



Date: May 15, 2015

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Marvin G. Williams, Director of Public Works

Subject: Completion of Street and Stormwater Infrastructure in Stone Hill Estates and Ravenstone Subdivisions

Executive Summary

The developers of the Stone Hill Estates and Ravenstone subdivisions failed to complete the streets and stormwater infrastructure. The purpose of this item is to present alternatives for the completion of the street and stormwater facilities for these developments. The estimated construction costs associated with completing the infrastructure in Ravenstone and Stone Hill Estates are as follows:

Table 1: Construction Cost Estimates

Subdivision	Street Infrastructure	Stormwater Infrastructure	Total
Stonehill Estates	\$687,071	\$428,274*	\$1,115,345
Ravenstone	\$1,118,319	\$572,003*	\$1,690,322

*Includes Stormwater Replacement Fund Payment

Recommendation

The Public Works Department recommends that City Council direct Public Works to schedule and notice a public hearing for City Council to order the completion of the street infrastructure in Stone Hill Estates and Ravenstone subdivisions in accordance with Alternative 2 - 10% City Contribution. The costs to complete the improvements will be paid through a combination of assessments of subdivision property owners, collected securities, security litigation proceeds, and funding provided by the City. Public Works recommends that City Council allow the residents 8 years to pay the assessment balance to the City at a 0% interest rate.

The Public Works Department also recommends that City Council direct the Public Works Department to prepare a Capital Improvement Project budget item to complete the infrastructure at the Stone Hill Estates and Ravenstone subdivisions.

Background

A. Stone Hill Estates Subdivision

The Stone Hill Estates Subdivision is a 9-phase 453-lot subdivision located south of Freeman Road and west of Mineral Springs Road. In 2009 the original Developer, Durham Land Associates, LLC, went bankrupt and left the street infrastructure in parts of Phases 1, 2, 3 and 4 incomplete. There are approximately 7,596 linear feet of incomplete streets. There are five dry detention ponds and three level spreaders which address the stormwater requirements for the subdivision. Of the eight stormwater control measures, 4 were previously completed in accordance to City requirements; however the Developer did not transition the completed facilities to the HOA as required and these completed facilities have not been maintained. Four dry ponds require as-built drawing submittals and certification. All facilities are out of compliance with City Code requirements.

B. Ravenstone Subdivision

Ravenstone Subdivision is a 2-phase 306-lot subdivision located off of Sherron Road south of NC Highway 98. In 2009 the original Developer, Sherron Road Ventures, LLC, went bankrupt and left the street infrastructure in parts of Phase 1 and in all of Phase 2 incomplete. There are approximately 10,678 linear feet of incomplete streets. There are two stormwater control measures which address the stormwater requirements for this subdivision, a wet detention pond and a constructed wetland. The wet detention pond was completed and it is currently in compliance with the City's BMP maintenance certifier program. The constructed wetland is not complete and it requires substantial work.

C. Construction Securities

Construction securities, such as performance bonds and a letter of credit, were collected during the construction process. After the Developers of both subdivisions went bankrupt the City made claims on the performance bonds. In turn, the sureties filed a declaratory judgment action in federal court seeking a judge's interpretation of the extent of the bonded obligations. The City and the sureties negotiated a settlement agreement that resolved the litigation. The total of the collected securities and the settlement proceeds are listed below:

- Stonehill Estates Street Infrastructure: \$126,356
- Stonehill Estates Stormwater Facilities: \$42,295
- Ravenstone Street Infrastructure: \$258,400
- Ravenstone Stormwater Facilities: \$109,795

Issues and Analysis

A. Street Infrastructure

In June 2014, the Engineering Division of the Public Works Department completed construction cost estimates for both subdivisions. The type of work required to complete the street infrastructure in conformance with City requirements includes: repair to the existing street

base, repair of curb and gutter, repair of driveways and sidewalks, utility/manhole adjustments, and placement of the final layer of asphalt. The estimated cost to complete street infrastructure is listed in Table 2 and was used to generate the assessment rates in the scenarios described in the Alternatives section of this memo.

