

**APPENDIX A**  
**Application Modifications**

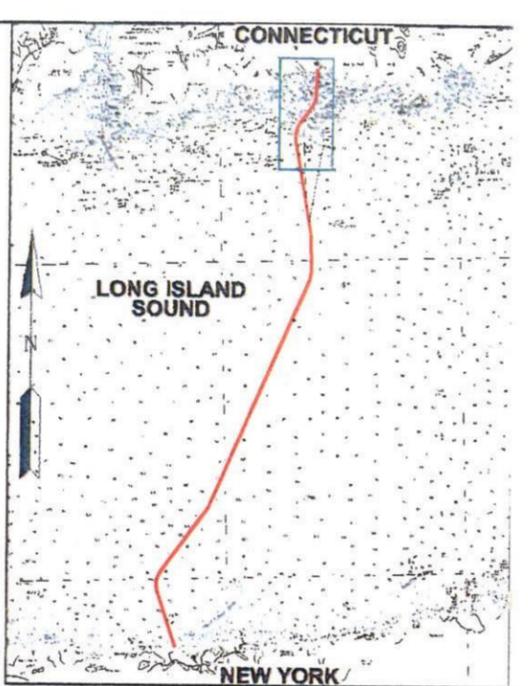
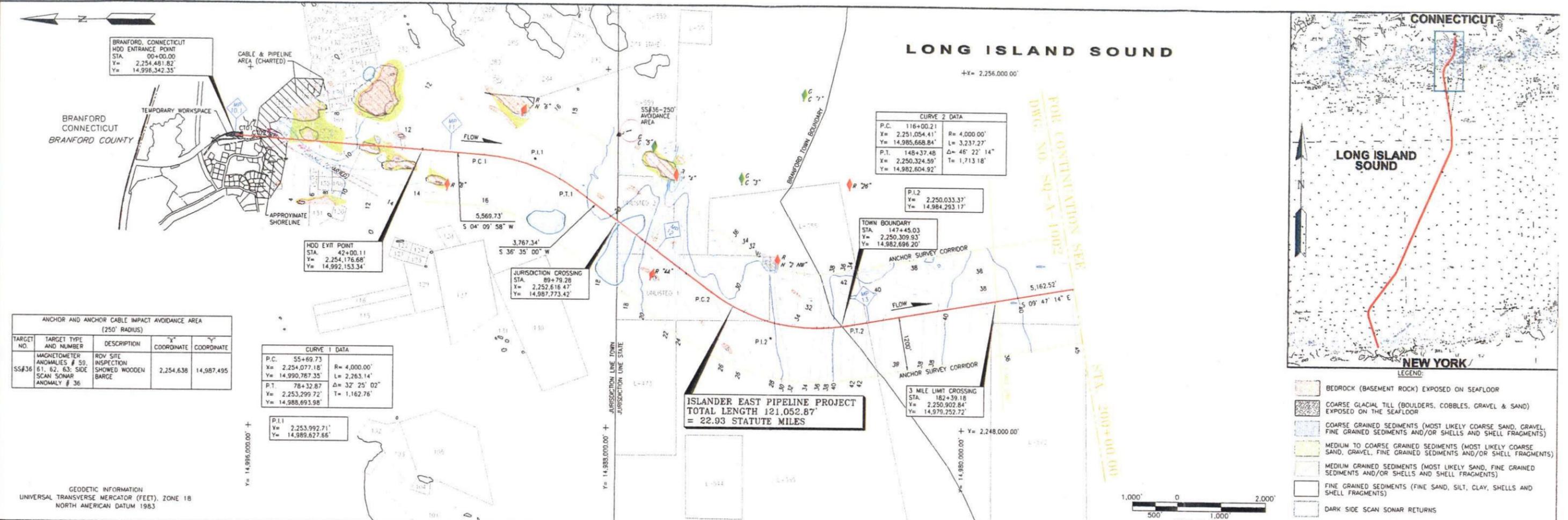
<b>ORIGINAL PROPOSAL</b>	<b>REVISED PROPOSAL</b>
↓	↓
<b>Wetlands</b>	
placement of an at-grade 24" diameter pipeline within a number of small wetland areas, both inland and tidal	no changes
<b>Pipeline Installation: Horizontal Directional Drill Methodology</b>	
installation of a sub-grade 24" diameter pipeline at Juniper Point utilizing the horizontal directional drilling (HDD) method to a point approximately 3500 feet offshore in Long Island Sound	no changes
<b>Exit Pit Details</b>	
excavation by clamshell bucket of an HDD exit-pit: <ul style="list-style-type: none"> <li>• 20' deep x 250' wide x 300' long</li> <li>• sidecasting/stockpiling of such sediment within a 65' area on three sides of such pit</li> </ul>	excavation by clamshell bucket of an HDD exit pit: <ul style="list-style-type: none"> <li>• 18' deep x 130' wide x 301' long</li> <li>• removal of 5,300 cubic yards of sediment to be disposed of at an open water disposal site</li> <li>• backfill the HDD exit hole with bank-run gravel</li> </ul>
<b>Spoil Mound Warning Signage</b>	
installation of illuminated navigation warning signage placed atop temporary timber piles along the route where sediment is stockpiled below the waterline	eliminated

<p><b>Drilling Fluid Containment System</b> No details provided</p>	
<p><b>Pipeline Installation: Trench Methodology</b></p>	
<p>installation of a sub-grade 24" diameter pipeline by excavating with a clamshell bucket from the HDD exit-pit to a location at approximately milepost 12 to create a trench:</p> <ul style="list-style-type: none"> <li>• 5' deep x 50' wide x 5808' long</li> <li>• sidecast and stockpile sediments in mounds which extend over 60' in both directions from the trench</li> <li>• pipe burial depth 3'</li> <li>• backfill by plowing sidecast material back into the trench</li> </ul>	<p>installation of a sub-grade 24" diameter pipeline by excavating with a clamshell bucket from the HDD exit-pit to a location at approximately milepost 12 to create a trench:</p> <ul style="list-style-type: none"> <li>• 5' deep x 37' wide x 5851' long</li> <li>• remove a maximum of 23,000 cubic yards of sediment to be disposed of at an open water disposal site</li> <li>• pipe burial depth 18"</li> <li>• backfill with new material consisting of bank run gravel</li> </ul>
<p><b>Pipeline Installation: Plow Methodology</b></p>	
<p>installation of a sub-grade 24" diameter pipeline by utilizing a sub-sea plow for approximately 9 miles from milepost 12 to the state line between Connecticut and New York to create a trench:</p> <ul style="list-style-type: none"> <li>• 5' deep trench x 25' wide at the top of slope</li> <li>• sidecasts sediment mounds approximately 25' wide on either side</li> <li>• four subsea plow passes</li> <li>• 3' burial</li> </ul>	<p>installation of a sub-grade 24" diameter pipeline by utilizing a sub-sea plow for approximately 9 miles from milepost 12 to the state line between Connecticut and New York to create a trench:</p> <ul style="list-style-type: none"> <li>• 5' deep trench x 25' wide at the top of slope</li> <li>• sidecasts sediment mounds approximately 25' wide on either side</li> <li>• three subsea plow passes</li> <li>• 2' burial</li> </ul>
<p><b>Temporary Mooring Structures</b></p>	
<p>none identified</p>	<p>installation of four temporary mooring piles at the HDD exit hole</p>

**APPENDIX B**

**PLANS OF PROPOSED  
PIPELINE ROUTE**

From DEP R. 73 and 93



ANCHOR AND ANCHOR CABLE IMPACT AVOIDANCE AREA (250' RADIUS)

TARGET NO.	TARGET TYPE AND NUMBER	DESCRIPTION	COORDINATE X	COORDINATE Y
SS#36	MAGNETOMETER ANOMALIES # 59, 61, 62, 63, SIDE SCAN SONAR ANOMALY # 36	ROW SITE INSPECTION SHOWED WOODEN BARGE	2,254.638	14,987.495

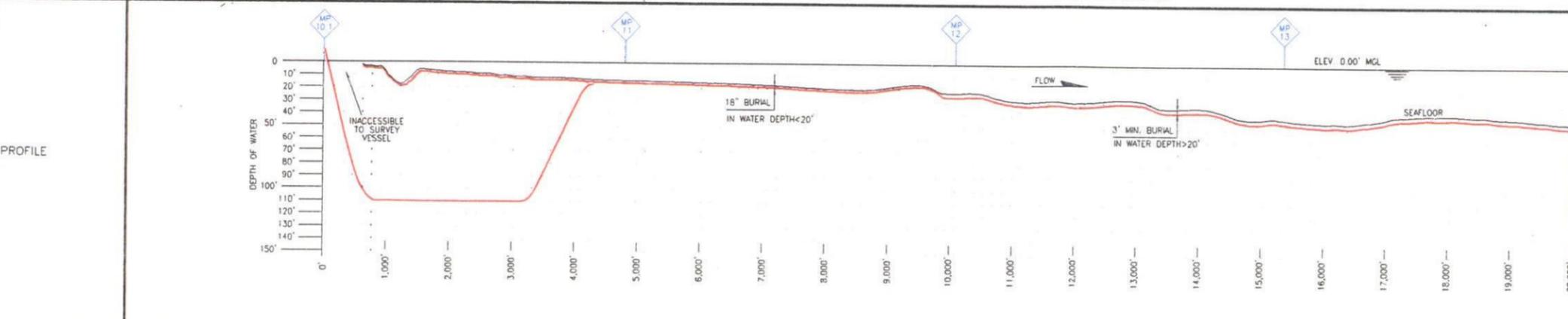
CURVE 1 DATA

P.C.	55+69.73	R = 4,000.00'
X	2,254,077.18'	L = 2,263.14'
Y	14,990,787.35'	Δ = 32° 25' 02"
P.T.	78+32.87	T = 1,162.76'
X	2,253,299.72'	
Y	14,988,693.98'	

CURVE 2 DATA

P.C.	116+00.21	R = 4,000.00'
X	2,251,054.41'	L = 3,237.27'
Y	14,985,668.84'	Δ = 46° 22' 14"
P.T.	148+37.48	T = 1,713.18'
X	2,250,324.59'	
Y	14,982,604.92'	

COATING	14 MILS MIN. 16 MILS NOMINAL F.B.E., 30 MILS ABRASION RESISTANT COATING OVER F.B.E. (EXTERNAL); 2-4 MILS CATALYZED EPOXY (INTERNAL)	2 1/2 MILS ROUGHCOAT F.B.E. OVER 14 MILS MIN. 16 MILS NOMINAL F.B.E. (EXTERNAL); 2-4 MILS CATALYZED EPOXY (INTERNAL)
PIPE	4,200.11'	15,799.89'
CONCRETE COATING	NONE	SACRIFICIAL ANODES, 141 LB ALUMINUM ALLOY @ 320' SPACING
OTHER	HORIZONTAL DIRECTIONAL DRILL	2.25" THICK (190 LB/FT <sup>3</sup> DENSITY)
TEST PRESSURE	PER COMPANY SPECIFICATION	PER COMPANY SPECIFICATION



- NOTES:
1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
  2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
  3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.
  4. MILE POSTS DO NOT REPRESENT TRUE LENGTH ALONG THE PIPELINE.
  5. THIS DRAWING HAS BEEN PREPARED FOR PERMITTING PURPOSES ONLY AND IS NOT PREPARED AS A CONSTRUCTION OR SURVEY DRAWING.
  6. CONTRACTOR SHALL NOT PLACE ANCHORS, OR ALLOW ANCHOR CABLE IMPACTS, WITHIN 250' OF MAGNETOMETER OF SIDE SCAN SONAR ANOMALIES SHOWN ON THIS DRAWING.
  7. BACKFILL MATERIAL TO BE DETERMINED.

