



**FLORIDA INLAND NAVIGATION DISTRICT
DREDGED MATERIAL MANAGEMENT
AREA DU-9 EXPANSION
ST. JOHNS COUNTY, FLORIDA**

APPENDIX C
Topographic Survey



**FLORIDA INLAND NAVIGATION DISTRICT
DREDGED MATERIAL MANAGEMENT
AREA DU-9 EXPANSION
ST. JOHNS COUNTY, FLORIDA**

APPENDIX C

2005 DeGrove Surveyors, Inc.
Construction Survey for Dredge Material
Management Area DU-9
Invoice No. W912EP-05-D-001

MAP SHOWING TOPOGRPHIC SURVEY OF

THE IWW DISPOSAL AREA DU-9
LYING IN TOWNSHIP 3 SOUTH, RANGE 29 EAST
ST. JOHNS COUNTY, FLORIDA



US Army Corps
of Engineers
Jacksonville District

SAFETY ON THIS JOB
DEPENDS ON YOU

Description

No. Symbol Zone

DEGROVE SURVEYORS, INC.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Inv. No. W912EP-05-D-001
Date: 2 DECEMBER 2005
D.O. FILE NO. 8A-38, 435
Date: DECEMBER 2005

Designed by:

Dwn by:

Rev by:

Reviewed by:

File name:
g111sh001.DGN

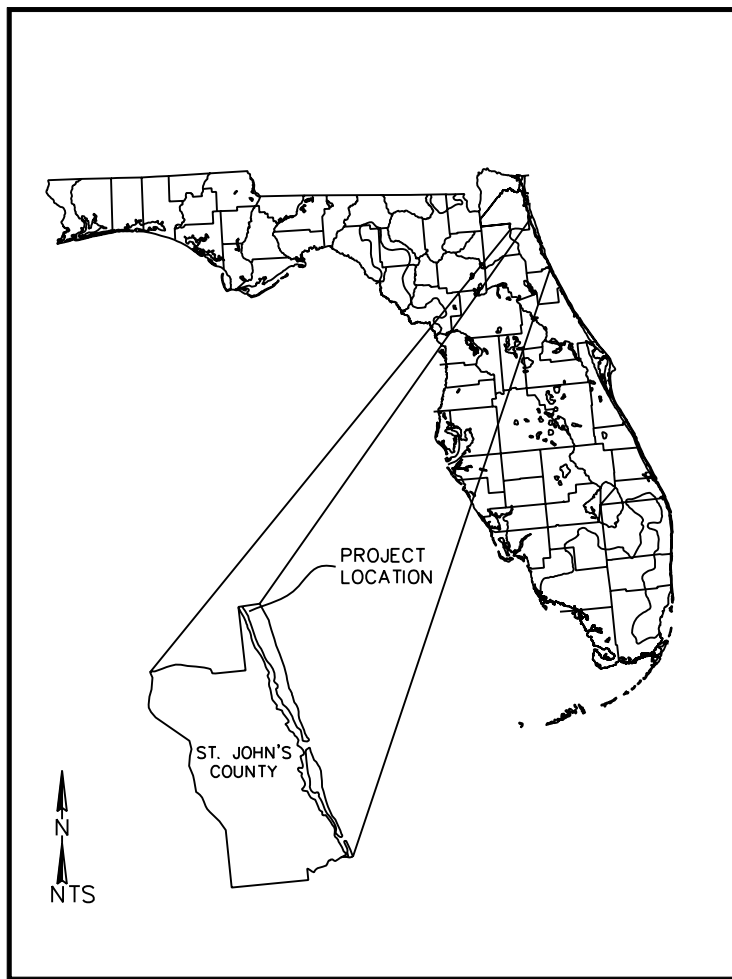
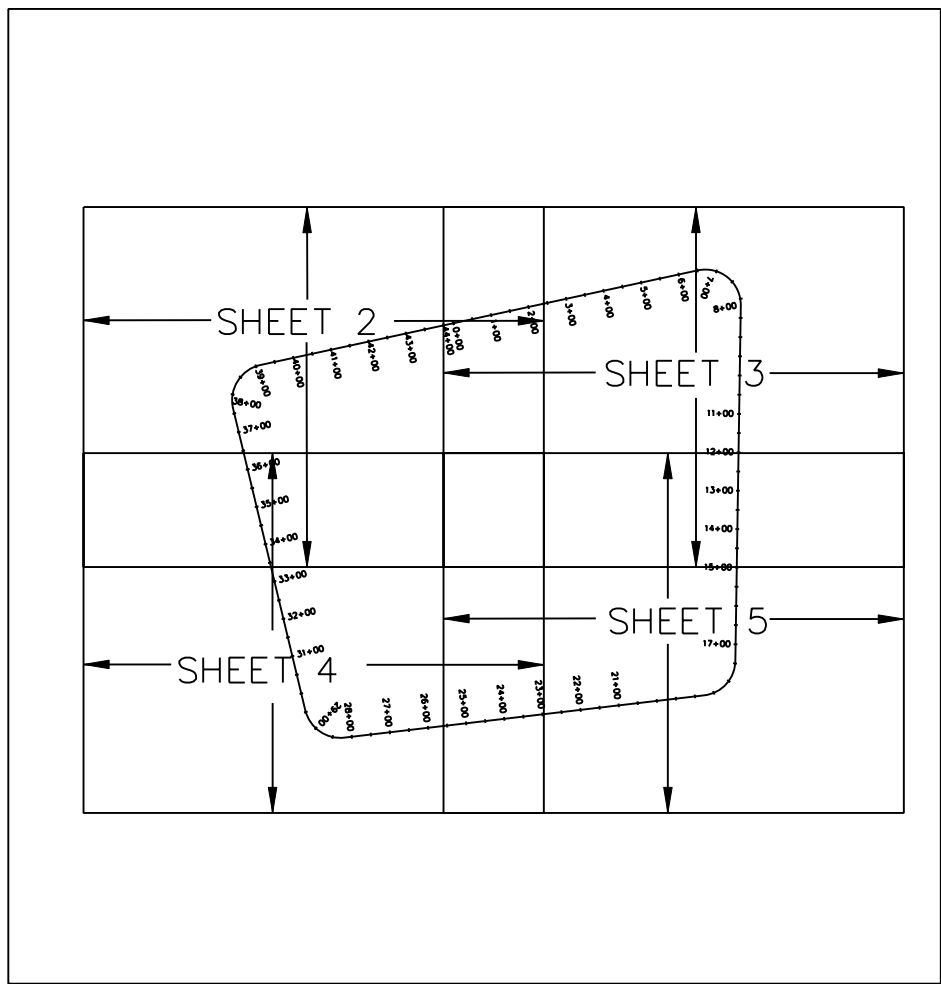
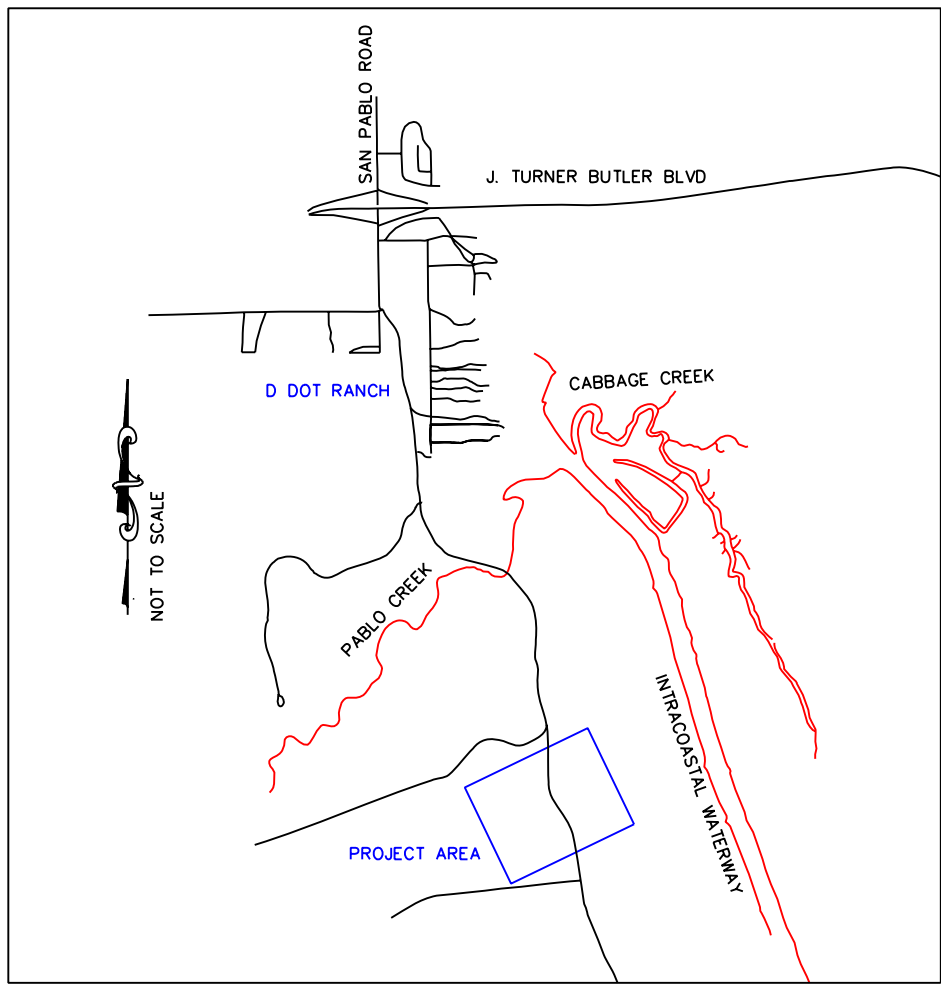
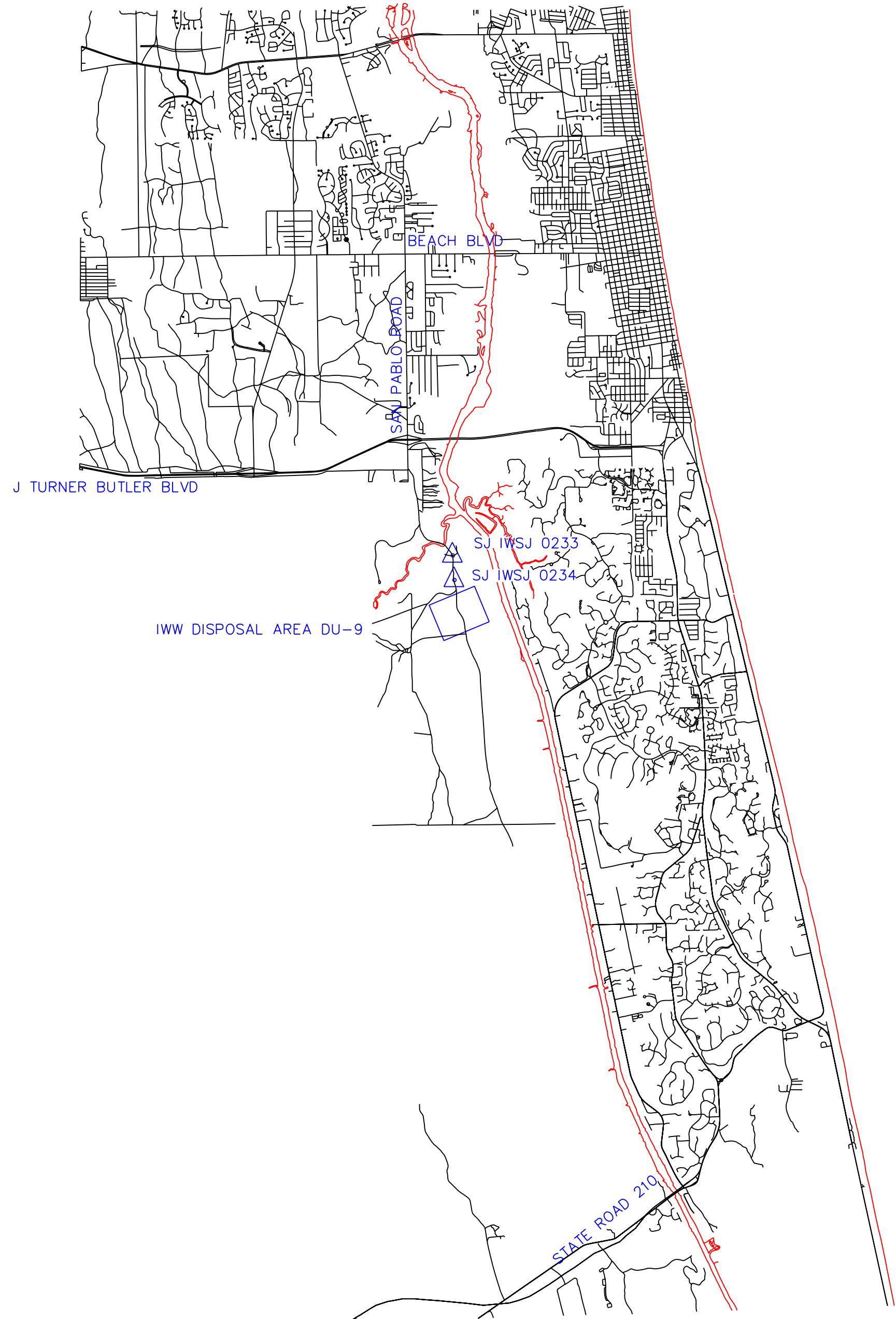
Reference files:
g111brdr1.DGN
g111ctcr1.DGN
g111lctc1.DGN

