

Village of Irvington Flood Study March 2011

for the
Village Board
&
Community

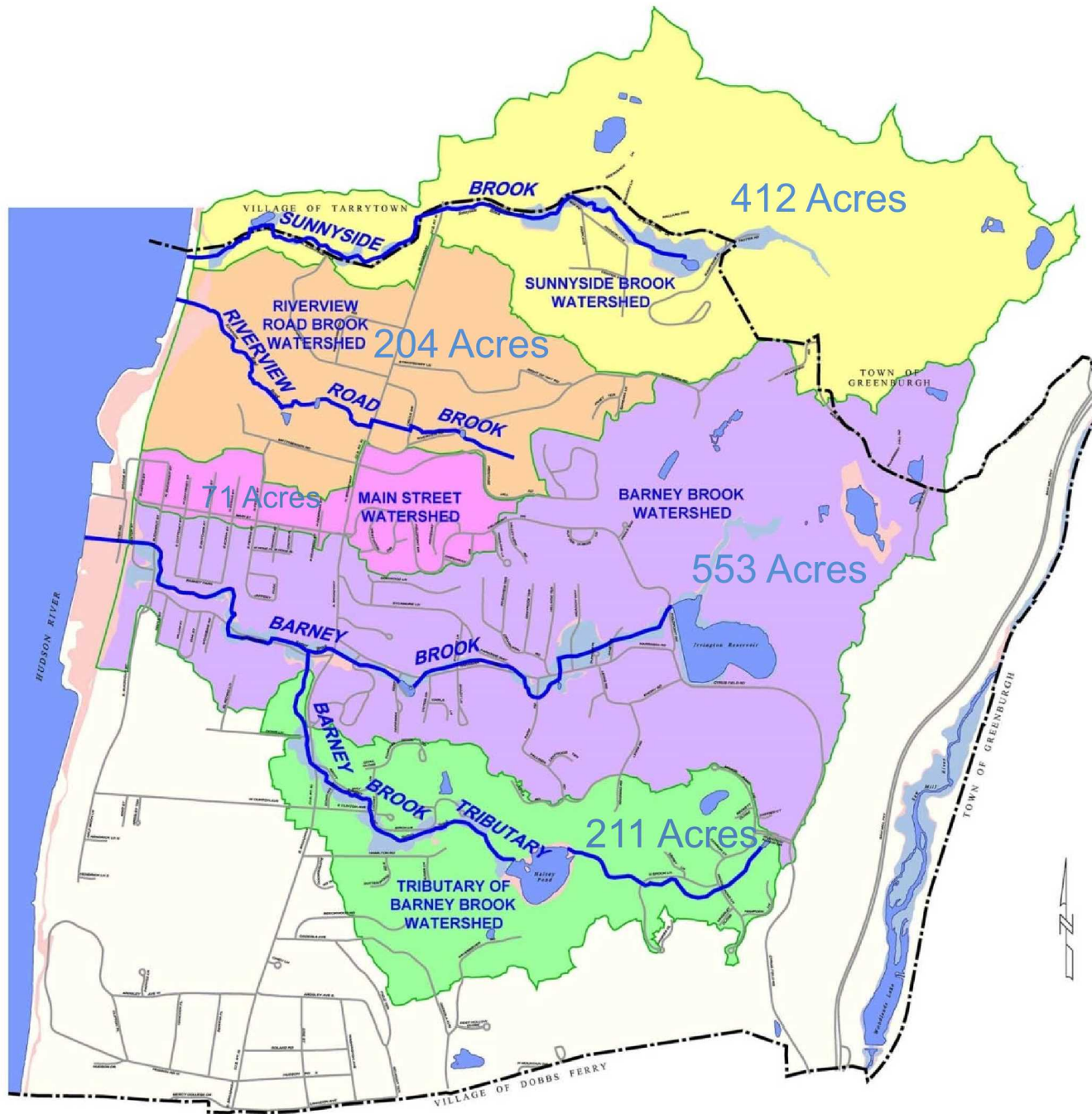
Prepared by
Hahn Engineering
Brewster, NY



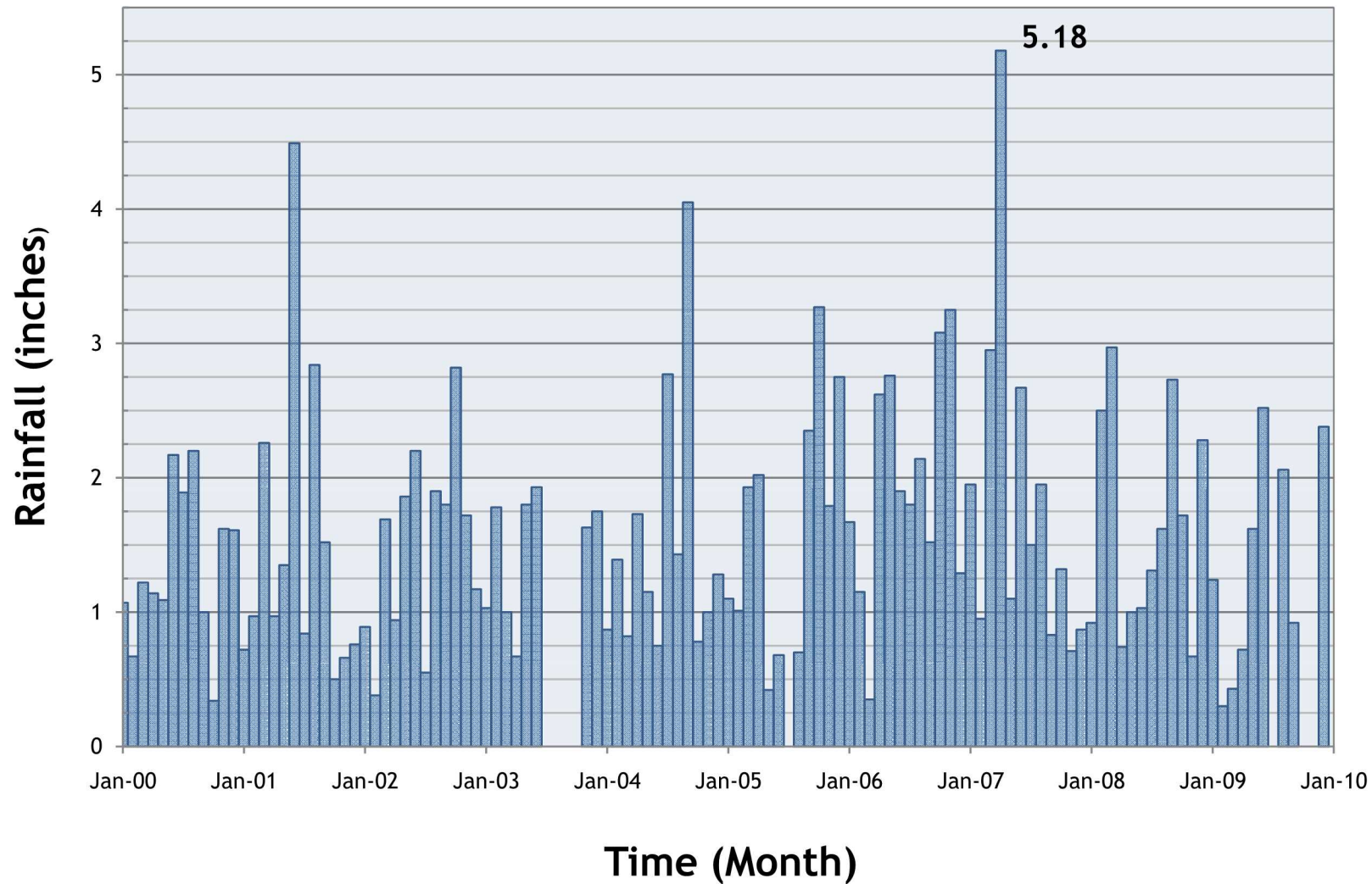


Drainage Areas

1. Sunnyside Brook
2. Riverview Road Brook
3. Barney Brook
4. Barney Brook Tributary
5. Main Street Culvert



Village of Irvington, NY
Maximum Daily Rainfall Per Month
January 2000 to December 2009



RAIN DATA FOR PAST 10 YEARS

Report used 5.18 inches which occurred on April 15, 2007.

The US Department of Agriculture, Natural Resource Conservation Service (NRCS) has determined that a 10 year storm in Westchester County is 5 inches of rainfall in a 24 hour period.