REFERENCE DRAWINGS

CT_LANDFALL	JCHA DWG. DATED 4-26-02
SO-L-1002	CONNECTICUT NEARSHORE AREA
01ES019	OCEAN SURVEYS, INC. HAZARD SURVEY DRAWINGS, DATED 11-27-01

**Islander East Pipeline Company**

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

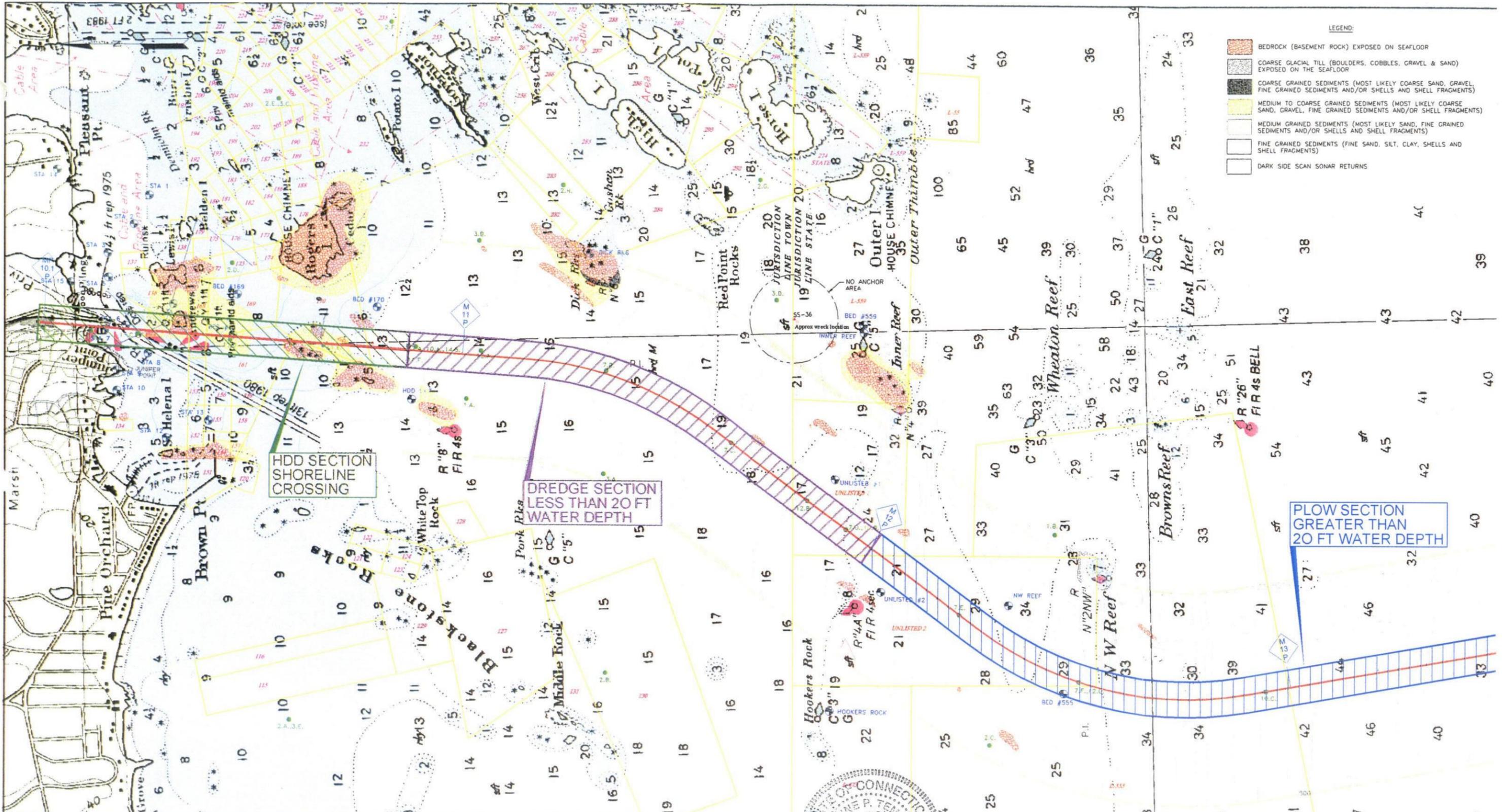
NO.	DATE	DESCRIPTION	DRAWN	CHK'D.	APPR'D.
G	3-12-03	MODIFIED BURIAL DEPTH < 20'	K.M.A.	J.H.E.	L.E.P.
F	9-30-02	COE PERMIT - NOT FOR CONSTRUCTION	K.M.A.	J.H.E.	L.E.P.
E	6-26-02	ADD AVOIDANCE AREAS, GENERAL REVISIONS	K.M.A.	J.H.E.	L.E.P.
D	5-21-02	ADD NO ANCHOR AREA (SS-36)	K.M.A.	J.H.E.	L.E.P.
C	3-8-02	ADJUST ROUTE BOTH ENDS	K.M.A.	J.H.E.	L.E.P.
B	3-28-02	AS SENT FOR BID	K.M.A.	J.H.E.	L.E.P.
A	1-18-02	PRELIMINARY	K.M.A.	J.H.E.	L.E.P.
NO.	DATE	DESCRIPTION	DRAWN	CHK'D.	APPR'D.

**PROJECT CONSULTING SERVICES, INC.**  
3300 WEST ESPLANADE AVE., S., SUITE 800  
METairie, LA 70002-7408  
(504) 833-8321 Fax (504) 833-4940  
E-mail: pcsinc@projectconsulting.com

**LONG ISLAND SOUND  
24" O.D. GAS PIPELINE  
ALIGNMENT AND PROFILE**

DRAWN BY:	K.M.A.	APPROVED BY:	L.E.P.
SCALE:	AS NOTED	PROJ. ENGR.:	
DATE:	1-3-01	PROJ. MGR.:	
CHECKED BY:	J.H.E.	SHEET:	1 OF 1

DWG. NO. SQ-A-1001



NOTES:

- SHELLFISH LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN LEASE MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY. NOAA CHARTS REFERENCED FOR THIS PROJECT ARE CHART NOS. 12373 AND 12354.
- FOR SURVEY DETAILS AND INFORMATION, REFERENCE DRAWING "DETAILED-A" BY OCEAN SURVEYS, INC., DATED MAY 24, 2001.
- THE INTENT OF THIS DRAWING IS TO PROVIDE A GRAPHIC ILLUSTRATION OF THE PROPOSED PIPELINE ROUTE WITHIN THE SURVEYED AREA AS DETAILED IN "DETAILED-A" BY OCEAN SURVEYS, INC., DATED MAY 24, 2001 REFERENCED IN NOTE 2. THIS IS NOT A SURVEY DOCUMENT AND IS NOT INTENDED FOR CONSTRUCTION.

SHELLFISH LEASE BOUNDARY

NO.	TASK	SAMPLE LOCATION
1.A-B	MOORED HYDRO ARRAY	TWO (2) LOCATIONS NEARSHORE CONNECTICUT
2.A-H	NEARSHORE WATER COLUMN - GRAB SAMPLE	SEVEN (7) LOCATIONS NEARSHORE CONNECTICUT, 3 WEST & 4 EAST OF LINE
3.A-E	SHALLOW CORE - DIVER CORES	FIVE (5) NEARSHORE CONNECTICUT
4.A-F	OFFSHORE WATER COLUMN - GRAB SAMPLE	SIX (6) EQUALLY SPACED OFFSHORE (FIRST ONE 0.5 MILE OFF LONG ISLAND)
5	ACOUSTIC DOPPLER - MOBILE ELECTRONICS	CONTINUOUS ACROSS LONG ISLAND SOUND
6	VIDEO SURVEY - ROV / TOWED SLED	WATERS LESS THAN 60'
7.A-L	BENTHIC SAMPLING - PONAR GRAB	12 TOTAL, 6 NEARSHORE CONNECTICUT, 3 NEARSHORE LONG ISLAND, 3 OFFSHORE
8.A-I	DIVER SURVEY OF OYSTER LEASES	LEASE NUMBERS IMPACTED BY INSTALLATION
9.A-B	SENSITIVE HABITAT MAPPING	NEARSHORE CONNECTICUT
10.A-W	SEDIMENT CORE - VIBRACORE, PONAR GRAB, ROTARY DRILL	EVERY MILE ACROSS SOUND, INCLUDE ONE 1,000' OFF LONG ISLAND SHORE
11.A-F	GEOTECH BORING FOR HDD	HDD SHORELINE CROSSING
12.A-F	VIBRACORE - GEOTECH GROUND-TRUTHING	LOCATIONS FOR GROUND-TRUTHING OF GEOPHYSICAL DATA
13	ROTARY BORING	LOCATIONS TO BE BASED UPON RESULTS OF VIBRACORING PROGRAM
14.A-B	VIBRACORE, ROTARY BORING FOR DESIGN OF COFFERDAM	CONNECTICUT AND LONG ISLAND SHORELINE CROSSINGS, EXTENT OF WORK, BASED ON GEOPHYSICAL DATA

NO.	DATE	DESCRIPTION	BY	CHK BY
J	3-12-03	MODIFIED NOTES	K.M.A.	J.H.E.
H	1-30-03	ADD METHOD DESCRIPTION	K.M.A.	J.H.E.
G	11-20-02	ADD SEDIMENTATION INFORMATION	J.E.F.	J.H.E.
E	5-21-02	ADD NO ANCHOR AREA SS-36	K.M.A.	J.H.E.
D	5-8-02	ROUTE CHANGE	K.M.A.	J.H.E.
		REVISIONS		

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET)  
NORTH AMERICAN DATUM 1983

SCALE IN FEET  
500 1000 1500  
CHECK GRAPHIC SCALE BEFORE USING

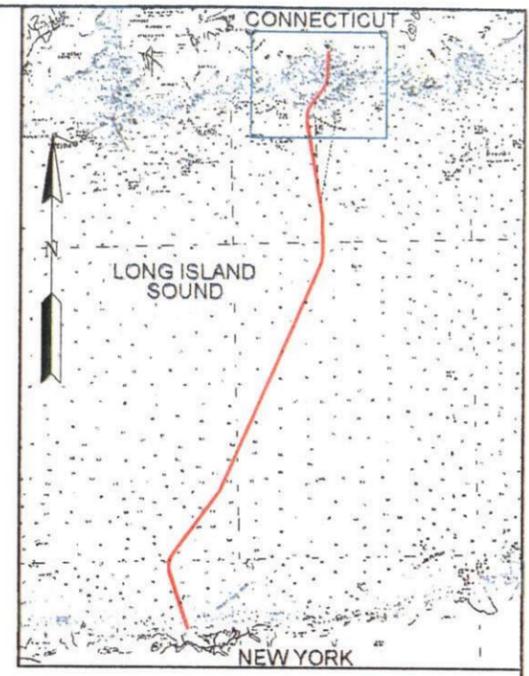
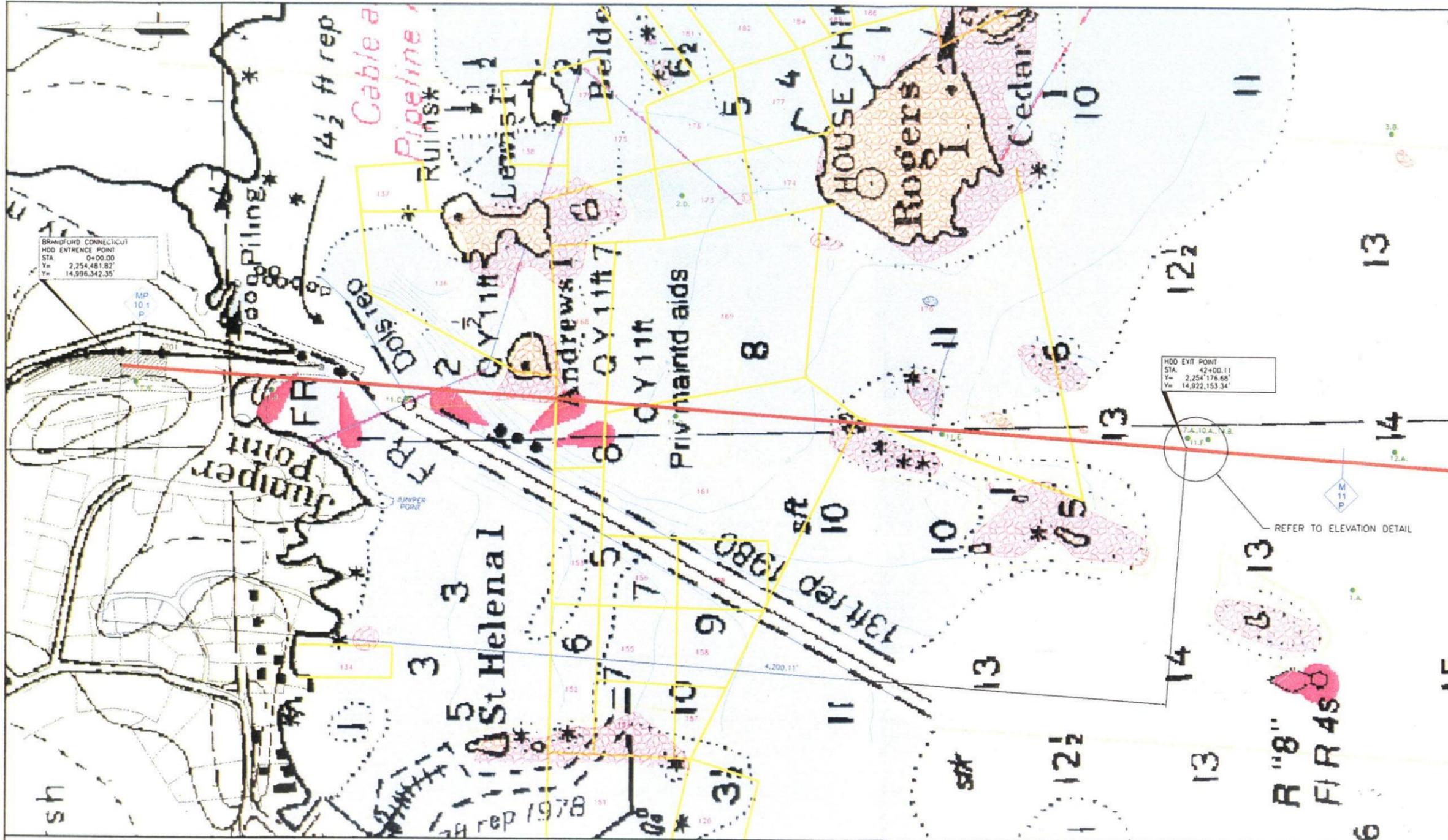
**Islander East**  
Islander East Pipeline Company, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

**PROJECT CONSULTING SERVICES, INC.**  
3300 WEST ESPLANADE AVE., SUITE 500  
METairie, LA 70002-7406  
(504) 833-5321 Fax (504) 833-4940  
E-mail: psinc@projectconsulting.com

LONG ISLAND SOUND CROSSING  
NEW YORK TO CONNECTICUT  
CONNECTICUT AREA MAP

DRAWN BY: K.M.A.	APPROVED BY: J.H.E.
SCALE: AS NOTED	PROJ. ENGR: J.H.E.
DATE: 9-5-01	PROJ. MGR: L.E.P.
CHECKED BY: W.J.C.	SHEET:

DWG. NO. MAP-03



BRANFORD CONNECTICUT  
HDD ENTRANCE POINT  
STA. 0+00.00  
X= 2,254,481.82'  
Y= 14,996,342.35'

