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## **Agenda**

**Restoration Advisory Board  
Naval Weapons Industrial Reserve Plant Bethpage**

**November 5, 2008  
Bethpage Community Center, Bethpage, NY  
7:00 p.m.**

**Welcome and Agenda Review**  
Lora Fly, NAVFAC Mid-Atlantic

**Meeting Minutes**  
All Members

**Technical Progress**

**Budget Update**  
Lora Fly

**Site 1 Soil Vapor Informational Session and Investigation**  
Rob Sok, Tetra Tech

**Offsite Groundwater Investigation – GM-75 Work Plan**  
David Brayack, Tetra Tech

**GM-38 Construction Status**  
Stavros Patselas, Tetra Tech

**Closing Remarks**  
Lora Fly

*Presenters will be available after the program for questions.*

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**NAVAL WEAPONS INDUSTRIAL  
RESERVE PLANT (NWIRP)  
BETHPAGE, NEW YORK  
INSTALLATION RESTORATION  
PROGRAM**

**BUDGET UPDATE – FY-08 ACTUAL COSTS AND  
FY-09 EXECUTION PLAN**

Restoration Advisory Board (RAB) Meeting

11/05/2008

**NWIRP Bethpage FY-08 ACTUAL EXECUTION**



**PROJECT FUNDED REMARKS**

<b>GM-38 – Additional Plant Construction Cost</b>	<b>\$ 2,607,282</b>	<b>Construction underway</b>
<b>GM-75 – Additional Vertical Profile Borings</b>	<b>\$ 740,407</b>	<b>Awaiting site access</b>
<b>Site 1 – Soil Vapor Investigation, On Site and Off Site</b>	<b>\$ 181,230</b>	<b>On-site complete off-site underway</b>
<b>Site 1 – Site Preparation for Soil Removal</b>	<b>\$ 302,289</b>	<b>Awarded to Small Business Contractor</b>
<b>Site 1 – Technology Evaluation for Soils</b>	<b>\$ 20,899</b>	<b>Report complete sent to NYSDEC for comments</b>
<b>TOTAL for FY-08 =</b>	<b>\$3,852,107</b>	

**NWIRP Bethpage FY-09 PLANNED EXECUTION**

**PROJECT**



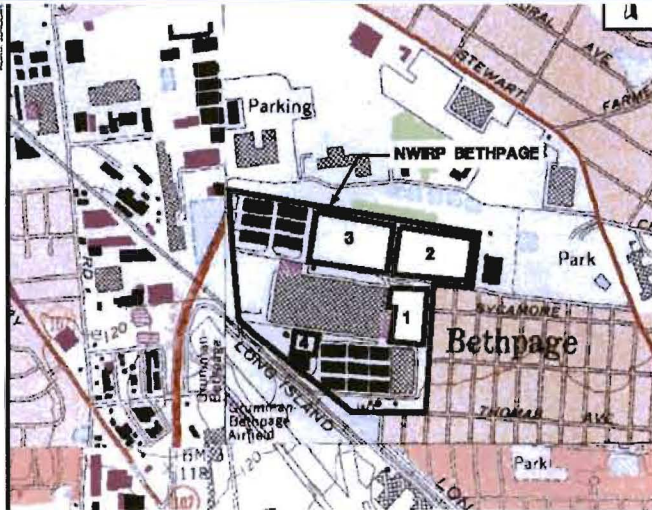
- Site 1 Construction of Soil Vapor Extraction System
- GM-38 Addition Construction Cost
- Evaluation of Treatment System for Off-site Water Supply
- Community Support
- Site 1 Pilot Study for In-situ Soil Solidification of PCB-contaminated Soil



