Mayor Patrick D. Cannon	Mayor Pro Tem Michael D. Barnes
Al Austin	Patsy Kinsey
John Autry	Vi Lyles
Ed Driggs	LaWana Mayfield
Claire Fallon	Greg Phipps
David L. Howard	Kenny Smith

CITY COUNCIL MEETING

Monday, February 10, 2014

CITY COUNCIL AGENDA
Monday, February 10, 2014

Table of Contents

5:00 P.M. DINNER BRIEFING, CONFERENCE CENTER

1. Mayor and Council Consent Item Questions

Resource(s): Hyong Yi, City Manager's Office

Time: 5 minutes

Synopsis
Mayor and Council may ask questions about Consent agenda items. Staff will address questions at the end of the dinner meeting.

2. Revaluation Review Process Briefing

Resource(s): Ken Joyner, Assessor, Mecklenburg County

Time: 45 minutes

Synopsis
- On Oct. 1, 2013, Ken Joyner joined Mecklenburg County as the County Assessor.
- Joyner is a former tax administrator and most recently a lecturer at the School of Government at the University of North Carolina at Chapel Hill. His career involving assessments began in 1993 in Harnett County as a residential appraiser. Since then, he has served as tax administrator for Chatham, Onslow and most recently, Durham counties.
- As part of the ongoing commitment to customer service and improving communications with the public, Joyner started a series of countywide briefings on the revaluation review process. He has spoken to several neighborhood associations, a real estate company, and the town councils of Cornelius, Davidson, Huntersville, Matthews, and Mint Hill.
- During tonight's briefing, Mr. Joyner is prepared to answer questions about the status of the revaluation review or any specifics related to the review process.

Future Action
The presentation is for information only.

3. Extension of Ordinance Mitigation Options

Resource(s): Daryl Hammock, Engineering & Property Manager

Time: 30 minutes

Synopsis
- The Federal Clean Water Act requires cities to adopt land-use regulations to protect surface waters from the harmful effects of storm water runoff.
- Over 100 North Carolina communities have adopted locally-tailored regulations that address these regulatory drivers in order to protect surface waters from further degradation, and to address other urban runoff drivers such as urban flooding, economic development issues, endangered species protection, and existing surface water impairment.
- In response to state and federal regulations, a County-wide, three-year stakeholder process was conducted between years 2005 to 2007 to develop the

Post-Construction Controls Ordinance, which would protect surface waters from the harmful effects of storm water runoff.

- On November 26, 2007, the City Council approved the Post Construction Controls Ordinance, effective 2008, which included a fee-in-lieu option for redevelopment projects in certain geographies including redevelopment projects located in Transit Station Areas and Distressed Business Districts.
- On October 10, 2011, the City Council approved a temporary mitigation option that expanded the use of the mitigation fee for all redevelopment projects Citywide.
- The temporarily expanded portion of the mitigation fee will expire in April 2014. The use of a mitigation fee as an ordinance compliance option provides flexibility and predictability for redevelopment projects and places a cost cap on compliance.
- This innovative approach is being used in other areas of the country to balance environmental and economic development objectives.
- Staff believes the use of the mitigation fee is effective from both standpoints and recommends extending the temporary mitigation fee option for an additional five years until development patterns return to a higher level
- Staff will explain the benefits of the mitigation fee, how it has been used successfully by redevelopment projects, and how staff uses it to improve surface waters.

Future Action
The City Council will be asked to extend the temporary use of a mitigation fee as a compliance option at a March or April Council Business Meeting.

4. 2012 Urban Tree Canopy Report

Resources(s): Gina Shell, Engineering & Property Management
Dave Weekly, Engineering & Property Management
Tim Porter, Engineering & Property Management

Time: 30 Minutes

Synopsis

- A report on the current tree canopy in Charlotte and Mecklenburg County was finalized on January 15, 2014.
  - In 2011, the City contracted with The University of Vermont's Spatial Analysis Laboratory, in partnership with the United States Forest Service's Northern Research Station, to complete the study.
  - The new study used 2012 high resolution, aerial photography and radar data for analysis of the current tree canopy, potential tree canopy, and impervious cover within Charlotte and Mecklenburg County.
- Staff will provide a results-based overview of the 2012 Urban Tree Canopy Report and generally compare the findings of the new study with previous tree canopy analyses.

Future Action
The presentation is for information only.

Attachment 1
Existing and Future Tree Canopy in Charlotte and Mecklenburg County

5. Answers to Mayor and Council Consent Item Questions

Resource(s): Hyong Yi, City Manager's Office

Time: 10 minutes

Synopsis
Staff responses to questions from the beginning of the dinner meeting.

Introductions

Invocation

Pledge of Allegiance

7:00 P.M. AWARDS AND RECOGNITIONS, MEETING CHAMBER

6. Mayor's Mentoring Alliance Award

Action:	**Mayor Cannon will recognize the Mayor's Mentoring Alliance award winners.**

7. Kelvin J. Seabrooks Recognition

Action:	**Kelvin J. Seabrooks will be recognized for his many contributions made to the Charlotte and North Carolina. Mayor Cannon will read a proclamation honoring Mr. Seabrooks.**

8. Black History Month Proclamation

Action:	**Mayor Cannon will read a proclamation recognizing February as Black History month.**

9. Human Relations Month Proclamation

Action:	**Mayor Cannon will read a proclamation recognizing February as Human Relations month.**

CONSENT

10. Consent agenda items 17 through 31 may be considered in one motion except those items removed by a Council member. Items are removed by notifying the City Clerk.

Consideration of Consent Items shall occur in the following order:

A. Consideration of Consent Items that have not been pulled
B. Consideration of Consent Items with citizens signed up to speak to the item

Public Hearing

11. Public Hearing on a Resolution to Close an unopened Alleyway off of S. Torrence Street

Action:	**A. Conduct a public hearing to close an unopened alleyway off of S. Torrence Street, and** **B. Adopt a Resolution to Close.**

Staff Resource(s): Jeff Boenisch, Transportation

Policy
- To abandon right-of-way that is no longer needed for public use

Explanation
- North Carolina General Statute 160A-299 outlines the procedures for permanently closing streets and alleys.
- The Charlotte Department of Transportation received a petition to abandon public right-of-way and requests this City Council action in accordance with the statute.
- The action removes land from public right-of-way status and attaches it to the adjacent property.
- The attached resolution refers to exhibits and metes and bounds descriptions that are available in the City Clerk's Office.

Petitioner
Samuel Burick

Right-of-Way to be abandoned
An unopened alleyway off of S. Torrence Street

Reason
To incorporate the unopened right-of-way into the adjacent property owned by the petitioner in order to create a more viable parcel for a future development.

Notification
As part of the City's notification process, and in compliance with North Carolina General Statute 160A-299, the Charlotte Department of Transportation submitted this abandonment petition for review by the public and City Departments.

Adjoining property owners
Charlotte Housing Authority – No objections

Neighborhood/Business Associations
Cherry Community – No objections

Private Utility Companies – No objections

City Departments
Review by City departments identified no apparent reason this closing would:
- Be contrary to the public interest

- Deprive any individual(s) owning property in the vicinity of reasonable means of ingress and egress to his property as outlined in the statutes
- Be contrary to the adopted policy to preserve existing rights-of-way for connectivity

Attachment 2
Map
Resolution

12. Public Hearing on Equipment and Facilities Financing

Action:
A. Conduct a public hearing on an installment financing contract to finance the City's acquisition of certain equipment and capital projects, and

B. Adopt a resolution that makes certain findings for the proposed financing and calls for the execution and delivery of various documents necessary to complete the sale.

Staff Resource(s): Greg Gaskins, Finance

Explanation
- In March 2014, the City is planning to issue up to $43.0 million of bond proceeds in order to finance equipment and facilities.
  - $26.0 million of the proceeds will be used for equipment - primarily to replace vehicles for public safety, sanitation, and utilities.
  - $17.0 million of the proceeds will used for facilities to partially fund Westover Police Station, Joint Communications Center, and site acquisition related to the redevelopment of the Bojangles/Ovens area.
  - The projects were approved by the City Council as part of FY2014-2018 Community Investment Plan, which totals $816.0 million.
  - The remaining portions of the projects will be funded in subsequent financings.
- The facility projects are to be financed with Certificates of Participation, not General Obligation bonds. The use of Certificates of Participation was planned with the adoption of the Community Investment Plan.
- The City's obligation to repay the debt will be secured by the real property and a security interest in the equipment.
- The current action will:
  - Conduct and close a public hearing on the projects to be financed;
  - Make certain findings required for Local Government Commission approval of the financing; and
  - Give approval to the City Manager to take necessary actions to complete the financing.

Funding
Municipal Debt Service Fund

Attachment 3
Lists of projects/equipment
Resolution

POLICY

13. City Manager's Report

BUSINESS

14. Immigrant Integration Task Force Appointments

Action: **Appoint the members of the Immigrant Integration Task Force as recommended by community partners.**

Staff Resource(s): Brad Richardson, Neighborhood & Business Services
Alexis Gordon, Neighborhood & Business Services

Explanation

- On November 25, 2013, the City Council adopted a resolution to create an inter-agency Immigrant Integration Task Force (Task Force) to maximize immigrants' economic and civic contributions to Charlotte.
- The work of the Task Force will be sponsored by the Charlotte International Cabinet and Neighborhood & Business Services, and will consist of the following activities:
  - Review the recommendations of the 2007 Mayor's Immigration Study Commission in order to leverage previous research and conclusions;
  - Research and recommend policies that facilitate access to city services for all residents of Charlotte, while addressing gaps in civic engagement;
  - Prepare a report with recommendations to the City Council that promotes awareness among the public of the availability of existing programs and services facilitating immigrant integration; and
  - Seek opportunities to better educate the Charlotte community on how embracing immigrant communities will help move the city forward.
- The Task Force will consist of 25 members, with seven members appointed by the Mayor and 18 members to be appointed by the City Council after receiving nominations from community partners that provide services to and/or unique perspectives on immigrant issues.
- In December 2013, former Mayor Kinsey appointed the following seven members to the Task Force:
  - Stefan LaTorre, LaTorre Law Firm (Chair),
  - Emily Zimmern, Levine Museum of the New South (Vice Chair),
  - Steven Garfinkel, Garfinkel Immigration Law Firm,
  - Ellen Dubin, Carolina Refugee Resettlement Agency, Inc.,
  - Martha Ann McConnell, Carolinas HealthCare System,
  - Robert Shore, B. Roberts Foods, LLC, and
  - Anika Khan, Wells Fargo.

- The 18 individuals recommended by community partners to serve as members of the Task Force are identified in the table below:

Community Partner Organization	Recommended Appointee
Latin American Coalition	Lacey Williams Advocacy Director
Southeast Asian Coalition	Thanh-Thu Luong Director of Programs
Charlotte Chamber of Commerce	Will be provided by February 10 Charlotte Chamber Member
International House	Jennifer Watson Roberts Board President
Charlotte International Cabinet	Dr. John Chen, Chairman Carolinas Asian American Chamber of Commerce
Charlotte Mecklenburg Schools – Administrator	Jennifer Lupold Pearsall ESL Student Education Director
Charlotte Mecklenburg Schools – Teacher	Maria De Luca English Language Learner Resource Teacher
Mecklenburg County Health Department	Amy Michelone Environmental Supervisor, Food & Facilities Sanitation
Mecklenburg County Sheriff's Office	Kim Vazquez Inmate Specialist III/Reentry
Mecklenburg County Department of Social Services	Audrea Caesar Civil Rights Compliance Officer
Charlotte-Mecklenburg Community Relations Committee	Tin Nguyen Committee Member and Founding Partner of Central Law Group, PLLC
Charlotte-Mecklenburg Police Department – Administrator	Major Diego Anselmo Northeast Service Area
Charlotte-Mecklenburg Police Department – Officer	Officer Daniel Hernandez Independence Division
Central Piedmont Community College	Marianne Lyall-Knusel Sr. Program Coordinator of Adult ESL
City of Charlotte – Code Enforcement	James "Curt" White Northeast Service Area Team Leader
Office of the Consul General of Mexico	Monica Colin Consul for Community, Political & Economic Affairs
Mecklenburg Ministries	Sam Wazan Former Mecklenburg Ministries Member, Public Speaker and Author
United Way of the Central Carolinas	Victoria Manning Community Investment Director

- The Task Force will deliver its findings and recommendations to the City Council within one year of its first meeting, expected to occur in February 2014.

15. Conclusion of Consent Agenda

16. Mayor and Council Topics

Council members may share information and raise topics for discussion

CONSENT

Introduction to CONSENT

Consent consists of routine items that have been approved in the budget. Price lists for unit price contracts are available upon request.

In April 2013, the City Council voted to replace the City's Small Business Opportunity Program with the Charlotte Business INClusion program. On July 1, 2013, the City phased in the Charlotte Business INClusion program into all of its practices and procedures.

The Charlotte Business INClusion program seeks to promote diversity, inclusion, and local business opportunities in the City's contracting and procurement process for Minority, Women, and Small Business Enterprises (MWSBEs) headquartered in the Charlotte Combined Statistical Area. Participation of Minority, Women, or Small Business Enterprises (MBE, WBE, or SBE) is noted where applicable.

For a period of time during FY2014, projects appearing in the Council Agendas will incorporate Policy references for either the current Charlotte Business INClusion program or the Small Business Opportunity Program.

The applicable Charlotte Business INClusion program Policy or the Small Business Opportunity Program policy sections are referenced at the end of the Council Request for Council Action.

Disadvantaged Business Enterprise

Disadvantaged Business Enterprise is a federal program primarily used for Aviation and Transit.

Contractors and Consultants

All contractor and consultant selections follow the Council-approved process unless described otherwise. For the procurement of professional services and/or engineering, architectural, and surveying services, the North Carolina General Statutes 143-64.31 requires that units of government "select firms qualified to provide such services on the basis of demonstrated competence and qualification…without regard to fee other than unit price information, and therefore to negotiate a contract for those services at a fair and reasonable fee with the best qualified firm."

The property transaction process following the City Council approval for condemnation is referenced at the end of Consent.

17. Dixie River Road Traffic Signals System

Action: **Award the low-bid contract with Whiting Construction Company, Inc. in the amount of $668,714.08 for installation of new traffic signals and fiber optic system related to the Charlotte Premium Outlets.**

Staff Resource(s): Angela Berry, Transportation

Explanation

- The project will add new traffic signals to the following intersections as part of the developer funded improvements related to the Charlotte Premium Outlets:
  - Dixie River and Shopton Roads,
  - Shopton Road and New Fashion Way,
  - Dixie River Road and New Public Street (yet to be named), and
  - Dixie River Road and Berewick Commons Parkway.
- The project will also add traffic management cameras to the City's existing traffic signals system.
- On September 23, 2013, the City Council approved the Developer Agreement between Charlotte Outlets, LLC (joint venture of Tanger Factory Outlets and Simon Property Group's Prime Outlets) and the City for the traffic signals and fiber optic system.
- On January 9, 2014, an Invitation to Bid was issued; three bids were received.
- The contract period is for 150 days and should be complete in June 2014 to coincide with Charlotte Premium Outlets' opening.

Charlotte Business INClusion

Established SBE Goal: 5.00 %
Committed SBE Goal: 5.26 %
Whiting Construction Company, Inc. exceeded the established SBE goal, and has committed 5.26% ($35,156) of the total contract amount to the following SBE firm: M.H. Graves Construction (trenching and concrete labor).

Funding

Developer Contributions

18. Providence Road Sidewalk Grant Funding

Action: **A. Approve a resolution authorizing the City Manager to execute a Municipal Agreement with the North Carolina Department of Transportation for sidewalk construction and approve the acceptance of the Congestion Mitigation and Air Quality grant, and**

B. Adopt a budget ordinance appropriating $750,000 of North Carolina Department of Transportation grant funding.

Staff Resource(s): Scott Correll, Transportation

Explanation

- The Providence Road Sidewalk project scope is to construct sidewalk on the southwest side of Providence Road between Providence Village Lane and East Barden Road.
- The City is committed to becoming a more "walkable" community as part of an overall strategy for advancing a balanced transportation system that accommodates motorists, transit users, pedestrians, and bicyclists.
- On June 13, 2011, the City Council adopted the Sidewalk Retrofit policy, which guides the prioritization and selection of sidewalk projects throughout Charlotte.
- The City is eligible for up to $750,000 from the North Carolina Department of Transportation for reimbursable right-of-way acquisition, utility relocation, and construction funds.
- The total project cost is estimated at $1.075 million and is compromised of the following funding sources:
  - $325,000: City, and
  - $750,000: North Carolina Department of Transportation.

Charlotte Business INClusion

This is an Interlocal Agreement contract and is exempt (Part A: Appendix 27 of the Charlotte Business INClusion Policy).

Funding

Transportation Community Investment Plan and NC Department of Transportation

Attachment 4

Location Map
Budget Ordinance
Resolution

19. Sunset Road Sidewalk Grant Funding

Action:

A. Approve a resolution authorizing the City Manager to execute a Municipal Agreement with the North Carolina Department of Transportation for sidewalk construction and approve the acceptance of the Congestion Mitigation and Air Quality grant in the amount of $1,386,000 million, and

B. Adopt a budget ordinance appropriating $1,386,000 million of North Carolina Department of Transportation grant funding.

Staff Resource(s): Scott Correll, Transportation

Explanation

- The Sunset Road Sidewalk project will construct sidewalk on both sides of Sunset Road between Interstate-77 and Statesville Road.
- The City is committed to becoming a more "walkable" community as part of an overall strategy for advancing a balanced transportation system that accommodates motorists, transit users, pedestrians, and bicyclists.
- On June 13, 2011, the City Council adopted the Sidewalk Retrofit policy, which guides the prioritization and selection of sidewalk projects throughout Charlotte.
- The City is eligible for up to $1,386,000 from the North Carolina Department of Transportation for reimbursable right-of-way acquisition, utility relocation, and construction.
- The total project cost is estimated at $1.85 million and is compromised of the following funding sources:
  - $464,000: City, and
  - $1,386,000: North Carolina Department of Transportation

Charlotte Business INClusion

This is an Interlocal Agreement contract and is exempt (Part A: Appendix 27 of the Charlotte Business INClusion Policy).

Funding

Transportation Community Investment Plan and NC Department of Transportation

Attachment 5

Location Map
Budget Ordinance
Resolution

20. Real Estate Services for Nevin Road-Gibbon Road Project

Action: **Approve a contract with THC, Inc. in the amount of $150,000 for real estate acquisition and relocation services on the Nevin Road-Gibbon Road Sidewalk project.**

Staff Resource(s): Tony Korolos, Engineering & Property Management
Becky Insogna, Engineering & Property Management

Explanation

- Typical acquisition and relocation services contracts include, but are not limited to, contacting and negotiating with property owners whose property will be impacted by the City's existing Community Investment Plan and for the acquisition of the property rights necessary for completion of the project.
- THC, Inc. was selected to provide acquisition and relocation services for the Nevin Road – Gibbon Road Sidewalk project.
- The real estate consultant's fees will be submitted for reimbursement through the North Carolina Department of Transportation's federally-funded Congestion Mitigation and Air Quality Program; therefore this contract process and the real estate processes must adhere to federal requirements.
- The firm was also selected through a competitive proposal process compliant with federal guidelines. THC, Inc. was selected based on criteria that included:
  - The proposal fee;
  - Qualifications of key individuals and experience in providing similar services for federally-funded projects; and
  - References and past performance on City projects.
- THC, Inc. has completed the City's training on negotiation policies and procedures and will be monitored closely for compliance. THC, Inc. is further required to provide the City with written policies, procedures, and training to ensure they meet the City's expectations of proper behavior, courtesy towards citizens, and professionalism in the field.
- The Nevin Road – Gibbon Road Sidewalk project will include the construction of sidewalk along the north side of Nevin Road from Alpine Lane to Gibbon Road and along the south side of Gibbon Road from Nevin Road to West Sugar Creek (approximately .91 miles). The project also includes filling in sidewalk gaps along the east side of West Sugar Creek Road from Mallard Creek Road to just south of Bisaner Street.
- The project will support the City's Sidewalk Program to enhance connectivity, offer transportation choices, and improve pedestrian safety.

Disadvantaged Business Enterprise

This project has federal funds committed by North Carolina Department of Transportation and is subject to the federal DBE regulations. The federal DBE regulations neither recommend nor require goals to be set on every federally-funded project. No DBE utilization goal was set for this contract because subcontracting is not anticipated. Subcontracting is not anticipated because the firm will self-perform the services

Funding

Transportation Community Investment Plan and the North Carolina Department of Transportation Grant

Attachment 6

Map

21. Street Maintenance Salt Spreaders

Award:

A. Award the unit price, low-bid contract to Godwin Manufacturing Company, Inc. for the purchase of salt spreaders for the term of three-years, and

B. Authorize the City Manager to extend the contract up to two additional, one-year terms with possible price adjustments at the time of renewal as authorized by the terms of the contract.

Staff Resource(s): Charles Jones, Transportation

Explanation

- Salt spreaders are mounted in the beds of tandem axle dump trucks and are used to apply salt to city roads during ice and snow events.
- Three spreaders, on the FY2014 General Capital Equipment Replacement list, were identified for replacement due to age, overall condition, and incompatibility with control systems used to manage roadway salt applications.
- The Procurement Division of Shared Services issued an Invitation to Bid for salt spreaders on November 11, 2013; one bid was received.
- The unit price for each spreader is $16,930.
- Future year purchases will be based on the Capital Equipment Replacement schedule.

Charlotte Business INClusion

No SBE goal was set for this contract because there are no subcontracting opportunities.

Funding

General Capital Equipment Replacement Fund

22. McAlpine Creek Plant Digester Mixer Replacement Parts

Action: **A. Approve the purchase and repair of digester mixer equipment parts as authorized by the sole source purchasing exemption of G.S. 143-129(e)(6), and**

B. Approve a contract with SPX Flow Technology/Lightnin for digester mixer equipment parts and repair in the amount of $382,099.

Staff Resource(s): Barry Shearin, Utility

Sole Source Exemption:

- G.S. 143-129 (e) (6) provides that formal bidding requirements do not apply when:
  - Performance or price competition is not available,
  - A needed product is available from only one source or supply, or
  - Standardization or compatibility is the overriding consideration.
- Sole sourcing, from SPX Flow Technology/Lightnin, is necessary for standardization and compatibility of the mixer parts to the existing equipment.
- The City Council must approve purchases made under the sole source exception.

Explanation

- Digesters are large, enclosed, circular, concrete tanks that each have a mixing system and are used in the wastewater treatment process to prepare the solids residuals (biosolids) for state-permitted land application on farmland.
- The contract is for the repair of one stainless steel mixer shaft and purchase of two additional digester shafts.
- The shafts are 48 feet long and are major components of the digester mixer assembly.
- McAlpine Creek Wastewater Treatment Plant has 10 digesters; three of the digesters are currently under repair; and a fourth is to be cleaned and repairs identified in a future contract.
- The digester tank cleaning and mixer repairs at the facility have been implemented in phases in order to maintain the required treatment processes necessary to meet federal permit requirements.
- Future contracts are anticipated for the cleaning and repair of the remaining digesters over the next couple years.

Charlotte Business INClusion

This is a sole source contract and is exempt (Part A: Appendix 27 of the Charlotte Business INClusion Policy).

Funding

Utility Community Investment Plan

23. Rocky River Road West Interlocal Agreement

Action: **Adopt a resolution authorizing an Interlocal Agreement between Charlotte-Mecklenburg Board of Education and the City of Charlotte for reimbursement of preliminary design services for the Rocky River Road West project in an amount not to exceed $135,000.**

Staff Resource(s): Jim Keenan, Engineering & Property Management

Explanation

- Through this agreement, the Charlotte-Mecklenburg Board of Education (the School Board) will provide preliminary design services to establish the proposed realignment of Rocky River Road adjacent to the proposed Newell Elementary School.
- The School Board has procured design professionals to provide this service as part of its overall school design work.
- The City will reimburse the School Board up to $135,000 for additional design services performed for the City's benefit.
- The City anticipates the School Board to approve and execute the Interlocal Agreement by February 28, 2014.

Background

- The School Board plans to build the new elementary school in the vicinity of proposed City improvements on Rocky River Road with a planned opening of August of 2015. In doing so, the School Board will be required by ordinance to make significant roadway improvements to the adjacent side of Rocky River Road.
  - The Interlocal Agreement includes a provision that requires interim safety improvements should the overall construction not be completed by the August 2015 opening.
- The City also plans to improve Rocky River Road between North Tryon Street and Toby Creek greenway (approximately .75 mile length). Proposed City improvements would include roadway realignment to address safety concerns, as well as typical street upgrades such as turn lanes, curb, gutter, bicycle lanes and sidewalks.
  - These improvements are planned for construction pending a successful 2014 bond referendum vote, with construction not anticipated until after 2018.
  - The Interlocal Agreement includes a provision that requires the School Board to build all applicable improvements should City funding not be available.
- The City's project is recommended in the Northeast Corridor Infrastructure Program and in the University Area Station Area Plan.
- Should the School Board proceed with only the Ordinance-required improvements in front of the school, then these improvements would need to be torn out when the City project occurs, wasting the School Board investment and further inconveniencing the traveling public and the local community.
- To avoid this, preliminary design for the realignment of Rocky River Road must be accelerated to determine the appropriate curb-line for the school frontage.

Charlotte Business INClusion

This is an Interlocal Agreement contract and is exempt (Part A: Appendix 27 of the Charlotte Business INClusion Policy).

Funding
General Community Investment Plan

Attachment 7
Vicinity Map
Interlocal Agreement
Resolution

24. Police Westover Division Station Design Services

Action: **Approve a contract with C Design, Inc. in an amount up to $598,000 for architectural services to design a new office facility for the Westover Division of the Charlotte-Mecklenburg Police Department and Neighborhood & Business Services Southwest Service Area Team.**

Staff Resource(s): William Haas, Engineering & Property Management
Pat Mumford, Neighborhood & Business Services
Katrina Graue, Police

Explanation
- On January 27, 2014, the City Council approved land purchases for this project.
  - A total of six parcels will be combined to create a 5-acre site at 2600 West Boulevard, which will be required to be re-zoned from the current commercial and residential zoning to neighborhood services.
- C Design, Inc. was selected to design a new field office for the Westover Patrol Division. The facility will also include space for Neighborhood & Business Services Southwest Service Area Team. C Design, Inc. will assist with the re-zoning process.
- A new 14,500 square foot building is proposed and includes 12,500 square feet for the Charlotte-Mecklenburg Police Department, 2,000 square feet for Neighborhood & Business Services Code Enforcement, secured parking for at least 121 vehicles and public parking for at least 14 vehicles.
- The new facility will be located on West Boulevard near Old Steele Creek Road and will replace leased space in the Westover Commons Shopping Center and West Area Service Center.
- C Design, Inc. was selected using the Council-approved, qualifications-based selection process.

Background
- The Charlotte-Mecklenburg Police Department Facilities Strategic Plan outlines the following criteria to guide City staff in identifying a suitable division office site:
  - Location must be highly visible and on a major thoroughfare.
  - Easily accessible from patrol division area; and
  - Accommodate a facility containing at least 12,500 square feet for police services, secured parking for at least 121 vehicles and public parking for at least 14 vehicles.
- The project is fully funded as part of the FY2014-2018 Community Investment Plan approved on June 10, 2013 through Certificates of Participation.

Sustainable Facilities Policy Implications
- The facility will be designed and constructed in accordance with the Policy for Sustainable City Facilities which was adopted by City Council in September 2009.

- The facility will be designed so that it can qualify for LEED certification.
- Sustainability goals will be achieved through facility design that balances concerns of cost and station functionality.
- Projections regarding costs and benefits will be calculated during the design phase.

Charlotte Business INClusion
For services based contracts, the City seeks to negotiate SBE goals during the contract negotiation process (Part C: Section 2.2 of the SBO Policy). On this contract, C Design, Inc. committed up to 15.10% ($90,300) of the total contract amount to the following SBE firm: Richa Graphics (reprographics) and AME Consulting Engineers (engineering services). C Design, Inc. is also a City-certified SBE.

Attachment 8
Map

25. New Communications Site Co-location

Action:	**Authorize the City Manager to approve a new collocation lease with AT&T on a telecommunications tower located at 232 Heathway Drive.**

Staff Resource(s): Leisa Sossamon, Engineering & Property Management

Explanation
- The City owns a communication tower located at 232 Heathway Drive.
- AT&T proposes to lease space on the telecommunications tower for six communications antennas and other equipment. AT&T also proposes to lease 304-square-feet of ground space.
- In FY2013, telecommunications leases generated approximately $800,000 in revenue.

AT&T Lease Terms
- An initial term of five years with four additional five-year renewal options.
- A monthly base rental rate of $2,500, based on the number and weight of proposed antennas as well as tower capacity and demand.
- An escalation factor of 3% annually, beginning December 1, 2014.

Attachment 9
Photo of the Property

26. Software and Consulting for Technology Business Planning

Action:

A. Approve a one-year contract with N. Dean Meyer and Associates, Inc. in an amount up to $30,000 for a license for the FullCost software solution,

B. Authorize the City Manager to approve expenditures with N. Dean Meyer and Associates, Inc. for the provision of training and consulting services for the implementation and application of the FullCost software solution and attendant FullCost planning methodology in an amount up to $194,400, and

C. Authorize the City Manager to approve up to four, one-year renewal options for continuing software licensing and support, with possible price adjustments as authorized by the contract, and contingent upon the company's satisfactory performance.

Staff Resource(s): Jeff Stovall, Office of Chief Information Officer

Explanation

- The Office of the Chief Information Officer and Shared Services Technology Management play a critical service delivery function for most City departments, including information technology applications, infrastructure, information security, and public safety communications.
- Using traditional planning and budgeting techniques, there has been limited ability to effectively analyze the manner in which existing resources can meet customer demand, the costs of service delivery, and incremental costs that would result from service improvements.
- FullCost is a business planning and software solution that will enable the organization to properly plan, forecast, and manage their costs to better meet the needs of the City in a transparent manner.
  - N. Dean Meyer and Associates, Inc. will provide the software and will also provide training and consulting services to City staff over a 10-month period.
  - Once completed, the organization will have a new, detailed method for producing technology forecasts in support of the annual budget process and a more comprehensive understanding of the cost of services and products for operational planning purposes.
- Estimated annual expenditures are as follows:
  - Licenses: $30,000, and
  - Consulting, training, and implementation services: $194,400.

Selection Process

The project team, consisting of staff from the Office of the Chief Information Officer, consulted with a leading industry research firm and determined that N. Dean Meyer and Associates, Inc. is the only service provider in the industry that offers the combination of products and services desired by departmental leadership in a licensed, pre-packaged methodology. These offerings include business planning, activity-based costing, organizational re-design, and service catalogs.

Charlotte Business INClusion
No SBE/MBE/WBE goal was set for this contract because there are no subcontracting opportunities. (Part C: Section 2.4 of the SBO Policy).

Funding
Technology Capital Investments

27. Goodyear Tires

Action:
A. Award the unit price, low-bid contract to Clark's Tire and Auto, Inc. for the purchase of Goodyear tires for the term of three-years, and

B. Authorize the City Manager to extend the contract for up to two additional, one-year terms with possible price adjustments at the time of renewal as authorized by the terms of the contract.

Staff Resource(s): Marie Harris, Shared Services

Explanation
- On July 22, 2013, the City Council awarded tire contracts, one of which was with Snider Fleet Solutions to purchase Goodyear tires.
- Effective December 31, 2013, Snider Fleet Solutions' Independent Dealer Agreement with Goodyear Tire and Rubber Company was terminated; a new contract is required to provide Goodyear tires from another vendor.
- The new contract will provide the Fleet Management Division of Shared Services with new tires, in the variety of sizes, necessary to service the City's diverse fleet of vehicles and equipment.
- Each make of tire is required for the safe operation of vehicles and equipment, including but not limited to, law enforcement vehicles, sedans, and light and medium trucks.
- On December 10, 2013, the Procurement Management Division of Shared Services issued an Invitation to Bid for Goodyear tires; five bids were received.
- The unit prices are set forth in the proposed contract, and are available upon request from Procurement Management.
- Annual expenditures under the contract are estimated to be $750,000.

Charlotte Business INClusion
No SBE goals were set for this contract because there are no subcontracting opportunities.

Funding
Various Departments' Operating Budgets

28. Refund of Property Taxes

Action:	**Adopt a resolution authorizing the refund of property taxes assessed through clerical or assessor error in the amount of $5,320.60.**

Staff Resource(s): Scott Greer, Finance

Explanation
Property tax refunds are provided to the City by Mecklenburg County due to clerical or assessor error or as a result of appeals.

