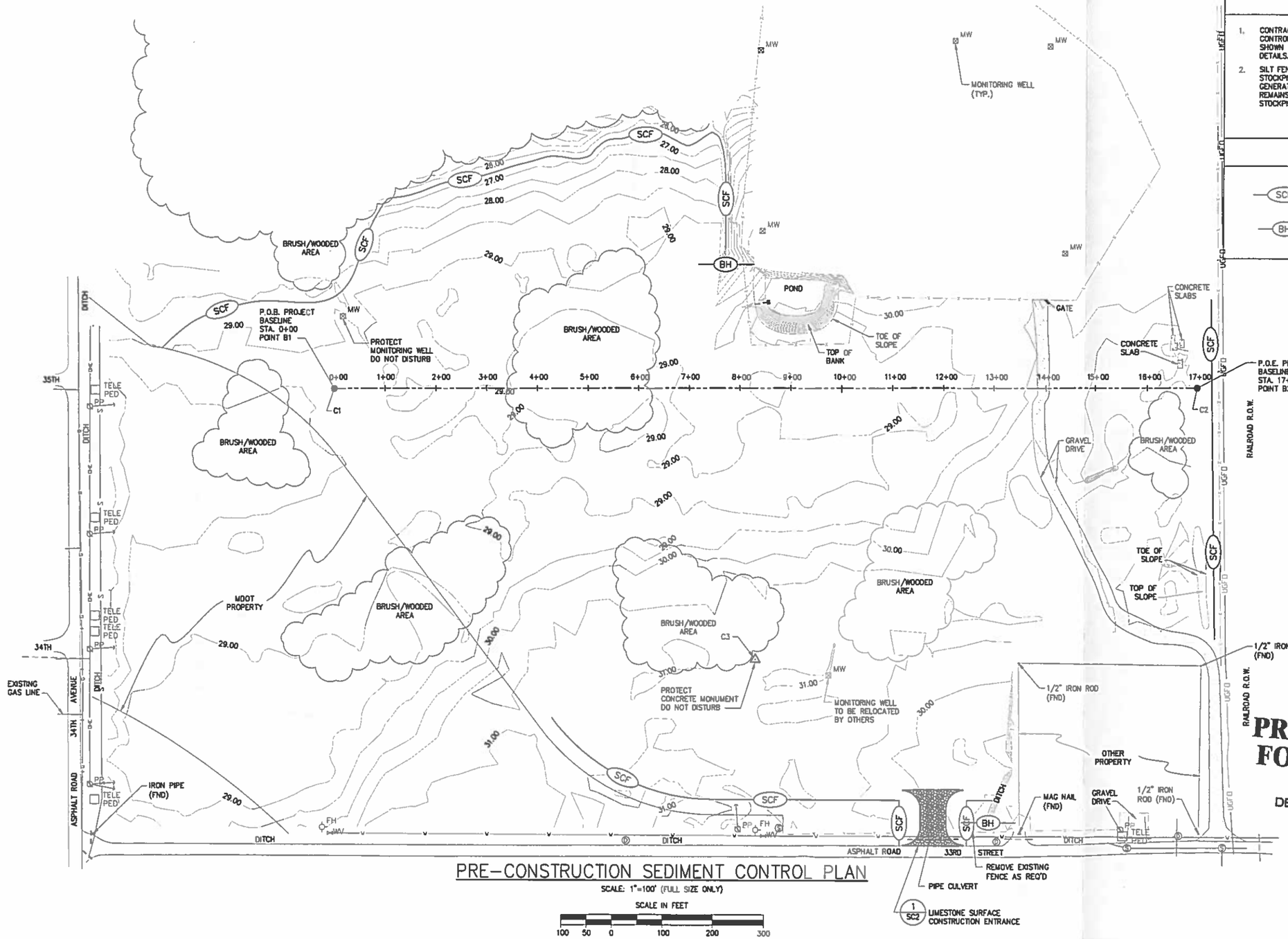
NOTES

1. CONTRACTOR SHALL INSTALL AND MAINTAIN SEDIMENT CONTROL FENCE AND BALED HAY IN THE LOCATIONS SHOWN AND IN ACCORDANCE WITH THE PROVIDED DETAILS.
2. SILT FENCING SHALL BE INSTALLED AROUND ALL STOCKPILES (TOPSOIL, DEBRIS, LIMESTONE, ETC.) GENERATED DURING CONSTRUCTION. IF STOCKPILE REMAINS ON SITE FOR MORE THAN 14 DAYS, SEED STOCKPILE.