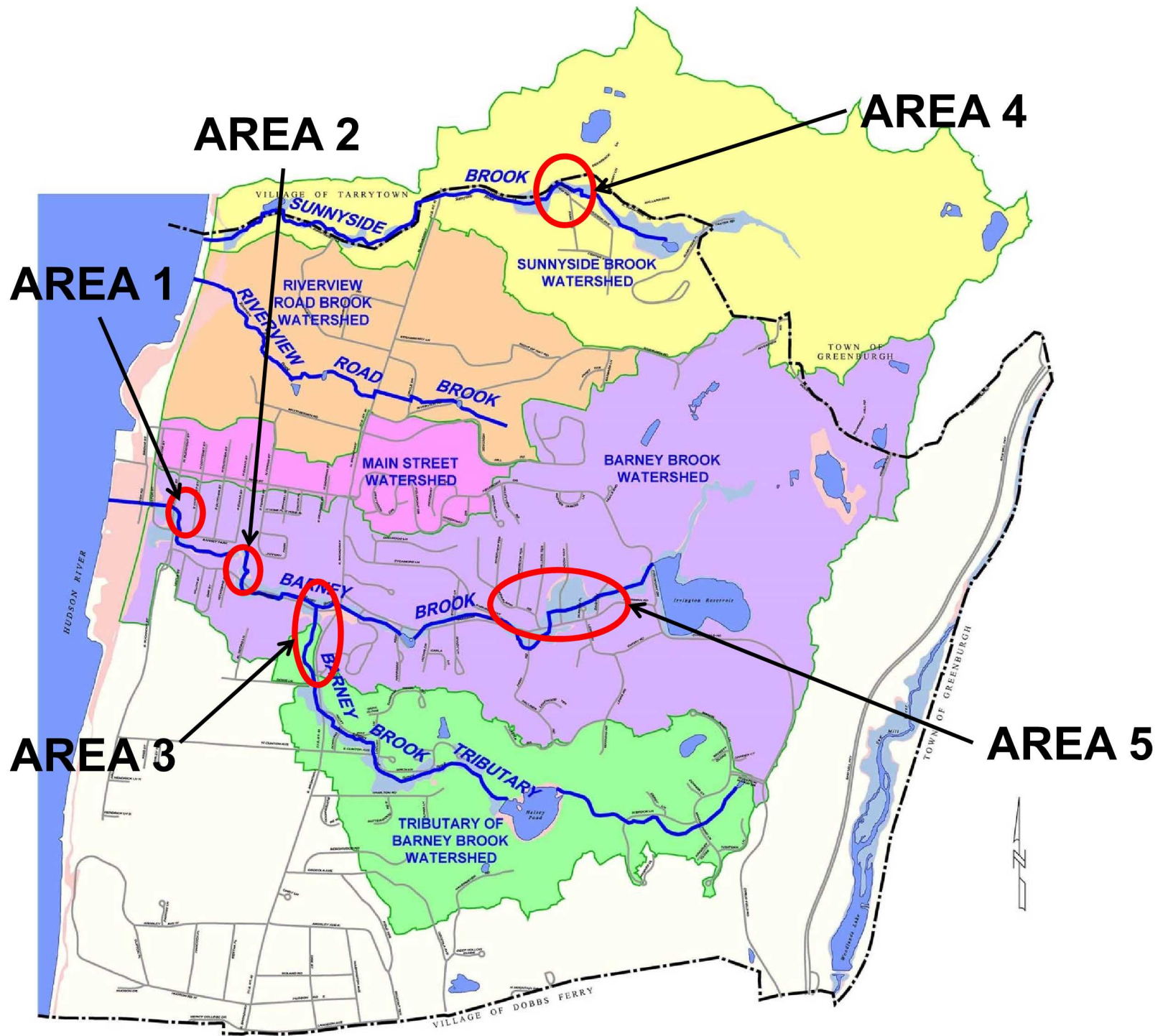
10 YEAR STORM EVENT- A MAGNITUDE OF RAINFALL THAT IS EXPECTED TO OCCURE ONCE EVERY 10 YEARS in a 24 hour period.

OBJECTIVES

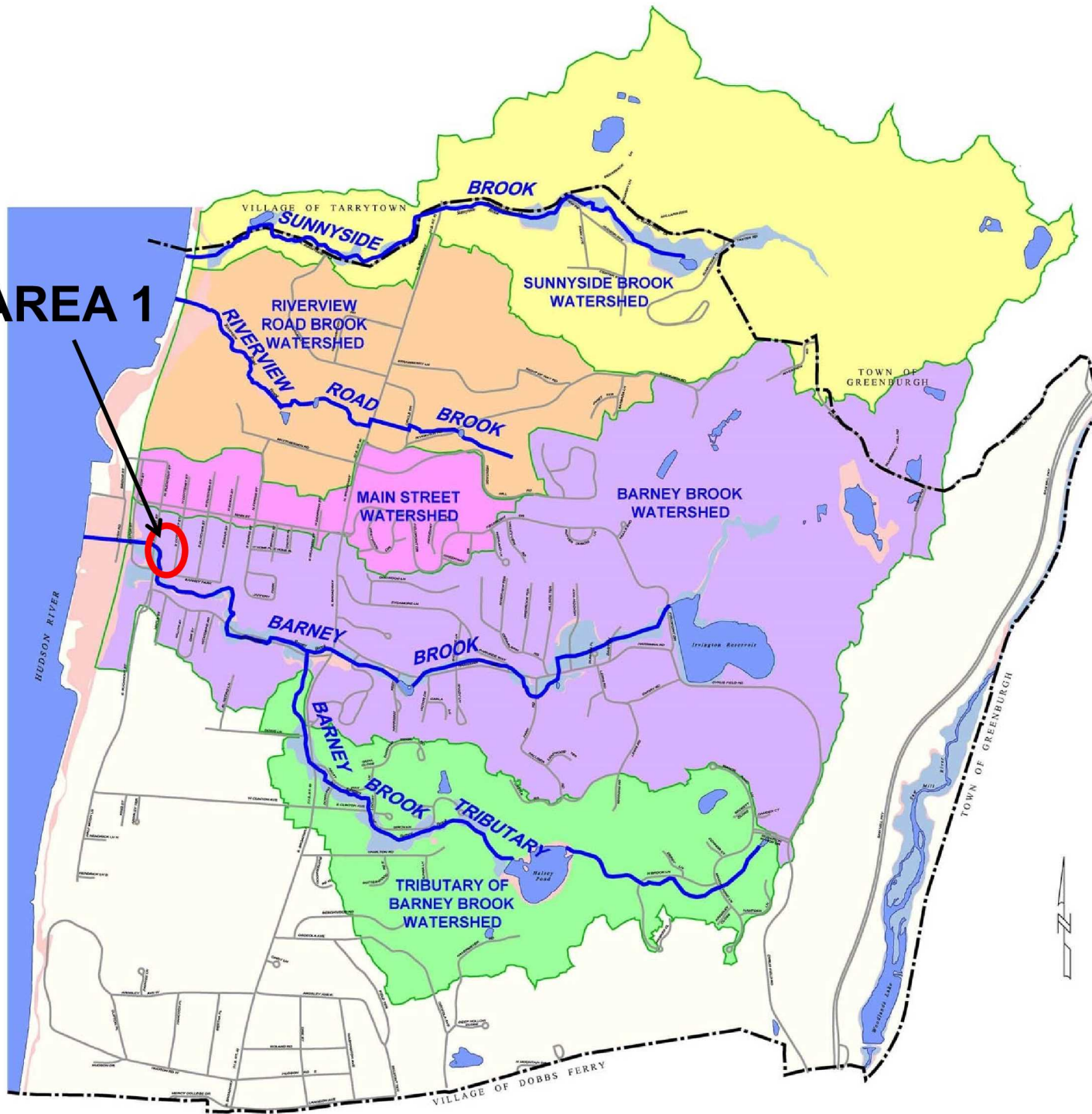
- Identify flooding areas.
 - 5 Village Identified Areas (Public Owned)
 - 6 Other Public Owned Properties
 - 12 Privately Owned Properties
- Recommendations to alleviate flooding.
- Preliminary cost estimates for Village Identified Areas.

