Cutchin Drive Storm Drainage Improvement Project
Public Meeting #1
October 21, 2014
6:00 P.M.

Adrian Cardenas, Charlotte-Mecklenburg Storm Water Services (CMSWS) Project Manager, welcomed attendees and introduced Doug Lozner, CMSWS Watershed Area Manager, Alyssa Dodd, CMSWS Public Information Specialist, and Karl Dauber and Rob Green, Parsons Brinckerhoff, engineering consultant for CMSWS. City Councilmember Kenny Smith, District 6 Representative, introduced himself and informed attendees that he would be available through email or phone if anyone had concerns that they felt needed his attention.

Adrian Cardenas, CMSWS Project Manager, explained the purpose of the first public meeting is to show the existing conditions analysis to the neighborhood and get feedback. He also gave a brief overview of Charlotte-Mecklenburg Storm Water Services.

Karl Dauber, Project Manager for Parsons Brinckerhoff, described the project area and overall larger watershed limits. He described the modeled findings of the Existing Conditions Analysis Report. Karl explained that the computer modeled results indicate 12 parcels with potential flooding to structures under existing conditions, and potential areas of street flooding along Wamath Drive, Cutchin Drive, Chaucer Drive, Mountainbrook Road, Landerwood Drive, and Shaker Drive.

Adrian Cardenas, CMSWS Project Manager, presented a general timeline for future project phases including Alternatives Analysis, Design, Permitting, Easement Acquisition, Bidding, and Construction. He also went over the next steps of the project and explained that there will be two more public meetings. Lastly, Adrian explained what type of alternatives may be evaluated for the project and opened the floor for questions.

After general questions, attendees broke up into smaller groups to look at maps in detail. Citizens spoke directly to City staff or Parsons Brinckerhoff staff and described stormwater issues they may or may not be seeing on their specific property.

The following summarizes the General Questions (*additional information provided after the public meeting in italics*):

Q: Are all planning reports and 311 records available for public record?
A: Yes. The Existing Conditions Analysis Report, which includes the 311 requests, is available for review at Charlotte-Mecklenburg Storm Water Services. *City of Charlotte, 600 East Fourth Street, 14th Floor.*

Q: Will the PowerPoint slides be available on the website?
A: Yes. The PowerPoint presentation as well as the [*Existing Conditions Modeled Floodplain*] map will be available on the website. *Additionally, an overall watershed map and a Citizen Reported Drainage Issues Map has also been posted on the project website.*

Q: What is the driver for this project, street flooding or house flooding?
A: Both street flooding and structure flooding are taken into account for qualifying projects.

Q: How do you determine who receives the postcard communications?
A: Postcards are sent to property owners within the project boundary. If you are outside the project boundary we can add you to the list. *The project boundary is not intended to coincide with neighborhood boundaries. Typically, only properties that contain or are adjacent to components of the main stormwater system within the watershed area are included in the project boundary. Please refer to the overall watershed map posted on the website for watershed and project boundaries.*

Q: Can you provide the cost?
A: The design portion of the project has not been determined. Therefore, there is no construction cost estimate at this time.

C: The project name is deceiving. A larger group [*beyond the project limits*] is impacted by construction. More neighbors should receive postcards.
A: Project names are not intended to convey project limits or coincide with neighborhood boundaries. Please refer to the project boundary map posted on the website.

C: Everyone who is attending this meeting should be added to the postcard list.
A: Attendees that provided contact information will be added to our project mailing list.

Q: When would the next [*#2*] meeting occur?
A: Approximately 6 months. *UPDATE: Per our project schedule, the next public meeting to present the City Recommended Alternative is in approximately 9-12 months.*

Q: All I see in your list of alternatives are pipes and structures. Do you have other alternatives like gravel driveways? Aren't you just moving the problem downstream?
A: This is a flood control project. Low Impact Development (LID) is great for new development and redevelopment projects, but not flood control retrofits. As part of this project, the City analyzes proposed improvements so that there is no impact downstream to the FEMA floodplain.

Q: Where is the water going for new development?
A: New development within the watershed is accounted for in the computer models as shown in the Existing Conditions Analysis Report.

C: We never had a problem until they built condos on Sharon Road.
A: The watershed and land use for this area has not changed. *Only about 6 acres (3.75%) of the total 160 acre watershed has developed into condos. Additionally, these condo developments have on-site underground detention basins. Please refer to the overall watershed and project boundary map posted on the website.*

Q: Why is the City allowing these big houses to be built?
A: Property owners have the right to develop their property as long as it meets City of Charlotte Land Development requirements which include the Post Construction Control Ordinance. Computer models developed for the Existing Conditions Analysis Report include analysis for two scenarios: (1) current conditions, and (2) future conditions that account for redevelopment and future development, zoning, and land use plans.