## Restoration Advisory Board (RAB) Meeting

**Site 1 – Soil Vapor Testing Update  
Naval Weapons Industrial Reserve  
Plant (NWIRP) Bethpage  
November 5, 2008**

### SITE MAP



## SITE 1 HISTORY – SOIL VAPOR

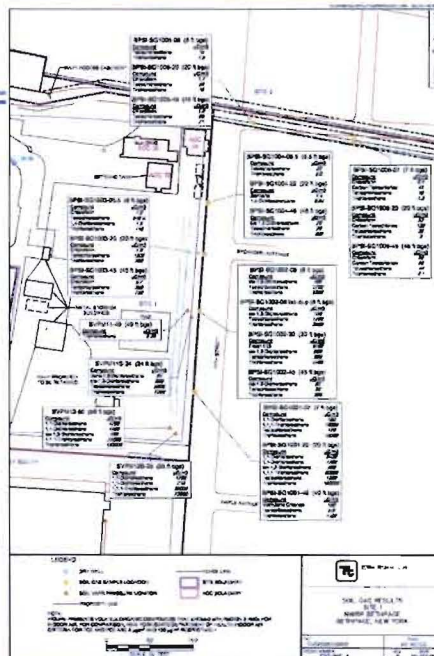


- October 2006 New York State Department of Health issued soil vapor intrusion guidelines – identifies soil vapor migration and potential intrusion into buildings as a potential concern.
- January 2008, Navy conducted a soil gas investigation at the eastern fence line of Site 1. Investigation was conducted to determine whether there was a potential for off site migration.
- Soil gas results indicated elevated levels at the fence line.
- September 2008 Work Plan developed for offsite soil vapor testing.
- October 2008 soil vapor testing conducted in the adjacent neighborhood along 10<sup>th</sup> and 11<sup>th</sup> Streets, and Sycamore/Maple Avenue (10-20-08 to 10-31-08).

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November 5, 2008

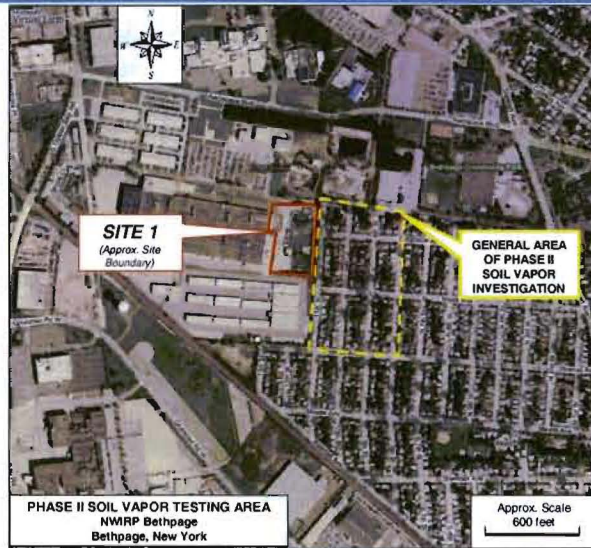
## SITE 1 SOIL GAS SAMPLING RESULTS (January 2008)



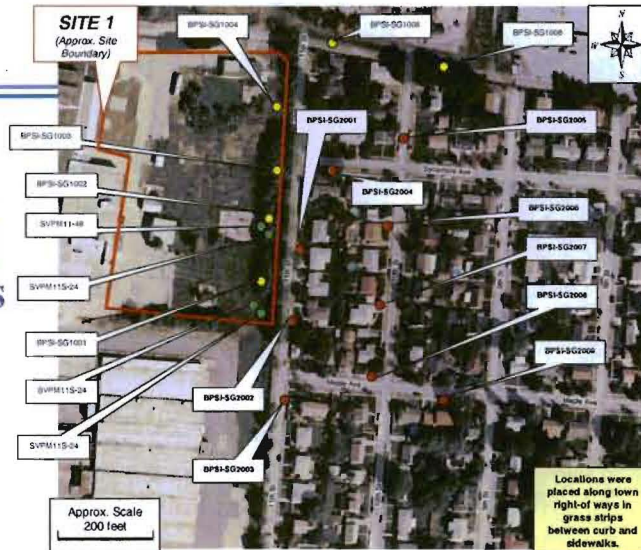
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# SITE 1 – PHASE II SOIL GAS INVESTIGATION



## SITE 1 SOIL GAS SAMPLING LOCATIONS



- Legend:**
- Former Soil Vapor Sample Locations
  - Former Soil Vapor Pressure Sample Locations
  - Soil Vapor Sample Locations