LEGEND

SCF — SEDIMENT CONTROL FENCE

BH — BALED HAY



PRE-CONSTRUCTION SEDIMENT CONTROL PLAN

SCALE: 1"=100' (FULL SIZE ONLY)

SCALE IN FEET

100 50 0 100 200 300

PRELIMINARY FOR REVIEW ONLY
DECEMBER 22, 2010

LANIER & ASSOCIATES
CONSULTING ENGINEERS
INCORPORATED
NEW ORLEANS, LA • BEAUMONT, TX

REV.	DATE	BY	DESCRIPTION
D	12/22/10	WGL	REVISED FOR REVIEW
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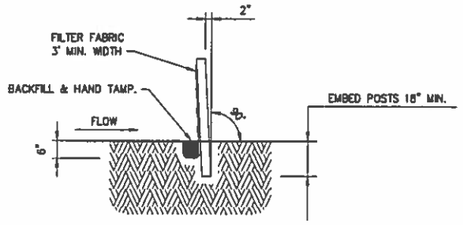
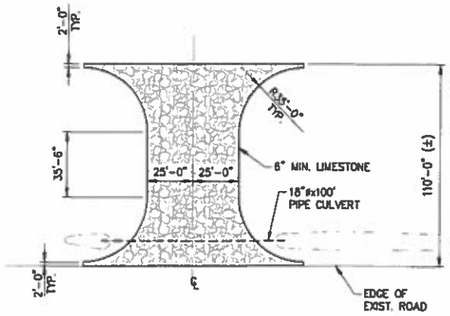
MISSISIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
PRE-CONSTRUCTION SEDIMENT CONTROL PLAN

SHEET NO. 8374-10
P3



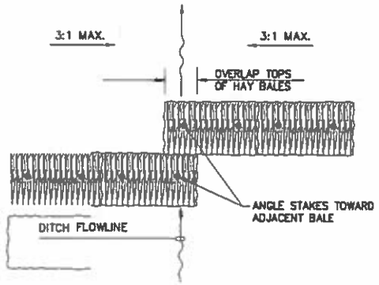
SECTION A
SCALE: N.T.S.



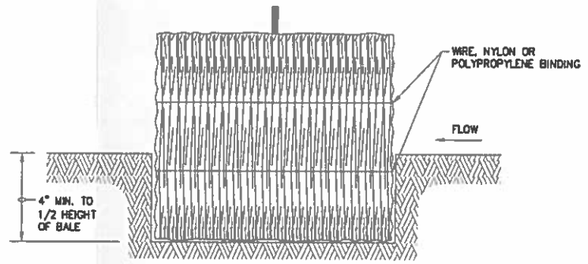
CONSTRUCTION ENTRANCE DETAIL 1/SC1
SCALE: 1"=40'

NOTES

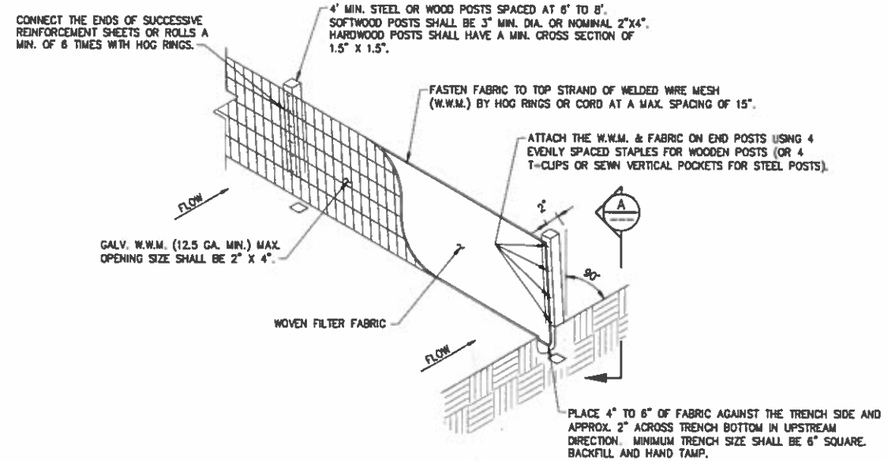
1. HAY BALES SHALL BE A MINIMUM OF 30" IN LENGTH AND WEIGH A MINIMUM OF 50 LBS.
2. HAY BALES SHALL BE BOUND BY EITHER WIRE OR NYLON OR POLYPROPYLENE STRING. THE BALES SHALL BE COMPOSED ENTIRELY OF VEGETATIVE MATTER.
3. HAY BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4" AND WHERE POSSIBLE 1/2 THE HEIGHT OF THE BALE.
4. HAY BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
5. HAY BALES SHALL BE SECURELY ANCHORED IN PLACE WITH 3/8" DIAMETER REBAR OR 2" X 2" WOOD STAKES, DRIVEN THROUGH THE BALES. THE FIRST STAKE SHALL BE ANGLED TOWARDS THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
6. IF NECESSARY GRADE EXISTING DITCH SIDE SLOPES TO 3:1 MAX WHERE HAY BALES ARE REQUIRED.
7. BALES SHOULD BE REPLACED USUALLY EVERY 2 MONTHS OR MORE OFTEN DURING WET WEATHER WHEN LOSS OF STRUCTURAL INTEGRITY IS ACCELERATED.
8. SILT FENCING SHALL BE INSTALLED AROUND ALL STOCKPILES (TOPSOIL, DEBRIS, LIMESTONE, ETC.) GENERATED DURING CONSTRUCTION. IF STOCKPILE REMAINS ON SITE FOR MORE THAN 14 DAYS, SEED STOCKPILE.



