

Mottolo Superfund Site

Neighborhood Meeting

Drew Hoffman, NHDES
Mike Metcalf, Underwood
Peter Pitsas, Underwood



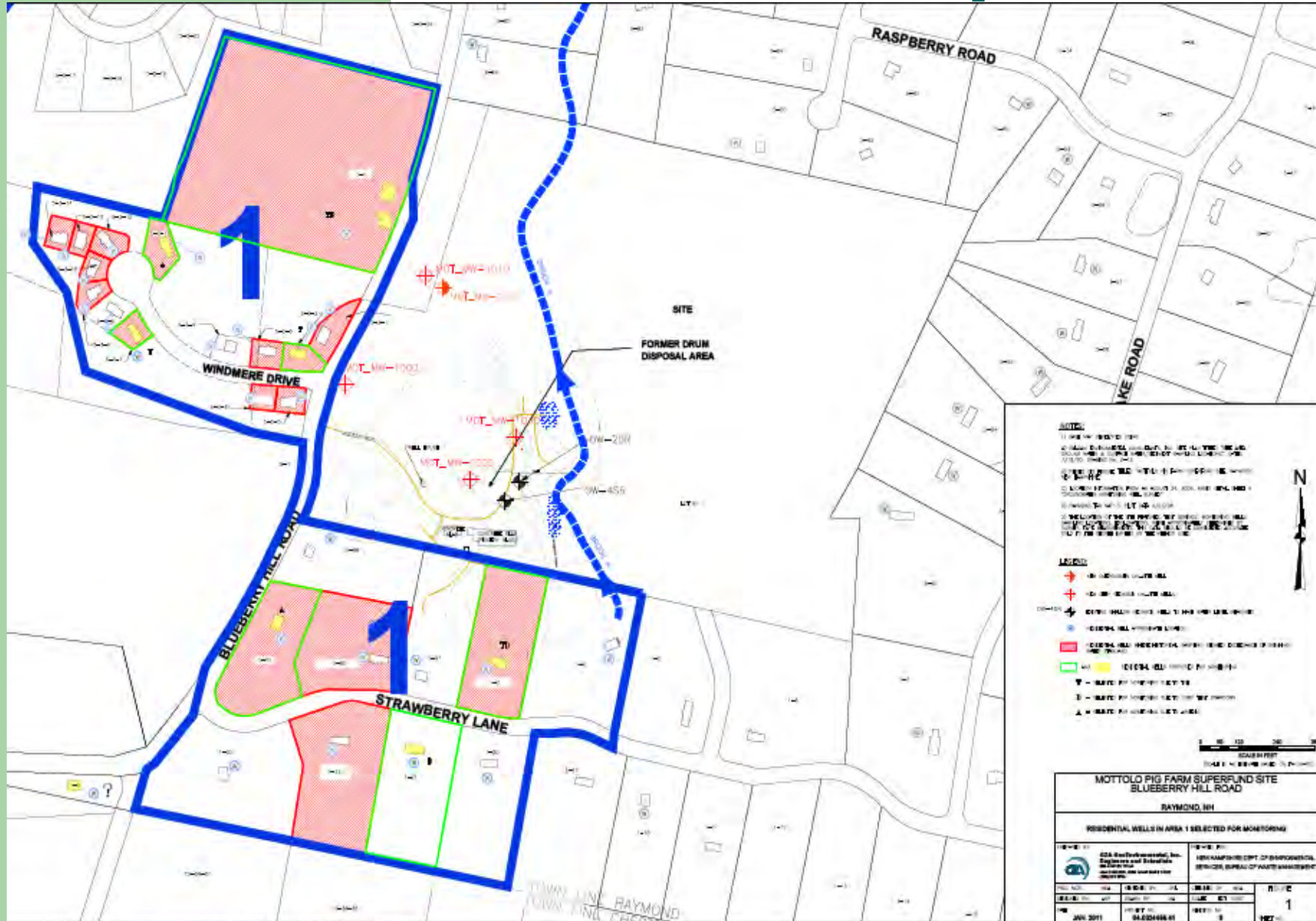
Meeting Agenda

1. **Introductions**
2. **Purpose of this meeting**
3. **Project overview (how we got to waterline ext.)**
4. **Design & construction schedule**
5. **Design team**
6. **Design details**
7. **In-home inspections & Right of Entry Agreement**
8. **Well decommissioning**
9. **Questions and discussion**
10. **Adjourn**