HDD EXIT POINT  
STA. 42+00.11  
X= 2,254,176.68'  
Y= 14,922,153.34'

NO.	TASK	SAMPLE LOCATION
1A-B	MOORED HYDRO ARRAY	TWO (2) LOCATIONS NEARSHORE CONNECTICUT
2A-H	NEARSHORE WATER COLUMN - GRAB SAMPLE	SEVEN (7) LOCATIONS NEARSHORE CONNECTICUT, 3 WEST & 4 EAST OF LINE
3A-E	SHALLOW CORE - DIVER CORES	FIVE (5) NEARSHORE CONNECTICUT
4A-F	OFFSHORE WATER COLUMN - GRAB SAMPLE	6 EQUALLY SPACED OFFSHORE (FIRST ONE 0.5 MILE OFF LONG ISLAND)
5	ACOUSTIC DOPPLER - MOBILE ELECTRONICS	CONTINUOUS ACROSS LONG ISLAND SOUND
6	VIDEO SURVEY - ROV / TOWED SLED	WATERS LESS THAN 60'
7A-L	BENTHIC SAMPLING - PONAR GRAB	12 TOTAL, 6 NEARSHORE CONNECTICUT, 3 NEARSHORE LONG ISLAND, 3 OFFSHORE
8A-I	DIVER SURVEY OF OYSTER LEASES	LEASE NUMBERS IMPACTED BY INSTALLATION
9A-B	SENSITIVE HABITAT MAPPING	NEARSHORE CONNECTICUT
10A-W	SEDIMENT CORE - VIBRACORE, PONAR GRAB, ROTARY DRILL	EVERY MILE ACROSS SOUND, INCLUDE ONE 1,000' OFF LONG ISLAND SHORE
11A-F	GEOTECH BORING FOR HDD	HDD SHORELINE CROSSING
12A-F	VIBRACORE - GEOTECH GROUND-TRUTHING	LOCATIONS FOR GROUND-TRUTHING OF GEOPHYSICAL DATA
13	ROTARY BORING	LOCATIONS TO BE BASED UPON RESULTS OF VIBRACORING PROGRAM
14	VIBRACORE, ROTARY BORING FOR DESIGN OF COFFERDAM	CONNECTICUT AND LONG ISLAND SHORELINE CROSSINGS, EVENT OF WORK, BASED ON GEOPHYSICAL DATA

NOTES:  
 1. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN LEASE MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY. NOAA CHARTS REFERENCED FOR THIS PROJECT ARE CHART NOS. 12373 AND 12354.  
 2. MILE POSTS HAVE NOT BEEN RELOCATED.  
 3. THIS DRAWING HAS BEEN PREPARED FOR PERMITTING PURPOSES ONLY AND IS NOT PREPARED AS A CONSTRUCTION OR SURVEY DRAWING.

TOWN LEASES  
 LOT 136 - TILCON MINERAL, INC.  
 LOTS 161/168/169/170 - LANG, EDWARD P.  
 STATE LEASES  
 LOT 555 - NICHOLAS J. CRISMALE & MICHAEL CUARNIERE d/b/a/ BRANFORD RIVER LOBSTER CO. LLC.

GEODETIC INFORMATION  
 UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
 NORTH AMERICAN DATUM 1983  
 SCALE IN FEET  
 200' 0' 200' 400' 600'  
 CHECK GRAPHIC SCALE BEFORE USING

**PROJECT CONSULTING SERVICES, INC.**  
 3300 WEST ESPLANADE AVE., SUITE 500  
 METAIRIE, LA 70002-7408  
 (504) 833-5321 Fax (504) 833-4940  
 E-mail: pcsc@projectconsulting.com

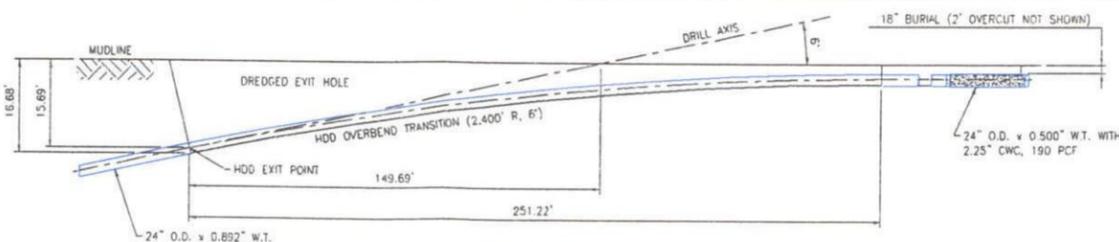
**LONG ISLAND SOUND  
 24" O.D. GAS PIPELINE  
 CONNECTICUT NEARSHORE AREA**

DRAWN BY: G.J.D.	APPROVED BY: J.H.E.
SCALE: AS NOTED	PROJ. ENGR.: J.H.E.
DATE: 8-20-02	PROJ. MGR.: L.E.P.
CHECKED BY: M.G.S.	SHEET:

DWG. NO. SQ-L-1002

LEGEND:

[Red Hatched Box]	BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
[Grey Box]	COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
[Dark Grey Box]	COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
[Light Grey Box]	MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
[Medium Grey Box]	MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
[Lightest Grey Box]	FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
[White Box]	DARK SIDE SCAN SONAR RETURNS
[Yellow Dashed Line]	OYSTER LEASE BOUNDARY



**ELEVATION  
 HDD EXIT HOLE**  
 HORZ. SCALE: 1" = 15'  
 VERT. SCALE: 1" = 30'



NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPR'D
C	3-12-03	MODIFIED HDD EXIT HOLE DETAIL	K.M.A.	J.H.E.	L.E.P.
B	9-30-02	COE PERMIT - NOT FOR CONSTRUCTION	S.E.M.	J.H.E.	L.E.P.
A	8-22-02	PRELIMINARY NOT FOR CONSTRUCTION	S.E.M.	J.H.E.	L.E.P.

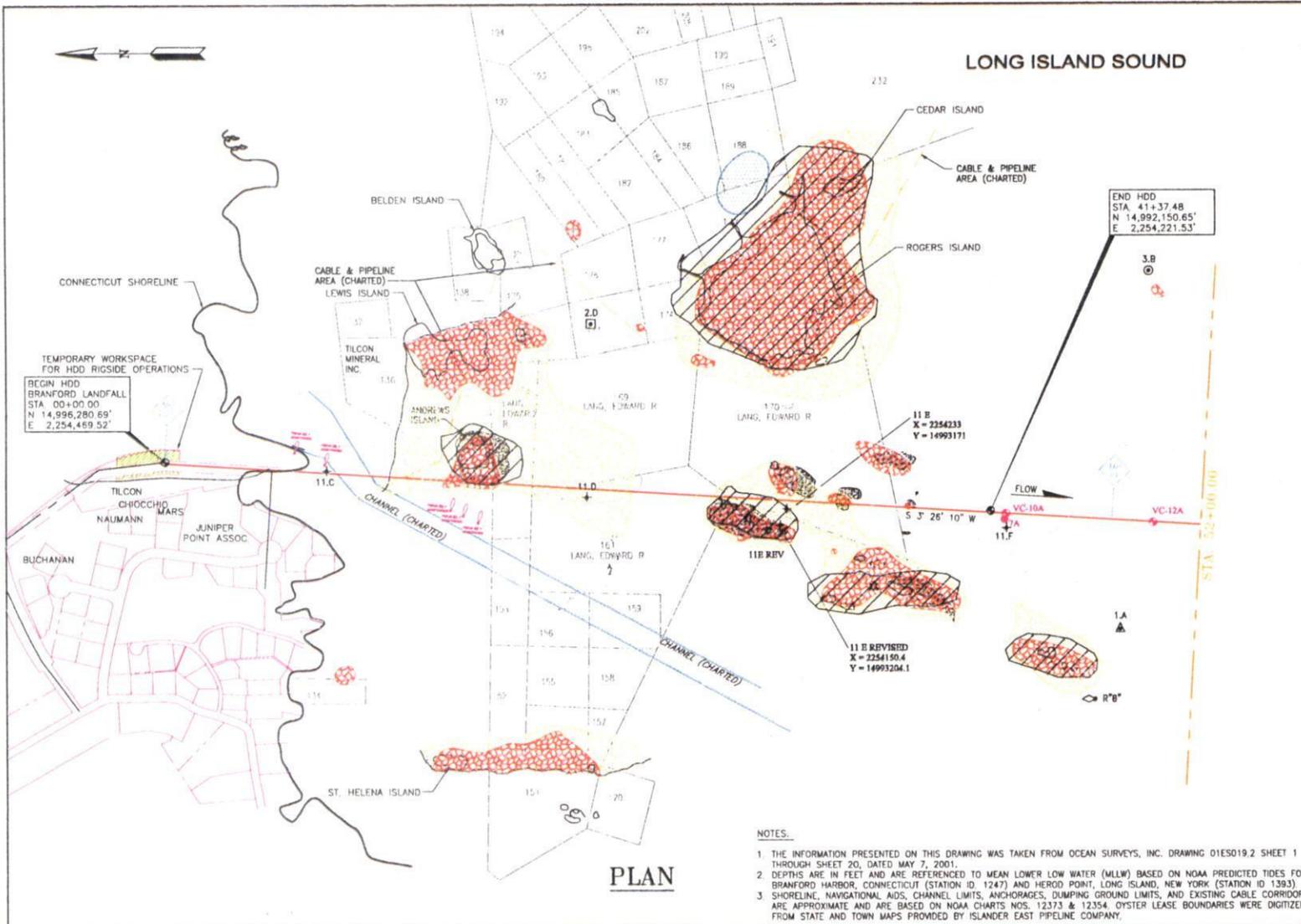
REFERENCE DRAWINGS

50-A-1001	ALIGNMENT & PROFILE
01ES019	OCEAN SURVEYS, INC. HAZARD SURVEY DRAWINGS, DATED 11-27-01

**Islander East Pipeline Company**

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
 454 EAST MAIN STREET, ROUTE 1  
 BRANFORD, CONNECTICUT

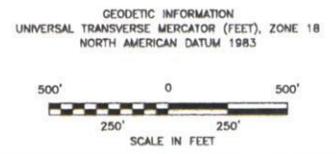
NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPR'D
C	3-12-03	MODIFIED HDD EXIT HOLE DETAIL	K.M.A.	J.H.E.	L.E.P.
B	9-30-02	COE PERMIT - NOT FOR CONSTRUCTION	S.E.M.	J.H.E.	L.E.P.
A	8-22-02	PRELIMINARY NOT FOR CONSTRUCTION	S.E.M.	J.H.E.	L.E.P.



**LONG ISLAND SOUND**

**LEGEND**

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- "R"BUOY NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)



**NOTES.**

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01E5019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393)
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

**PLAN**

**Islander East**  
Pipeline Company

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

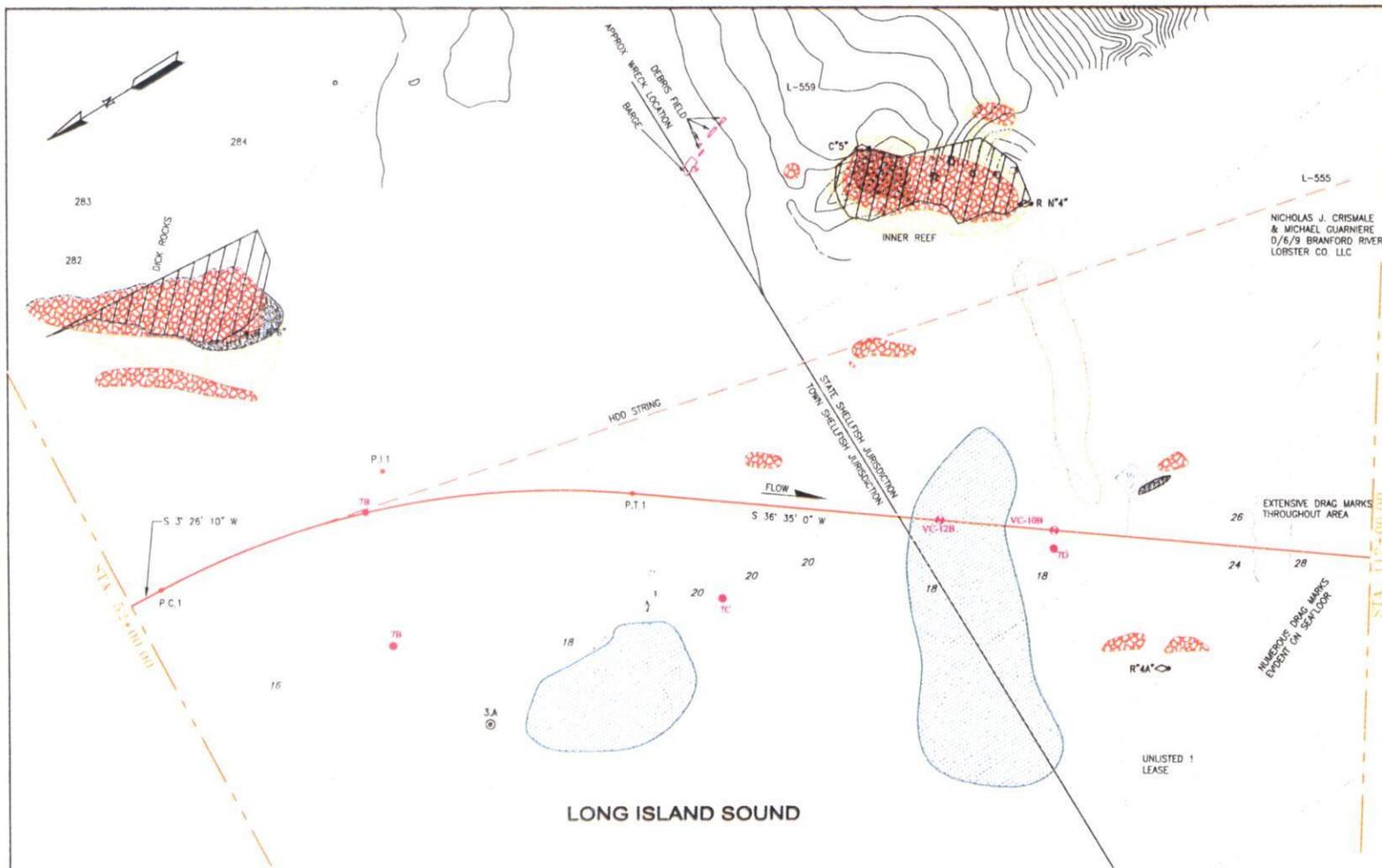
NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	12-26-01	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 2 of 21
DWG. NO. Sheet 101 of 120	REV D

04-25-03 12:59 01138\PLATS 9 K.M.A.

