SWG-2017-00744

NOV 0 8 2017

San Jacinto Waste Pits Area of Concern
Proposed Pipeline
Workspaces
NWI Wetlands
River/Stream

1:40,000
0 1,500 3,000
Feet

CenterPoint Energy

Figure 1
Site Location Map
Southwest Shipyard Project
Channelview, Harris County, Texas

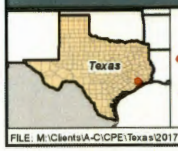
ERM

FILE: M:\Clients\A-C\CPE\Texas\2017\11_CPE_Southwest_Shipyard_CPE_Southwest_Shipyard_SiteLocation_HASP.mxd | REVISED: 11/06/2017 | SCALE: 1:40,000

DRAWN BY: GIS

SWG-2017-00744

NOV 0 8 2017



SUPERFUND
Proposed 4" Pipeline - Bore Method
Pipeline to be Abandoned
Workspaces
Northern Impoundment
Southern Impoundment
NWI Wetlands
River/Stream

1:7,200

0 300 600 Feet

CenterPoint. Energy

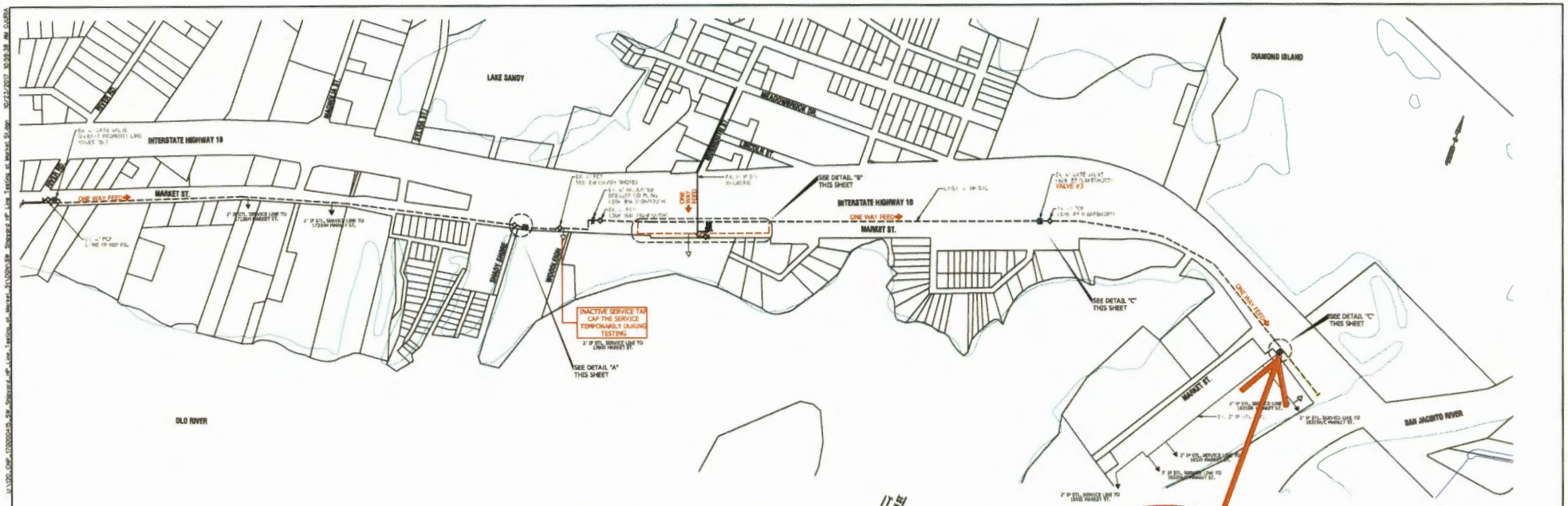
Figure 2
Site Plan
Southwest Shipyard Project
Channelview, Harris County, Texas