INTRACOASTAL WATERWAYS JACKSONVILLE TO MELBOURNE
ST. JOHNS COUNTY, FLORIDA

CONSTRUCTION SURVEY
DREDGE MATERIAL MANAGEMENT AREA DU-9

Scale: 1" = 6000'
DRAWING NO.

1 of 5



LOCATION MAP

SHEET INDEX

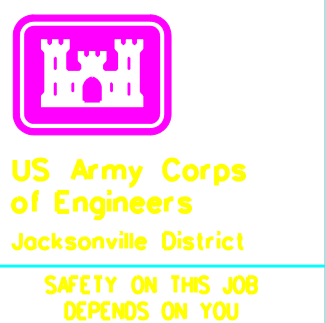
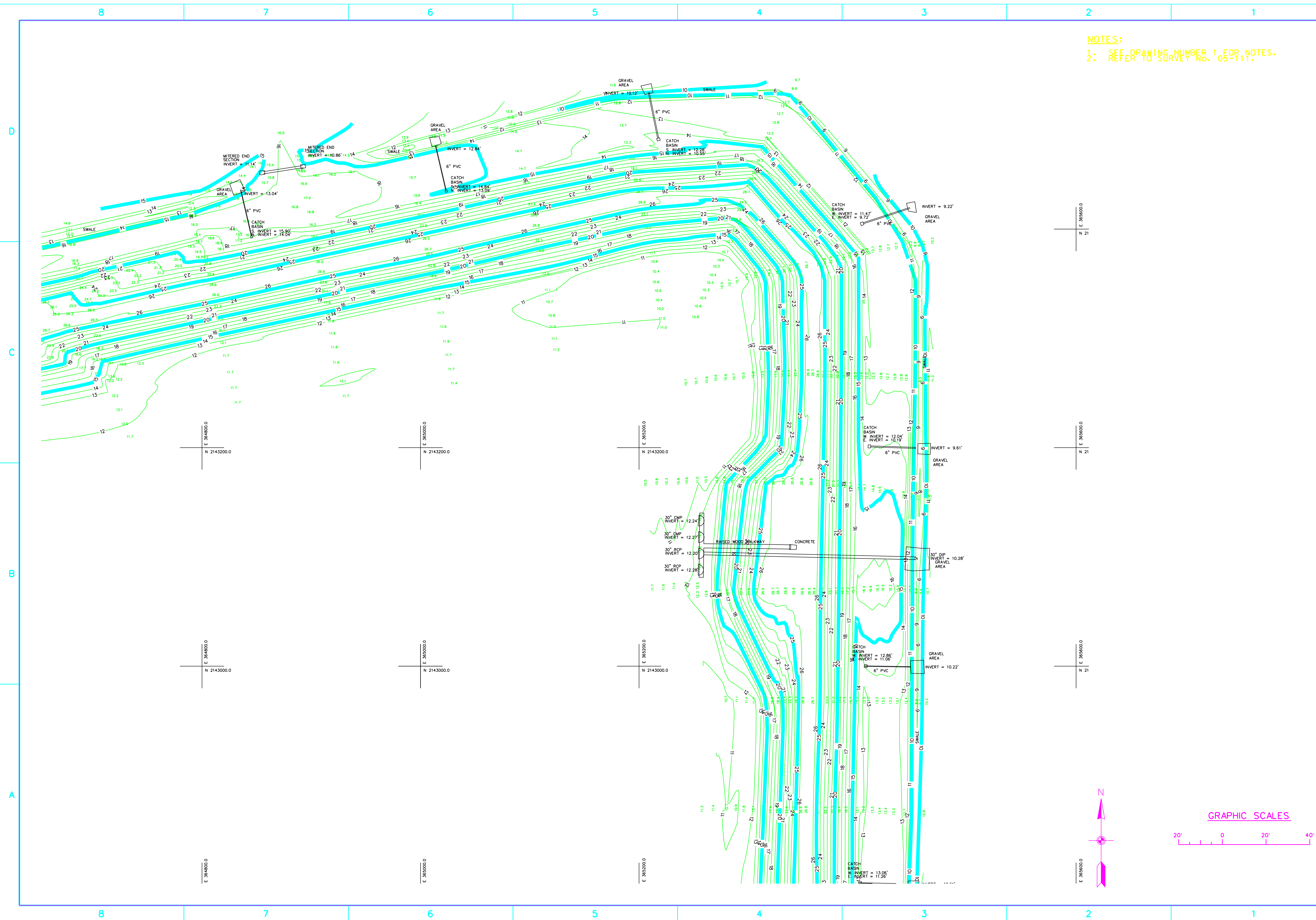
SHEET NO. 1 COVER SHEET
SHEET NO. 2 SURVEY SHEET

SURVEY NOTES

- SURVEY No. 05-111(DEG)
- ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO NAVD 1929.
- THE HORIZONTAL COORDINATES, ARE IN U.S. SURVEY FEET AND ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE AND ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1927...
- SURVEY DATA WAS OBTAINED BETWEEN JULY 2005 AND DECEMBER 2005.
- POSITIONING AND ELEVATIONS WERE OBTAINED WITH TRIMBLE 4800 AND 5700 RTK UNITS.
- PROJECT DATA:
 - A. FIELD BOOKS: No. 145
 - B. COMPUTER FILES: 12-02-05
 - C. DATA COLLECTOR FILES: 7-21-05/12-03-05
- THIS SURVEY IS NOT VALID WITHOUT THE ATTACHED SURVEYOR'S REPORT, DATED DECEMBER 5, 2005.