Attachment 10
List of Refunds
Resolution

29. Meeting Minutes

Action:	**Approve the titles, motions, and votes reflected in the Clerk's record as the minutes of:** – **January 6, 2014 Workshop/Citizens' Forum** – **January 13, 2014 Business Meeting**

30. In Rem Remedy

For In Rem Remedy A-C, the public purpose and policy are outlined here.

Public Purpose:
- Eliminate a blighting influence.
- Reduce the proportion of substandard housing.
- Increase tax value of property by making land available for potential infill housing development.
- Support public safety initiatives.

Policy:
- Housing & Neighborhood Development
- Community Safety

The In Rem Remedy items were initiated from three categories:
1. Public Safety – Police and/or Fire Department
2. Complaint – petition by citizens, tenant complaint, or public agency referral
3. Field Observation – concentrated code enforcement program

The In Rem Remedy item(s) is listed below by category identifying the street address and neighborhood.

Public Safety:

A. 6023 & 6023-2 Olinda Street (Neighborhood Profile Area 223)
B. 12334 Panthersville Drive (Neighborhood Profile Area 265)

Field Observation:

C. 1016 State Street (Neighborhood Profile Area 293)

Public Safety:

A. 6023 & 6023-2 Olinda Street

Action: Adopt an Ordinance authorizing the use of In Rem Remedy to demolish and remove the structure at 6023 & 6023-2 Olinda Street (Neighborhood Profile Area 223).

Attachment 11

B. 12334 Panthersville Drive

Action: Adopt an Ordinance authorizing the use of In Rem Remedy to demolish and remove the structure at 12334 Panthersville Drive (Neighborhood Profile Area 265).

Attachment 12

Field Observation:

C. 1016 State Street

Action: Adopt an Ordinance authorizing the use of In Rem Remedy to demolish and remove the structure at 1016 State Street (Neighborhood Profile Area 293).

Attachment 13

PROPERTY TRANSACTIONS

31. Property Transactions

Action: Approve the following property transaction(s) (A-F) and adopt the condemnation resolution(s) (G-J).

- The City has negotiated in good faith to acquire the properties set forth below.
- For acquisitions, the property owner and staff have agreed on a price based on appraisals and/or estimates.
- In the case of condemnations, the value was established by an independent, certified appraisal followed by a third-party appraisal review.
- Real Estate staff diligently attempts to contact all property owners by:
  - Sending introductory letters via regular and certified mail
  - Making several site visits
  - Leaving door hangers and business cards
  - Seeking information from neighbors
  - Searching the internet
  - Obtaining title abstracts
  - Leaving voice messages
- For most condemnation cases, City staff and the property owner(s) have been unable to reach a settlement. In some cases, condemnation is necessary to ensure a clear title to the property.
- If City Council approves the resolutions, the City Attorney's Office will initiate condemnation proceedings. As part of the condemnation process, real estate staff and the City Attorney's Office will continue to negotiate, including court-mandated mediation, in an attempt to resolve the matter. Most condemnation cases are settled by the parties prior to going to court.
- If a settlement cannot be reached, the case will proceed to trial before a judge or jury to determine "just compensation."
- Full text of each resolution is on file with the City Clerk's Office.
- The definition of *easement* is a right created by grant, reservation, agreement, prescription, or necessary implication, which one has in the land of another, it is either for the benefit of land, such as right to cross A to get to B, or "in gross", such as public utility easement.
- The definition of *fee simple* is an estate under which the owner is entitled to unrestricted powers to dispose of the property, and which can be left by will or inherited, commonly, synonym for ownership.

Acquisitions

A. **Project:** Airport Master Plan Land Acquisition
Owner(s): Shopton Holdings LLC
Property Address: 8116 Robbie Circle
Property to be acquired: 4.02 acres
Improvements: Single-family Residence
Purchase Price: $100,000
Remarks: The purchase price was determined by one independent appraisal and was reviewed by a second appraiser. Each appraisal takes into consideration the specific quality and quantity of the land. Property is acquired per Federal Guidelines 49 CFR Part 24 of the Uniform Acquisition and Relocation Act of 1970. Acquisition costs are eligible for Federal Aviation Administration reimbursement.

Zoned: R-3 Use; Single-Family Residence
Tax Code: 141-111-09

B. **Project:** Airport Master Plan Land Acquisition
Owner(s): Shopton Holdings LLC
Property Address: 8120 Robbie Circle
Property to be acquired: 1.00 acre
Improvements: Single-family Residence
Purchase Price: $30,000
Remarks: The purchase price was determined by one independent appraisal and was reviewed by a second appraiser. Each appraisal takes into consideration the specific quality and quantity of the land. Property is acquired per Federal Guidelines 49 CFR Part 24 of the Uniform Acquisition and Relocation Act of 1970. Acquisition costs are eligible for Federal Aviation Administration reimbursement.
Zoned: R-3 Use; Single-family Residence
Tax Code: 141-111-56

C. **Project:** Airport Master Plan Land Acquisition
Owner(s): Rickie and Sharon Hall
Property Address: 9233 Snow Ridge Lane
Property to be acquired: .47 acre
Improvements: Single-family Residence
Purchase Price: $149,000
Remarks: The purchase price was determined by one independent appraisal and was reviewed by a second appraiser. Each appraisal takes into consideration the specific quality and quantity of the land. Property is acquired per Federal Guidelines 49 CFR Part 24 of the Uniform Acquisition and Relocation Act of 1970. Acquisition costs are eligible for Federal Aviation Administration reimbursement.
Zoned: R-3 Use: Single-family Residence
Tax Code: 141-111-31

D. **Project:** Coliseum Creek Stream Restoration, Parcel #8
Owner(s): DEEPE, LLC, et al
Property Address: Price Lane
Total Parcel Area: 300,490 sq. ft. (6.898 ac.)
Property to be acquired by Easements: 80,358 sq. ft. (1.845 ac.) in Conservation Easement, plus 43,096 sq. ft. (.989 ac.) in Temporary Construction Easement
Structures/Improvements to be impacted: None
Landscaping to be impacted: Trees
Zoned: I-1(CD)
Use: Office
Tax Code: 143-251-14
Purchase Price: $17,217

E. **Project:** Gaynor Storm Drainage Improvement Project, Parcel #40
Owner(s): John A. Ashworth, III and Anne W. Ashworth
Property Address: 426 Chillingworth Lane
Total Parcel Area: 31,978 sq. ft. (0.734 ac.)
Property to be acquired by Easements: 7,896 sq. ft. (.181 ac.) in Storm Drainage Easement, plus 3,096 sq. ft. (.071 ac.) in Sanitary Sewer Easement,

plus 5,150 sq. ft. (.118 ac.) in Temporary Construction Easement, plus 432 sq. ft. (.01 ac.) in Utility Easement
Structures/Improvements to be impacted: None
Landscaping to be impacted: Trees and Shrubs
Zoned: R-3
Use: Single-family Residence
Tax Code: 185-071-21
Purchase Price: $39,900

F. **Project:** Johnston Oehler Farm to Market, Parcel #42
Owner(s): Jeffrey O. Raborn and Joan M. Raborn; Jay Scott Raborn and Sherry Raborn
Property Address: 2821 Johnston-Oehler Road
Total Parcel Area: 320,321 sq. ft. (7.354 ac.)
Property to be acquired in Fee: 10,175 sq. ft. (.234 ac.) in Fee Simple, plus 25,621 sq. ft. (.588 ac.) in Fee Simple within Existing Right-of-Way
Property to be acquired by Easements: 7,795 sq. ft. (.179 ac.) in Storm Drainage Easement, plus 13,314 sq. ft. (.306 ac.) in Temporary Construction Easement, plus 4,472 sq. ft. (.103 ac.) in Utility Easement
Structures/Improvements to be impacted: None
Landscaping to be impacted: None
Zoned: R-3
Use: Single-family Residence - Rural Acreage
Tax Code: 029-331-02
Purchase Price: $12,475

Condemnations

G. **Project:** 10th Street Right-of-Way 1st Ward, Parcel #1
Owner(s): Brian Ascher, Steven Ascher, Community Development and Realty Company, Inc. and Dennis L. Watts and any other parties of interest
Property Address: 631 North Brevard Street
Total Parcel Area: 17,346 sq. ft. (.398 ac.)
Property to be acquired in Fee: 17,346 sq. ft. (.398 ac.) in Fee Simple **(TOTAL TAKE)**
Structures/Improvements to be impacted: None
Landscaping to be impacted: None
Zoned: Uptown Mixed Use (uptown only)
Use: Commercial
Tax Code: 080-041-06
Appraised Value: $1,214,225
Property Owner's Counteroffer: $1,900,000
Property Owner's Concerns: City's offer to purchase too low.
City's Response to Property Owner's Concerns: The City Attorney's Office explained to the owner that it could only make offers based on the most recent appraisals done on the property and that the City's offer was within the range of the appraisals performed to date.
Outstanding Concerns: Staff is still unable to reach a negotiated settlement with the owners of this property**.**
Recommendation: To avoid delay in the project schedule, staff recommends proceeding to condemnation during which negotiations can continue, mediation is available and if necessary, just compensation can be determined by the court.

H. **Project:** Celia Avenue Storm Drainage Improvement Project Easement Acquisition, Parcel #13
Owner(s): John Earl Chambers, Jr. and Teresa Genise Chambers and any other parties of interest
Property Address: 2635 Celia Avenue
Total Parcel Area: 1,938 sq. ft. (0.044 ac.)
Property to be acquired in Fee: 113 sq. ft. (.003 ac.) in Fee Simple
Structures/Improvements to be impacted: None
Landscaping to be impacted: None
Zoned: R-12MF
Use: Single-family Residence
Tax Code: 069-094-59
Appraised Value: $175
Property Owner's Counteroffer: None
Property Owner's Concerns: None
City's Response to Property Owner's Concerns:
Staff is unable to make contact with property owners and unpaid taxes.
Recommendation: To avoid delay in the project schedule, staff recommends proceeding to condemnation during which negotiations can continue, mediation is available and if necessary, just compensation can be determined by the court.

I. **Project:** Coliseum Creek Stream Restoration, Parcel #1 and #2
Owner(s): Rodrick J. McAllister, et al and any other parties of interest
Property Address: 4842 Price Lane
Total Parcel Area: 401,779 sq. ft. (9.224 ac.)
Property to be acquired by Easements: 77,546 sq. ft. (1.78 ac.) in Conservation Easement
Structures/Improvements to be impacted: None
Landscaping to be impacted: Trees
Zoned: R-4
Use: Single-family Residence - Rural Acreage
Tax Code: 143-141-02 and 143-141-03
Appraised Value: $60,475
Property Owner's Counteroffer: $271,366
Property Owner's Concerns: Property owner's attorney objected to the access easement. Attorney also questioned the right to take private property for mitigation credits.
City's Response to Property Owner's Concerns: The City removed the permanent access easement and reduced the conservation easement. The City Attorney's Office provided statutory justification for mitigation credits to property owner's attorney.
Outstanding Concerns: The property owner's attorney requested to proceed with condemnation.
Recommendation: To avoid delay in the project schedule, staff recommends proceeding to condemnation during which negotiations can continue, mediation is available and if necessary, just compensation can be determined by the court.

J. **Project:** Johnston Oehler Farm to Market, Parcel #38
Owner(s): William L. Mowry and Donna E. Mowry and Hermitage Partners, LLC and any other parties of interest
Property Address: 3124 Johnston-Oehler Road
Total Parcel Area: 653,560 sq. ft. (15.004 ac.)
Property to be acquired in Fee: 5,950 sq. ft. (.137 ac.) in Fee Simple, plus 32,609 sq. ft. (.749 ac.) in Fee Simple within Existing Right-of-Way
Property to be acquired by Easements: 731 sq. ft. (.017 ac.) in Storm Drainage Easement, plus 15,214 sq. ft. (.349 ac.) in Temporary Construction Easement, plus 9,556 sq. ft. (.219 ac.) in Utility Easement
Structures/Improvements to be impacted: None
Landscaping to be impacted: None
Zoned: R-3
Use: Single-family Residence - Rural Acreage
Tax Code: 029-721-19
Appraised Value: $8,050
Property Owner's Counteroffer: $27,471
Property Owner's Concerns: Property owner is concerned that the project affects his ability to develop the parcel and is concerned about the appraised value being too low.
City's Response to Property Owner's Concerns: Staff met with the property owner, addressed their questions and concerns.
Outstanding Concerns: City staff has yet to reach a negotiated settlement with the property owner.
Recommendation: To avoid delay in the project schedule, staff recommends proceeding to condemnation during which negotiations can continue, mediation is available and if necessary, just compensation can be determined by the court.

32. Reference – Charlotte Business INClusion Policy

The following excerpts from the City's SBO Policy are intended to provide further explanation for those agenda items which reference the SBO Policy in the business meeting agenda.

Part A: Administration & Enforcement

Appendix Section 18: Contract: For the purposes of establishing an SBE subcontracting goal on a Contract, the following are examples of contract types:

- Any agreement through which the City procures services from a Business Enterprise, other than Exempt Contracts.
- Contracts include agreements and purchase orders for (a) construction, re-construction, alteration and remodeling; (b) architectural work, engineering, testing, construction management and other professional services related to construction; and (c) services of any nature (including but not limited to general consulting and technology-related services).
- Contracts do not include agreements or purchase orders for the purchase or lease of apparatus, supplies, goods or equipment.
- The term "Contract" shall also include Exempt Contracts for which an SBE Goal has been set.
- Financial Partner Agreements, Development Agreements, and Construction Manager-at-Risk Agreements shall also be deemed "Contracts," but shall be subject to the provisions referenced in the respective Parts of the SBO Program Policy.

Appendix Section 23: Exempt Contracts: Contracts that fall within one or more of the following categories shall be "Exempt Contracts" for the purposes of establishing an SBE subcontracting goal, unless the Department responsible for procuring the Contract decides otherwise:

23.1. Informal Contracts. Informal Contracts shall be Exempt Contracts. (See Appendix Section 29 for a definition of Informal Contracts)

23.2. No Competitive Process Contracts: Contracts or purchase orders that are entered into without a competitive process, or entered into based on a competitive process administered by an entity other than the City shall be Exempt Contracts, including but not limited to contracts that are entered into by sole sourcing, piggybacking, buying off the North Carolina State contract, buying from a competitive bidding group purchasing program as allowed under G.S. 143-129(e)(3), or using the emergency procurement procedures established by the North Carolina General Statutes.

23.3. Managed Competition Contracts: Managed competition contracts pursuant to which a City Department or division competes with Business Enterprises to perform a City function shall be Exempt Contracts.

23.4. Real Estate Leasing and Acquisition Contracts: Contracts for the acquisition or lease of real estate shall be Exempt Contracts.

23.5. Federal Contracts Subject to DBE Requirements: Contracts that are subject to the U.S. Department of Transportation Disadvantaged Business Enterprise

Program as set forth in 49 CFR Part 26 or any successor legislation shall be Exempt Contracts.

23.6. State Contracts Subject to MWBE Requirements: Contracts for which a minority and women business participation goal is set pursuant to G.S. 143-128.2(a) due to a building project receiving funding from the State of North Carolina shall be Exempt Contracts.

23.7. Financial Partner Agreements with DBE or MWBE Requirements: Contracts that are subject to a disadvantaged business development program or minority and women business development program maintained by a Financial Partner shall be Exempt Contracts.

23.8. Interlocal Agreements: Contracts with other units of federal, state or local government shall be Exempt Contracts.

23.9. Contracts for Legal Services: Contracts for legal services shall be Exempt Contracts, unless otherwise indicated by the City Attorney.

23.10. Contracts with Waivers: Contracts for which the SBO Program Manager or the City Manager waives the SBO Program requirements shall be Exempt Contracts (such as when there are no SBE subcontracting opportunities on a Contract).

23.11. Special Exemptions: Contracts where the Department and the Program Manager agree that the Department had no discretion to hire an SBE (e.g., emergency contracts or contracts for banking or insurance services) shall be Exempt Contracts.

Appendix Section 29: Informal Contracts: Contracts and purchase orders through which the City procures services from a Business Enterprise that fall within one of the following two categories:

29.1. Construction Contracts Less Than or Equal To $200,000: Contracts for construction or repair work that are estimated to require a total expenditure of City funds less than or equal to $200,000.

29.2. Service Contracts That Are Less Than or Equal To $100,000: Service Contracts that are estimated to require a total expenditure of City funds less than or equal to $100,000.

Part B: Formal Construction Bidding

Part B: Section 2.1: When the City Solicitation Documents for a Construction Contract contain an SBE Goal, each Bidder must either: (a) meet the SBE Goal, or (b) comply with the Good Faith Negotiation and Good Faith Efforts requirements. Failure to do so constitutes grounds for rejection of the Bid. The City Solicitation Documents will contain certain forms that Bidders must complete to document having met these requirements.

Part B: Section 2.4: No SBE Goal When There Are No SBE Subcontracting Opportunities.
The City shall not establish an SBE Goal for Construction Contracts where there are no SBEs certified to perform the scopes of work that the City regards as realistic opportunities for subcontracting.

Part C: Services Procurement

Part C: Section 2.2: When the City Solicitation Documents for a Service Contract do not contain an SBE Goal, each Proposer must negotiate in good faith with each SBE that responds to the Proposer's solicitations and each SBE that contacts the Proposer on its own accord. Additionally, the City may negotiate a Committed SBE Goal with the successful Proposer after the Proposal Opening.

Part C: Section 2.4: No SBE Goal When There Are No SBE Subcontracting Opportunities.
The City shall not establish an SBE Goal for Service Contracts where there are no SBEs certified to perform the scopes of work that the City regards as realistic opportunities for subcontracting.

Part D: Post Contract Award Requirements

Part D: Section 6: New Subcontractor Opportunities/Additions to Scope, Contract Amendments
If a Contractor elects to subcontract any portion of a Contract that the Contractor did not previously identify to the City as a subcontracting opportunity, or if the scope of work on a Contract increases for any reason in a manner that creates a new SBE subcontracting opportunity, the City shall either:

- notify the Contractor that there will be no Supplemental SBE Goal for the new work; or
- establish and notify the Contractor of a Supplemental SBE Goal for the new work.

33. Reference – Property Transaction Process

Property Transaction Process Following Council Approval for Condemnation

The following overview is intended to provide further explanation for the process of property transactions that are approved by City Council for condemnation.

Approximately six weeks of preparatory work is required before the condemnation lawsuit is filed. During this time, City staff continues to negotiate with the property owner in an effort to reach a mutual settlement.

- If a settlement is reached, the condemnation process is stopped and the property transaction proceeds to a real estate closing.
- If a settlement cannot be reached, the condemnation lawsuit is filed. Even after filing, negotiations continue between the property owner and the City's legal representative. Filing of the condemnation documents allows:
  - The City to gain access and title to the subject property so the capital project can proceed on schedule.
  - The City to deposit the appraised value of the property in an escrow account with the Clerk of Court. These funds may be withdrawn by the property owner immediately upon filing, and at any time thereafter, with the understanding that additional funds transfer may be required at the time of final settlement or at the conclusion of litigation.
- If a condemnation lawsuit is filed, the final trial may not occur for 18 to 24 months; however, a vast majority of the cases settle prior to final trial. The City's condemnation attorney remains actively engaged with the property owner to continue negotiations throughout litigation.
  - North Carolina law requires that all condemnation cases go through formal non-binding mediation, at which an independent certified mediator attempts to facilitate a successful settlement. For the minority of cases that do not settle, the property owner has the right to a trial by judge or jury in order to determine the amount of compensation the property owner will receive.

A Report on Existing and Possible Tree Canopy in the City of Charlotte and Mecklenburg County, NC

Why is Tree Canopy Important?

Tree canopy (TC) is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above. Tree canopy provides many benefits to communities: improving water quality, saving energy, lowering summer temperatures, reducing air pollution, enhancing property values, providing wildlife habitat, facilitating social and educational opportunities, and providing aesthetic benefits (National Research Council, 2013). Establishing a tree canopy goal is crucial for communities seeking to improve their green infrastructure. A tree canopy assessment is the first step in urban forest planning, providing estimates for the amount of tree canopy currently present as well as the amount of tree canopy that could theoretically be established.

National Research Council. *Urban Forestry: Toward an Ecosystem Services Research Agenda: A Workshop Summary*. Washington, DC: The National Academies Press, 2013.

How Much Tree Canopy Exists?

An analysis of Mecklenburg County based on land cover data derived from high-resolution aerial imagery and LiDAR (Figure 1) found that 172,283 acres of the county were covered by tree canopy (termed Existing TC), representing 51% of all land in the county (47% within city limits). An additional 36% (121,294 acres) of the county's land area (37% within city limits) could theoretically be modified (termed Possible TC) to accommodate tree canopy. In the Possible TC category, 25% (83,851 acres) of total land area was classified as Vegetated Possible TC (23% within city limits) and another 11% (14% within city limits) as Impervious Possible TC (37,443 acres). Vegetated Possible TC, or grass/shrub, is more conducive to establishing new tree canopy, but establishing tree canopy on areas classified as Impervious Possible TC will have a greater impact on water quality and summer temperatures.

Figure 1: Example of the land cover derived from high-resolution imagery and LiDAR for this project.

Project Background

The goal of the project was to apply the USDA Forest Service's Tree Canopy Assessment protocols to the City of Charlotte and Mecklenburg County (Figure 2). The analysis was conducted using year 2012 data. This project was made possible through funding from the City of Charlotte, North Carolina. The Spatial Analysis Laboratory (SAL) at the University of Vermont's Rubenstein School of the Environment and Natural Resources carried out the assessment in collaboration with Mecklenburg County, the City of Charlotte, SavATree, and the USDA Forest Service's Northern Research Station.

Figure 2: Study area for the project. Land cover mapping and urban tree canopy assessments were carried out at both the county– and city-scales.

Key Terms

TC: Tree canopy (TC) is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above.

Land Cover: Physical features on the earth mapped from aerial or satellite imagery, such as trees, grass, water, and impervious surfaces.

Existing TC: The amount of urban tree canopy present when viewed from above using aerial or satellite imagery.

Impervious Possible TC: Asphalt or concrete surfaces, excluding roads and buildings, that are theoretically available for the establishment of tree canopy.

Vegetated Possible TC: Grass or shrub area that is theoretically available for the establishment of tree canopy.

Not Suitable: Areas where it is highly unlikely that new tree canopy could be established (primarily buildings and roads).

Tree Canopy Results for the City and County

On a percentage basis, Mecklenburg County and the City of Charlotte have similar amounts of tree canopy as a percentage of land area, with 51% and 47% respectively . Possible Tree Canopy percentages are also similar between the County and the City. Possible TC in the County is 36% and Possible TC in the City is 37%. The difference between the two is the higher relative percentage of Possible TC within the City that is impervious. These Possible TC Impervious areas consist of non-building, non-road impervious surfaces such as driveways and parking lots. Establishing tree canopy on these surfaces, through either overhanging tree canopy or the removal of impervious surfaces, can offer substantial gains in ecosystem services. However, it is considerably more challenging than planting on Possible TC Vegetation, which consists of grass/shrub. Possible TC is only and indication of land where tree canopy could be established.

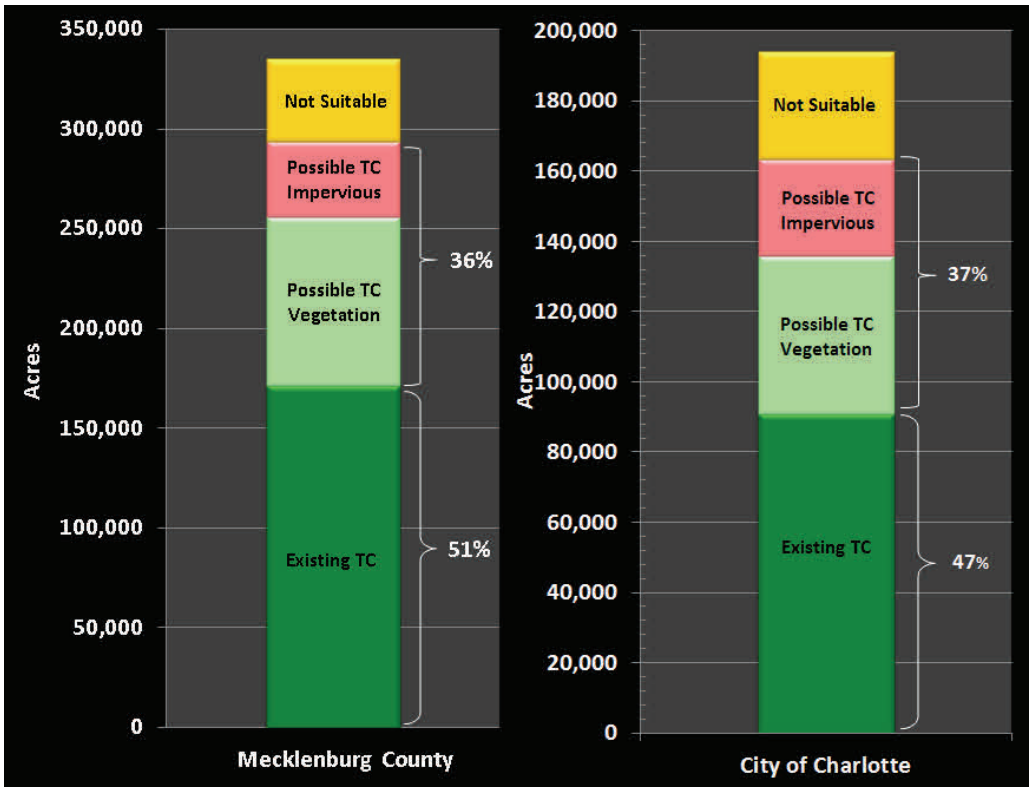


Figure 3: Tree canopy metrics for Mecklenburg County and the City of Charlotte.

Forest Patch Size

Tree canopy assessment has historically focused on measuring the amount of tree canopy. A new tree canopy patch analysis, developed to support the USDA Forest Service's Urban Tree Canopy (UTC) Assessment protocols, gives resource managers a better understanding of the type of tree canopy they have by dividing the tree canopy into large, medium, and small patches. Patches are delineated using a customized object-based approach that takes into account morphology, area, perimeter, and edge metrics. 57% of Mecklenburg County's tree canopy is in large patches, 38% in medium patches, and 6% in small patches (Figure 4).

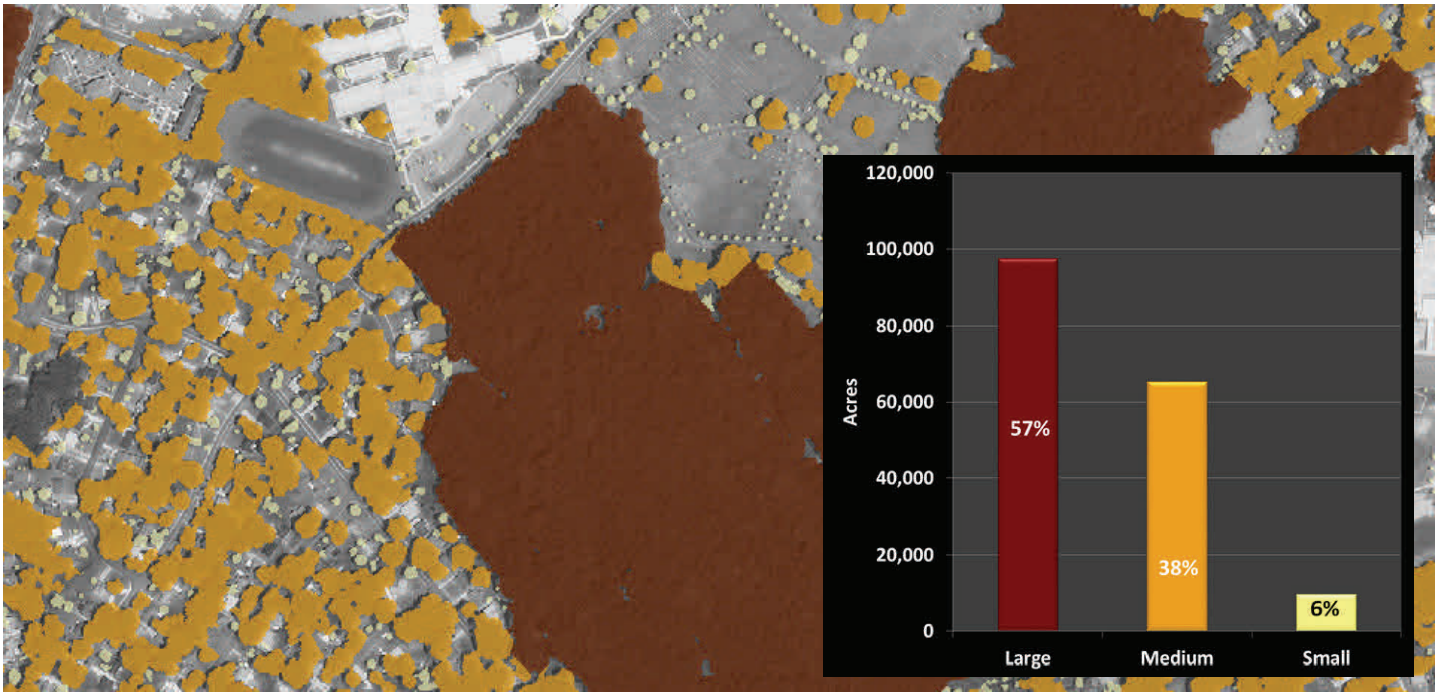


Figure 4: Tree Canopy Patch Analysis for Mecklenburg County.

Comparison to Previous Studies

This study is considered to be the most precise and accurate accounting of tree canopy for both the City and the County due to three factors: the availability of LiDAR, advanced object-based image analysis workflows, and a detailed QA/QC process. Differences in percent tree canopy from previous studies, such as the 2008 urban ecosystem assessment, likely result from the quality of the mapping as much as changes in the landscape. Figure 5 shows a comparison between the 2012 tree canopy layer developed in this study (Figure 5a) and the 2008 American Forests tree canopy layer (Figure 5c). The 2012 1-meter resolution imagery is provided for reference (Figure 5b). Although there were likely changes in the tree canopy over this 4-year period there are noticeable errors of both omission and commission in the 2008 layer. Individual trees along streets are sometimes missed in the 2008 layer, and in some cases, moderately-sized forest patches. Tree canopy also appears in the 2008 study in areas where it is unlikely to exist, such as in the middle of an industrial parking lot.

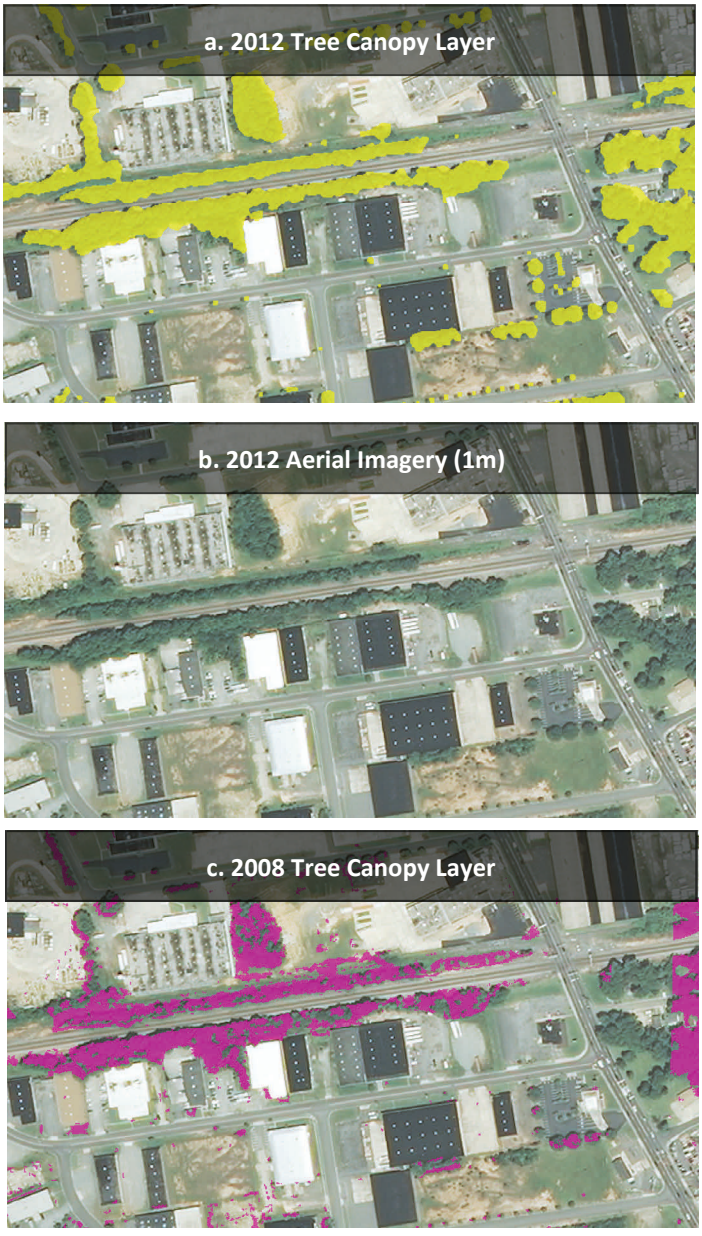


Figure 5: Comparison of NLCD 2001 (a) to high-resolution imagery (b) and tree canopy (c) derived for this study.