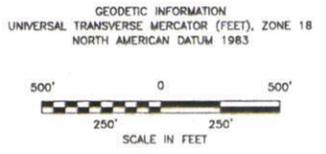


- ### LEGEND
- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
  - COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
  - COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
  - MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
  - MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
  - FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
  - DARK SIDE SCAN SONAR RETURNS
  - WATER DEPTH CONTOUR
  - SHELLFISH LEASE BOUNDARY
  - VIBRATORY CORE LOCATION
  - GRAB SAMPLE LOCATION
  - TEST BORING
  - MOORED HYDRO ARRAY
  - SHALLOW DIVER CORE
  - WATER COLUMN GRAB SAMPLE
  - NAVIGATIONAL BUOY MARKER
  - INACCESSIBLE BY SURVEY VESSEL
  - MILE POST (APPROXIMATE)

CURVE 1 DATA	
P.C.	5,346,101
X	2,254,148.20'
Y	14,990,929.32'
P.T.	76+75.11
X	2,253,367.35'
Y	14,988,785.10'
R	4,000.00'
L	2,314.11'
Δ	33° 8' 50"
T	1,190.44'
P.I.	
X	2,254,076.85'
Y	14,989,741.02'

### PLAN

- NOTES:
- THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
  - DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
  - SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.



**Islander East**  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

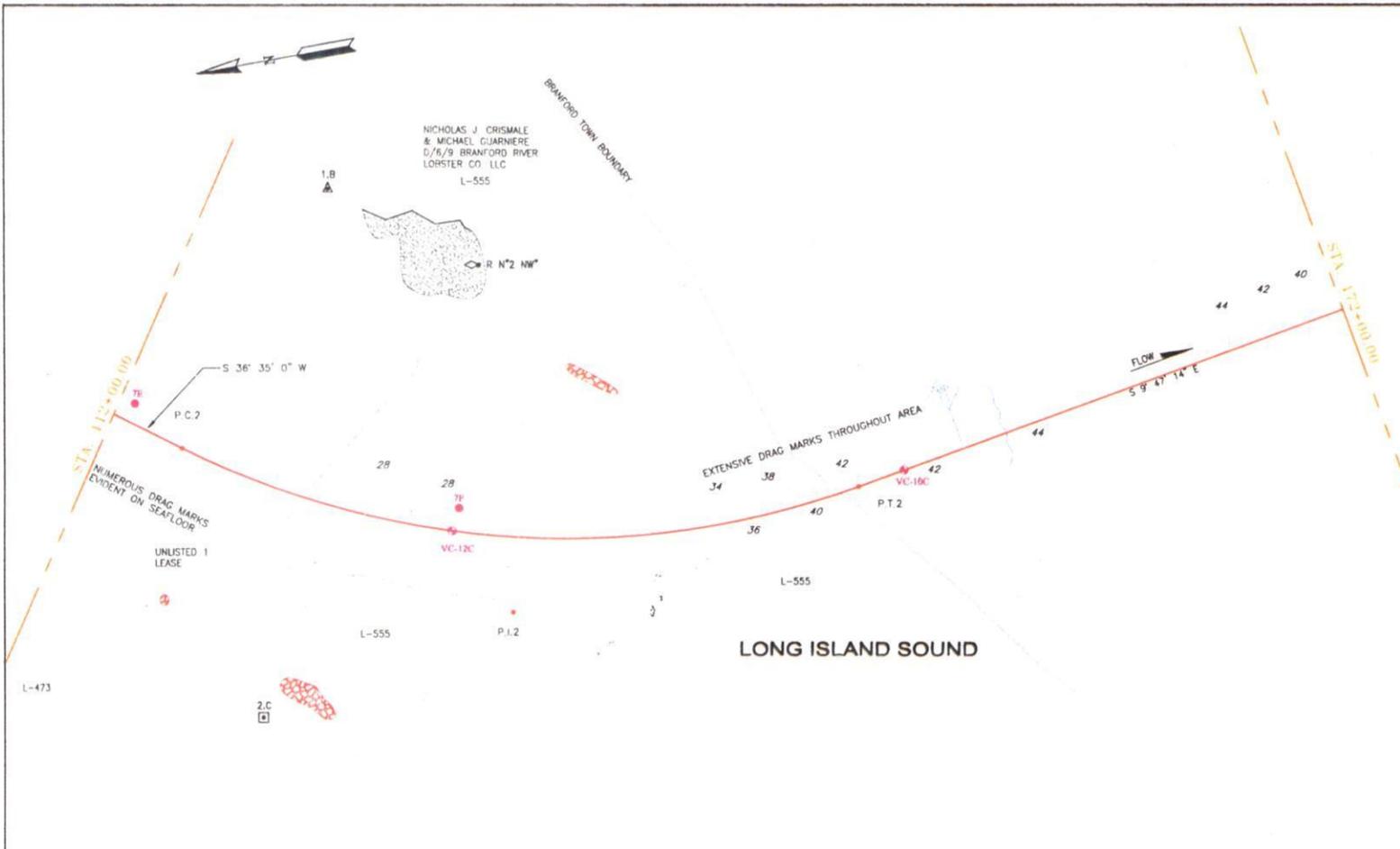
NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	12-26-01	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY:
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 3 of 21
DWG. NO. Sheet 102 of 120	REV D

04-25-03 13:02 01139/PLATS 7 K.M.A.



### LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

GEODETTIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983

500' 0 500'  
250' 250'  
SCALE IN FEET

CURVE 2 DATA	
P.C.	115+55.94
X	2,251,054.41
Y	14,985,688.84
P.T.	147+93.21
X	2,250,324.59
Y	14,982,604.92
R	4,000.00'
L	3,237.27'
Δ	46° 22' 14"
T	1,713.18'
P.I.	2
X	2,250,033.37'
Y	14,984,293.17'

### PLAN

#### NOTES

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID. 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID. 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

**Islander East**  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

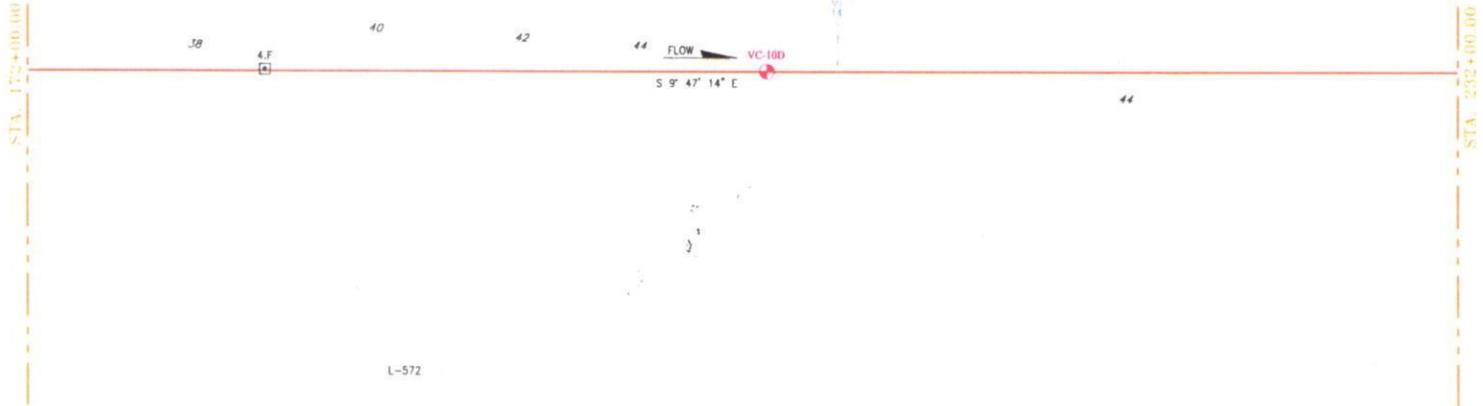
TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 4 of 21
DWG. NO. Sheet 103 of 120	REV D

04-25-03 13.03 01139/P/PLS B.K.M.A.



LONG ISLAND SOUND



L-572

PLAN

NOTES

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24 WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- 

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983



04-25-03 13:06 01139 PLAYS 6 K.M.A

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 5 of 21
DWG. NO. Sheet 104 OF 120	REV D



LONG ISLAND SOUND



EAST-WEST ORIENTED  
LINEAR BOTTOM FEATURES  
CONCENTRATED IN AREA

FLOW  
S 9° 47' 14\"/>

PLAN

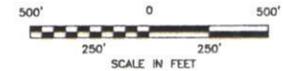
NOTES:

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID. 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24 WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VC-10A VIBRATORY CORE LOCATION
- 7A GRAB SAMPLE LOCATION
- 11.D TEST BORING
- 1.A WOODED HYDRO ARRAY
- 3.B SHALLOW DIVER CORE
- 2.D WATER COLUMN GRAB SAMPLE
- R'B' NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983



04-25-03 1307 01139/PLATS 7 K.M.A.

**Islander East** Partners Company  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-01	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	
REVISIONS					

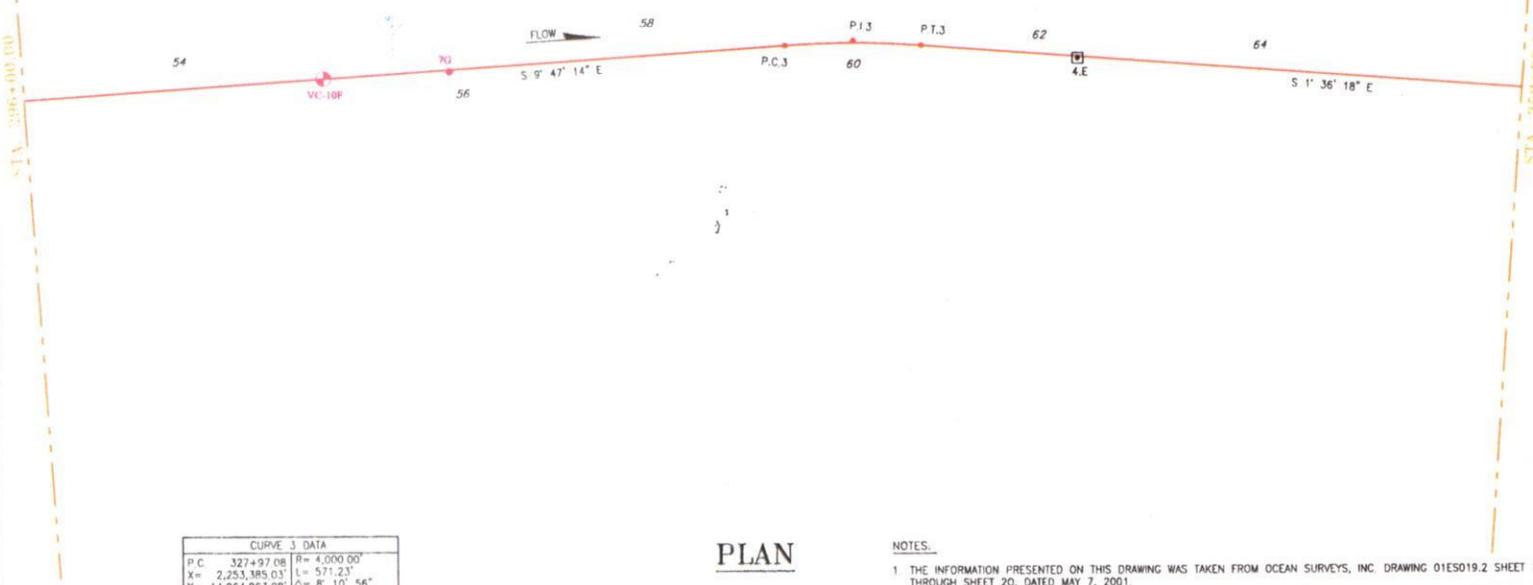
TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 6 of 21
DWG. NO. Sheet 105 of 120	REV <b>D</b>



# LONG ISLAND SOUND



CURVE 3 DATA	
P.C.	327+97.08
X=	2,253,385.03'
Y=	14,964,863.08'
P.T.	333+68.31'
X=	2,253,441.67'
Y=	14,964,295.15'
R=	4,000.00'
L=	571.23'
Δ=	8° 10' 56"
T=	286.10'
P.I.	3
X=	2,253,433.66'
Y=	14,964,581.14'

## PLAN

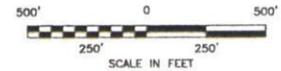
### NOTES:

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

## LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24 WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983



04-25-03 13.09 011.39/PJ/JS 7 K.M.A.