Orientation

- EPA's Third Five-Year Review
- Expanded residential well monitoring
- Impacted area defined

Residence Impacted





2009-10 Investigation Findings

- **Windmere Drive area -- TCE present and elevated arsenic levels likely associated with Mottolo site.**
- **Strawberry Lane area -- Similar to naturally occurring distributions of arsenic that are typical of southeastern New Hampshire, TCE historically present.**

Design & Construction Schedule

- February – Homeowner meetings
- March – 90% design & 2nd neighborhood meeting
- April/May – 100% design, bid prep, funding arrangements, public meeting
- June/July – Bid & award
- August/September – Construction start?

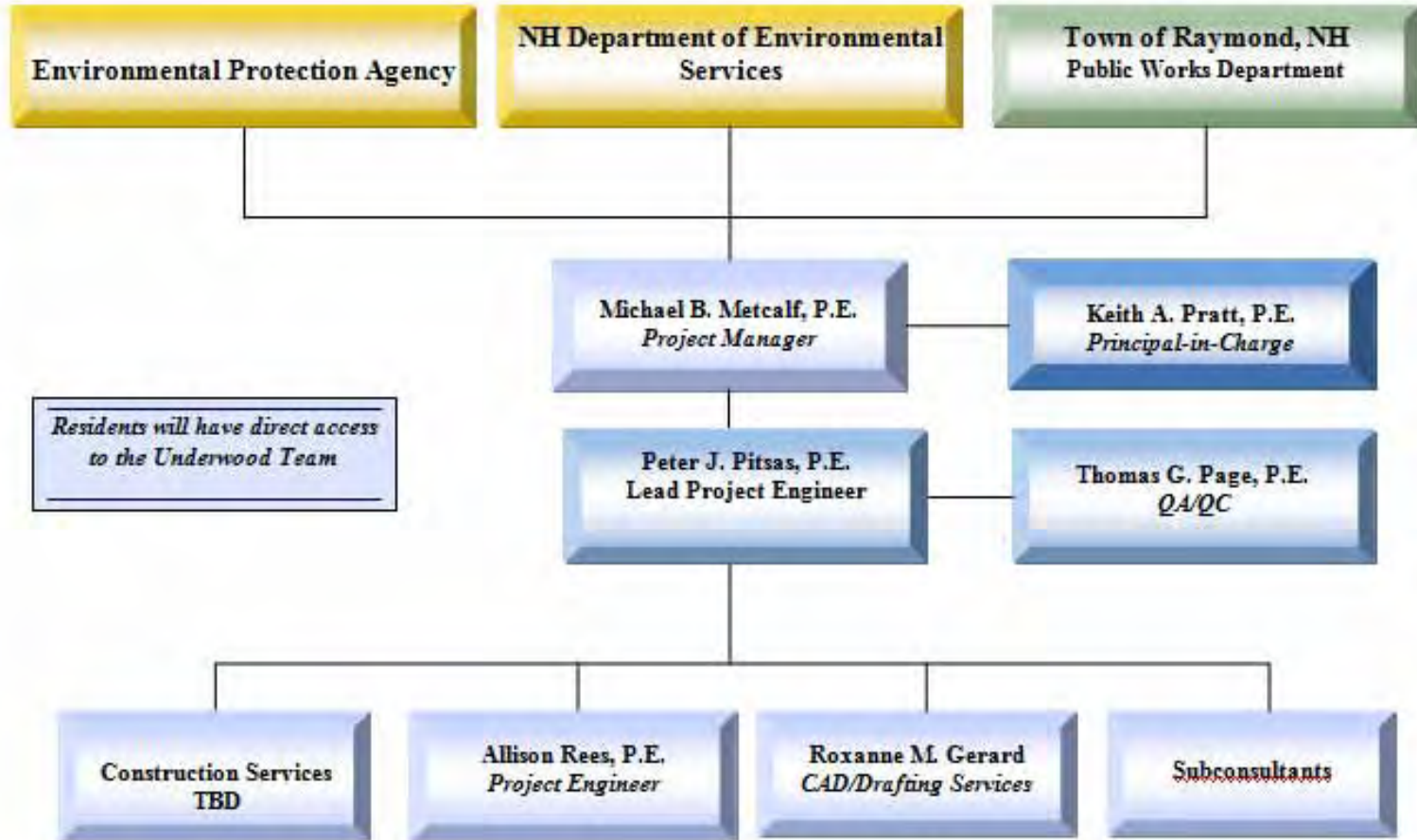
Design Team

- Selection committee (DES & Raymond)
- Pool of pre-qualified engineers
- Underwood Engineers selected based on qualifications