Parcel Summary

Tree Canopy (TC) metrics were summarized for each property in the County's parcel database (Figure 6). Existing TC and Possible TC metrics were calculated for each parcel, both in terms of total area (square footage) and as a percentage of the land area within each parcel (TC area divided by land area of the parcel). The resulting data can be used to assess the tree canopy and tree planting opportunities for every property in the Mecklenburg County.

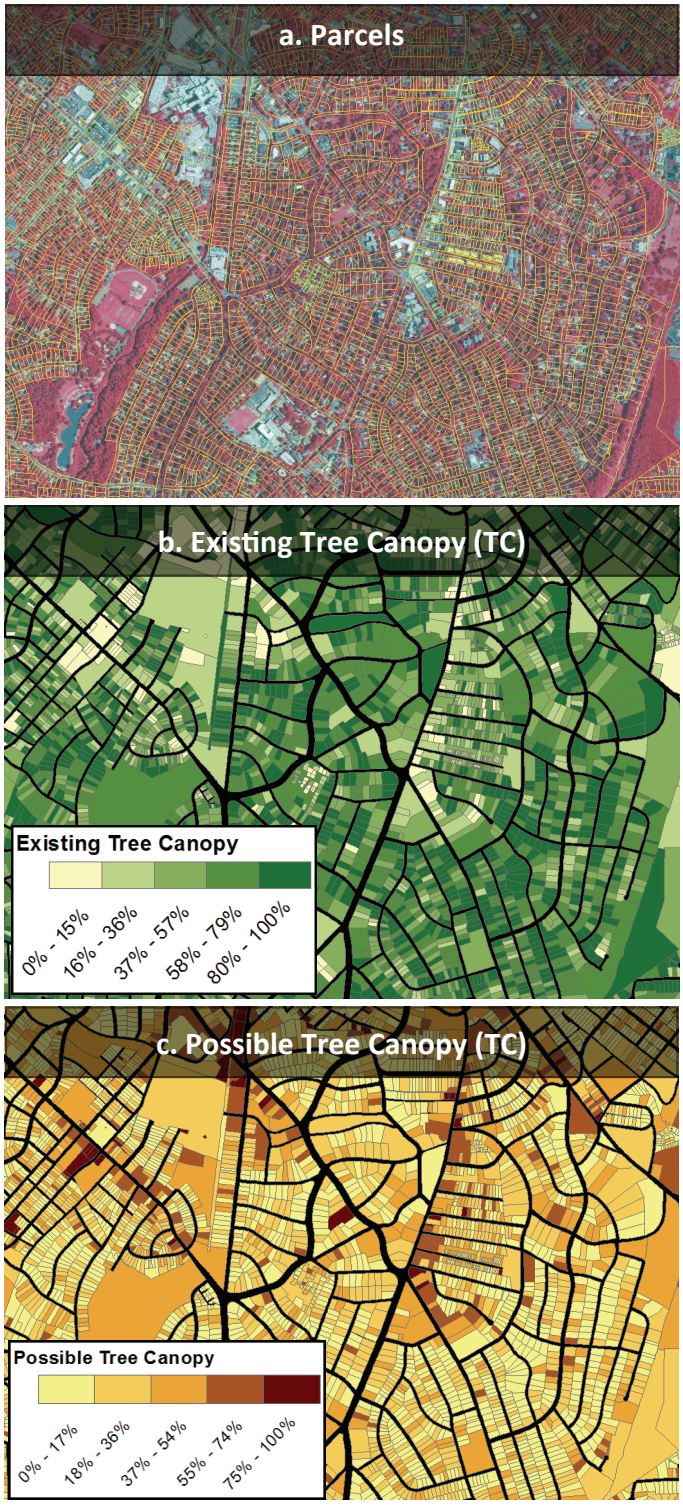


Figure 6: Tax Parcel-based TC metrics. TC metrics are generated at the parcel level (a), allowing each property to be evaluated according to its Existing TC (b) and Possible TC (c).

Rights-Of-Way

Land within Mecklenburg County can be broadly split into two categories (Figure 7), parcel land and rights-of-way (ROW). Parcel land refers to all land contained within the county's parcel database. Rights-of-Way (ROW) refers to "non-parcel" land, essentially street rights-of-way and water. The vast majority of the county's land base (88%) exists within parcels, with 5% of the land base for ROW Within City and 7% ROW Outside City (Figure 8). 50% of parcel land is covered by tree canopy. Within the ROW only 20-30% of the land is covered by tree canopy. Additional tree canopy (Possible TC) could theoretically be established on 37% of all the parcel land area, on 33% of the ROW Outside City, but on only 21% of the ROW Within City , largely due to the presence of roads and other transportation infrastructure. Establishing new tree canopy within the parcel land will likely be easier as much of the Possible TC falls into the Vegetation category whereas in the ROW much of the Possible TC is in the Impervious category (particularly on the ROW Within City). Nevertheless, the city could substantially improve its tree canopy through an "all lands" approach that includes both street tree plantings (within the ROW) and plantings on parcel land.

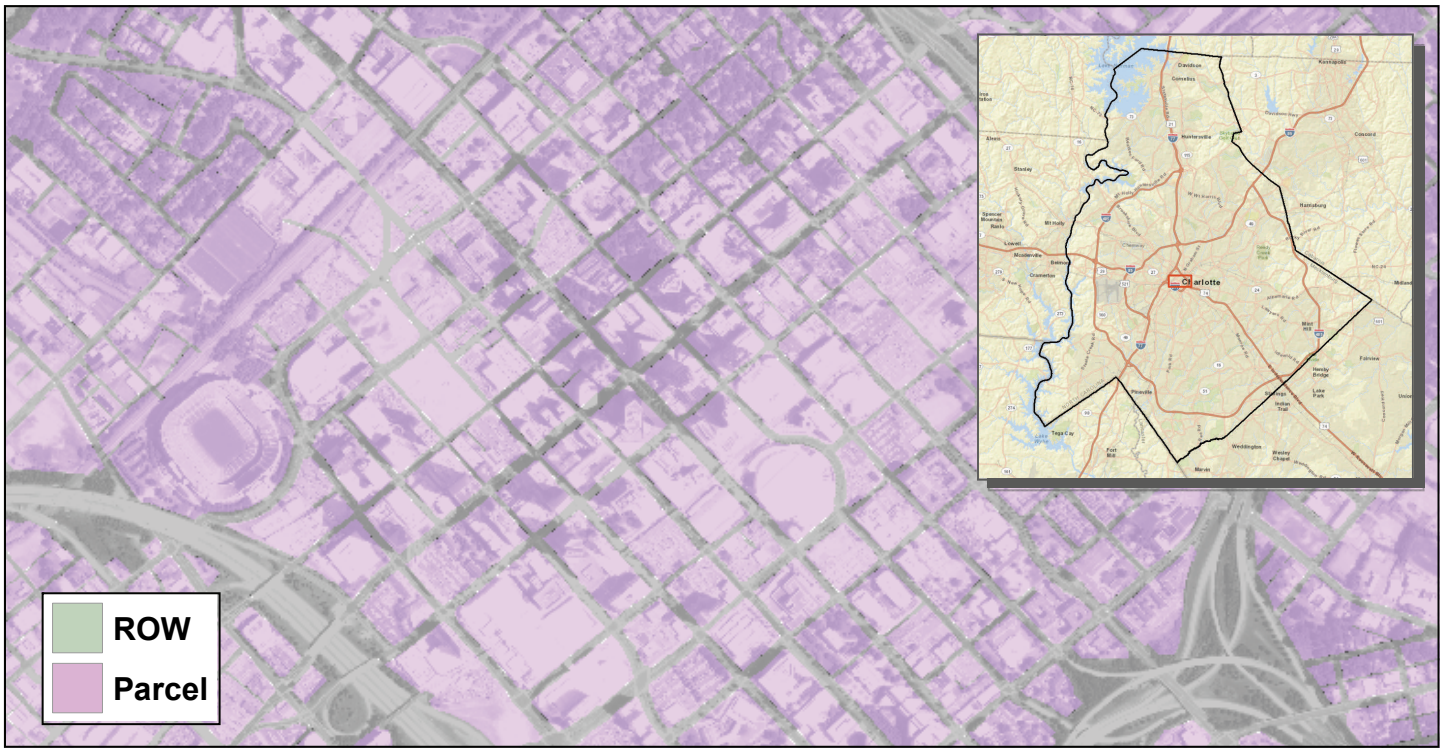


Figure 7: Parcels and ROW land division in Charlotte.

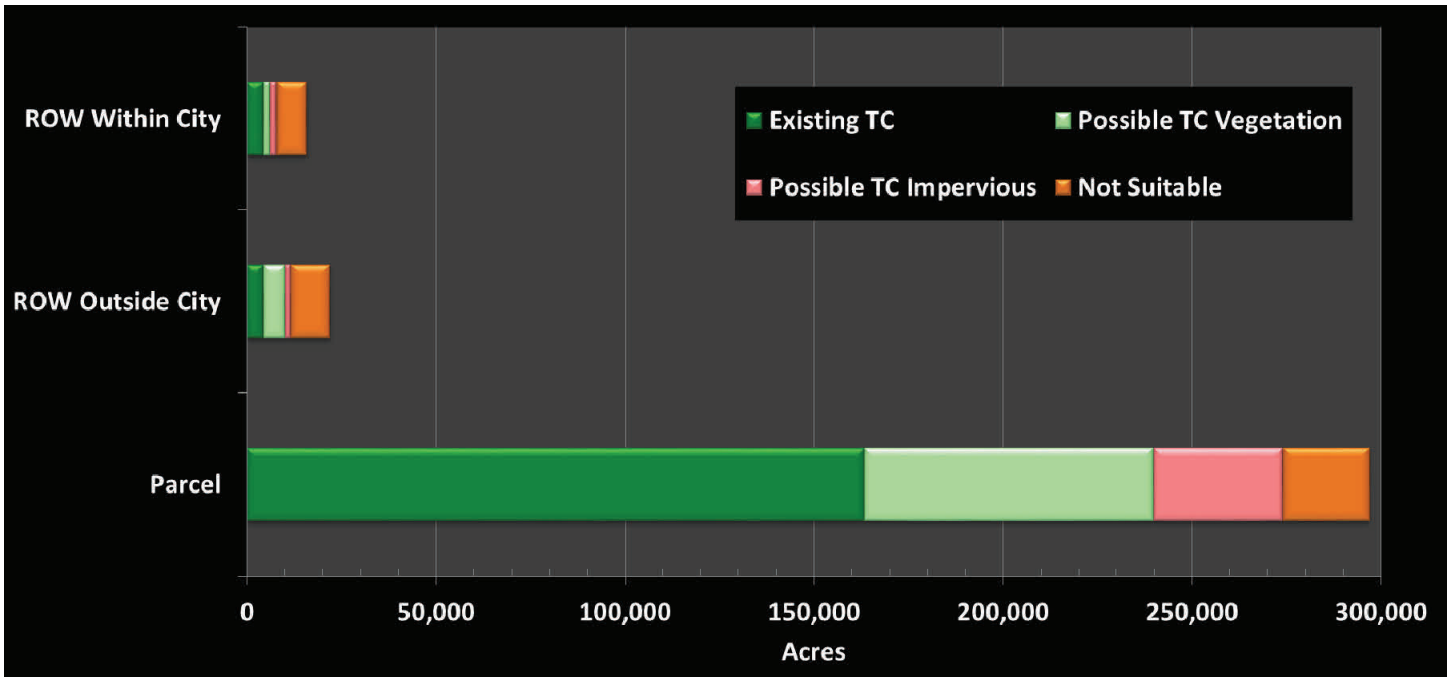


Figure 8: Tree Canopy (TC) metrics were summarized by parcels and ROW.

County Land Use Analysis

An analysis of Existing and Possible Tree Canopy by land use was conducted using the County's existing land use and right of way data (Figure 9 /10, Table A-1). For each land use category, tree canopy metrics were calculated as a percentage of all land in the Mecklenburg County study area (% Land), as a percentage of land area in the specified land use (% Category), and as a percentage of total area in the tree canopy type (% TC Type). Nearly 40% of Mecklenburg County is classified as Single Family -- Detached or Large Lot Residential, and thus it comes as no surprise that these two categories have a large fraction (almost one third) of the area's tree canopy, but also the most room to plant new trees. These two residential land use categories account for 41% of land in Mecklenburg County that is categorized as Vegetated Possible Tree Canopy. Lands categorized as Right-of-Way, Open Space/Recreation and Civic/Institutional also present opportunities for tree planting. Taken together Residential lands contain 45,305 acres (40%) of land classified as Possible Tree Canopy and might contain the most area where resources could efficiently be directed to increase tree canopy, although recreation and other open space would be competitive land uses.

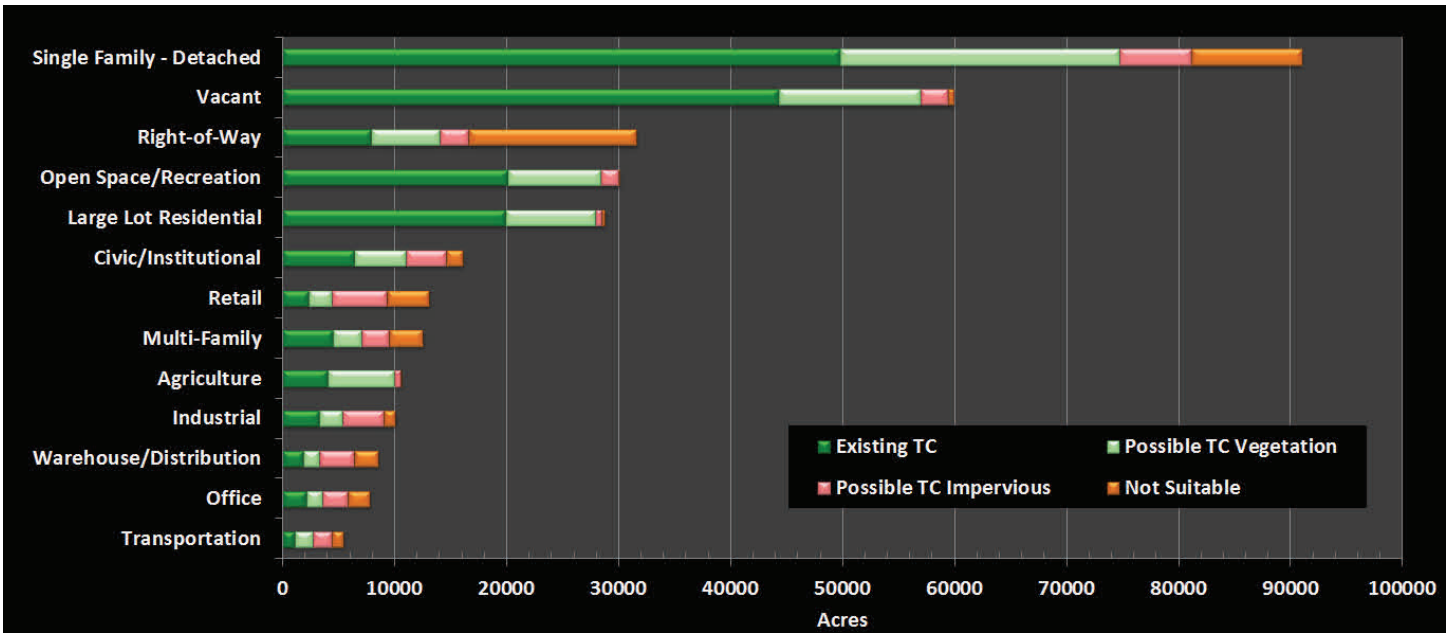
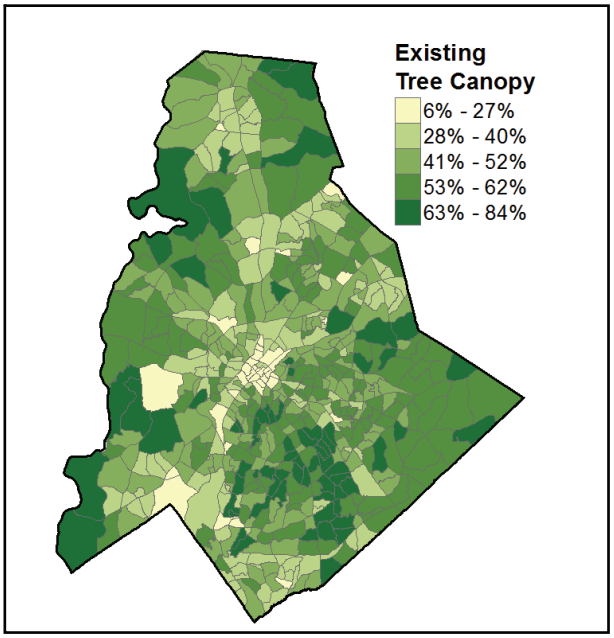


Figure 9: Tree Canopy (TC) metrics summarized for each land use class (classes smaller than 5,000 acres are not shown).

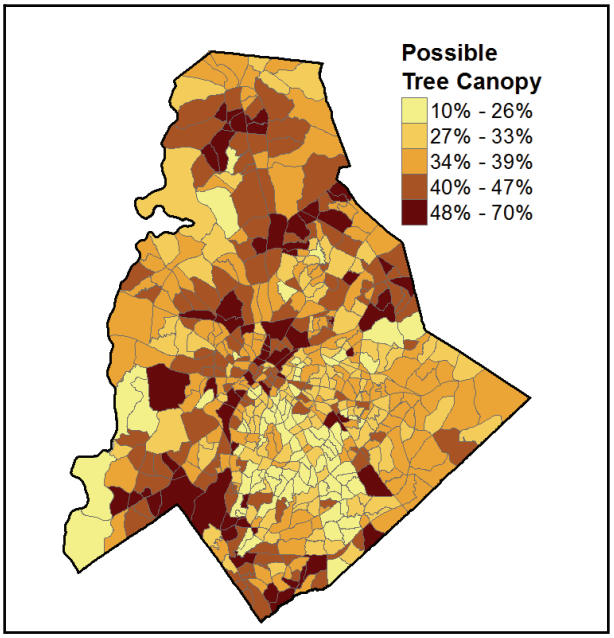
Figure 10: Land use data used for the UTC metrics. The graphic is centered on the intersection of I-77 and Tyvola Road.

Socio-Demographic Analysis

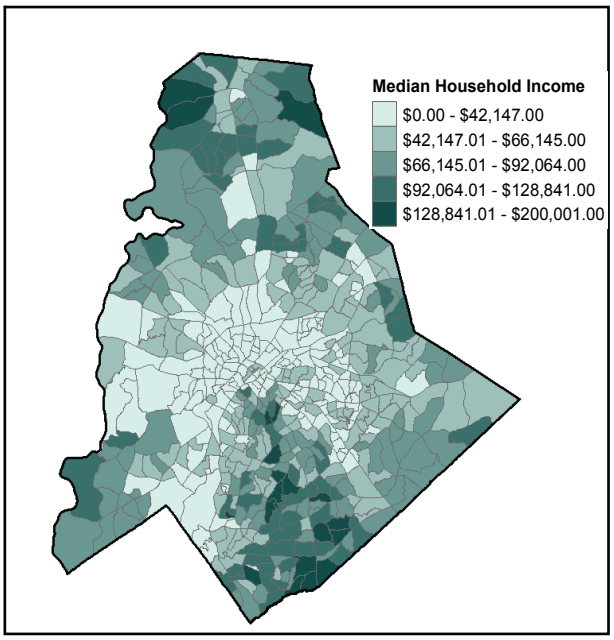
US Census block groups contain a wealth of socio-demographic information that, when combined with Tree Canopy metrics, provide new insights into the relationship between the citizens of Mecklenburg County and their tree canopy. This study computed tree canopy metrics using 2010 US Census block group data. Percent Existing and Percent Possible Tree Canopy maps indicate socio-demographic units where tree canopy is sparse and where planting opportunities exist (Figure 11a & 11b). These maps can be used to help direct resources for tree planting. Many of the block groups in the lowest median income bracket have a relatively low amount of tree canopy (Figure 11c). Population density is relatively high in some of these block groups with low amounts of Existing Tree Canopy and would thus be places to look at enhancing tree canopy for the benefit of these population centers (Figure 11d).



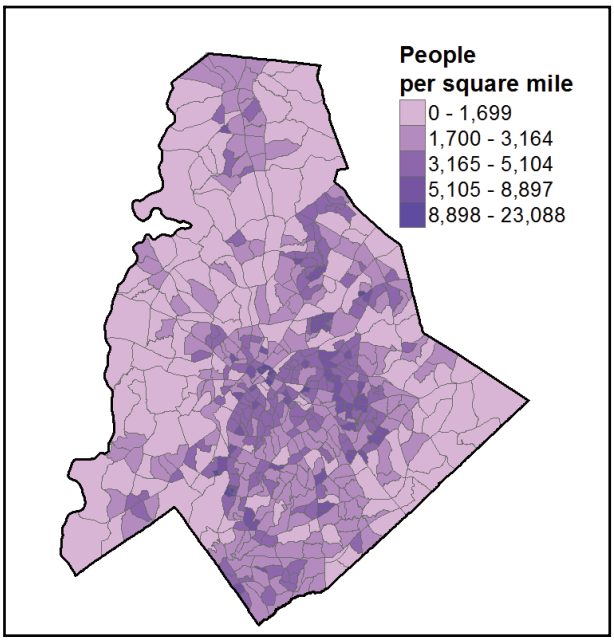
(a)



(b)



(c)



(d)

Figure 11: (a) Percent Existing TC; (b) Percent Possible TC; (c) 2011 median income per capita; and (d) people per square mile for census block groups in Mecklenburg County.

Priority Planting Index

The Priority Planting Index (PPI), developed by the US Forest Service, incorporates census data and Tree Canopy metrics to score block groups based on the need for tree plantings. It is a simplistic method to prioritizing areas for tree plantings. The Priority Planting Index, which factors in population density, Existing Tree Canopy, and per capita tree cover helps to identify areas where tree planting efforts can be targeted to address issues of environmental justice (Figures 12 & 13). A higher PPI score indicates a higher priority for planting. Interestingly, the areas with high PPI values also have relatively high amounts of Possible Tree Canopy.

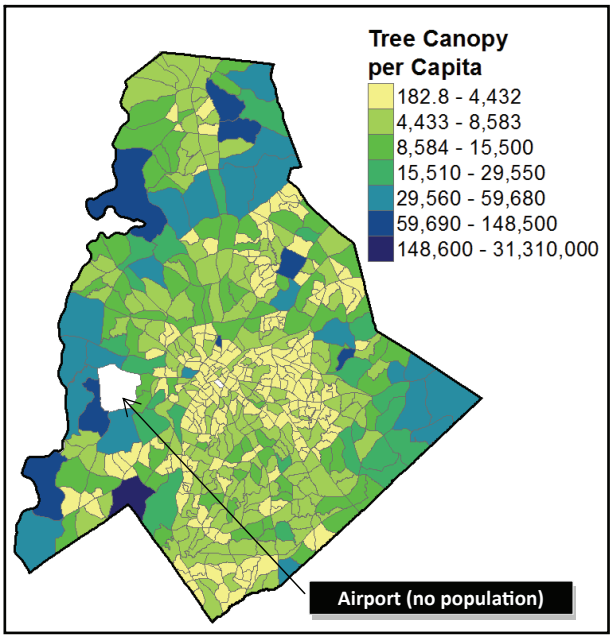


Figure 12: Tree canopy per capita by census block group in feet squared.

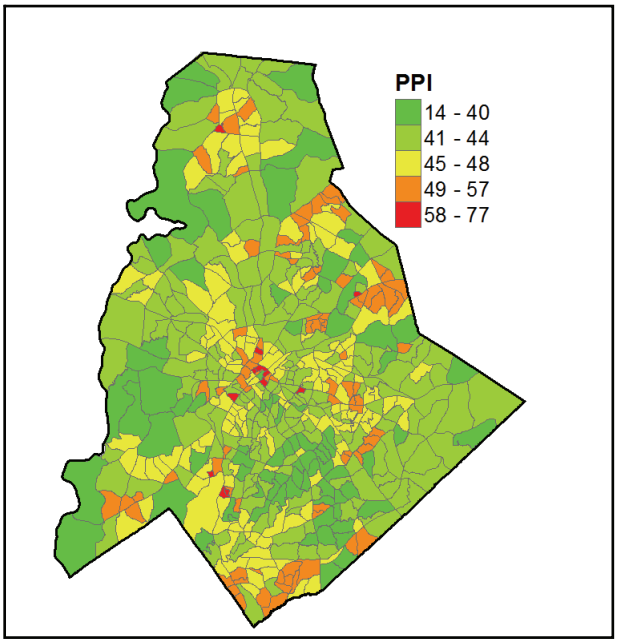


Figure 13: Priority Planting Index by census block group.

Surface Temperature

One of the chief benefits of tree canopy is the ability to reduce summer temperatures in urbanized areas, ameliorating the urban heat island effect. The urban heat island effect is largely a result of impervious surfaces, which unlike vegetation, retain and emit heat. Higher summer temperatures are associated with increased energy use, which in turn, drives up the cost of living along with operational costs for commercial and industrial operations. To examine the urban heat island effect in Mecklenburg County we used a Landsat satellite image acquired on June 1, 2011. Landsat has the ability to measure surface temperature at a relatively detailed scale. Landsat surface temperatures were summarized at the Census block group level and compared to both tree canopy and impervious surfaces (Figures 14 & 15). It was found that block groups with lower amounts of tree canopy and higher amounts of impervious surfaces tend to have higher temperatures.

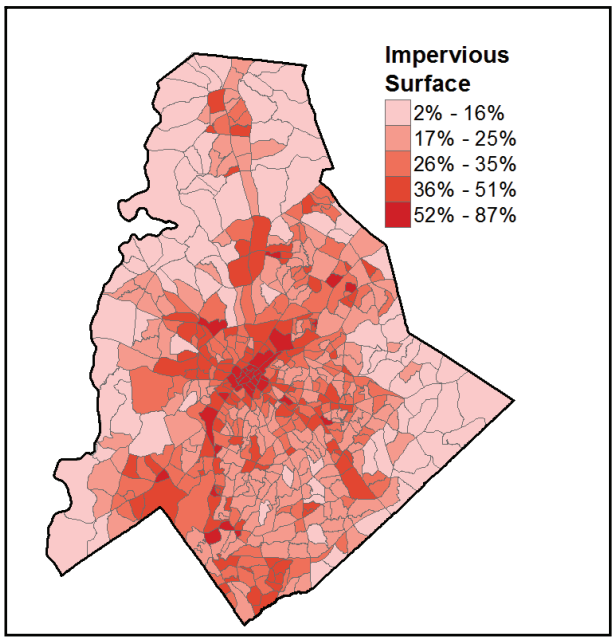


Figure 14: Amount of impervious surface by census block group.

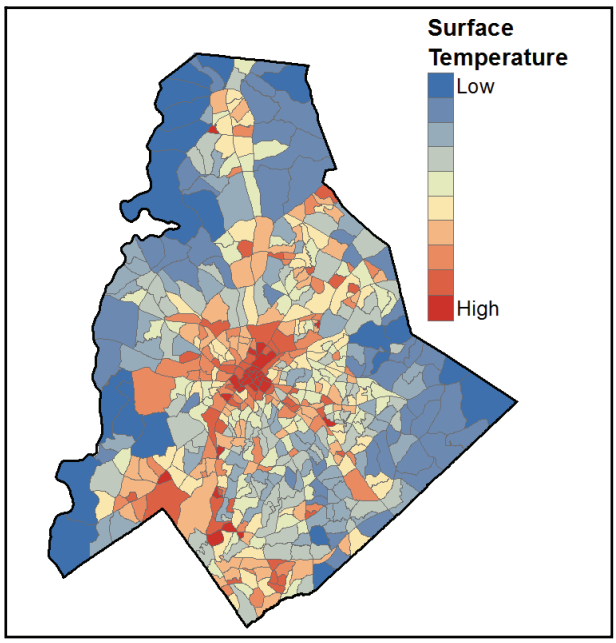


Figure 15: Surface temperature by census block group.

Plan Boundaries

Existing and Possible Tree Canopy were summarized by 32 Plan Boundaries delineated in a dataset acquired from the City of Charlotte that includes Plans adopted since 2005 (Figure 16). Of the 8 largest plan boundaries (those greater than 1,500 acres) 6 of the areas range from 45-59% forested (Figure 17). The Northlake Area and University City Area Plan areas are 34% and 35% forested, respectively; The Catawba Area Plan is 59% forested. The 8 largest plan boundaries account for 91% of all Tree Canopy within plan boundaries. Nearly all of the largest plan boundaries have at least one third of their area in Possible Tree Canopy. In terms of establishing new tree canopy, Steele Creek and Rocky River Road Areas have the largest fraction of the Vegetated Possible Tree Canopy category and together account for 62% of land in this category. Steele Creek also provides the greatest area of opportunity for establishing tree canopy on impervious surfaces, along with the Independence Boulevard and Northlake Areas. These 3 plan areas account for 60% of the Possible Tree Canopy Impervious type. New tree planting in impervious areas can provide many benefits but typically comes at greater expense compared to planting in areas of existing vegetative cover. A majority of the largest plan boundaries have a substantial fraction of land classified as vegetated possible tree canopy.

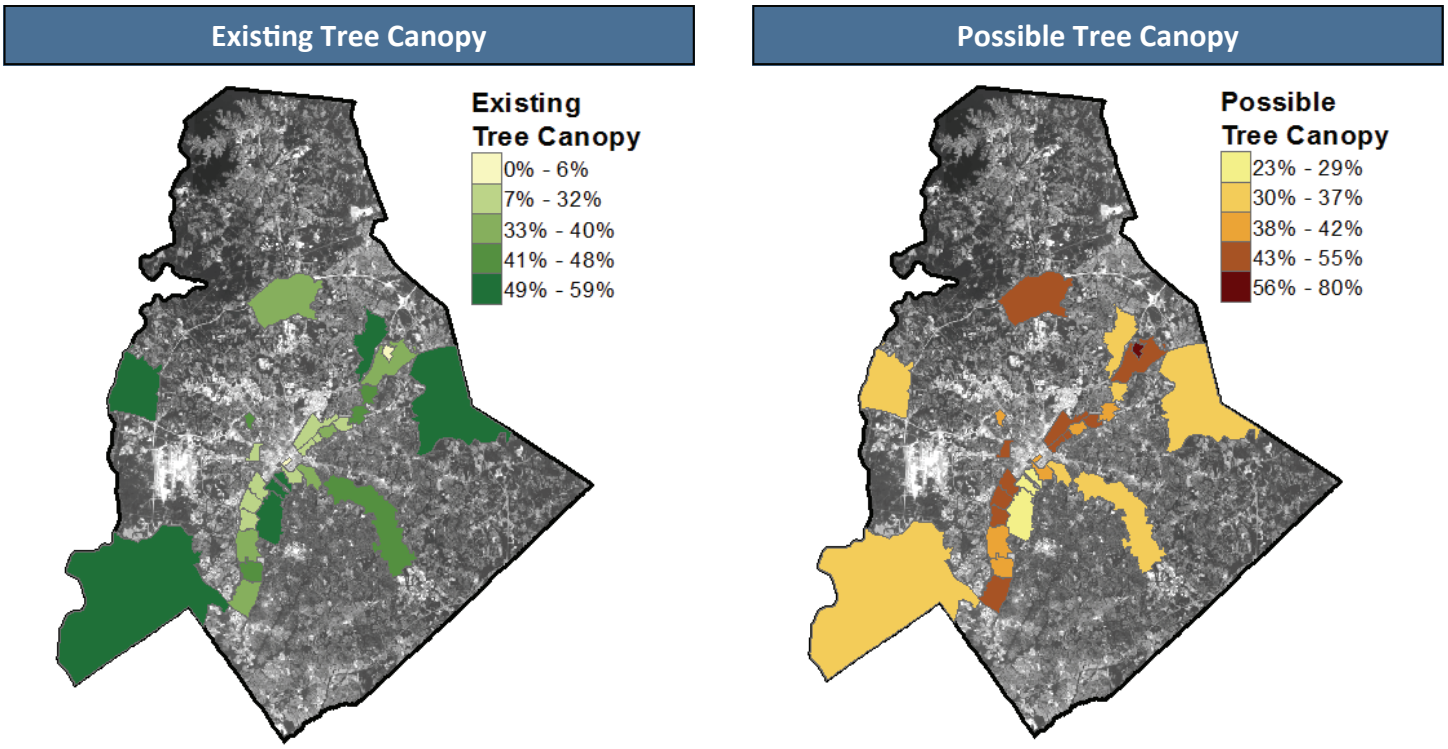


Figure 16: Existing and Possible Tree Canopy for Plan Boundaries adopted since 2005.