Table 2: Street Infrastructure Cost Estimate

Subdivision	2014 Construction Estimate
Stone Hill Estates	\$687,071
Ravenstone	\$1,118,319

B. Stormwater Facilities Infrastructure

In January 2015, the Stormwater Division of the Public Works Department completed construction cost estimates for both subdivisions. The type of work required to complete the stormwater facilities includes: removal and disposal of trees and invasive vegetation, slope repair and establishment of grass cover, removal and replacement of improperly compacted earthen embankment material, conversion from sediment and erosion control devices to stormwater facilities, sediment removal, concrete weir and spillway repair, drainage diaphragm correction, establishment of appropriate wetland vegetation, pipe outlet/drainage ditch stabilization, surveying, as-built drawing preparation, engineering certification, etc. The estimated cost for repair, remediation, and completion of the stormwater facilities listed in Table 3 was used to generate the assessment rates in the scenarios described in the Alternatives section of this memo. The stormwater replacement fund payment is included in the estimate.

Table 3: Stormwater Infrastructure Cost Estimate

Subdivision	2015 Construction Estimate	Stormwater Replacement Fund Payment	Total Estimate
Stonehill Estates	\$323,385	\$104,889	\$428,274
Ravenstone	\$239,750	\$332,253	\$572,003

Alternatives

Alternative 1 – Per Lot Assessment

In this scenario, lots abutting incomplete streets will be assessed to complete the streets, and all lots within a respective subdivision will be assessed to complete incomplete stormwater infrastructure. The construction security proceeds have been subtracted from the construction estimates before calculating the assessments. The street assessments have been allotted based on the number of lots abutting incomplete streets and not on frontage. Stormwater assessments include replacement securities for stormwater facilities.

Table 4: Total Estimated Costs to be assessed to complete the Street Infrastructure

Subdivision	Construction Estimate	Acquired Funds from Securities	Total to be assessed
Stonehill Estates	\$687,070	\$126,356	\$560,714
Ravenstone	\$1,118,319	\$258,400	\$859,919

Table 5: Total Estimated Costs to be assessed to complete the Stormwater Infrastructure

Subdivision	Construction Estimate	Acquired Funds from Securities	Total to be assessed
Stone Hill Estates	\$428,274	\$42,295	\$385,979
Ravenstone	\$572,003	\$109,795	\$462,208

Stone Hill Estates: The street and stormwater infrastructure assessments for Stonehill Estates are based on costs associated with completion of infrastructure divided by 187 lots in the subdivision (see attached maps):

Street Infrastructure = \$2,999
 Stormwater Facilities = \$2,064
Total Lot Assessment = \$5,063

Ravenstone: The street infrastructure assessments for Ravenstone are based on costs associated with completion of street infrastructure divided by the 221 lots in the subdivision that abut the incomplete street infrastructure. The stormwater assessments for Ravenstone are based on the costs associated with completion of stormwater facility infrastructure for stormwater compliance divided by the 306 lots in the subdivision (see attached maps). This will result in 221 lots with a higher assessment.

Street Infrastructure = \$3,891
 Stormwater Infrastructure (Stormwater only assessment) = \$1,511
Total Lot Assessment (Street and Stormwater Facilities) = \$5,402

Public Works suggests that City Council allow the residents 8 years to pay the assessment balance to the City at a 0% interest rate. Once the work has been completed, the street infrastructure (streets and utilities within the streets) will be submitted to City Council for acceptance. This option is not recommended as it is inconsistent with previous practice and direction from City Council for partial contributions.