Q: With the potential for an increased volume of water through the project, will more houses be in a flood plain?
A: No. The Cutchin Drive Storm Drainage Improvement Project will not raise the FEMA floodplain.

Q: Can you describe the impacts on properties?
A: The project is in the early Planning Phase and design has not begun. Therefore, exact construction impacts have not been determined. During the Design Phase, property owners will have the opportunity to share concerns with the City on how fencing, sheds, trees and landscaping will be affected. All construction areas will be graded to provide positive drainage and reseeded.

Q: How many properties are in the project area?
A: *There are approximately 106 homes in the project area and a total of 255 homes in the Study Area (watershed). Please refer to the overall watershed and project boundary map posted on the website.*

Q: Will there be any erosion control if you are putting more water in the creek?
A: Increases in volume and velocity in the creek will be determined during the design phase of the project. If erosive velocities exist, erosion control and channel bank stabilization measures will be evaluated for the project.

Q: Why is this [*i.e. watershed*] such a high priority area?
A: The project started as a localized stormwater maintenance project to alleviate flooding issues with houses on Cutchin Drive. However, after further investigation it was determined that this is a larger watershed-wide issue that cannot be managed by localized repairs without potentially impacting downstream properties.

Q: Does this program look at buying out homeowners and/or raising structures?
A: Charlotte-Mecklenburg Storm Water Services does not typically purchase and/or raise houses.

C: Seems like this project may or may not benefit us and maybe creates more problems downstream.
A: The project design will not allow upstream improvements to create or make downstream problems worse. Downstream impacts from any proposed improvements will be analyzed during the Alternatives Analysis Phase.

Q: There was a project in a nearby neighborhood where people are now having structural problems due to the construction and some owners can't do additions to their house or landscaping.
A: Any work done near structures is evaluated to determine if there is a need for foundation protection. Landscaping is allowed within storm drainage easements, but not trees since their large roots can grow into the pipe joints and cause them to fail. Charlotte-Mecklenburg Storm Water Services generally prefers to keep pipe in the same location. If a pipe existed on the property before the project, Land Development and building standards already state structures [*houses*] cannot be built over pipes, so it was a pre-existing condition not created by the project.

Q: A home impacted by the Eastburn Project has a large giant cap over a hole [*i.e. slab top inlet*]. Property values must be impacted and these property owners maybe were not impacted by flooding.
A: We try to minimize property impacts. At this time we do not know which property owners will be impacted.

Q: What are the alternatives for erosion?
A: If channel bank stabilization is needed, we generally use natural approaches, like floodplain benching and live staking [*planting trees and shrubs*].

Q: What about the creek from the Chaucer Drive outfall to the Mountainbrook Road crossing? Will rip-rap be used for stabilization?
A: The Alternative Analysis Phase will analyze improvements to see if stream stabilization is required. CMSWS tries to avoid the use of rip-rap because the stream disturbance mitigation costs through the Army Corps of Engineers are very high.

Q: A bigger pipe means more water. What does it mean for downstream?
A: Downstream impacts from any improvements will be analyzed during the Alternatives Analysis Phase. The project design will not allow upstream improvements to create or make downstream problems worse.

Q: What options will you be looking at to improve water quality?
A: The two biggest impacts to water quality are sediment and bacteria. While this is not a water quality project, addressing erosion issues will reduce sediment loads.

Q: There is a water and sewer line crossing the creek. At times the pipe crossing captures debris and creates a blockage. Now you're putting more water in the creek.
A: Typically, creek crossings with waterlines and sewer lines are not modified in storm water projects. Residents are urged to call 311 if they notice a creek blockage at a utility crossing.

Q: Is this [*project*] a done deal?
A: Something will be done to address the house and street flooding, but the extent of the project has not been determined at this time.

Q: What is our ability to fight this [*i.e. project*]? Can the City just purchase the three houses impacted by the flooding?
A: Residents can voice their concerns with Charlotte City Council District 6 Representative, Councilmember Kenny Smith. The City does not generally purchase houses.

C: I'm new to the neighborhood and just came from the Eastburn area where construction was invasive and loud and disruptive all day long.
A: It is true construction is messy. *During construction, every reasonable effort will be made to minimize disruption to area residents. A city inspector will also be on-site during construction activities.*

Q: How do we know which yards will get dug up?
A: We do not know at this time which properties will be impacted.

