Monday, Dec. 6th, 2010
Weather: ≈ 30°F, snowing
Purpose: BATHYMETRIC SURVEY NEWMARKET POND
Arrived at 7:30 am, Brookhollow Rd.
organizing, grouping field supplies

Berger member: Ellis Byeon

- Called Mark Padover (ASI) and will meet ASI crew at parking lot near spillway (SW corner of pond).

- Met Mark & Chris from ASI at SW parking lot next to spillway.

- ASI will set up control point at SW corner parking lot and do survey scope around site before bathymetric survey begins.
- GPS Trimble 5700 (RTK)
- N.J State Plane, NAD83, ft

- moved to second location towards SE for control point (BRIDGE NO. 2C-95) for cross-checking.

OK! CHECK IS GOOD!

across 108 LAKEVIEW AVE.

EB 12/6/10

9:25 AM ≈32°F LIGHT FLURRIES, CLEAR SKIES

9:45 AM, LAUNCH BOAT at SE RAMP @ entrance to PARK.

equipment: fathometer, transducer, GPS, computer

SURVEY DEPTH SOUNDER MODEL 455 (NARROW BEAM)

10 AM SET UP EQUIPMENT AT GAZEBO (MIDPOINT)

PLAN: START SURVEY AT SW LOCATION (SPILLWAY)

CROSS-SECTIONS EVERY 50'

10:20 AM WIND KNOCKED OVER RTK GPS at the base location (SW corner of POND)

MARK HEADING DOWN TO FIX & CHECK.

NOTE: AREA OF POND (SE corner) is very shallow. FATHOMETER will most likely not work in that area. will need to use other survey method.

- APPROX DRAFT OF BOAT ≈ 1 ft.

10:40 AM ALL EQUIPMENT SET.

EB 12-6-10

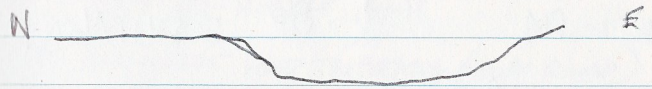
11 AM BATHYMETRIC SURVEY BEGINS START FROM SPILLWAY TO EAST

- STAYED APPROX. 15-20' AWAY FROM DAM FOR SAFETY REASONS

- FATHOMETER COLLECTS DATA AS WE GO.

- GRADUAL SLOPE FROM NORTH BANK TO SOUTH (FAIRLY FLAT)

★ AREA DREDGED MAY POSSIBLY BE 40' DOWNSTREAM OF BRIDGE CROSSING.



NEED TO CHECK w/ SIDE SCAN & POST PROCESS WORK.

- Shallow area east bank at ≈RM 3.9. Approx 1.5' depth.

- shallow area near small bridge No. 2-6-95 (slightly near downstream of RM 4 both bank areas.

EB 12-6-10

- UPSTREAM OF ≈ RM 4.0 very shallow.
  & FATHOMETER WILL NOT WORK.

  THICK VEGETATION ROOTS, LOGS,
  SHALLOW AT ~~SOUTHERN PORTION~~ MAJORITY.

  CHANNEL LIES AT NORTHERN SIDE.
- NEED TO DISCUSS AT OFFICE ON HOW
  TO APPROACH AREA.
- SIDE SCAN will not work either

1:41 PM CROSS-CUTTING TO ALONG POND

2 PM BAR CHECK FOR QA
on calibration CHECK is GOOD.

2:20 PM PACK UP EQUIPMENT

BATHYMETRIC SURVEY
Using FATHOMETER complete
except for extreme shallow areas.

SIDE SCAN SONAR begins
tommorow.