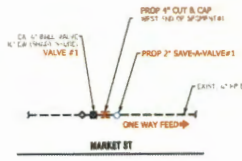
ERM

FILE: M:\Clients\A-C\CPE\Texas\2017\11_CPE_Southwest_Shipyard_CPE_Southwest_Shipyard_SitePlan_HASP.mxd | REVISED: 11/06/2017 | SCALE: 1:7,200 when printed at 11x17

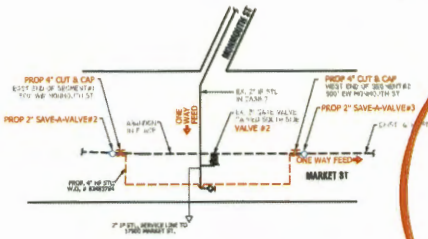
DRAWN BY: GIS

NOV 0 8 2017

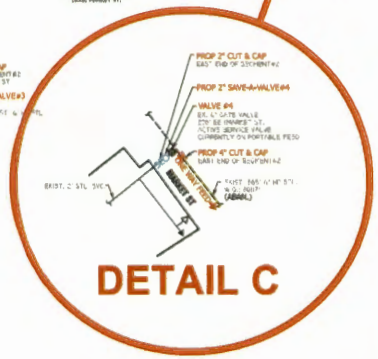




DETAIL A - WEST END OF SEGMENT#1



DETAIL B - EAST END OF SEGMENT#1
WEST END OF SEGMENT#2



DETAIL C

HIGH PRESSURE PIPE SPECS	4" STL, 4.50" OD, 0.156" WT
	API 5L, X-42 (EXISTING)
	API 5L, X-52 (NEW)
SMYS RATING	160 PSIG MAOP
	4" PIPE & FITTINGS (GR B) = 6.7%

LEGEND:
EXIST. 4" HP STL. MAIN FOR TESTING — 7,700 LF
ABAN. 4" HP STL. W.O.: 83736702 — 586 LF

STAKING REQUEST NUMBER: 83736702
G.C.O.: 38566
SUPERIOR W.O.: 83736696

TESTING PROCEDURE: (ACCORDING TO CS-B-1.230)

STEP 1 VERIFY STATUS OF GAS LINES AND SERVICES

1. VERIFY IF THERE ARE EXISTING SERVICES TAPPED INTO THE EXISTING 4"HP LINE. ISOLATE SERVICES AND CUT AND CAP SERVICES AT THE TAP LOCATIONS.

2. VERIFY THAT THE 4" GATE VALVE (VALVE#1) IS FULLY CLOSED.
VERIFY THAT THE 2" GATE VALVE (VALVE#2) IS FULLY CLOSED AND CAPPED SOUTH SIDE
VERIFY THAT THE 4" GATE VALVE (VALVE#3) IS FULLY OPEN
VERIFY THAT THE 2" GATE VALVE (VALVE#4) IS FULLY OPEN

3. CUT AND CAP THE 4" STL HP LINE AT THE LOCATIONS SHOWN IN DETAILS A, B AND C. ABANDON THE MIDDLE SEGMENT AT MARKET & MONMOUTH TO SEPARATE SEGMENT#1 AND SEGMENT#2. ABANDON 565' OF 4" HP STL EAST OF VALVE#4.

STEP 2 RUN SWABS TO DRY THE LINE (SEGMENT#1 AND THEN SEGMENT#2)

4. WITH SWAB, REMOVE AND DISPOSE WATER OR DIRT FROM THE SEGMENT ACCORDING TO CNP STANDARDS AND REGULATIONS.

5. SWAB TO HAVE NO MORE THAN 1/4" PENETRATION, CONTINUE TO LAUNCH SWAB TO CLEAN AND DRY THE LINE.

6. INJECT AIR TO DRY THE LINE UP TO A DEW POINT OF -40 DEG. F.

7. AIR TEST THE LINE TO 240 PSIG (1.5 X MAOP) FOR ONE HOUR. CONTACT ENGINEERING IF TEST DOES NOT HOLD.

8. RELEASE AIR. CUT PIPE ENDS AND TIE-IN TO EXISTING LINES AT LOCATIONS SHOWN ON DETAILS A AND B. NOTE: THE PROPOSED JOB (WO#83483784) CAN BE TIED IN AT THIS POINT.

