Mobilization Costs.....
What Gives?

Bill Hanson
Great Lakes Dredge & Dock
Dredge Projects
or
Mobilization Exercises?
Mob Cost Drivers

- Mob Schedule
  - Tight Schedule?
  - Time for Plan B?
- Project Complexity
  - Equipment Spread
  - Location
  - Weather
- Contract Mob Risk
  - Original Concept (assumed)
  - Options
  - Funding
  - Permits/ 3rd Party
Mob Schedule

Potential Complications

- Quick Start Dredging
- Enviro windows
- Current project obligations
- SAFETY
- Large Spread
- New equipment
- New methods
- New techniques
- SI
- Plan B?
Equipment Spread

- Simple or Extreme
- Location
- Weather
- Disposal Areas
Contract Risk

- Original Concept (assumed)

What can change?
- Options
- Funding
- Permits/ Third Party
### Sample Project

#### Typical Channel Cross Section

![Typical Channel Cross Section](image)

#### Table of Channel Coordinates

<table>
<thead>
<tr>
<th>Option</th>
<th>x-coordinates</th>
<th>y-coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Coordinates in feet. Please refer to the project plan for detailed information.

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**Table Notes:**
- Each line in the table represents a specific option for the channel design.
- The x and y coordinates are given in feet for each option.
- The table is essential for understanding the layout and planning of the channel construction.

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**Diagram Notes:**
- The diagram illustrates various lines and areas related to the channel, such as the contract limit line and the basic contract width.
- The diagram is not to scale and serves as a visual aid for the project planning.

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**Contact Information:**
- Refer to the project plan for contact details and further information.
- The project plan can be accessed via the attached PDF file.
Sample Project

Complications
- Quick Start Dredging
- Enviro windows
- Current project obligation
- SAFETY
- Large Spread
- New equipment
- New methods
- New technique
- SI
- Plan B?
## Sample Project Equipment Spread

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large class CSD</td>
<td>Louisiana</td>
</tr>
<tr>
<td>Booster</td>
<td>Louisiana</td>
</tr>
<tr>
<td>Launches</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>Derrick</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>Fuel Barge</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>Anchor Barge</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>Plunder Barge</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>Rental Tug</td>
<td>Local??</td>
</tr>
<tr>
<td>2 Dozers</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>1 FEL</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>1 land based crane</td>
<td>Local</td>
</tr>
<tr>
<td>25,000 feet subline</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>2,000 feet floathose</td>
<td>East Coast Florida</td>
</tr>
<tr>
<td>5,000 feet shoreline</td>
<td>East Coast Florida</td>
</tr>
</tbody>
</table>
Sample Project Equipment Spread

HOW DOES IT ALL GET THERE? CARE TO DANCE????

- Prep Dredge for Ocean Going Tow
- Tow Dredge to site with Rental Tug RT slow bell
- Tow Subline Rafts 5,000’ each (5 tows with 2 tugs each tow)
- Tow Derrick Barge with launch
- Tow Anchor Barge with launch
- Tow Fuel Barge with launch
- Tow Float Hose with launch
- Tow Plunder barge with launch

- Prep Booster
- Tow Booster with rental tug RT

- Tugs at $10,000 per day each
- Equipment may or not be charged during tows
- Long Distance tows can easily reach $200k to $350k each
Sample Project
Equipment Spread

NOW IT IS THERE, HOW DO WE GET IT TO WORK??

- Rental Tugs during prep
- Derrick during prep
- Set up Office
- Transportation and Travel
- Survey Boat to Site
- Truck Land Equipment to site
- Prep Dredge for Work

REMEMBER, EXPENSIVE SPREAD OF EQUIPMENT AND LABOR ALREADY ON SITE BEFORE DREDGE EVER ARRIVES!!
Sample Project Equipment Spread

WHAT ABOUT ALL THAT PIPELINE?

- Shore pipe loaded onto trucks
- Truck shore pipe
- Shore pipe unloaded at site
- Subline, unrafted and installed
  (EXTREMELY WEATHER DEPENDENT)
Sample Project Equipment Spread

AND OF COURSE THE WEATHER IS ALWAYS PERFECT!!!

- In poor weather, EVERYTHING SHUTS DOWN.
- Never for a day always more.
- The intricate dance becomes a nightmare.
Contract Risk

Original Concept (assumed)
- Assumption - entire project gets awarded QUICKLY!
  - 1 to 2 month mobe
  - 3 weeks work MAX
  - 2 to 4 week demobe
- How do you cost?
- How do you price?
- What would you do?
Contract Risk

What can change?

- Options don’t get awarded QUICKLY
  - Miss opportunity to bid other work
  - Mobes still the same depending on timing
- Options Awarded Randomly
  - Possible Redredge Areas
- Surveys show different project
- Weather creates different project
- Permits/ Third Party
Cost Estimating for dredging is difficult.
Cost Estimating for dredge mobilization is REALLY difficult!
Don’t be surprised at a wide spread of opinions……

AND ... WHAT ABOUT THE DEMOBE??
Realize America’s Maritime Promise
Harbor Maintenance Fairness Coalition

www.RAMPHMTF.org

3 Layered approach

- Coalition Building
- Legislative Action
- Assure money to be spent as intended.