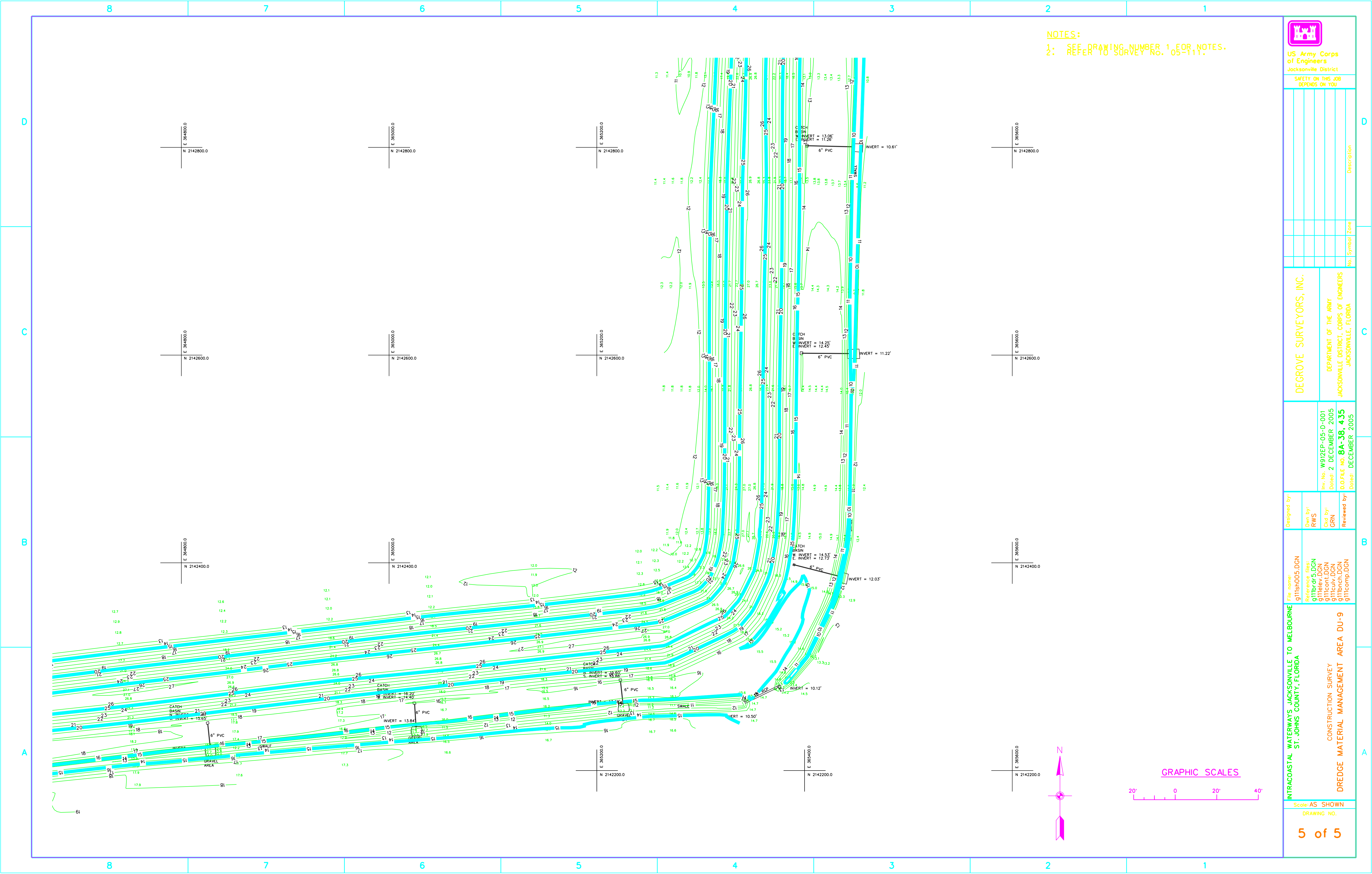
SURVEY CONTROL			
CONTROL POINT	STATE PLANE COORDS, FL. EAST (NAD 1927)		EL. FEET (NAVD 1929)
	EASTING (X) FEET	NORTHING (Y) FEET	
SJ IWSJ 0233	364636.92	2146586.87	8.11
SJ IWSJ 0234	364734.20	2145109.80	11.36

BENCHMARKS			
POINT	STATE PLANE COORDS, FL. EAST (NAD 1927)		EL. FEET (NAVD 1929)
	EASTING (X) FEET	NORTHING (Y) FEET	
SJ IWSJ 0233	364636.92	2146586.87	8.11
SJ IWSJ 0234	364734.20	2145109.80	11.36
SET NAIL & DISK	364837.52	2144536.75	14.53
SET MONUMENT	365416.20	2141858.18	13.87
SET MONUMENT	364225.76	2141760.53	17.06



3 of 5 DRAWING NO. Scale: AS SHOWN	INTRACOASTAL WATERWAYS JACKSONVILLE TO MELBOURNE ST. JOHNS COUNTY, FLORIDA	CONSTRUCTION SURVEY DREDGE MATERIAL MANAGEMENT AREA DU-9	File name: g11hnp003.DGN	Designed by:	DEGREEVE SURVEYORS, INC.						
				Dwn by:							
				Old by:							
				GRN							
				Reviewed by:							
				Inv. No. W912EP-JS-D-001 Date: 2 DECEMBER 2005 D.O.F.I.L. NO. 8A-36, 4 35 Date: DECEMBER 2005	DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA						No Symbol Zone Description

Scale: AS SHOWN
DRAWING NO.
3 of 5

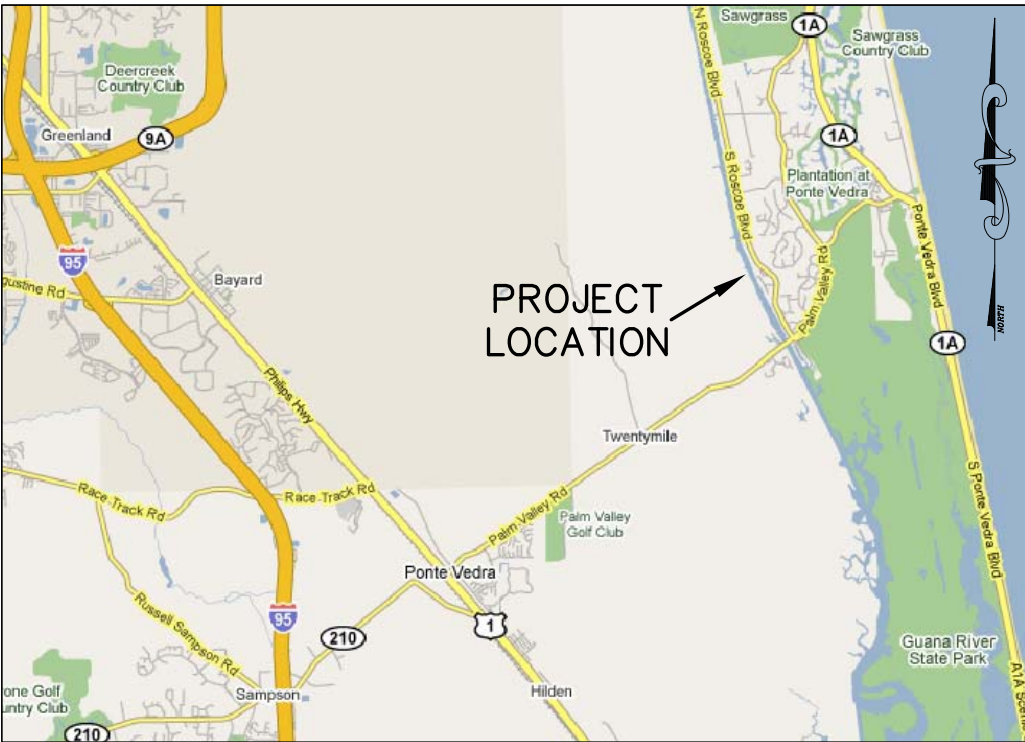




**FLORIDA INLAND NAVIGATION DISTRICT
DREDGED MATERIAL MANAGEMENT
AREA DU-9 EXPANSION
ST. JOHNS COUNTY, FLORIDA**

APPENDIX C

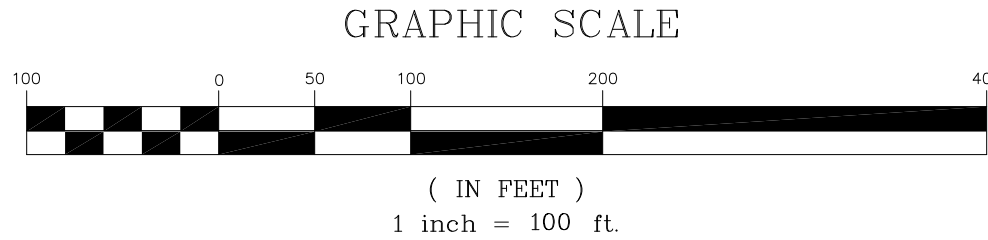
2008 Arc Surveying & Mapping, Inc.
Topographic Survey DU-9 - 60' Pipeline Easement
Project No. 08-05-06



VICINITY MAP
NOT TO SCALE

MAP SHOWING A TOPOGRAPHIC SURVEY OF:

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



LEGEND

- == CABLE BOX
- == TELEPHONE BOX
- == ELECTRIC BOX
- == ELECTRIC HAND HOLE
- == DRAINAGE MANHOLE
- == SANITARY HANDHOLD
- == SPRINKLER
- == SECURITY CAMERA
- == CONTROL VALVE
- == WATER VALVE
- == WATER METER
- == ELECTRIC METER
- == FIRE HYDRANT
- == GUARD POST
- == SIGN
- == LIGHT POLE
- == UTILITY POLE
- == GUY ANCHOR
- == OVERHEAD UTILITY LINE
- == TOP OF BANK
- == CHAIN LINK FENCE
- == BARBED WIRE FENCE
- == CORRUGATED METAL PIPE
- == POLY VINYL CHLORIDE
- == MAN HOLE
- == INVERT
- == MODULAR BUILDING NO FOUNDATION
- == MITERED END SECTION
- == FINISHED FLOOR ELEVATION

SURVEY NOTES:

- ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND IN TENTHS AND ARE BASED ON THE U.S. SURVEY FOOT.
- ABOVE GROUND EVIDENCE OF UNDERGROUND FEATURES (I.E. UTILITIES, TANKS, RAILROAD TRACKS, ETC.) ARE SHOWN HEREON. NO UNDERGROUND UTILITY LOCATION HAS BEEN SHOWN UNLESS NOTED OTHERWISE.
- COORDINATES SHOWN HEREON ARE BASED ON A ST. JOHNS COUNTY SURVEY MARKER DESIGNATED "03-39", HAVING A HORIZONTAL POSITION OF N.2140687.59 E.518333.82 AND ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS SHOWN HEREON ARE BASED ON A ST. JOHNS COUNTY SURVEY MARKER DESIGNATED "03-39", HAVING AN ELEVATION OF 22.30 FEET, AND ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).