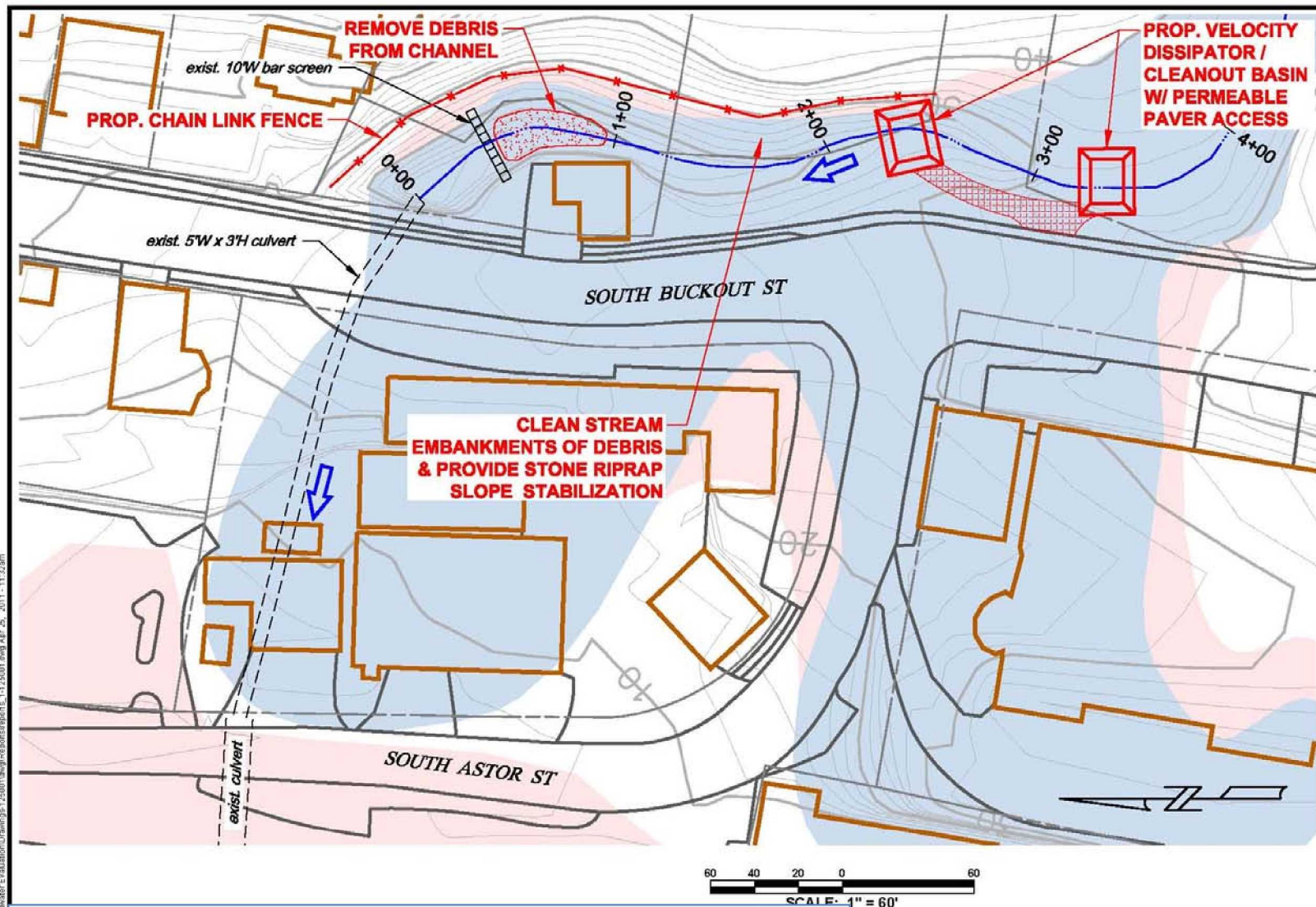
Village Identified Areas

- Conceptual Plan
- Preliminary Cost Estimates



AREA 1





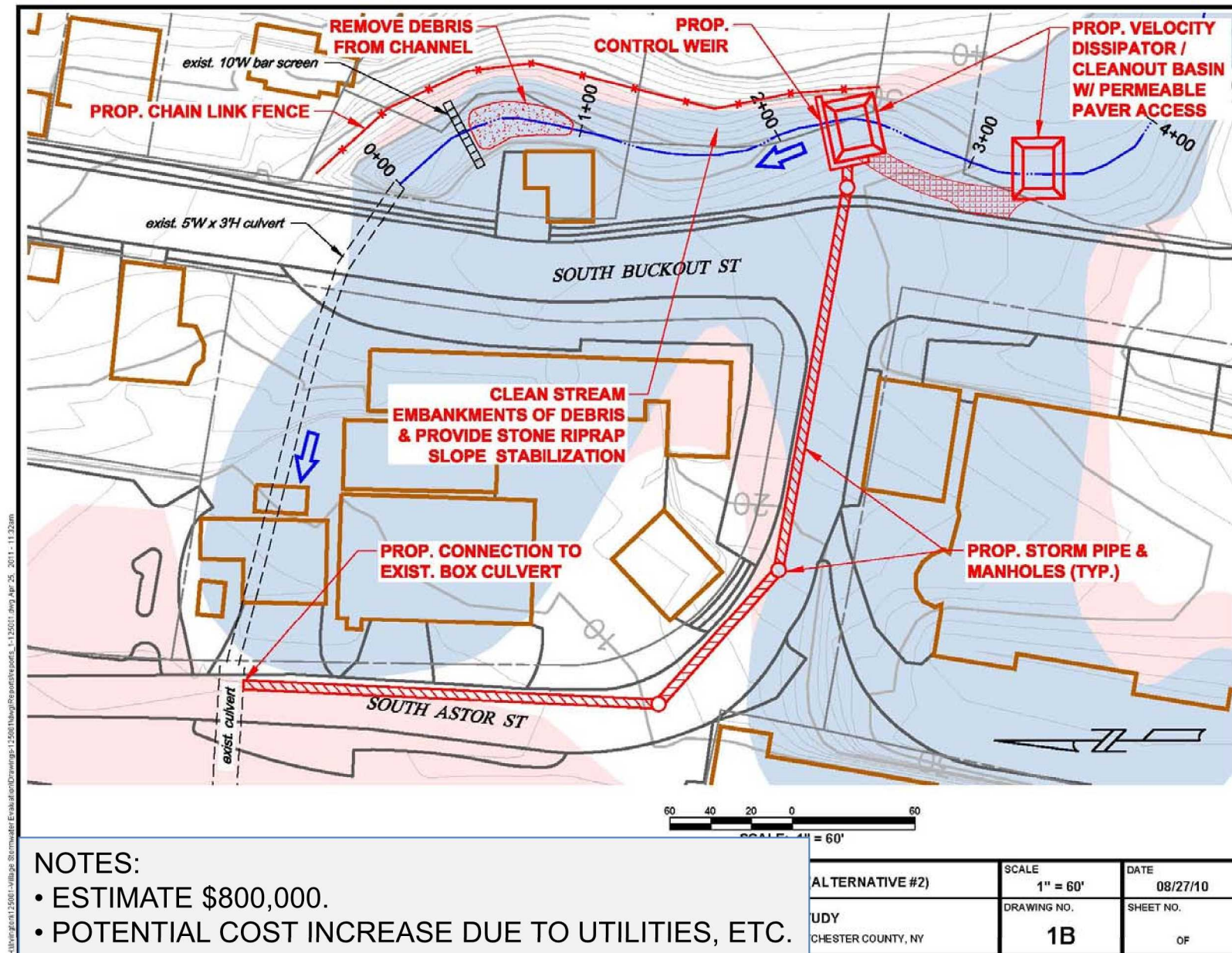
NOTES:

- ESTIMATE \$300,000.
- CULVERT TO BE SURVEYED TO VERIFY CAPACITY.

