Laurel Hill Stormwater Improvements

South Burlington, VT

June 18, 2013

South Burlington
Stormwater Utility

Outline

- Project Objectives
- Background
- Financing
- Existing Stormwater System
- Proposed Improvements
- Next Steps and Schedule

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Project Objectives

- Reduce potential for flooding during rainstorms
- Improve water quality and protect Bartlett Brook
- Replace undersized and aging stormwater pipes

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Background

- Pipe system installed approx 40 years ago
- Flooding relatively common
- City responsible for stormwater system
- Bartlett Brook water quality concerns
- Previous conceptual study
- Current project developing final designs and construction
- Project Financing

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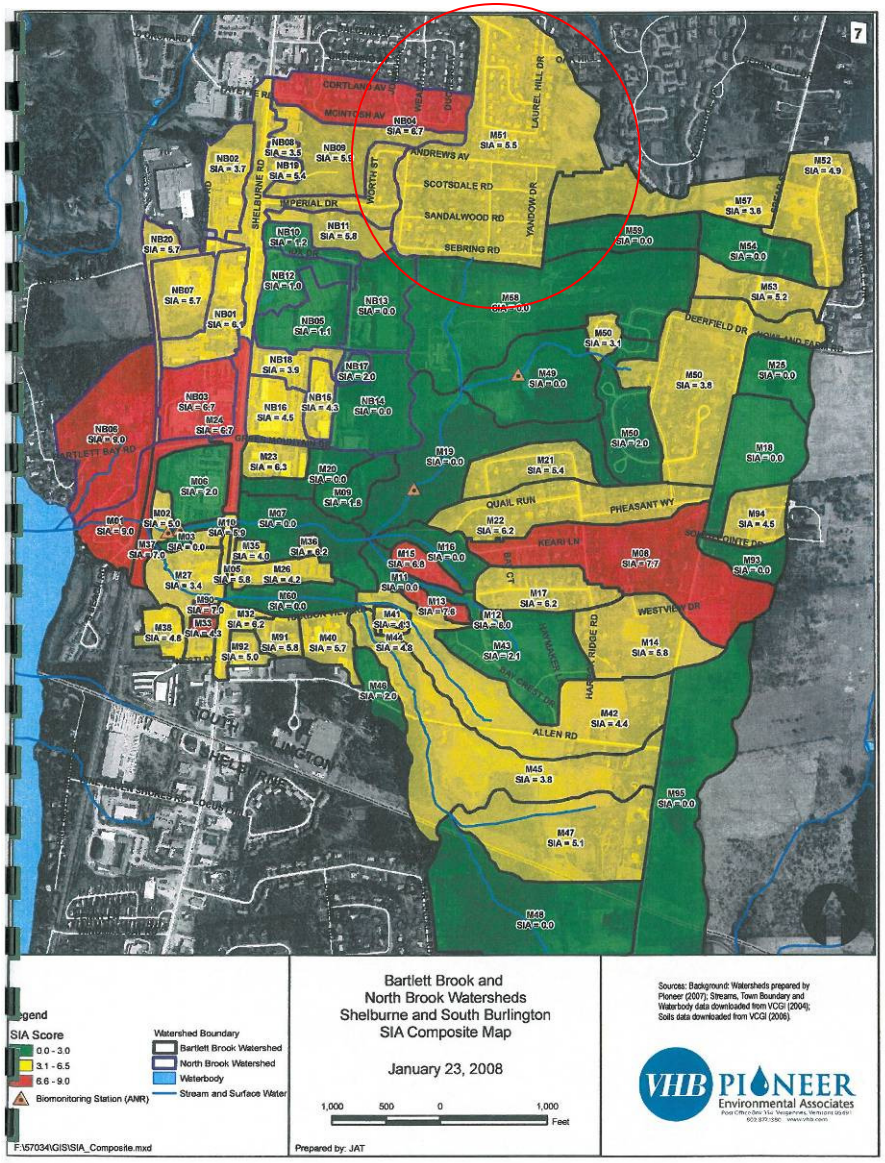
Bartlett Brook Water Quality Impacts



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Financing

- Engineering Costs: ~ $110,000
- Construction: $560,000 – $920,000 (working estimates. Depends on which components are included)
- City has a project agreement with Army Corps of Engineers (ACOE). ACOE will be responsible for 65% of project costs.

