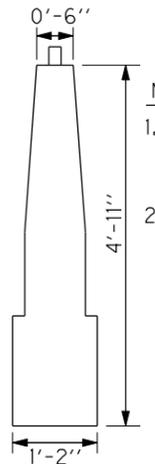


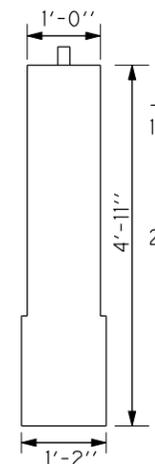
NOTE: PERMANENT PIERS MAY REMAIN IN PLACE WITH DREDGING CONDUCTED NO CLOSER THAN 10 FEET FROM THE EDGE OF PIER.

1
20 TYPICAL OPEN WATER CHANNEL CROSS-SECTION WITH PIER PRESENT
NOT TO SCALE



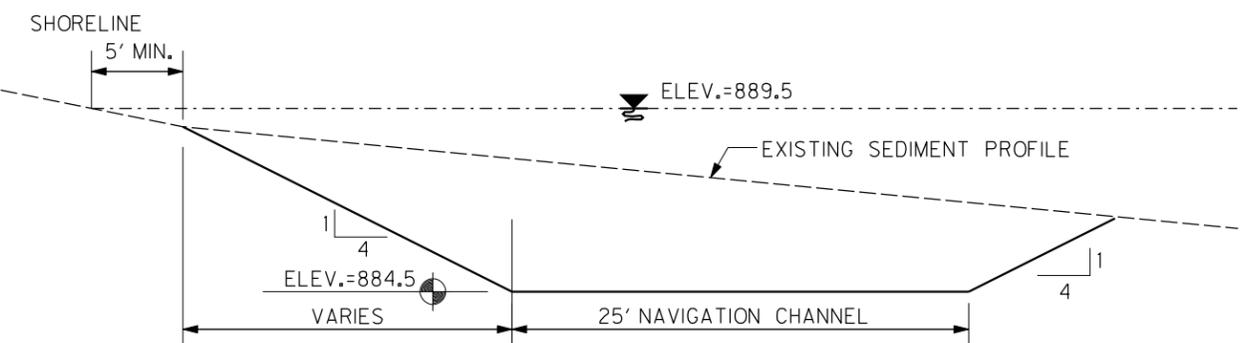
NOTES:
1. CHANNEL MARKING BUOY PLACED 250' EITHER SIDE OF CROSSING LOCATION.
2. SOLAR POWERED BLINKING LIGHT IN ACCORDANCE WITH USCG REGULATIONS.

4
20 BATTERY POWERED LIGHT BUOY DETAIL
NOT TO SCALE

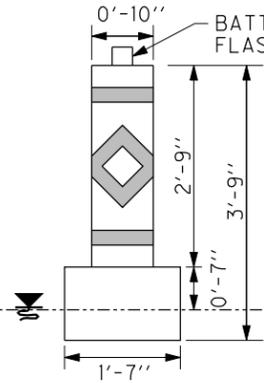


NOTES:
1. CHANNEL MARKING BUOY PLACED 250' EITHER SIDE OF CROSSING LOCATION MARK SAFE CROSSING AREAS.
2. SOLAR POWERED BLINKING LIGHT IN ACCORDANCE WITH USCG REGULATIONS.