**Islander East**  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

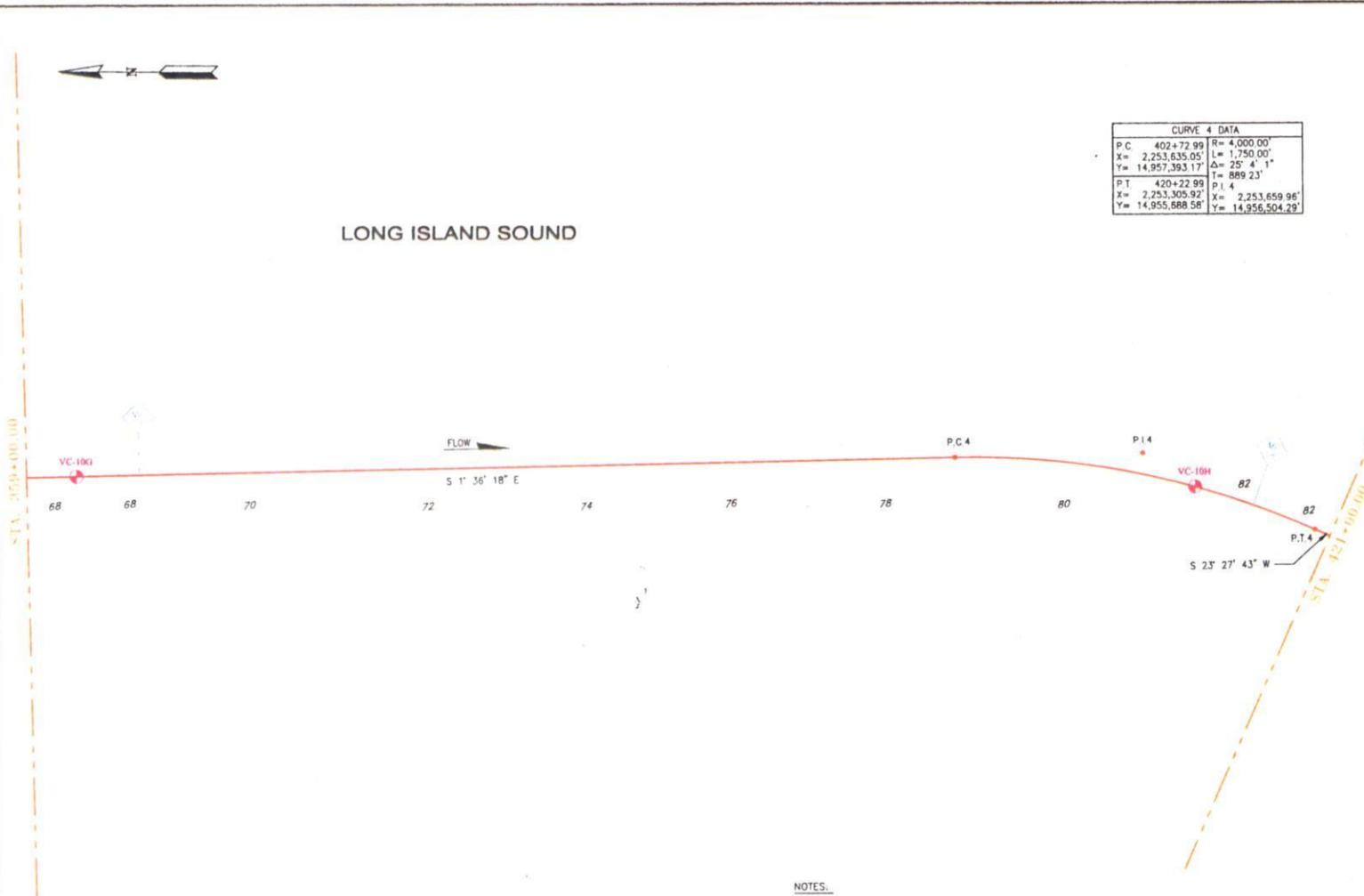
TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 7 of 21
DWG. NO. Sheet 106 of 120	REV D

LONG ISLAND SOUND

CURVE 4 DATA	
P.C.	402+72.99
X=	2,253,635.05
Y=	14,957,393.17
P.T.	420+22.99
X=	2,253,309.92
Y=	14,955,688.58
R=	4,000.00'
L=	1,750.00'
Δ=	25° 4' 1"
T=	889.23'
P.I.	411.4
X=	2,253,659.96'
Y=	14,956,504.29'



**LEGEND**

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24" WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

**GEODETIC INFORMATION**  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983

500' 0 500'  
250' 250'  
SCALE IN FEET

**NOTES:**

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

**PLAN**

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

REVISIONS

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-4-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 8 of 21
DWG. NO. Sheet 107 of 120	REV D

04-25-03 1.31:0 01128/VP/ATIS 3 K.M.A.



LONG ISLAND SOUND

STA. 421+00.00

STA. 482+00.00

FLOW  
S 23° 27' 43" W

88

VC-108

90

84

86

PLAN

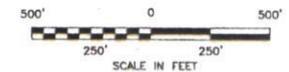
NOTES:

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, CORBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24 WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VC-104 VIBRATORY CORE LOCATION
- 7A GRAB SAMPLE LOCATION
- 11.D TEST BORING
- 1.A MOORED HYDRO ARRAY
- 3.B SHALLOW DIVER CORE
- 2.D WATER COLUMN GRAB SAMPLE
- R7B NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

GEODEIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983



**Islander East** Pipeline Company  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-5-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 9 of 21
DWG. NO. Sheet 108 OF 120	REV D

04-25-03 8:29 01138/PJ/S 6 K.M.A.



LONG ISLAND SOUND

STA 492+00.00

90

90

92

92

92

VC-10J

FLOW

S 23° 27' 43" W

STA 544+00.00

PLAN

NOTES

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393)
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- 24 WATER DEPTH CONTOUR
- SHELLFISH LEASE BOUNDARY
- VIBRATORY CORE LOCATION
- GRAB SAMPLE LOCATION
- 11.D TEST BORING
- MOORED HYDRO ARRAY
- SHALLOW DIVER CORE
- WATER COLUMN GRAB SAMPLE
- NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983



04-25-03 B-31 01130/PJ/JS & K.M.A

**Islander East** Pipeline Company  
ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

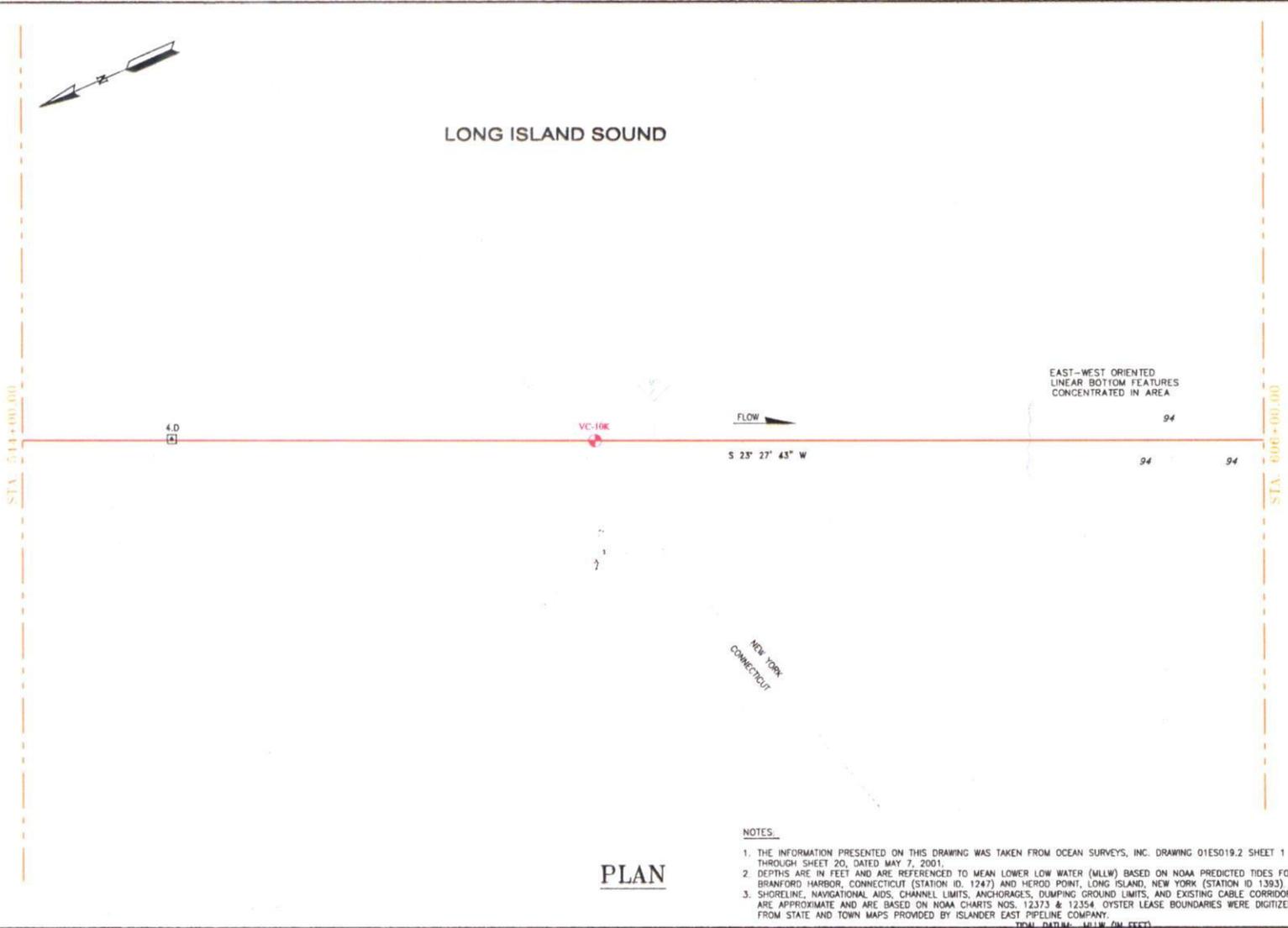
NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	
REVISIONS					

TIDAL DATUM: MLLW (IN FEET)  
HTL: 7.53  
MHW: 5.73  
MLW: 0.23

PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-5-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 10 of 21
DWG. NO. Sheet 109 of 120	REV D

# LONG ISLAND SOUND



### LEGEND

- BEDROCK (BASEMENT ROCK) EXPOSED ON SEAFLOOR
- COARSE GLACIAL TILL (BOULDERS, COBBLES, GRAVEL & SAND) EXPOSED ON THE SEAFLOOR
- COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- MEDIUM TO COARSE GRAINED SEDIMENTS (MOST LIKELY COARSE SAND, GRAVEL, FINE GRAINED SEDIMENTS AND/OR SHELL FRAGMENTS)
- MEDIUM GRAINED SEDIMENTS (MOST LIKELY SAND, FINE GRAINED SEDIMENTS AND/OR SHELLS AND SHELL FRAGMENTS)
- FINE GRAINED SEDIMENTS (FINE SAND, SILT, CLAY, SHELLS AND SHELL FRAGMENTS)
- DARK SIDE SCAN SONAR RETURNS
- WATER DEPTH CONTOUR
- OYSTER LEASE BOUNDARY
- VC-10K VIBRATORY CORE LOCATION
- 7A GRAB SAMPLE LOCATION
- 11.D TEST BORING
- 1A MOORED HYDRO ARRAY
- 3.B SHALLOW DIVER CORE
- 2.D WATER COLUMN GRAB SAMPLE
- R'B NAVIGATIONAL BUOY MARKER
- INACCESSIBLE BY SURVEY VESSEL
- MILE POST (APPROXIMATE)

24 WATER DEPTH CONTOUR

OYSTER LEASE BOUNDARY

VC-10K VIBRATORY CORE LOCATION

7A GRAB SAMPLE LOCATION

11.D TEST BORING

1A MOORED HYDRO ARRAY

3.B SHALLOW DIVER CORE

2.D WATER COLUMN GRAB SAMPLE

R'B NAVIGATIONAL BUOY MARKER

INACCESSIBLE BY SURVEY VESSEL

MILE POST (APPROXIMATE)

GEODETIC INFORMATION  
UNIVERSAL TRANSVERSE MERCATOR (FEET), ZONE 18  
NORTH AMERICAN DATUM 1983

500' 0 500'  
250' 250'  
SCALE IN FEET

### NOTES:

1. THE INFORMATION PRESENTED ON THIS DRAWING WAS TAKEN FROM OCEAN SURVEYS, INC. DRAWING 01ES019.2 SHEET 1 THROUGH SHEET 20, DATED MAY 7, 2001.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW) BASED ON NOAA PREDICTED TIDES FOR BRANFORD HARBOR, CONNECTICUT (STATION ID. 1247) AND HEROD POINT, LONG ISLAND, NEW YORK (STATION ID 1393).
3. SHORELINE, NAVIGATIONAL AIDS, CHANNEL LIMITS, ANCHORAGES, DUMPING GROUND LIMITS, AND EXISTING CABLE CORRIDORS ARE APPROXIMATE AND ARE BASED ON NOAA CHARTS NOS. 12373 & 12354. OYSTER LEASE BOUNDARIES WERE DIGITIZED FROM STATE AND TOWN MAPS PROVIDED BY ISLANDER EAST PIPELINE COMPANY.

