

Concord Ave Neighborhood

Phase 3: Alewife Sewer Separation Project

Inflow Removal Meeting – October 22, 2013



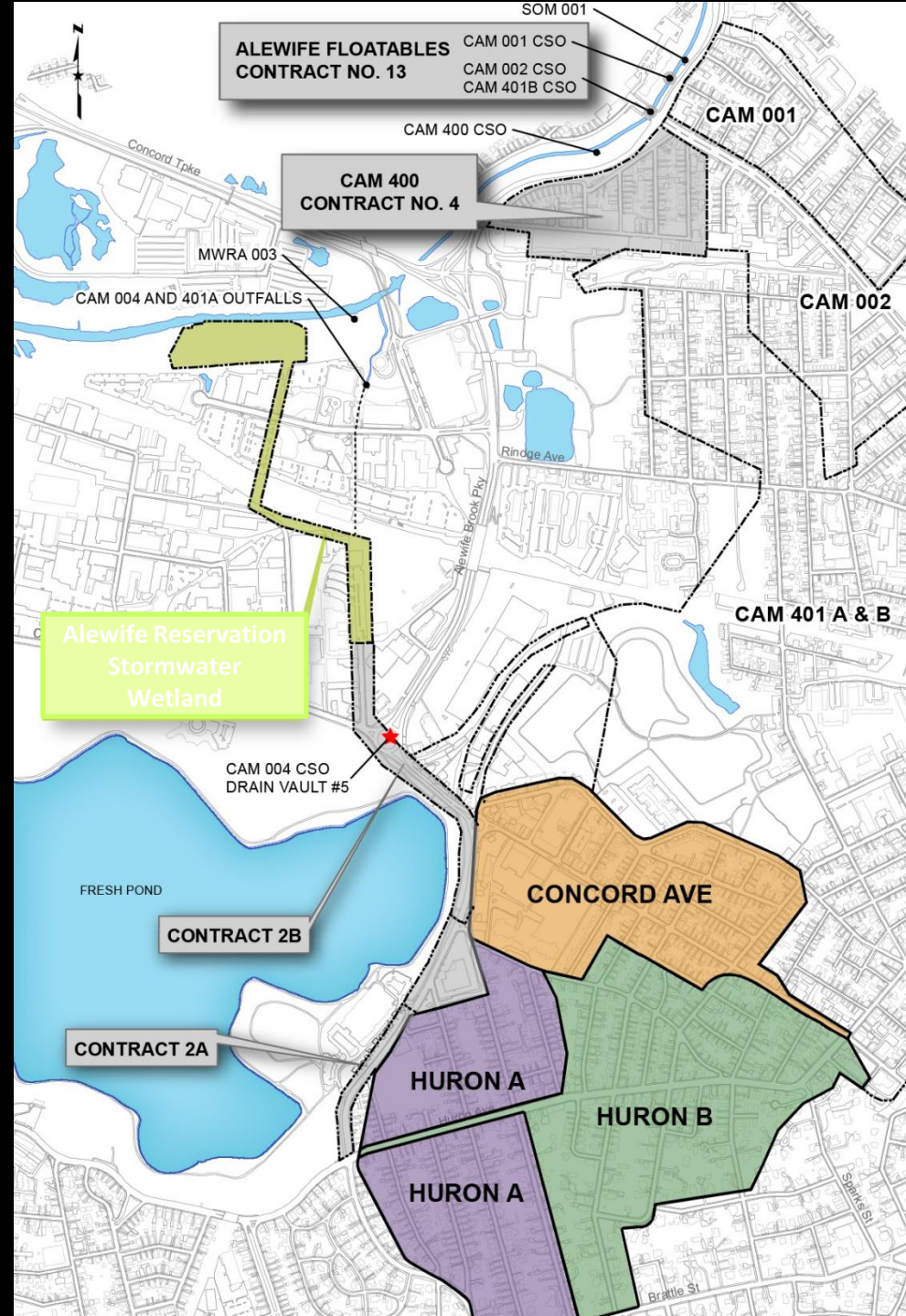
Concord Ave Neighborhood

Inflow Removal Meeting

- **Welcome and Introduction** **Catherine Daly Woodbury**
- **Project Description**
 - **Project Goals and Benefits**
 - **What is Inflow**
 - **Why Remove Inflow**
- **Private Property Inflow Removal**
 - **Why Your Property**
 - **What to Expect**
 - **Timeline**
- **Property Owner Consultations** **City Staff and Consultants**