DUVAL COUNTY, FLORIDA

TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

File name: 080506.DWG	Party Chief: M. ALLISON	Dwn by: JKM	Drawing Date: 06-12-08
Reference files:	Field Bk/Pg 08-06	Ckd by: JES	Survey Date: 06-11-08
Survey Performed for: TAYLOR ENGINEERING 9000 CYPRESS GREEN DRIVE SUITE 200, JACKSONVILLE, FL			

No.	Approved	Date	Description
-----	----------	------	-------------

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION DEPICTED HEREON IS TRUE AND COMPLETE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS ESTABLISHED BY THE BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17-6 OF THE FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

JOHN E. SHERRILL
FLORIDA REGISTERED CERTIFICATE. NO. 6135

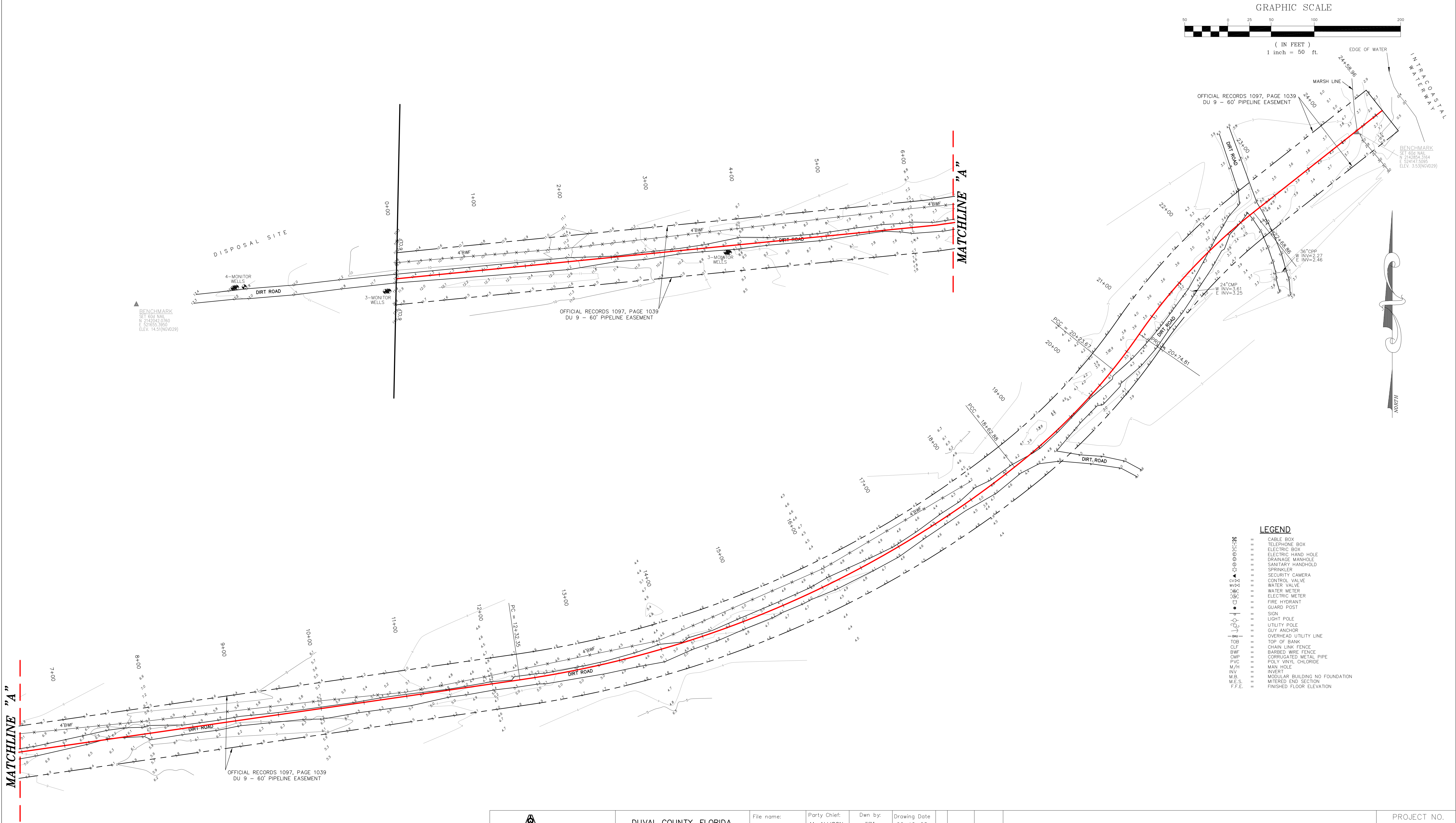
PROJECT NO.
08-05-06

FILE NO.
C-08-26A

SHEET 1 OF 3

MAP SHOWING A TOPOGRAPHIC SURVEY OF:

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



ARC
ARC SURVEYING &
MAPPING, INC.

5202 San Juan Ave.
Jacksonville, Florida 32210
Tel. (904)384-8377 Fax (904)384-8388
www.arcsurveyors.com
Licensed Business # 6487