Q: Are we having these problems because it's raining more or are people just complaining more?
A: The rainfall has not changed. Development standards from when the neighborhood was built [*1970's*] differ from today, and engineering studies may not have been performed as they do today.

Q: Do you start downstream?
A: Yes, construction typically starts at the downstream end of the project and works toward the top.

Q: Regarding the 311 calls, when and how many households made these calls?
A: There were 79 calls to 311 from within the project basin. Those are not necessarily 79 unique residences making calls to 311. A single residence can make multiple calls. *There were actually 93 unique records (19 Open and 74 Closed), of these 58 are from unique addresses. Please refer to the Citizen Reported Drainage Issues Map posted on the website for additional clarification.*

Q: What are the volume calculations?
A: The engineering calculations are provided in the Existing Conditions Analysis Report.

Q: Why are we fixing a problem that impacts only three houses with some water damage? Isn't there a better solution?
A: Different solutions will be analyzed during the Alternatives Analysis Phase of the project. We are trying to alleviate flooding within the neighborhood. Mitigating flooding issues upstream may cause the problems to move downstream **IF** nothing is done downstream.

Q: Everyone here is saying there is no road flooding. Where is this data coming from?
A: The data showing flooding within the basin was developed from engineering computer models using local rainfall data models. *Please refer to the Citizen Reported Drainage Issues Map posted on the website which includes all questionnaire responses and 311 service requests within the project area.*

Q: How much additional water [*volume*] do you expect? Will there be any re-grading?
A: Some grading activity is often associated with drainage improvement projects, but re-grading or re-location of streams is generally not proposed in order to avoid environmental impacts and mitigation costs.

Q: When the South Park mall roof caved, what was that year storm? 100-year?
A: We can't answer at this time. Need to check the data. *The rainfall event on July 20, 2012 that caused the reported South Park mall roof collapse had about 3 inches of rainfall in 2 hours, which is between a 10 to 20 year storm event. Regarding the rainfall event on July 27, 2010 that caused the reported flooding, it had about 2.2 inches of rainfall in a 30 minute period, which equates to about a 50-year storm event.*

C: There seems to be a big gap between the maps and what people are saying. Please take all this into consideration for meeting #2.
A: *Please refer to the Citizen Reported Drainage Issues Map posted on the website which includes all questionnaire responses and 311 service requests within the project area.*

Q: Do you ever work upstream to downstream?
A: Generally, no.

Q: If you change the size of the pipes, and the water stays the same, do you model velocity?
A: Yes. We look to see if additional channel bank stabilization is needed.

Q: How is this project funded?
A: Through the CMSWS Storm Water fee.

C: This money [*i.e. storm water fee*] has to be spent or you owe citizens a refund.
A: The Charlotte-Mecklenburg Storm Water fee pays for the storm water program, if funds were not used on this project they would be used elsewhere in the program. For accurate information about the Charlotte-Mecklenburg Storm Water fee, please visit the City website: ***http://charmeck.org/stormwater/FeesandBilling****.*

Q: Who do we need to talk to about buying the houses and donating the land for a park/greenway?
A: Residents with questions about City policies may want to speak with their City Council Representative.

Q: What is the cost benefit analysis? Do you do a cost benefit analysis like in the private sector?
A: Yes. We look at the benefit versus cost of the proposed improvements during the Alternatives Analysis Phase. Therefore, this has not been performed during the early planning stage of the project.

C: We have had flooding at 3222 Meadowbrook and a request was made to 311. I was asked to donate 30 feet from each side of the creek and I don't want to lose my land.
A: What you are referring to is a storm drainage easement [*SDE*]. The City would not own the land, only the rights to do improvements within this area and maintain it in the future.

Q: Why are we getting all this additional drainage? Why is the City increasing impervious surface north of the watershed with development?
A: Property owners have the right to develop. The development of the properties north of the watershed is permitted through a different department within the City. New developments and

redevelopments are required to adhere to the City's Post-Construction Stormwater Ordinance (PCO) *(which includes detention requirements for impervious surfaces).* If you don't think the rules are strong enough you can speak with your City Council Representative.

Q: Are you talking about today's problems or future problems?
A: The maps at the front and in the presentation were showing the existing conditions. Future conditions are also considered in the analysis and are included in the Existing Conditions Analysis Report. *The map used at the public meeting, known as the Existing Conditions Modeled Flood Plain Map is available on the project website.*