Goals

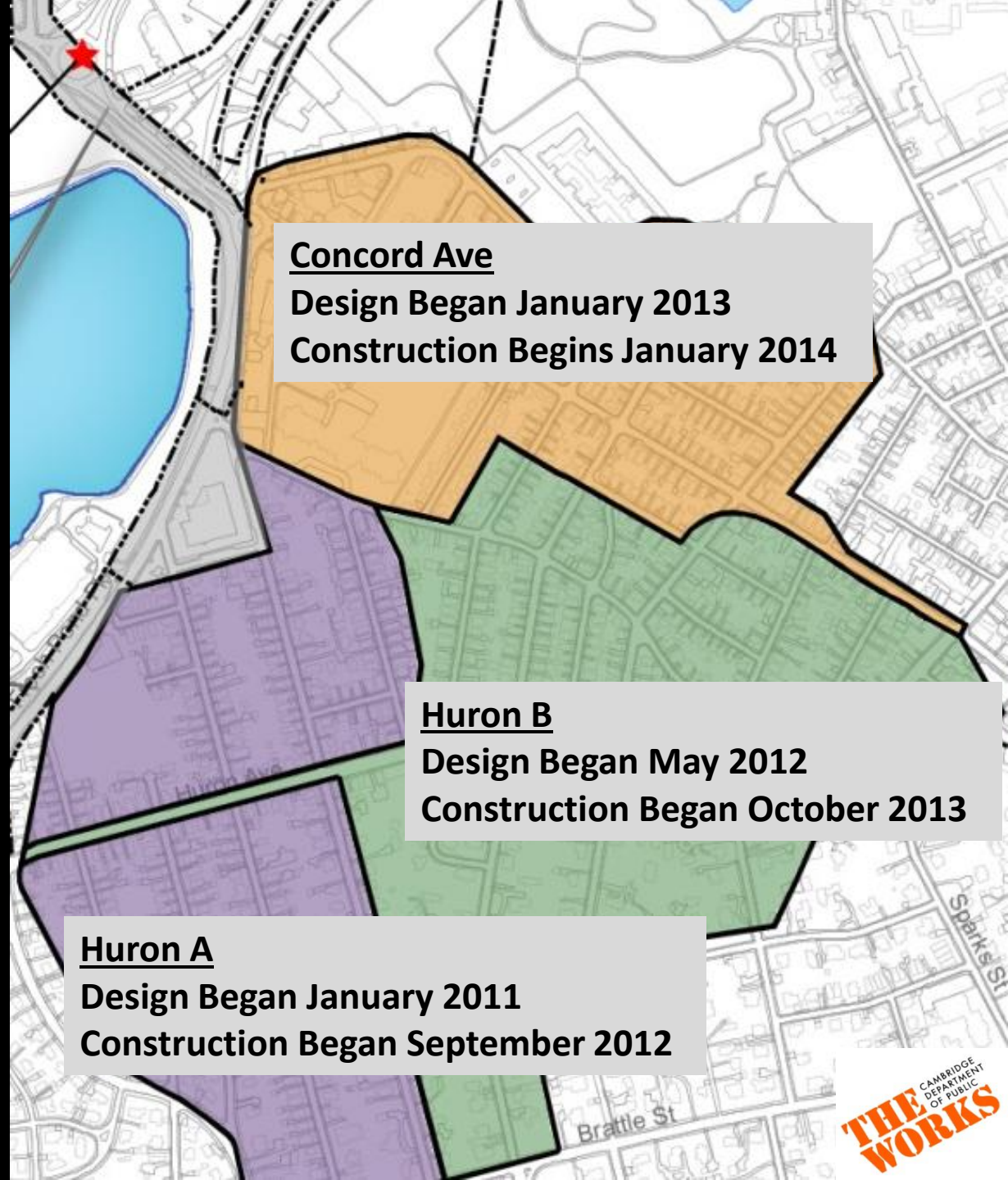
- Court-ordered clean up of Boston Harbor requires implementation of the Long Term Control Plan for Combined Sewer Overflow (CSO) for Alewife Brook
- MWRA's Plan for Alewife Brook
 - 50 Mg → 7.3 Mg
 - 63 activations → 7 activations per year