STEP 3 PURGE GAS INTO THE LINE (SEGMENT#1, NEW PIPING, SEGMENT#2)

9. VERIFY THAT GAS IS FLOWING FROM THE WEST SIDE OF VALVE#1.

10. SLOWLY TURN VALVE #1 OPEN TO INJECT GAS INTO THE SEGMENTS FROM THE WEST END WHILE DISCHARGING AIR AT THE 2" SAVE-A-VALVE#4.

11. WHEN AIR IS COMPLETELY OUT OF THE SEGMENT, TIE-IN THE SERVICE LINE SHOWN IN DETAIL C. CONCLUDE THE PURGE.

12. RESTORE THE TAPS AND PUT THE SERVICES BACK INTO OPERATION.

13. CONFIRM THAT THE 4" GATE VALVE (VALVE#1) IS FULLY OPEN.
CONFIRM THAT THE 4" GATE VALVE (VALVE#3) IS FULLY OPEN.
CONFIRM THAT THE 2" GATE VALVE (VALVE#4) IS FULLY OPEN.

GENERAL DATA TABLE:

PRESSURE:
MAOP: 160 PSIG

PIPELINE:
1,500' OF 4" STL MAIN TO PURGE (SEGMENT#1)
1000' OF 4" STL MAIN TO ABANDON & REPLACE
5,200' OF 4" STL MAIN TO PURGE (SEGMENT#2)

PURGING:
PURGE LOCATION: IN LINE THROUGH VALVE#1
VOLUME TO PURGE: 7.5 MCF
PURGE DURATION: 3 MINUTES

GENERAL NOTES:

1. COORDINATE WITH GAS CONTROL (THOMAS BAKER 713-207-4985), SYSTEM OPERATIONS (DENNIS HUTCHISON 713-967-7196), ENGINEERING (RAILEY LADNER 713-207-4605), SBI (OSCAR JURISA 713-869-3433) PRIOR TO THE START OF THE JOB.
2. FIELD LOCATE AND VERIFY ALL EXISTING FEEDS, MAINS, AND SERVICES.
3. USE GAUGES TO MONITOR AND MAINTAIN FEEDS AND PRESSURES.
4. FIELD VERIFY VALVES AND OPERATE. SERVICE AND RE-STACK VALVES IF NECESSARY.
5. CONTACT ENGINEERING IF ANY CHANGE IS NEEDED TO ANY PROCEDURE OUTLINED ON THIS JOB.
6. KEEP RECORDS AS DETAILED IN CS MANUAL "PRESSURE TESTING" TEST AT NIGHT.

Figure 3
Design Drawing
Southwest Shipyard Project
Channelview, Harris County, Texas

Binkley & Barfield, Inc
consulting engineers
Texas Registration Number F-257

DESIGNED BY: O.JURIA — 713-869-3433
DRAWN BY: CONTRACTOR — CONTRIBUTION:
DATE REVISED: 10/23/2017
PURPOSE AND NECESSITY: TEST A PIPELINE THAT WAS SHUTIN DURING THE STORM AND BRING IT BACK TO SERVICE.

RECOMMENDED BY: — DATE:
APPROVED BY: — DATE:

SOUTHWEST SHIPYARD 4" HP GAS LINE AT MARKET ST (TESTING AND ABANDONMENT)

CenterPoint Energy
Houston Gas Engineering

DRAWN BY: F. ESTRADA
DATE: 10/23/2017
SCALE: 1:200
SHEET: 1 OF 1
DWG NO: ED3 - 171281