Underwood Engineers

- NH based firm formed in 1982
- Locally owned
- Offices in Portsmouth and Concord
- 37 employees – 19 licensed PEs
- Municipal water, wastewater & civil engineering

Organizational Chart



Project Work Plan



Project Work Plan



Water Main Construction



What is the Process?

- Survey
- Geotechnical – ledge, boulders, water
- Computer modeling
- Coordinate with DOT & town
- Determine water main alignment
- Coordinate with affected homeowners
- Design individual service connections
- Prepare temporary easements

What is the Process? (cont.)

- Design Exeter River crossing
- Create plans and specifications
- Obtain necessary permits/approvals
- Finalize construction documents
- Put project out for bids
- Select contractor
- Construction

ANTICIPATED PROJECT SCHEDULE-Revised 1/27/2011

**Raymond Waterline Extension Design
TOWN OF RAYMOND, NEW HAMPSHIRE**

Schedule	2010/2011										
	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	
Proposals Due	X										
Interview		X									
Select Engineer		■									
Contract Negotiation			■								
Governor & Council Approval				X							
Kick-Off Meeting and Site Walk				■	■						
Survey			■	■							
Subsurface/Geotechnical					■						
Homeowner meetings					■		■				
30% Design (Preliminary)					■	■					
Permit Application Process					■	■	■				
1st Neighborhood Mtg.					X						
60% Design					■	■					
Obtain Easements					■	■	■	■			
90% Design Completion						■					
2nd Neighborhood Mtg.							X				
Final Contract to DES for Approval							■	■			
NHDES Review								■			
Construction Document Preparation								■	■		
Bidding Period									■	■	
Bid Opening										X	
Contract Review and Award											■

What is the Schedule?

- Survey (complete) - Jan 2011
- Geotechnical - Feb 2011
- Homeowner meetings - Feb 2011
- Design complete - Mar 2011
- NHDES review/approval - Apr 2011
- Advertise for bids - May 2011
- Bid opening - Jun 2011