Soil Gas Sampling Photos



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November 5, 2008

Soil Gas Sampling Photos



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## Soil Gas Sampling Photos



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## Soil Gas Sampling Photos



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November 5, 2008



## SCHEDULE



- Field work was completed on October 31, 2008.
- Final analytical results from soil gas testing will be available in January 2009.
- Pilot test for SVE system at Site 1; pilot test anticipated to be conducted in early January 2009.
- Draft Work Plans are currently being developed for indoor air sampling (anticipated to be submitted in November 2008); Navy working on property access agreements with homeowners along 11<sup>th</sup> Street.
- Indoor air sampling tentatively scheduled to begin in mid-January 2009.



# Groundwater Remediation Project

Naval Weapons Industrial Reserve Plant

Bethpage, NY

GM-38 Area

Restoration Advisory Board Meeting

November 5, 2008



TETRA TECH EC, INC.



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## Treatment System Design

- Mass Removal of Volatile Organic Compounds (VOC's) from groundwater
- Process Flow Rate = 1,100 gallons per minute (gpm)
- Max. Design Flow Rate = 1,375 gpm
- Pumping from two recovery wells (one located on Route 135 western right of way and other to be located on west side of Broadway)

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## Treatment System Design (cont'd)

- Primary treatment is Air Stripping
- Secondary treatment (polish) is Carbon Media
- Vapors from Air Stripping Treated w/ Carbon Media
- Split the discharge of treated water into one injection well and into a county recharge basin

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# Well Installations

- Currently installed (Nov 2004 - May 2005)
  - 2 Recovery Wells
  - 1 Injection Well
  - 6 Monitoring Wells
- To be installed during construction
  - 1 Recovery Well (RW-3)
  - 6 Monitoring Wells (may change)

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# Construction Status

- Construction Entrance is located at 100 Broadway between residences at 96 and 106 Broadway
- Dig Safe Notifications and Geophysical Surveys completed.
- Concrete – Sumps, Piers, and Grade Beam are complete
- Treatment equipment has been ordered with some on-site.
- Trenching to Recovery and Injection Wells has started.
- Utility and Process Piping entry points into building are complete.
- Electric Load letter submitted to National Grid
- Majority of local and state permits have been submitted

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# Construction Upcoming

- Set Large Equipment onto foundation with Crane
- Receive Building Material and Begin to Erect Structure (columns and framing)
- Interior Piping and Electric
- Install Fire Alarm and Security Systems
- Install and Test Instrumentation
- Test and Balance All Systems
- Site Restoration

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# Local Subcontractors

- Mechanical from East Setauket, NY
- Electrical from Medford, NY
- Building GC from Farmingdale, NY
- Erector from Huntington, NY
- QC Testing Lab from Bay Shore, NY
- Surveyor from Brookhaven, NY
- Third Party Consultant from Melville, NY



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# Esthetic Considerations

- Excavated soil used to construct berm
- Maintain as many existing trees as possible
- 100 new trees to be planted
- Building exterior to be a natural color
- Exterior building lights are motion activated
- No audible exterior alarms
- Chain link fence with privacy screening

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# Project Status

- Access agreements in place for Town, NYSDOT, and Long Island Railroad properties.
- Subcontracts issued to local companies for the building, mechanical, and electrical. Treatment equipment ordered.
- Continue building and treatment system construction.
- Obtain all outstanding necessary local permits and approvals for utility connections (i.e. sewer, water, electric, etc.)
- Finalize discharge details into county basin.
- Issue subcontract for driller.