Huron/Concord Project Areas

-Sewer improvements
on all 3 contracts to be
complete by December
2015

-Surface restoration
complete by 2016



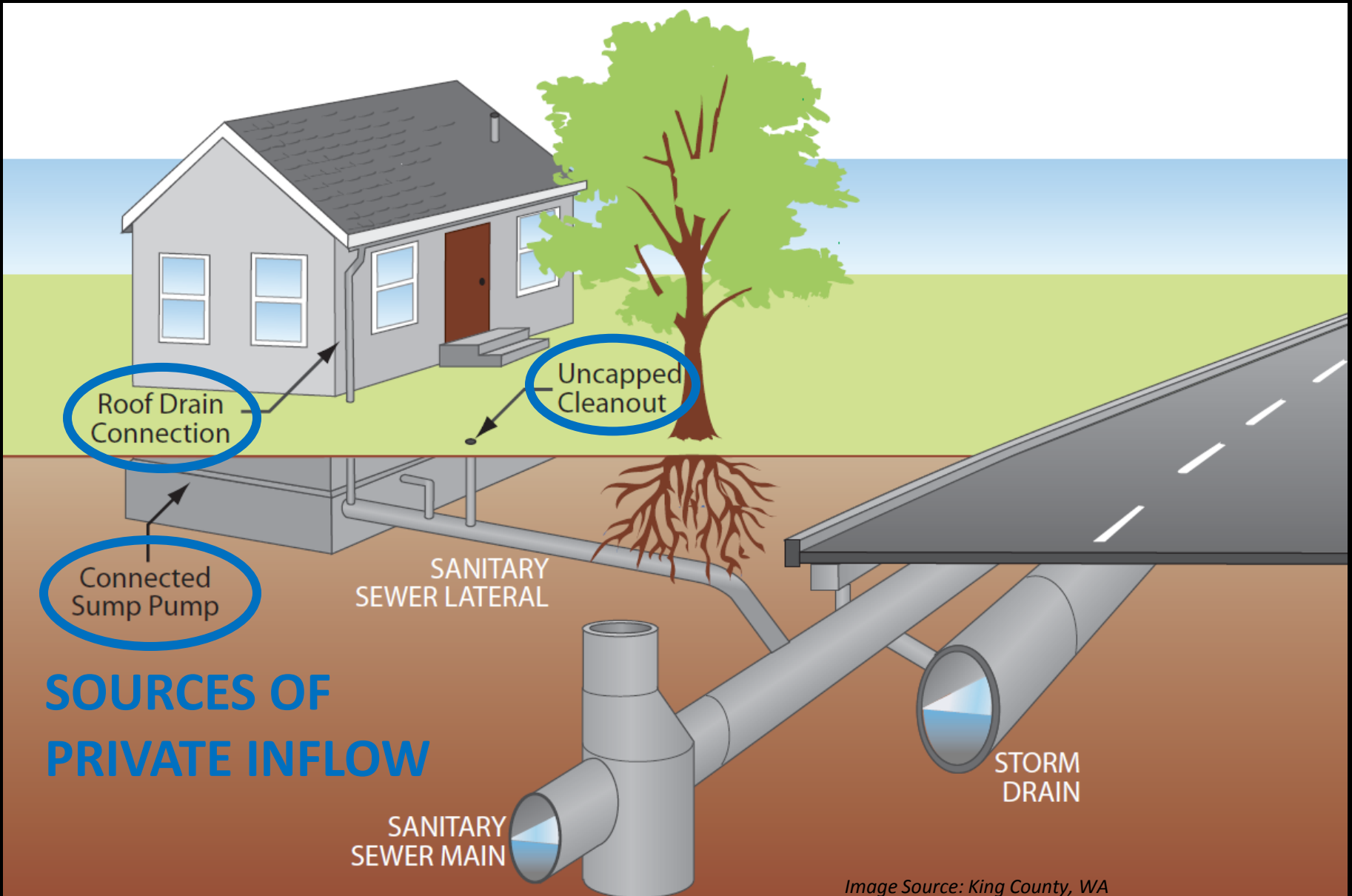
Concord Ave
Design Began January 2013
Construction Begins January 2014