Financing

- Unlike many other South Burlington neighborhoods, the LHS neighborhood does not have a State issued stormwater permit. Therefore, RESIDENTS IN LAUREL HILL SOUTH ARE NOT BEING ASKED TO PROVIDE ADDITIONAL FUNDING FOR THIS PROJECT.

- Remaining project costs (~$234,000 – $322,000 depending on what is included) to be paid by the South Burlington Stormwater Utility.

Existing Stormwater System (1/3)

- 12” – 18” diameter pipes under many roads
- Corrugated metal
- Intercepts Bartlett Brook at head of Sebring
- Outlets to Bartlett Brook
- Large “upstream” collection area
- Some pipes go “cross country” between houses

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Existing Stormwater System (2/3)

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Existing Stormwater System (3/3)

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Proposed Improvements (1/6)

- Larger pipes from top of Andrews to Bartlett Brook (the main storm drain line), including:
  - Under-road pipes
  - "Cross country" pipes
- Detention between Sandlewood and Sebring
- Three pipe branches that feed the main line
- Larger pipe under Sebring

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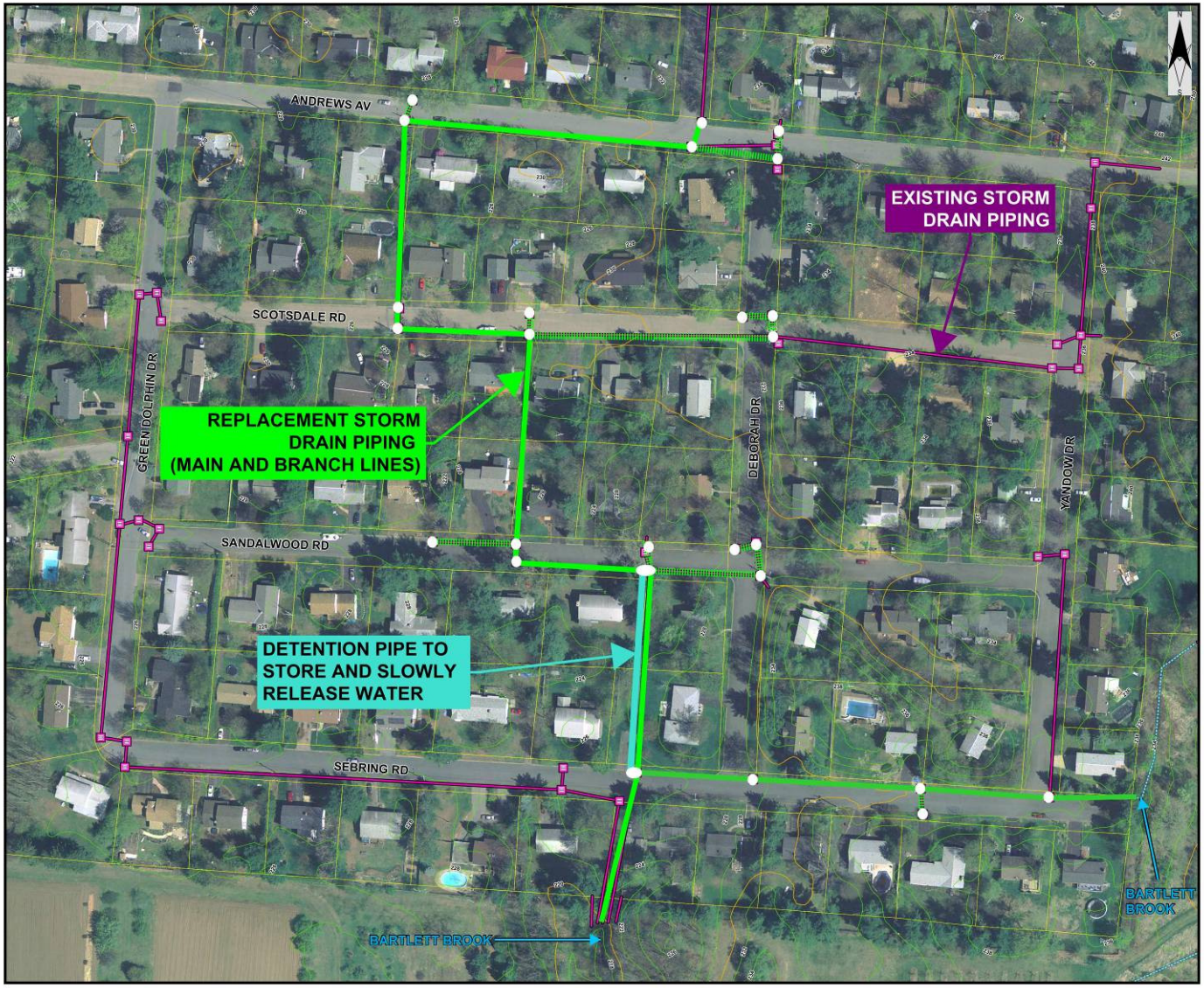
Proposed Improvements (2/6)



