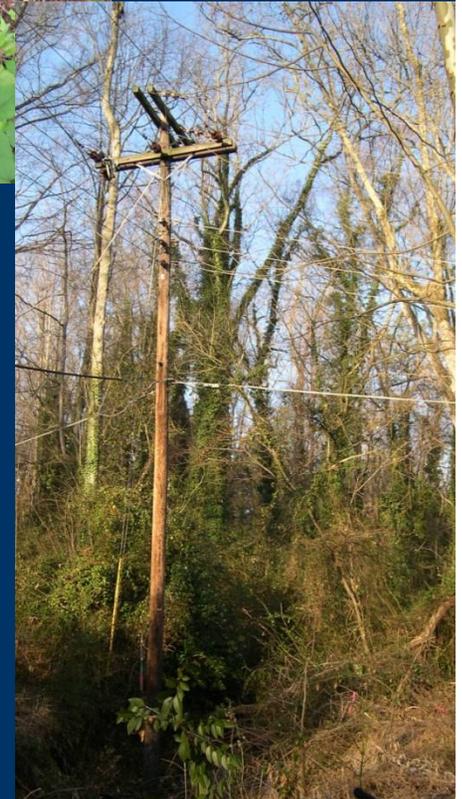


Existing Conditions Analysis Summary Meeting



Gaynor Storm Drainage Improvement Project



Providence Baptist Church
May 13, 2010

Introduction of Staff

- **Charlotte-Mecklenburg Storm Water Services (CMSWS) Staff**
 - Corky Botkin – Project Manager
 - Phone - 704-432-5536
 - E-mail - cbotkin@charlottenc.gov
 - Doug Lozner – Watershed Area Manager
- **Armstrong Glen Staff**
 - Josh Letourneau – Project Manager
 - Andy Litten – Project Engineer

Housekeeping Items

- Sign-In
- Fill out a Questionnaire if you did not previously
- Customer Service Comment Cards
- Question and Answer period after presentation

Meeting Purpose and Agenda

- Purpose
 - Provide a summary of the Existing Conditions analysis
 - Request input from property owners/residents on the Existing Conditions analysis results
 - Obtain additional information from property owners/residents on perceived drainage issues
- Agenda
 - Charlotte-Mecklenburg Storm Water Services Summary
 - Project Selection and Citizen Involvement
 - Existing Conditions Analysis Summary
 - Alternatives Analysis and future project milestones
 - General Questions and Comments

CMSWS Summary

Storm Water Program Roots:

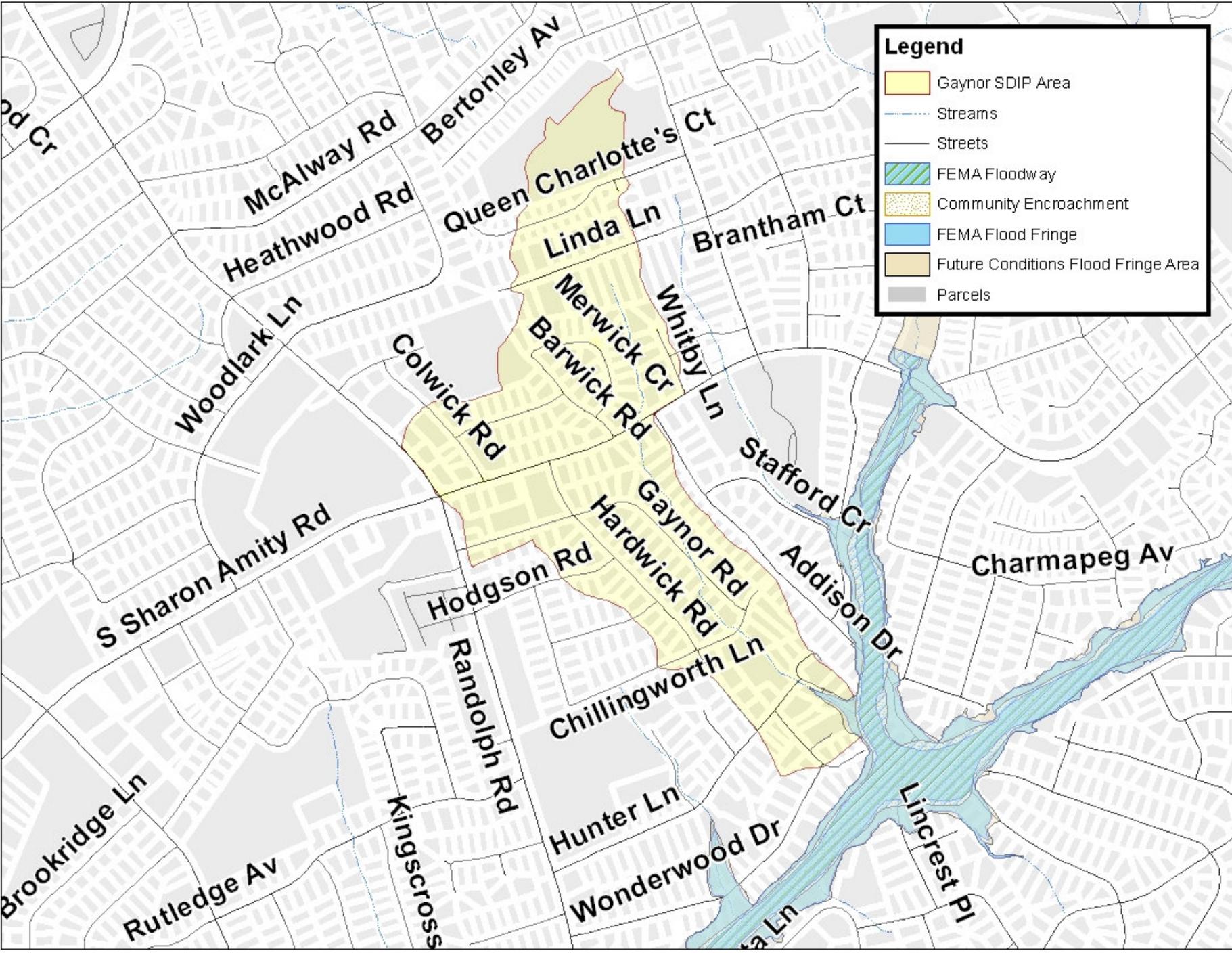
- 1911 – Mecklenburg County Drainage Commission created
- 1993 – Charlotte obtained and begin to comply with a NPDES Phase I permit
 - Charlotte established a storm water fee to fund NPDES required measures and to address drainage issues

What the program includes:

- Administration and Technology
- *Water Quality*
- *Maintenance*
- *Engineering*

Legend

- Gaynor SDIP Area
- Streams
- Streets
- FEMA Floodway
- Community Encroachment
- FEMA Flood Fringe
- Future Conditions Flood Fringe Area
- Parcels



Why the Gaynor SDIP was chosen as an Engineering project

- **Requests for Service from Property Owners (57 - 311 requests within watershed)**
 - **Inadequate Infrastructure**
 - Road flooding
 - House flooding
 - **Deteriorating Infrastructure**
 - Old culverts, pipes, inlets
 - Sink holes
 - Erosion, blockages in streams
- **CMSWS watershed ranking**
- **Larger watershed-wide issues that cannot be managed by spot repairs or without potentially impacting downstream properties**

What we need from you

- **Feedback on our consultant's modeled results**
- **Additional information on drainage related concerns (previously 56 questionnaires were returned)**
- **Support for the project's future phases**