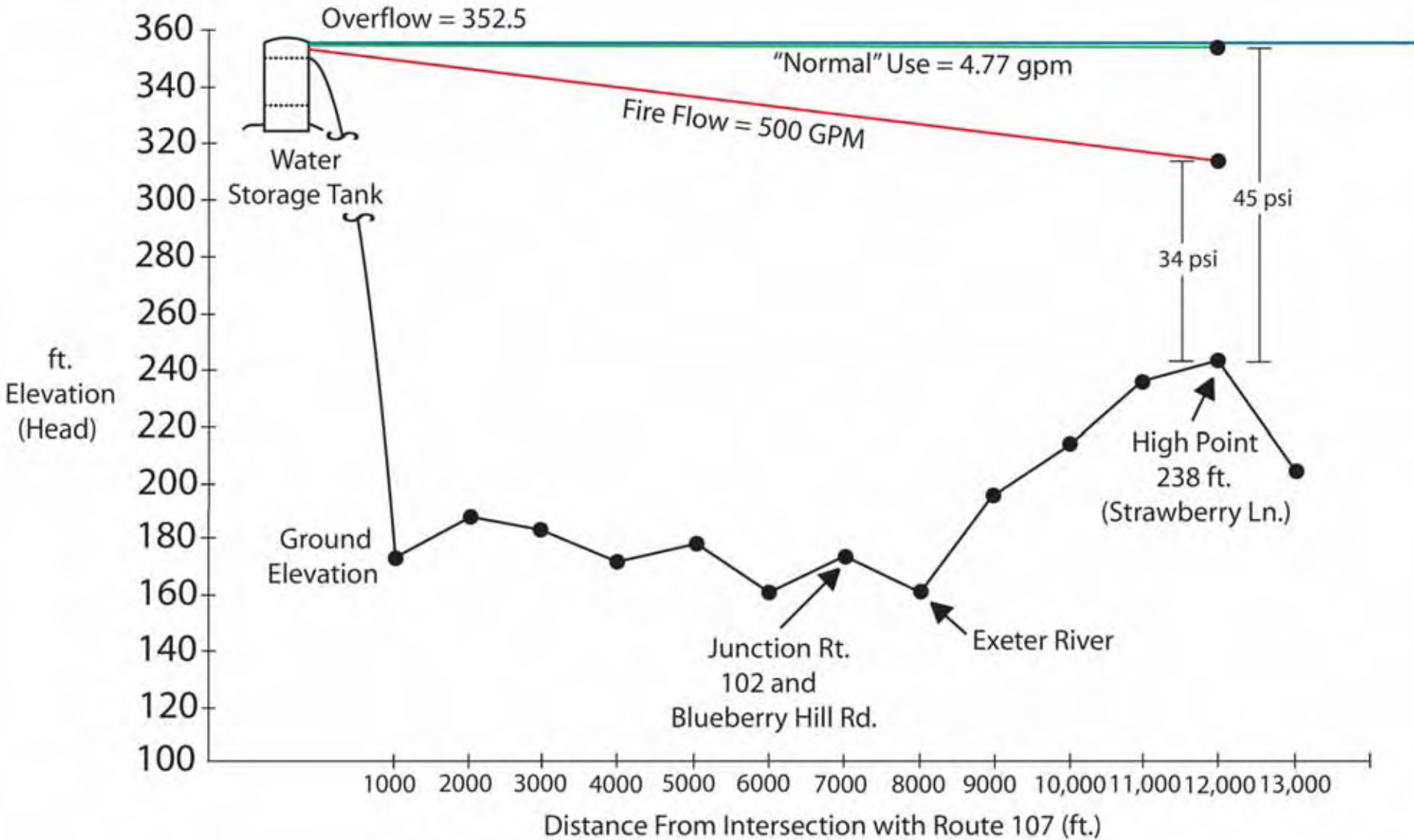
What is the Schedule?

- Award Contract - Jul 2011
- Start construction - Jul/Aug 2011
- Potential schedule
 - Main line - Jul – Sep 2011
 - Exeter River crossing- Sep – Oct 2011
 - Individual services - Oct – Nov 2011
 - Final completion - Spring 2012

Possible Questions

- What is Raymond's water source?
 - Wells in sand and gravel deposits near the Fire and Police Station
- Is the water treated?
 - Yes, for removal of iron, manganese and radon
 - The water is disinfected with chlorine
- What pressure will I have?
 - This depends on the elevation of your house compared to the water system storage tanks

Hydraulic Grade Line



Possible Questions

- What's going to happen inside my house?
 - Peter Pitsas will describe in detail.
- How long will the work in my house take?
 - This depends on each situation but likely no more than one or two days.
- Will there be an interruption in water service?
 - Yes, when the final transfer to town water is made.
 - This will likely be about an hour.
- Will this affect our wastewater system?
 - No, you will continue to use your septic system.

Possible Questions

- What am I responsible for?
 - The town is responsible for the water main and the service to your property line or curb stop.
 - You are responsible for the service on your property.
- What will I pay for water?
 - Per the NHDES 2009 Water Rate Survey, about \$532/year for a single family home using 275 gpd

Water Main Design

- Preliminary drawings on wall (service line locations based on initial site review and may change based on home inspection).
- Water main in street along Blueberry Hill Rd.
- Water main off road on Windmere and Strawberry.

Home Inspections

- A representative from Underwood Engineers will visit each house in the next few weeks.
- Sign up sheet.
- All residents need to sign up for an appointment.
- Each appointment will last ½ hour.