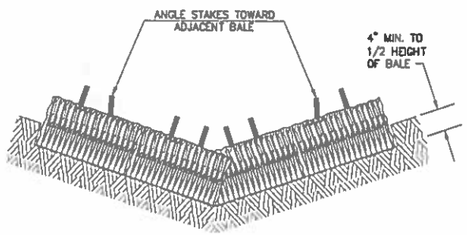
PLAN VIEW



SECTION B
SCALE: N.T.S.

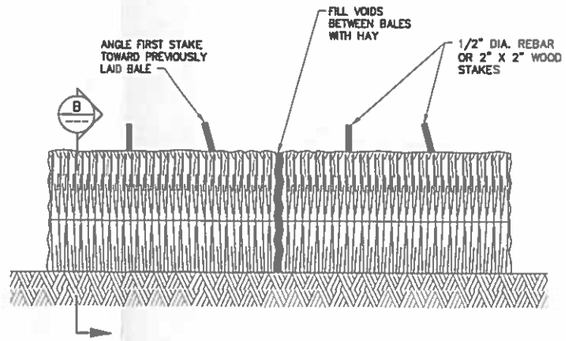


SEDIMENT CONTROL FENCE
SCALE: N.T.S.
SCF



PROFILE VIEW

PRELIMINARY FOR REVIEW ONLY
DECEMBER 22, 2010



BALED HAY FOR EROSION CONTROL
BH

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DATE JULY '10
SCALE NOTED
DESIGN BNF
DRAWN WGL
CHECK
APPR'VD SCK
CAD NO. 8374-SC2

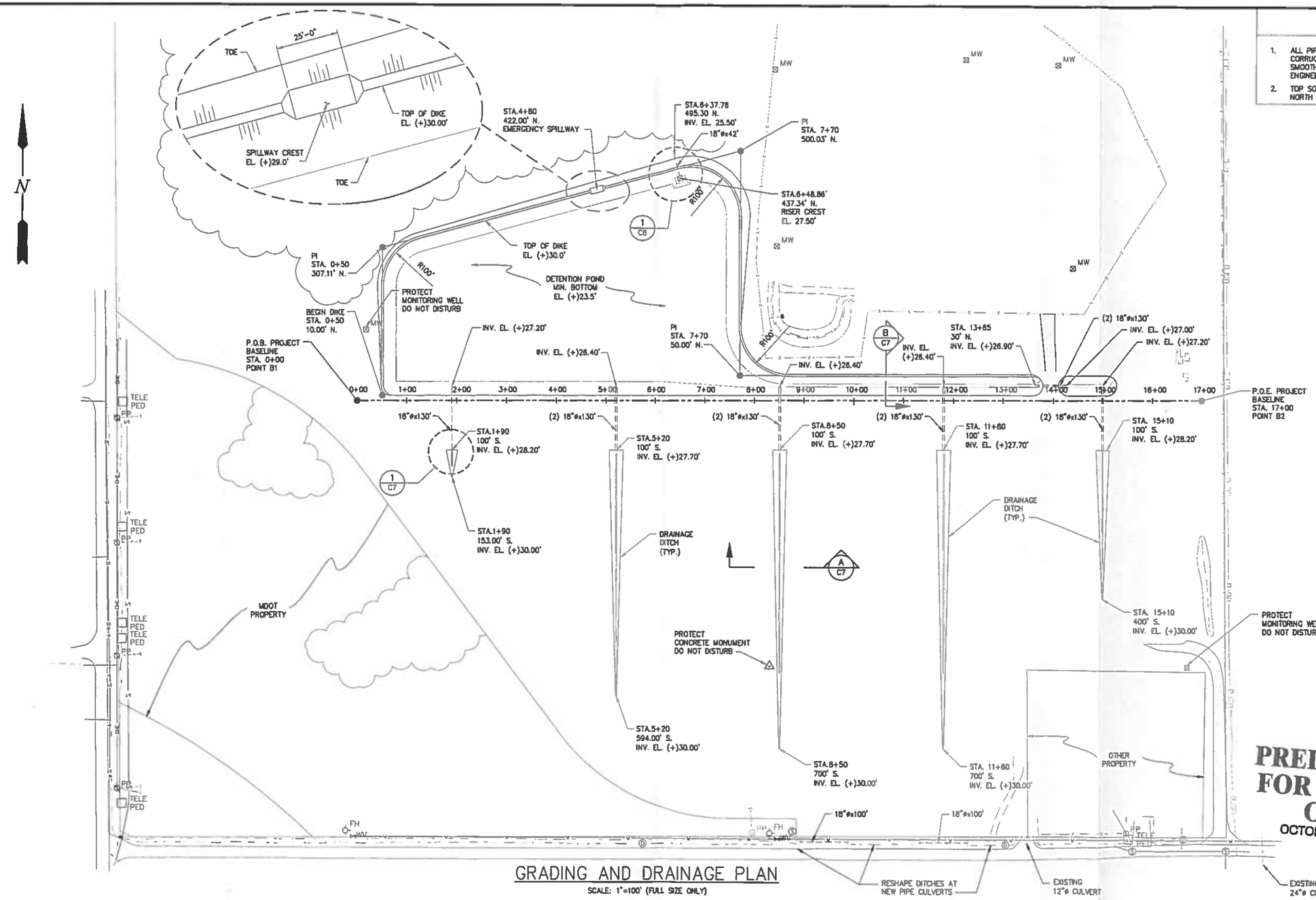
MISSISSIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
SEDIMENT CONTROL DETAILS