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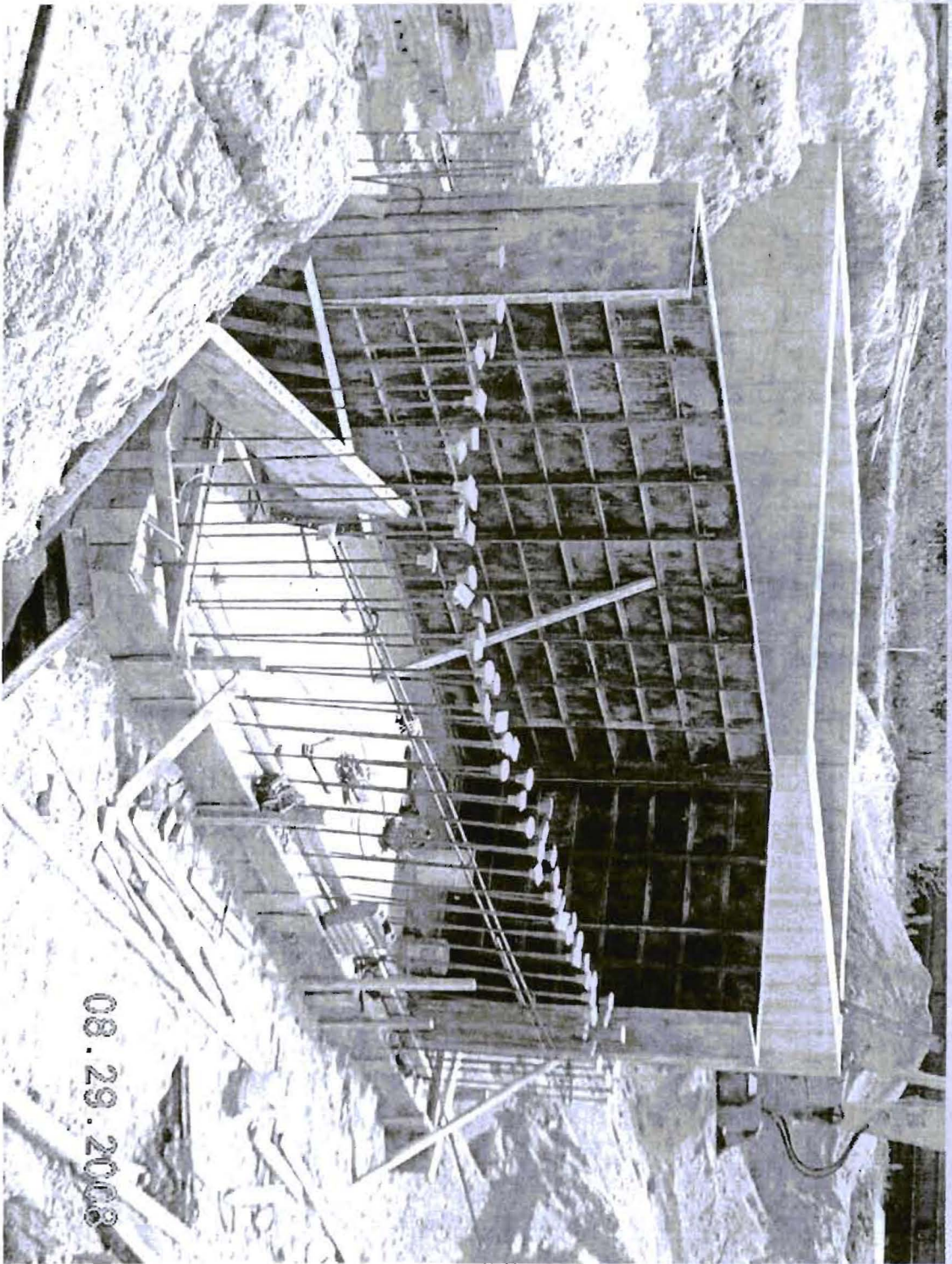
# Current Schedule

<b>Milestones</b>	<b>Date</b>
Mobilization & Start of Construction	June 2008
Set Large Treatment Equipment Into Place	November 2008
Install of Additional Wells	November 2008 – Winter 2009
Exterior Process Piping and Utilities	Oct 2008 – Feb 2009
Building Complete, Continue Interior Work	Winter 2008 - 2009
Treatment System Construction Complete	Spring 2009
Plant Start-Up, Calibration & Testing	Spring 2009