(ALTERNATIVE #1)	SCALE 1" = 60'	DATE 08/27/10
STUDY STCHESTER COUNTY, NY	DRAWING NO. 1A	SHEET NO. OF



Improvement 1A – South Buckout Street



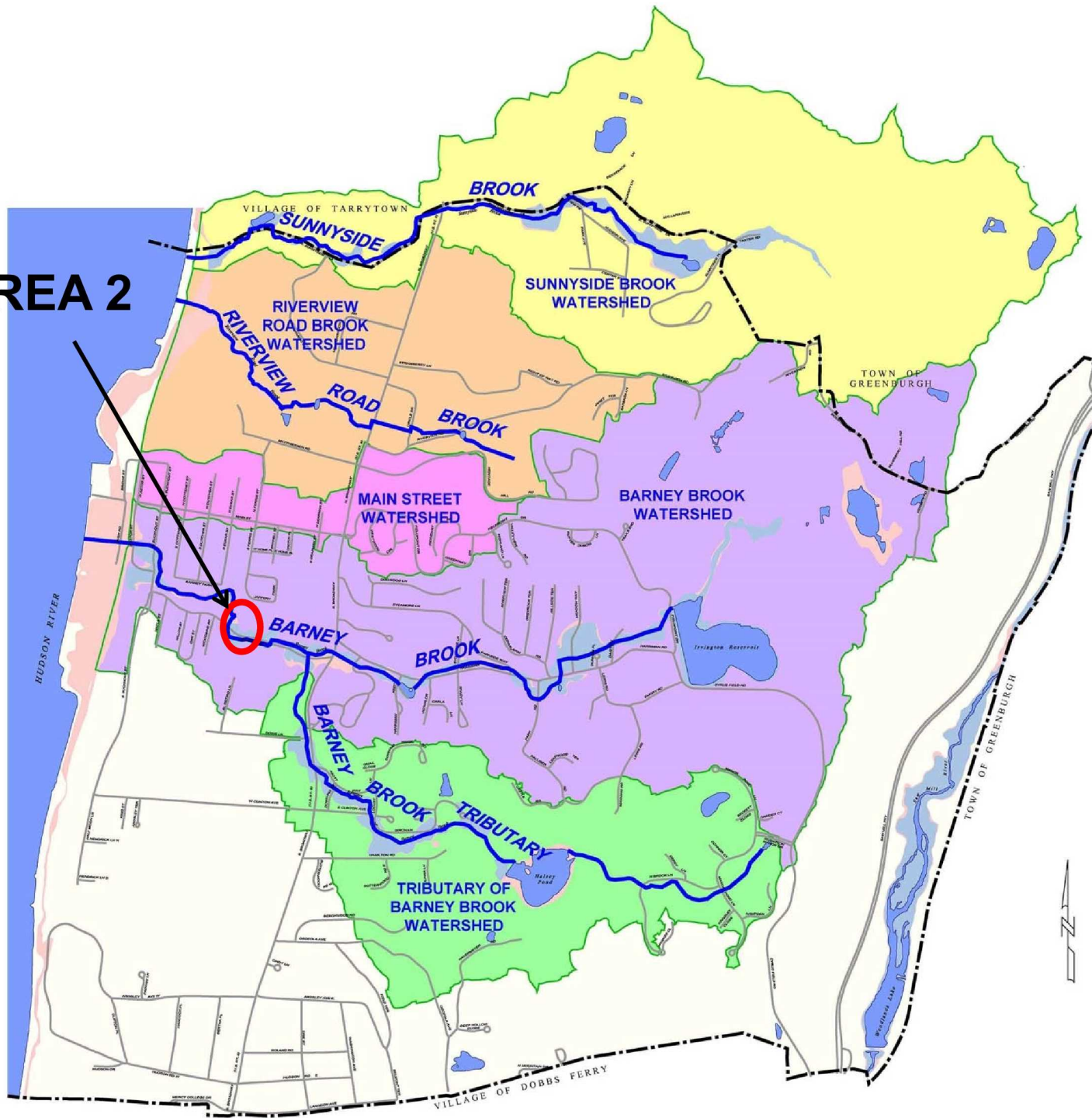


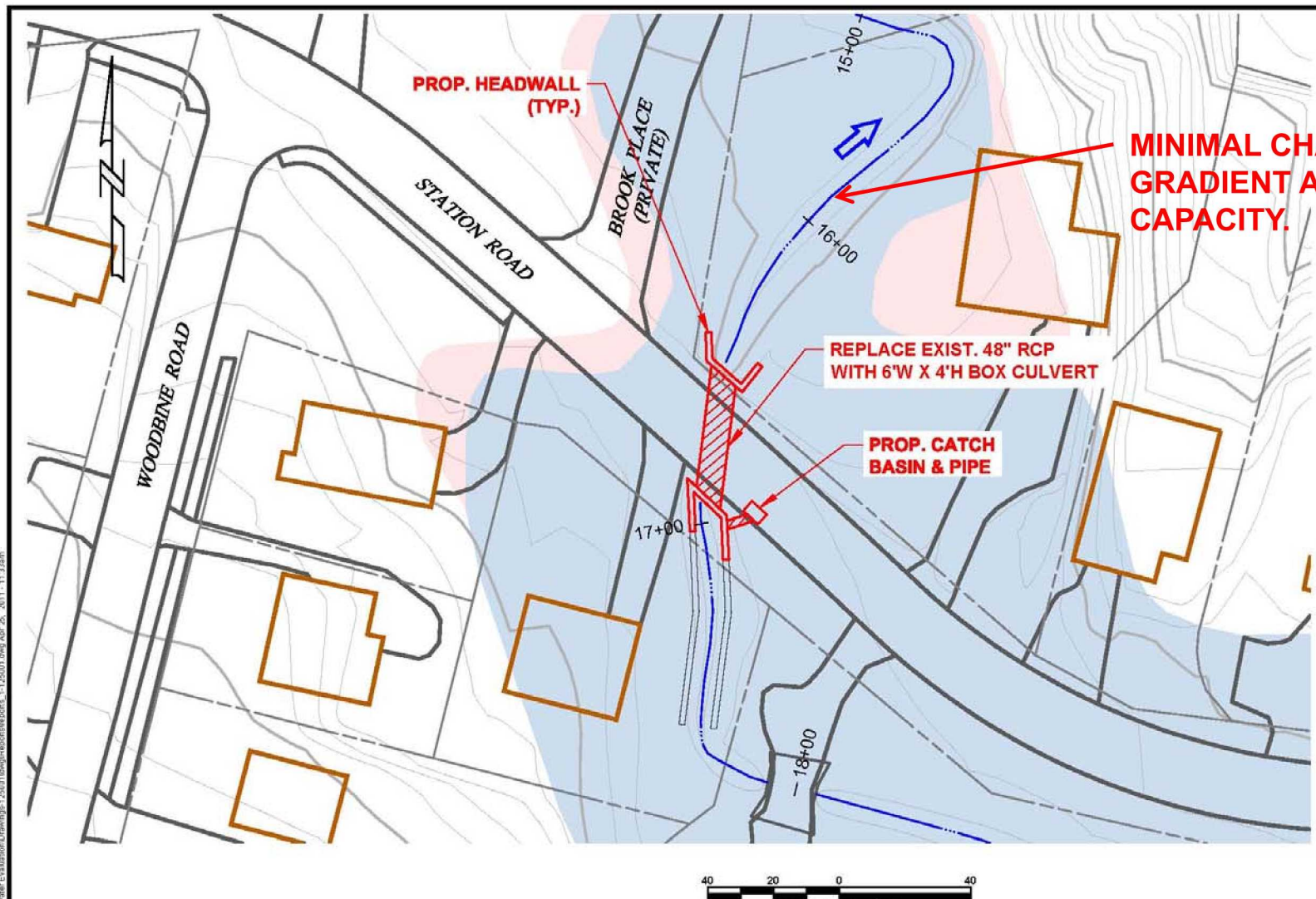


**DEBRIS
FROM
SLOPE**

**SEDIMENT
ACCUMULATION**

AREA 2





H:\projects\125001-Village Stormwater Evaluation\Drawings\125001-01-Station Road.dwg, 26, 2011, 11:33am

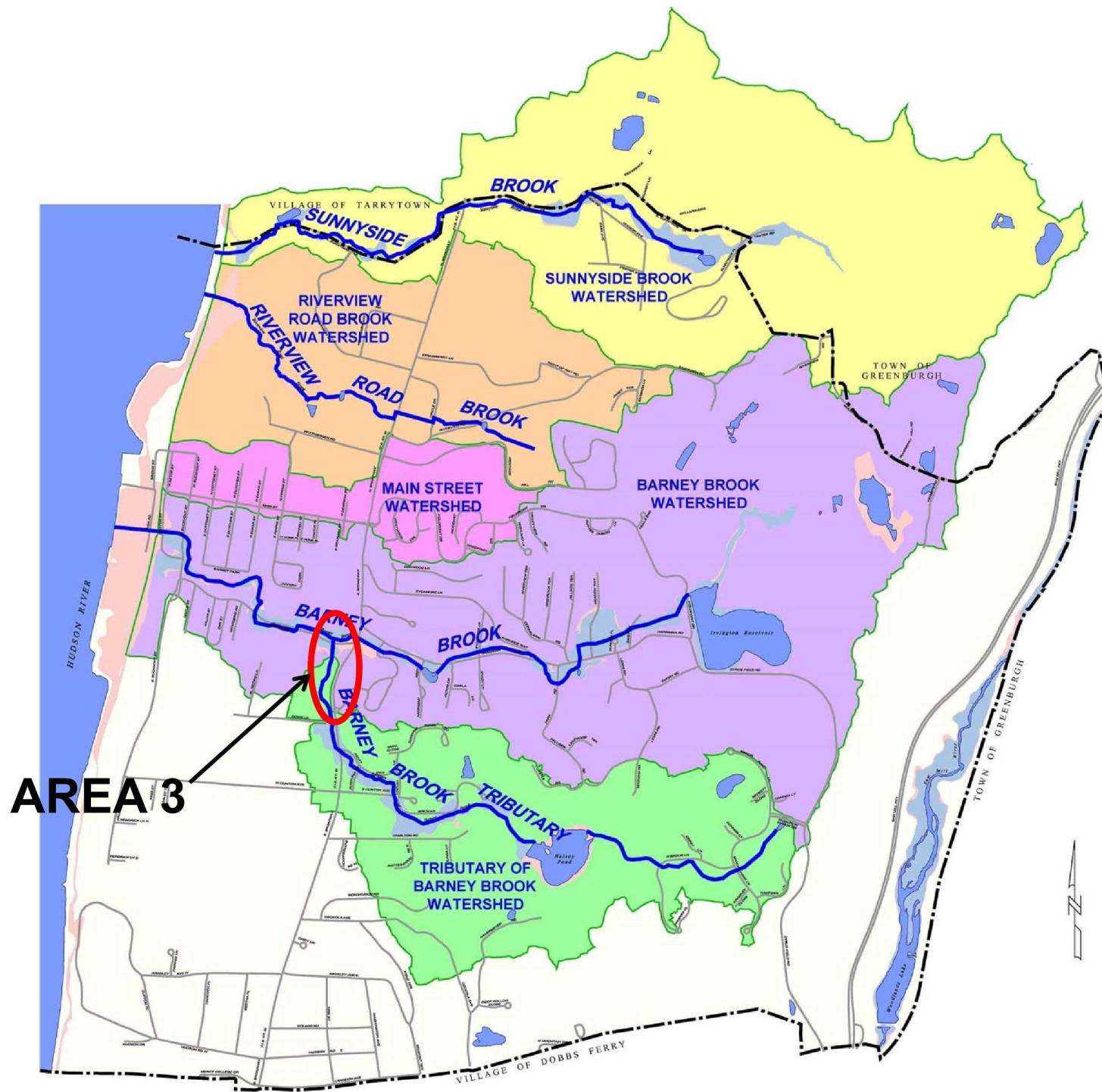
NOTES:

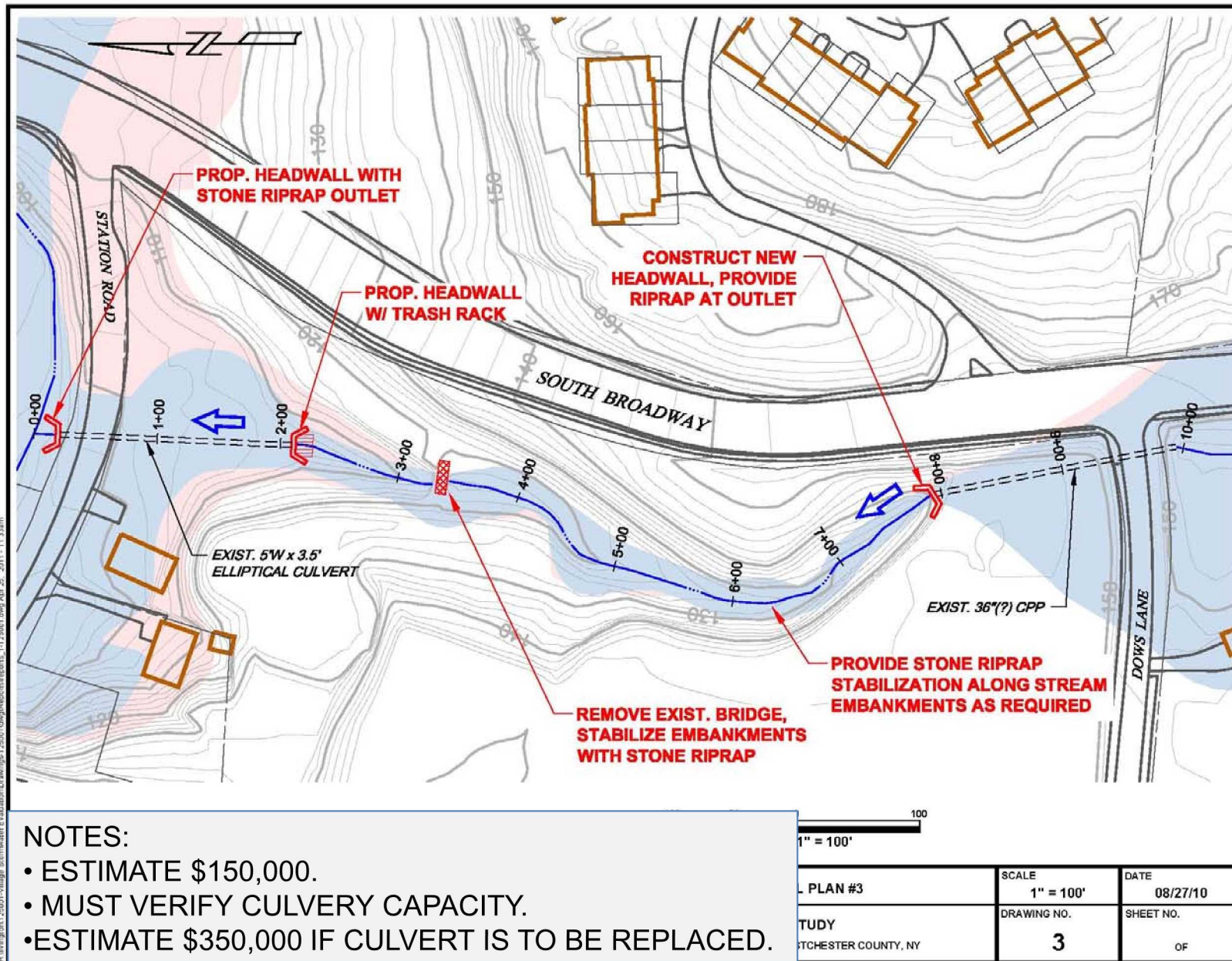
- ESTIMATE \$220,000.
- POTENTIAL DOWNSTREAM IMPACT, SURVEY AND ADDITIONAL ANALYSIS REQUIRED.