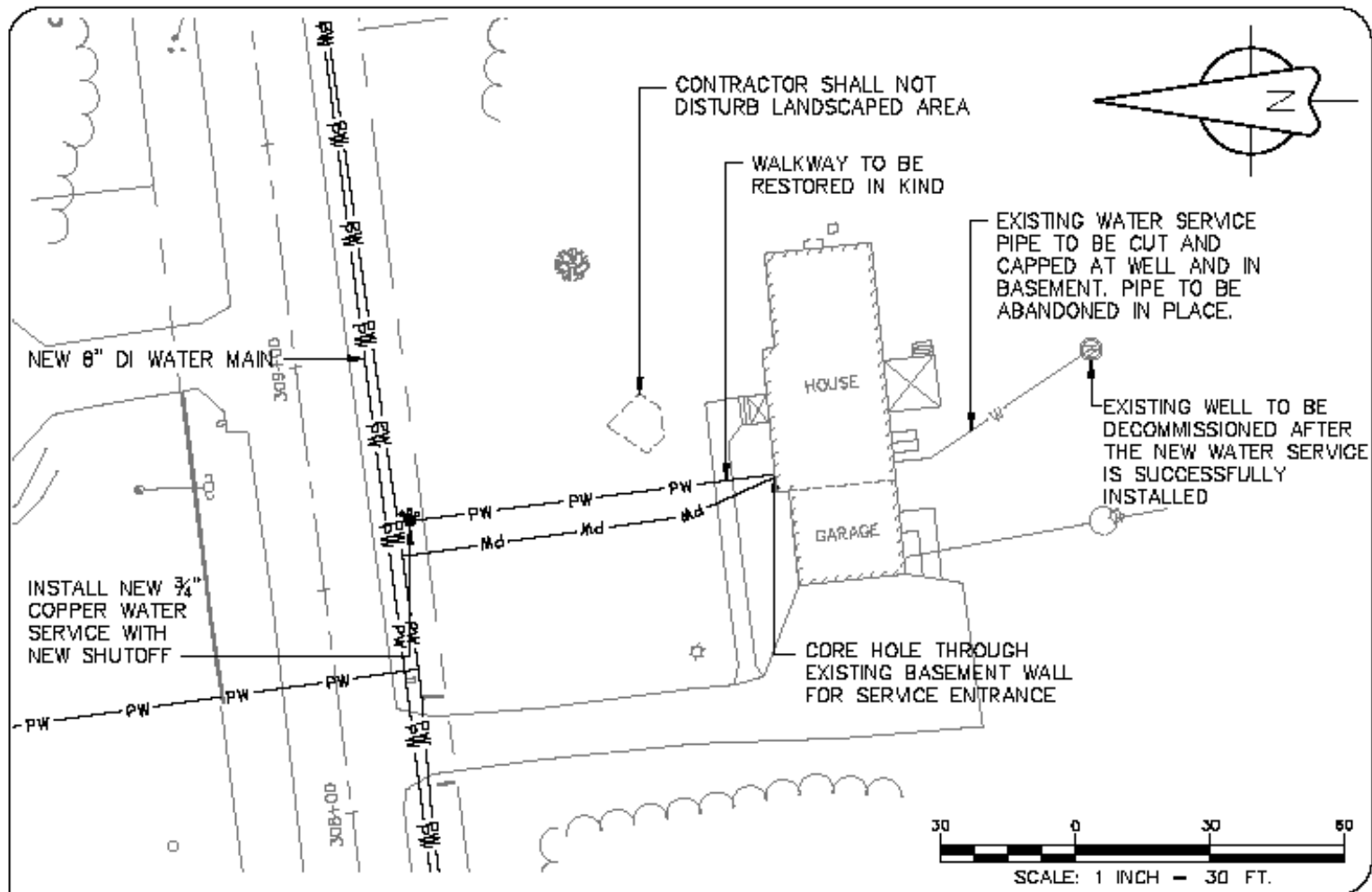
Home Inspections Will Include

- Review the layout of the basement
- Review the anticipated plumbing modifications with the homeowner
- Review anticipated site construction
- Review design options
 - Remove pressure tank
 - Remove treatment system

Initial Design

- Use the information gathered to develop the initial design
- Visit all homeowners again to review the design
- Design example