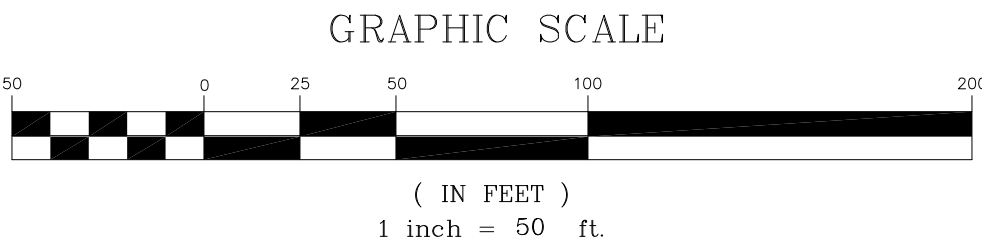
DUVAL COUNTY, FLORIDA

TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

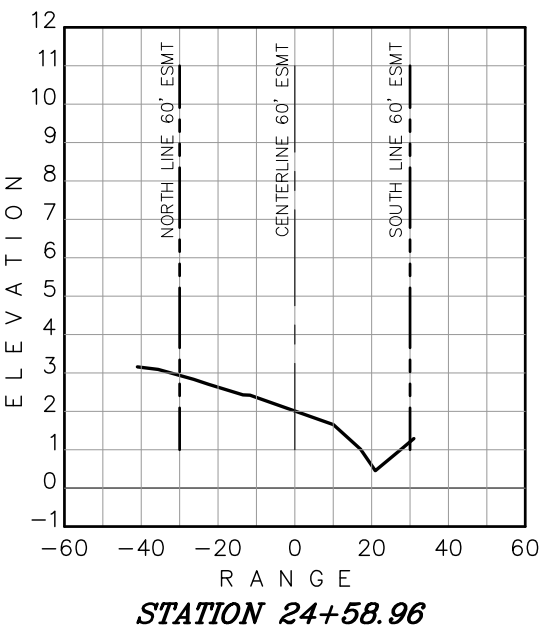
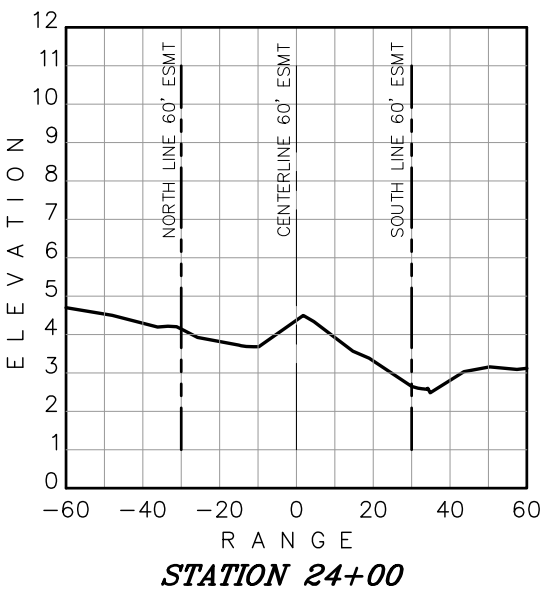
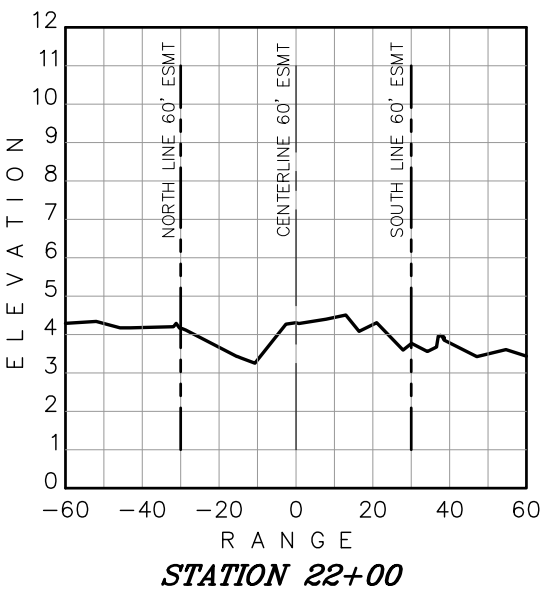
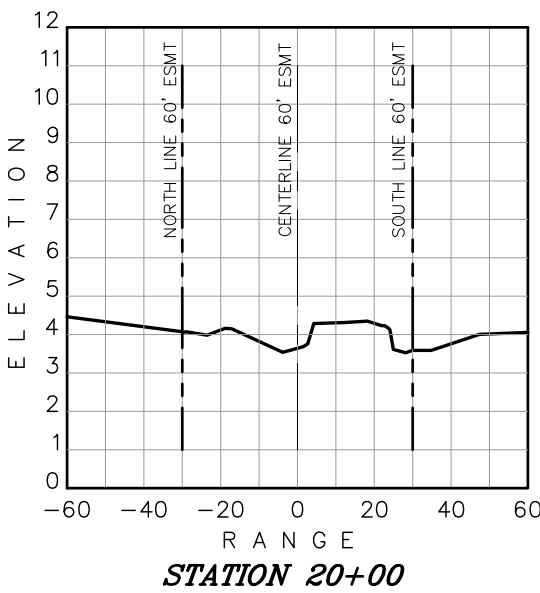
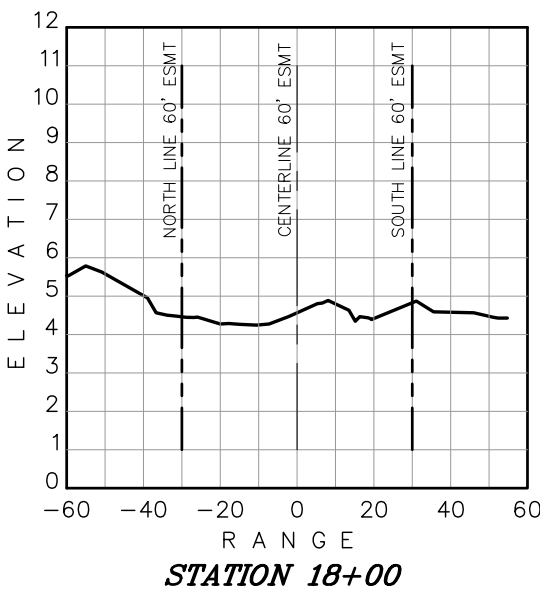
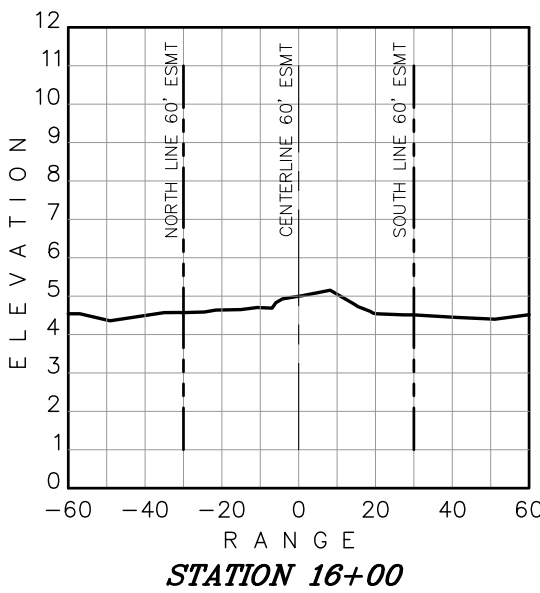
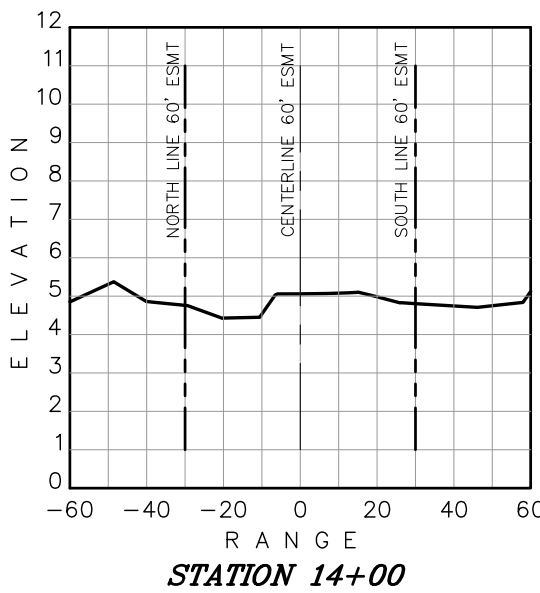
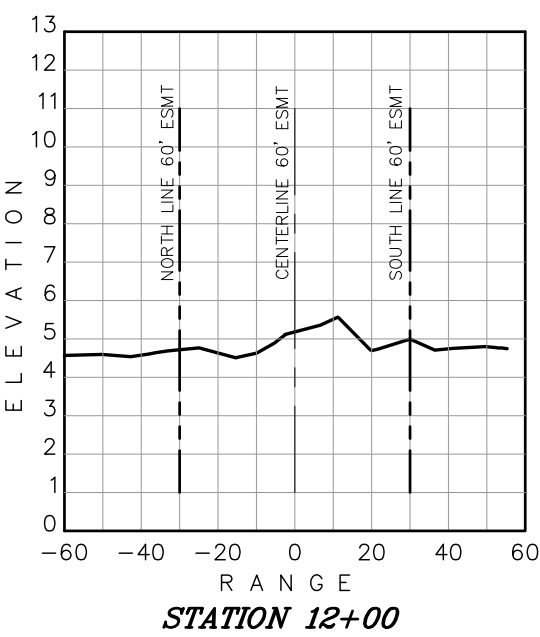
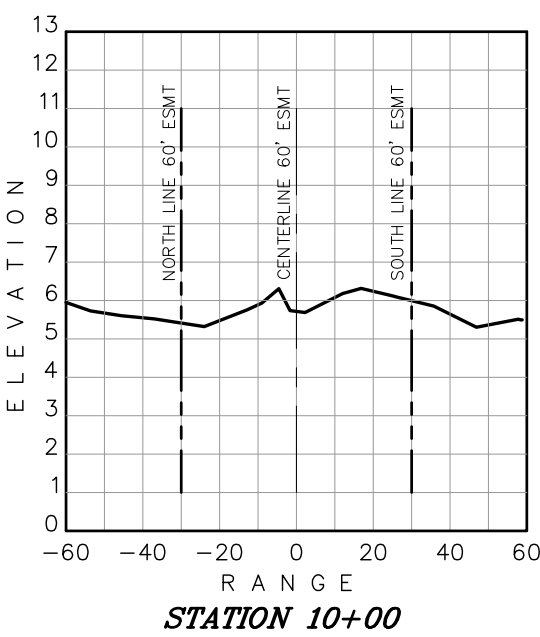
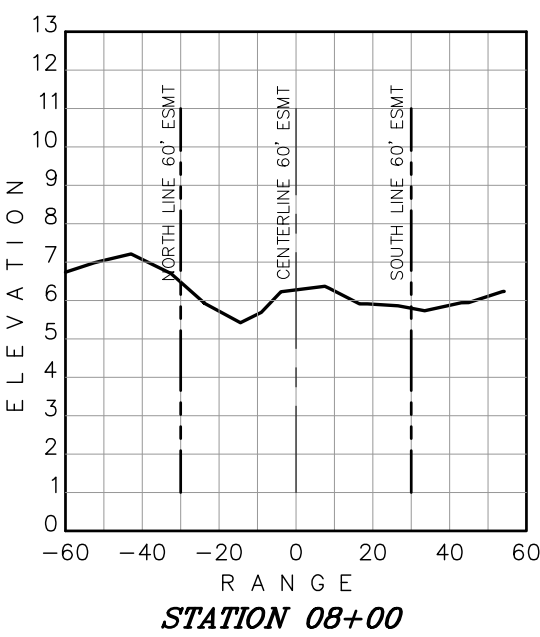
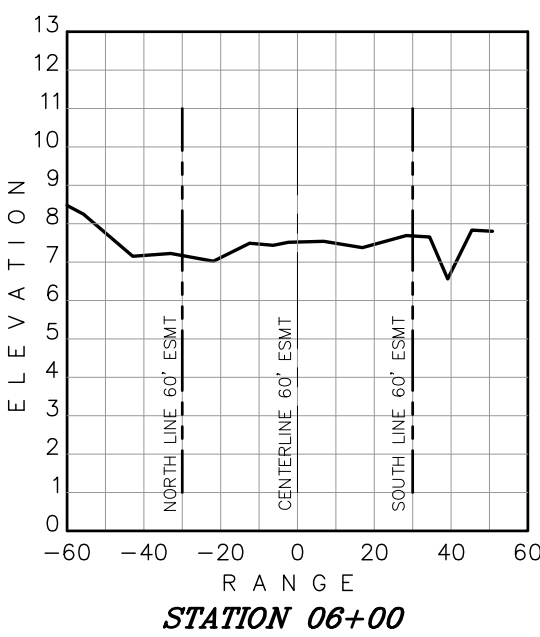
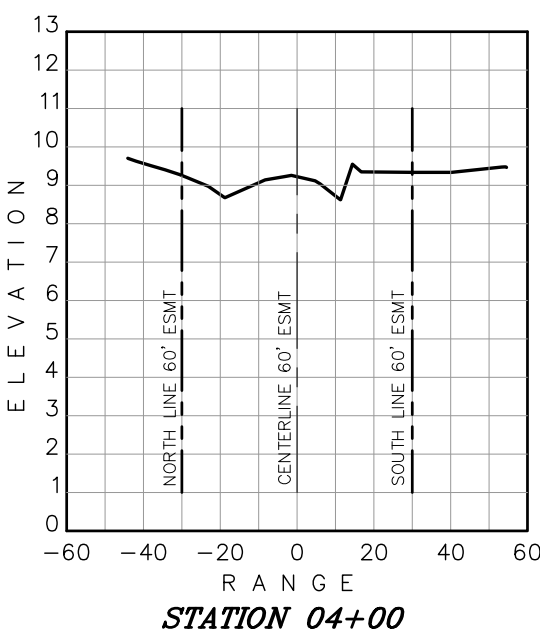
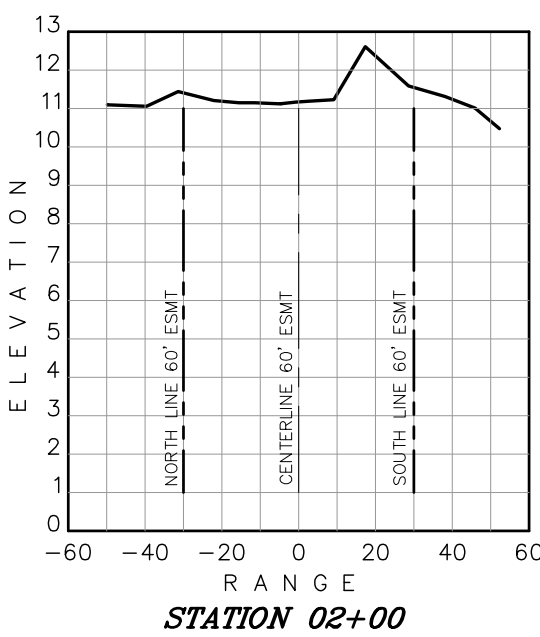
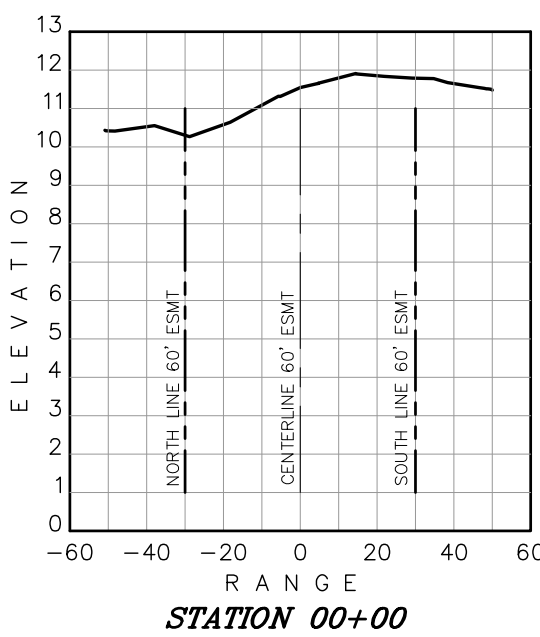
File name: 080506.DWG	Party Chief: M. ALLISON	Dwn by: JKM	Drawing Date: 06-12-08							PROJECT NO. 08-05-06
Reference files:	Field Bk/Pg 08-06	Ckd by: JES	Survey Date: 06-11-08							FILE NO. C-08-26A
Survey Performed for: TAYLOR ENGINEERING 9000 CYPRESS GREEN DRIVE SUITE 200, JACKSONVILLE, FL										SHEET 2 OF 3
				No. Approved	Date	Description				

MAP SHOWING A TOPOGRAPHIC SURVEY OF:

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



VERTICAL SCALE
1 inch = 5 ft.