PLAN #2	SCALE 1" = 40'	DATE 08/27/10
UDY CHESTER COUNTY, NY	DRAWING NO. 2	SHEET NO. OF



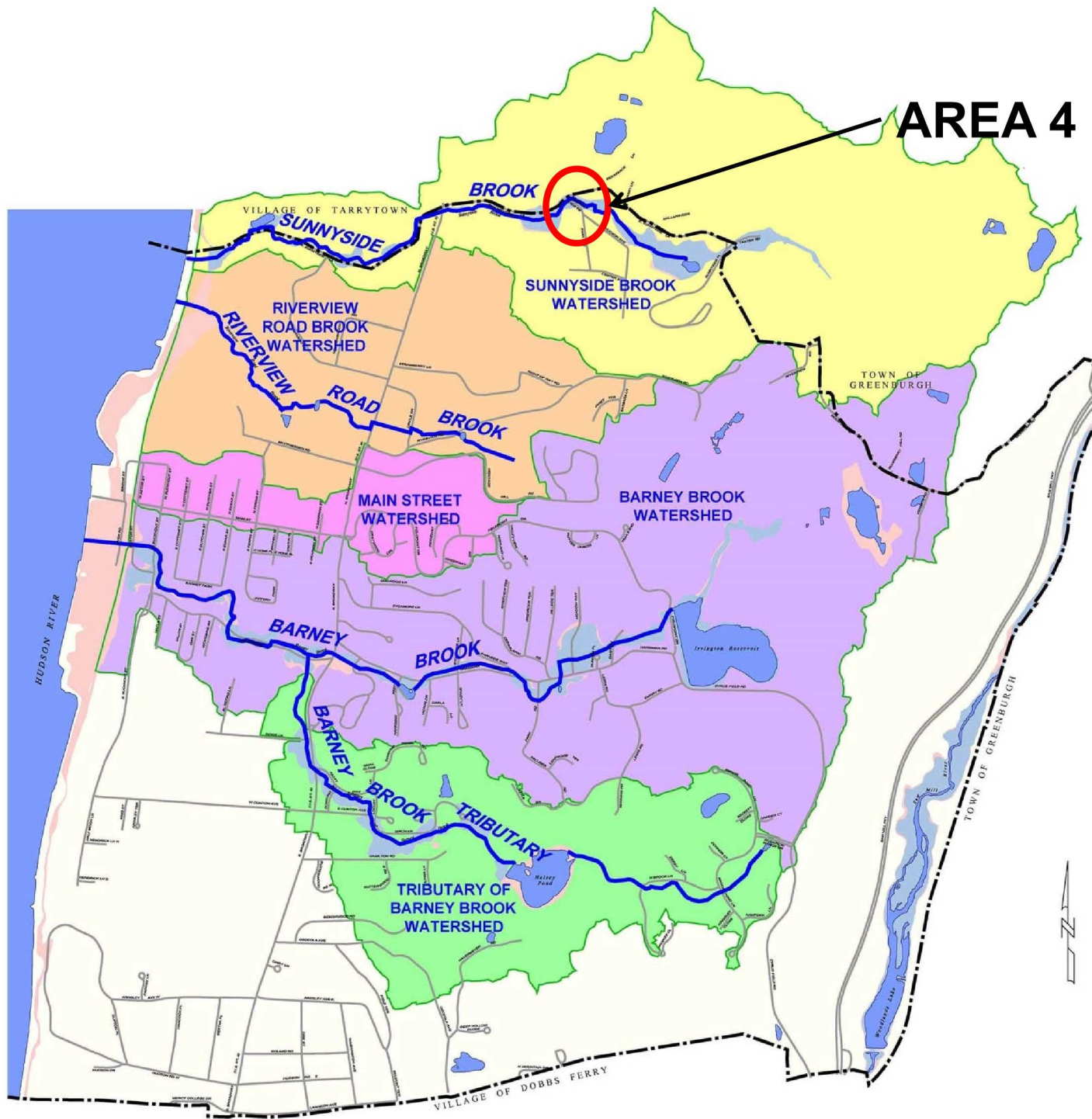
Improvement 2 – Station Road

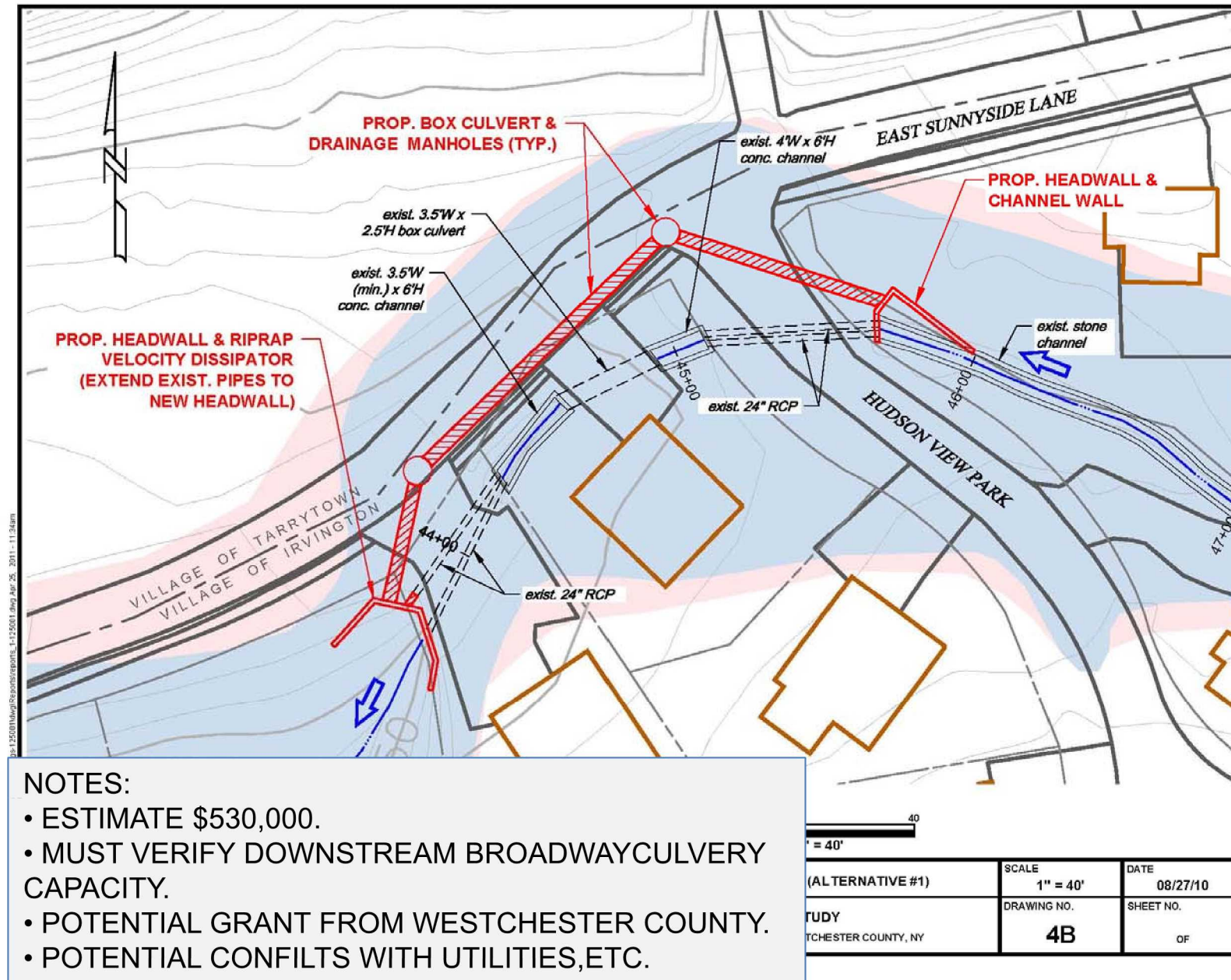




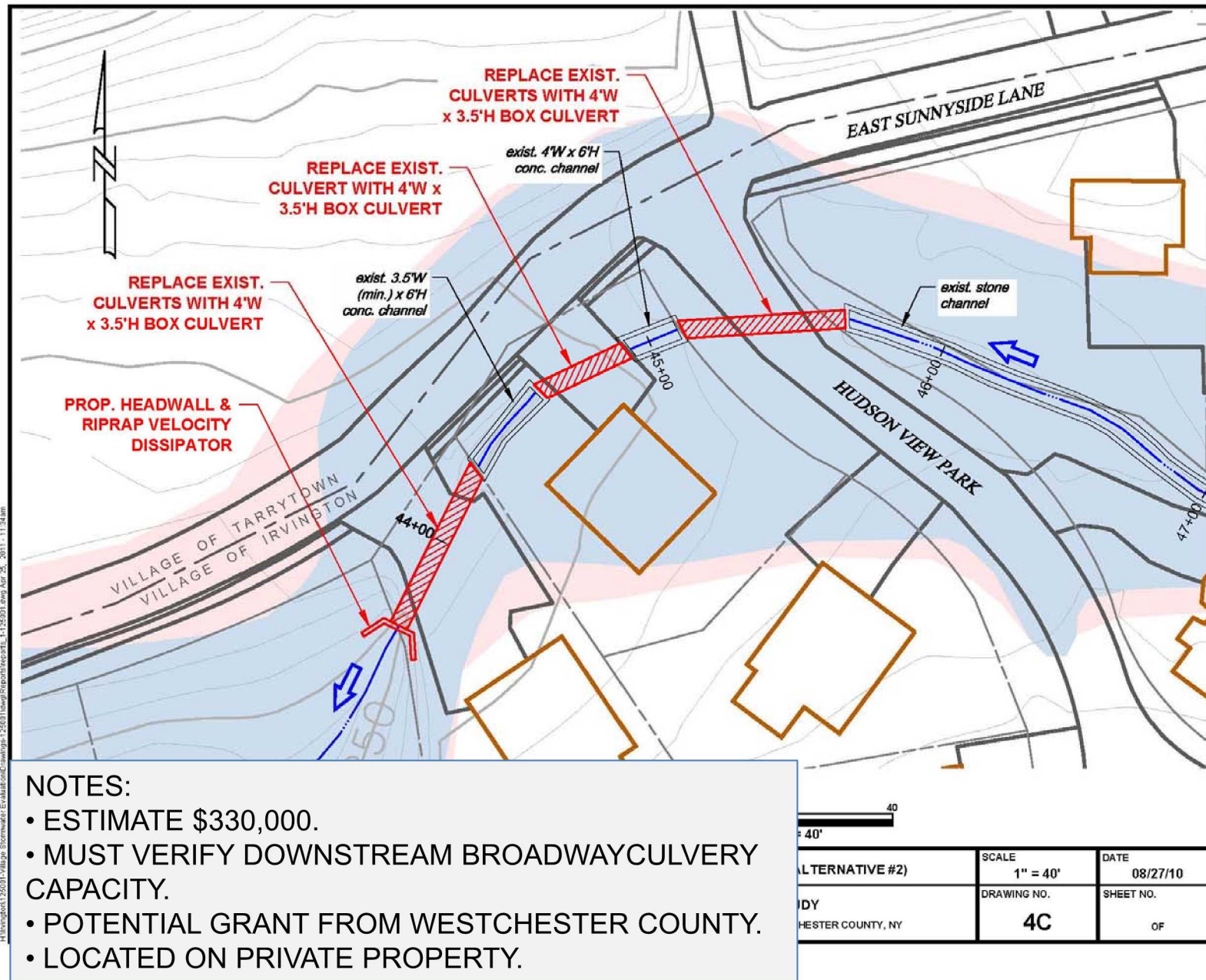