Gaynor Storm Drainage Improvement Project

Existing Conditions Analysis Results



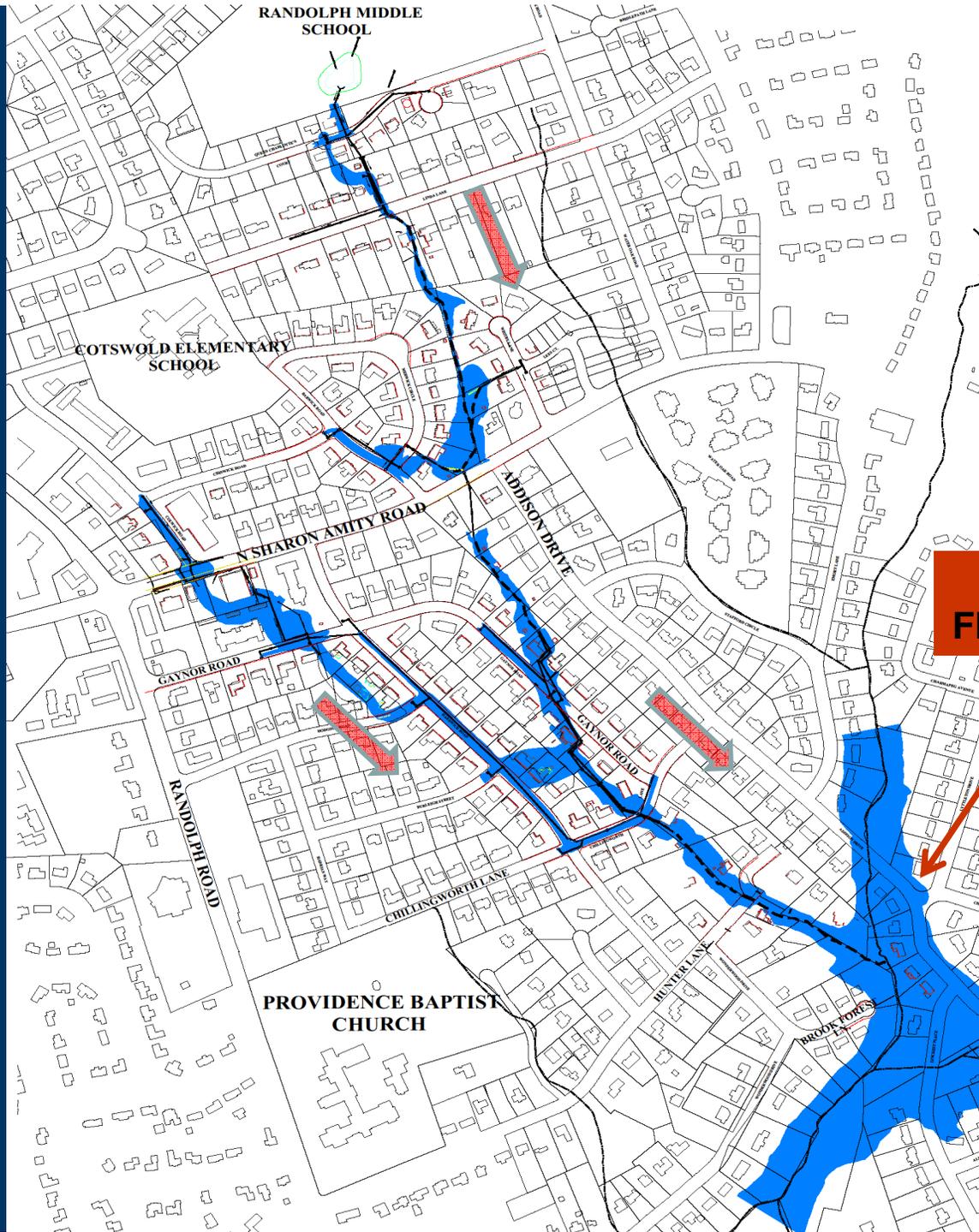
Presented by:

Armstrong Glen, P.C.