### PLAN

**Islander East**  
Pipeline Company

ISLANDER EAST PIPELINE COMPANY, L.L.C.  
454 EAST MAIN STREET, ROUTE 1  
BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
D	4-25-03	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
C	1-23-02	FOR CLIENT REVIEW	K.M.A.	J.H.E.	
B	1-3-02	FOR CLIENT REVIEW	G.J.D.	J.H.E.	
A	12-5-01	PRELIMINARY	K.M.A.	J.H.E.	

REVISIONS

TOTAL DATUM - MLLW (IN FEET)

HTL: 7.53  
MHW: 5.73  
MLW: 0.23

**PROPOSED 24" PIPELINE INSTALLATION  
FROM BRANFORD, CONNECTICUT  
TO LONG ISLAND, NEW YORK**

DRAWN BY: K.M.A.	CHECKED BY: J.H.E.
DATE: 12-5-01	APPROVED BY:
SCALE: AS SHOWN	SHEET: 11 of 21
DWG. NO. Sheet 110 of 120	REV D

04-25-03 13.14 01139/PJ/S 6 K.M.A.

## **APPENDIX C**

### **HDD SEGMENT**

From DEP R. 7 and 93

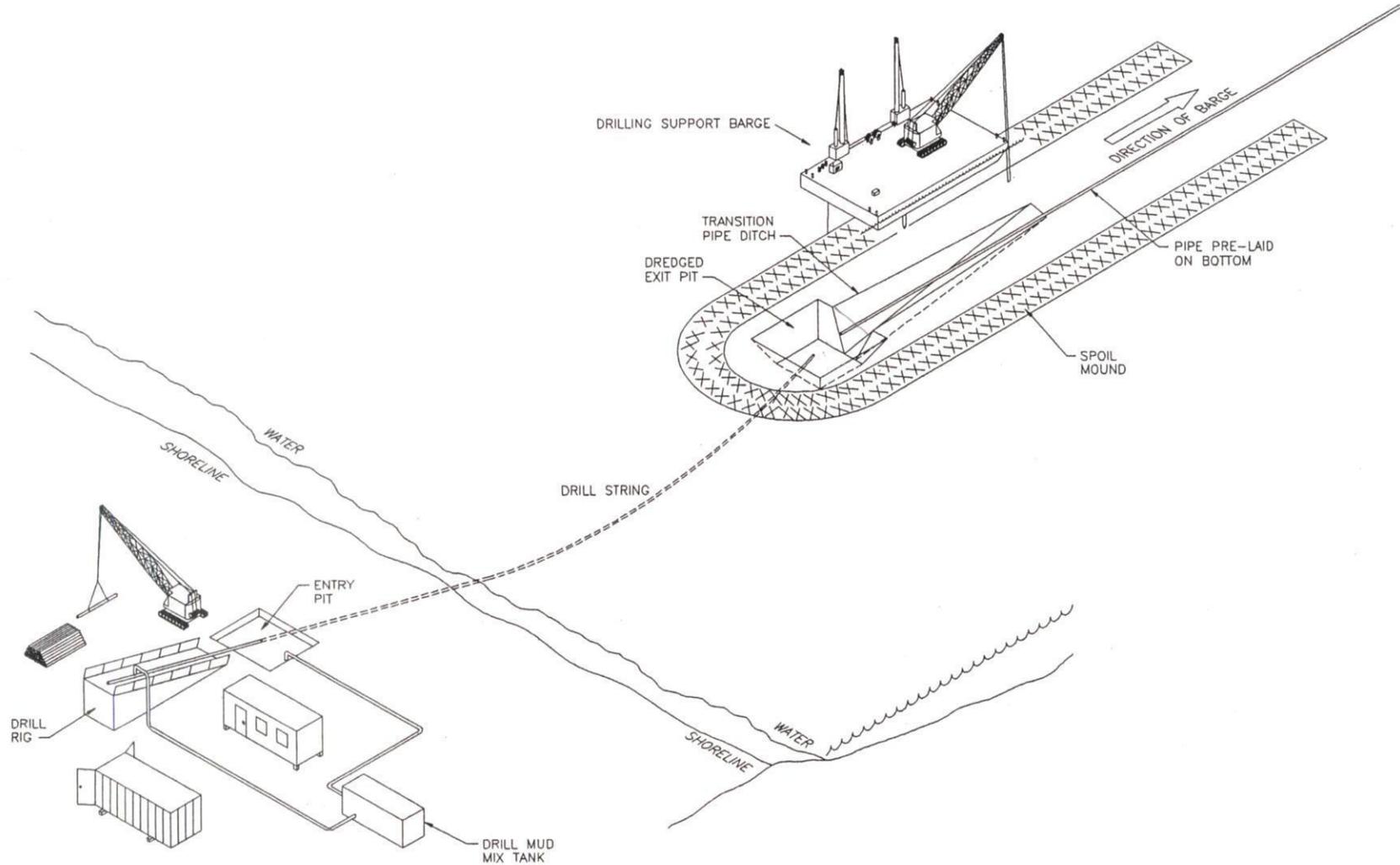
# ***HDD LAYOUT: SUPPORT VESSELS***



Set-up requirements of  
200'-300'

# DIRECTIONAL DRILLING SHORE TO WATER (GENERAL LAYOUT)

NOT TO SCALE



Sheet 90 of 120

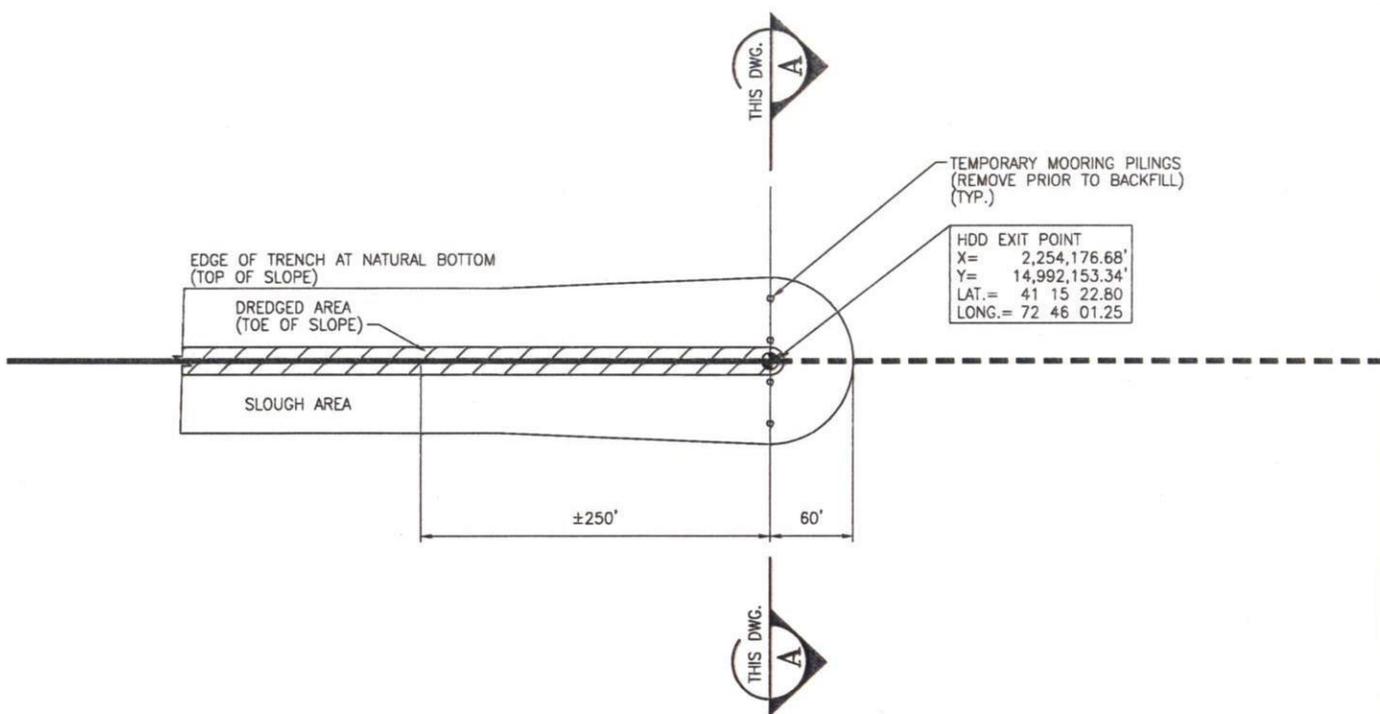
**Islander East**  
Engineering & Construction  
 ISLANDER EAST PIPELINE COMPANY, L.L.C.  
 454 EAST MAIN STREET, ROUTE 1  
 BRANFORD, CONNECTICUT

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
B	1-23-02	FOR COMMENT		K.M.A.	J.H.E.
A	1-3-02	PRELIMINARY		K.M.A.	J.H.E.
REVISIONS					

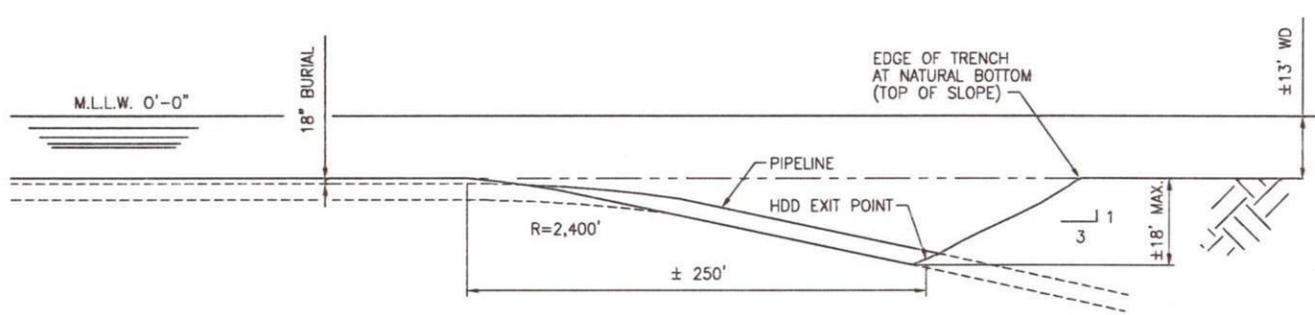
LONG ISLAND SOUND  
 TYPICAL DIRECTIONAL DRILLING  
 SHORE TO WATER

DRAWN BY: K.M.A.	CHK'D. BY: J.H.E.
DATE: 12-31-01	APPRV. BY:
DWG. NO. SK-4	REV B

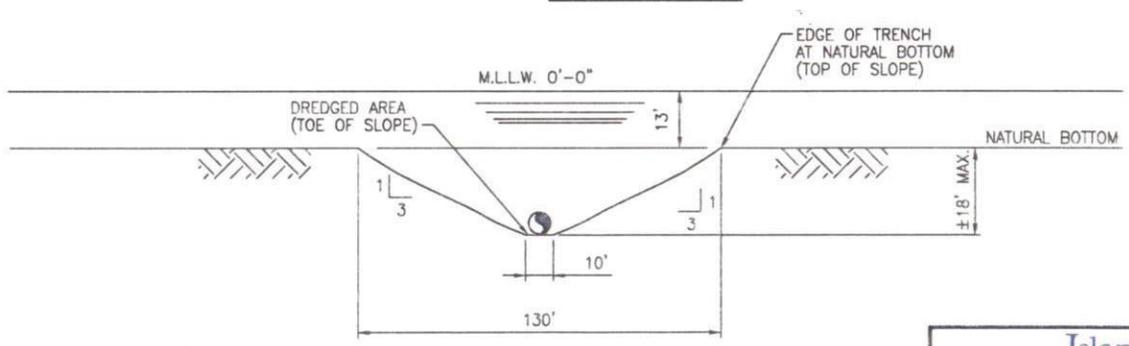
01-17-02 16:18 01139\SK.dwg 4 K.M.A.



**PLAN**



**PROFILE**



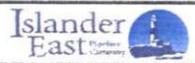
**SECTION**

SCALE: N.T.S.

THIS DWG. A

- NOTES:
- VOLUME OF DREDGED AREA ± 6,000 CU. YDS.
  - EXCAVATED SPOIL WILL BE PLACED ON BARGES

NO.	DATE	DESCRIPTION	BY	CHK'D.	APPRV.
H	6-20-03	REVISED DESCRIPTION	K.M.A.	J.H.E.	
G	6-10-03	REVISED DESCRIPTION	K.M.A.	J.H.E.	
F	3-12-03	REMOVED SPOIL MOUNDS	K.M.A.	J.H.E.	
E	8-23-02	ADDED COORDINATES	J.E.F.	J.H.E.	
REVISIONS					

  
**Islander East**  
Engineering Company  
 ISLANDER EAST PIPELINE COMPANY, L.L.C.  
 454 EAST MAIN STREET, ROUTE 1  
 BRANFORD, CONNECTICUT

**LONG ISLAND SOUND  
NEARSHORE CONNECTICUT  
DRILLED CROSSING EXIT POINT**

DRAWN BY: K.M.A.    CHK'D. BY: J.H.E.  
 DATE: 1-2-02    APPRV. BY:

DWG. NO. **SK-10**

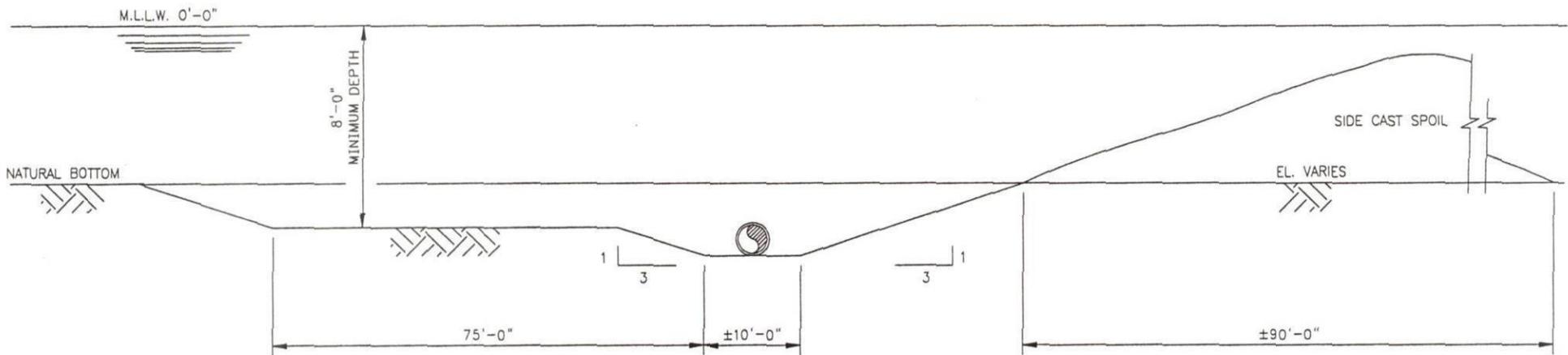
REV H

06-20-03 12:38 011391 SK.dwg 12 H.M.A.