Sample Site Plan



EXAMPLE SITE PLAN
MOTTOLO WATER MAIN EXTENSION
RAYMOND, NEW HAMPSHIRE
UE #1655

UNDERWOOD
engineers

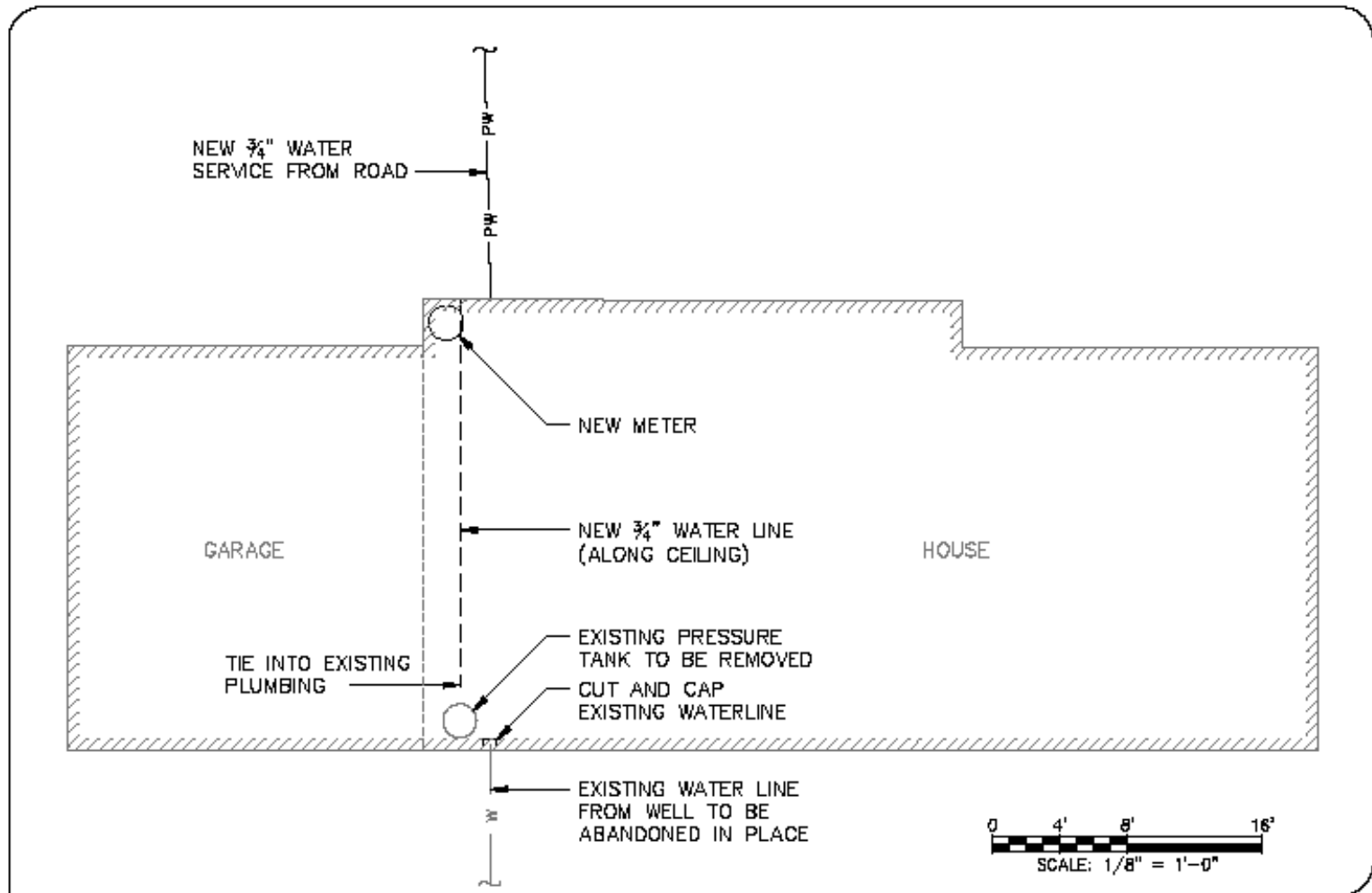
99 North State Street, Concord, N.H. 03301
Tel. 603-230-8098 Fax. 603-230-8099