Huron B
Design Began May 2012
Construction Began October 2013

Huron A
Design Began January 2011
Construction Began September 2012



What Is Inflow?



Why Remove Inflow?

- Reduces probability of sewer backups
- Inflow causes increased pollution to Alewife Brook
- Reduced cost of sewage treatment for entire community



Private Property Inflow Removal: Why Your Property?

- Collected data through Field Investigations and Building Inspections
- Performed hydraulic analysis to determine how much inflow must be removed
- Performed a feasibility analysis to determine which sources should be targeted
 - Developed Conceptual Plan
 - Determined Estimated Cost



Building Inspections



City of Cambridge

Information on Building Inspections for Sewer Separation Program for the Huron A, Huron B and Concord Ave. Neighborhoods

To Schedule an Appointment for a Building Inspection please call:

Christine Clancy - 617-594-1316 or Email - christine.clancy@eacon.com

If you have any questions please feel free to contact Catherine Daly Woodbury at the City of Cambridge:

Catherine Daly Woodbury, Project Manager
City of Cambridge DPW - 617-349-4818

PUMP USED:	STORM	QUANTITY	2	HP	1/2	PIPE SIZE	1.5	GPM	UNK	VOLTS	UNK
	SANITARY	QUANTITY		HP		PIPE SIZE		GPM		VOLTS	
IS PUMP HARD PIPED TO DISCHARGE?		YES	NO	(SUMP FREQUENCY) DAILY - WEEKLY - MONTHLY - SEASONAL							
DISTANCE FROM TOP OF FOUNDATION TO SANITARY SERVICE. (CLEAN OUT CAP)										6.5	(ft)
DISTANCE FROM TOP OF FOUNDATION TO WATER SERVICE:										6.1	(ft)
DISTANCE FROM TOP OF FOUNDATION TO GAS SERVICE:										5.1	(ft)
FIELD OBSERVATION		EXISTS Y/N	DISCHARGE LOC.					INFO.*			
SANITARY SERVICE: DIA 4 IN.		Y	SS	CS	SD	-----	-----	UNK	R	D	C
GUTTER / DOWNSPOUT:		Y	SS	CS	SD	D/WELL	SURE	UNK	R	D	C
FLAT ROOF DRAIN:		N	SS	CS	SD	D/WELL	-----	UNK	R	D	C
STORM/SUMP PUMP:		Y	SS	CS	SD	D/WELL	SURE	UNK	R	D	C
SANITARY/GRINDER PUMP:		N	SS	CS	SD	-----	-----	UNK	R	D	C
DRIVEWAY DRAIN:		N	SS	CS	SD	D/WELL	-----	UNK	R	D	C
AREA DRAIN:		Y	SS	CS	SD	D/WELL	-----	UNK	R	D	C
WATER SERVICE MAT.: DIA 1 IN.			COPPER		STEEL/LEAD		OTHER		UNKNOWN		
*INFORMATION SOURCE: (R)-RECORD INFORMATION, (D)-DYE TEST & (C)-INFORMATION FROM CONTACT											
SANITARY PIPE, WATER, GAS, AREA DRAINS & PUMP LOCATIONS						DOWNSPOUT LOCATIONS:					
See Attached						See Attached					