**APPENDIX D**

**FLOTATION TRENCH**

From DEP R. 7



## TYPICAL FLOTATION TRENCH CROSS-SECTION

SCALE: N.T.S.

NOTE: THIS TRENCH REQUIRED IN SHALLOW AREAS TO ACHIEVE MINIMUM BARGE FLOTATION DEPTH OF 8 FEET.



B	1-23-02	FOR COMMENT	K.M.A.	J.H.E.
A	1-3-02	PRELIMINARY	K.M.A.	J.H.E.
NO.	DATE	DESCRIPTION	BY	CHK'D. APPRV.
REVISIONS				

LONG ISLAND SOUND  
TYPICAL FLOTATION TRENCH

DRAWN BY: K.M.A.	CHK'D. BY: J.H.E.
DATE: 1-1-02	APPRV. BY:
DWG. NO. SK-7	REV B

**APPENDIX E**

**TASKFORCE TECHNICAL  
PRESENTATIONS**

# The Institute for Sustainable Energy

At Eastern Connecticut State University

## Presentations

[HOME](#) [WELCOME](#) [ABOUT US](#) [EDUCATION](#) [ENERGY SOLUTIONS](#) [ENERGY INFORMATION](#) [POLICY](#)

Technical Presentations  
Task Force/Working Group  
Executive Order 26, Public Act 02-95

**May 17, 2002**  
**Task Force/Working Group**  
**Organizational Meeting**

Commissioner Donald W. Downes,  
Department of Public Utility Control

Commissioner Arthur J. Rocque, Jr.,  
Department of Environmental Protection

Joel M. Rinebold, *Executive Director*  
Institute for Sustainable Energy

Overview and Intent of [Executive Order 26](#)

**June 6, 2002**  
**Workshop Training**

Tom Kiley  
New England Gas Association

Craig Kazin  
ISO New England

Betsy Wingfield  
Connecticut DEP

Provided information regarding electric and gas dispatch, market factors, rate design and system design

Provided information regarding environmental and natural resource criteria relevant to decision-making processes for energy related facilities including activities in or affecting Long Island Sound

**Public Input:**

June 10	Community of Norwalk Public Hearing
June 11	Community of Clinton Public Hearing
June 12	Community of Hartford Public Hearing
June 13	Community of Danbury Public Hearing
June 25	Community of Bridgeport Public Hearing

**July 8, 2002****Investigation of habitat and oyster beds**

John Volk Department of Agriculture	Aquaculture
John Curtis Department of Agriculture	Aquaculture
Mike Ludwig National Marine Fisheries Service	Marine Fisheries

**July 16, 2002****Investigation of fisheries and ecological habitat**

Milan Bull Connecticut Audubon	Habitat
Rich Jacobson Connecticut DEP	Riparian buffers/fisheries

**July 18, 2002****Energy Issues Presentation**

Senator Donald Williams Representative Jessie Stratton	Overview & intent of <a href="#">Public Act 02-95</a>
Attorney General Richard Blumenthal	Regional needs
Consumer Counsel Mary Healey	Consumer Issues
Harold W. Borden PSEG Power	Generation
Chris James Connecticut DEP	<a href="#">Air Permitting for Distributed Generation (252 KB) (PDF)</a>

Joel Gordes Solar Design Service	Security
Dan Sosland Environment Northeast	Conservation and Load Management
Charlotte Pyle, PhD., USDA Natural Resources Conservation Service	Vernal Pools, Landscape Fragmentation, Invasive Species
David Small Metropolitan District Commission	Massachusetts ROW Management
Dr. Mark Mitchell Connecticut Environmental Justice Coalition	Environmental Justice
Cynthia Jennings Attorney at Law	Environmental Equity
David Brown, ScD. Environment & Human Health Inc.	Human Health Concept

**September 4, 2002  
(Joint Task Force/Working Group)**

Cindy Jacobs Department of Public Utility Control	Role of the Department of Public Utility Control
Craig Kazin, ISO New England Rich Kowalski, ISO New England	<a href="#">ISO-NE Electric Transmission Planning for Connecticut and New England, and forecasting(250 KB) (PDF)</a>
Richard Soderman, CL&P Bruce Blakely, CL&P	<a href="#">Electric Use Forecasting (1.38 MB) (PDF)</a>
S. Derek Phelps, Executive Director Connecticut Siting Council (CSC)	Jurisdiction of the CSC, and work levels

**September 4, 2002  
(Task Force)**

Randy Mathura  
Federal Energy Regulatory Commission

[Gas Pipeline Review and Certification Process](#)  
(427 KB) (PDF)

Eric Johnson, ISO New England  
Rich Kowalski, ISO New England

Status of transmission project and proposals

**September 10, 2002  
(Working Group)**

Walter Zenger  
EPRI

[Cable technologies and land-based applications](#)  
(895 KB) (PDF)

John Engelhardt  
USI

[USI experience and installation issues](#)  
(676KB) (PDF)  
[additional material](#) (928KB) (PDF)

Greg Sullivan  
NStar

Boston Edison lines and experience

John Miller  
TransEnergie

[Direct current experience in Australia](#)  
(931 KB) (PDF)  
[additional material](#) (2.53 MB) (PDF)

Mike McCarthy  
American Superconductor

[Future cable technologies](#)  
(295 KB) (PDF)

**September 12, 2002  
(Task Force)**

Ed Gonzales  
Duke Energy Company

Natural Gas Pipeline Installations

Dave Warman  
Iroquois Gas Transmission System

Long Island Sound installation and experience

John Miller  
TransEnergie

Electric Transmission Line Installations

Roger Zaklukiewicz  
CL&P

Status of existing 138-kV line

**September 18, 2002  
(Working Group)**

Michael Smalec  
SNG/CNG

Overview of Distributed Generation (DG)

John Troccioli  
UTC Fuel Cells

Fuel Cell Technology

Jim Watts  
Ingersoll-Rand

[Microturbine Technology](#)  
(3.28) MB (PDF)

Janet Besser  
Lexecon

[Issues and Implementation of DG](#)  
(132 KB) (PDF)

John Mutchler  
CL&P

[CL&P Programs-C&LM](#)  
(75KB)(PDF)  
[additional material \(65KB\)\(PDF\)](#)

Joseph Hebert  
United Illuminating

[UI Programs-Conservation & Load Mngmt.](#)  
(214 KB) (PDF)

Cindy Jacobs, DPUC  
Chris James, DEP

New England Demand Response Initiative  
( 1.98 MB) (PDF)

Craig Kazin  
ISO New England

ISO New England Demand Response  
Program

Devang Patel  
NXYGEN

[Load Dispatch](#)  
(4.98 MB) (PDF)

**September 19, 2002**  
**(Task Force)**

John Volk  
Department of Agriculture

Environmental Review-aquaculture

David Simpson  
Connecticut DEP Fisheries

[Environmental Review-marine fisheries](#)  
(2,031 KB) (PDF)

Mark Johnson  
Connecticut DEP Fisheries

Dr. Frank Bohlen  
University of Connecticut

[Sedimentation Modeling \(10,502 KB\)](#)  
(PDF)

Mike Ludwig  
National Marine Fisheries Service

[Environmental Review-essential fish habitat](#)  
(558 KB) (PDF)

**October 1, 2002**  
**(Joint Task Force/Working Group)**

Rich Kowalski  
ISO-New England

[Regional Transmission Expansion Plan](#)  
(RTEP)  
(597KB)(PDF)

S. Derek Phelps, Executive Director  
Connecticut Siting Council

Application requirements, public  
need/benefit and cumulative environmental  
effects

Scott Miller  
FERC, Office of Markets, Tariffs, and  
Rates

[Standard Market Design \(531 KB\) \(PDF\)](#)

**(Working Group)**

Robert Carberry

[Overhead transmission line clearance](#)

CL&amp;P

[considerations \(558 KB\) \(PDF\)](#)

Robert Jontos  
Land-Tech Consultants

[Potential environmental impacts associated with utility construction \(644 KB\)\(PDF\)](#)  
[additional material \(645 KB\) \(PDF\)](#)

**(Task Force)**

Robert Duke  
The Surety Association of America

Natural resource performance bonds

S. Derek Phelps, Executive Director  
Connecticut Siting Council

Statutory authority to impose bonding requirements

Betsey Wingfield  
DEP

Statutory authority to impose bonding requirements; bonding requirements for directional drilling

**October 17, 2002**  
**(Joint Task Force/Working Group)**

David Schlissel, Synapse Energy Economics Inc  
Paul Peterson, Synapse Energy Economics Inc.

[Public Need Standard \(135 KB\)\(PDF\)](#)

Susan Tierney  
Lexicon Inc.

[Public Benefit Standard \(231 KB\) \(PDF\)](#)

Paul DeCotis, Executive Director  
New York State Energy Research and Development Authority

[Regional Energy Issues \(300 KB\)\(PDF\)](#)

**October 30, 2002**  
**(Joint Task Force/Working Group)**

Thomas Kirk, Wisvest

[Electric generation \(markets\) \(914 KB\)\(PDF\)](#)

David Damer, Wisvest

[Electric generation \(environment\) \(914 KB\)\(PDF\)](#)

Gabe Stern  
 CT Municipal Electrical Energy  
 Cooperative  
 Dr. Gary Ginsberg  
 Department of Public Health

Electric generation

Toxicity of insulating fluids

**October 30, 2002  
 (Task Force)**

Dr. Ellen Cool  
 Levitan & Associates, Inc.

[Review of natural gas pipeline infrastru](#)  
[\(170 KB\)\(PDF\)](#)

**November 6, 2002  
 (Joint Task Force/Working Group)**

Mark DeCaprio  
 DEP

Environmental risk assessment and clean-u  
 of  
 insulating fluids

Marika Tatsutani  
 Northeast States for Coordinated Air  
 Use  
 Management

[Regional air issues](#)  
[\(573 KB\)\(PDF\)](#)

**November 6, 2002  
 (Joint Task Force)**

David Blatt  
 DEP  
 Ralph Lewis  
 State Geologist

[Submerged lands leasing](#)  
[\(2.53 MB\)\(PDF\)](#)

Geology of Long Island Sound

**November 13, 2002  
 (Task Force)**

Roger Zaklukiewicz  
 CL&P

Common utility corridor (electric  
 transmission  
 cables)

Edward Gonzales, Duke Energy  
 Joe Reinemann, Islander East  
 Dave Warman, Iroquois Gas

[Common utility corridor \(natural gas  
 pipelines\)-\(516KB\) \(PDF\)](#)

Dr. Mathew Cordaro  
Center for Management Analysis  
Long Island University

Feasibility study on re-powering KeySpan'  
Long Island electric generating plants

**November 21, 2002  
(Joint Task Force/Working Group)**

Chairman Donald W. Downes, DPUC  
Commissioner Arthur J. Rocque, Jr., DEP

Presentation on Planning Authority

**November 21, 2002  
(Working Group)**

Tom Michelman  
Xenergy

Status of Energy Audit for the City of  
Norwalk

**November 21, 2002  
(Task Force)**

Larry Williams  
Robert Granfield

Common utility corridor (fishing operations)

**November 25, 2002  
(Joint Task Force/Working Group)**

John Plunkett  
Optimal Energy, Inc.

[Integrating conservation and load management  
in transmission planning \(267 KB\) \(PDF\)](#)

**November 25, 2002  
(Working Group)**

Robert Forrester  
Woodland Coalition  
Dr. Richard Stein  
Committee for Responsible Energy

Application process and alternatives

**November 25, 2002  
(Task Force)**

Joe Wyzik  
El Paso

[Presentation on the proposed Blue Atlantic  
project \(2,145 KB\) \(PDF\)](#)

**January 22, 2003  
(Task Force)**

James Dedes  
Normandeau Associates, Inc.

[Inventory of environmental data and identification of data gaps \(162 KB\) \(PDF\)](#)

**February 5, 2003  
(Task Force)**

Dr. Ellen Cool  
Levitan & Associates

Discussion of energy management in New York and New England.

**February 28, 2003  
(Task Force)**

Attorney General Richard Blumenthal

Discussion of legal issues.

Dan Zaweski  
Long Island Power Authority

[Discussion of the LIPA Energy Plan and distributed generation programs on Long Island New York \(976 KB\) \(PDF\)](#)

David Manning  
KeySpan Corporation

[Electric Generation and natural gas supply on Long Island \(344 KB\) \(PDF\)](#)

Tom Kiley  
Northeast Gas Association

[Regional natural gas supply \(1,971 KB\) \(PDF\)](#).

