

WORK AREA LOCATED APPROXIMATELY 16.2 MILES  
SOUTHEAST OF VENICE, LA.

THESE PLATS ARE NOT INTENDED TO BE USED  
AS ENGINEERING SPECIFICATIONS OR  
CONSTRUCTION DRAWINGS.  
THESE PLATS ARE TO BE USED EXCLUSIVELY FOR  
THE ACQUISITION OF REGULATORY PERMITS.

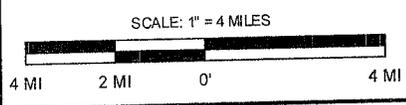
DRAWN BY: SPH      APPROVED BY: LLS

DATE: 7/19/12      JOB NO: 2011.0587

DRAWING NAME: DUNE\_O\_SOUTHEAST\_C1\_C0E\_REV2.DWG

SHEET NO: 1 OF 8

PROJECTION: LOUISIANA SOUTH  
GEO. DATUM: NAD27 | VERT. DATUM: NAVD88  
GRID UNITS: US SURVEY FEET



**VICINITY MAP**



**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGING  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA



**T. BAKER SMITH**  
REGULATORY & PERMITTING  
100 Colonial Center, Lake Charles, LA 70603  
(337) 95-2800 | tbsmith.com

REV. NO: 2      REV. DATE: 10/31/12      REV. BY: MAM

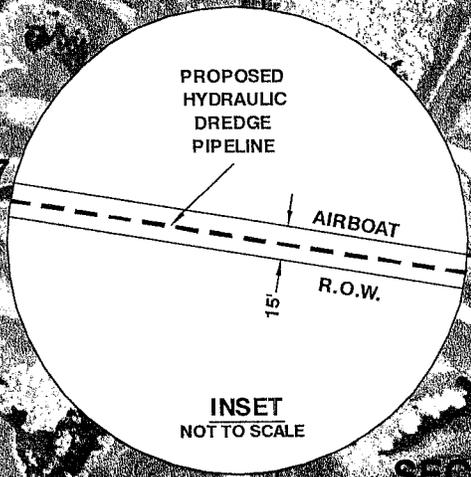
REVISION DESCRIPTION:  
REVISED PER CMD

**PROPOSED WELL LOCATION, HYDRAULIC DREDGE, (4) 6" PIPELINES & STRUCTURES**  
**DUNE OPERATING COMPANY**  
**PROPOSED "O" SOUTHEAST PROSPECT**

X= (NAD 27) 2,692,118  
 Y= 169,252

X= (NAD 83) 3,972,921'  
 Y= 229,955'

LAT. (NAD 83) 29° 06' 51.5"N  
 LON. (NAD 83) 89° 09' 57.5"W



**END PROPOSED HYDRAULIC DREDGING**  
 LAT: 29° 06' 52.2" (NAD 83)  
 LONG: 89° 09' 58.4" (NAD 83)

**PROPOSED HYDRAULIC DREDGING**  
 (± 6,100')

**PROPOSED HYDRAULIC DREDGING PIPELINE**  
 (± 628')

**PROPOSED SPOIL TO BE PLACED IN OPEN WATER AT AT HEIGHT CONDUCTIVE TO MARSH ESTABLISHMENT**

**BEGIN PROPOSED HYDRAULIC DREDGING**  
 LAT: 29° 06' 11.6" (NAD 83)  
 LONG: 89° 09' 10.2" (NAD 83)

**PROPOSED SPOIL TO BE PLACED IN OPEN WATER AT AT HEIGHT CONDUCTIVE TO MARSH ESTABLISHMENT**

**END PROPOSED HYDRAULIC DREDGING**  
 LAT: 29° 06' 10.2" (NAD 83)  
 LONG: 89° 09' 06.2" (NAD 83)

**PROPOSED HYDRAULIC DREDGING**  
 (± 4,097')

**BEGIN PROPOSED HYDRAULIC DREDGING**  
 LAT: 29° 05' 58.5" (NAD 83)  
 LONG: 89° 09' 33.6" (NAD 83)

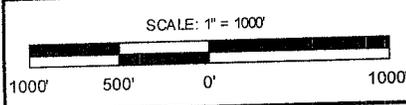
**P.O.B. PIPELINE LOWERING**  
 LAT: 29°06'03.7"  
 LONG: 89°09'10.6"  
 (NAD 83)

**P.O.E. PIPELINE LOWERING**  
 LAT: 29°06'02.3"  
 LONG: 89°09'10.0"  
 (NAD 83)

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS. AREA MAP REPRODUCED FROM 2010 DOQQ AERIAL PHOTOGRAPHS.