	Concord Ave	Project-wide
Total Buildings	373	954
Buildings with Confirmed Inflow Sources	37	230
Buildings Selected for Inflow Removal	31	173



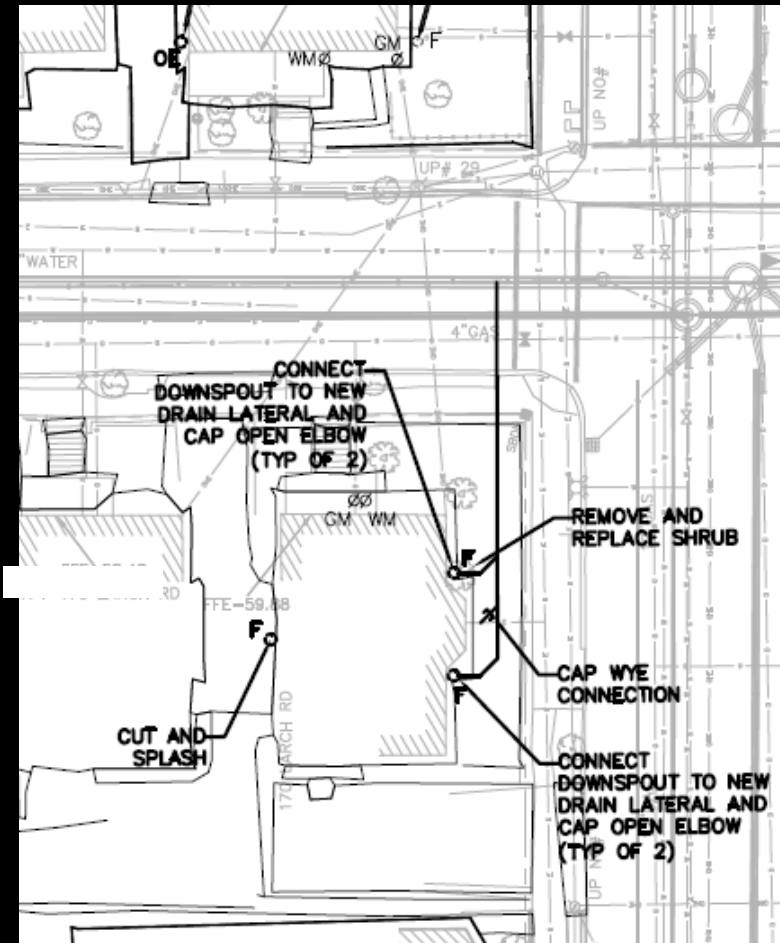
Private Property Inflow Removal: Concord Ave Neighborhood Targeted Properties



What to Expect: How Is Inflow Removed?

Inflow Removal Goals:

- **Keep Stormwater Local**
 - Discharge to Surface
 - Recharge with overflow
- If not possible:
 - **Provide Lateral Connection**



