



Discuss Budget Proposal for Interim Measures to Begin Addressing Coal Ash Clean-up and Monitoring


May 15, 2019

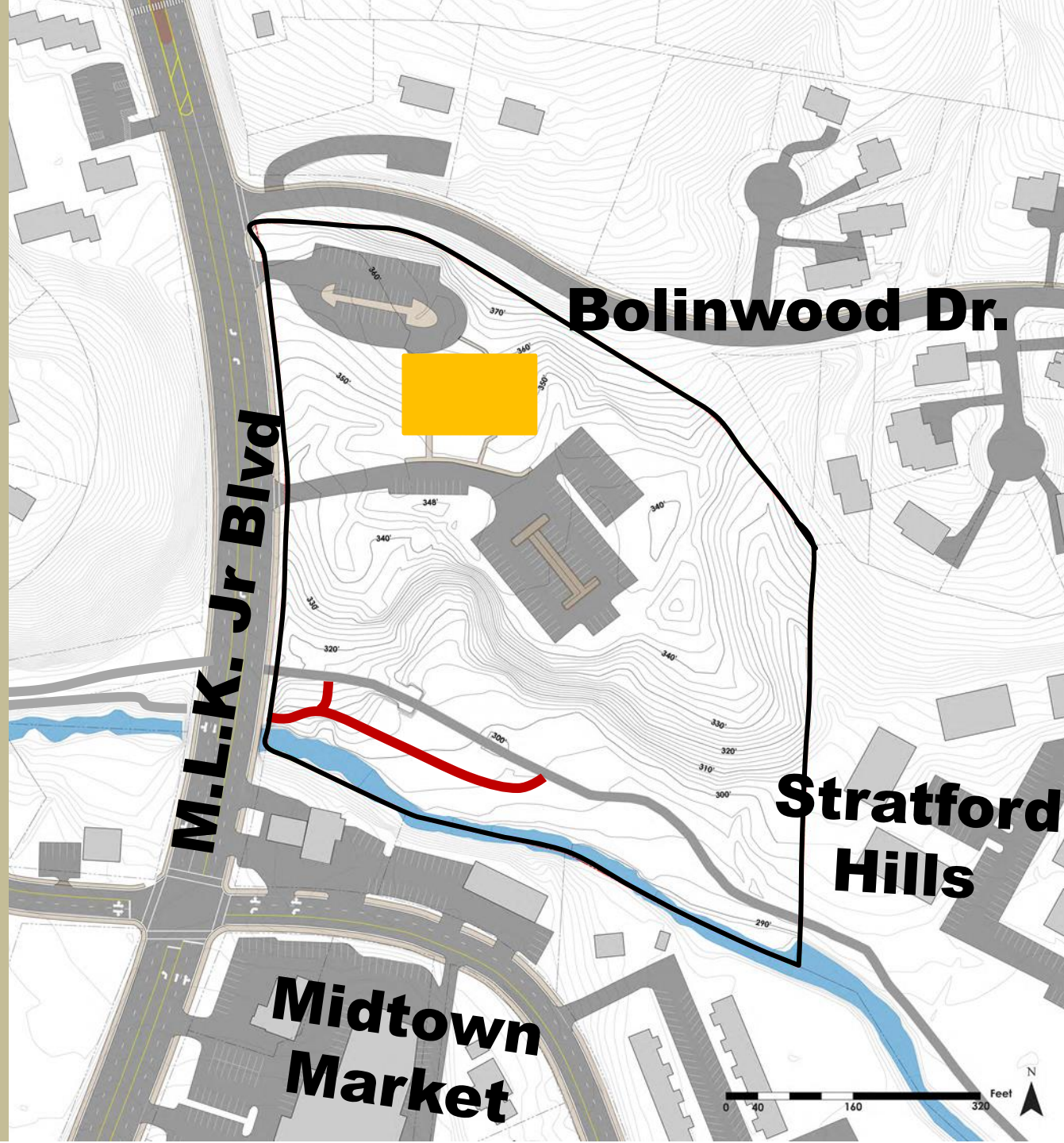


Police Station Property

828 Martin
Luther King Jr
Blvd

 Police Station

 New Bolin Creek
Greenway Connection



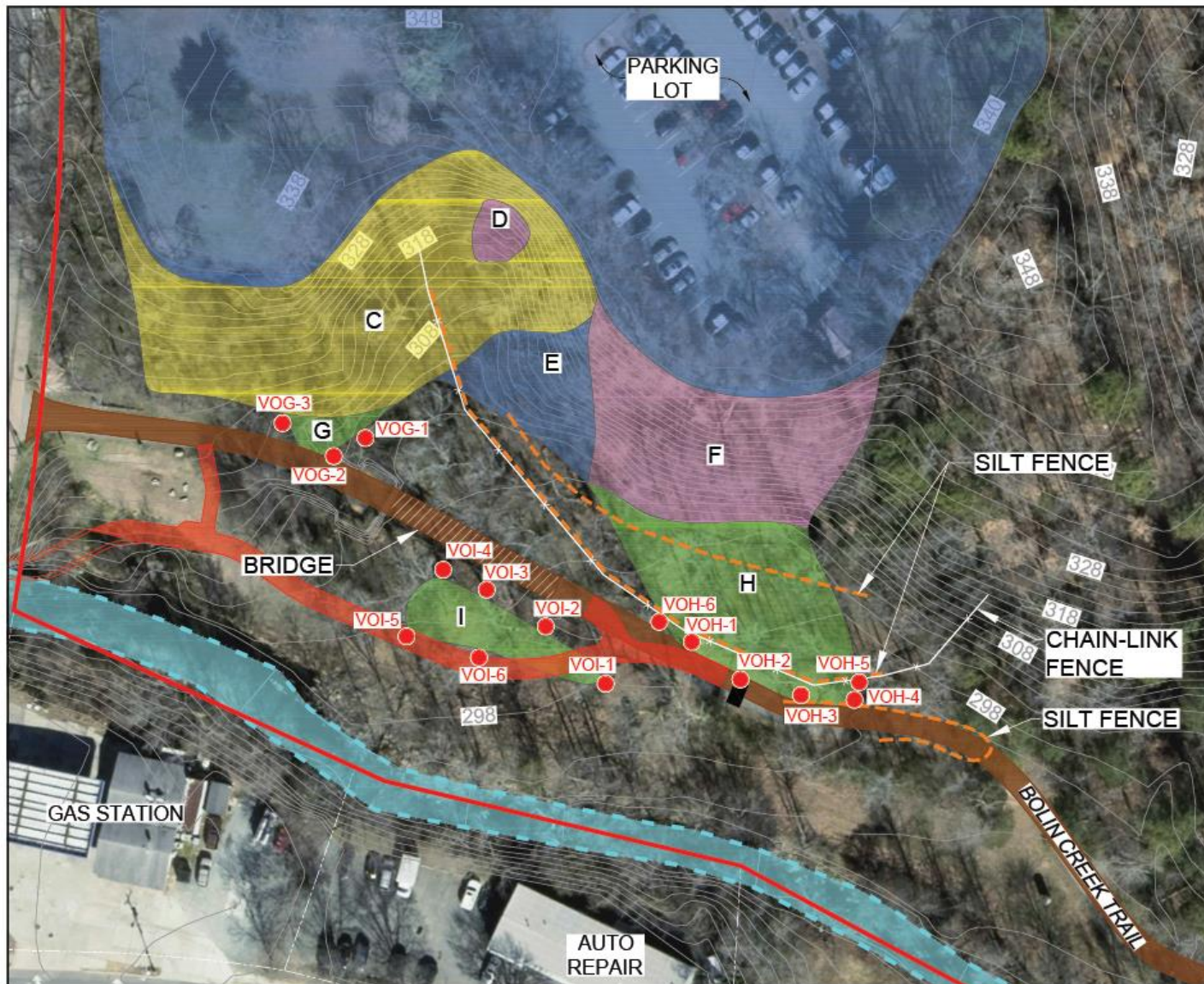




Coal Ash Disposal Site Remediation Project

TownofChapelHill.org/coal-ash





LEGEND

- SITE PROPERTY BOUNDARY
- BOLIN CREEK
- TOPOGRAPHIC CONTOUR ELEVATION (FT MSL)
- FENCE LINE (APPROXIMATE LOCATION)
- SILT FENCE (APPROXIMATE LOCATION)
- CCP UNDER > 2 FT COVER
- CCP UNDER < 2 FT COVER
- CCP EXPOSED AT GROUND SURFACE
- CCP DEPOSITIONAL LAYER
- STORMWATER CULVERT
- DEPOSITIONAL CCP AREA STAKES
- PROPOSED TRAIL

APPROXIMATE SCALE IN FEET

0 50 100

SITE MAP - PROPOSED TRAIL LOCATION

TOWN OF CHAPEL HILL
 828 MARTIN LUTHER KING JR. BOULEVARD
 CHAPEL HILL, NORTH CAROLINA

hart hickman
 SMARTER ENVIRONMENTAL SOLUTIONS

2525 South Tryon Street-Suite 100
 Charlotte, North Carolina 28205
 704-586-0007(p) 704-586-0373(f)
 License # C-1209 / #C-245 Geology

DATE: 5-10-19 REVISION NO. 0

JOB NO. TCH-003 FIGURE NO. 2

Options for Consideration