DATE
1/31/2011

FIGURE

1

Sample Basement Floor Plan



EXAMPLE SERVICE CONNECTION
MOTTOLO WATER MAIN EXTENSION
RAYMOND, NEW HAMPSHIRE
UE #1655

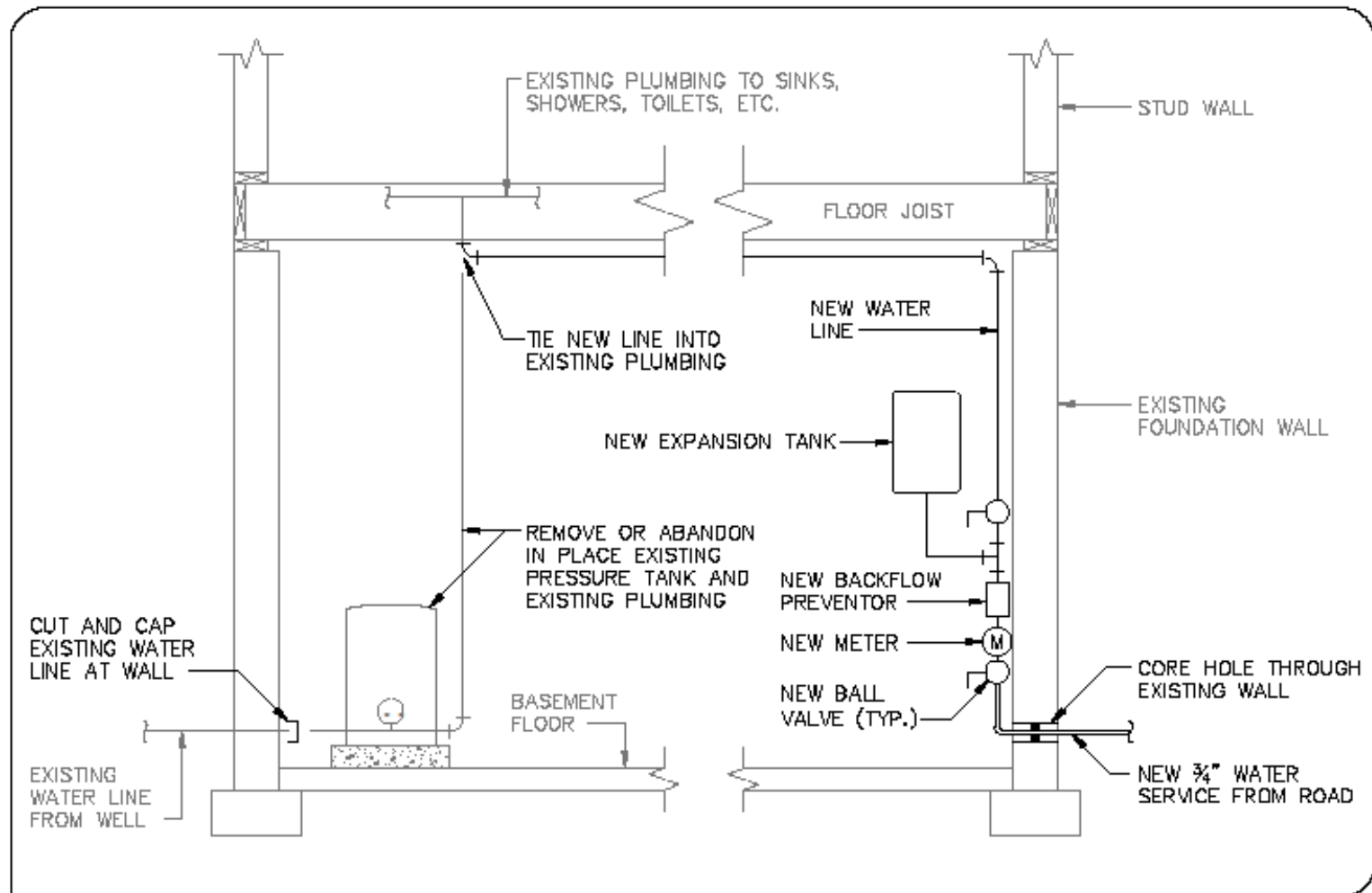
UNDERWOOD
engineers

99 North State Street, Concord, N.H. 03301
Tel. 603-230-0608 Fax. 603-230-8600

DATE
2/1/2011

FIGURE
2

Sample Plumbing Layout



EXAMPLE SERVICE CONNECTION
 MOTTOLO WATER MAIN EXTENSION
 RAYMOND, NEW HAMPSHIRE
 UE #1655

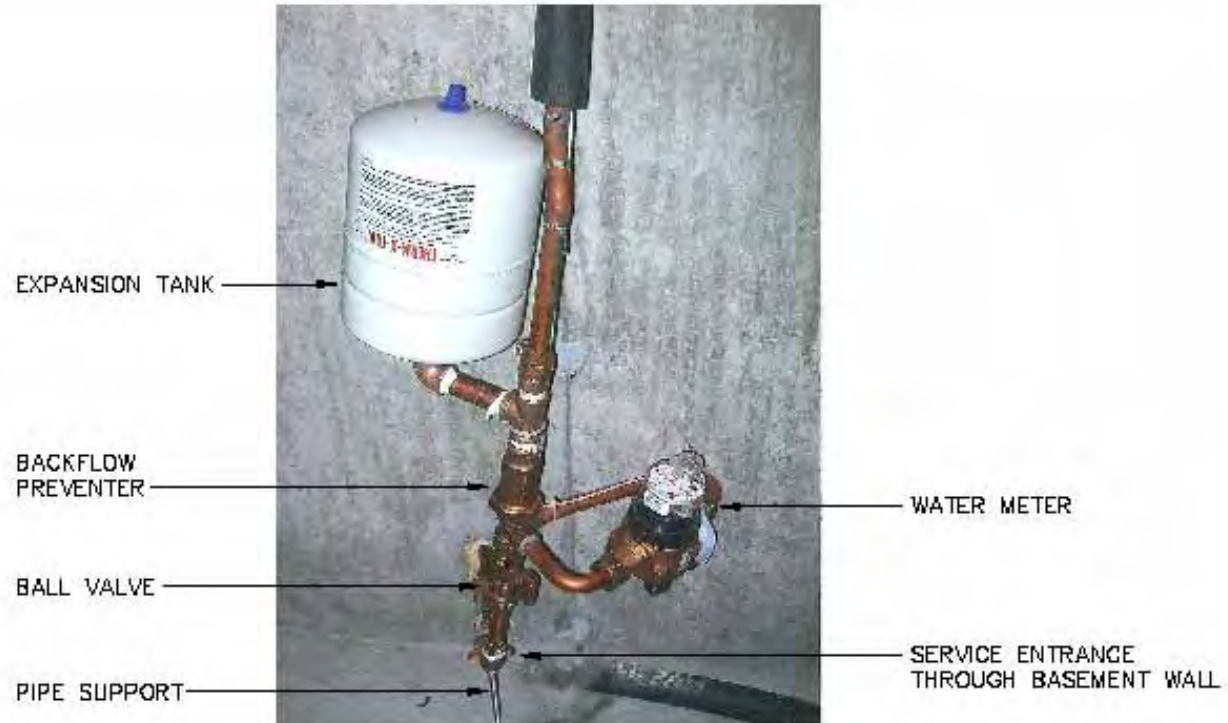


99 North State Street, Concord, N.H. 03301
 Tel. 603-230-8698 Fax. 603-230-8699

DATE
 2/1/2011

FIGURE
 3

Example



TYPICAL SERVICE PHOTO
MOTTOLO WATER MAIN EXTENSION
RAYMOND, NEW HAMPSHIRE
UE #1655

UNDERWOOD
engineers

99 North State Street, Concord, N.H. 03301
Tel. 603-236-0098 Fax. 603-236-0099

DATE
1/31/2011

FIGURE

4

Right-of-Entry Agreement

- Upon approval of the design, each homeowner must sign a Right-of-Entry Agreement.
- This agreement grants permission for the contractor to work on private property.
- Agreement to include individual design drawings (these drawings will be given directly to the contractor).

Construction Activity

- Perform preconstruction survey
- Installation of water main
- Testing of water main
- Installation of service pipe into house by the earthwork contractor
- Installation of interior piping by plumber
- Decommission well
- Restoration of pavement and lawns

Construction Sequence

- Installation of water main
- Testing of water main (may be done weeks after the main has been installed)
- Installation of service pipe (sitework, plumbing, and restoration) to be done in groups to limit disruption to homeowners
- Restoration of pavement (needs to be done at least 30 days after the last excavation)

Questions and Discussion



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