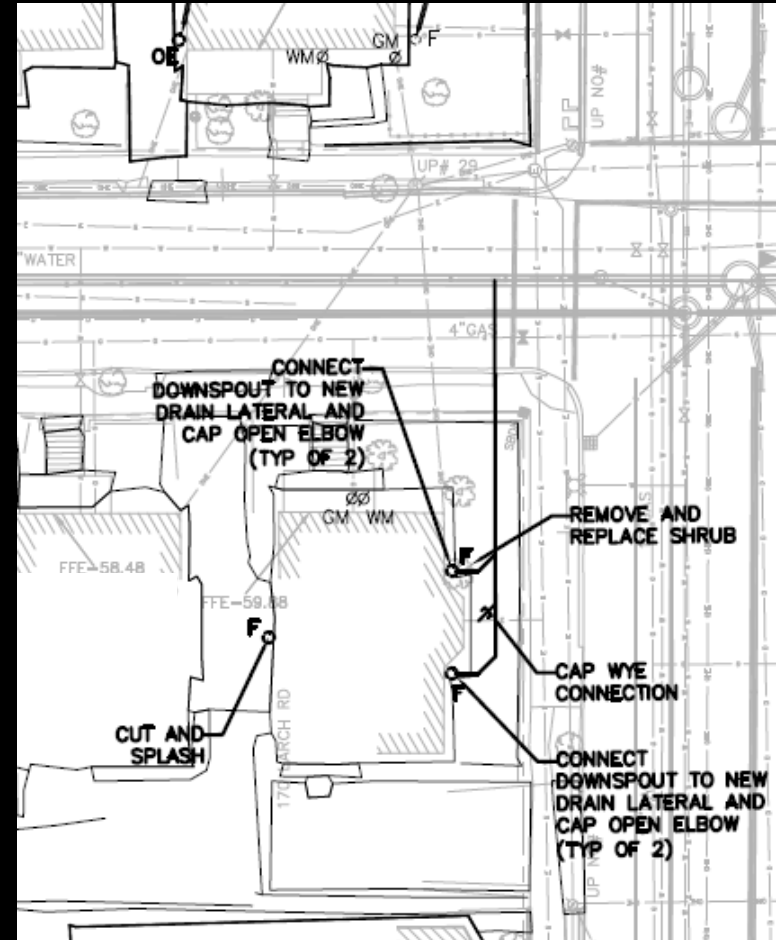
What to Expect: How Is Inflow Removed?

Exterior work:

- Cut downspouts and splash to surface
- Reroute downspouts
- Install new drainage lateral
- Install drywells with overflow

Interior work:

- Plug discontinued roof drains
- Disconnect/reconnect sump pumps and roof drains



What to Expect: How Is Inflow Removed?



Before: Downspout disappeared into foundation; connected to sewer



After: Downspout reconnected to new drain lateral with cleanout access. Sidewalk, driveway restored.



What to Expect: How Is Inflow Removed?

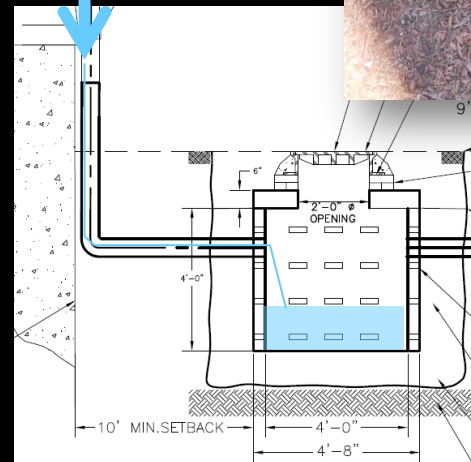


Downspouts disconnected. Elbow capped.

Drywell
installed with
overflow to the
storm drain.



From
Downspout



Drywell cross-section.

Overflow to
Storm Drain
(if needed)

What to Expect: How Is Inflow Removed?