THIS DRAWING MAY NOT REPRESENT ALL HAZARDS IN PROJECT AREA

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/2012	JOB NO: 2011.0567
DRAWING NAME: DUNE_o_southeast_c2_c0e_rev2.dwg	
SHEET NO: 2	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	



**T. BAKER SMITH**  
 SOLUTIONS START HERE  
 107 Global Circle, Lafayette, LA 70503  
 (337) 235-2800 - tbsmith.com

**AREA MAP**

**DUNE OPERATING COMPANY**  
 PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
 (4) 6" PIPELINES & STRUCTURES  
 TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
 GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
 PLAQUEMINES PARISH, LOUISIANA

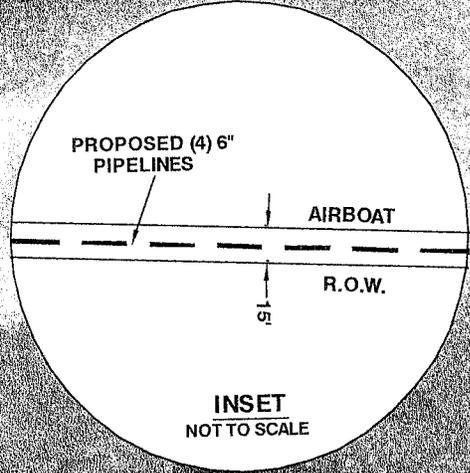
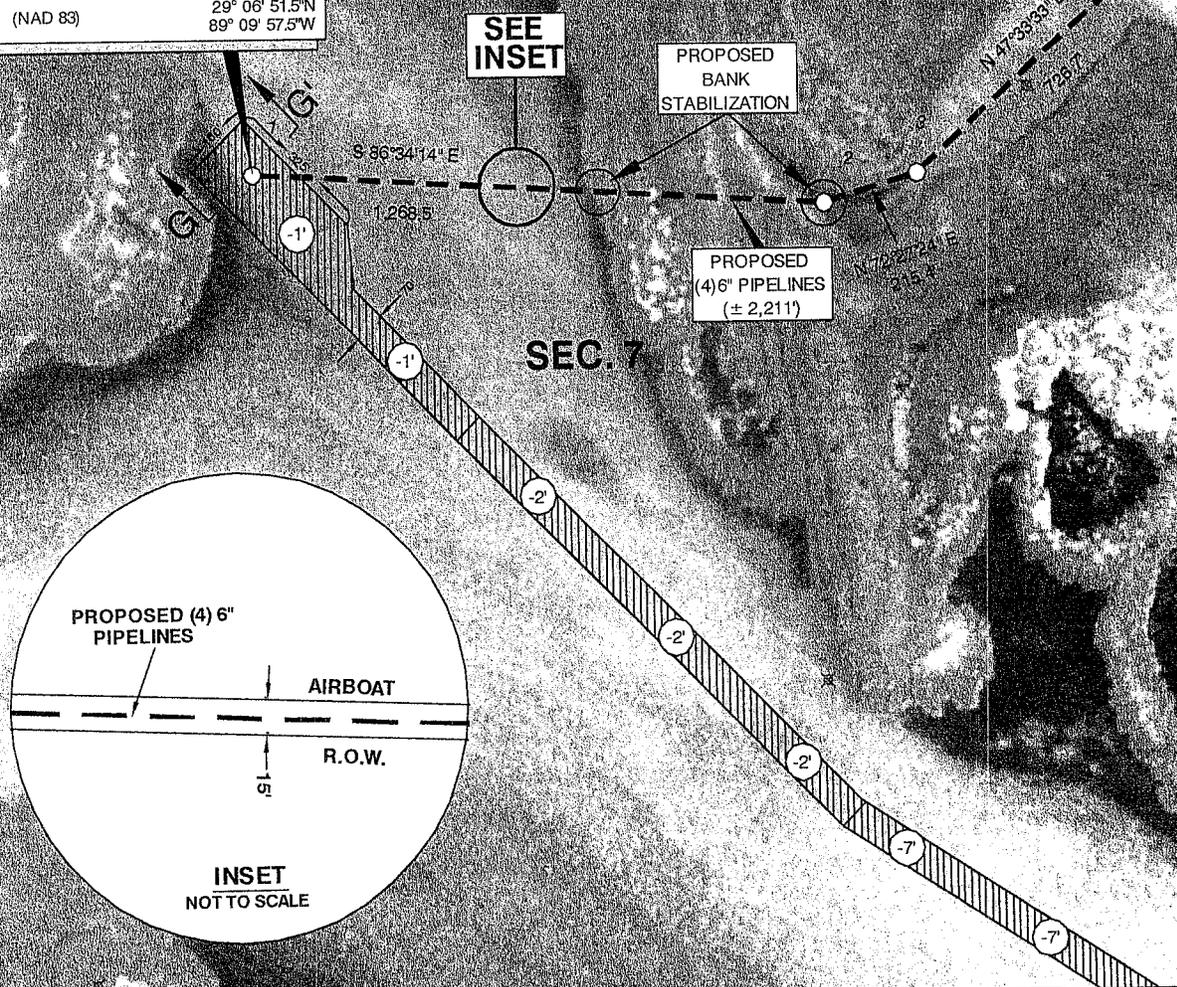
REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		