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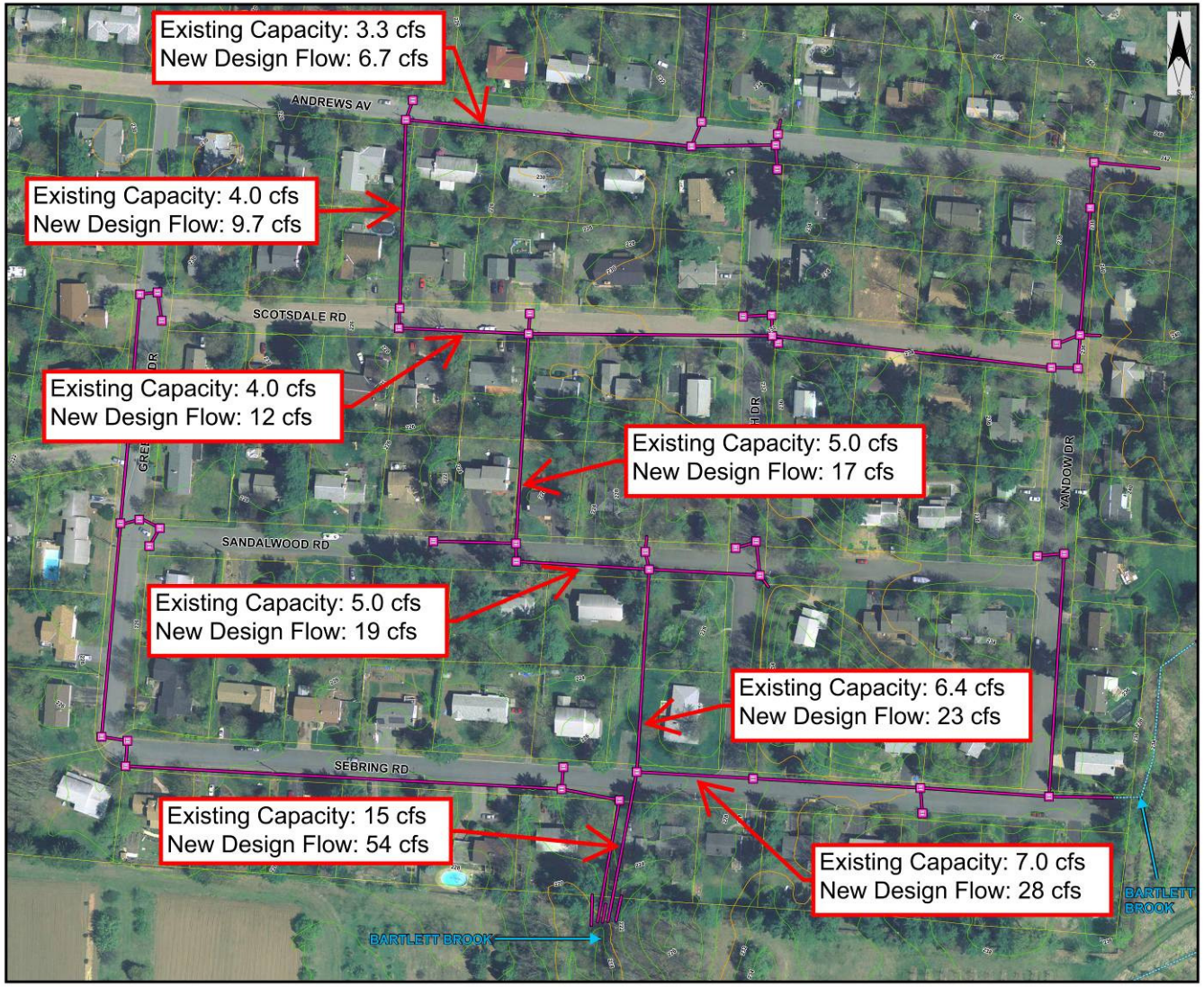
Proposed Improvements (3/6)