SHEET NO. 8374-10
P4

NOTES

1. ALL PIPE CULVERT SHALL BE ANNULAR CORRUGATION HDPE DRAINAGE PIPE WITH SMOOTH INTERIOR, TYPE SURE-LOK F477 OR ENGINEER APPROVED EQUAL.
2. TOP SOIL AND SOD REQUIRED AT THE FIVE NORTH – SOUTH DITCHES ONLY.



GRADING AND DRAINAGE PLAN

SCALE: 1"=100' (FULL SIZE ONLY)

SCALE IN FEET

100 50 0 100 200 300

PRELIMINARY FOR REVIEW ONLY
OCTOBER 21, 2010

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NEW ORLEANS, LA • BEAUMONT, TX

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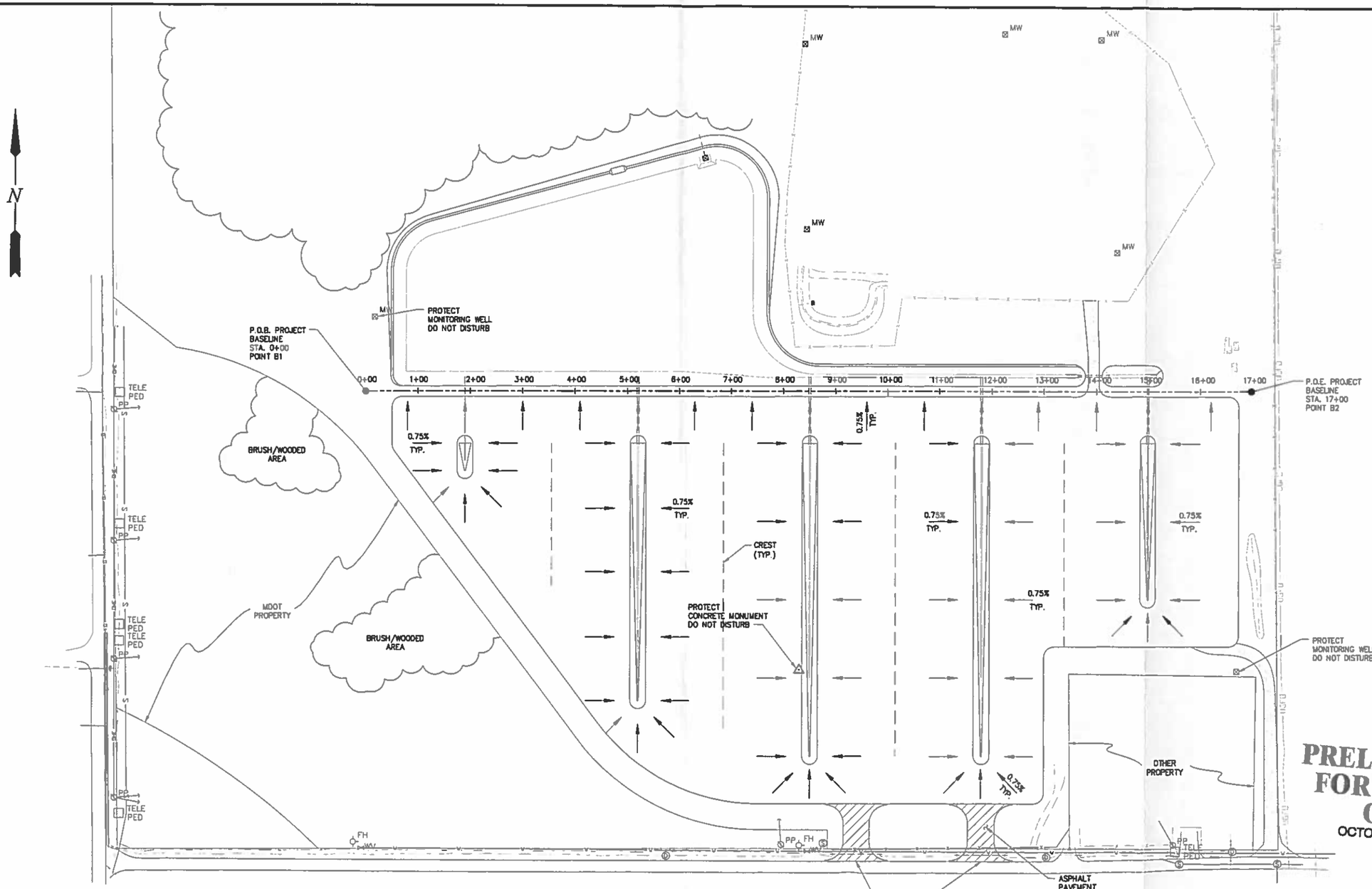
DESIGN	BNF
DRAWN	WGL
CHECK	
APPR'VD	SCK
CAD NO	8374-C4

MISSISIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
GRADING AND DRAINAGE PLAN (1 OF 2)

SHEET NO. 8374-10
P5



GRADING AND DRAINAGE PLAN

SCALE: 1"=100' (FULL SIZE ONLY)

SCALE IN FEET

100 50 0 100 200 300

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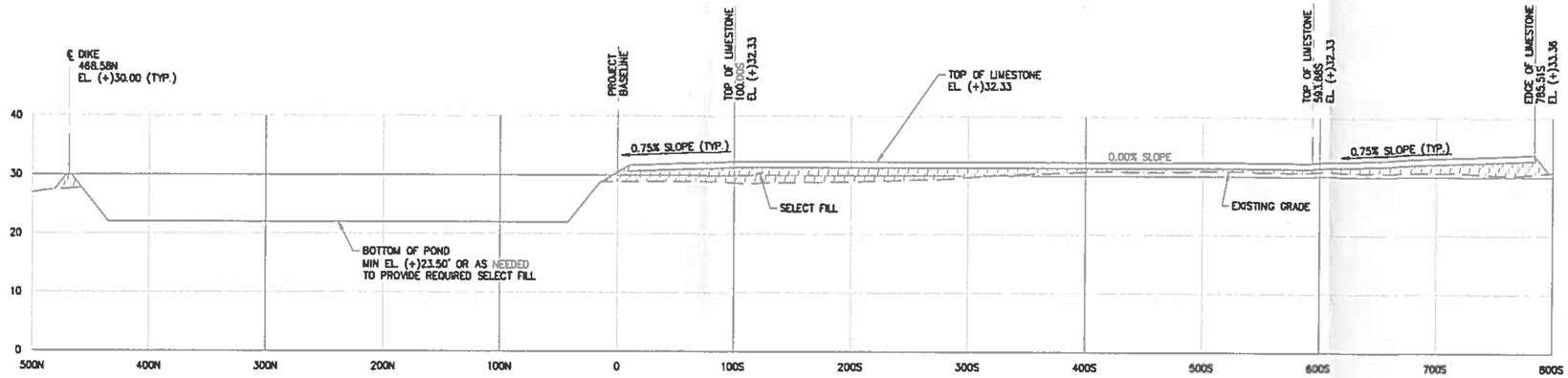
DRAWN WGL
CHECK
APPR'VD SCK
CAD NO 8374-C5

MISSISIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
GRADING AND DRAINAGE PLAN (2 OF 2)