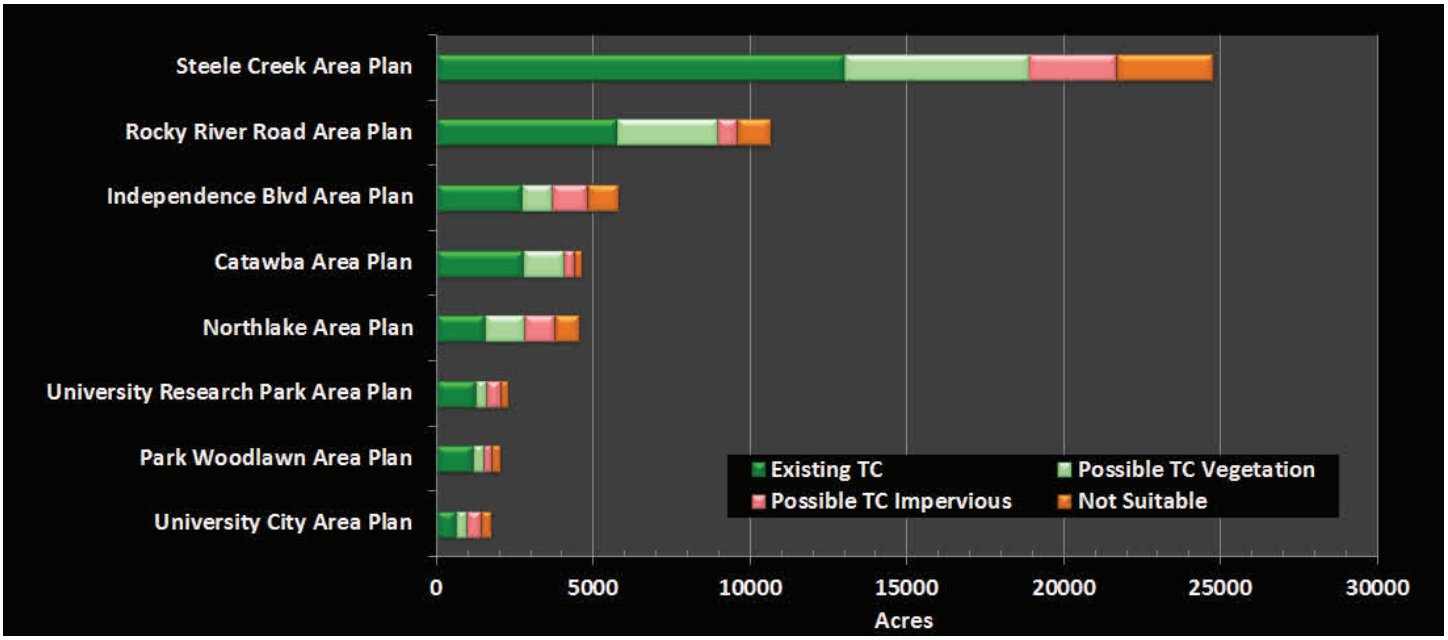


Figure 17: Tree Canopy metrics summarized by Plan Boundaries (only those boundaries larger than 2% of total plan boundary area are shown).

Centers/Corridors/Wedges

Existing and Possible Tree Canopy were also summarized by general use patterns in the city of Charlotte as represented by a dataset that divides the City into Centers, Corridors or Wedges (CCW; Figure 17). Not surprisingly, Existing Tree Canopy percentages are relatively high for Corridors and Wedges (Figure 18). The Wedge designation accounts for a full two-thirds of CCW area and contains 37% of the tree canopy; Corridors account for 16%. The Center City and Industrial Centers have the least tree canopy of these designated areas. Mixed Use Centers have the greatest amount of Existing Tree Canopy but still have a relatively high percentage of Possible Tree Canopy. Despite their relatively large proportions of tree canopy, Corridors and Wedges also present the greatest total area of Possible Tree Canopy (Figure 18). These areas also may be good places to focus tree canopy improvements efforts for developed land as they each have over 10,000 acres of Possible Tree Canopy classified as Impervious. On a percentage basis, Industrial Centers and the Center City have the largest fraction of Possible Tree Canopy (51% and 43%, respectively). The Center City would be another good focal point for tree canopy improvements on developed land as any gains here would have a positive influence on quality of life in the urban core. Mixed Use Activity Centers also have a substantial fraction of Possible Tree Canopy and may provide good planting opportunities, depending on the primary use.

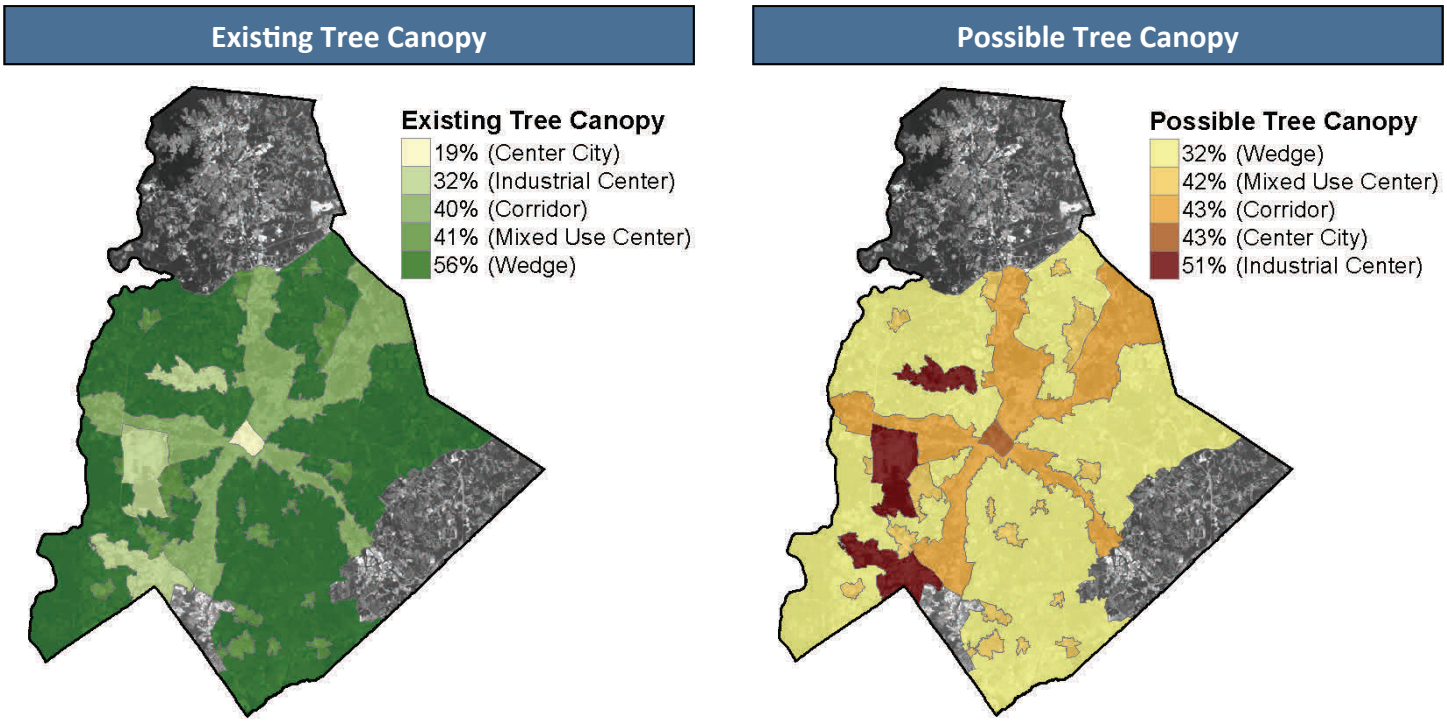


Figure 17: Percent Existing and Possible Tree Canopy by Center/Corridor/Wedge designation.

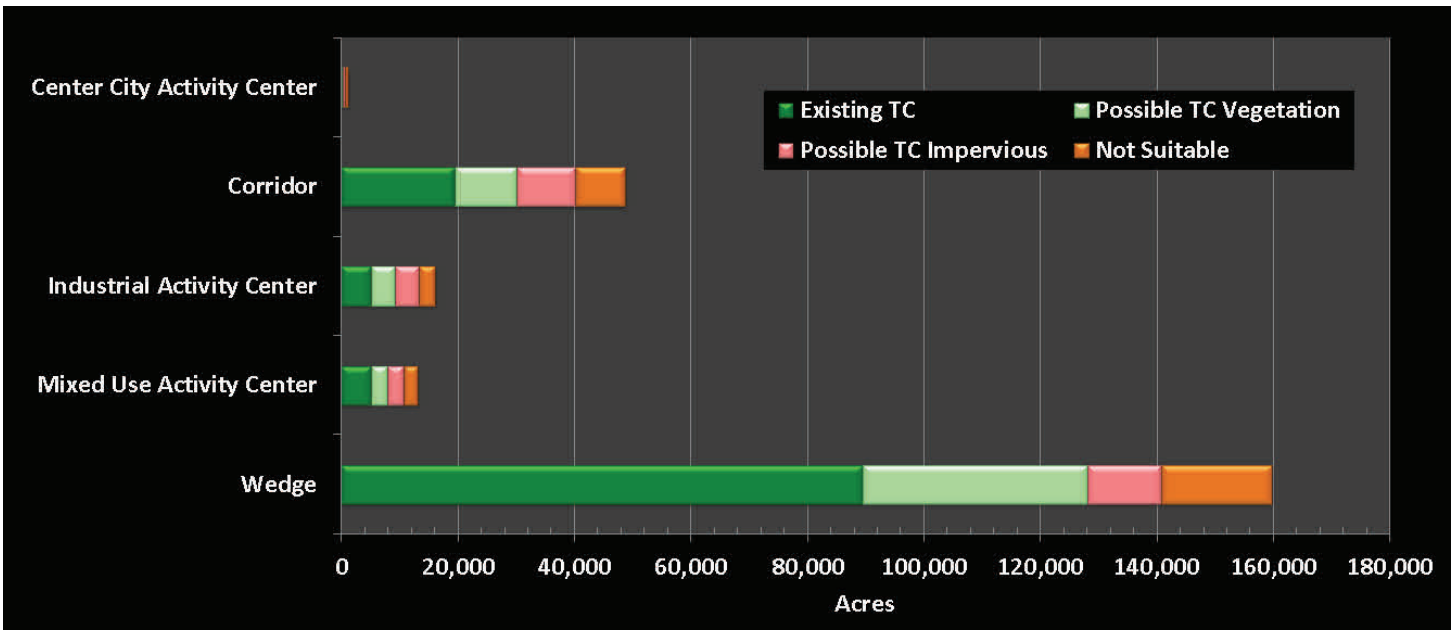


Figure 18: Tree Canopy metrics summarized by Center/Corridor/Wedge designation.

Riparian Areas

Riparian zones in Mecklenburg County have been modeled using variable width buffers around streams and other hydrologic features. These water quality buffers were provided by the County and range from 30 to 200 feet in width. Existing and Possible Tree Canopy were tabulated for these riparian areas (Figure 19). Within the riparian areas, which total 29,551 acres (land area), 73% of land is categorized as Existing Tree Canopy and 22% is categorized as Possible Tree Canopy. Of the 22% available land, only 4% is impervious surface, so ample opportunities exist to stabilize stream banks and protect water quality by increasing the amount of tree canopy in these environmentally important zones.

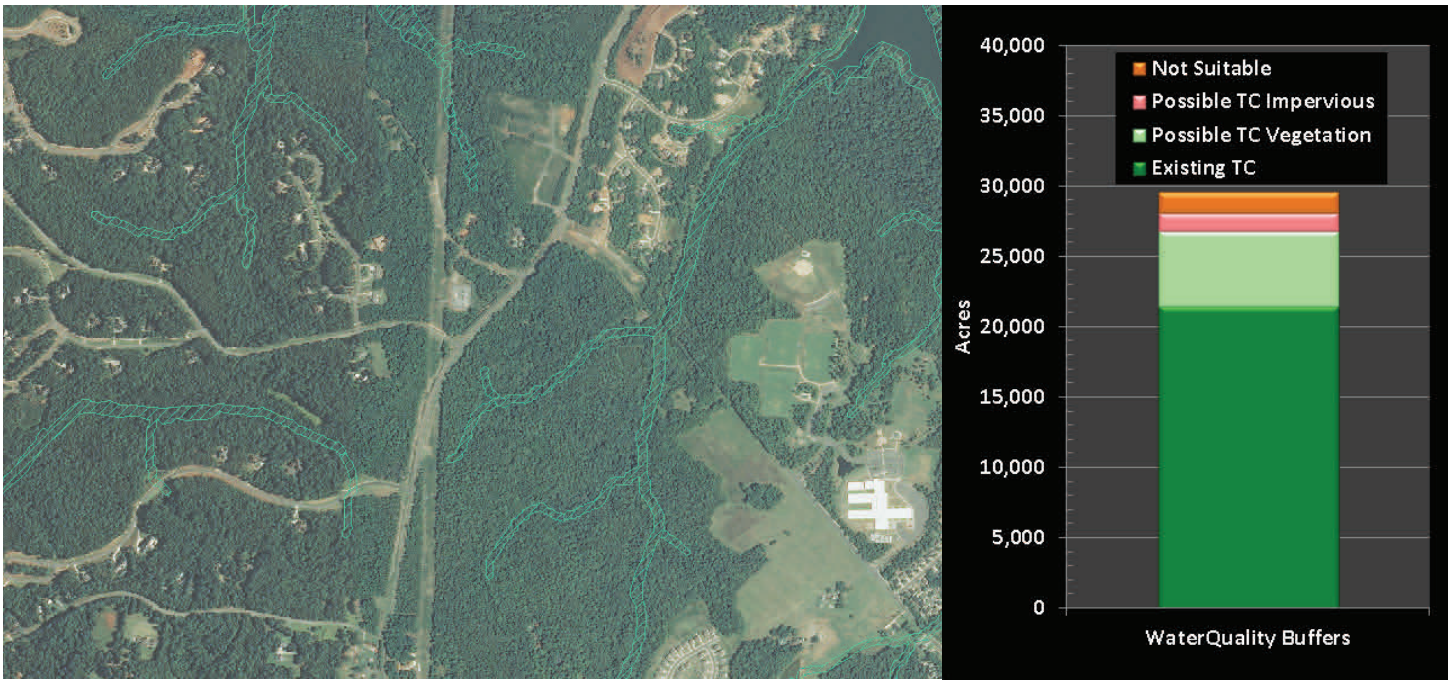
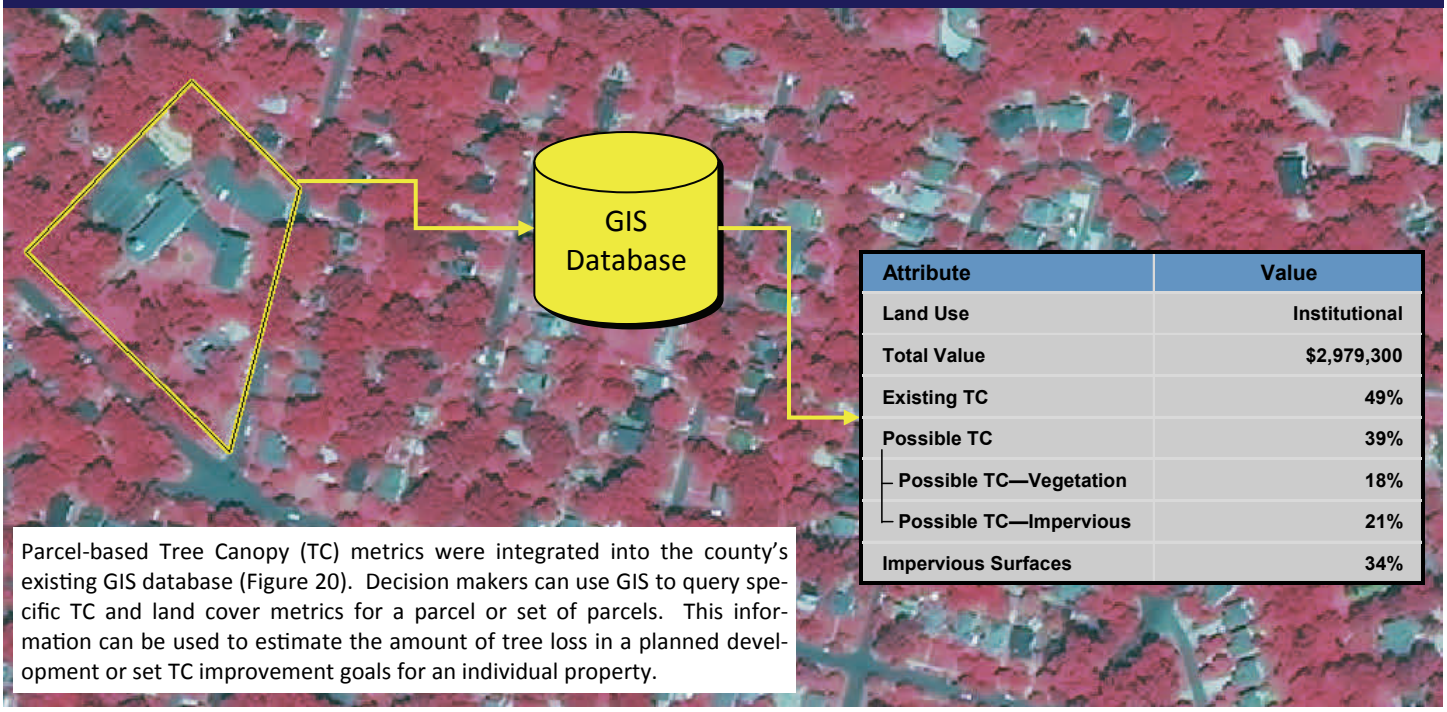


Figure 19. Tree Canopy metrics summarized by water quality buffers.

Decision Support



Attribute	Value
Land Use	Institutional
Total Value	$2,979,300
Existing TC	49%
Possible TC	39%
Possible TC—Vegetation	18%
Possible TC—Impervious	21%
Impervious Surfaces	34%

Parcel-based Tree Canopy (TC) metrics were integrated into the county's existing GIS database (Figure 20). Decision makers can use GIS to query specific TC and land cover metrics for a parcel or set of parcels. This information can be used to estimate the amount of tree loss in a planned development or set TC improvement goals for an individual property.

Figure 20: GIS-based analysis of parcel-based TC metrics for decision support. In this example, GIS is used to select an individual parcel. The attributes for that parcel, including the parcel-based TC and land cover metrics, are displayed in tabular form providing instant access to relevant information.

Tree Canopy Opportunity Index

In addition to simple descriptive statistics, more sophisticated techniques can help identify areas of the city where tree-planting and stewardship programs would be most effective. One approach is to focus on spatial clusters of Existing and Possible TC. When a 1000-foot grid network is superimposed on the land-cover map (Figure 21a), it is possible to map regions of the study area where high values of Existing TC are tightly clustered (Figure 21b). A similar map was constructed for Possible TC (Figure 21c). A single index was created by subtracting the percentage of Existing TC per grid cell from Possible TC, which produced a range of values from –1 to 1. When clustered, this tree canopy opportunity (TCO) index highlights areas with high Possible TC and low Existing TC (Figure 21d); these areas theoretically offer the best places to strategically expand Mecklenburg County's tree canopy and to increase its many attendant benefits. Unlike PPI (Figure 12), TCO does not take into account population information. The areas with the highest TCO are typically urbanized areas with low Existing and high Possible TC. As with all such analyses, however, landscape context must be evaluated before setting priorities.

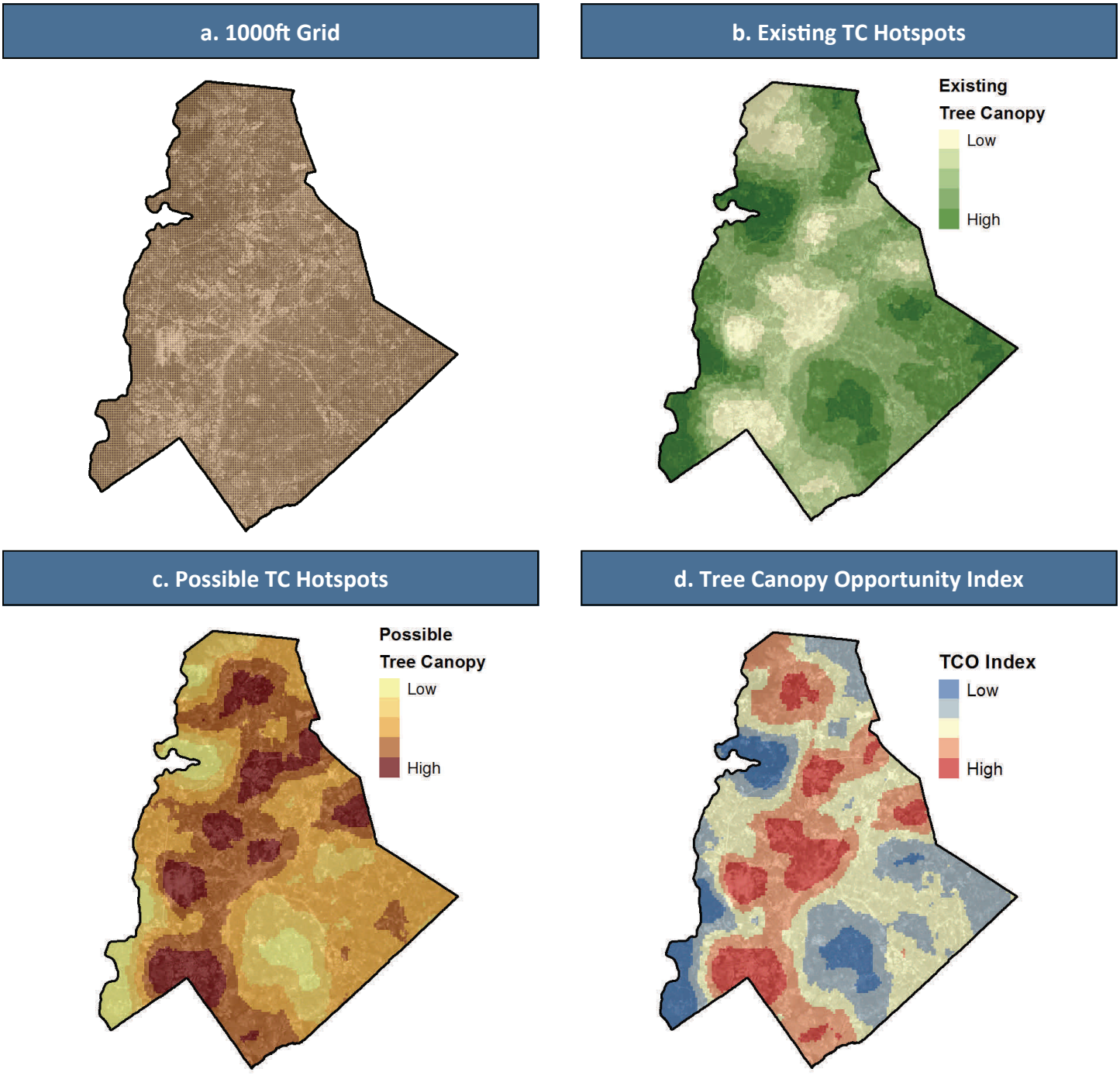


Figure 21: (a) Grid network (1000-foot cells) superimposed on land-cover map for Mecklenburg County and then used in spatial cluster analyses; (b) Spatial clustering of Existing TC in Mecklenburg County; dark green areas are highly clustered and have high Existing TC values; (c) Spatial clustering of Possible TC in Mecklenburg County; dark red areas are highly clustered and have high Possible TC values.; and (d) Spatial clustering of a combined index of Existing and Possible TC; red areas theoretically provide the best opportunities for expanding tree canopy.

Conclusions

- Tree canopy for Mecklenburg County is comparable to other urbanized counties in the Eastern United States (e.g. Baltimore County and Prince George's County, MD—Figure 21). Nevertheless, there exist areas ,both within the County and City that have well-below average tree canopy, indicating areas where improvements can be made to insure the benefits of trees are realized by the entire population.
- The City of Charlotte has substantially higher amounts of tree canopy compared to major cities such as New York and Washington DC (Figure 21), but is similar to less urbanized cities such as Pittsburgh (Figure 21).
- This study can assist Mecklenburg County and the City of Charlotte in meeting their tree canopy goals. These data can help the County and the City prioritize areas for increasing tree canopy based on biophysical and socio-demographic factors using tools such as the Priority Planting Index (PPI) or Tree Canopy Opportunity (TCO) Index.
- Residents are the largest single stakeholder group in terms of land use with respect to both Existing Tree Canopy and Possible Tree Canopy. Programs that educate the County's and City's residential land owners will be crucial for the long-term success of any tree canopy goals.
- Strategies for increasing tree canopy will likely differ by land use type. The city could substantially improve its tree canopy through an "all lands" approach that includes both street tree plantings (within the ROW) and plantings on parcel land.
- Tree canopy has a clear effect on surface temperature, helping to reduce the urban heat island effect. Increasing tree canopy, particularly in those areas with high amounts of impervious surfaces will reduce energy costs for residents and business in addition to making the area more livable.
- Despite the dominance of residential land use within the county all land use types have vegetated or impervious surfaces, that if improved, could yield additional tree canopy. For example, 26% of the land in industrial land use contains non-tree canopy vegetated land that is available for the establishment of new tree canopy.
- Efforts to preserve the county's current tree canopy and establish new tree canopy will likely take many forms. Tree canopy prioritization analyses can help managers make strategic decisions to match their objectives from the property parcel to the watershed scale.

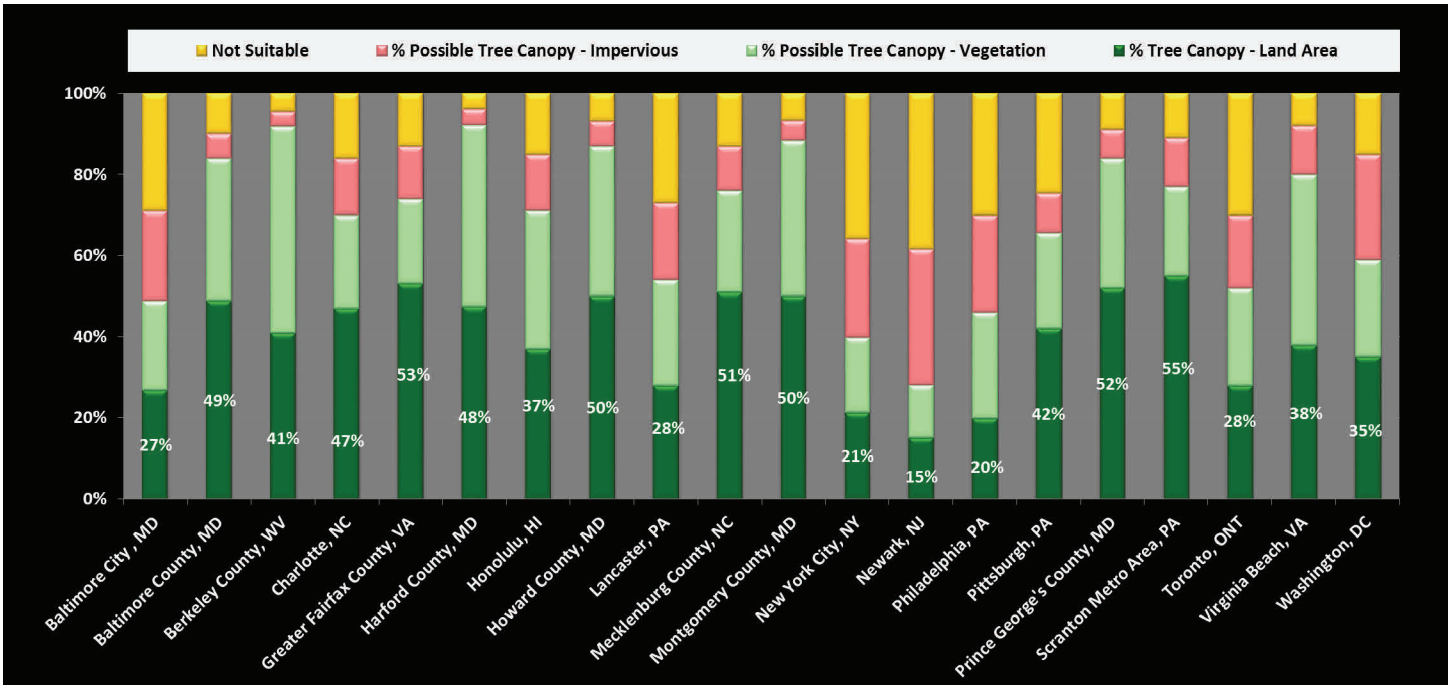


Figure 22: Results from other communities that have completed Tree Canopy Assessments.

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Additional Information

For more info on the Urban Tree Canopy Assessment please visit **http://nrs.fs.fed.us/urban/UTC/**

Spatial Analysis Lab Tree Canopy Assessment Team: Ernie Buford, Teresa DiTore, Sarah Gallalee, Lindsay Jordan, Sean MacFaden, Alex Marcucci, Alan McCarthy, Jarlath O'Neil-Dunne, Max Reis, Anna Royar, Will Seegers, D.J. Westley, Will Ziegler, and Adam Zylka.