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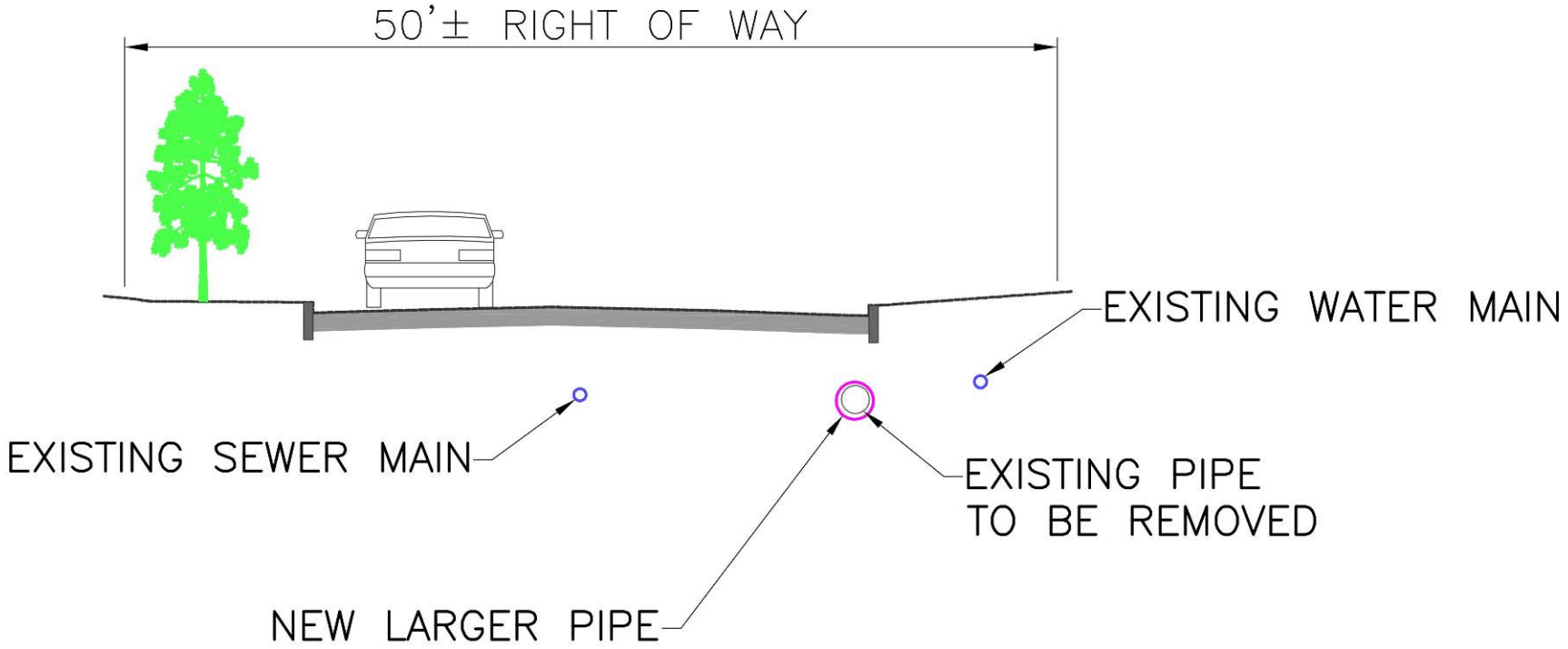
Proposed Improvements (4/6)