Alternative 2 –City Contribution and Per Lot Assessment

In this scenario, the City would contribute a percentage to the cost to complete the street and stormwater infrastructure with the remaining costs to be assessed to each lot. The

construction security proceeds have been subtracted from the construction estimates before calculating the assessments. The street and stormwater infrastructure assessment for Stone Hill Estates is based on the cost estimate divided by 187 lots in the subdivision. The street infrastructure assessment for Ravenstone is based on the cost estimate divided by 221 lots in the subdivision (number of lots abutting incomplete streets). The stormwater assessments for Ravenstone are based on the cost estimate of stormwater facility infrastructure for stormwater compliance divided by 306 lots in the subdivision. This will result in 221 lots in the Ravenstone Subdivision receiving a higher assessment amount.

Table 6: Stone Hill Estates Lot Assessment with City Contribution

City Contribution	Street and Stormwater Lot Assessment
10%	\$4,556
25%	\$3,797
50%	\$2,531
75%	\$1,266

Table 7: Ravenstone Lot Assessment with City Contribution

City Contribution	Stormwater Only Lot Assessment	Street and Stormwater Lot Assessment
10%	\$1,359	\$4,861
25%	\$1,133	\$4,051
50%	\$755	\$2,701
75%	\$378	\$1,350

Public Works recommends that City Council allow the residents 8 years to pay the assessment balance to the City at a 0% interest rate. Once the work has been completed, the street infrastructure (streets and utilities within the streets) will be submitted to City Council for acceptance.

The Public Works Department recommends that the City complete the work in the subdivision. Public Works also recommends that the City contribute 10% of the cost to complete the street and stormwater infrastructure. This is consistent with recent practice. (In 2013 the street of the Dunwoody Subdivision was completed by the City with lot assessments, a 10% City contribution, and replacement of a construction security. The Dunwoody Subdivision did not have a stormwater facility.) (Public Works does not recommend City Contributions above 10% based on past practice.)

Alternative 3 – Streets and Stormwater Facilities Completed by Residents

The respective homeowners associations for the subdivisions would retain the services of a contractor to perform the necessary work to complete the streets and stormwater facilities at their direct cost. Public Works would inspect the work of the privately retained contractor to verify completion of the infrastructure in accordance with City of Durham requirements. Upon completion of the work, the homeowners associations would petition the City to accept the street infrastructure (streets and utilities within the streets). This option is not recommended as it requires the citizens to have expertise in the completion of infrastructure. This responsibility would be a more difficult burden than alternative 1 and requires a greater amount of time and personal involvement by the citizens.

Financial Impact

The alternatives discussed above would have the following financial impacts:

- Alternative 1: This alternative does not impact the City financially.
- Alternative 2: This alternative proposes that the City contributes a percentage of the costs to complete the street infrastructure in both subdivisions.

Table 8: Financial Impact to the City to Complete the Street and Stormwater Infrastructure Stone Hill Estates

Percentage of Contribution	City Contribution to Complete Street Infrastructure	City Contribution to Complete Stormwater Infrastructure
10%	\$56,071	\$38,598
25%	\$140,179	\$96,495
50%	\$280,357	\$192,990
75%	\$420,536	\$289,484

Table 9: Financial Impact to the City to Complete the Street and Stormwater Infrastructure Ravenstone

Percentage of Contribution	City Contribution to Complete Street Infrastructure	City Contribution to Complete Stormwater Infrastructure
10%	\$85,992	\$46,221
25%	\$214,980	\$115,552
50%	\$429,959	\$231,104
75%	\$644,939	\$346,656

Table 10: Financial Impact to the City to Complete the Street and Stormwater Infrastructure in both Subdivisions

Percentage of Contribution	City Contribution to Complete Street Infrastructure	City Contribution to Complete Stormwater Infrastructure
10%	\$142,063	\$84,819
25%	\$355,159	\$212,047
50%	\$710,316	\$424,094
75%	\$1,065,475	\$636,140

- Alternative 3: This alternative does not impact the City financially.

SDBE Summary

The SDBE Summary section is not applicable for this item.