DUVAL COUNTY, FLORIDA

TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

File name:
080506.DWG
Reference files:

Party Chief:
M. ALLISON
Dwn by:
JKM
Field Bk/Pg
08-06
Ckd by:
JES
Drawing Date:
06-12-08
Survey Date:
06-11-08

Survey Performed for:
TAYLOR ENGINEERING
9000 CYPRESS GREEN DRIVE
SUITE 200, JACKSONVILLE, FL

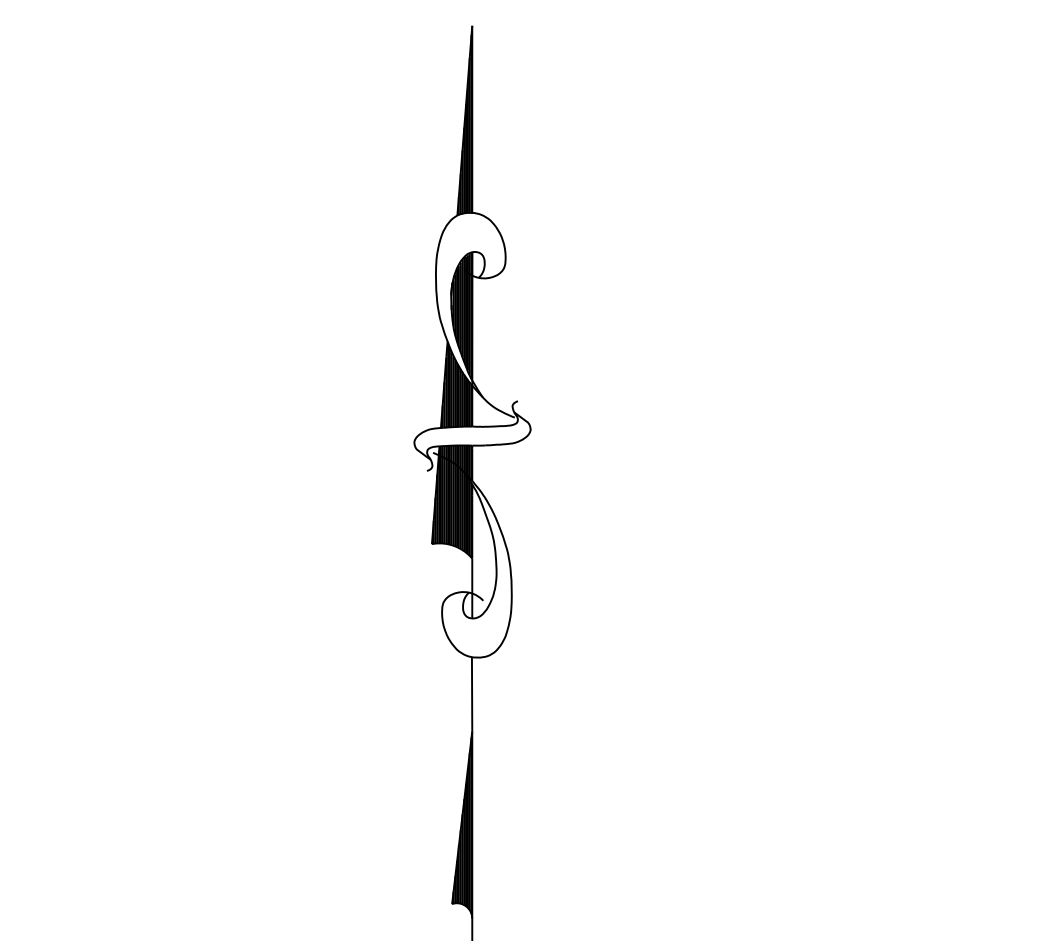
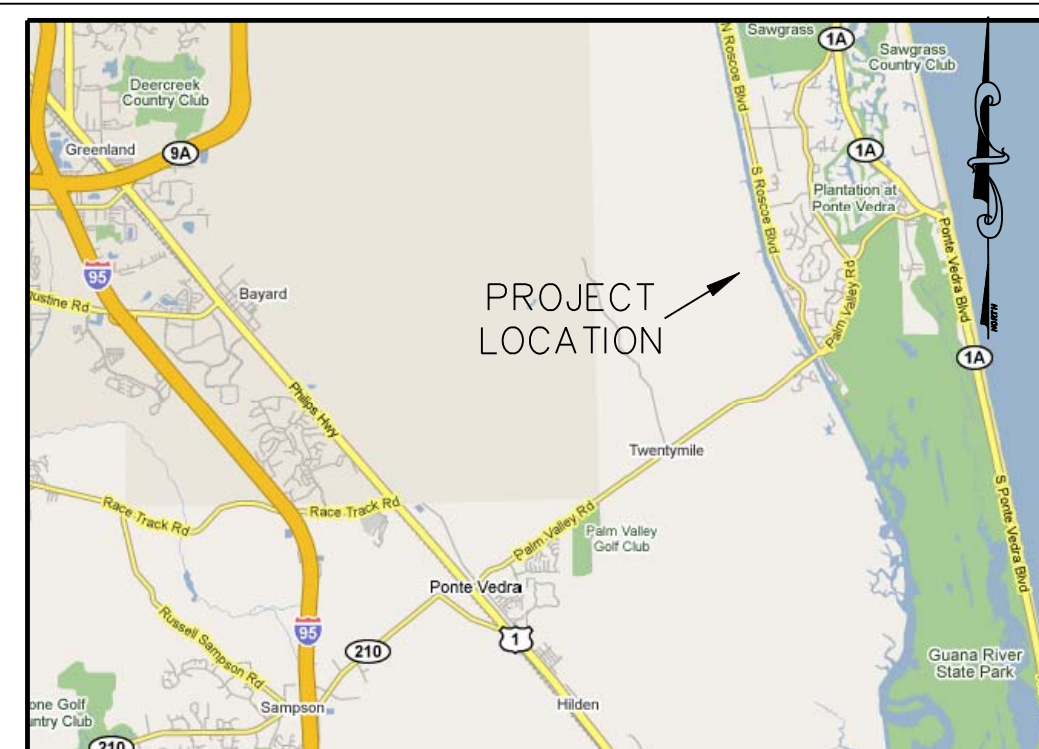
					PROJECT NO.
					08-05-06
					FILE NO.
					C-08-26A
No. Approved	Date			Description	SHEET 3 of 3



**FLORIDA INLAND NAVIGATION DISTRICT
DREDGED MATERIAL MANAGEMENT
AREA DU-9 EXPANSION
ST. JOHNS COUNTY, FLORIDA**

APPENDIX C

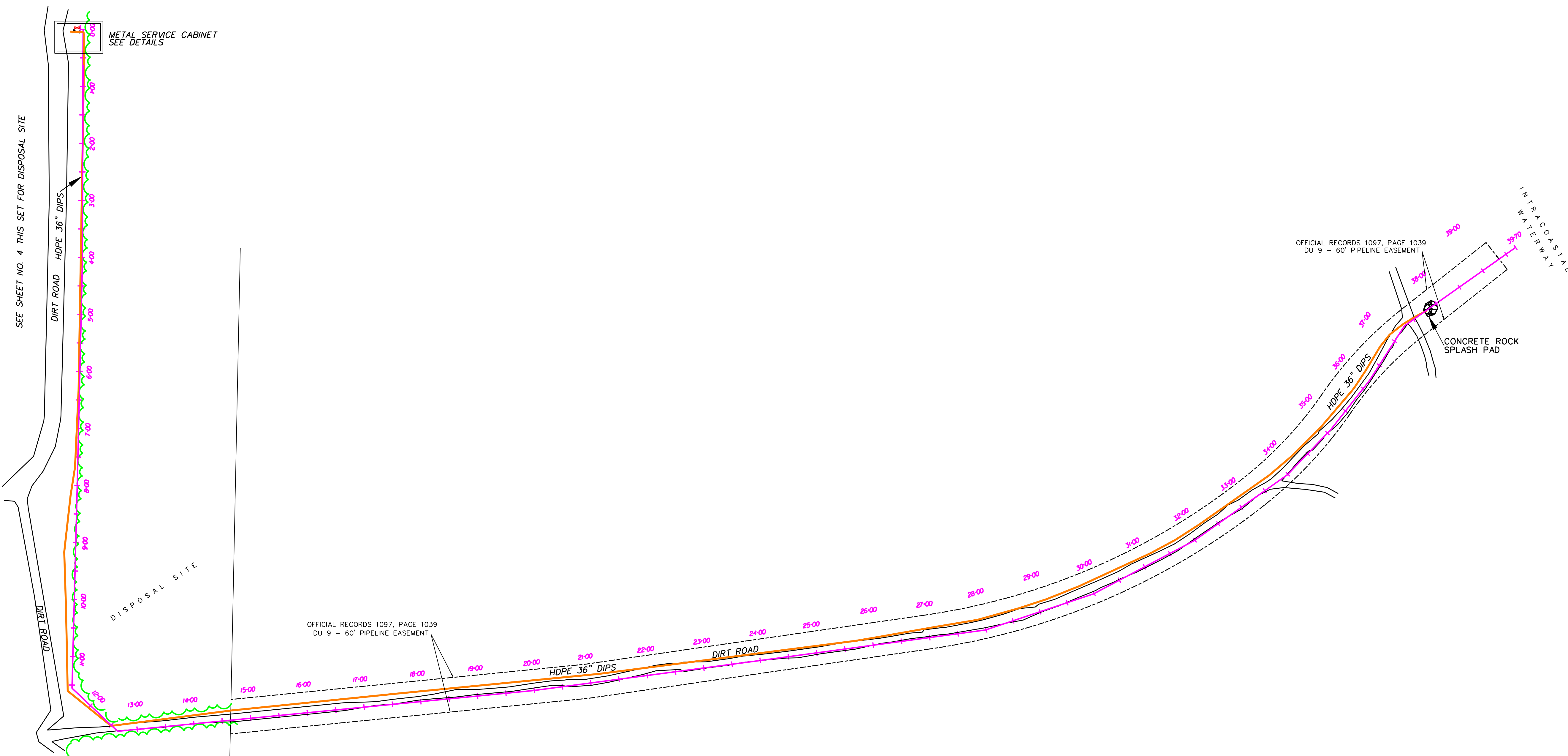
2010 Arc Surveying & Mapping, Inc.
Topographic Survey DU-9 - 60' Pipeline Easement
Project No. 09-09-04