Appendix A: Additional UTC Metrics

Land Use	Existing TC			Possible TC Vegetation			Possible TC Impervious		
	% Land	% Category	% TC Type	% Land	% Category	% TC Type	% Land	% Category	% TC Type
Single Family - Detached	16%	55%	30%	8%	27%	31%	2%	7%	19%
Vacant	14%	74%	27%	4%	21%	16%	1%	4%	7%
Right-of-Way	2%	25%	5%	2%	19%	8%	1%	8%	8%
Open Space/Recreation	6%	67%	12%	3%	28%	10%	0%	5%	5%
Large Lot Residential	6%	69%	12%	3%	28%	10%	0%	2%	2%
Civic/Institutional	2%	40%	4%	1%	28%	6%	1%	22%	11%
Retail	1%	18%	1%	1%	16%	3%	2%	38%	14%
Multi-Family	1%	36%	3%	1%	20%	3%	1%	19%	7%
Agriculture	1%	38%	2%	2%	56%	7%	0%	5%	2%
Industrial	1%	33%	2%	1%	20%	3%	1%	36%	11%
Warehouse/Distribution	1%	22%	1%	0%	17%	2%	1%	36%	9%
Office	1%	28%	1%	0%	18%	2%	1%	29%	7%
Transportation	0%	21%	1%	1%	30%	2%	1%	30%	5%
Utility	1%	53%	2%	1%	33%	2%	0%	12%	2%
Horizontal Mixed Use Non-Residential	0%	21%	0%	0%	12%	0%	0%	43%	2%
Single Family - Attached	0%	56%	0%	0%	23%	0%	0%	8%	0%
Water	0%	79%	0%	0%	15%	0%	0%	5%	0%
Parking	0%	19%	0%	0%	14%	0%	0%	59%	0%
Vertical Mixed Use	0%	21%	0%	0%	9%	0%	0%	28%	0%
Horizontal Mixed Use - Residential/Non-Residential	0%	54%	0%	0%	21%	0%	0%	12%	0%

$$\%\ \text{Land} = \frac{\text{Area of TC type for land use category}}{\text{Area of all land}}$$

The % Land Area value of 2% indicates that 2% of Mecklenburg County's land area is covered by tree canopy in the Civic/Institutional land use class.

$$\%\ \text{Category} = \frac{\text{Area of TC type for land use category}}{\text{Area of all land for specified land use}}$$

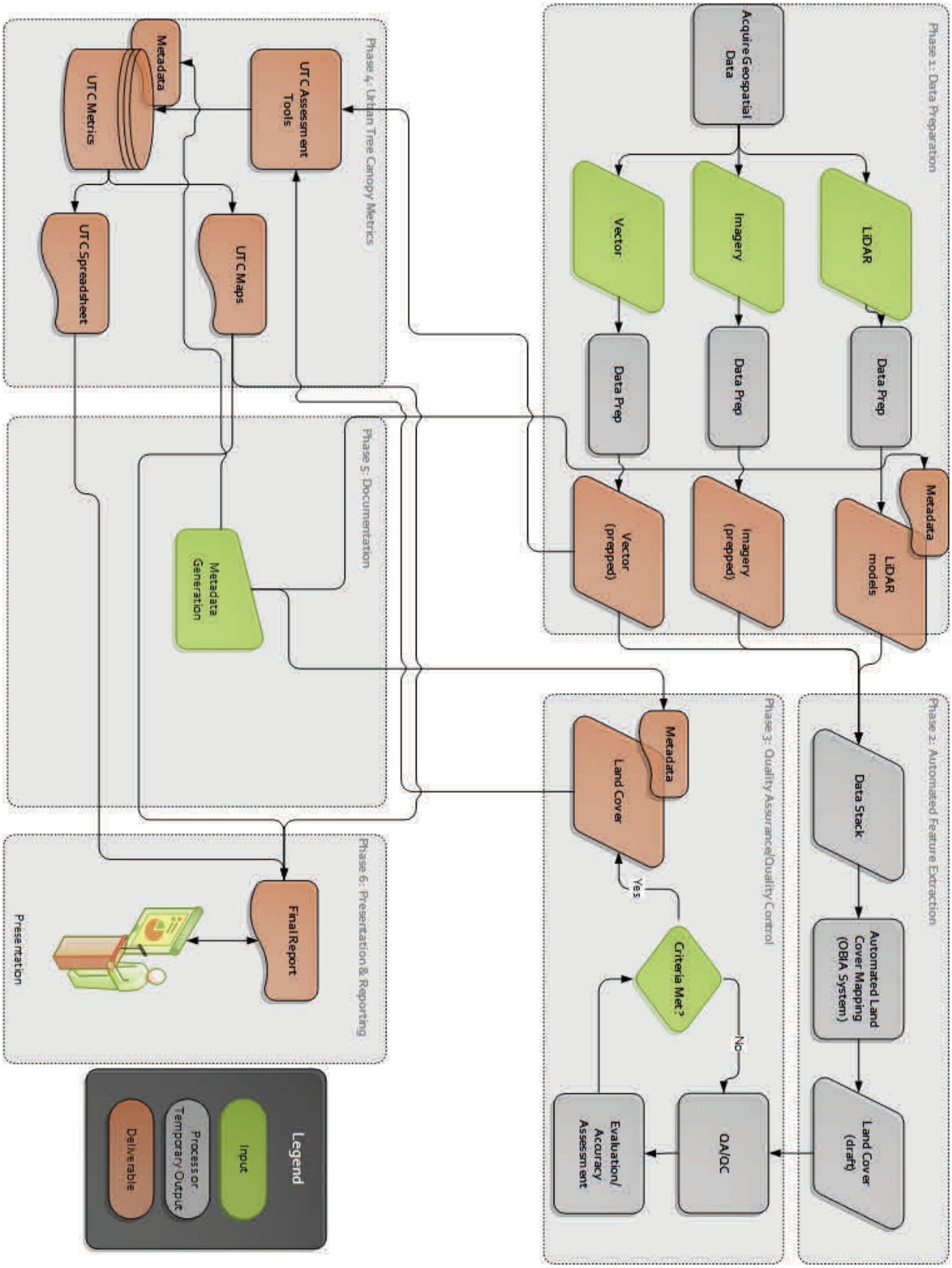
The % Land value of 40% indicates that 40% of land in the Civic/Institutional land use class is covered by tree canopy.

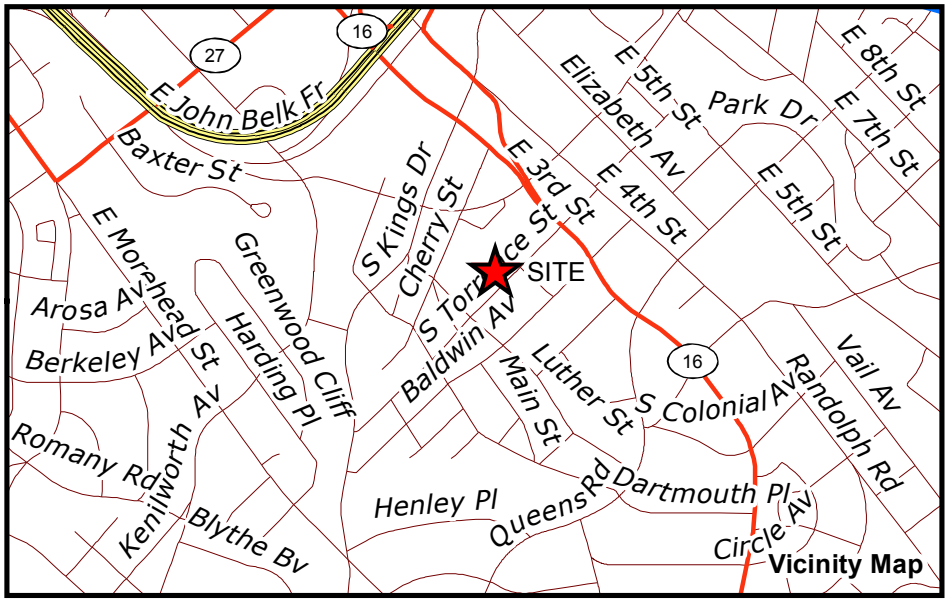
$$\%\ \text{TC Type} = \frac{\text{Area of TC type for land use category}}{\text{Area of all TC type}}$$

The % TC Type value of 4% indicates that 4% of all tree canopy is in land classified in the Civic/Institutional land use class.

Table A-1: Tree Canopy (TC) metrics were summarized by land use. For each land use category, TC metrics were computed as a percentage of all land in the county(% Land), as a percentage of land in the specified category (% Category), and as a percentage of the area for TC type (% TC Type).

Appendix B: Workflow





CITY OF CHARLOTTE
DEPARTMENT OF TRANSPORTATION

Development Services Division

Right-of-Way Abandonment Petition 2013-11

An unopened alleyway off of S. Torrence Street

Right-of-Way Abandonment Area

RESOLUTION CLOSING AN ALLEYWAY OFF OF S. TORRENCE STREET IN THE CITY OF CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA

WHEREAS, pursuant to the provisions of Chapter 160A-299 of the General Statutes of North Carolina, the City Council has caused to be published a Resolution of Intent to close an alleyway off of S. Torrence Street, which calls for a public hearing on the question; and,

WHEREAS, the petitioner has caused a copy of the Resolution of Intent to close an alleyway off of S. Torrence Street to be sent by registered or certified mail to all owners of property adjoining the said street and prominently posted a notice of the closing and public hearing in at least 2 places along said street or alley, all as required by G.S. 160A-299; and

WHEREAS, the public hearing was held on the 10th day of February, 2014, and City Council determined that the closing of an alleyway off of S. Torrence Street is not contrary to the public interest, and that no individual, firm or corporation owning property in the vicinity thereof will be deprived of reasonable means of ingress and egress to his or its property; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Charlotte, North Carolina at its regularly assembled meeting of February 10, 2014, that the Council hereby orders the closing of an alleyway off of S. Torrence Street in the City of Charlotte Mecklenburg County, North Carolina as shown in the map marked "Exhibit A", and is more particularly described by metes and bounds in the document marked "Exhibit B, all of which are attached hereto and made a part hereof.

BE IT FURTHER RESOLVED that a certified copy of this Resolution be filed in the Office of the Register of Deeds for Mecklenburg County, North Carolina.

Facilities

911 Communications Center	$5,500,000
Westover Division Police Station	$4,500,000
Bojangles/Ovens Area Development	$7,000,000
	$17,000,000

TOTAL FACILITIES **$17,000,000**

Equipment

Department	Description of Current Vehicle to be Replaced Year	Make	Model	Vehicle ID# ID Number	New/Repl	Replacement Vehicle	Per Unit $	No. Units	Total $
CMPD	Marked Vehicle Replacement					Comparable	$30,000	158	$4,740,000
							Total Marked Vehicle	**158**	$4,740,000
CMPD	2005	CHEVROLET	G-2500	ACB049	Repl	Comparable	$39,500	1	$39,500
CMPD	2006	CHEVROLET	G-2500	ACB054	Repl	Comparable	$39,500	1	$39,500
CMPD	2003	FORD	EXPEDITION	PDA4021	Repl	Comparable	$35,000	1	$35,000
CMPD	2002	FORD	TAURUS	PDA5048T	Repl	Comparable	$22,000	1	$22,000
CMPD	2004	CHEVROLET	IMPALA	PDA5145	Repl	Comparable	$22,500	1	$22,500
CMPD	2005	CHEVROLET	IMPALA	PDA5170	Repl	Comparable	$22,500	1	$22,500
CMPD	2006	CHEVROLET	IMPALA	PDA5208	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5257	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5260	Repl	Comparable	$22,500	1	$22,500
CMPD	2005	CHEVROLET	G-2500	ACB047	Repl	Comparable	$39,500	1	$39,500
CMPD	2005	CHEVROLET	G-2500	ACB050S	Repl	Comparable	$39,500	1	$39,500
CMPD	2007	FORD	EXPLORER	PDA055	Repl	Comparable	$27,000	1	$27,000
CMPD	2000	FORD	TAURUS	PDA300	Repl	Comparable	$22,000	1	$22,000
CMPD	2004	CHEVROLET	IMPALA	PDA5133	Repl	Comparable	$22,500	1	$22,500
CMPD	2004	CHEVROLET	IMPALA	PDA5137	Repl	Comparable	$22,500	1	$22,500
CMPD	2005	CHEVROLET	IMPALA	PDA5163	Repl	Comparable	$22,500	1	$22,500
CMPD	2007	CHEVROLET	IMPALA	PDA5224	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5268	Repl	Comparable	$22,500	1	$22,500
CMPD	2009	CHEVROLET	MALIBU	PDA5329S	Repl	Comparable	$22,000	1	$22,000
CMPD	2002	CHEVROLET	G-3500	PDB128	Repl	Comparable	$29,000	1	$29,000
CMPD	2003	CHEVROLET	G-3500	PDB135	Repl	Comparable	$29,000	1	$29,000
CMPD	1993	FORD	E-350	PDB502	Repl	Comparable	$29,000	1	$29,000
CMPD	2002	FORD	F-250 C/C	PDU217	Repl	Comparable	$37,000	1	$37,000
CMPD	2006	CHEVROLET	G-2500	ACB055	Repl	Comparable	$39,500	1	$39,500
CMPD	2007	CHEVROLET	G-2500	ACB058	Repl	Comparable	$39,500	1	$39,500
CMPD	2004	FORD	EXPLORER	PDA130	Repl	Comparable	$27,000	1	$27,000
CMPD	2002	FORD	TAURUS	PDA5045T	Repl	Comparable	$22,000	1	$22,000
CMPD	2006	TOYOTA	PRIUS HYBRID	PDA5176	Repl	Comparable	$23,000	1	$23,000
CMPD	2006	CHEVROLET	MALIBU	PDA5177	Repl	Comparable	$22,000	1	$22,000
CMPD	2006	CHEVROLET	MALIBU	PDA5180	Repl	Comparable	$22,000	1	$22,000
CMPD	2006	CHEVROLET	MALIBU	PDA5182	Repl	Comparable	$22,000	1	$22,000
CMPD	2006	CHEVROLET	IMPALA	PDA5199	Repl	Comparable	$22,500	1	$22,500
CMPD	2007	CHEVROLET	MALIBU	PDA5245	Repl	Comparable	$22,000	1	$22,000
CMPD	2008	CHEVROLET	IMPALA	PDA5255	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5271	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5281	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	MALIBU	PDA5287	Repl	Comparable	$22,000	1	$22,000
CMPD	2005	FORD	E-350	PDB511	Repl	Comparable	$29,000	1	$29,000
CMPD	1993	CHEVROLET	C-3500	SPU803	Repl	Comparable	$39,000	1	$39,000
CMPD	2005	CHEVROLET	G-2500	ACB051	Repl	Comparable	$39,500	1	$39,500
CMPD	2006	CHEVROLET	G-2500	ACB052	Repl	Comparable	$39,500	1	$39,500
CMPD	2008	CHEVROLET	G-2500	ACB063	Repl	Comparable	$39,500	1	$39,500
CMPD	2002	FORD	TAURUS	PDA5053	Repl	Comparable	$22,000	1	$22,000
CMPD	2003	FORD	TAURUS	PDA5076T	Repl	Comparable	$22,000	1	$22,000
CMPD	2003	FORD	TAURUS	PDA5080	Repl	Comparable	$22,000	1	$22,000
CMPD	2003	FORD	TAURUS	PDA5086	Repl	Comparable	$22,000	1	$22,000
CMPD	2004	CHEVROLET	IMPALA	PDA5129	Repl	Comparable	$22,500	1	$22,500
CMPD	2006	CHEVROLET	MALIBU	PDA5183	Repl	Comparable	$22,000	1	$22,000
CMPD	2006	CHEVROLET	MALIBU	PDA5184	Repl	Comparable	$22,000	1	$22,000
CMPD	2007	CHEVROLET	MALIBU	PDA5219	Repl	Comparable	$22,000	1	$22,000
CMPD	2007	CHEVROLET	IMPALA	PDA5238	Repl	Comparable	$22,500	1	$22,500
CMPD	2007	CHEVROLET	MALIBU	PDA5244	Repl	Comparable	$22,000	1	$22,000
CMPD	2008	CHEVROLET	IMPALA	PDA5258	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5267	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5270	Repl	Comparable	$22,500	1	$22,500
CMPD	2008	CHEVROLET	IMPALA	PDA5272	Repl	Comparable	$22,500	1	$22,500
CMPD	2009	CHEVROLET	MALIBU	PDA5320	Repl	Comparable	$22,000	1	$22,000
CMPD	2008	FORD	CROWN VICTORIA	PDA855	Repl	Comparable	$30,000	1	$30,000
							TOTAL POLICE UNMARKED VEHICLES	58	$1,535,500
							TOTAL POLICE VEHICLES	**216**	**$6,275,500**
FIRE			FIRE APPARATUS			Comparable	$526,991	8	$4,215,928
FIRE			Ladder		Repl	Comparable	$819,385	2	$1,638,770
FIRE	2002	FORD	TAURUS	FDA077	Repl	Comparable	$22,000	1	$22,000
FIRE	2002	FORD	TAURUS	FDA076	Repl	F-150 4-door, short bed	$25,000	1	$25,000
FIRE	1996	FORD	UTILITY 4	F70649	Repl	Comparable	$40,000	1	$40,000

FIRE	2003	FORD	CROWN VICTORIA	FDA083	Repl	Suburban, 4WD	$43,000	1	$43,000
FIRE	2005	FORD	TAURUS	FDA157	Repl	Comparable	$22,000	1	$22,000
FIRE	2004	FORD	TAURUS	FDA151	Repl	Comparable	$22,000	1	$22,000
FIRE	2002	FORD	E-350	FDB071	Repl	1/2 ton crew cab 4x4	$35,000	1	$35,000
FIRE	2006	FORD	CROWN VICTORIA	FDA167	Repl	Comparable	$30,000	1	$30,000
FIRE	2007	FORD	CROWN VICTORIA	FDA173	Repl	Comparable	$30,000	1	$30,000
FIRE	2004	CHEVROLET	K-2500 C/C	FDU097	Repl	Comparable	$30,000	1	$30,000
FIRE	2005	CHEVROLET	K-3500 C/C	FDU103	Repl	Comparable	$30,000	1	$30,000
							TOTAL FIRE VEHICLES	**21**	**$6,183,698**
SWS	2004	FREIGHTLINER	FC80	SSS276	Repl	Comparable	$205,000	1	$205,000
SWS	2001	FREIGHTLINER	FL80	SSJ457	Repl	Comparable	$135,000	1	$135,000
SWS	2007	FREIGHTLINER	CONDOR	SNP125	Repl	Comparable	$297,587	1	$297,587
SWS	2007	FREIGHTLINER	CONDOR	SNP127	Repl	Comparable	$297,587	1	$297,587
SWS	2007	FREIGHTLINER	CONDOR	SNP128	Repl	Comparable	$297,587	1	$297,587
SWS	2005	FREIGHTLINER	M2106	SNP631	Repl	Comparable	$212,391	1	$212,391
SWS	2005	FREIGHTLINER	M2106	SNP632	Repl	Comparable	$212,391	1	$212,391
SWS	1992	Ford	CT8000	SNP343	Repl	Comparable	$212,391	1	$212,391
SWS	2005	FREIGHTLINER	M2106	SNP636	Repl	Comparable	$212,391	1	$212,391
SWS	2005	FREIGHTLINER	M2106	SNP637	Repl	Comparable	$212,391	1	$212,391
SWS	2002	FORD	F-150	SSU036	Repl	Comparable	$22,000	1	$22,000
SWS	1999	INTERNATIONAL	4700	SSD462	Repl	3 crew cab trucks	$24,850	3	$74,550
SWS	1999	INTERNATIONAL	4700	SSD466	Repl	2 crew cab trucks	$24,850	2	$49,700
SWS	2007	FREIGHTLINER	CONDOR	SNP124	Repl	Comparable	$258,000	1	$258,000
SWS	2007	FREIGHTLINER	CONDOR	SNP125	Repl	Comparable	$258,000	1	$258,000
SWS	2008	FREIGHTLINER	CONDOR	SNP660	Repl	Comparable	$258,000	1	$258,000
SWS	2007	AMERICAN LAFRAN	CONDOR(ALF)	SNP700CT	Repl	Comparable	$258,000	1	$258,000
SWS	2005	FREIGHTLINER	M2106	SNP633	Repl	Comparable	$220,000	1	$220,000
SWS	2006	FREIGHTLINER	M2106	SNP649	Repl	Comparable	$220,000	1	$220,000
SWS	2005	FORD	F-150	SNU065	Repl	Comparable	$22,000	1	$22,000
SWS	2006	FREIGHTLINER	M2106	SNP648	Repl	Comparable	$220,000	1	$220,000
SWS	2005	FREIGHTLINER	M2106	SNP635	Repl	Comparable	$220,000	1	$220,000
							TOTAL SOLID WASTE SERVICES VEHICLES	**25**	**$4,374,967**
CDOT SMD	2001	MEYER	NO	SMP124	Repl	Comparable	$13,500	1	$13,500
CDOT SMD	2001	FREIGHTLINER	FL80	SMD451	Repl	Comparable	$145,000	1	$145,000
CDOT SMD	2005	MULTIQUIP	V304EH	SMR531	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2005	MULTIQUIP	V304EH	SMR532	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2006	MULTIQUIP	V304EH	SMR533	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2001	FORD	F-350 C/C	SMU165	Repl	Comparable	$51,000	1	$51,000
CDOT SMD	2003	FREIGHTLINER	FL80	SMJ296	Repl	Comparable	$180,000	1	$180,000
CDOT SMD	2001	MULTIQUIP	V304EY	SMR791	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2002	HI-WAY	E-2020XT=11	SMS5341	Repl	Comparable	$24,000	1	$24,000
CDOT SMD	2000	FORD	F-350 C/C	SMU185	Repl	Comparable	$51,000	1	$51,000
CDOT SMD	2000	FREIGHTLINER	FL80	SMD478	Repl	Comparable	$145,000	1	$145,000
CDOT SMD	1991	MEYER	NO	SMP364	Repl	Comparable	$13,500	1	$13,500
CDOT SMD	1996	FLINK SPRE	11'LMC5H	SMS524	Repl	Comparable	$24,000	1	$24,000
CDOT SMD	2001	FREIGHTLINER	FL80	SMD428	Repl	Comparable	$145,000	1	$145,000
CDOT SMD	1996	FLINK SPRE	11'LMC5H	SMS5261	Repl	Comparable	$24,000	1	$24,000
CDOT SMD	2005	MULTIQUIP	V304EH	SMR528	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2005	MULTIQUIP	V304EH	SMR530	Repl	Comparable	$10,200	1	$10,200
CDOT SMD	2001	GRADALL	XL4100	SME612	Repl	Comparable	$356,000	1	$356,000
CDOT SMD	1990	CATERPILLAR	12G	SMG616	Repl	Comparable	$225,000	1	$225,000
CDOT SMD	2006	INTERNATIONAL	4400	SMJ299	Repl	Comparable	$180,000	1	$180,000
CDOT SMD	2006	FORD	ESCAPE HYBRID	SMA105	Repl	Comparable	$29,973	1	$29,973
CDOT SMD	2001	CHEVROLET	C-1500	SMU186	Repl	Comparable	$28,000	1	$28,000
							TOTAL POWELL BILL VEHICLES	**22**	**$1,696,173**
CDOT	2001	FORD	F-250	TSJ102	Repl	Comparable	$24,000	1	$24,000
CDOT	1997	FORD	F-250	TOJ476	Repl	Comparable	$24,000	1	$24,000
CDOT	1995	CHEVROLET	CAVALIER	TEA026	Repl	Comparable	$14,000	1	$14,000
CDOT	2000	FORD	TAURUS	TEA103	Repl	Comparable	$22,000	1	$22,000
CDOT	1987	BUTLER	HWSC-5	TOY820	Repl	Comparable	$9,995	1	$9,995
CDOT	1999	CHEVROLET	ASTRO	TSB020	Repl	Comparable	$18,000	1	$18,000
CDOT	2000	FORD	TAURUS SW	DTA027	Repl	Comparable	$25,000	1	$25,000
CDOT	1999	FORD	RANGER	TEU001	Repl	Comparable	$18,000	1	$18,000
CDOT	1999	FORD	RANGER	TEU004	Repl	Comparable	$18,000	1	$18,000
CDOT	1991	CHEVROLET	C-1500	TOU037	Repl	Comparable	$23,005	1	$23,005
							TOTAL CDOT VEHICLES	**10**	**$196,000.00**
EPM	2006	HONDA	CIVIC HYBRID	LMA153	Repl	Comparable	$26,000	1	$26,000
EPM	2001	NEW HOLLAND	TS100	LMT545	Repl	Comparable	$67,000	1	$67,000
EPM	2001	FORD	F-150	LMU457	Repl	Comparable	$25,000	1	$25,000
EPM	1971	SUPERVAC	C-108HPY	LMV907	Repl	Comparable	$15,000	1	$15,000
EPM	2003	BANDIT	200T	LMZ958	Repl	Comparable	$28,500	1	$28,500
EPM	1999	NEW HOLLAND	TS110	LMT544	Repl	Comparable	$80,000	1	$80,000
EPM	2005	FORD	F-250	LMU468	Repl	Comparable	$39,000	1	$39,000
EPM	2002	NEW HOLLAND	TS100	LMT657	Repl	Comparable	$80,000	1	$80,000
EPM	2002	NEW HOLLAND	TS100	LMT658	Repl	Comparable	$80,000	1	$80,000
EPM	2002	FORD	TAURUS	BMA854	Repl	Comparable	$22,000	1	$22,000
EPM	2000	FORD	RANGER	BMU114	Repl	Comparable	$22,000	1	$22,000
EPM	1999	G.M.C.	SUBURBAN (GMC)	EDA154	Repl	Comparable	$40,000	1	$40,000
EPM	1999	G.M.C.	SUBURBAN (GMC)	EDA153	Repl	Comparable	$40,000	1	$40,000
							TOTAL ENG & PPTY MANAGEMENT VEHICLES	**13**	**$564,500**
N&BS	2001	CHEVROLET	C-1500	NDU009	Repl	Comparable	$22,000	1	$22,000

N&BS	2002	FORD	TAURUS	NDA068	Repl	Ford F-150 Short Bed	$19,000	1	$19,000
N&BS	1997	FORD	ESCORT SW	NDA078	Repl	Ford F-150	$22,000	1	$22,000
N&BS	2005	FORD	F-150	NDU005	Repl	Comparable	$22,000	1	$22,000
N&BS	2002	CHEVROLET	C-1500	NDU010	Repl	Comparable	$22,000	1	$22,000
N&BS	1999	CHEVROLET	BLAZER	NDA080	Repl	Comparable	$26,000	1	$26,000
						TOTAL NEIGHBORHOOD DEV VEHICLES		6	$133,000
Shared Services	2000	FORD	F-150	EMU055	Repl	Comparable	$25,000	1	$25,000
						TOTAL BSS EQUIP MGT DIVISION VEHICLES		1	$25,000
Utilities	1998	FORD	EXPLORER	UAA020	Repl	Comparable	$30,000	1	$30,000
Utilities	2003	FORD	F-150	UCU263	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU275	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU296	Repl	Comparable	$25,000	1	$25,000
Utilities	2005	FORD	F-150	UCU500	Repl	Comparable	$25,000	1	$25,000
Utilities	2005	FORD	F-150	UCU502	Repl	Comparable	$25,000	1	$25,000
Utilities	2005	FORD	F-150	UCU503	Repl	Comparable	$25,000	1	$25,000
Utilities	2003	FORD	TAURUS	UAA031	Repl	Explorer or Comparable	$22,000	1	$22,000
Utilities	2002	CHEVROLET	C-3500	UCJ210	Repl	F-450 or comparable	$56,000	1	$56,000
Utilities	2003	FORD	F-150	UCU272	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU274	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU276	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU279	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU282	Repl	Comparable	$25,000	1	$25,000
Utilities	2004	FORD	F-150	UCU297	Repl	Comparable	$25,000	1	$25,000
Utilities	2002	FREIGHTLINER	FL70	UDD203	Repl	Comparable	$92,000	1	$92,000
Utilities	1999	FORD	555CP2	UDH618	Repl	Comparable	$83,000	1	$83,000
Utilities	2001	FORD	555CP2	UDH621	Repl	Mini-excavator	$83,000	1	$83,000
Utilities	2001	INTERNATIONAL	4700	UDJ835T	Repl	Comparable	$103,500	1	$103,500
Utilities	2005	FORD	F-150	UDU597	Repl	Comparable	$25,000	1	$25,000
Utilities	2002	FORD	TAURUS	USA027	Repl	Explorer or Comparable	$30,000	1	$30,000
Utilities	2002	FORD	TAURUS	USA028	Repl	Explorer or Comparable	$30,000	1	$30,000
Utilities	2000	FORD	F-350 C/C	USJ867	Repl	Comparable	$56,000	1	$56,000
Utilities	2001	JOHN DEERE	4610	UST856	Repl	Comparable	$67,000	1	$67,000
Utilities	2005	FORD	F-150	USU211	Repl	Comparable	$25,000	1	$25,000
Utilities	1999	JETWAY	JAJ-600R	USV884	Repl	Comparable	$50,000	1	$50,000
Utilities	2003	FORD	F-150	UWU054	Repl	Comparable	$25,000	1	$25,000
Utilities	2005	FORD	F-150	UWU059	Repl	Comparable	$25,000	1	$25,000
Utilities	2009	FORD	ESCAPE	UCA080	Repl	Comparable	$30,000	1	$30,000
Utilities	2002	FREIGHTLINER	FL70	UDD204	Repl	Comparable	$92,000	1	$92,000
Utilities	2003	FREIGHTLINER	M2106	UDD316	Repl	Comparable	$92,000	1	$92,000
Utilities	2004	FREIGHTLINER	M2106	UDD321T	Repl	Tandem-axle	$125,000	1	$125,000
Utilities	2004	FREIGHTLINER	M2106	UDD323	Repl	Comparable	$92,000	1	$92,000
Utilities	1998	FORD	555E	UDH617	Repl	Mini-excavator	$83,000	1	$83,000
Utilities	1989	FORD	FT900	UDJ819	Repl	Comparable	$225,000	1	$225,000
Utilities	2005	FORD	F-450	UDJ851	Repl	Comparable	$56,000	1	$56,000
Utilities	2005	FORD	F-450	UDJ852	Repl	Comparable	$56,000	1	$56,000
Utilities	1999	HUDSON	HTD18D	UDY928	Repl	Comparable	$16,000	1	$16,000
Utilities	2000	FORD	RANGER	UEU412	Repl	Comparable	$18,000	1	$18,000
Utilities	2001	FORD	RANGER	UEU422	Repl	Comparable	$18,000	1	$18,000
Utilities	2008	FORD	F-550	USJ710	Repl	Comparable	$71,000	1	$71,000
Utilities	2000	CHEVROLET	K-3500 C/C	USJ872	Repl	F-450 or comparable	$56,000	1	$56,000
Utilities	2002	FREIGHTLINER	FL60	USJ874	Repl	Comparable	$150,000	1	$150,000
Utilities	2005	CHEVROLET	K-2500	USJ881	Repl	Comparable	$24,000	1	$24,000
Utilities	2004	FORD	F-150 EXT	USU208	Repl	Comparable	$27,000	1	$27,000
Utilities	2006	CHEVROLET	K-1500 EXT	USU603	Repl	Comparable	$27,000	1	$27,000
Utilities	2006	FORD	ESCAPE HYBRID	UWA028	Repl	Comparable	$29,973	1	$29,973
Utilities	1981	N/A	N/A	UWT593	Repl	Comparable	$67,000	1	$67,000
Utilities	2003	FORD	F-150	UWU049	Repl	Comparable	$25,000	1	$25,000
Utilities	2000	FORD	RANGER	UWU110	Repl	Comparable	$25,000	1	$25,000
Utilities	2005	CHEVROLET	BLAZER	UAA033SM	Repl	Comparable	$30,000	1	$30,000
Utilities	1996	FORD	AEROSTAR	UAB023N	Repl	3/4 ton cargo van	$30,000	1	$30,000
Utilities	1990	CHEVROLET	C-3500	UFJ506N	Repl	F-550 or comparable	$75,000	1	$75,000
Utilities	1999	FORD	F-150	UFU028N	Repl	Comparable	$25,000	1	$25,000
Utilities	1983	SULLIVAN	DO185Q4	UFC900N	Repl	Comparable	$20,000	1	$20,000
Utilities	1991	MASSEY FERGUSON	1433V	UFT504	Repl	Comparable	$67,000	1	$67,000
Utilities		Slope Mower Addition to Fleet		Kut-Kwik	Repl	Comparable	$67,000	1	$67,000
Utilities	2001	INTERNATIONAL	4700	UDJ833	Repl	Comparable	$103,000	1	$103,000
Utilities	1992	HUDSON	HSE16	UDY579	Repl	Comparable	$16,000	1	$16,000
Utilities	1993	HUDSON	HSE16	UDY581	Repl	Comparable	$16,000	1	$16,000
Utilities	1998	HUDSON	HTD18D	UDY929	Repl	Comparable	$16,000	1	$16,000
Utilities	1998	HUDSON	HTD18D	UDY930	Repl	Comparable	$16,000	1	$16,000
Utilities	1997	HUDSON	HTD18D	UDY931	Repl	Comparable	$16,000	1	$16,000
Utilities	1999	HUDSON	HTD18D	UDY932	Repl	Comparable	$16,000	1	$16,000
Utilities	2000	HUDSON	HTD18D	UDY934	Repl	Comparable	$16,000	1	$16,000
Utilities	1999	HUDSON	HTD18D	UDY935	Repl	Comparable	$16,000	1	$16,000
Utilities	2002	FREIGHTLINER	FL80	USJ877	Repl	Combination truck	$303,000	1	$303,000
Utilities	2005	STERLING	LT7500	USJ879	Repl	Combination truck	$303,000	1	$303,000
Utilities					New	24 Turbidimeters	$43,200	1	$43,200
Utilities					New	Passive Leak Detection	$25,000	1	$25,000
Utilities					New	Active Leak Detection	$28,000	1	$28,000
Utilities					New	Acoustic Sewer Blockage Device	$237,600	1	$237,600
Utilities					New	Particle counters	$38,400	1	$38,400
Utilities					New	IC-ICPMS Lab Equipment	$230,000	1	$230,000
Utilities					New	Horizon SPE System Lab Equipment	$40,790	1	$40,790
						TOTAL UTILITIES VEHICLES		75	$4,301,463

TOTAL TECHNOLOGY EQUIPMENT	$2,200,000

TOTAL GEN EQUIP	$17,752,665
TOTAL POWELL BILL	$1,696,173
TOTAL UTILITIES VEHICLES	$4,301,463
TOTAL TECHNOLOGY EQUIPMENT	$2,200,000
TOTAL EQUIPMENT	$25,950,301

TOTAL FACILITIES & EQUIPMENT	$42,950,301

EXTRACTS FROM MINUTES OF CITY COUNCIL

* * *

A Regular Meeting of the City Council of the City of Charlotte, North Carolina was duly held in the Meeting Chamber at the Charlotte-Mecklenburg Government Center in Charlotte, North Carolina, the regular place of meeting, at 7:00 p.m. on February 10, 2014:

Members Present:

Members Absent:

* * * * * *

* * *

Councilmember _____ introduced the following resolution, a summary of which had been provided to each Councilmember, copy of which was available with the City Council and which was read by title:

RESOLUTION OF THE CITY OF CHARLOTTE, NORTH CAROLINA APPROVING AN INSTALLMENT FINANCING CONTRACT TO PROVIDE FOR THE ACQUISITION AND INSTALLATION OF CERTAIN EQUIPMENT AND THE ACQUISITION, CONSTRUCTION, FURNISHING AND EQUIPPING OF CERTAIN PROJECTS SET FORTH THEREIN

WHEREAS, the City of Charlotte, North Carolina (the "*City*") is a municipal corporation duly created and validly existing under and by virtue of the Constitution, statutes and laws of the State of North Carolina (the "*State*");

WHEREAS, the City has the power, pursuant to the General Statutes of North Carolina, to (1) purchase real and personal property, (2) enter into installment financing contracts to finance the purchase or improvement of real and personal property used, or to be used, for public purposes, and (3) grant a security interest in some or all of the property purchased or improved to secure repayment of the purchase price;

WHEREAS, the City Council of the City (the "*City Council*") hereby determines that it is in the best interest of the City to enter into an installment financing contract (the "*Contract*") with New Charlotte Corporation (the "*Corporation*") in order to provide funds (1) to finance the following projects (collectively, the "*Projects*"): (a) the purchase and installation of certain personal property (the "*Equipment*") for use by various City departments for the City's general governmental purposes, (b) the acquisition, construction, equipping and furnishing of various public safety and general

governmental facilities, including the Westover Police Station and the City's 911 Communications Center (collectively, the "*Facilities*"), and (c) the acquisition of certain real property, together with the improvements thereon (collectively, the "*Redevelopment Property*"), adjacent to the Bojangles Coliseum/Ovens Auditorium Complex (the "*Complex*") to facilitate the future redevelopment of the Complex; and (2) to pay certain costs incurred in connection with the execution and delivery of the Contract;

WHEREAS, in connection with the execution and delivery of the Contract, and to secure its obligations thereunder, the City Council hereby further determines that it is in the best interest of the City (1) to enter into a deed of trust, security agreement and fixture filing (the "*Deed of Trust*") related to all or a portion of the City's fee simple interest in the real property on which one or more of the Facilities will be located, together with the improvements thereon (collectively, the "*Mortgaged Property*") and (2) to grant to the Corporation and its assignee under the Contract a security interest in the Equipment acquired with the proceeds of the Contract;

WHEREAS, in connection with the City's plans to provide parking facilities and other amenities to support the redevelopment of the Complex, the City intends, at the appropriate time, to demolish any improvements acquired as part of the Redevelopment Property not constituting a public purpose;

WHEREAS, City hereby determines that the acquisition of the Projects is essential to the City's proper, efficient and economic operation and to the general health and welfare of its inhabitants; that the Projects will provide an essential use and will permit the City to carry out public functions that it is authorized by law to perform; and that entering into the Contract and Deed of Trust is necessary and expedient for the City by virtue of the findings presented herein;

WHEREAS, the City hereby determines that the Contract allows the City to finance the Projects and to take title thereto at a favorable interest rate currently available in the financial marketplace and on terms advantageous to the City;

WHEREAS, the City hereby determines that the estimated cost of financing the Projects is an amount not to exceed $45,000,000.00, and that such cost of financing the Projects exceeds the amount that can be prudently raised from currently available appropriations, unappropriated fund balances and non-voted bonds that could be issued by the City in the current fiscal year pursuant to Article V, Section 4 of the Constitution of the State;

WHEREAS, although the cost of financing the Projects pursuant to the Contract is expected to exceed the cost thereof pursuant to a bond financing for the same undertaking, the City hereby determines that the cost of financing the Projects pursuant to the Contract and Deed of Trust and the obligations of the City thereunder are preferable to a general obligation bond financing or revenue bond financing for several reasons, including but not limited to the following: (1) the cost of a special election necessary to approve a general obligation bond financing, as required by the laws of the State, would result in the expenditure of significant funds; (2) the time required for a general obligation bond election would cause an unnecessary delay which would thereby decrease the financial benefits of financing the Projects; and (3) insufficient revenues are produced by the Projects so as to permit a revenue bond financing;

WHEREAS, the City has determined and hereby determines that the estimated cost of financing the Projects pursuant to the Contract reasonably compares with an estimate of similar costs under a bond financing for the same undertaking as a result of the findings delineated in the above preambles;

WHEREAS, the City does not anticipate a future property tax increase to pay installment payments falling due under the Contract;

WHEREAS, the sums to fall due under the Contract will be adequate but not excessive for its proposed purpose;

WHEREAS, Parker Poe Adams & Bernstein LLP, as special counsel ("*Special Counsel*"), will render an opinion to the effect that entering into the Contract and the transactions contemplated thereby are authorized by law;

WHEREAS, no deficiency judgment may be rendered against the City in any action for its breach of the Contract, and the taxing power of the City is not and may not be pledged in any way directly or indirectly or contingently to secure any moneys due under the Contract;

WHEREAS, the City is not in default under any of its debt service obligations;

WHEREAS, the City's budget process and Annual Budget Ordinance are in compliance with the Local Government Budget and Fiscal Control Act, and external auditors have determined that the City has conformed with generally accepted accounting principles as applied to governmental units in preparing its Annual Budget ordinance;

WHEREAS, past audit reports of the City indicate that its debt management and contract obligation payment policies have been carried out in strict compliance with the law, and the City has not been censured by the North Carolina Local Government Commission (the "*LGC*"), external auditors or any other regulatory agencies in connection with such debt management and contract obligation payment policies;

WHEREAS, the Corporation will execute and deliver one or more series of certificates of participation to evidence proportionate undivided interests in rights to receive certain Revenues pursuant to the Contract (collectively, the "*2014 Certificates*");

WHEREAS, in connection with the sale of the 2014 Certificates by the Corporation to Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Bank, National Association (collectively, the "*Underwriters*"), the Corporation will enter into the Contract of Purchase (as defined below) and the City will execute a Letter of Representation to the Underwriters (the "*Letter of Representation*");

WHEREAS, there have been described to the City Council the forms of the following documents (collectively, the "*Instruments*"), copies of which have been made available to the City Council, which the City Council proposes to approve, enter into and deliver, as applicable, to effectuate the proposed installment financing:

(1) the Contract;

(2) the Deed of Trust;

(3) an Indenture of Trust dated as of March 1, 2014 (the "*Indenture*") between the Corporation and the Trustee;

(4) a Contract of Purchase to be dated on or about March 14, 2014 (the "*Contract of Purchase*") among the Corporation and the Underwriters; and

(5) the Letter of Representation;

WHEREAS, to make an offering and sale of the 2014 Certificates, there will be prepared a Preliminary Official Statement (the "*Preliminary Official Statement*"), a draft thereof having been presented to the City Council, and a final Official Statement (collectively with the Preliminary Official Statement, the "*Official Statement*") with respect to the 2014 Certificates, which Official Statement will contain certain information regarding the City;

WHEREAS, the City Council has been advised that it may be in the City's best interests, based on market conditions at the time the 2014 Certificates are sold, to sell all or a portion of the 2014 Certificates (as part of a single series of 2014 Certificates or as a separate series of 2014 Certificates) directly to one or more financial institutions to be determined by the Chief Financial Officer in lieu of selling such 2014 Certificates to the Underwriters under the terms of the Contract of Purchase;

WHEREAS, it appears that each of the Instruments and the Preliminary Official Statement is in an appropriate form and is an appropriate instrument for the purposes intended;

WHEREAS, the City Council did conduct a public hearing on February 10, 2014 to receive public comment on the proposed Contract to acquire, install, construct, furnish and equip, as applicable, the Projects; and

WHEREAS, the City has filed an application to the LGC for approval of the Contract;

WHEREAS, with respect to the 2014 Certificates, Parker Poe Adams & Bernstein LLP will serve as special counsel and Corporation's counsel, DEC Associates, Inc. will serve as financial advisor, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Bank, National Association will serve as underwriters, U.S. Bank National Association will serve as trustee, McGuireWoods LLP will serve as underwriters' counsel, and Waters and Company LLC will serve as financial consultant (collectively, the "*Financing Team*");

***NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHARLOTTE, NORTH CAROLINA, AS FOLLOWS*:**

Section 1. ***Ratification of Instruments.*** All actions of the City, the City Manager, the Chief Financial Officer, the City Clerk, the City Attorney and their respective designees, whether previously or hereinafter taken, in effectuating the proposed financing are hereby approved, ratified and authorized pursuant to and in accordance with the transactions contemplated by the Instruments.

Section 2. ***Authorization of the Official Statement.*** The form, terms and content of the Official Statement are in all respects authorized, approved and confirmed, and the use of the Official Statement by the Underwriters in connection with the sale of the 2014 Certificates is hereby in all respects authorized, approved and confirmed.

Section 3. ***Authorization to Execute the Contract.*** The City approves the financing of the Projects in accordance with the terms of the Contract, which will be a valid, legal and binding obligation

of the City in accordance with its terms. The form and content of the Contract are hereby authorized, approved and confirmed in all respects, and the City Manager or the Deputy City Manager and the City Clerk and their respective designees are hereby authorized, empowered and directed, individually and collectively, to execute and deliver the Contract, including necessary counterparts, in substantially the form and content presented to the City Council, but with such changes, modifications, additions or deletions therein as they may deem necessary, desirable or appropriate, their execution thereof to constitute conclusive evidence of the City's approval of any and all changes, modifications, additions or deletions therein from the form and content of the Contract presented to the City Council. From and after the execution and delivery of the Contract, the City Manager, the Chief Financial Officer and the City Clerk are hereby authorized, empowered and directed, individually and collectively, to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of the Contract as executed.

Section 4. ***Authorization to Execute the Deed of Trust.*** The City approves the form and content of the Deed of Trust, and the Deed of Trust is hereby authorized, approved and confirmed in all respects. The City Manager or the Deputy City Manager and the City Clerk and their respective designees are hereby authorized, empowered and directed, individually and collectively, to execute and deliver the Deed of Trust, including necessary counterparts, in substantially the form and content presented to the City Council, but with such changes, modifications, additions or deletions therein as they may deem necessary, desirable or appropriate. Execution by the City Manager or the Deputy City Manager and the City Clerk or their respective designees shall constitute conclusive evidence of the City's approval of any and all such changes, modifications, additions or deletions therein from the form and content of the Deed of Trust presented to the City Council. From and after the execution and delivery of the Deed of Trust, the City Manager, the City Clerk and the Chief Financial Officer of the City are hereby authorized, empowered and directed, individually and collectively, to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of the Deed of Trust as executed.

Section 5. ***Letter of Representation.*** The form and content of the Contract of Purchase are hereby approved in all respects, and the City Manager or the Deputy City Manager is authorized to execute the Letter of Representation for the purposes stated therein.

Section 6. ***Direct Placement of 2014 Certificates.*** The direct placement of all or a portion of the 2014 Certificates with one or more financial institutions selected by the Chief Financial Officer is hereby authorized and approved if the City Manager and the Chief Financial Officer, with the advice of the City Attorney, the City's financial advisor and special counsel to the City, determine that such a direct placement of all or such portion of such 2014 Certificates is in the best interests of the City. In connection with any such direct placement of such 2014 Certificates, the City Manager, the Deputy City Manager and the Chief Financial Officer are hereby authorized, empowered and directed, individually and collectively, to negotiate, execute and deliver any and all documents, and to do any and all acts, which they, in their discretion, deem necessary or appropriate to effect the direct placement of such 2014 Certificates.

Section 7. ***City Representative.*** The City Manager, the Deputy City Manager, the Chief Financial Officer, the City Treasurer and the City Debt Manager are hereby designated as the City's representatives to act on behalf of the City in connection with the transaction contemplated by the Instruments and the Official Statement, and each is authorized to proceed with the financing of the Projects in accordance with the Instruments and to seek opinions as a matter of law from the City

Attorney, which City Attorney is authorized to furnish on behalf of the City, and opinions of law from such other attorneys for all documents contemplated hereby as required by law. The City's representatives or designees are in all respects authorized, individually and collectively, on behalf of the City to supply all information pertaining to the City as purchaser under the Contract for use in the Official Statement and the transactions contemplated by the Instruments or the Official Statement. The City Manager, the Deputy City Manager, the Chief Financial Officer, the City Treasurer, the City Debt Manager and the City Clerk or their respective designees are hereby authorized, empowered and directed, individually and collectively, to do any and all other acts and to execute any and all other documents, which they, in their discretion, deem necessary or appropriate to consummate the transactions contemplated by the Instruments or the Official Statement or as they deem necessary or appropriate to implement and carry out the intent and purposes of this Resolution.

Section 8. ***Financing Team.*** The Financing Team (including any financial institution selected by the Chief Financial Officer in accordance with Section 6 above) for the 2014 Certificates is hereby approved.

Section 9. ***Severability.*** If any section, phrase or provision of this Resolution is for any reason declared to be invalid, such declaration shall not affect the validity of the remainder of the sections, phrases or provisions of this Resolution.

Section 10 ***Repealer.*** All motions, orders, resolutions and parts thereof in conflict with this Resolution are hereby repealed.

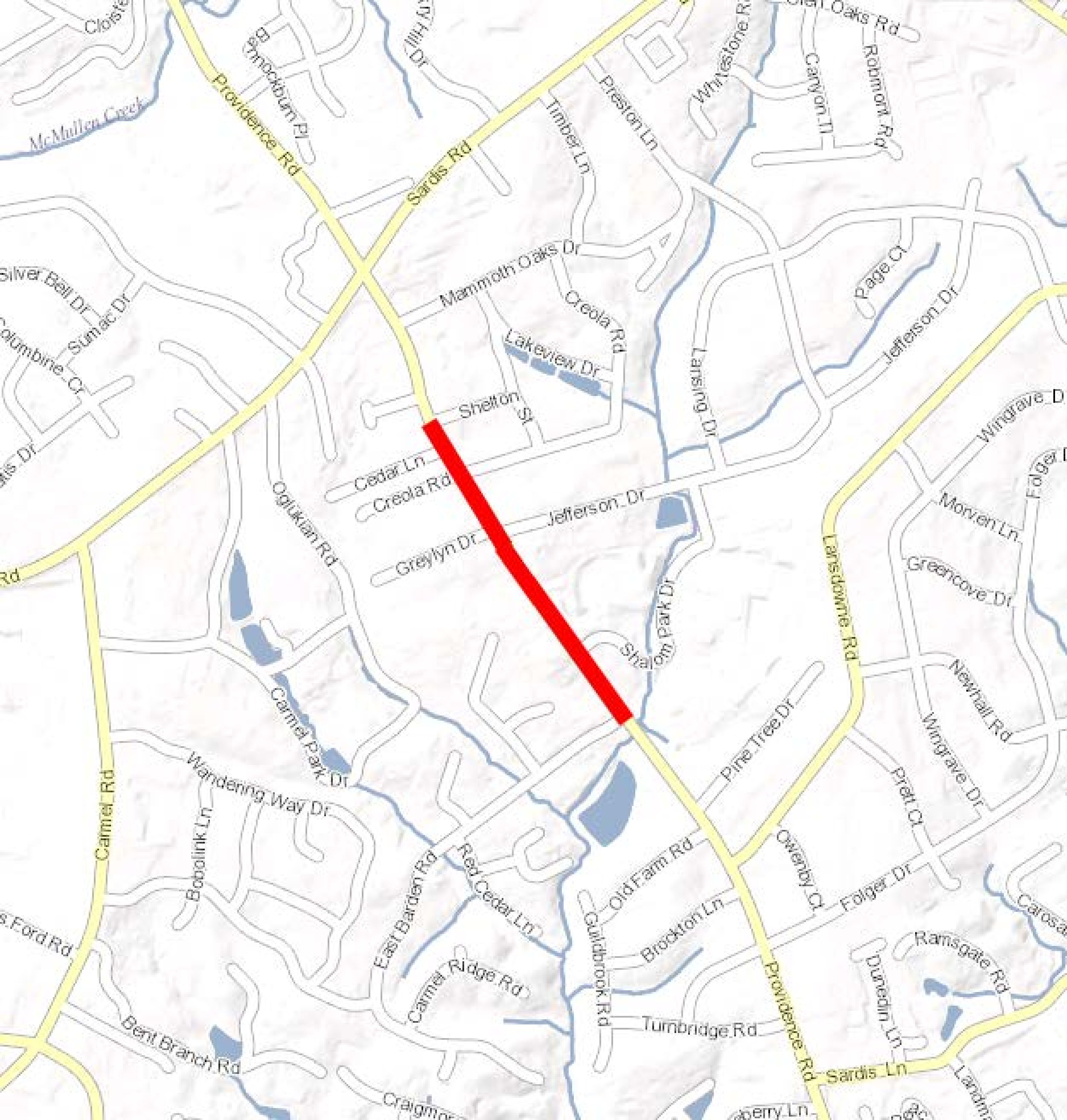
Section 11. ***Effective Date.*** This Resolution is effective on the date of its adoption.

STATE OF NORTH CAROLINA)
) ss:
CITY OF CHARLOTTE)

I, STEPHANIE C. KELLY, City Clerk of the City of Charlotte, North Carolina, ***DO HEREBY CERTIFY*** that the foregoing is a true and exact copy of a resolution entitled "**RESOLUTION OF THE CITY OF CHARLOTTE, NORTH CAROLINA APPROVING AN INSTALLMENT FINANCING CONTRACT TO PROVIDE FOR THE ACQUISITION AND INSTALLATION OF CERTAIN EQUIPMENT AND THE ACQUISITION, CONSTRUCTION, FURNISHING AND EQUIPPING OF CERTAIN PROJECTS SET FORTH THEREIN**" adopted by the City Council of the City of Charlotte, North Carolina, at a meeting held on the 10th day of February, 2014.

WITNESS my hand and the corporate seal of the City of Charlotte, North Carolina, this the ___ day of February, 2014.

STEPHANIE C. KELLY
City Clerk
City of Charlotte, North Carolina



McMullen Creek
Brockburn Pl
Ivy Hill Dr
Providence Rd
Sardis Rd
Timber Ln
Preston Ln
Whitestone Rd
Canyon Tl
Robmont Rd
Mammoth Oaks Dr
Creola Rd
Page Ct
Jefferson Dr
Silver Bell Dr
Sumac Dr
Columbine Cr
Lakeview Dr
Shelton St
Lansing Dr
Wingrave Dr
Cedar Ln
Creola Rd
Greylyn Dr
Jefferson Dr
Oglukian Rd
Morven Ln
Lansdowne Rd
Greencove Dr
Shalom Park Dr
Carmel Park Dr
Newhall Rd
Pine Tree Dr
Wandering Way Dr
Carmel Rd
Pratt Ct
Wingrave Dr
Bobolink Ln
East Barden Rd
Red Cedar Ln
Old Farm Rd
Owenby Ct
Folger Dr
Brockton Ln
Guildbrook Rd
Carmel Ridge Rd
Ramsgate Rd
Dunedin Ln
Turnbridge Rd
Bent Branch Rd
Sardis Ln
Providence Rd

ORDINANCE NO. _____

AN ORDINANCE TO AMEND ORDINANCE NUMBER 5127-X, THE 2013-2014 BUDGET ORDINANCE PROVIDING AN APPROPRIATION FOR A SIDEWALK ON PROVIDENCE ROAD BETWEEN PROVIDENCE VILLAGE LANE AND AND EAST BARDEN ROAD

BE IT ORDAINED, by the City Council of the City of Charlotte;

Section 1. That the sum of $750,000 is hereby estimated to be available from a Federal Highway Administration Congestion Mitigation Air Quality grant through the North Carolina Department of Transportation

Section 2. That the sum of $750,000 is hereby appropriated in the General Capital Investment Fund (2010) to the Providence Road Sidewalk Project (0331028).

Section 3. That the existence of this project may extend beyond the end of the fiscal year. Therefore, this ordinance will remain in effect for the duration of the project and funds are to be carried forward to subsequent fiscal years until all funds are expended or the project is officially closed.

Section 4. All ordinances in conflict with this ordinance are hereby repealed.

Section 5. This ordinance shall be effective upon adoption.

Approved as to form:

_____

City Attorney

RESOLUTION PASSED BY THE CITY COUNCIL OF THE CITY OF CHARLOTTE, NORTH CAROLINA ON FEBRUARY 10, 2014

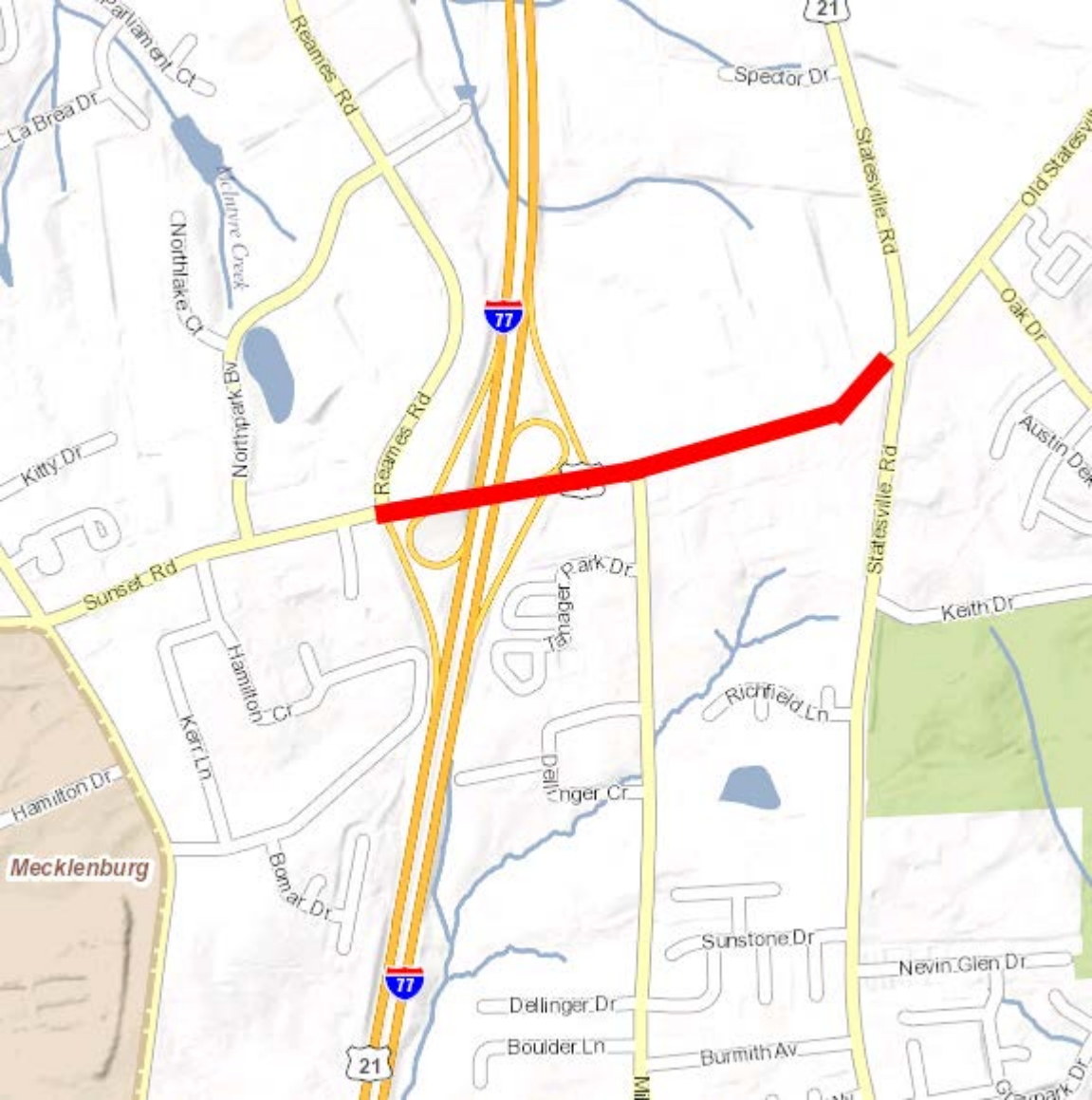
A motion was made by _____ and seconded by _____ for the adoption of the following Resolution and upon being put to a vote was duly adopted:

WHEREAS, A Municipal Agreement between the City and the North Carolina Department of Transportation (NCDOT) will allow the City accept a Congestion Mitigation and Air Quality Grant in the amount of $750,000; and,

WHEREAS**,** the City of Charlotte is committed becoming a more "walkable" community as part of an overall strategy for advancing a balanced transportation system that accommodates motorists, transit users, pedestrians, and bicyclists; and

WHEREAS, the format and cost sharing philosophy is consistent with past Municipal Agreements; and,

NOW, THEREFORE, BE IT RESOLVED that this resolution authorizing the Director of the Charlotte Department of Transportation (Transportation) to execute a municipal agreement with the NCDOT for, is hereby formally approved by the City Council of the City of Charlotte and the Director of Transportation and Clerk of this Municipality are hereby empowered to sign and execute the Agreement with the aforementioned groups.


Parliament Ct
La Brea Dr
Reames Rd
Spector Dr
21
Statesville Rd
Old Statesville
Oak Dr
Austin Dr
Mallard Creek
Northlake Ct
Northlake Rd
77
Reames Rd
Kitty Dr
Sunset Rd
Tanager Park Dr
Keith Dr
Hamilton Cr
Kerr Ln
Richfield Ln
Dellinger Cr
Hamilton Dr
Mecklenburg
Bomar Dr
Sunstone Dr
Nevin Glen Dr
77
Dellinger Dr
Boulder Ln
Burmith Av
21

ORDINANCE NO. _____

AN ORDINANCE TO AMEND ORDINANCE NUMBER 5127-X, THE 2013-2014 BUDGET ORDINANCE PROVIDING AN APPROPRIATION FOR A SIDEWALK ON BOTH SIDES OF SUNSET ROAD BETWEEN 1-77 AND STATESVILLE ROAD

BE IT ORDAINED, by the City Council of the City of Charlotte;

Section 1. That the sum of $1,386,000 is hereby estimated to be available from a Federal Highway Administration Congestion Mitigation Air Quality grant through the North Carolina Department of Transportation

Section 2. That the sum of $1,386,000 is hereby appropriated in the General Capital Investment Fund (2010) to the Sunset Road SW Project (0331004)

Section 3. That the existence of this project may extend beyond the end of the fiscal year. Therefore, this ordinance will remain in effect for the duration of the project and funds are to be carried forward to subsequent fiscal years until all funds are expended or the project is officially closed.

Section 4. All ordinances in conflict with this ordinance are hereby repealed.

Section 5. This ordinance shall be effective upon adoption.

Approved as to form:

_____

City Attorney

RESOLUTION PASSED BY THE CITY COUNCIL OF THE CITY OF CHARLOTTE, NORTH CAROLINA ON FEBRUARY 10, 2014

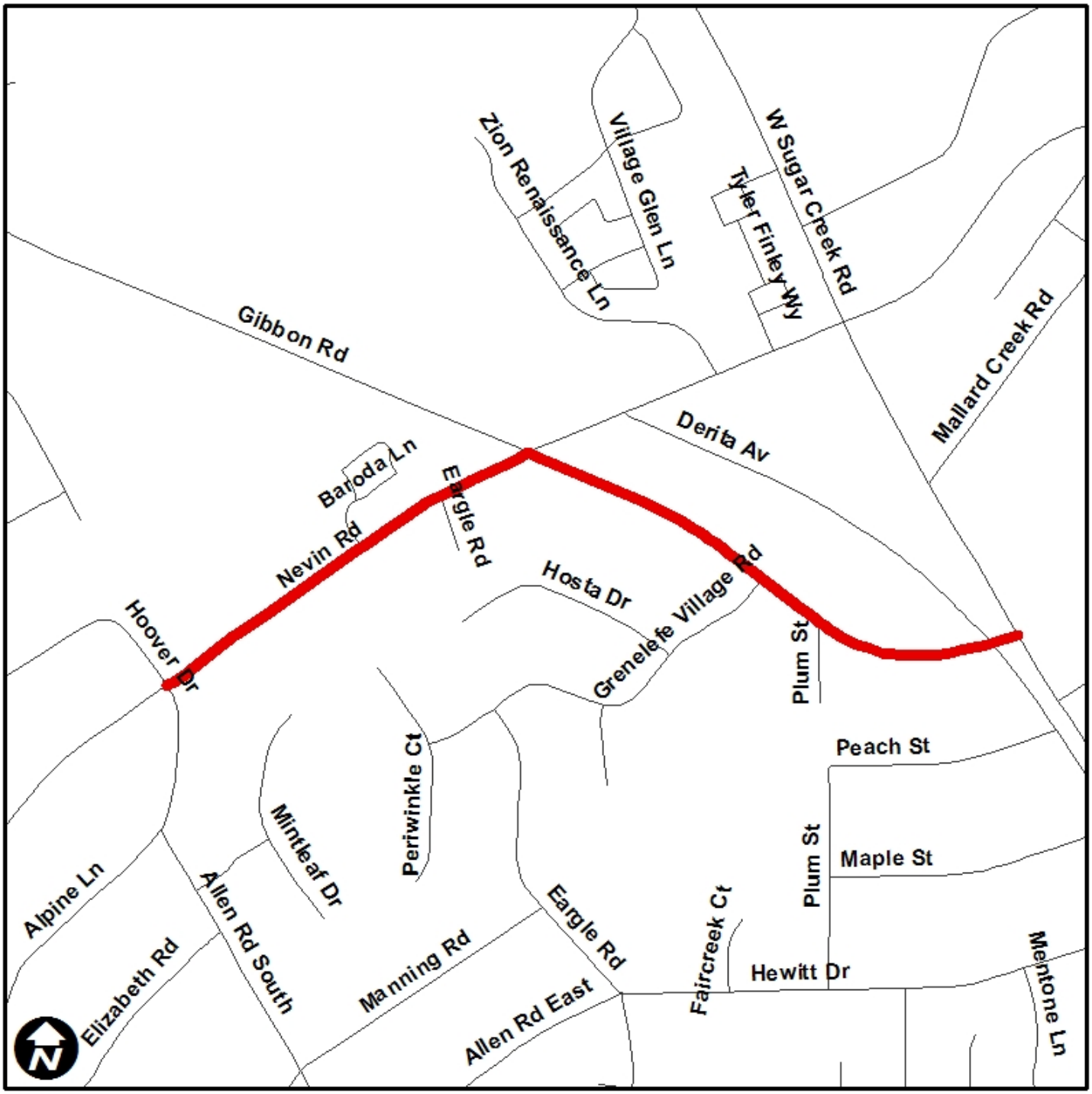
A motion was made by _____ and seconded by _____ for the adoption of the following Resolution and upon being put to a vote was duly adopted:

WHEREAS, A Municipal Agreement between the City and the North Carolina Department of Transportation (NCDOT) will allow the City accept a Congestion Mitigation and Air Quality Grant in the amount of $1,386,000; and,

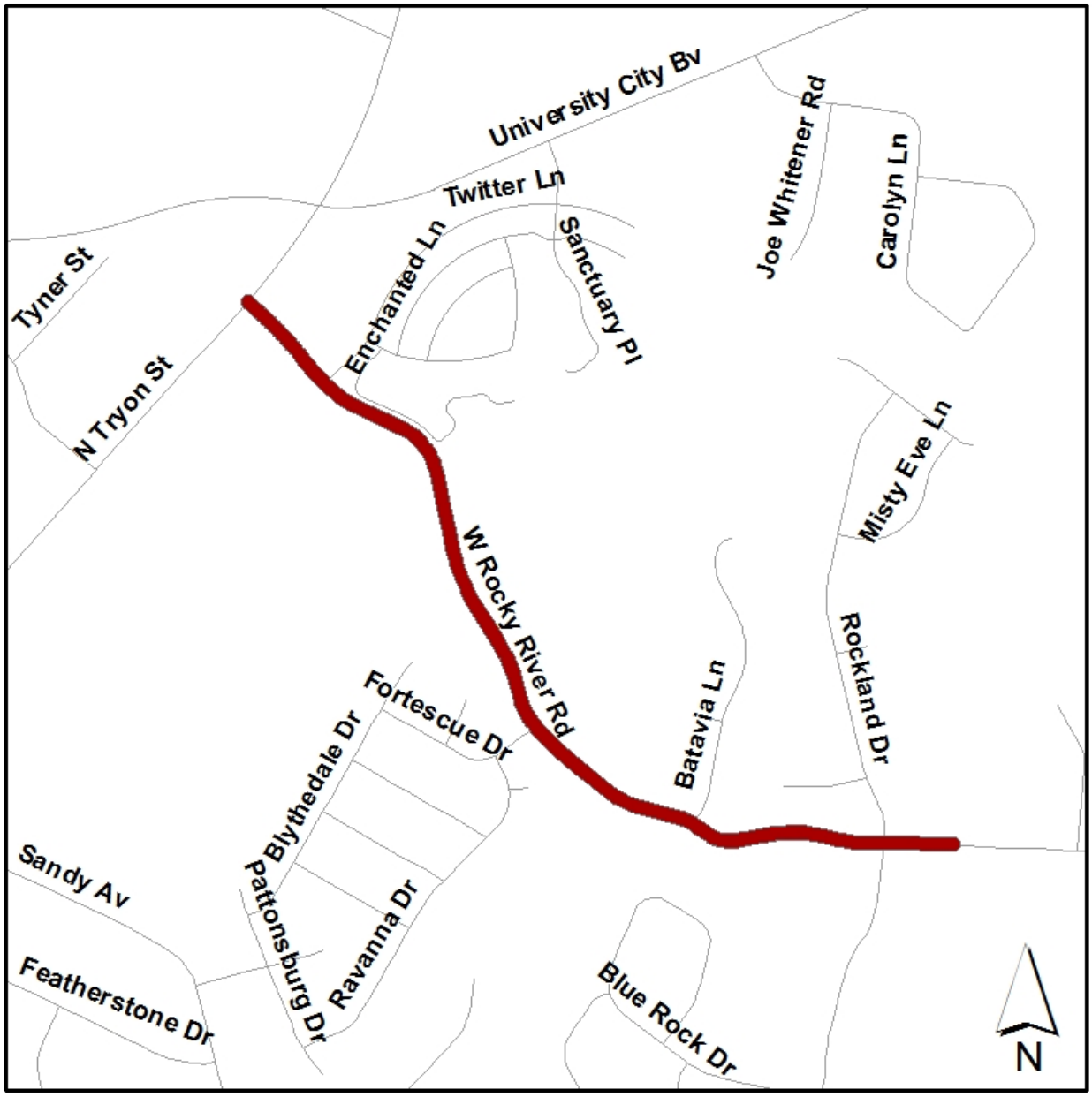
WHEREAS**,** the City of Charlotte is committed becoming a more "walkable" community as part of an overall strategy for advancing a balanced transportation system that accommodates motorists, transit users, pedestrians, and bicyclists; and

WHEREAS, the format and cost sharing philosophy is consistent with past Municipal Agreements.