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# Community

- A project goal is to minimize disturbance to the surrounding neighborhood to best extent possible during the construction.
- NYSDEC Citizen Participation Office  
**631-444-0350**
- Project Hotline cell phone number is  
**516-732-3393**
- Periodic project updates will be delivered to the surrounding residences (approx. 200).
- Overnight security is present 7 days per week



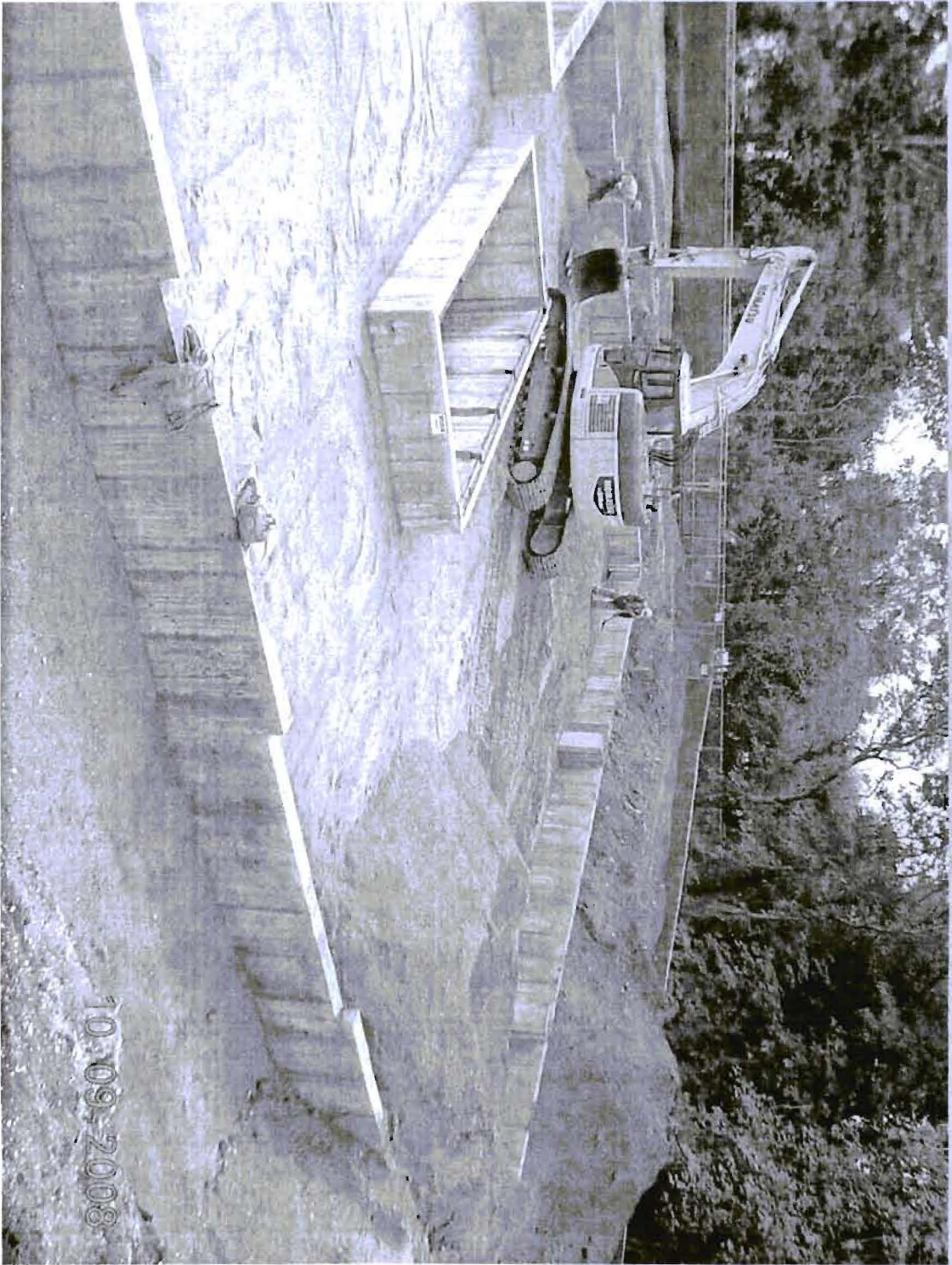
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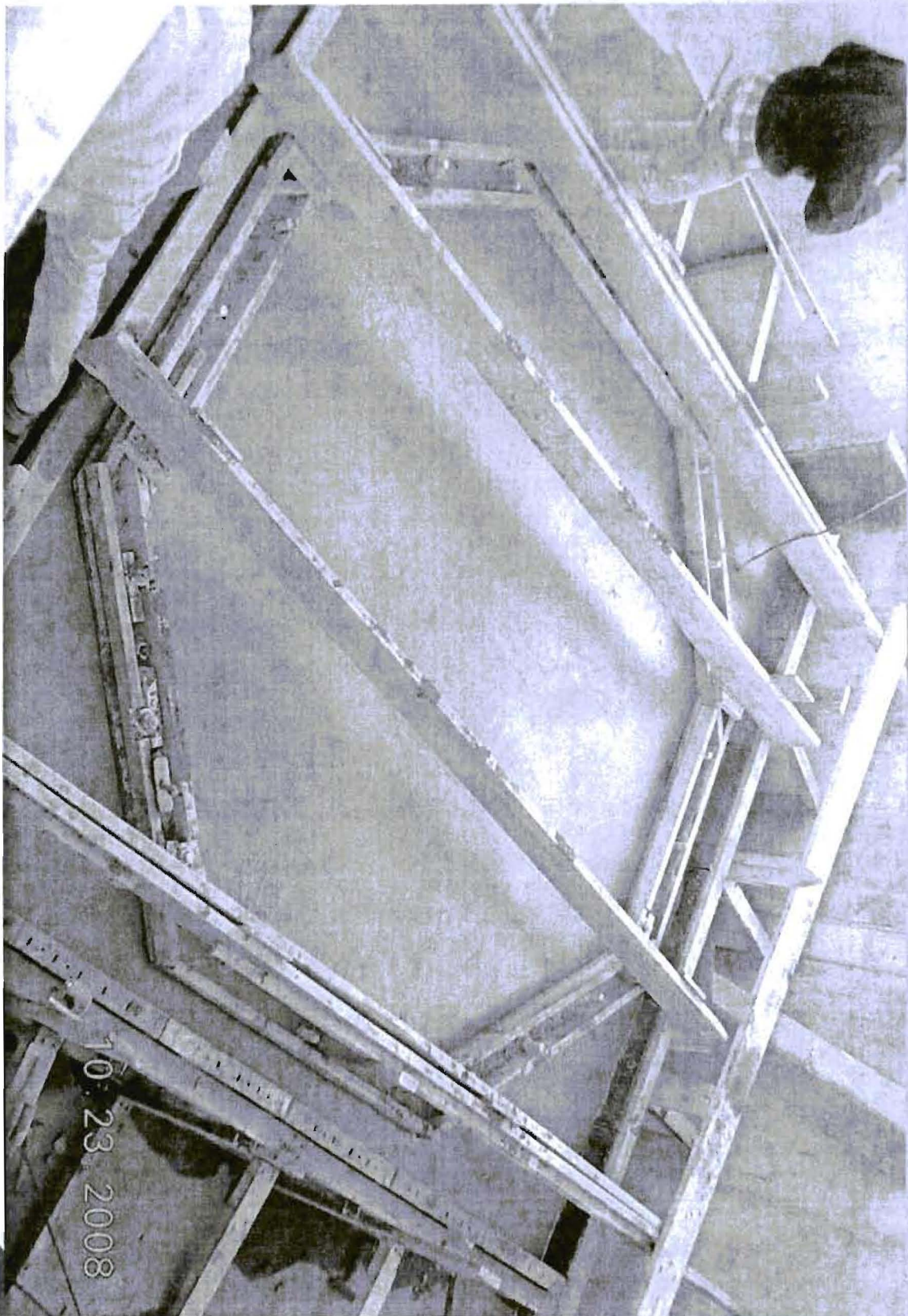












10 23 2008





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**Wrap-up**

**Questions?**