Civil Engineers

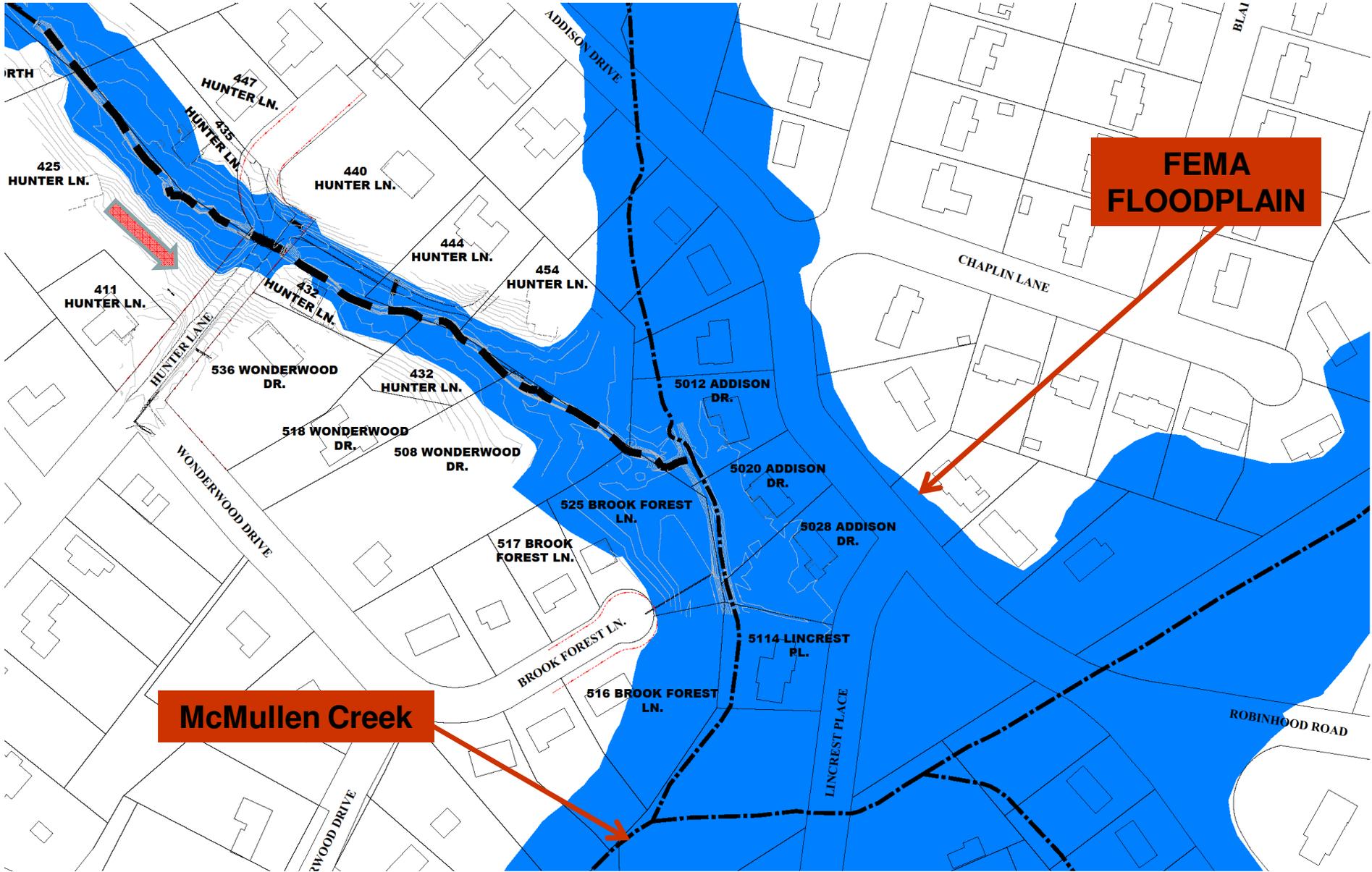
Existing Conditions Floodplain Map

- Illustrates Predicted Extent of Flooding
- 100-Year Storm Event
 - 1 percent chance of storm occurring in any given year
 - Similar to May 2009 storm