PNT	STA	LAT. (NAD83)	LONG. (NAD83)
1	00+00	29° 06' 51.5"	89° 09' 57.5"
2	12+68	29° 06' 50.5"	89° 09' 43.3"
3	14+84	29° 06' 51.1"	89° 09' 40.9"
4	22+11	29° 06' 55.9"	89° 09' 34.8"

T22S-R33E

P.O.E. 22+11 PROPOSED WELL LOCATION, HYDRAULIC DREDGE, (4) 6" PIPELINES & STRUCTURES DUNE OPERATING COMPANY WASKEY DECK	
X= (NAD 27)	2,694,126'
Y= (NAD 27)	169,731'
X= (NAD 83)	3,974,929'
Y= (NAD 83)	230,435'
LAT. (NAD 83)	29° 06' 55.9"N
LON. (NAD 83)	89° 09' 34.8"W

P.O.B. 0+00 PROPOSED WELL LOCATION, HYDRAULIC DREDGE, (4) 6" PIPELINES & STRUCTURES DUNE OPERATING COMPANY PROPOSED "O" SOUTHEAST PROSPECT	
X= (NAD 27)	2,692,118'
Y= (NAD 27)	169,252'
X= (NAD 83)	3,972,921'
Y= (NAD 83)	229,955'
LAT. (NAD 83)	29° 06' 51.5"N
LON. (NAD 83)	89° 09' 57.5"W



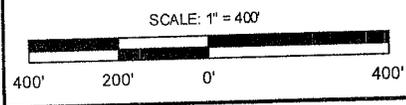
THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS. AREA MAP REPRODUCED FROM 2010 DOGQ AERIAL PHOTOGRAPHS.

THIS DRAWING MAY NOT REPRESENT ALL HAZARDS IN PROJECT AREA

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 7/19/12	JOB NO: 2011.0567
DRAWING NAME: DUNE_O SOUTHEAST_C3_COE_REV2.DWG	
SHEET NO: 3	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

PLAN VIEW

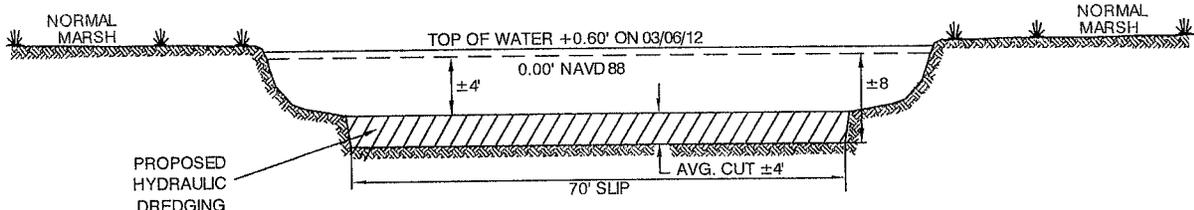
**DUNE OPERATING COMPANY**  
 PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
 (4) 6" PIPELINES & STRUCTURES  
 TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
 GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
 PLAQUEMINES PARISH, LOUISIANA



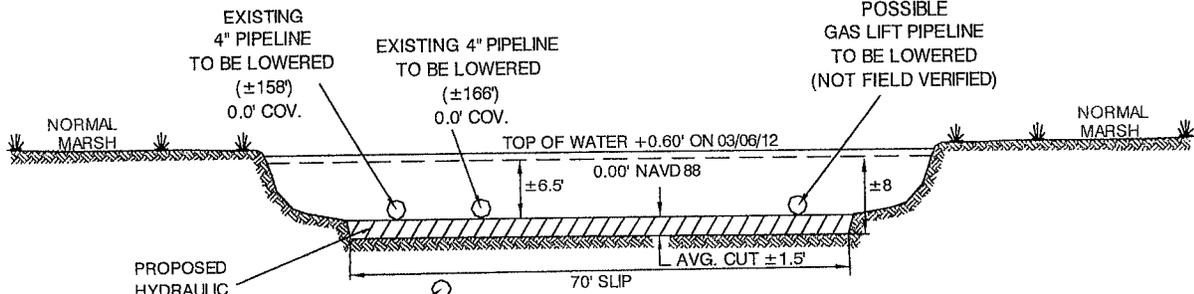
**T. BAKER SMITH**  
 RELIABLES START HERE  
 107 Global Drive, Lafayette, LA 70503  
 504.735.2500 - tbsmith.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		