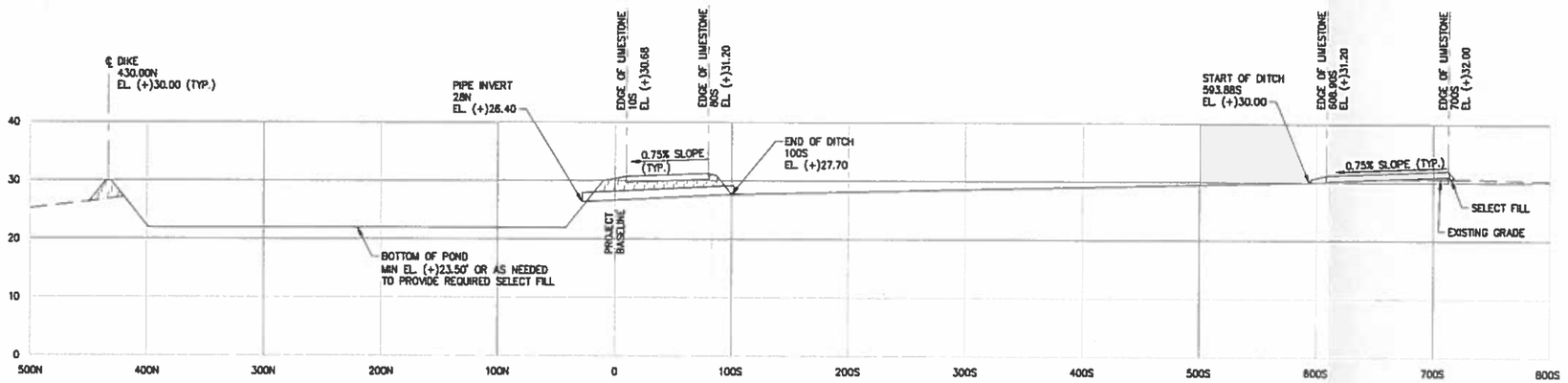
SHEET NO. 8374-10

P6



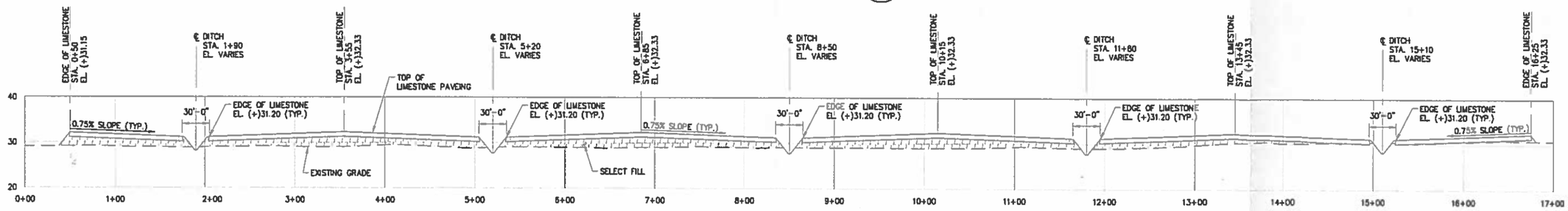
SECTION @ STA. (6+85) C/C2

SCALE: 1" = 60', 1"H=5"V



SECTION @ STA. (5+20) B/C2

SCALE: 1" = 60', 1"H=5"V



SECTION @ 100FT SOUTH A/C2

SCALE: 1" = 60', 1"H=5"V

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OCTOBER 21, 2010

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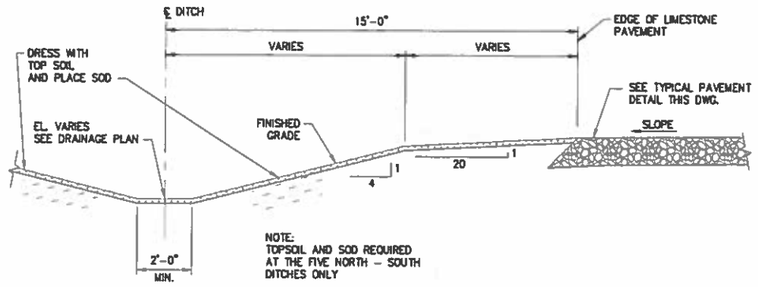
DRAWN WGL
CHECK
APPR'VD SCK
CAD NO 8374-C3

MISSISSIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
FINISHED NEW SECTIONS

SHEET NO.
8374-10

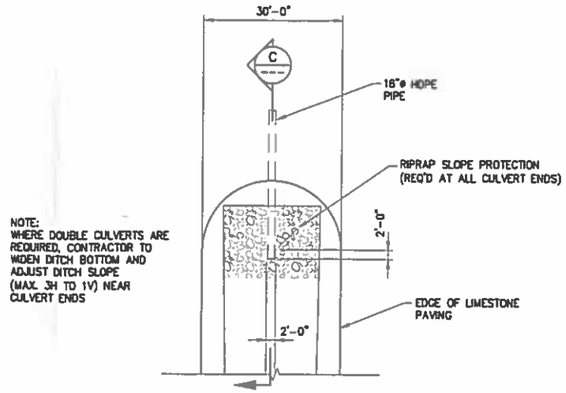
P7



TYPICAL OPEN DITCH SECTION

A / C?

SCALE: 3/8"=1'-0"

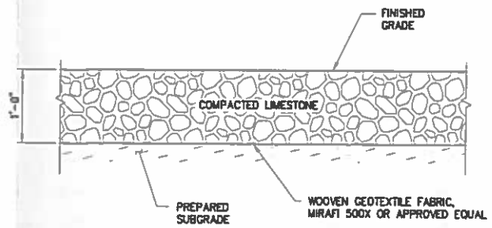


TYPICAL OPEN DITCH DETAIL

1 / C4 C5

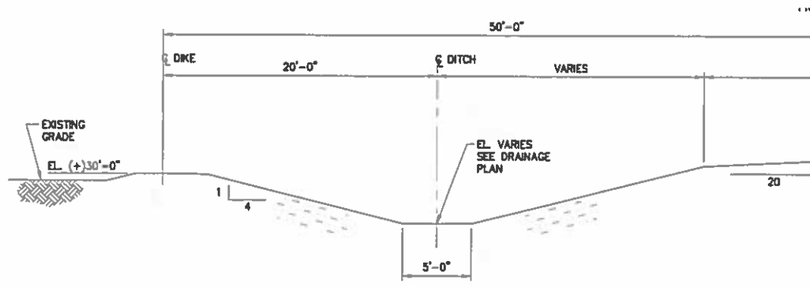
SCALE: 1/16"=1'-0"

NOTES
1. NUMERIC SCALE IS FOR FULL SIZE 24"x36" DRAWING ONLY.