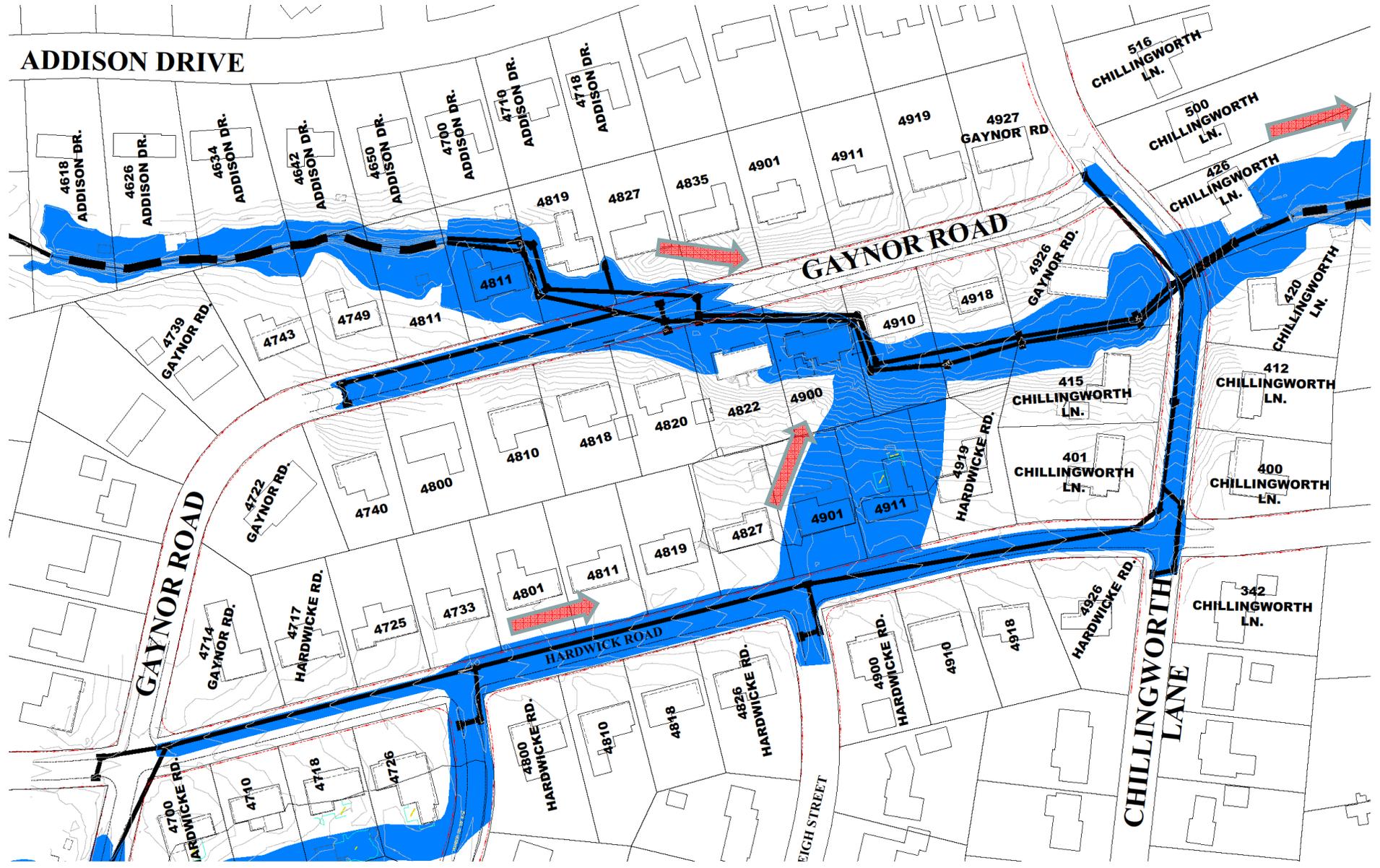
**FEMA
FLOODPLAIN**

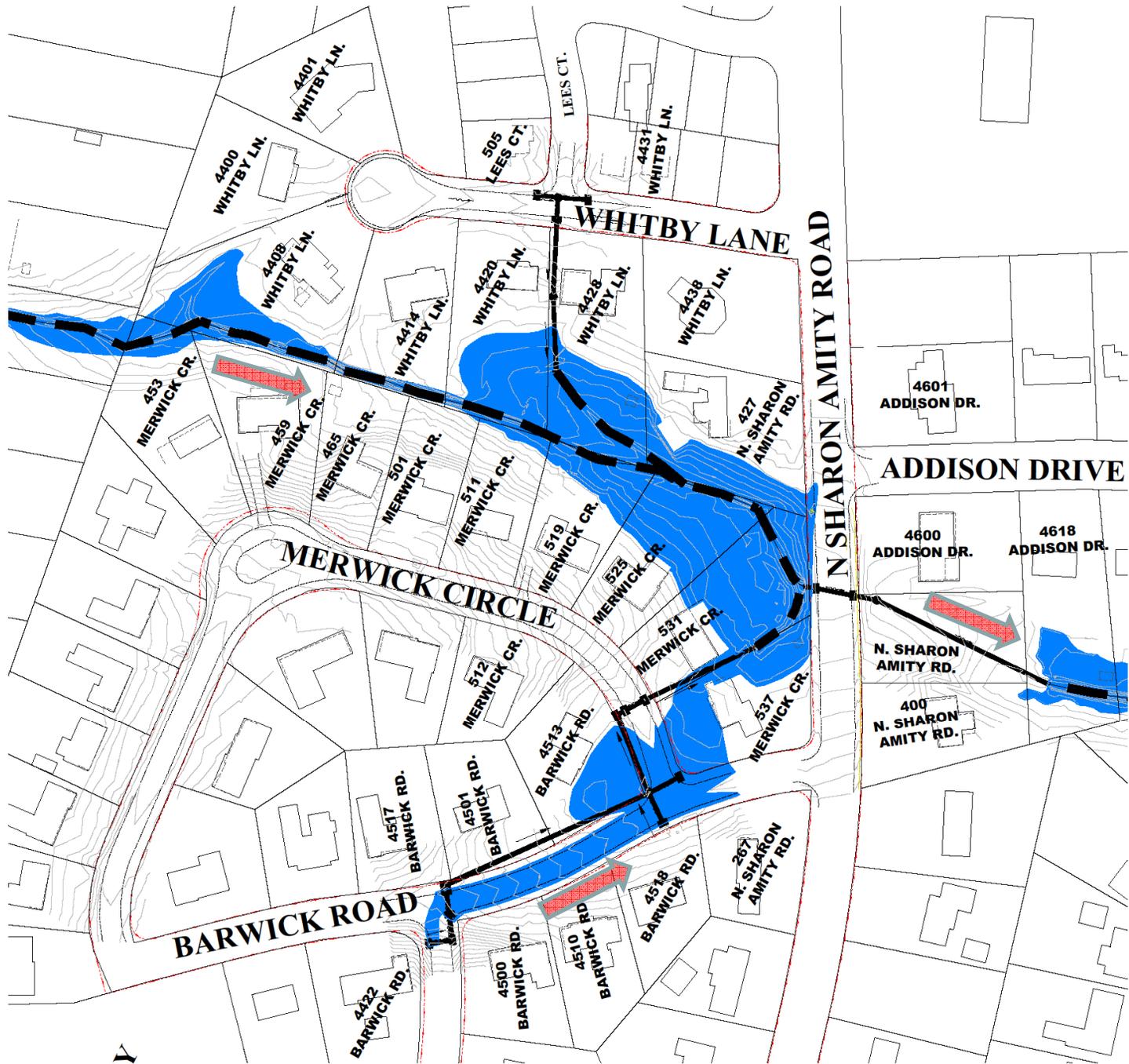




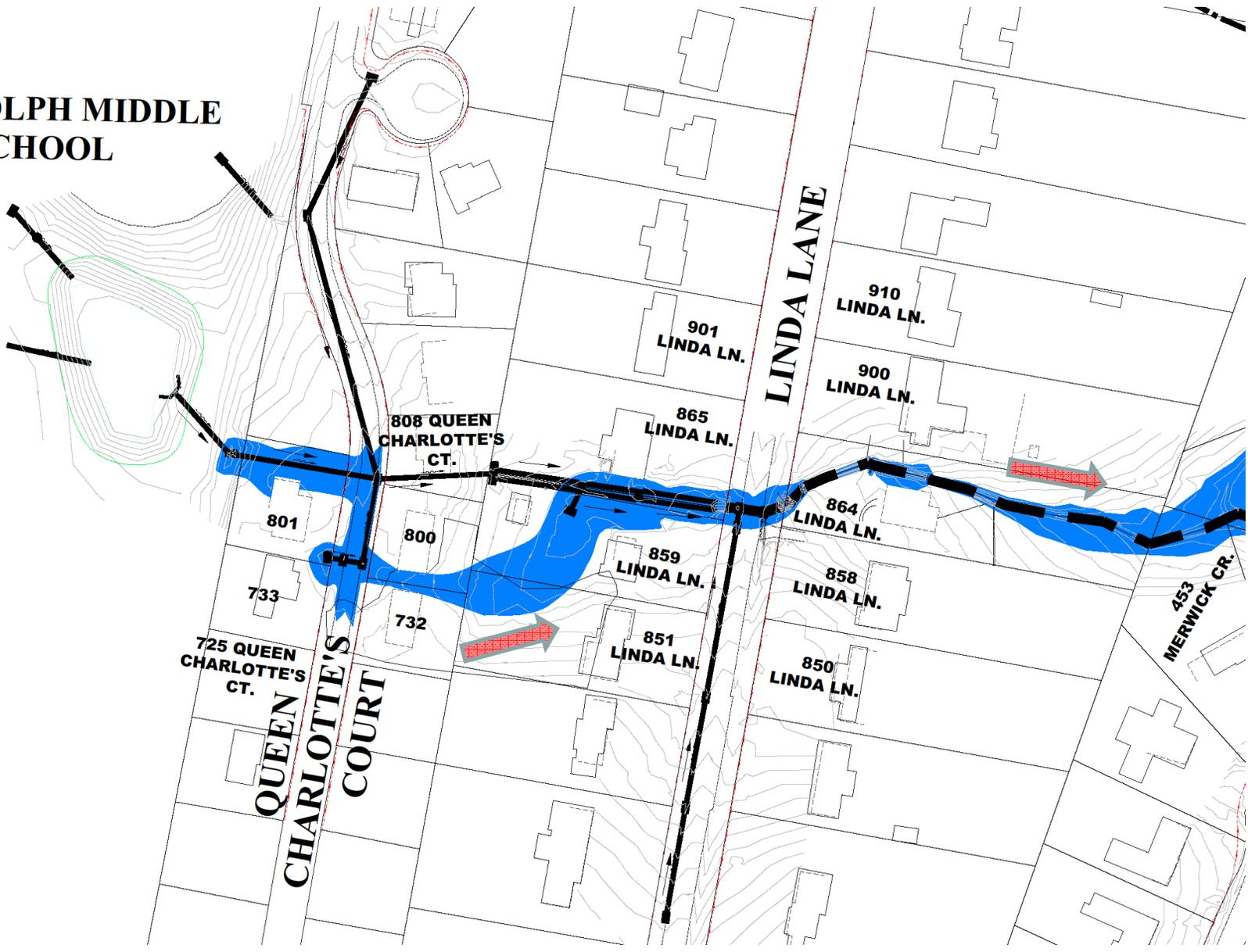
**FEMA
FLOODPLAIN**

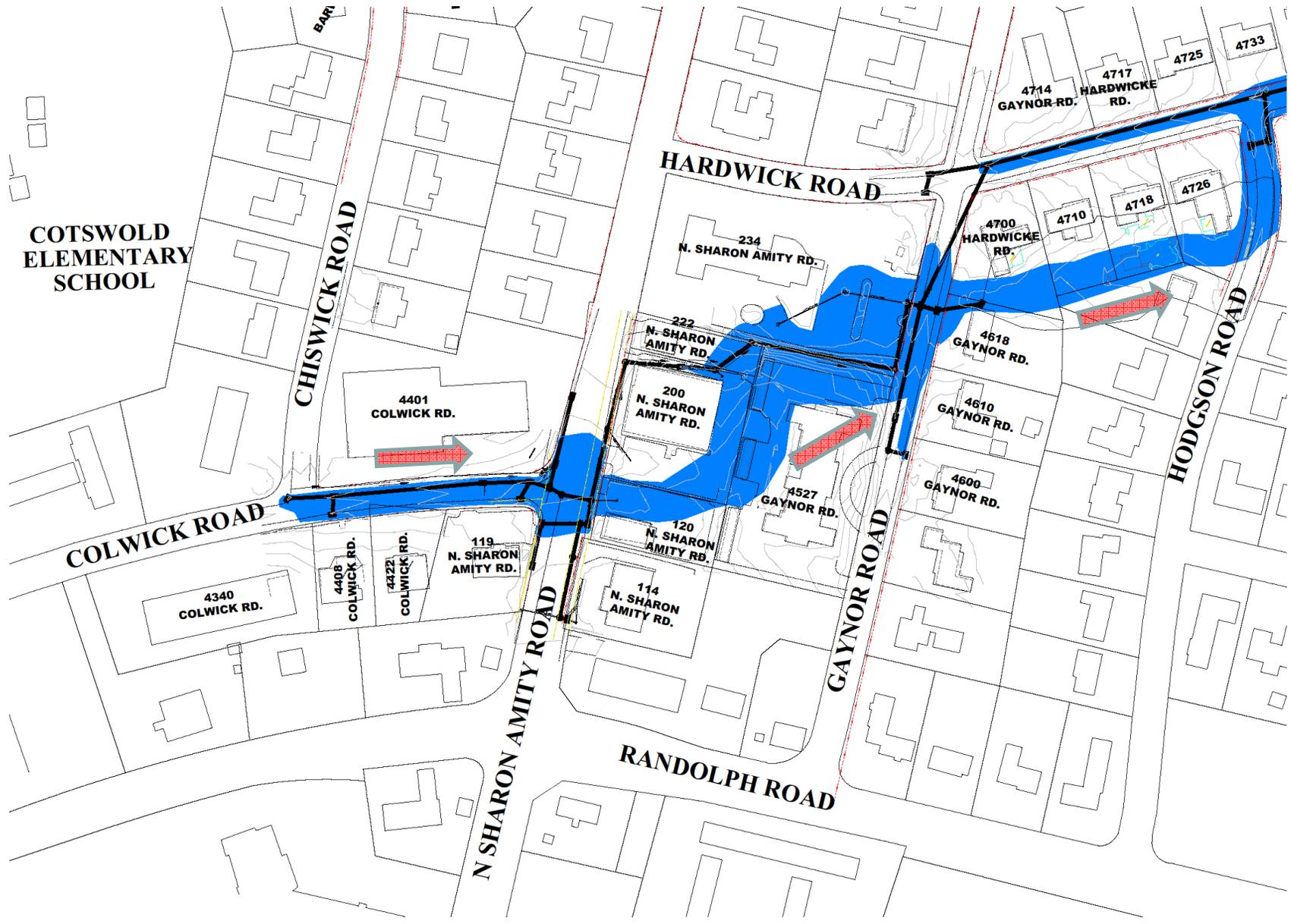
McMullen Creek





RANDOLPH MIDDLE SCHOOL





Storm Drainage Improvement Project Phases

PLANNING (Typically 12 to 27 months)

- **Existing Conditions Analysis – Finding the Problems (Started in late October of 2009)**