NOW, THEREFORE, BE IT RESOLVED that this resolution authorizing the Director of the Charlotte Department of Transportation (Transportation) to execute a municipal agreement with the NCDOT for, is hereby formally approved by the City Council of the City of Charlotte and the Director of Transportation and Clerk of this Municipality are hereby empowered to sign and execute the Agreement with the aforementioned groups.



Location Map: Nevin Road – Gibbon Road Sidewalk Improvements



Location Map: Rocky River Road West Improvements

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

INTERLOCAL AGREEMENT

This Agreement for Pre-development Cooperation ("the Agreement"), entered into as of this _____ day of _____, 2014, by and between the **CITY OF CHARLOTTE**, a municipal corporation organized and existing under the laws of the State of North Carolina (the "City"), and **THE CHARLOTTE-MECKLENBURG BOARD OF EDUCATION**, a corporate body formed and existing in accordance with Article 5 of Chapter 115C of the General Statutes of North Carolina ("CMBE").

Background and Purpose

City has a planned road improvement project for Rocky River Road which includes road widening, addition of curb and gutter, bicycle lanes, planting strips, sidewalks, and street trees, as well as required drainage improvements and utility modifications along portions of Rocky River Road West in Charlotte, North Carolina as generally described in a concept report entitled Rocky River Road West Streetscape and dated August 17 , 2012, attached hereto and incorporated herein as Exhibit A (the "City Road Project").

CMBE owns property located at 431 Rocky River Road, Mecklenburg County Tax Parcel Nos. 049-231-03 and 049-231-51 (the "CMBE Property") and plans to build a new elementary school at this location (the "New Elementary School");

City ordinances require CMBE to make certain road improvements to Rocky River Road in connection with the development of the New Elementary School (exact scope of work to comply is not yet determined, but requirements are known to include new left turn lanes, new curb and gutter, drainage infrastructure to support new work, sidewalks, and planting strips) (the "CMBE Baseline Road Improvements").

City and CMBE desire to coordinate their respective projects so money is not wasted, citizens are not unduly inconvenienced, and the CMBE Baseline Road Improvements are not removed when the City Road Project is constructed.

The first step to coordinate these planned projects is to have an integrated, single design for the City Road Project and the CMBE Baseline Road Improvements, such that the City Road Project incorporates the CMBE Baseline Road Improvements.

The parties also acknowledge their intention to equitably share the costs of this joint effort, with CMBE's equitable share of the cost being the cost of the CMBE Baseline Road Improvements and the City's equitable share of cost being the difference between the total cost of the City Road Project and the cost of CMBE Baseline Road Improvements alone. The City and CMBE also acknowledge that they anticipate - but are not yet certain since preliminary design work has not been completed - that the scope of road improvements along the CMBE

Property that will be desired in order to be consistent with the City Road Project will be more extensive and will marginally increase the cost of the CMBE Baseline Road Improvements, such enhanced scope referred to herein as the "CMBE Enhanced Road Improvements" (and, if City and CMBE subsequently agree to have the CMBE Enhanced Road Improvements constructed, that the City will be responsible for any cost differential between the CMBE Baseline Road Improvements and the CMBE Enhanced Road Improvements).

The purpose of this Agreement is to memorialize the parties' agreement regarding the first phase of this design work and subsequent steps that may be taken after the preliminary design is completed. Depending on the results of the preliminary design work, the parties may enter into subsequent agreements regarding (i) the final design and (ii) construction of their respective improvements consistent with the terms of this Agreement.

Accordingly, City and CMBE agree as follows:

Agreement

1. Joint Design.

    a. CMBE to Amend Contract with Its Architect. Because CMBE already has an architect under contract, CMBE will amend its contract with its architect to complete a preliminary design of the City Road Project, inclusive of CMBE Enhanced Road Improvements. Results of the preliminary design effort must be sufficient to determine agreeable horizontal and vertical alignments of the Project from the intersection of Rocky River Road with North Tryon Street to a point on Rocky River Road that is approximately at the intersection of Rocky River Road and Batavia Lane ("Project Area").The scope of services for preliminary design is described on Exhibit B attached hereto and incorporated herein by reference (the "Scope of Services").

    b. Changes in Preliminary Design. The parties may mutually agree to add additional design services. Payment for any such additional services shall be the responsibility of the party seeking the additional service. If the service applies to and benefits both parties, payment for the additional services shall be allocated between the parties pursuant to a formula mutually agreed upon by the parties.

    c. Payment Responsibilities of CMBE. CMBE shall be responsible for making all payments to the architect for preliminary design services rendered in connection with the City Road Project. CMBE shall provide to the City detailed invoices for the costs associated solely with preliminary design of the City Road Project. Within seven (7) business days of the receipt of the invoice, CMBE will email a copy of those portions of the invoice to the City for its review and approval. City shall complete its review within seven (7) business days and notify CMBE by email that the invoice is approved or request modifications or clarification.

2. Cost Sharing. The City agrees to reimburse CMBE for funds up to $135,000 ("City Reimbursement Amount") for the preliminary design for City Road Project in accordance with the Scope of Services. City agrees to pay CMBE the actual costs incurred for paying the architect for the preliminary design of the City Road Project. CMBE shall cause its architect to determine the portion of the cost of the preliminary design work equitably allocated to the City, such amount to be reviewed and approved by both City staff and CMBE staff in advance of commencement of the preliminary design work by the architect. City agrees to pay CMBE within thirty (30) calendar days of submission of all approved invoices.

3. No Negative Schedule Impact to CMBE; No Negative Financial Impact to CMBE. The parties acknowledge and agree that this cooperative effort will not negatively impact the opening of the New Elementary School for the 2015-2016 school year and will not cost CMBE more than it otherwise would spend on the preliminary design of the CMBE Baseline Road Improvements. It is further acknowledged and agreed that it is possible, depending on the time it takes to complete the design of the entire City Road Project and the practicality of the designer being able to design the portion of the Project such that there are CMBE Enhanced Road Improvements that can be constructed separately, that the New Elementary school will open without the City Road Project or any portion thereof (including the CMBE Enhanced Road Improvements or CMBE Baseline Road Improvements) being completed. The City agrees to cooperate and use best efforts to facilitate release of all building and other permits for the New Elementary School and agrees not to withhold or unreasonably delay release of permits due to any incomplete City Road Project or portion thereof (including the CMBE Enhanced Road Improvements or CMBE Baseline Road Improvements) and that the City will cooperate and use best efforts to facilitate release of a certificate of occupancy for the New Elementary School and will not withhold or unreasonably delay its release due to any incomplete City Road Project or portion thereof (including the CMBE Enhanced Road Improvements or CMBE Baseline Road Improvements).

4. Agreed Upon Next Steps. Subsequent Agreement for Final Design and Construction; Remedies if no Subsequent Agreement Reached. Subject to the parties' obligations as stated in paragraph 3, after review and approval of the preliminary design, City and CMBE may enter into at least two subsequent agreements as follows: (i) an agreement for final design of the City Road Project (inclusive of the CMBE Enhanced Road Improvements), and (ii) an agreement for the construction of the City Road Project (inclusive of the CMBE Enhanced Road Improvements). At this time, the City and CMBE are not certain as to the specifics of such future agreements or whether such agreements will be entered into, since, at this time (prior to completion of the preliminary design work contemplated by this Agreement), the City and CMBE do not know whether it is practically feasible to complete the entire City Road Project on budget and within a reasonable schedule. However, the parties agree that the following options appear to be available:

a. City and CMBE Determine that City Road Project (inclusive of the CMBE Enhanced Road Improvements) is Feasible and Desired to be Constructed as a Single Project.
    i. CMBE pays City CMBE's pro rata share of the cost of the City Road Project (i.e. the amount of the estimated cost of the CMBE Baseline Road Improvements to be determined as part of this preliminary design work); City builds entire road project; goal is to have work completed before school opening in August 2015, but school can open with or without City having completed its portion; or
    ii. City pays CMBE the City's pro rata share (amount to be determined as part of this design work); CMBE builds entire project; goal is to have work completed before school opening in August 2015, but school can open with or without CMBE having completed its portion.

b. City and CMBE determine that the City Road Project should be built in two phases: (i) CMBE Enhanced Road Improvements, and (ii) remainder of City Road Project.
    i. City pays CMBE the City's pro rata share (the difference between the estimated cost of the CMBE Baseline Road Improvements and the CMBE Enhanced Road Improvements); CMBE builds CMBE Enhanced Road Improvements; goal is to have work completed before school opening in August 2015 but school can open with or without CMBE having completed its portion.

c. City and CMBE determine that the City Road Project is not feasible.

    i. CMBE reverts to designing, permitting, and construction the CMBE Baseline Road Improvements all at CMBE expense; goal is to have work completed before school opening in August 2015 but school can open with or without CMBE having completed its portion.

If the City and CMBE, for any reason or no reason at all, do not enter into a subsequent agreement regarding final design and construction of improvements, then CMBE shall proceed with option c.i.

5. Interim Safe Access to New Elementary School. Should at any point the City and CMBE jointly determine that the CMBE Baseline Road Improvements or CMBE Enhanced Road Improvements cannot or should not be completed by the date that CMBE seeks to receive a final certificate of occupancy for the New Elementary School, CMBE shall construct minimum improvements, as shown on the City Approved Land Development Plan LDC-2013-00211 dated _____, 2014, a copy of which is attached hereto and incorporated herein as Exhibit C.

6. Miscellaneous.

a. Notices: All notices required or permitted to be given hereunder shall be deemed given if emailed, hand delivered or faxed with a mailed copy to follow, or mailed in a sealed wrapper and deposited in the United States Mail, registered or certified, return receipt requested, postage prepaid, properly addressed as follows:

If to the City:

Jim Keenan, PE
City of Charlotte
Engineering & Property Management
600 East Fourth Street
Charlotte, NC 28202
(704)336-4252
Email: jkeenan@charlottenc.gov

If to CMBE:

Mike Higgins
CMS Capital Program Services
3301 Stafford Drive
Charlotte, NC 28208
(704) 201-3406
Email: m.higgins@cms.k12.nc.us

Copy to:
Dennis K. LaCaria
Director, Facilities Planning & Real Estate
(980)343-6880 Ph
(980)722-5728 cell
Email: dennis.lacaria@cms.k12.nc.us

Either party may change its notice address, the City Road Project Manager or CMBE Project Manager, as applicable, by giving written notice of the change to the other party in the manner specified above ten (10) days prior to the effective date of such change.

b. No Third Party Rights: This Agreement is entered into by and between the parties hereto for their exclusive benefit. The parties do not intend to create or establish by this Agreement any third-party beneficiary status or rights, and no such third-party shall be entitled to enforce any right of obligation or enjoy any benefit created or established by this Agreement.

c. Binding Effect: This Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns.

d. Applicable Law: This Agreement shall be enforced, interpreted and construed by and under the laws of the State of North Carolina.

e. Severability: The invalidity or unenforceability of any one or more phrases, sentences, clauses or provisions of this Agreement shall not affect the validity or enforceability of the remaining portion of this Agreement or any part hereof.

f. Captions: The captions and headings set forth in this Agreement are for convenience of reference only and shall not be construed as part of this Agreement.

g. Multiple Originals: This Agreement is executed in multiple originals, one of which is being retained by each of the parties hereto and each of which shall be deemed an original hereof.

7. Compliance with Laws: CMBE shall comply with all Federal, State, and local laws, ordinances, and regulations applicable to the services provided herein. If, due to conflicts between two or more such ordinances, statutes, laws, rules, and regulations (the "Regulations") or due to conflicts in the interpretation or enforcement of such Regulations by courts or governing bodies having jurisdiction over the project, CMBE is unable to comply with such Regulations, CMBE shall exercise usual and customary care in complying with such conflicting Regulations.

   CMBE further agrees that it will at all times during the term of this Agreement be in compliance with all applicable Federal, State and/or local laws regarding employment practices. Such laws include, but shall not be limited to workers' compensation, the Fair Labor Standards Act (FSLA), the Americans with Disabilities Act (ADA), the Family and Medical Leave Act (FMLA), and all Occupational Safety and Health Administration (OSHA) regulations applicable to the work.

8. Drug Free Workplace Requirement: CMBE shall provide a drug-free workplace during the performance of this Agreement. This obligation is met by:

   a. Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the CMBE workplace and specifying the actions that will be taken against employees for violations of such prohibition;

   b. Establishing a drug-free awareness program to inform employees about (i) the dangers of drug abuse in the workplace, (ii) the CMBE policy of maintaining a

drug-free workplace, (iii) any available drug counseling, rehabilitation, and employee assistance programs and (iv) the penalties that may be imposed upon employees for drug abuse violations;

c. Notifying each employee that as a condition of employment, the employee will (i) abide by the terms of the prohibition outlined in this Article and (ii) notify CMBE of any criminal drug statute conviction for a violation occurring in the workplace not later than five (5) days after such conviction;

d. Notifying the City within ten (10) days after receiving from an employee a notice of a criminal drug statute conviction or after otherwise receiving actual notice of such conviction, unless otherwise forbidden to communicate such information to third parties under the CMBE drug-free awareness program or other restrictions;

e. Imposing a sanction on, or requiring the satisfactory participation in a drug counseling, rehabilitation or abuse program by an employee convicted of drug crime;

f. Making a good faith effort to continue to maintain a drug-free workplace for employees; and

g. Requiring any party to which it subcontracts any portion of the work under the Agreement to comply with the provisions above.

If CMBE is an individual, the requirement is met by not engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of this Agreement.

Failure to comply with the above drug-free workplace requirements during the performance of the Agreement shall be grounds for suspension, termination or debarment.

9. Commercial Non-Discrimination Clause: As a condition of entering into this Agreement, CMBE represents and warrants that it will fully comply with the City's Commercial Non-Discrimination Policy as described in Section 2, Article V of the Charlotte City Code, and consents to be bound by the award of any arbitration conducted thereunder. As part of such compliance, CMBE shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, age, or disability in the solicitation, selection, hiring, or treatment of subconsultants, vendors, suppliers, or commercial customers in connection with a City contract or contract solicitation process, nor shall CMBE retaliate against any person or entity for reporting instances of such discrimination.

CMBE shall provide equal opportunity for subconsultants, vendors and suppliers to participate in all of its subcontracting and supply opportunities on City contracts, provided that nothing contained in this clause shall prohibit or limit otherwise lawful efforts to remedy the effects of marketplace discrimination that has occurred or is occurring in the marketplace. CMBE understands and agrees that a violation of this

clause shall be considered a material breach of this Agreement and may result in termination of this Agreement, disqualification of CMBE from participating in City contracts or other sanctions.

As a condition of entering into this Agreement, CMBE agrees to: (a) promptly provide to the City all information and documentation that may be requested by the City from time to time regarding the solicitation, selection, treatment and payment of subconsultants in connection with this Agreement; and (b) if requested, provide to the City within sixty days after the request a truthful and complete list of the names of all subconsultants, vendors, and suppliers that CMBE has used on City contracts in the past five years, including the total dollar amount paid by CMBE or on each subcontract or supply contract.

CMBE further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Commercial Non-Discrimination Policy as set forth in Section 2, Article V of the City Code, to provide any documents relevant to such investigation that are requested by the City, and to be bound by the award of any arbitration conducted under such Policy. CMBE understands and agrees that violation of this clause shall be considered a material breach of this Agreement and may result in contract termination, disqualification of CMBE from participating in City contracts and other sanctions.

10. E-Verify: As a condition for payment under this Agreement, CMBE shall: (i) comply with the E-Verify requirements set forth in Article 2 of Chapter 64 of the North Carolina General Statutes (the "E-Verify Requirements"); and (ii) cause each subcontractor under this Agreement to comply with such E-Verify Requirements as well. CMBE will indemnify and save harmless the City from all losses, damages, costs, expenses (including reasonable attorneys' fees), obligations, duties, fines, penalties, interest charges and other liabilities (including settlement amounts) incurred on account of any failure by CMBE or any subcontractor to comply with the E-Verify Requirements.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

CITY OF CHARLOTTE **ATTEST**

By: _____ _____
City Manager

_____ _____
Printed Name *Printed Name*

Date: _____ Date: _____

THE CHARLOTTE-MECKLENBURG BOARD OF EDUCATION **ATTEST**

By: _____ _____
Superintendent

_____ _____
Printed Name *Printed Name*

Date: _____ Date: _____

EXHIBIT A

ROCKY RIVER ROAD WEST STREETSCAPE

August 17, 2012

Rocky River Road West Streetscape

NECI ID: 196

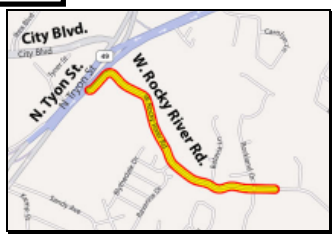
PROJECT SUMMARY

- **Project Type:** Streetscape
- **Project Goals:** To encourage multi-modal transportation, provide a bicycle and pedestrian friendly connection between the light rail station and the future Toby Creek Greenway, and address existing sight distance concerns along the corridor.
- **Project Description:** 3/4 mile streetscape along Rocky River Road from North Tryon Street to Toby Creek Greenway.

FEASIBILITY CONCLUSIONS

Rocky River Road provides a connection for several neighborhoods to access the proposed University City Boulevard Station along the Blue Line Extension, which is located on North Tryon Street between I-85 Connector and City Boulevard. Improvements to this connection would promote transit use by accommodating alternative transportation choices. This project would also improve existing sight conditions, at tight roadway curves.

Three alternatives were considered for this project. Alternative 1 addresses the concerns given by creating a streetscape with elements such as bike lanes, curb and gutter, sidewalk, ped-scale lighting and landscaping. In addition, horizontal curvature of the existing road was reviewed and modifications were made to improve sight distance. Alternatives 2 and 3 are various combinations of a multi-use path in lieu of the streetscape. This idea was considered because an existing trail runs parallel to Rocky River Road West for approximately 600 ft and it connects to an additional 650 ft of sidewalk at the Rocky River Village neighborhood. Grading can still be completed to address sight distance concerns while the multi-use path creates a connection that accomplishes the project goals. Trails, assuming they are properly lit and visible, provide an excellent walking and riding experience for pedestrians and bicyclists. In addition, the costs and environmental impacts should be significantly less. Both Alternatives 2 and 3 show mid-block pedestrian/bicycle crossings across Rocky River Road at different locations. Consider providing a pedestrian signal if crossing alternative is preferred. Alternative 2a also includes potential sidewalk along Rockland Drive. This will provide a connection between the neighborhood off Blue Rock Road and the trail, giving access to both the future greenway along Toby Creek and the University City Boulevard light rail station.



Rocky River Road West Streetscape

NECI ID: 196

PROJECT COSTS

ALTERNATIVE 1 WITH BIKE LANES AND ROAD IMPROVEMENTS

Construction	$3,152,000
Planning, Design, and Administration	$630,000
Utility Relocation	$95,000
Right-of-Way	$795,000
Total Project Cost	$5,117,200

ALTERNATIVE 2 WITH MULTI-USE PATH OPTION 1 (INCLUDES ALTERNATIVE 2A)

Construction	$1,157,000
Planning, Design, and Administration	$231,000
Utility Relocation	$43,000
Right-of-Way	$498,000
Total Project Cost	$2,152,700

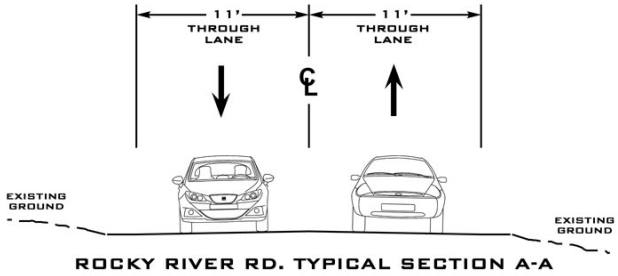
ALTERNATIVE 3 WITH MULTI-USE PATH OPTION 2

Construction	$842,000
Planning, Design, and Administration	$168,000
Utility Relocation	$73,000
Right-of-Way	$346,000
Total Project Cost	$1,586,200

Rocky River West Streetscape

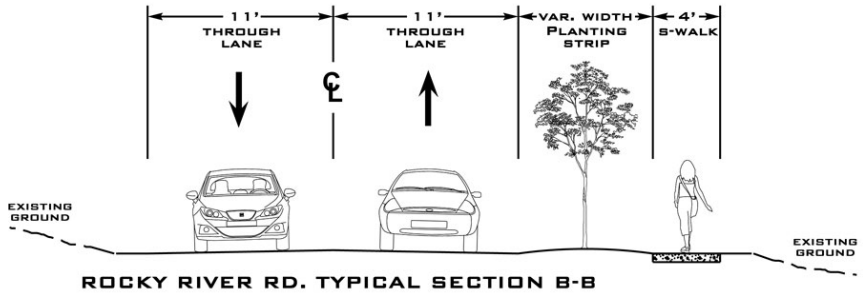
NECI ID: 196

EXISTING CROSS SECTIONS



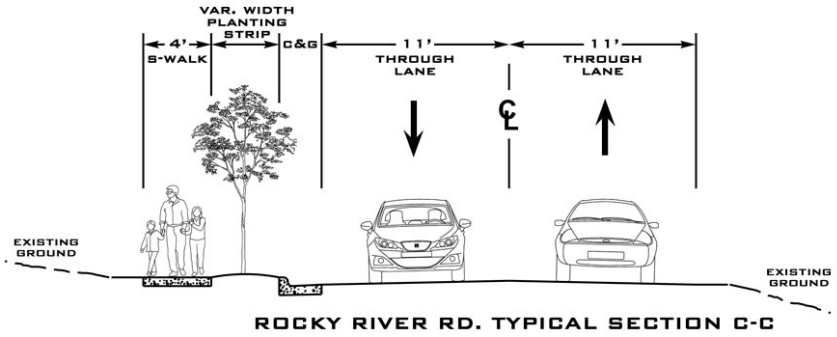
ROCKY RIVER RD. TYPICAL SECTION A-A

- 2-lane section



ROCKY RIVER RD. TYPICAL SECTION B-B

- 2-lane section with varying planting strip and sidewalk



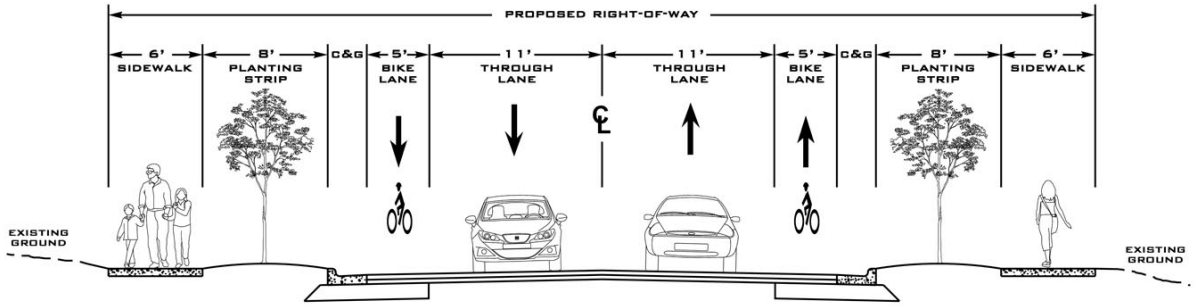
ROCKY RIVER RD. TYPICAL SECTION C-C

- 2-lane section with varying planting strip and sidewalk

Rocky River West Streetscape

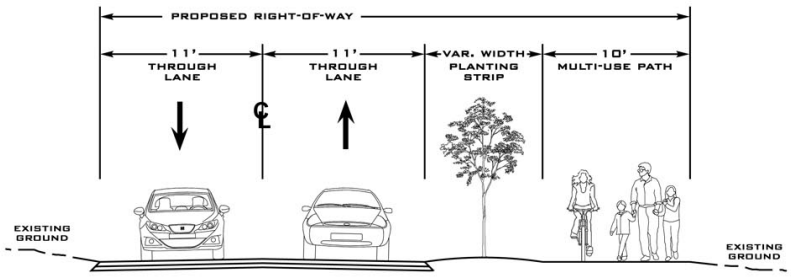
NECI ID: 196

CONCEPTUAL CROSS SECTIONS



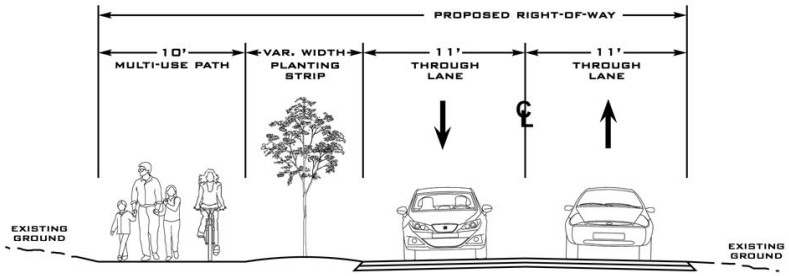
ROCKY RIVER RD. TYPICAL SECTION D-D

- Alternative 1: 2-lane section with bike lanes, planting strip, and sidewalk



ROCKY RIVER RD. TYPICAL SECTION E-E

- Alternatives 2 & 3: 2-lane section with varying planting strip and multi-use path



ROCKY RIVER RD. TYPICAL SECTION F-F

- Alternative 3: 2-lane section with varying planting strip and multi-use path

Rocky River West Streetscape

NECI ID: 196

Rocky River Road Concept Design Criteria	
USDG Street Classification	Avenue
Design Speed/Posted Speed	40 mph/35 mph
Design Vehicle	B-40
Lane Width	11’
Bike Lane Width	5’
Planting Strip Width	Varies
Sidewalk Width	6’
On-Street Parking	No
Curb and Gutter	2’-6”
Landscaping	Yes
Maintained By	City of Charlotte
SUE	2’ Back of Sidewalk
Construction Easement	10’ Back of SUE
Multi-use Path	10’

COST ASSUMPTIONS

- Roadway and Drainage Assumptions
  - Pedestrian lights-$5000/ea at 100’ spacing included in estimate.
  - Street trees-$500/ea at 50’ spacing included in estimate.
  - Culvert extension-$50,000 included for alternatives 1&2, $30,000 for alternative 3.
  - Interlocking block retaining wall-$25/sf included in estimate.
  - Pedestrian bridge-$12,000/ea included in estimate.
- Utility Assumptions
  - Utility relocation will be a 60/40 split between the City of Charlotte and utility companies.

Rocky River West Streetscape

NECI ID: 196

FEASIBILITY ISSUES

ALTERNATIVE 1

Constraints	High	Moderate	Low
Wetlands	✓		
Environmental	✓		
Drainage		✓	
Traffic Volumes		✓	
Political Environment			✓
Building Impacts			✓
Right-of-way		✓	
Structures	✓		
Utilities		✓	

ALTERNATIVE 2

Constraints	High	Moderate	Low
Wetlands		✓	
Environmental		✓	
Drainage			✓
Traffic Volumes		✓	
Political Environment			✓
Building Impacts			✓
Right-of-way		✓	
Structures	✓		
Utilities		✓	

Rocky River West Streetscape

NECI ID: 196

ALTERNATIVE 3

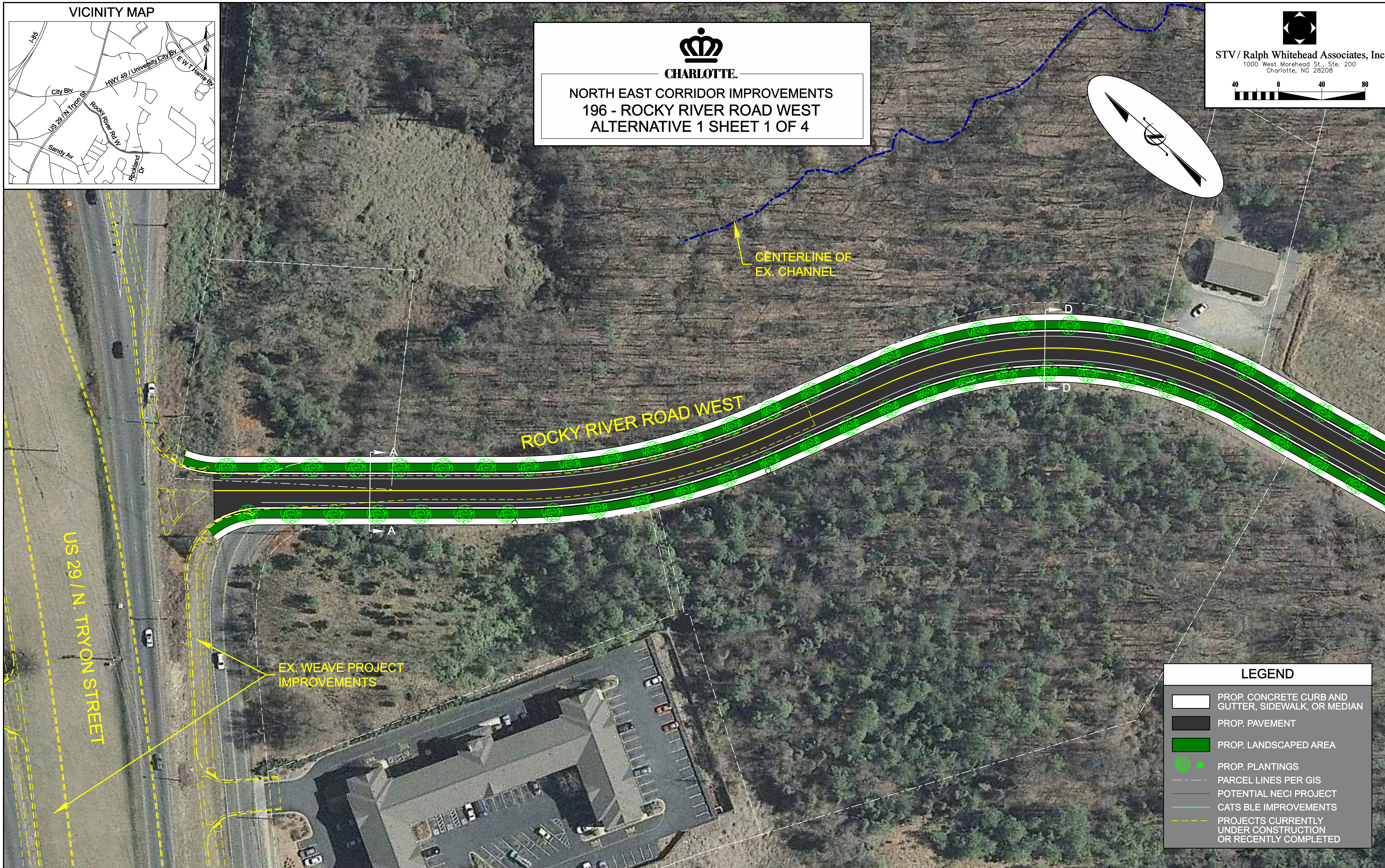
Constraints	High	Moderate	Low
Wetlands			✓
Environmental			✓
Drainage			✓
Traffic Volumes		✓	
Political Environment			✓
Building Impacts			✓
Right-of-way			✓
Structures		✓	
Utilities		✓	

- A large existing culvert is located within the boundaries for this project, at the Toby Creek crossing. Widening the cross section may cause the culvert to be extended, triggering a MOA or CLOMR. The existing culvert overtops in the 100 year storm, therefore the new culvert would need to accommodate a 100 year storm event and meet City Design Standard. A future greenway is planned along Toby Creek. The potential extension of the existing culvert should be coordinated with the anticipated timing of design and construction of this greenway. This will consolidate permitting needs for the two projects.
- A future farm-to-market study is anticipated for this roadway. The NECI Project should include accommodating the preferred cross-section for the farm-to-market project if feasible.
- The Post-Construction Controls Ordinance may affect the cross-section as well as add additional cost to treat run-off.
- An existing transformer may need to be relocated as well as existing overhead lines.
- Sight distance issues occurring along Rocky River Road will require grading as well as flattening horizontal curves.
- Retaining walls may be required in multiple locations due to the existing topography.
- A pedestrian/bicycle crossing will be required at Fortescue Drive.
- A jurisdictional tributary of Toby Creek parallels Rocky River Road. Flattening curves to improve sight distance may require the channel to be realigned, requiring a Nationwide 14 permit. The extension of the existing sidewalk as a multi-use path (one of our proposed alternatives) also poses potential conflicts with the tributary. Two pedestrian bridges may need to be constructed in order to cross the stream, which will also require a Nationwide 14 permit.