TYPICAL CRUSHED STONE PAVEMENT SECTION

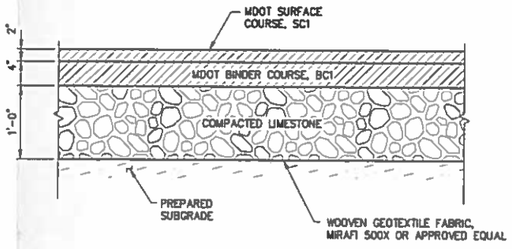
SCALE: 1"=1'-0"



SECTION THRU DIKE AND DITCH

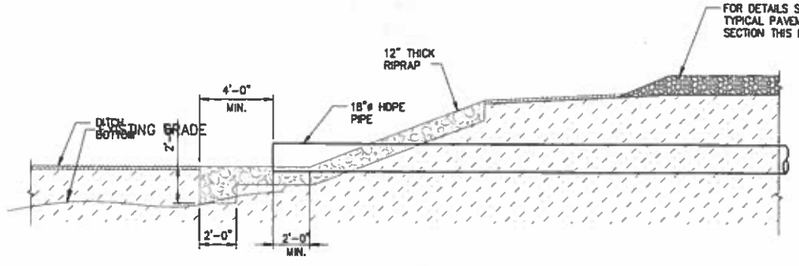
B / C4 B / C6

SCALE: 3/16 =1'-0"



TYPICAL ASPHALT PAVEMENT SECTION

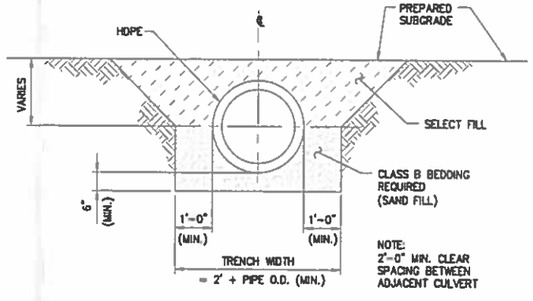
SCALE: 1"=1'-0"



TYPICAL RIPRAP SLOPE PROTECTION

C / ---

SCALE: 1/4"=1'-0"



TYPICAL BEDDING & BACKFILL FOR CULVERT

SCALE: 1/2"=1'-0"

PRELIMINARY FOR REVIEW ONLY

OCTOBER 21, 2010

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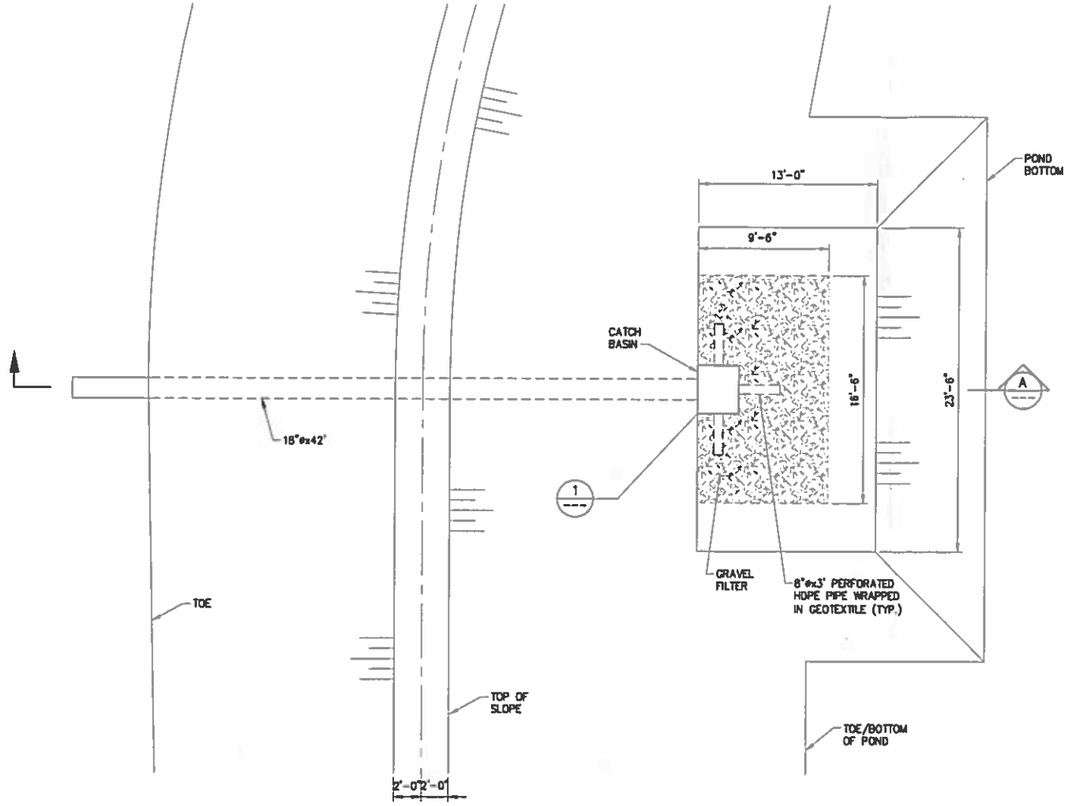
DESIGN	BNF
DRAWN	WGL
CHECK	
APPR'VD	SCK
CAD NO.	8374-C7

MISSISIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

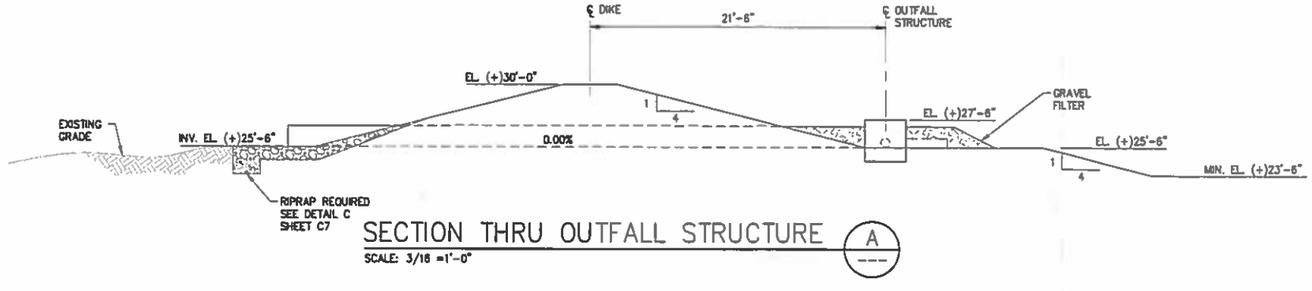
NORTH PORT PROPERTY
SITE DEVELOPMENT
SECTIONS AND DETAILS (1 OF 2)

SHEET NO. 8374-10

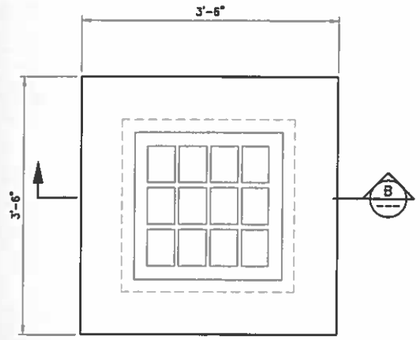
P8



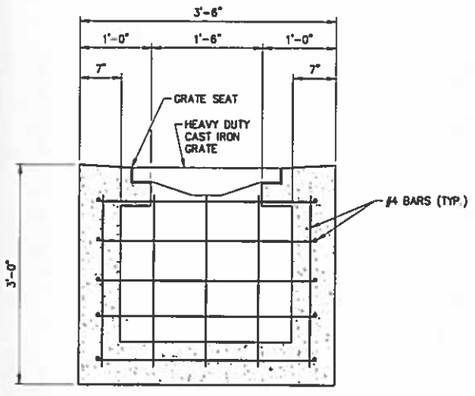
OUTFALL STRUCTURE PLAN (1 / C4)
SCALE: 3/16 =1'-0"



SECTION THRU OUTFALL STRUCTURE (A)
SCALE: 3/16 =1'-0"



CATCH BASIN DETAIL (1)
SCALE: 1"=1'-0"



CATCH BASIN DETAIL (B)
SCALE: 1"=1'-0"

PRELIMINARY FOR REVIEW ONLY
OCTOBER 21, 2010

LANIER & ASSOCIATES
CONSULTING ENGINEERS
INCORPORATED
NEW ORLEANS, LA • BEAUMONT, TX

REV.	DATE	BY	DESCRIPTION
B	10/21/10	JPL	REVISED FOR REVIEW
A	9/17/10	WGL	ISSUED FOR REVIEW

THIS PLAN HAS BEEN PREPARED UNDER MY CLOSE PERSONAL SUPERVISION. TO THE BEST OF MY KNOWLEDGE IT COMPLIES WITH ALL REQUIREMENTS.

DATE JULY '10
SCALE NOTED
DESIGN BNF
DRAWN WGL
CHECK
APPR'VD SCK
CAD NO 8374-C8

MISSISSIPPI STATE PORT AUTHORITY
GULFPORT MISSISSIPPI

NORTH PORT PROPERTY
SITE DEVELOPMENT
SECTIONS AND DETAILS (2 OF 2)

SHEET NO. 8374-10
P9