- \$315,000 Investment:
 - Begin clean-up and continue managing and monitoring coal materials in the area closest to Bolin Creek;
 - Maximize safety for people using the Bolin Creek Greenway
- Anticipate Police Station relocation within 2-3 years
- Measures estimated to last 3-5 years

Bolin Creek Trail Risk Assessment

By:

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DUNCKLEE & DUNHAM
ENVIRONMENTAL GEOLOGISTS & ENGINEERS

HYDROGEOLOGY • ENGINEERING • BROWNFIELDS • REMEDIATION

Our Work Scope

- Human Health Risk Assessment
 - Toxicologist
 - Data Gap Sampling (April)
 - Interim Measures Evaluation
 - Trail Construction Project
- Ecological Risk Assessment
- Report



Comparison to NCDEQ Risk Evaluation

- NCDEQ used different calculator tool in 2016
- We used new NCDEQ Risk Calculator Tool
 - EPA risk data changed slightly
 - Tested additional coal ash samples, higher levels of contaminants found than in 2014 data set
 - Six metals higher, arsenic and manganese the most prominent
- We used more conservative default assumptions across the board
- We used new data set collected after recent storms



Key Findings, So Far

- 52 Additional Samples Collected
- Using Worst Case Scenarios, Evaluated Risk for 17 Contaminant Pathways
- Found Elevated Risk with 2 Current Pathways:
 - Future Construction Worker – Arsenic and Manganese non-cancer risks from soil
 - Recreational User – Arsenic non-cancer risks from soil exposure
- No cancer risks exceeded NCDEQ or USEPA criteria
- No increased risk for adolescent exposures along or in Bolin Creek



Completing the Greenway Project and Opening the Bridge Underpass



- Manage Risk to Construction Workers with Proper Training
- There is Currently Risk To Trail Users By Crossing Martin Luther King, Jr. Blvd.



Interim Measures to Keep Trail Open

- These Measures Control Risk to Recreational Users of Greenway Trail
 - a) Surficial Soil Removal / Backfill
 - b) Additional Signage Along Trail
 - c) Polling of Users
 - d) Additional Silt Fencing
 - e) Limit Embankment Disturbance
 - f) Periodic Inspections and Sampling
- Post-Construction Sampling and Update Risk Assessment



Next Steps

- Complete Underpass
- Signage on Path
- Interim Measures
- Post-Construction Sampling
- Report to Update Risk Assessment and Include Ecological Risk Assessment



Questions?