**March 6, 2003  
(Task Force)**

Ann Rodney  
U.S. Environmental Protection Agency

[Discussion of EIS for dredge disposal sites in Long Island Sound \(3,324 KB\) \(PDF\)](#)

Richard Kay  
University of Connecticut  
School of Law

Discussion of commerce clause.

**March 12, 2003  
(Task Force)**

DavidHopp

Effects of pipeline installation on shellfishing operations.

Larry Williams

James Dedes  
Normandeau Associates

Status of the work by Levitan/Normandeau on the environmental portion of the scope of work

**March 25, 2003  
(Task Force)**

First Selectman Anthony DaRos  
Town of Branford

Discussion of intervenor funds

Leah Lopez  
Save the Sound

Discussion of intervenor funds

Dave Warman  
Iroquois Gas Transmission System, L.P.

[Environmental review and permitting of the Eastchester Extension project \(11,693 KB\) \(PDF\)](#)

Kent Sanders  
New York State  
Department of Environmental Conservation

[Environmental review and permitting of the Eastchester Extension project \(2,851 KB\) \(PDF\)](#)



[Web Master](#) | [Search](#) | [Disclaimer](#) | [Site Map](#)

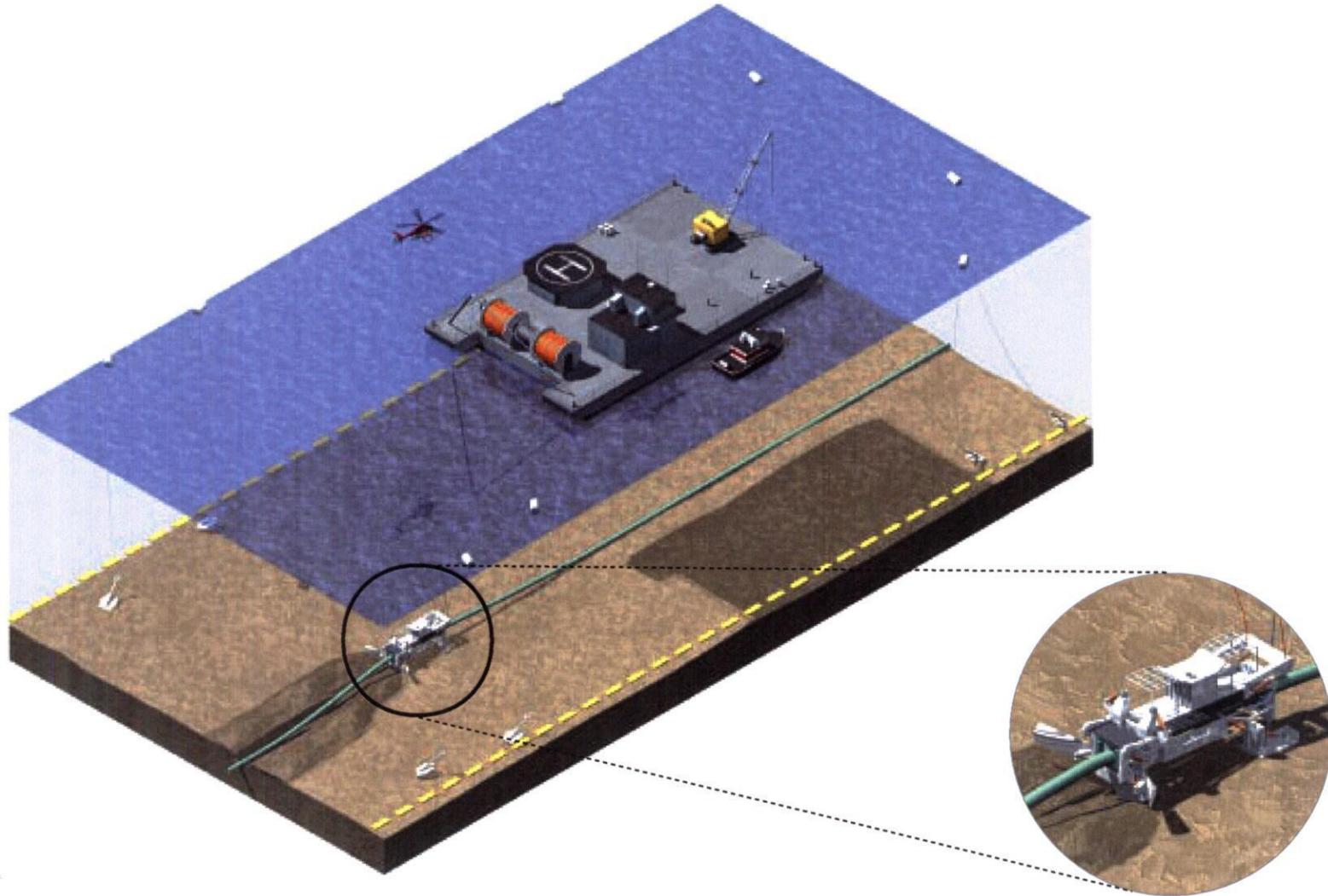
OFFICE: Foster Building, 670-676 Main Street, 4th Floor, Willimantic CT 06226  
MAILING ADDRESS: 83 Windham Street, Willimantic CT 06226  
Phone (860) 465-0251 Fax: (860) 465-0261



**APPENDIX F**

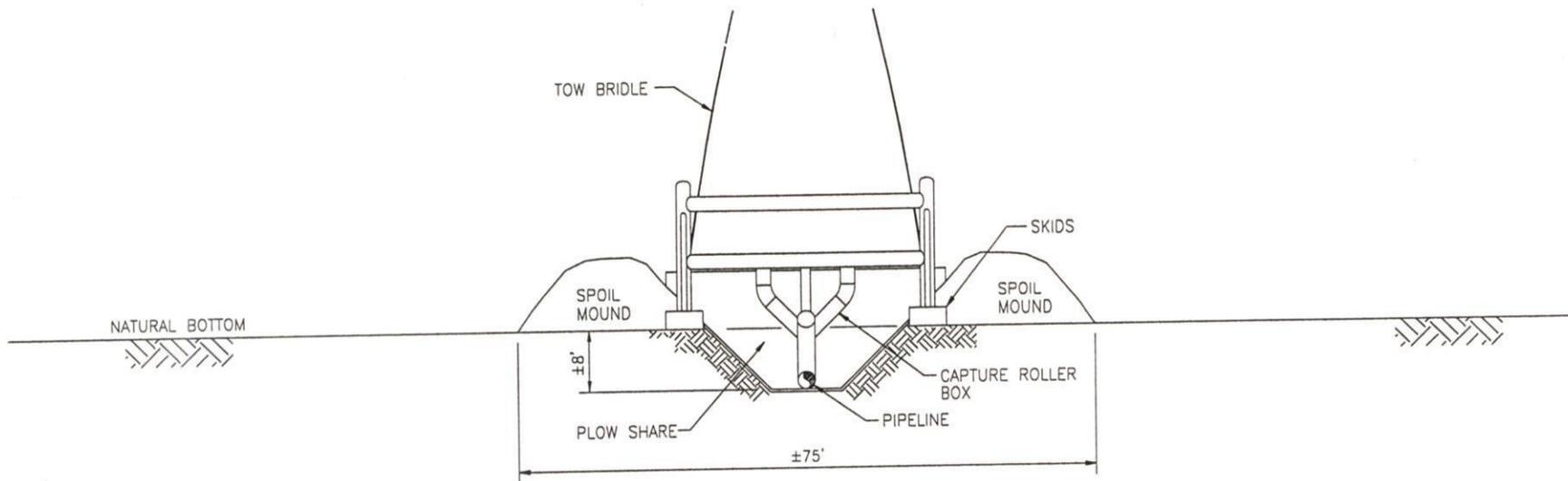
**PLOW SEGMENT**

From DEP R. 7



**Figure 6**  
**Typical Offshore Pipeline Bury Barge (Subsea Plow)**

DATE: 05/23/01
REVISED: 08/23/01
SCALE: NA
DRAWN BY: JRFLANNERY
m:\clients\islander\avproj\2001\05\vnulepics.apr



TYPICAL PIPE TRENCH CROSS-SECTION  
BY TOWED PLOW LOWERING METHOD  
 NOT TO SCALE

Sheet 11 of 120



B	1-23-02	FOR COMMENT	K.M.A.	J.H.E.
A	1-23-02	PRELIMINARY	K.M.A.	J.H.E.
NO.	DATE	DESCRIPTION	BY	CHK'D. APPRV.
REVISIONS				

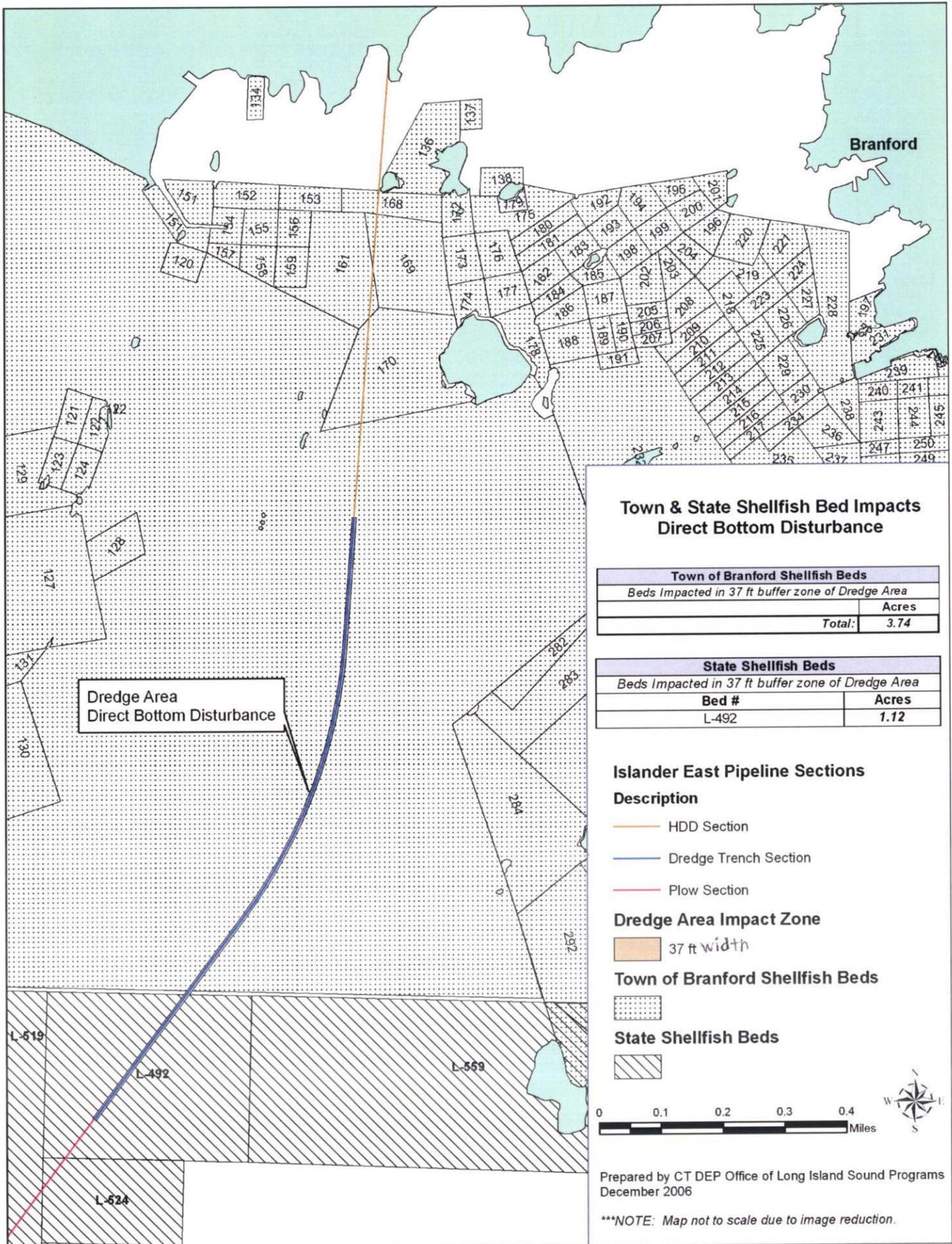
LONG ISLAND SOUND  
 TOWED PLOW METHOD  
 TYPICAL PIPE TRENCH

DRAWN BY: K.M.A.	CHK'D. BY: J.H.E.
DATE: 1-17-02	APPRV. BY:
DWG. NO. SK-12	REV A

01-17-02 16:59 01139\SK.dwg 1 K.M.A.

**APPENDIX G**

**DIRECT BOTTOM  
DISTURBANCE**



Branford

**Town & State Shellfish Bed Impacts  
Direct Bottom Disturbance**

Town of Branford Shellfish Beds	
Beds Impacted in 37 ft buffer zone of Dredge Area	
	Acres
<b>Total: 3.74</b>	

State Shellfish Beds	
Beds Impacted in 37 ft buffer zone of Dredge Area	
Bed #	Acres
L-492	1.12

**Islander East Pipeline Sections**

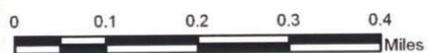
- Description**
- HDD Section
  - Dredge Trench Section
  - Plow Section

**Dredge Area Impact Zone**

37 ft width

**Town of Branford Shellfish Beds**

**State Shellfish Beds**



Prepared by CT DEP Office of Long Island Sound Programs  
December 2006

\*\*\*NOTE: Map not to scale due to image reduction.