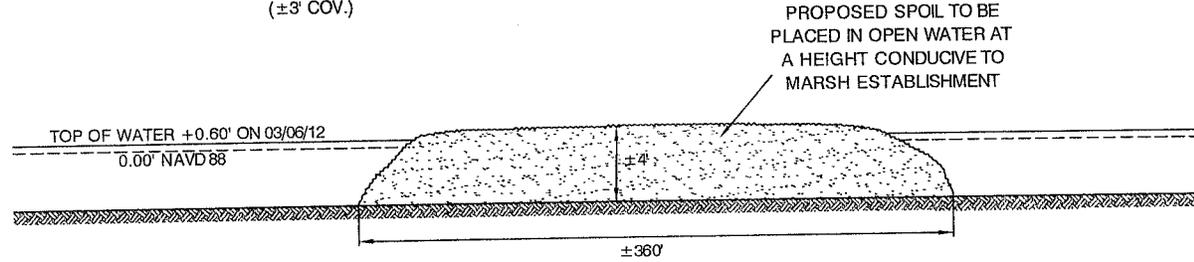
+1.5' NGVD MHW  
0.0' NGVD MLW



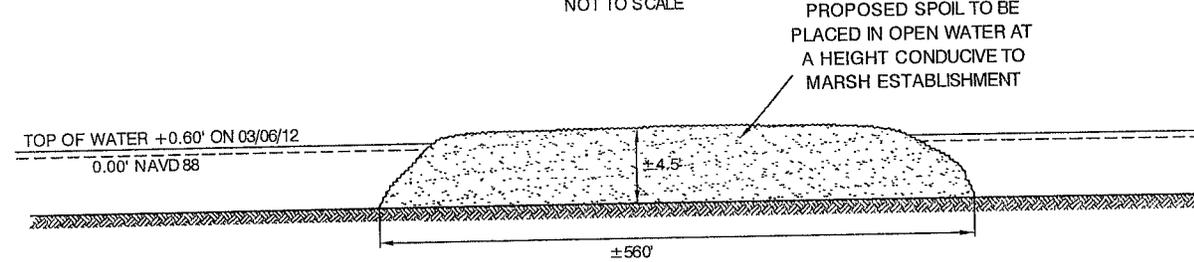
**CROSS-SECTION A-A'**  
NOT TO SCALE



**CROSS-SECTION B-B'**  
NOT TO SCALE



**CROSS-SECTION C-C'**  
NOT TO SCALE



**CROSS-SECTION D-D'**  
NOT TO SCALE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/12	JOB NO: 2011.0587
DRAWING NAME: DUNE O SOUTHEAST C3 COE REV2.DWG	
SHEET NO: 4	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