UNDER ROAD TYPICAL SECTION



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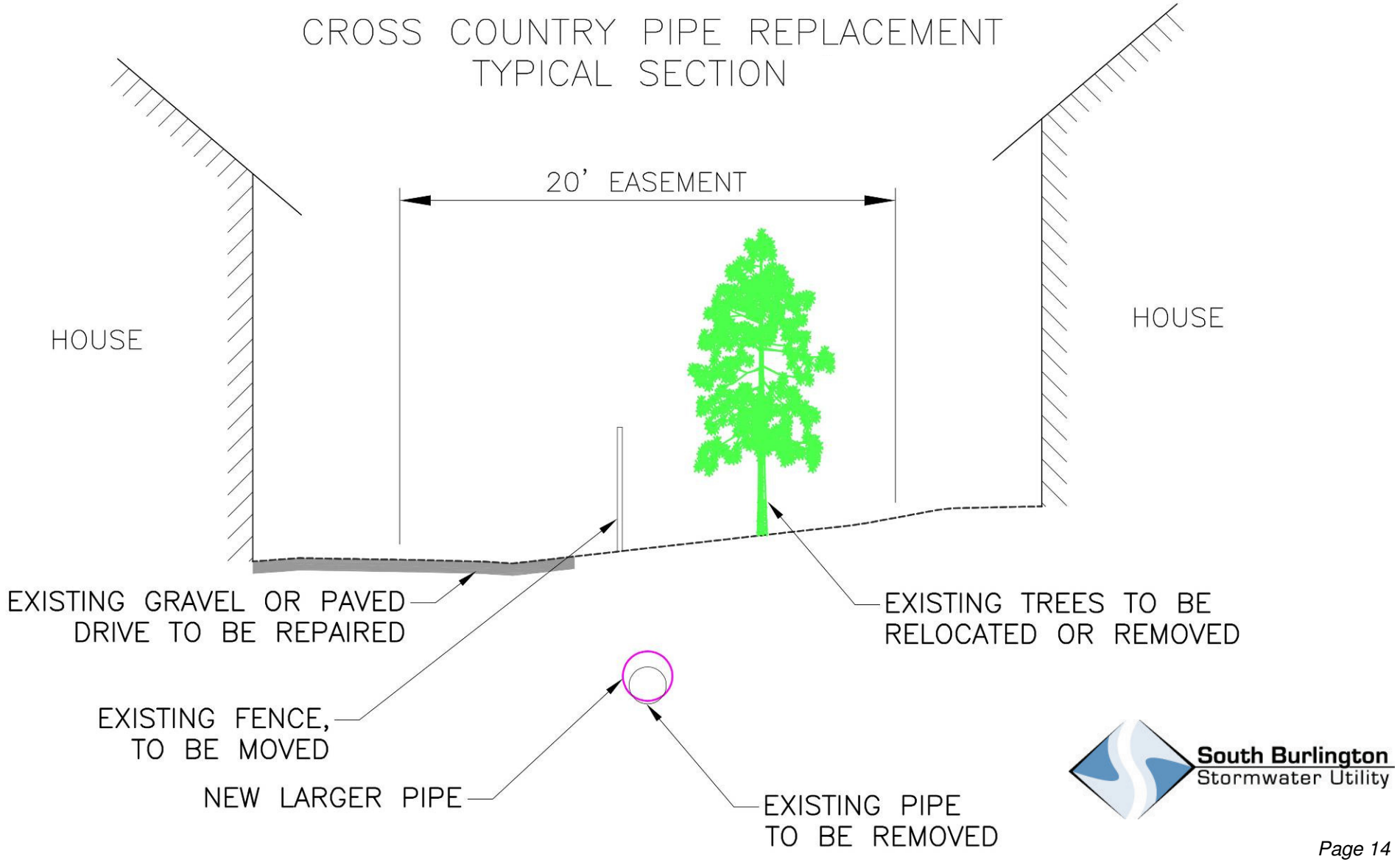
Proposed Improvements (5/6)