- ### LEGEND
- | | | |
|------|---|--------------------------------|
| CLF | = | CHAIN LINK FENCE |
| BWF | = | BARBED WIRE FENCE |
| CMP | = | CORRUGATED METAL PIPE |
| PVC | = | POLY VINYL CHLORIDE |
| INV | = | INVERT |
| HDPE | = | HIGH DENSITY POLYETHYLENE PIPE |
| DIPS | = | DUCTILE IRON PIPE SIZE |

SURVEY NOTES:

- ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND IN TENTHS AND ARE BASED ON THE U.S. SURVEY FOOT.
- ABOVE GROUND EVIDENCE OF UNDERGROUND FEATURES (E. UTILITIES, TANKS, RAILED TRACKS, ETC.) ARE SHOWN HEREON. NO UNDERGROUND UTILITY LOCATION HAS BEEN SHOWN UNLESS NOTED OTHERWISE.
3. COORDINATES SHOWN HEREON ARE BASED ON A ST. JOHNS COUNTY SURVEY MAP DATED "03-19-87" WITH A SECTION OF U.S. EMBARKMENT 518333.82 AND ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
4. COORDINATES SHOWN HEREON ARE BASED ON A ST. JOHNS COUNTY SURVEY MAP DATED "03-31-89" HAVING AN ELEVATION OF 22.30 FEET, AND ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (MCGV29).
5. ORIGINAL TOPOGRAPHIC SURVEY WAS PERFORMED IN 1987.
6. ADDITIONAL TOPOGRAPHIC FEATURES AND DREDGE PIPE LOCATION WAS SURVEYED FEBRUARY 5, 2010.
7. SERVICE CABINET AND SLAT FEATURES WERE COLLECTED MARCH 1, 2010.
8. DISPOSAL SITE WAS SURVEYED MARCH 24-25, 2010.



 ARC SURVEYING & MAPPING, INC. 5202 San Juan Ave. Jacksonville, Florida 32210 Tel. (904)384-8377 • Fax (904)384-8388 www.arcsurveyor's.com Licensed Business # 6487	DUVAL COUNTY, FLORIDA TOPOGRAPHIC SURVEY DU 9 – 60' PIPELINE EASEMENT	File name: 090909.dgn	Party Chief: J. Thomas	Dwn by: DET	Drawing Date: 04-07-10					CERTIFICATION: NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER Richard J. Sawyer FLORIDA REGISTERED CERTIFICATE. NO. 6131	PROJECT NO. 09-09-04
		Reference files:	Field Bk/Pg 10-05/1-6	Ckd by: JES	Survey Date: SEE NOTES						FILE NO. C-08-26C
		Survey Performed for:									
		COTTRELL CONTRACTING 328 NORTH BATTLEFIELD BLVD CHESAPEAKE, VA 23320					04-07-10	ADDED DISPOSAL SITE SURVEY			
							02-08-10	ADDED ADDITIONAL TOPO DATA			
							02-08-10	ADDED DREDGE PIPE TO PLAN VIEW			SHEET 1 of 4
No.	Approved	Date	Description								

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



- | | | |
|------|---|--------------------------------|
| CLF | = | CHAIN LINK FENCE |
| BWF | = | BARBED WIRE FENCE |
| CMP | = | CORRUGATED METAL PIPE |
| PVC | = | POLY VINYL CHLORIDE |
| INV | = | INVERT |
| HDPE | = | HIGH DENSITY POLYETHYLENE PIPE |
| DIPS | = | DUCTILE IRON PIPE SIZE |



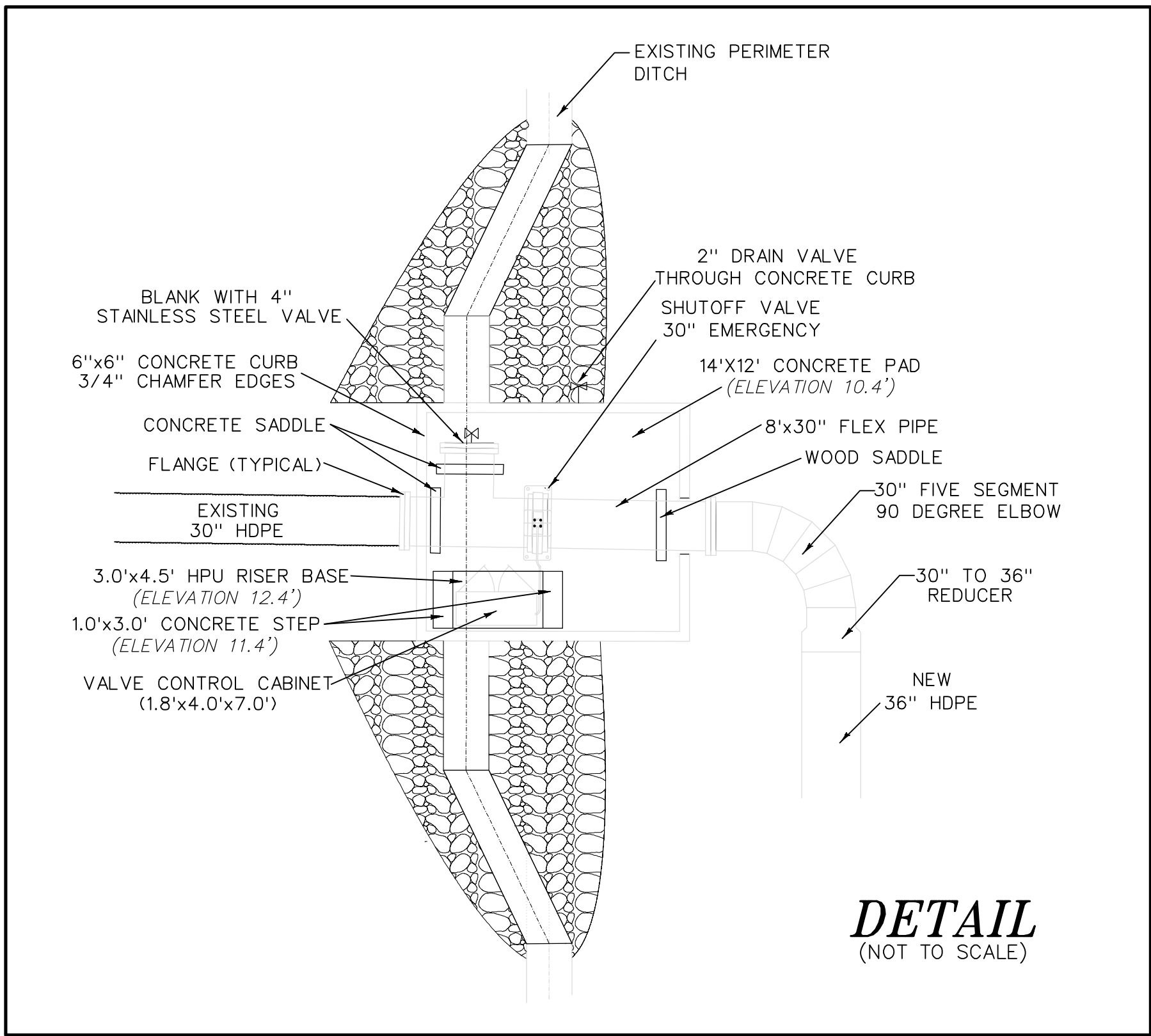
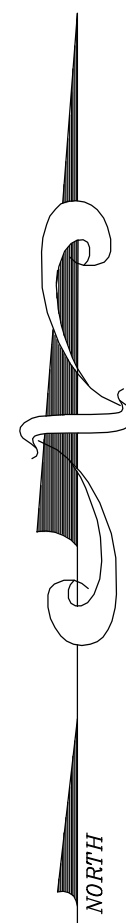
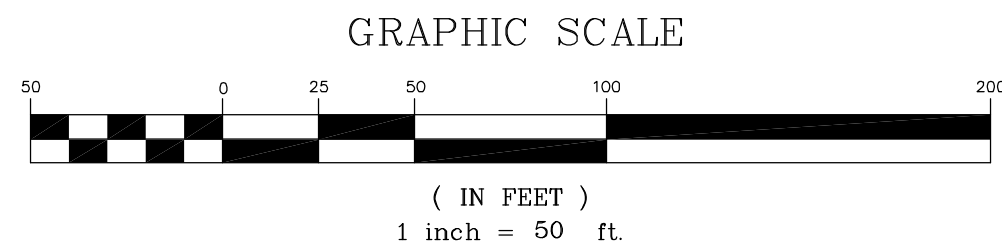
TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