**CROSS SECTIONS**

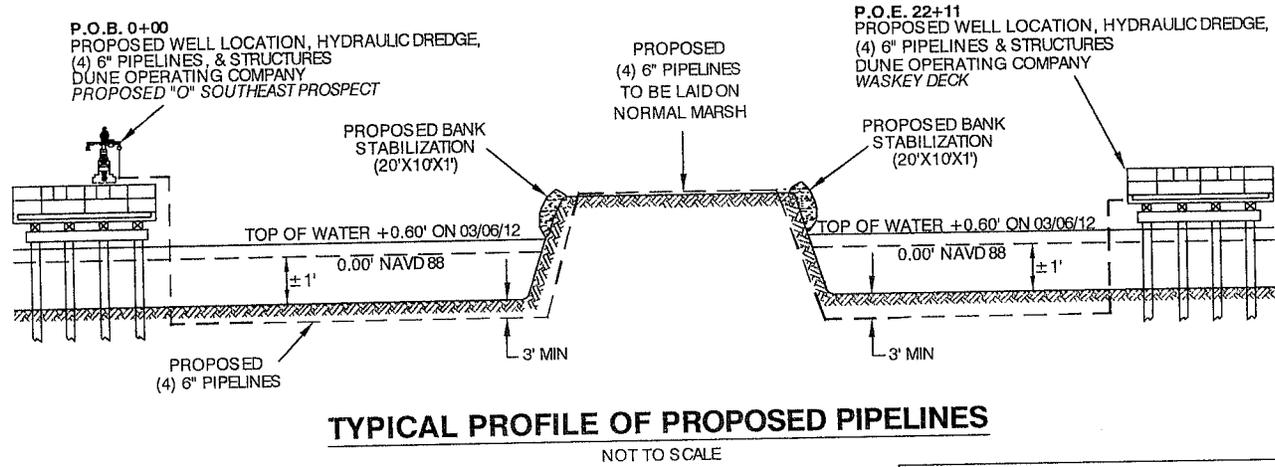
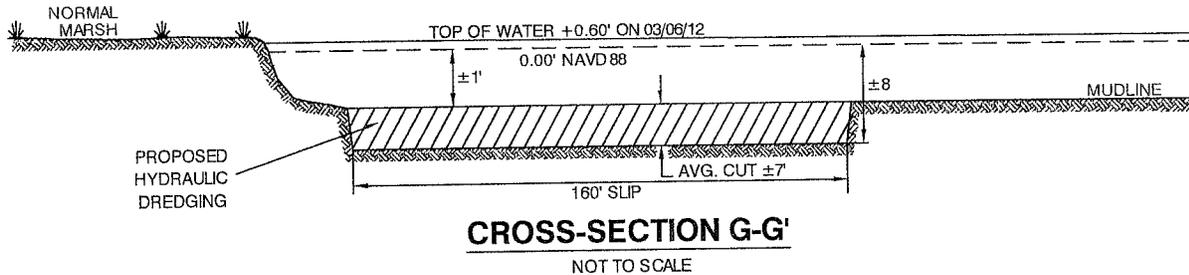
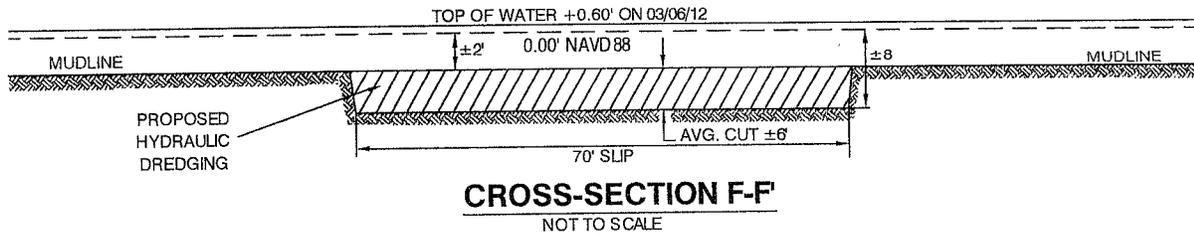
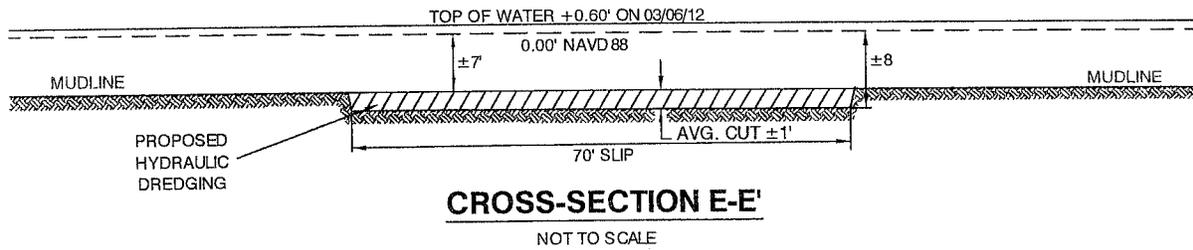
**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA

NOT TO SCALE


**T. BAKER SMITH**  
 SOLUTIONS START HERE  
 97 Glenview, Lafayette, LA 70503  
 (337) 728-2800 - tbsm.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		

+1.5' NGVD MHW  
0.0' NGVD MLW



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/12	JOB NO: 2011.0567
DRAWING NAME: DUNE O SOUTHEAST C3 COE REV2.DWG	
SHEET NO: 5 OF 8	
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

**CROSS SECTIONS**

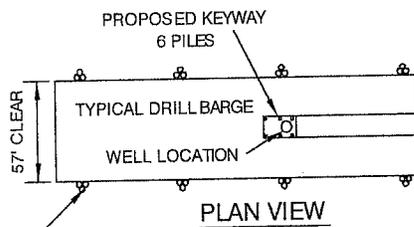
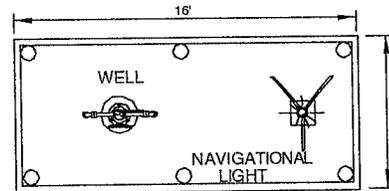
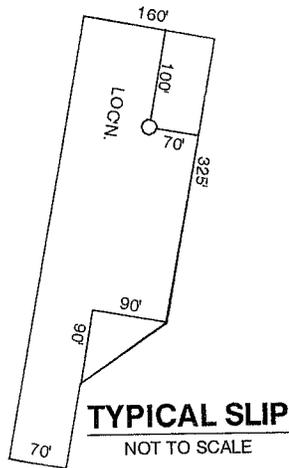
**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA

NOT TO SCALE

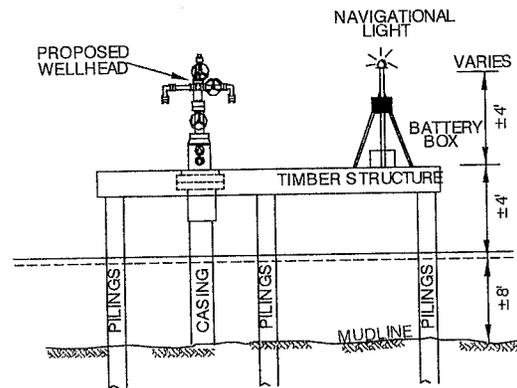
**T. BAKER SMITH**  
REGISTERED SURVEYOR  
107 Gibson Circle, Lake Charles, LA 70603  
(337) 485-2800 - tbsmith.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		

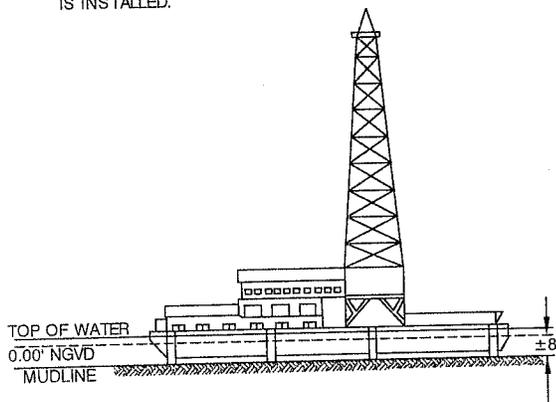
+1.5' NGVD MHW  
0.0' NGVD MLW



**NOTE:**  
8 TEMPORARY 3 PILE CLUSTERS TO BE DRIVEN TO ASSIST IN MAINTAINING DRILL BARGE FROM LOC.N. TEMPORARY CLUSTERS TO BE PULLED WHEN PERMANENT WELL GUARD IS INSTALLED.



**TYPICAL WELL HEAD PROTECTOR**  
NOT TO SCALE



**TYPICAL DIESEL POWER DRILL BARGE**  
NOT TO SCALE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

**TYPICALS**

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/2012	JOB NO: 2011.0567
DRAWING NAME: DUNE_O_SOUTHEAST_C3_COE_REV2.DWG	
SHEET NO: 6	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	



**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA

NOT TO SCALE



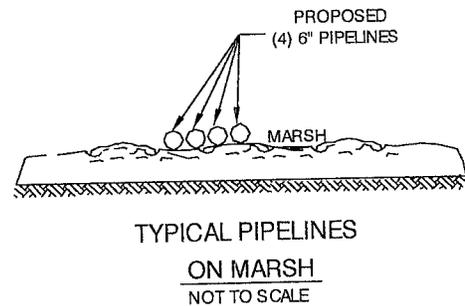
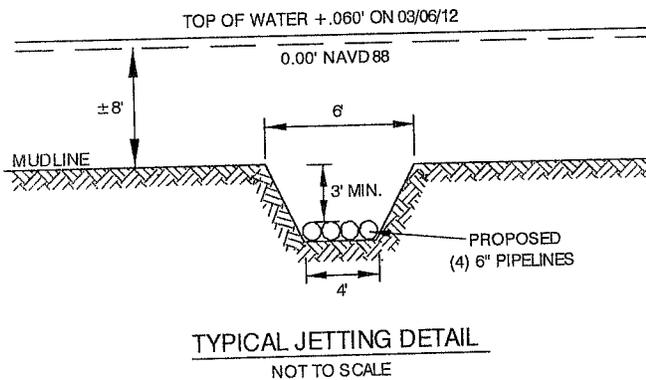
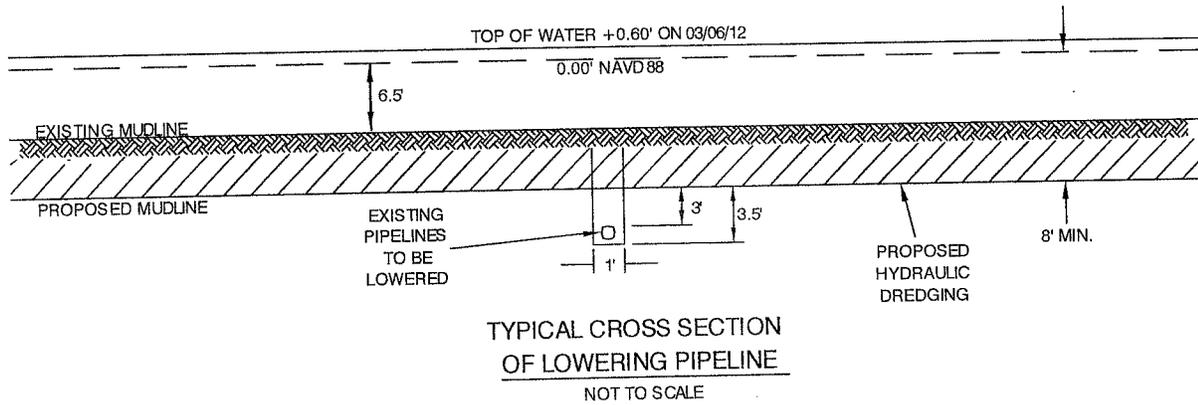
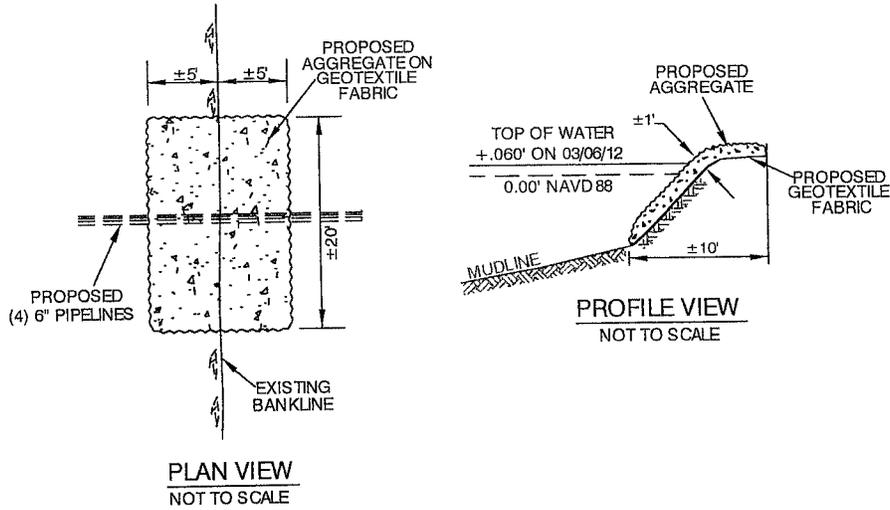
**T. BAKER SMITH**  
SOLUTIONS START HERE  
101 Global Circle, Lafayette, LA 70503  
(337) 281-3900 - tbsmith.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
------------	---------------------	--------------