- **Alternative Analysis – Finding the Solutions**

DESIGN (Typically 21 to 34 months)

– *Designing the Solutions*

PERMITTING (Typically 3 to 9 months, but usually overlaps the design phase)

EASEMENT ACQUISITION (Typically 8 to 12 months)

BID (Typically 4 to 5 months)

CONSTRUCTION (3 months to over 2 years)

EVALUATING ALTERNATIVES

Coming up with the “BEST” solutions



1. Public Safety



2. Private Property Impact



3. Public Cost



EVALUATING ALTERNATIVES

Types of Alternatives Considered

- **Replacement of failing pipes**
- **Different culvert and pipe sizes**
- **Different culvert/pipe shapes and materials**
- **Additional pipes and inlets**
- **New Alignments**
- **Detaining Water to Reduce Flow**
- **Stream Stabilization**
- **Changing stream profiles**

Path Forward

- Additional information obtained during this meeting will be considered and incorporated into the existing conditions analysis, where applicable.
- Alternatives will be evaluated, and a recommended alternative will be developed.
- CMSWS will then hold a second public meeting to present and obtain feedback on the recommended alternative.

Wrapping Up

- Please remember to sign-in and fill out a customer service card
- The City and our consultant will stay here to answer any specific questions you may have
- General Discussion
- Thank you for coming to the meeting!