5
20 SOLAR POWERED LIGHT BUOY DETAIL
NOT TO SCALE

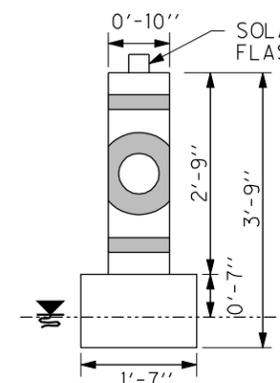


2
20 TYPICAL OPEN WATER CHANNEL CROSS-SECTION
NOT TO SCALE



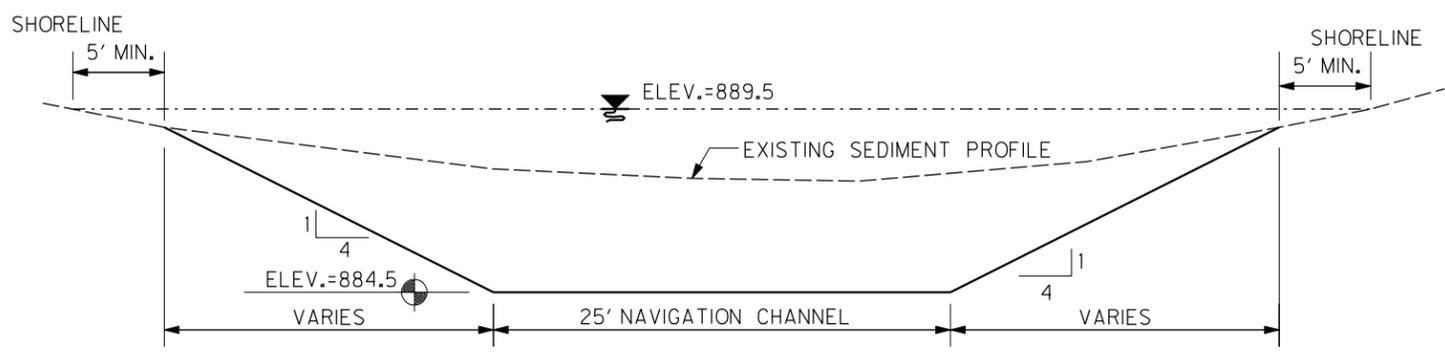
NOTES:
1. BUOYS SHALL BE PLACED 500' APART ON CENTER PARALLEL WITH DREDGE PIPELINE.
2. BUOYS SHALL BE PLACED A MAXIMUM 250' EITHER SIDE OF PIPELINE.
3. BATTERY POWERED LIGHT SHALL BE BLINKING AND IN ACCORDANCE WITH USCG REGULATIONS.

6
20 CHANNEL MARKING DETAIL
NOT TO SCALE



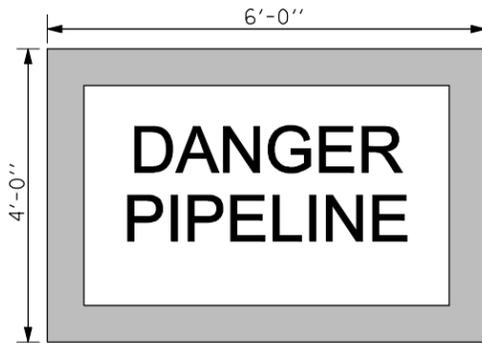
NOTES:
1. BUOYS SHALL BE PLACED IN AREAS WHERE DREDGE PIPE IS ANCHORED TO ALLOW FOR MARINE TRAFFIC PASSAGE.
2. BUOYS SHALL BE PLACED A MAXIMUM 250' EITHER SIDE OF PIPELINE.
3. BATTERY POWERED BLINKING LIGHT SHALL BE BLINKING IN ACCORDANCE WITH USCG REGULATIONS.

7
20 CHANNEL MARKING DETAIL
NOT TO SCALE



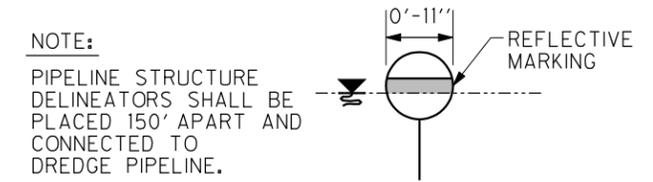
NOTE: CHANNEL BOTTOM WIDTH WILL VARY BASED UPON LOCATION.

3
20 TYPICAL CLOSED CHANNEL CROSS-SECTION
NOT TO SCALE



NOTE: SIGN SHALL BE PLACED ON SHORELINE AND PIPELINE CONTROL BARGE.

8
20 DANGER SIGN DETAIL
NOT TO SCALE



NOTE: PIPELINE STRUCTURE DELINEATORS SHALL BE PLACED 150' APART AND CONNECTED TO DREDGE PIPELINE.

9
20 PIPELINE STRUCTURE DELINEATOR DETAIL
NOT TO SCALE



CITY OF DELAFIELD

FIGURE 20
DREDGING OPERATION DETAILS
NAGAWICKA LAKE
CHAPTER 30 PERMIT APPLICATION

Scale: NOT TO SCALE	Date: MAY, 2008
Prepared By: JOW	Checked By: JOS1 06D006