REVISION DESCRIPTION:  
REVISED PER CMD

+1.5' NGVD MHW  
0.0' NGVD MLW

### TYPICAL BANK STABILIZATION DETAIL



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/2012	JOB NO: 2011.0587
DRAWING NAME: DUNE_O_SOUTHEAST_C3_COE_REV2.DWG	
SHEET NO: 7	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

### TYPICALS



**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA

NOT TO SCALE



**T. BAKER SMITH**  
SOLUTIONS START HERE  
107 Global Circle | Lafayette, LA 70503  
(337) 785-2800 | tbsmith.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		

COASTAL NOTES:

ALL STRUCTURES, FACILITIES, WELLS AND PIPELINES/FLOWLINES OCCURRING IN OPEN WATER AREAS, OR IN OILFIELD CANALS, OR SLIPS SHALL BE REMOVED WITHIN 120 DAYS OF ABANDONMENT OF THE FACILITIES FOR THE HEREIN PERMITTED USE, UNLESS PRIOR WRITTEN APPROVAL TO LEAVE SUCH STRUCTURES IN PLACE IS RECEIVED FROM THE COASTAL MANAGEMENT DIVISION. THIS CONDITION DOES NOT PRECLUDE THE NECESSITY FOR REVISING THE CURRENT PERMIT OR OBTAINING A SEPARATE COASTAL USE PERMIT, SHOULD ONE BE REQUIRED FOR SUCH ACTIVITIES.

AS-BUILT DRAWINGS SHALL BE SUBMITTED WITHIN 30 DAYS OF COMPLETION OF THIS PROJECT TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, COASTAL MANAGEMENT DIVISION AND OFFICE OF CONSERVATION, PIPELINE SAFETY DIVISION, POST OFFICE BOX 44487, BATON ROUGE, LA 70804-4487.

IN ORDER TO ENSURE THE SAFETY OF ALL PARTIES, THE PERMITTEE SHALL CONTACT THE LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY.

THE PERMITTEE SHALL ALSO CONTACT OTHER GOVERNMENTAL ENTITIES THAT MAY HAVE OPTED OUT OF THE ONE CALL PROGRAM. THESE GOVERNMENTAL ENTITIES MAY HAVE OPERATIONS LOCATED IN THE AREA OF THIS PROJECT. ALL STRUCTURES WILL BE MARKED AND LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.

LDWF NOTES:

PRIOR TO THE INITIATION OF THE PROPOSED PROJECT, THE PERMITTEE SHALL NOTIFY MR. SHANE GRAINER OF THE LDWF, IN WRITING THEIR INTENT TO BEGIN THE PROJECT AND GIVE A BRIEF OUTLINE OF THE PROJECT SCHEDULE. UPON RECEIPT OF THIS NOTIFICATION, LDWF MAY REQUEST A PRE-PROJECT MEETING TO COORDINATE DETAILS.