Before: Roof Leaders and Sump Discharge
Tied into Sewer

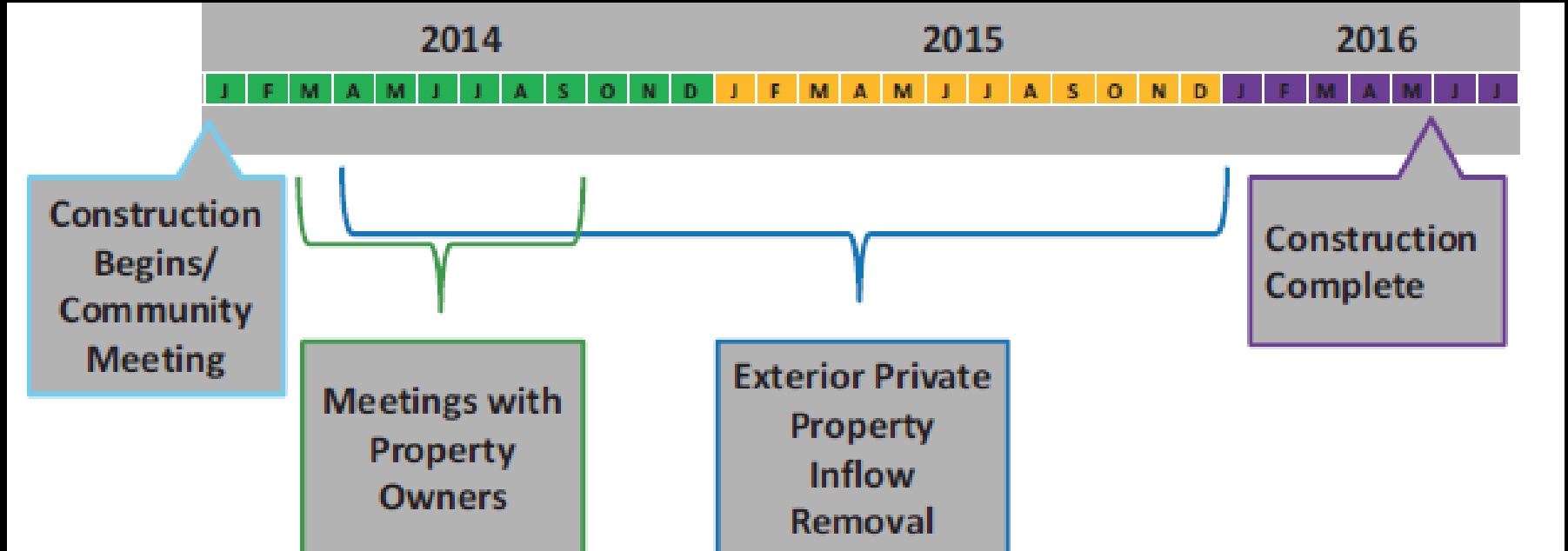


After: New dedicated drain lateral
for sump discharge and/or roof
drains

What to Expect: FAQ'S?

- **This work happens at no cost to the owner, if they choose to allow it as part of the project**
- **Property will be restored to equivalent or better condition**
- **Individual properties typical work schedule:**
 - **1-5 Days of Inflow Removal work**
 - **1-2 Days of Surface Restoration**

Construction Timeline: Concord Ave Neighborhood (Anticipated)



Next General Meetings:

- **Construction kick-off with contractor: February 2014**

Private Inflow work:

- **Private Consultation: 6 weeks prior to work**
 - Finalize conceptual plans
 - Right of Entry documentation
 - schedule work

Contact Information

- **Questions, Comments or Suggestions**
 - Catherine Daly Woodbury, Project Manager
cwoodbury@CambridgeMA.gov
 - KyAnn Anderson, Community Relations Manager
KAnderson@Kleinfelder.com
- **After Hours Emergency Contact**
 - Cambridge DPW at 617-349-4800
- **Information on City Web Site**
 - www.cambridgema.gov/theworks/ConcordArea