COTTRELL CONTRACTING
328 NORTH BATTLEFIELD BLVD
CHESAPEAKE, VA 23320

				PROJECT NO.
				09-09-04
		04-07-10	ADDED DISPOSAL SITE SURVEY	FILE NO. C-08-26C
		02-08-10	ADDED ADDITIONAL TOPO DATA	
		02-08-10	ADDED DREDGE PIPE TO PLAN VIEW	
No.	Approved	Date	Description	SHEET 2 OF 4

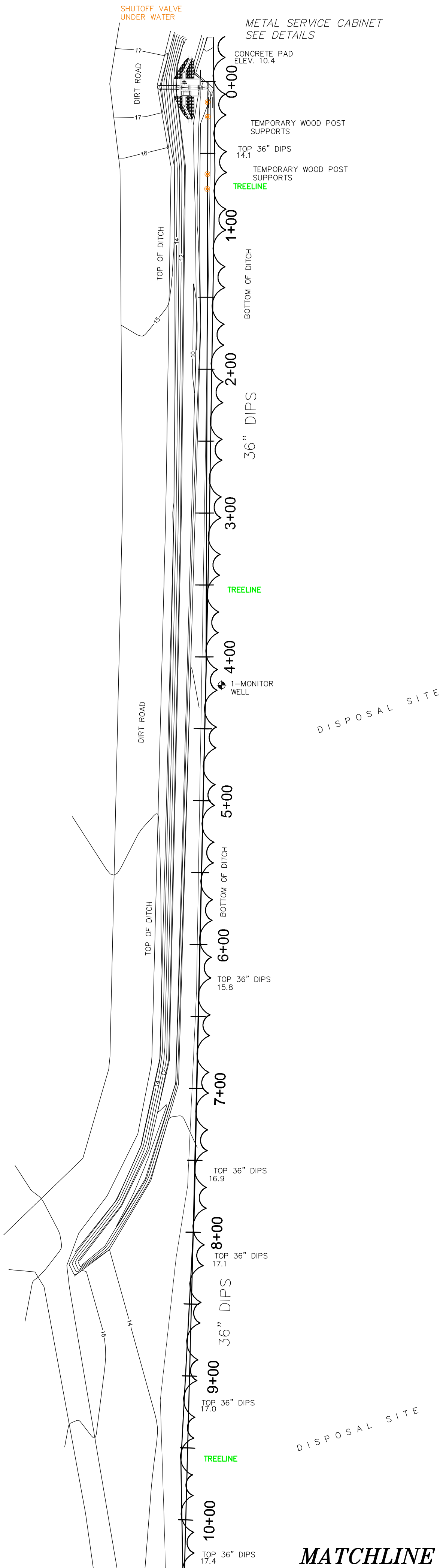
MAP SHOWING A TOPOGRAPHIC & SPECIFIC PURPOSE SURVEY OF:

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



LEGEND

CLF	=	CHAIN LINK FENCE
BWF	=	BARBED WIRE FENCE
CMP	=	CORRUGATED METAL PIPE
PVC	=	POLY VINYL CHLORIDE
INV	=	INVERT
HDPE	=	HIGH DENSITY POLYETHYLENE PIPE
DIPS	=	DUCTILE IRON PIPE SIZE
TYP.	=	TYPICAL
11.6	=	INTERPOLATED ELEVATION IN MIDDLE OF SITE
16.7	=	SURVEYED ELEVATION



DUVAL COUNTY, FLORIDA

TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

File name:
090904.DWG

Reference files:

Party Chief:
J. THOMAS

Dwn by:
DET

Drawing Date
04-07-10

Field Bk/Pg
10/05

Ckd by:
JES

Survey Date:
SEE NOTES

Survey Performed for:
COTTRELL CONTRACTING
328 NORTH BATTLEFIELD BLVD
CHESAPEAKE, VA 23320

Survey Date:
SEE NOTES

04-07-10

02-08-10

02-08-10

No. Approved

Date

Description

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

02-08-10

04-07-10

02-08-10

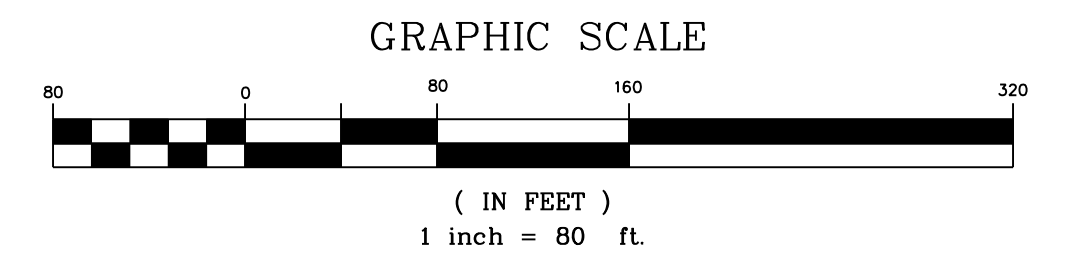
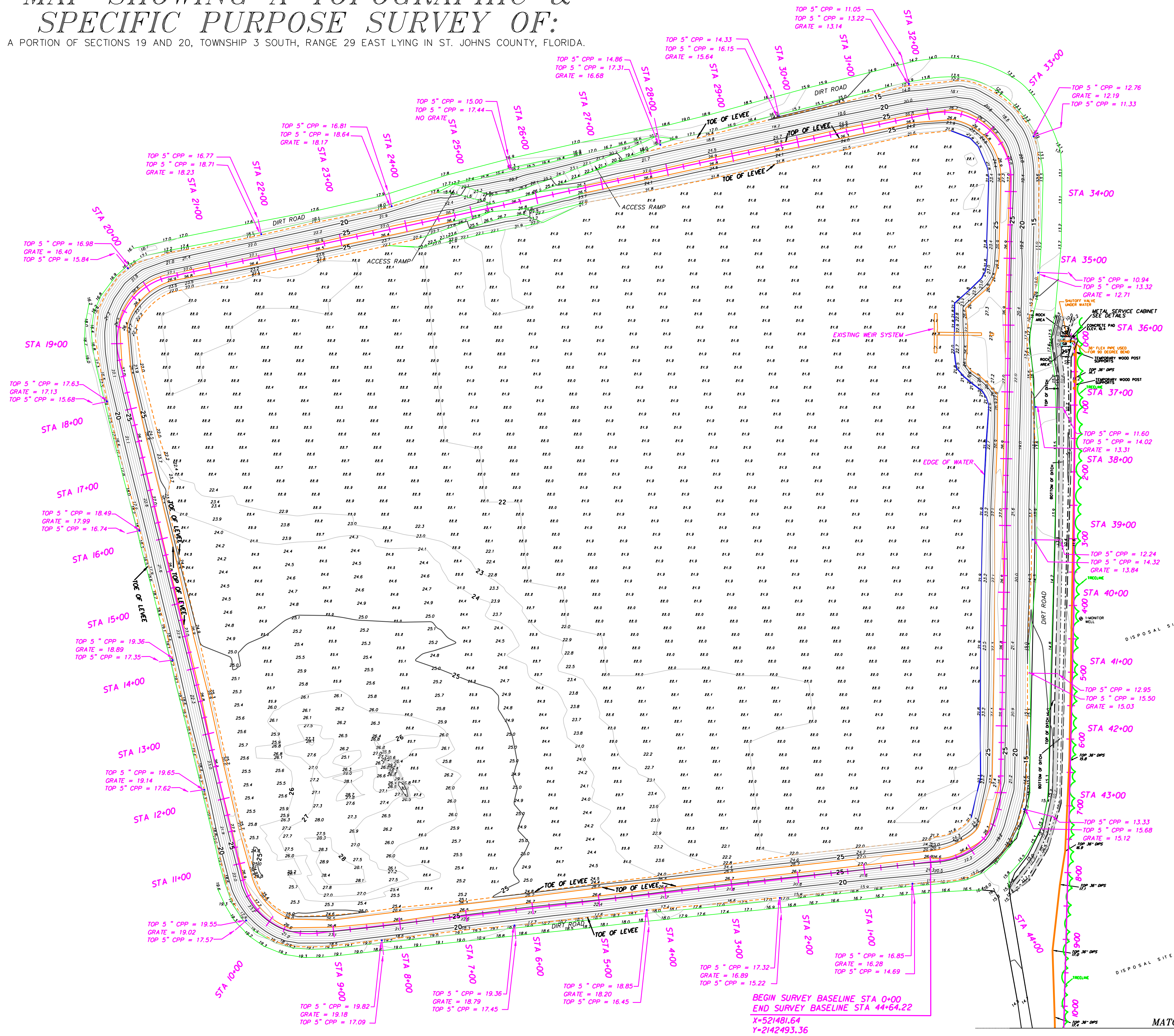
02-08-10

04-07-10

02-08-10

MAP SHOWING A TOPOGRAPHIC & SPECIFIC PURPOSE SURVEY OF:

A PORTION OF SECTIONS 19 AND 20, TOWNSHIP 3 SOUTH, RANGE 29 EAST LYING IN ST. JOHNS COUNTY, FLORIDA.



LEGEND

- CLF = CHAIN LINK FENCE
- BWF = BARBED WIRE FENCE
- CMP = CORRUGATED METAL PIPE
- PVC = POLY VINYL CHLORIDE
- INV = INVERT
- HDPE = HIGH DENSITY POLYETHYLENE PIPE
- DIPS = DUCTILE IRON PIPE SIZE
- TYP. = TYPICAL
- xx.0 = INTERPOLATED ELEVATION IN MIDDLE OF SITE
- 16.7 = SURVEYED ELEVATION



DUVAL COUNTY, FLORIDA

TOPOGRAPHIC SURVEY
DU 9 - 60' PIPELINE
EASEMENT

File name:
090909.dgn
Reference files:

Party Chief:
J. Thomas
Field Bk/Pq
10-05/1-6

Dwn by:
DET
Ckd by:
JES

Drawing Date:
04-07-10
Survey Date:
SEE NOTES

Survey Performed for:
COTTRELL CONTRACTING
328 NORTH BATTLEFIELD BLVD
CHESAPEAKE, VA 23320

MATCHLINE "B"

No. Approved Date

Description

PROJECT NO.

09-09-04

FILE NO.

C-08-26C

SHEET 4 OF 4