IT SHALL BE THE PERMITTEE'S RESPONSIBILITY TO MARK ACCORDING TO COAST GUARD REGULATIONS ANY SPOIL MATERIAL OF STRUCTURES THAT BECOME A HAZARD TO NAVIGATION.

NO ACTIVITIES WILL BE ALLOWED WITHIN THE WATERFOWL SEASON WITHOUT APPROVAL FROM LDWF. SHOULD MITIGATION BE ASSOCIATED WITH THIS ACTIVITY, THE MITIGATION WILL BE CONDUCTED ON THE PASS-A-LOUTRE WMA.

THE PASS-A-LOUTRE WMA MINERAL REQUIREMENTS HAVE BEEN INCORPORATED INTO MINERAL LEASES AND MUST BE ADHERED TO BY ALL COMPANIES.

ALL STRUCTURES, FACILITIES, WELLS, AND PIPELINES SHALL BE REMOVED WITHIN 120 DAYS OF ABANDONMENT UNLESS LDWF ISSUES A WRITTEN APPROVAL TO LEAVE THEM IN PLACE FOR FUTURE USE.

NOTES:

WHILE REASONABLE EFFORTS ARE MADE TO LOCATE ALL PIPELINES, METAL OBJECTS OR OTHER SUBSURFACE OBSTRUCTIONS IN THE SURVEYED AREA, THE EQUIPMENT USED AND THE CHARACTERISTICS OF PIPELINES THEMSELVES MAKE IT IMPOSSIBLE TO GUARANTEE TOTAL SUCCESS. ACCORDINGLY, IT IS INCUMBENT UPON THE OWNERS, OPERATORS AND/OR CONTRACTORS CONDUCTING OPERATIONS INCLUDING DREDGING AND EXCAVATION TO CONDUCT THEIR OPERATIONS WITH EXTREME CAUTION AND RECOGNIZE THAT HAZARDS IN ADDITION TO THOSE DETECTED AND MARKED BY TBS MAY EXIST.

PROPOSED (4) 6" PIPELINES TO BE JETTED A MINIMUM OF 3' BELOW MUDLINE IN OPEN WATER.  
ALL EXISTING PIPELINES THAT CROSS THE DREDGING ROUTE WILL MAINTAIN 3' OF COVER POST DREDGING.

DISTANCE FROM THE DREDGE FOOTPRINT TO BANKLINE FROM:  
A-A' & B-B' ARE ±21' TO ±75'  
E-E' IS ±2,083 TO ±693',  
F-F' IS ±1,65' TO ±27', &  
G-G' IS ±13' TO ±818'

HYDRAULIC DREDGING CALCULATIONS:  
APPROXIMATELY 72,200 CU YDS TOTAL OF MATERIAL TO BE DISPLACED DUE TO HYDRAULIC DREDGING.  
APPROXIMATELY 17.13 ACRES OF WATER BOTTOMS WILL BE IMPACTED DUE TO HYDRAULIC DREDGING.  
APPROXIMATELY 10.17 ACRES OF SPOIL TO BE PLACED IN THE WATER AT A HEIGHT CONDUCIVE TO MARSH ESTABLISHMENT.

PIPELINE CALCULATIONS:  
APPROXIMATELY 27 CU YDS TOTAL OF MATERIAL TO BE DISPLACED DUE TO LOWERING OF EXISTING PIPELINES.  
APPROXIMATELY 1,108 CUBIC YARDS OF MATERIAL TO BE DISPLACED DUE TO JETTING.  
APPROXIMATELY 0.24 ACRES TO BE TEMPORARILY IMPACTED DUE TO JETTING.  
APPROXIMATELY 7.4 CUBIC YARDS REQUIRED FOR EACH BANK STABILIZATION.

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

DRAWN BY: SPH	APPROVED BY: LLS
DATE: 07/19/2012	JOB NO: 2011.0567
DRAWING NAME: DUNE_O_SOUTHEAST_C3_COE_REV2.DWG	
SHEET NO: 8	OF 8
PROJECTION: LOUISIANA SOUTH GEO. DATUM: NAD27   VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET	

**NOTES**

**DUNE OPERATING COMPANY**  
PROPOSED WELL LOCATION, HYDRAULIC DREDGE,  
(4) 6" PIPELINES & STRUCTURES  
TO SERVE THE "O" SOUTHEAST PROSPECT WELL  
GARDEN ISLAND BAY FIELD, SECTIONS 7, 17 & 18, T23S-R33E  
PLAQUEMINES PARISH, LOUISIANA



NOT TO SCALE



**T. BAKER SMITH**  
SOLUTIONS STAY HERE  
107 Cibola Circle, Lafayette, LA 70503  
1527 / 25-2500 - tbam@tbs.com

REV. NO: 2	REV. DATE: 10/31/12	REV. BY: MAM
REVISION DESCRIPTION: REVISED PER CMD		