- **General Questions**

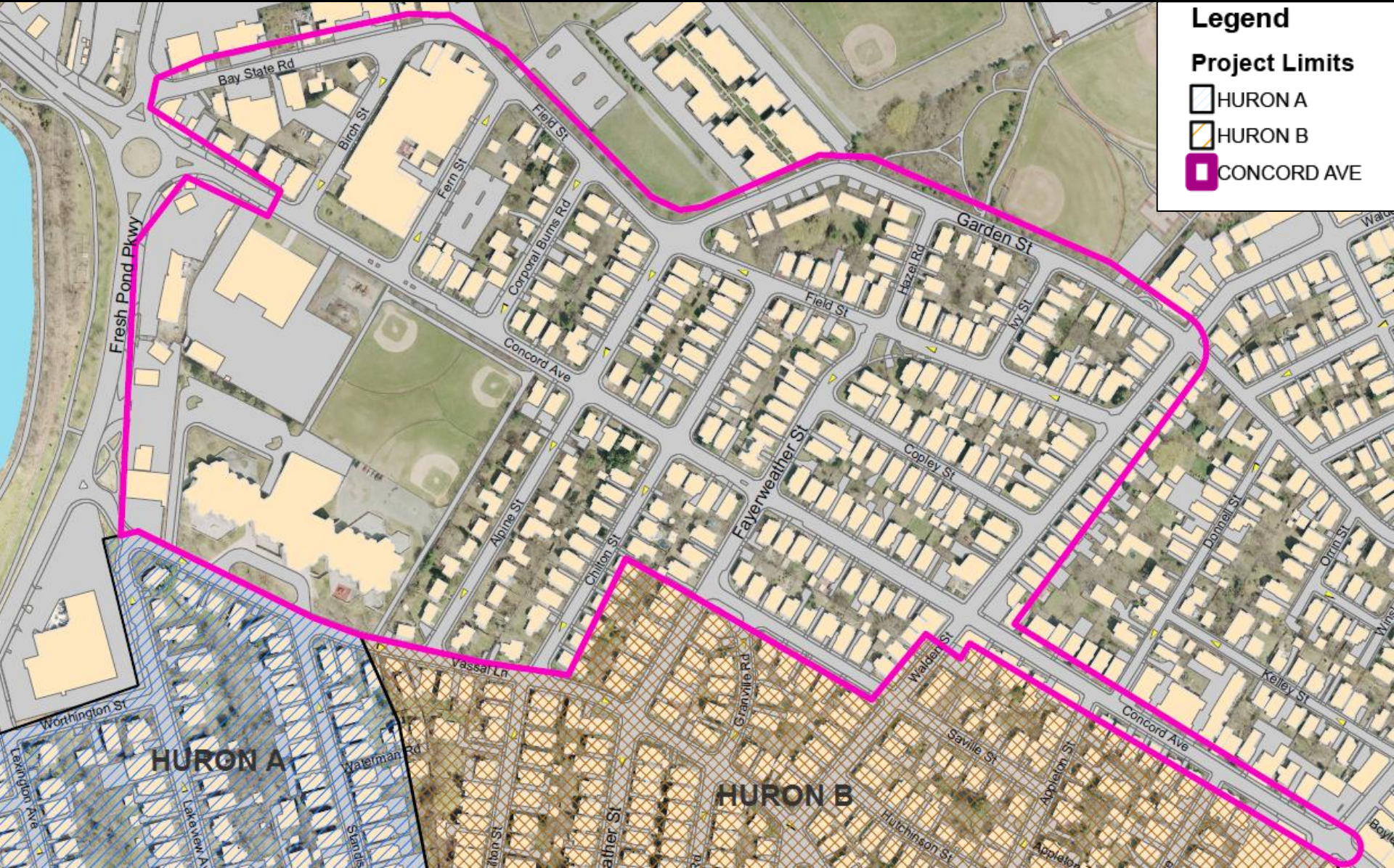
- **Private Consultations**

- **Property Specific Questions**

Reminders:

- **Plans are conceptual until the contractor and/or plumber visits your property**
 - **Please coordinate with all other owners of shared properties (condo's etc.)**
 - **Properties not in attendance tonight will have plans mailed to them**

Concord Ave Neighborhood Project Area



Legend

Project Limits

- HURON A
- HURON B
- CONCORD AVE