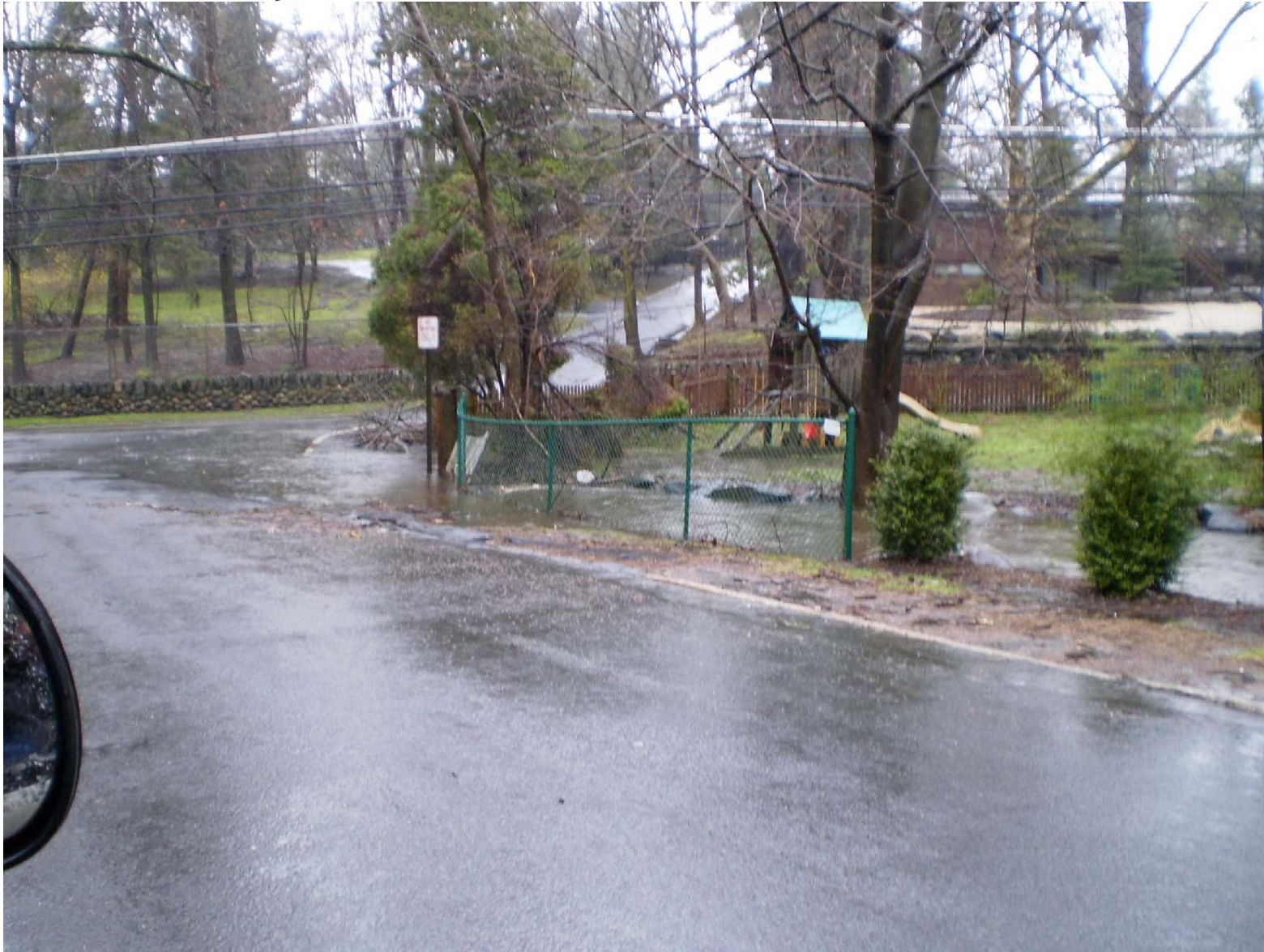


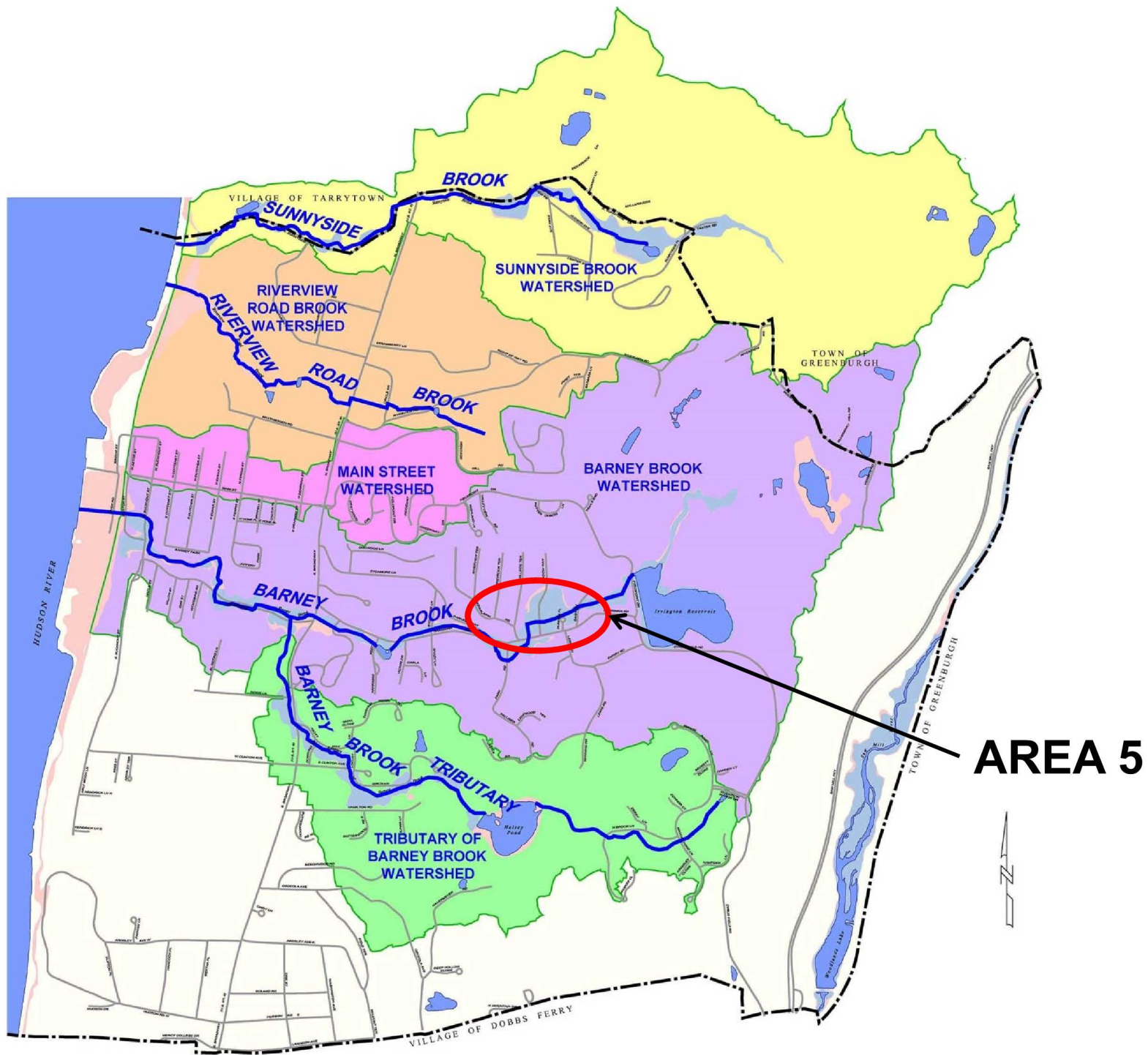
Improvement 4A – E.Sunnyside Lane & Hudson View Park

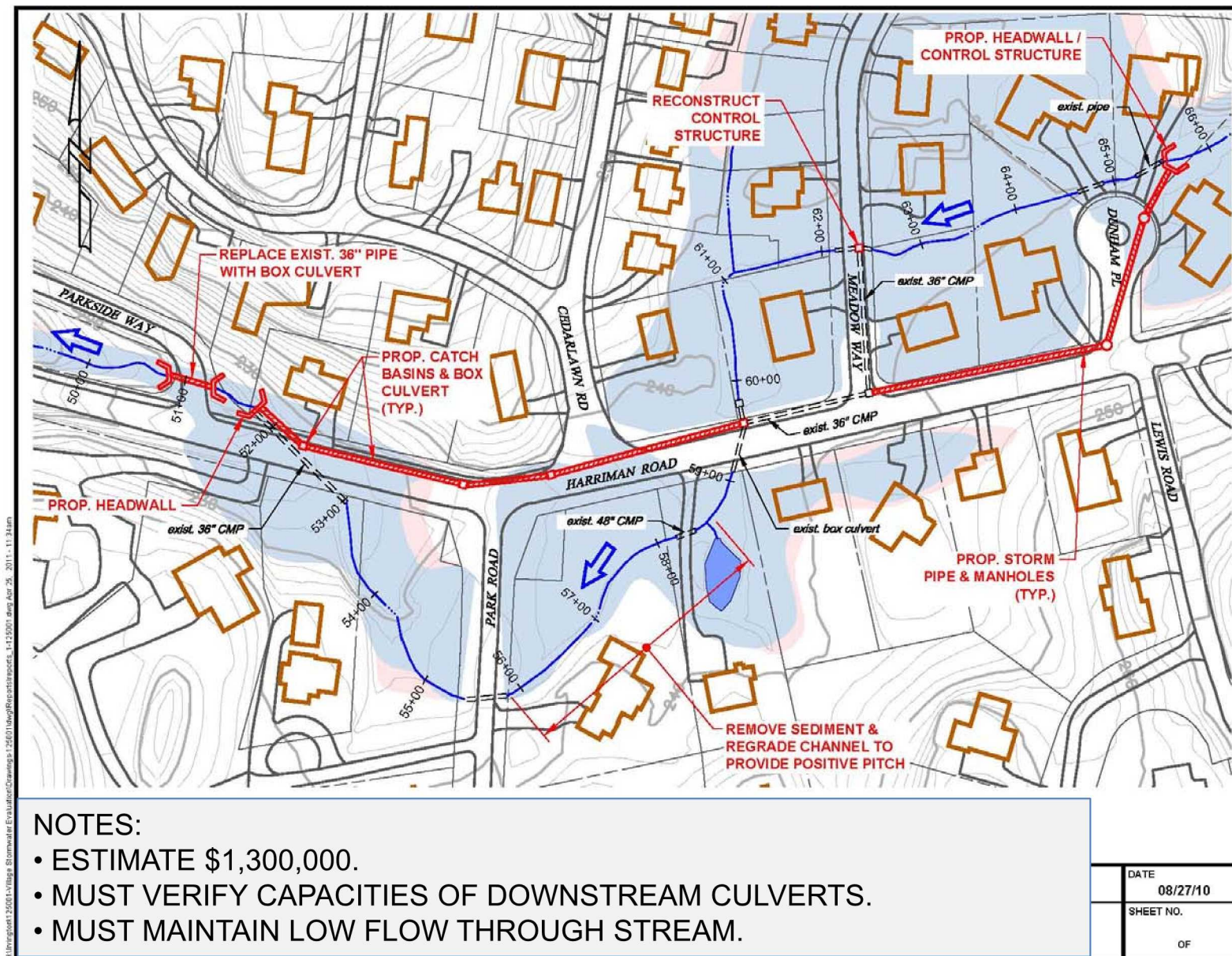


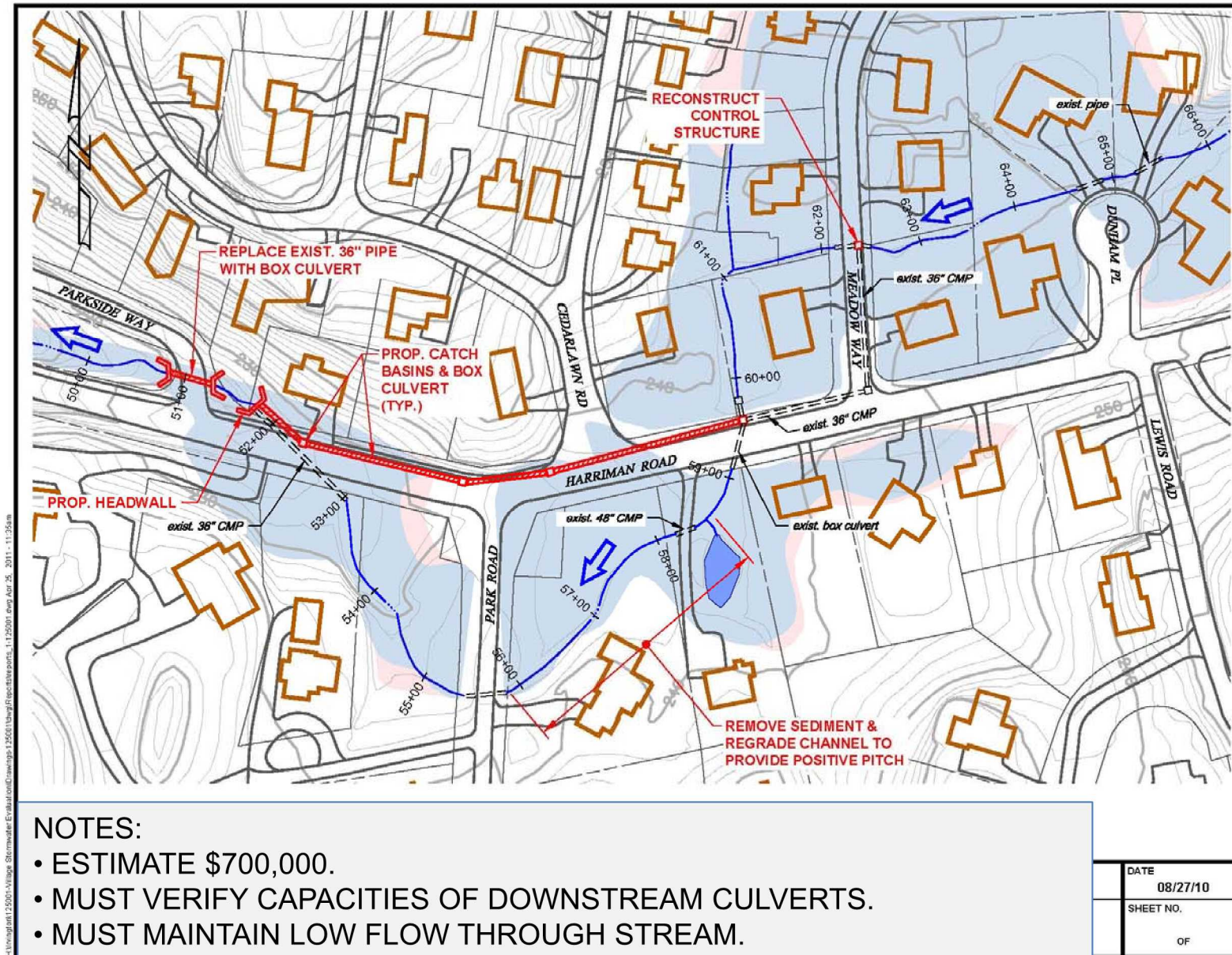
Improvement 4B – E.Sunnyside Lane & Hudson View Park