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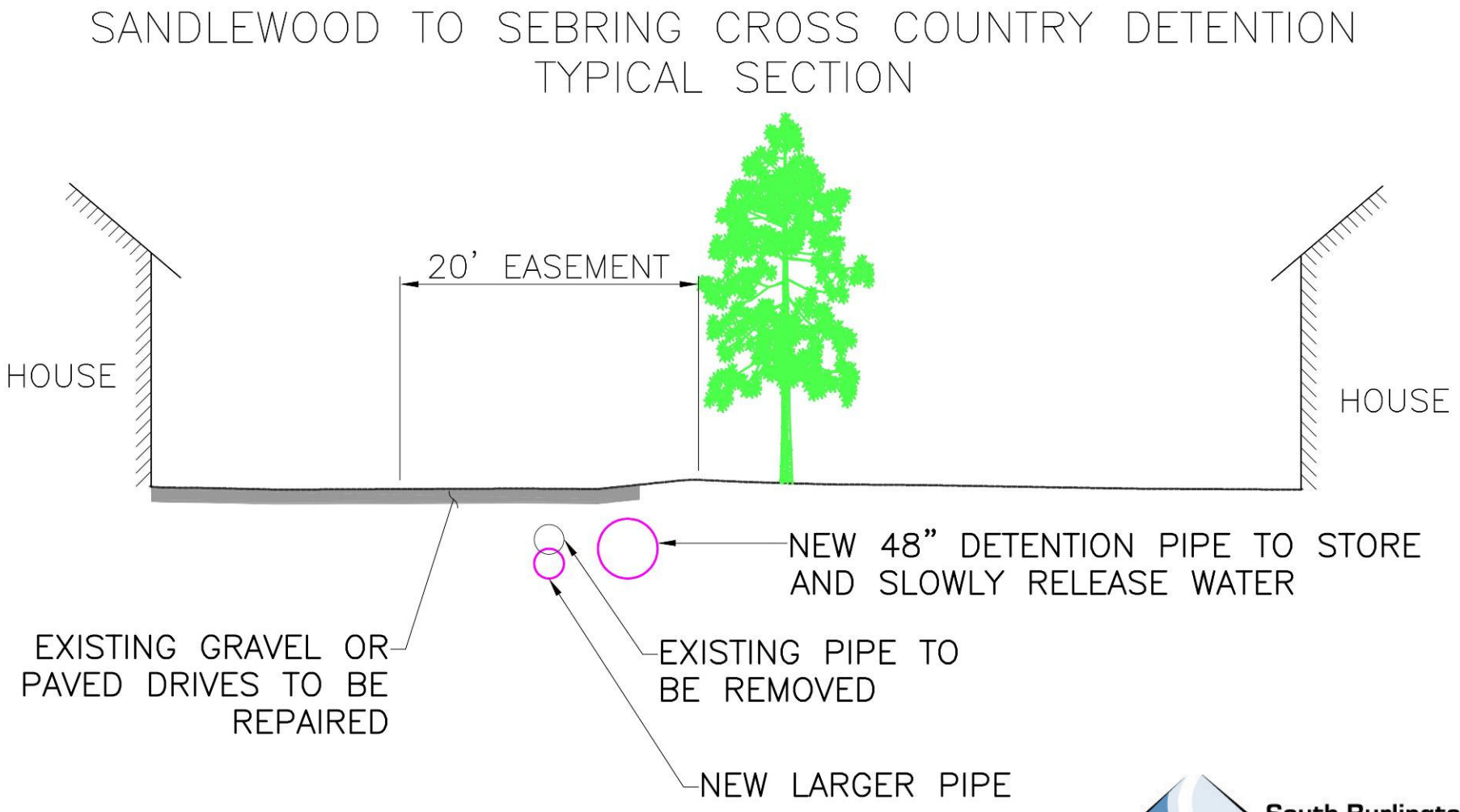
Proposed Improvements (6/6)



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Easements (1/3)

- Existing easements established at time of original subdivision
- 50’ wide for roadways
- 20’ wide for “cross country” runs
  - 10’ either side of property line

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Easements (2/3)

- The plan is to generally match existing pipe alignments
- Some pipes not centered in easement, and some pipes built outside of easement
- City will be contacting owners where alignment is not within easement to discuss options
- Many encroachments over 50 years
- There will be conflicts

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Easements (3/3)

- DPW staff is available for site visits to discuss
- Any items located in City's easement must be moved prior to construction
  - Sheds
  - Fences
  - Plants/trees to be preserved
  - Other
- Remaining items will be placed onto owners' property but not reinstalled
- Remaining plants/trees will be removed as needed
- Damage to lawns and driveways will be repaired

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Next Steps and Schedule

- Complete design and permitting (early 2014)
- Select Contractor (Spring 2014)
- Construction (Summer 2014)

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