EB
12-06-10

SUMMARY OF PHOTOS 12-06-10

001 - FACING WEST LOOKING AT DAM

002 - } LOOKING AT POND FROM SW corner
003 - } PARKING LOT

004 - X SPILLWAY

005 - } ASI truck & small boat
006 - }

007 - 015 - ASI setting up RTK GPS control point at
SW corner parking lot

016 - 021 - ASI GPS check at bridge NO 2-C-95
(across 108 LAKEVIEW AVE)

022 - LOOKING AT SPILLWAY FACING EAST

023-025 - BOAT LAUNCH AT RAMP LOCATED
SE of NEW MARKET POND

026 - AT NEW MARKET POND TRIBUTARY (BOAT RAMP)
FACING TOWARDS POND (NW)

027 - BOAT MOTOR

028 - GAZEBO DOWNSTREAM OF RM 4.0

029 - WASHINGTON AVE BRIDGE FACING EAST

030 - } FATHOMETER & EQUIPMENT SETUP
- 036 }

037 - SIGN

038 - NEAR DAM FACING SOUTH

039 - POND LOOKING EAST

040 - POND LOOKING ~~SOUTH~~ WEST TOWARDS DAM

041 - POND LOOKING EAST

042 - POND BANK

043 - SURVEY DEPTH SOUNDER MODEL 455

EB
12-06-10

044 - WASH. AVE BRIDGE LOOKING EAST
045 - " LOOKING WEST
046 - POND LOOKING WEST (≈ RM 3.7)
047 - SOUTHERN BANK OF POND LOOKING WEST
048 - " " " " EAST
049-057 - SHALLOW AREAS U/S OF RM 4.0

EB
12-06-10

044 - WASH. AVE BRIDGE LOOKING EAST
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EB
12-06-10

12-07-10

Carroll-Dubilier
SSS + Confirmatory Sampling

EPA/ACOE

Task: Side Scan Sonar (SSS) of New Market Pond

Personnel: J. Ganz - LBG - 646-784-5533
M. Padover
K. Dunnebacke
S. Brodman
ASI

Weather: 35, overcast, Mod. Wind, flurries

Equipment: 5700 Trimble, AS750 w/Radio base station
Edgetech 4100 (JG) SSS, boat

0730 Meet ASI @ base station setup near Stelton + Lakeview

0745 Tailgate / safety meeting

0810 Contact A. AccardiDey re: scope to clarify schedule + activities;

0830 Mob boat to boat ramp

0845 Boat prepped and launched;

0900 dock @ Western most Gazebo to setup computers and misc electronics

Cornell-Dubilier 12-07-10
40 SSS + Confirmatory Sampling EPA/ACOE

0930 sonar + assoc. electronics setup; review purpose of scan: determine if pond is sedimentation zone for fines suspended from up river OU2 source; looking for thick layer of fines on pond bottom and bank slopes; Begin calibrating and fine tuning sonar settings

0940 Begin high frequency survey using SSS

0945 GPS error; restart survey;

0950 Recording error; restart survey;

0955 Survey Running; begin at western end of pond near dam;

1050 Complete 2 sets of passes in pond Right side Sonar having techical dif. Left side sonar working well; Begin Low frequency passes

1145 2 set of passes completed; Begin break down of equipment.

1230 OFF SITE

Cornell-Dubilier 12-09-10
SSS confirmatory sampling ACOE

Task: collect 50 sediment grab sample from NMP

Personnel: J. Ganz - LBG - 646-784-5533
M. Padover, K. Dunnebacke, S. Brodman — 908-347-9776 ASI

Weather: 20's, hazy, Mod. Wind, Mod. humid

Equipment: Petite Ponar; 5700 Trimble, MS750 w/radio base station; Motor Boat

0740 Onsite; setup Base station GPS; Tailgate safety meeting; Ice + Boat safety discussed;

0815 Mob boat to launch; before equipment setup boat taken out to determine Ice condition;

0845 Boat reaches dam @ west end of Lake Ice approx. 3/4 - 1 inch thick and greater in some areas; boat mobility + maneuverability severely hindered by Ice; conditions deemed unsafe to

Corwell-Dobilier
42 SSS Confirmatory Sampling

12-09-10
ACOE

0845 cont. cont. work; return to boat Launch

0900 ASI looks @ weather forecast for the next week; Friday, 12-10-10, too cold for ice to work; work to cont. on 12-13-10;

0915 Boat being removed from pond; Contact A. Accardi Day re: schedule + H+S concerns; V-mail left; C. Perkins contacted re: schedule and H+S concerns V-mail left.

0940 OFFSITE