East Sunnyside Lane and Hudson Park











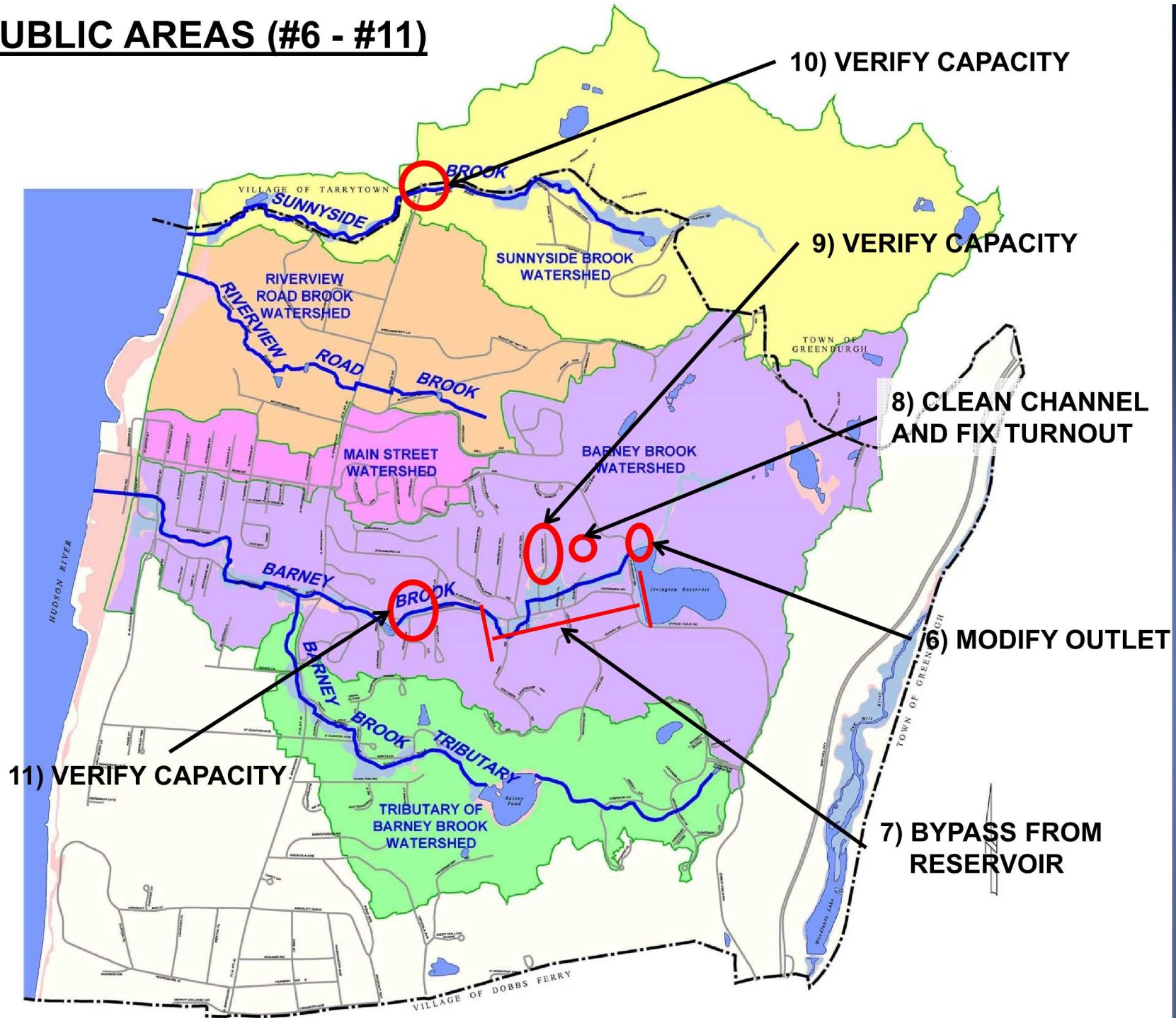
**RECONSTRUCT CONTROL STRUCTURE AT
MEADOW WAY.**





SEDIMENT ACCUMULATION IMPEDES FLOW.

PUBLIC AREAS (#6 - #11)



PRIVATE AREAS (#12 - #23)

12) NEEDS MAINTENANCE,
NARROW CHANNEL, SHALLOW,
MINIMAL GRADIENT

19) VERIFY CAPACITY

15) REMOVE BLOCKAGE

13) VERIFY CAPACITY

18) NARROW CHANNEL

23) SHALLOW CHANNEL

17) NEEDS MAINTENANCE,
POSSIBLE FORBAY

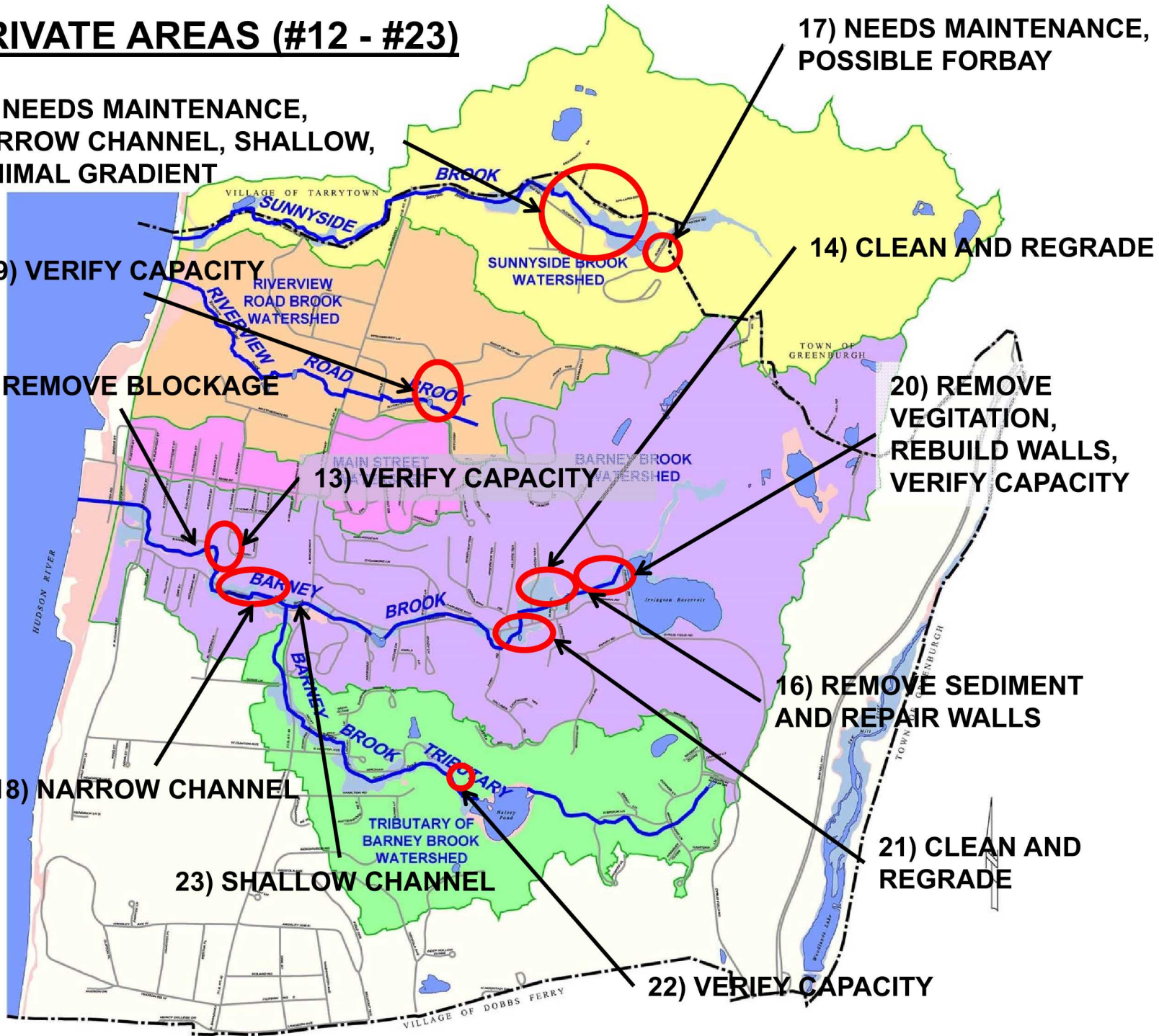
14) CLEAN AND REGRADE

20) REMOVE
VEGETATION,
REBUILD WALLS,
VERIFY CAPACITY

16) REMOVE SEDIMENT
AND REPAIR WALLS

21) CLEAN AND
REGRADE

22) VERIFY CAPACITY



PRIVATE RESIDENTS

*MUST CLEAN AND MAINTAIN THEIR
SECTIONS OF THE CHANNEL.*







Sediment Accumulation Reduces Pipe Capacity





Channel failure



Channel failure



Harriman Road-Stream has limited capacity





**Sediment Buildup, Vegetation, and
channel failure**



**Sewer service and walkway
impedes flow.**

COMMENTS & QUESTIONS?