Rocky River West Streetscape

NECI ID: 196

- Pedestrian street crossing and greenway access locations should be evaluated as well as appropriate crossing treatments.



CHARLOTTE.
NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
ALTERNATIVE 1 SHEET 1 OF 4
STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
40
0
40
80
VICINITY MAP
I-85
City Blv
HWY 49 / University City Bv
E W T Harris Bv
US 29 / N Tryon St
Rocky River Rd W
Sandy Av
Rockland Dr
CENTERLINE OF
EX. CHANNEL
ROCKY RIVER ROAD WEST
A
A
D
D
US 29 / N. TRYON STREET
EX. WEAVE PROJECT
IMPROVEMENTS
LEGEND
PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
PROP. PAVEMENT
PROP. LANDSCAPED AREA
PROP. PLANTINGS
PARCEL LINES PER GIS
POTENTIAL NECI PROJECT
CATS BLE IMPROVEMENTS
PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

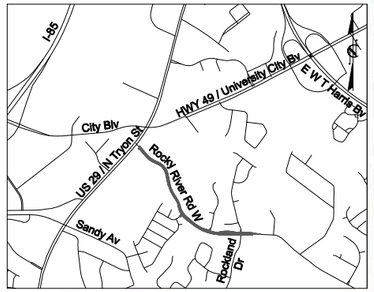
CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
ALTERNATIVE 1 SHEET 2 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

VICINITY MAP



ROCKY RIVER ROAD WEST

A
B
C
D

EXTEND EX. CULVERT

EXISTING TRAIL MAY NEED ADA IMPROVEMENTS

NON-MECHANICAL CLEARING

CENTERLINE OF EX. CHANNEL

FORTESCUE DRIVE

PROVIDE MAINTENANCE DRIVEWAY FOR EX. TRANSFORMER

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

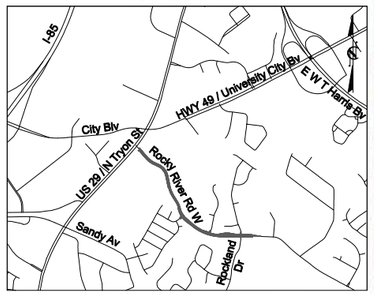
CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
ALTERNATIVE 1 SHEET 3 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte NC 28208

40 0 40 80

VICINITY MAP



BATAVIA LANE

POTENTIAL LANDSCAPING / ART OPPORTUNITY AREA

ROCKY RIVER ROAD WEST

REVISE HORIZONTAL CURVATURE TO IMPROVE SIGHT DISTANCE

PROVIDE MAINTENANCE DRIVEWAY FOR EX. TRANSFORMER

CENTERLINE OF EX. CHANNEL

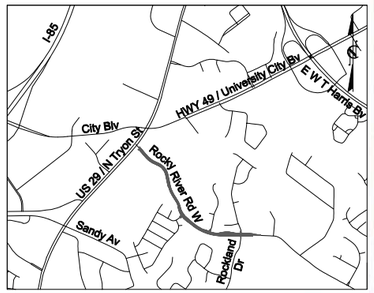
PROP. CHANNEL REALIGNMENT

B B C C D D

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
ALTERNATIVE 1 SHEET 4 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

ROCKLAND DRIVE

NEWELL VIEW LANE

ROCKY RIVER ROAD WEST

TOBY CREEK

FLOODWAY

FUTURE FEMA 100YR

FUTURE GREENWAY ALONG TOBY CREEK

EXTEND EX. CULVERT

NOTE: COORDINATE TIE TO TOBY CREEK GREENWAY WITH MECKLENBURG COUNTY

C

D

CENTERLINE OF EX. CHANNEL

PROP. CHANNEL REALIGNMENT

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

Rocky River West Streetscape

NECI ID: 196

CONCEPT ESTIMATE – ALTERNATIVE 1

Item Description Roadway Items	Unit	Unit Cost	Quantity	Amount
Mobilization	LS		1	$101,000
Grading	LS		1	$302,800
Storm Drainage	LS		1	$252,000
Asphalt Concrete Base Course, Type B25.0	TON	$75.00	2873	$215,500
Asphalt Concrete Base Course, Type I19.0	TON	$75.00	1064	$79,800
Asphalt Concrete Surface Course, Type S9.5	TON	$65.00	2760	$179,400
Asphalt Binder for Plant Mix	TON	$682.00	353	$240,700
2'-6" Concrete Curb & Gutter	LF	$17.00	8400	$142,800
4" Concrete Sidewalk	SY	$30.00	5600	$168,000
Misc Items	LS		1	$153,900
Erosion Control	LS		1	$30,800
Water/Sewer Utilities	LS		1	$51,300
Pavement Markings/Traffic Control	LS		1	$102,600
Landscaping	LS		1	$100,800
Pedestrian Lights	EA	$5,000.00	85	$425,000
Street Trees	EA	$500.00	170	$85,000
Culvert Extension	EA	$50,000.00	1	$50,000
Block Retaining Wall	SF	$25.00	370	$9,250
Subtotal				**$2,690,650**
PCCO Cost				$57,855
Construction Contingency (15%)				$403,600
Subtotal – Roadway Construction				**$3,152,000**
Planning & Design (20% of Roadway)				$630,000
Private Utility Relocation Cost				$95,000
Right-of-Way Acquisition				$795,000
Subtotal – Non-Construction Costs				**$1,500,000**
Project Subtotal				**$4,652,000**
Project Contingency				$465,200
Estimated Project Cost				**$5,117,200**

Rocky River West Streetscape

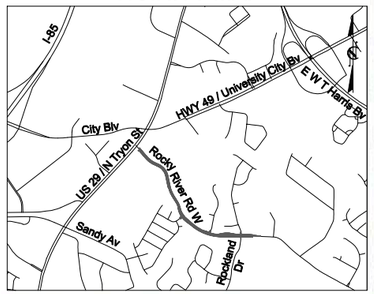
NECI ID: 196

CONCEPT ESTIMATE – PROJECT DATA – ALTERNATIVE 1

Project: Rocky River West Streetscape	
Project Length(feet)	4200
widening	4200
resurfacing	4200
Existing Pavement Width	22
Proposed Pavement Width	32
no. of lanes	2
bike lanes (0-no bike lanes, 1-one side or 2-bothsides)	2
parking? (0-no parking, 1-one side or 2-bothsides)	0
Pavement Area for Widening(sy)	4667
Pavement Area for Resurfacing(sy)	10267
Pavement Area Under Curb & Gutter(sy)	3733
Textured Turn Lane (0-no or 1-yes)?	0
Landscaped Median (0-no or 1-yes)?	0
Sidewalk	
(enter 0-no sidewalk, 1-one side or 2-two sides)	2
average width	6
Curb & Gutter	
(enter 0-no curb & gutter, 1-one side or 2-two sides)	2
Valley gutter separator for parking	
(enter 0-no valley gutter, 1-one side or 2-two sides)	0
Storm Drainage System	
most or all new system needed (enter 2)	2
supplemental new system needed (enter 1)	
Incidental or no new system needed (enter 0)	
Planting Strip	
(enter 0-no planting strip, 1-one side or 2-two sides)	2
Utility Relocation	
overhead lines(enter length in feet)	4200
underground(enter length in feet)	0
Right-of-Way Acquisition	
construction easement area(sf)	67585
Right-of-way area(sf)	72370
number of parcels	37
Environmental Impact	
(linear ft. of contamination, enter 0 if none)	0

Enter data for items highlighted in red

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 1
ALTERNATIVE 2 SHEET 1 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

CENTERLINE OF EX. CHANNEL

ROCKY RIVER ROAD WEST

A

A

E

E

GRADE AREA TO ALLOW APPROPRIATE SIGHT DISTANCE ALONG ROCKY RIVER ROAD

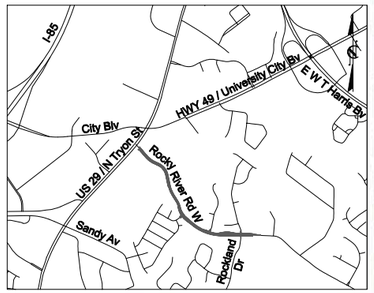
US 29 / N. TRYON STREET

EX. WEAVE PROJECT IMPROVEMENTS

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 1
ALTERNATIVE 2 SHEET 2 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte NC 28208

40 0 40 80

ROCKY RIVER ROAD WEST

FORTESCUE DRIVE

POTENTIAL RETAINING WALLS

PROP. PEDESTRIAN / BICYCLE BRIDGE

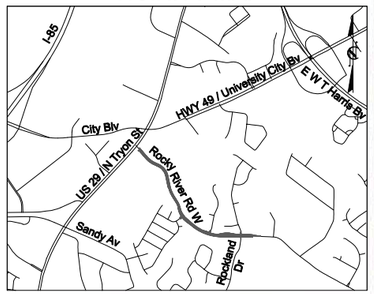
CENTERLINE OF EX. CHANNEL

ADJUST / RELOCATE EX. TRANSFORMER

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 1
ALTERNATIVE 2 SHEET 3 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

BATAVIA LANE

ROCKY RIVER ROAD WEST

POTENTIAL RETAINING WALLS

POTENTIAL SIGNALIZED PEDESTRIAN CROSSING

POTENTIAL RETAINING WALLS

GRADE AREA TO ALLOW APPROPRIATE SIGHT DISTANCE ALONG ROCKY RIVER ROAD

CENTERLINE OF EX. CHANNEL

ADJUST / RELOCATE EX. TRANSFORMER

PROP. PEDESTRIAN / BICYCLE BRIDGE

PROP. PEDESTRIAN / BICYCLE BRIDGE

B B C C E E

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

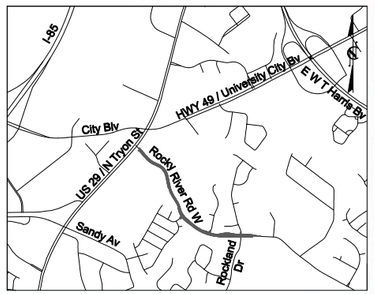
CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 1
ALTERNATIVE 2 SHEET 4 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

VICINITY MAP



ROCKLAND DRIVE

NEWELL VIEW LANE

ROCKY RIVER ROAD WEST

TOBY CREEK

FLOODWAY

FLOODWAY

FUTURE FEMA 100YR

FUTURE FEMA 100YR

FUTURE GREENWAY ALONG TOBY CREEK

EXTEND EX. CULVERT

NOTE: COORDINATE TIE TO TOBY CREEK GREENWAY WITH MECKLENBURG COUNTY

PROPOSED CHANNEL REALIGNMENT

START OF ALTERNATIVE 2A

CENTERLINE OF EX. CHANNEL

FUTURE FEMA 100YR

FLOODWAY

TOBY CREEK

FLOODWAY

FUTURE FEMA 100YR

E

C

E

C

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

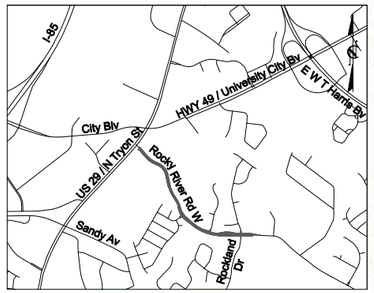
CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 1
ALTERNATIVE 2A SHEET 1 OF 1

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

VICINITY MAP



FUTURE FEMA 100YR

FLOODWAY

TOBY CREEK

FLOODWAY

FUTURE GREENWAY
ALONG TOBY CREEK

FUTURE FEMA 100YR

ROCKLAND DRIVE

ADJUST / RELOCATE
EX. TRANSFORMER

BLUE ROCK DRIVE

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

Rocky River West Streetscape

NECI ID: 196

CONCEPT ESTIMATE – ALTERNATIVE 2

Item Description Roadway Items	Unit	Unit Cost	Quantity	Amount
Mobilization	LS		1	$23,000
Grading	LS		1	$61,300
Storm Drainage	LS		1	$60,100
4" Concrete Sidewalk	SY	$30.00	6672	$200,200
Misc Items	LS		1	$30,000
Erosion Control	LS		1	$6,000
Water/Sewer Utilities	LS		1	$10,000
Pavement Markings/Traffic Control	LS		1	$20,000
Landscaping	LS		1	$72,100
Pedestrian Lights	EA	$5,000.00	60	$300,000
Street Trees	EA	$500.00	120	$60,000
Culvert Extension	EA	$50,000.00	1	$50,000
Pedestrian Bridge	EA	$12,000.00	4	$48,000
Interlocking Block Retaining Wall	SF	$25.00	2600	$65,000
		Subtotal		**$1,005,700**
		PCCO Cost		$0
		Construction Contingency (15%)		$150,900
		Subtotal – Roadway Construction		**$1,157,000**
		Planning & Design (20% of Roadway)		$231,000
		Private Utility Relocation Cost		$43,000
		Right-of-Way Acquisition		$498,000
		Subtotal – Non-Construction Costs		**$800,000**
		Project Subtotal		**$1,957,000**
		Project Contingency		$195,700
		Estimated Project Cost		**$2,152,700**

Rocky River West Streetscape

NECI ID: 196

CONCEPT ESTIMATE – PROJECT DATA – ALTERNATIVE 2

Project: Rocky River West Streetscape	
Project Length(feet)	6005
widening	0
resurfacing	0
Existing Pavement Width	22
Proposed Pavement Width	22
no. of lanes	2
bike lanes (0-no bike lanes, 1-one side or 2-bothsides)	0
parking? (0-no parking, 1-one side or 2-bothsides)	0
Pavement Area for Widening(sy)	0
Pavement Area for Resurfacing(sy)	0
Pavement Area Under Curb & Gutter(sy)	0
Textured Turn Lane (0-no or 1-yes)?	0
Landscaped Median (0-no or 1-yes)?	0
Sidewalk	
(enter 0-no sidewalk, 1-one side or 2-two sides)	1
average width	10
Curb & Gutter	
(enter 0-no curb & gutter, 1-one side or 2-two sides)	0
Valley gutter separator for parking	
(enter 0-no valley gutter, 1-one side or 2-two sides)	0
Storm Drainage System	
most or all new system needed (enter 2)	0
supplemental new system needed (enter 1)	
Incidental or no new system needed (enter 0)	
Planting Strip	
(enter 0-no planting strip, 1-one side or 2-two sides)	1
Utility Relocation	
overhead lines(enter length in feet)	1930
underground(enter length in feet)	0
Right-of-Way Acquisition	
construction easement area(sf)	65125
Right-of-way area(sf)	41050
number of parcels	22
Environmental Impact	
(linear ft. of contamination, enter 0 if none)	0

Enter data for items highlighted in red

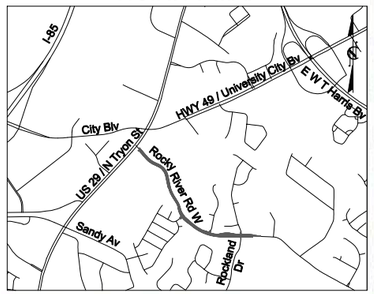
CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 2
ALTERNATIVE 3 SHEET 1 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

VICINITY MAP



CENTERLINE OF EX. CHANNEL

ROCKY RIVER ROAD WEST

GRADE AREA TO ALLOW APPROPRIATE SIGHT DISTANCE ALONG ROCKY RIVER ROAD

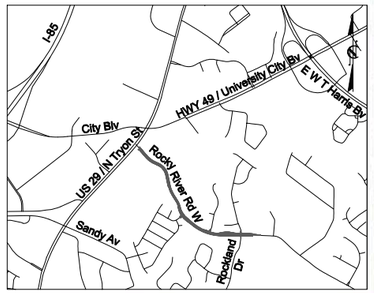
US 29 / N. TRYON STREET

EX. WEAVE PROJECT IMPROVEMENTS

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST MULTI-USE PATH, OPTION 2 ALTERNATIVE 3 SHEET 2 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

ROCKY RIVER ROAD WEST

POTENTIAL SIGNALIZED PEDESTRIAN CROSSING

FORTESCUE DRIVE

CENTERLINE OF EX. CHANNEL

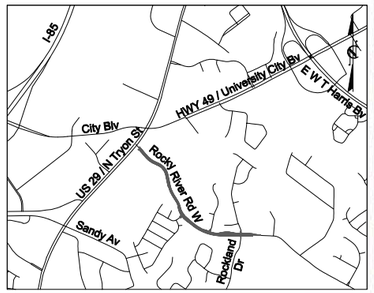
PROP. PEDESTRIAN / BICYCLE BRIDGE

A A B B F F

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED

VICINITY MAP



CHARLOTTE.

NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 2
ALTERNATIVE 3 SHEET 3 OF 4

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

40 0 40 80

BATAVIA LANE

ROCKY RIVER ROAD WEST

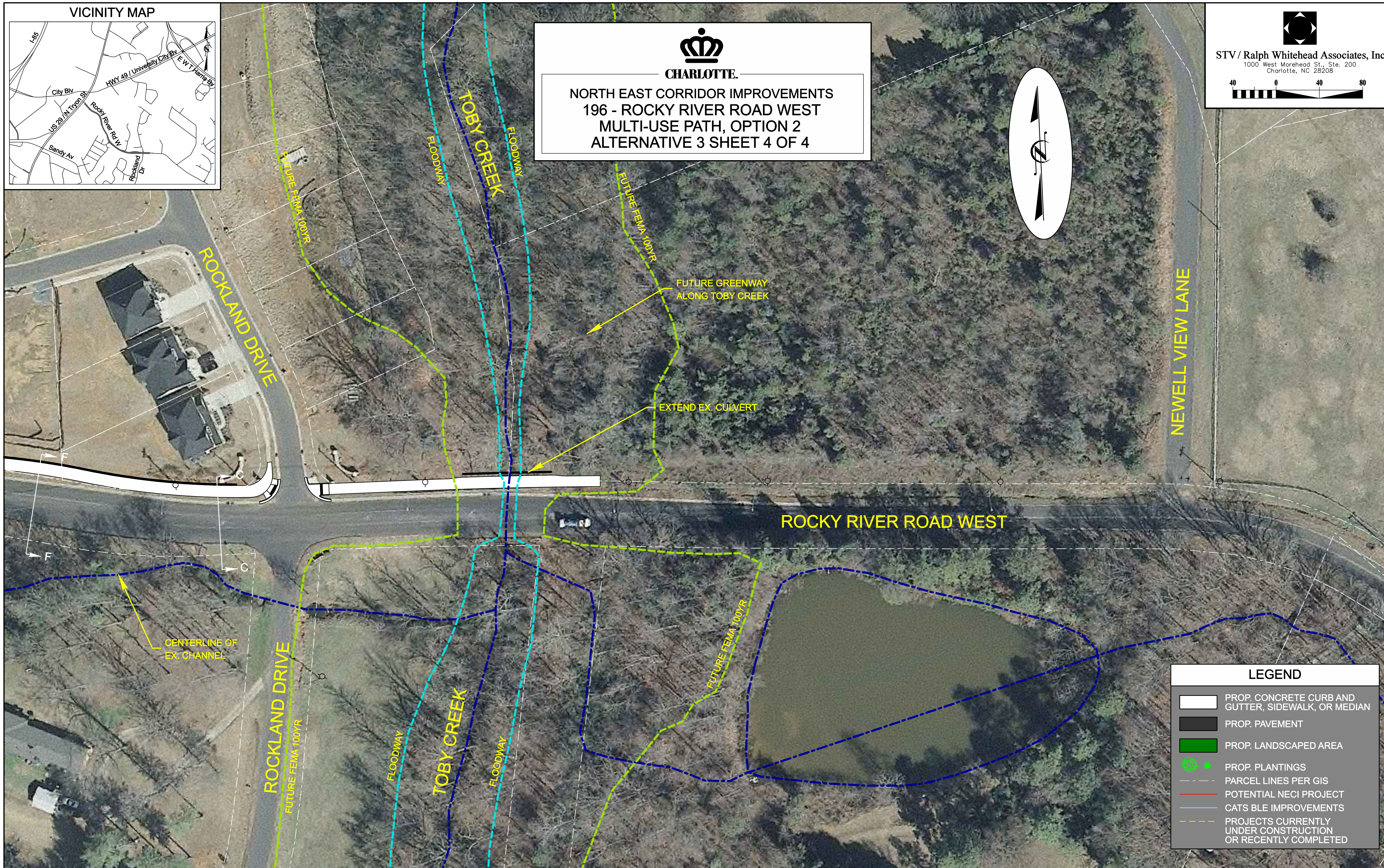
GRADE AREA TO ALLOW APPROPRIATE SIGHT DISTANCE ALONG ROCKY RIVER ROAD

CENTERLINE OF EX. CHANNEL

B B C C F F

LEGEND

- PROP. CONCRETE CURB AND GUTTER, SIDEWALK, OR MEDIAN
- PROP. PAVEMENT
- PROP. LANDSCAPED AREA
- PROP. PLANTINGS
- PARCEL LINES PER GIS
- POTENTIAL NECI PROJECT
- CATS BLE IMPROVEMENTS
- PROJECTS CURRENTLY UNDER CONSTRUCTION OR RECENTLY COMPLETED


VICINITY MAP
I-85
City Blv
US 29 / N Tryon St
HWY 49 / University City Bv
E W T Harris Bv
Rocky River Rd W
Sandy Av
Rockland Dr
CHARLOTTE.
NORTH EAST CORRIDOR IMPROVEMENTS
196 - ROCKY RIVER ROAD WEST
MULTI-USE PATH, OPTION 2
ALTERNATIVE 3 SHEET 4 OF 4
STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
40 0 40 80
N
TOBY CREEK
FLOODWAY
FLOODWAY
FUTURE FEMA 100YR
FUTURE FEMA 100YR
FUTURE GREENWAY
ALONG TOBY CREEK
EXTEND EX. CULVERT
ROCKLAND DRIVE
NEWELL VIEW LANE
ROCKY RIVER ROAD WEST
CENTERLINE OF
EX. CHANNEL
ROCKLAND DRIVE
FUTURE FEMA 100YR
FLOODWAY
TOBY CREEK
FLOODWAY
FUTURE FEMA 100YR
F
F
C
C
LEGEND
PROP. CONCRETE CURB AND
GUTTER, SIDEWALK, OR MEDIAN
PROP. PAVEMENT
PROP. LANDSCAPED AREA
PROP. PLANTINGS
PARCEL LINES PER GIS
POTENTIAL NECI PROJECT
CATS BLE IMPROVEMENTS
PROJECTS CURRENTLY
UNDER CONSTRUCTION
OR RECENTLY COMPLETED

Rocky River West Streetscape

NECI ID: 196

CONCEPT ESTIMATE – ALTERNATIVE 3

Item Description Roadway Items	Unit	Unit Cost	Quantity	Amount
Mobilization	LS		1	$15,700
Grading	LS		1	$41,800
Storm Drainage	LS		1	$41,000
4" Concrete Sidewalk	SY	$30.00	4450	$136,500
Misc Items	LS		1	$20,500
Erosion Control	LS		1	$4,100
Water/Sewer Utilities	LS		1	$6,800
Pavement Markings/Traffic Control	LS		1	$13,700
Pedestrian Lights	EA	$5,000.00	40	$200,000
Street Trees	EA	$500.00	80	$40,000
Culvert Extension	EA	$30,000.00	1	$30,000
Pedestrian Bridge	EA	$12,000.00	2	$24,000
Interlocking Block Retaining Wall	SF	$25.00	2290	$57,250
		Subtotal		**$628,450**

PCCO Cost	$0
Construction Contingency (15%)	$102,100
Subtotal – Roadway Construction	**$783,000**
Planning & Design (20% of Roadway)	$157,000
Private Utility Relocation Cost	$73,000
Right-of-Way Acquisition	$346,000
Subtotal – Non-Construction Costs	**$600,000**
Project Subtotal	**$1,383,000**
Project Contingency	$138,300
Estimated Project Cost	**$1,521,300**

Rocky River West Streetscape

NECI ID: 196

CONCEPT ESTIMATE – PROJECT DATA – ALTERNATIVE 3

Project: Rocky River West Streetscape	
Project Length(feet)	4095
widening	0
resurfacing	0
Existing Pavement Width	22
Proposed Pavement Width	22
no. of lanes	2
bike lanes (0-no bike lanes, 1-one side or 2-bothsides)	0
parking? (0-no parking, 1-one side or 2-bothsides)	0
Pavement Area for Widening(sy)	0
Pavement Area for Resurfacing(sy)	0
Pavement Area Under Curb & Gutter(sy)	0
Textured Turn Lane (0-no or 1-yes)?	0
Landscaped Median (0-no or 1-yes)?	0
Sidewalk	
(enter 0-no sidewalk, 1-one side or 2-two sides)	1
average width	10
Curb & Gutter	
(enter 0-no curb & gutter, 1-one side or 2-two sides)	0
Valley gutter separator for parking	
(enter 0-no valley gutter, 1-one side or 2-two sides)	0
Storm Drainage System	
most or all new system needed (enter 2)	0
supplemental new system needed (enter 1)	
Incidental or no new system needed (enter 0)	
Planting Strip	
(enter 0-no planting strip, 1-one side or 2-two sides)	1
Utility Relocation	
overhead lines(enter length in feet)	3224
underground(enter length in feet)	0
Right-of-Way Acquisition	
construction easement area(sf)	38392
Right-of-way area(sf)	26689
number of parcels	20
Environmental Impact	
(linear ft. of contamination, enter 0 if none)	0

Enter data for items highlighted in red

EXHIBIT B

SCOPE OF SERVICES
ROCKY RIVER RD STREET IMPROVEMENTS

SCOPE OF SERVICES
ROCKY RIVER RD. WEST STREET IMPROVEMENT

The Engineer shall perform all services in accordance with the current version of the City of Charlotte CADD standards, the "Charlotte-Mecklenburg Storm Water Design Manual," and the *Urban Street Design Guidelines*. At the time work commences under this Contract, the Engineer shall use the then-current edition of NCDOT *Roadway Design Manual*, *Roadway Standard Drawings*, and *Standard Specifications for Roads and Structures*. The Engineer shall perform all services using English units.

The Engineer shall perform the following services:

1. PLANNING PHASE

A feasibility study was performed for this project in 2012 (the "Feasibility Study"). It made certain assumptions about the characteristics of the road, including its USDG street typology, number of lanes, and geometrics. The cross-section was subsequently refined by City staff in an "Abbreviated" 6-Step Process in August, 2013. Additionally, City staff have developed an approximate centerline alignment (the "Staff Alignment") for Rocky River Road West. Unless otherwise specified in this Scope of Services, the Engineer shall use the results of the Feasibility Study, Abbreviated 6-Step Process, and Staff Alignment as the basis for Planning Phase and Design Phase activities. The Feasibility Study, the results and products of the Abbreviated 6-Step Process, and the Staff Alignment are incorporated into this Contract by reference in their entireties.

The Engineer shall provide services in the Planning Phase that shall include, but may not be limited to, those following:

1.1 ***Applying the Urban Street Design Guidelines***
RESERVED

1.2 ***Traffic Analysis – omitted***
RESERVED

1.3 ***Public Involvement Process***

The Engineer shall provide assistance to the City in its efforts to present this project to the public. Such assistance shall include:

- Attending and assisting with presentation(s) at two public meetings at locations in or near the project area;
- Preparing of presentation-quality exhibits that indicate the project as proposed and its context to surrounding properties and neighborhoods. Such exhibits may include mounted plans, aerial photos with proposed concept(s), photos of similar typical sections, etc.;
- Public meeting arrangements including facility reservations and facility setup.
- Evaluating any issues identified by citizens and the City, and making recommendations;
- Preparing and distributing summary notes from the public meetings within five working days of the meeting;
- Providing copies of all public correspondence to the City's Project Manager; and
- Preparing a summary report detailing the citizen involvement process.

1.4 ***Planning Phase Public Input Process***

The Engineer shall carry out the public input process described in section 1.3.

1.5 ***Design Criteria***

The Engineer shall develop design criteria for the Project consistent with the Urban Street Design Guidelines for the selected street typology and the scope of the project that shall include but may not be limited to: Design speed, posted speed, minimum radius, superelevation, rate of change of superelevation, maximum and minimum grades, vertical curve “K” values for crests and sags, stopping sight distance, intersection sight distance, vertical clearance, lane width, normal crown, maximum slopes, curb radii, right-of-way widths, clear zone, taper ratios (shift, merge, bay), design vehicle, traffic control plan design speed, maximum vertical curve (mainline, stop intersection, through intersection), sidewalk width, planter strip, handicapped access, bicycle lanes, and driveways. The Engineer shall submit the proposed design criteria for review and approval by the City’s Project Manager with every plan submittal. The approved design criteria will be used in developing conceptual, preliminary, and final plans.

Section 3.3.6 of the 2011 edition of the AASHTO *A Policy on Geometric Design of Highways and* Streets (the "Green Book"), entitled "Design of Low-Speed Urban Streets," shall supersede any conflicting provision in the NCDOT *Roadway Design Manual* regarding radius or superelevation.

1.6 ***Alternatives Analysis***

a. *Identify Alternatives*

The Engineer, in cooperation with the City, shall analyze and document all plausible alternatives in summary form as the basis for establishing the alternatives for detailed evaluation. The documentation will include:

- Improving existing facilities alternative(s), if applicable; and
- Relocation alternative, i.e. relocating a portion or portions of the existing facility to a new location, if applicable.

Possible alternatives will be generated through the preparation of "land suitability mapping" within the study area. Various factors that would limit or discourage the development of a highway will be mapped at a suitable scale on aerial or planimetric mapping. Factors to be mapped include, but may not be limited to: Natural resources, floodplains (as identified on FIRM/FEMA maps for 100 year floods), parks and recreational open spaces (including 4(f) and 6(f) properties), recorded hazardous waste generators and sites, cultural resources (including known historical architecture and archaeological sites), communities and community facilities (such as cemeteries, schools, churches, etc.), agricultural lands, and existing and planned development.

With these factors overlaying the base mapping, areas or "windows" of least potential impact will be established. These corridors will then be checked for geometric limitations and modified/adjusted as required. The net result of this process will be the establishment of possible build alternatives. It is the intent of the City that the Staff Alignment be used as the starting point for alternatives analysis, and that the Preferred Alternative (see subsection C) be developed through an iterative process of minor adjustments or revisions to the Staff Alignment. The Engineer

shall not propose changes that deviate from the intent of the Staff Alignment without prior City approval.

The Engineer will develop a cost analysis for each of the build alternatives as determined by the City. The analysis shall individually list the costs for each component (e.g., turn lanes, channelization, utility relocation, etc.) and a summation of the advantages and disadvantages of each alternate.

b. *Centerline Design*

The Engineer will prepare centerline design drawings for the possible build alternates at an appropriate scale. This effort will be based on a maximum of three (3) possible project alternatives. The centerline plans shall show the proposed centerline, curve radii, constant right-of-way limits, grade separations, conceptual intersection layouts and vertical alignment. The centerline designs will include conceptual sizing requirements of proposed structures for stream crossings. Proposed bridges and reinforced concrete box culvert locations with their approximate lengths and widths will be shown. All topographic information will be taken from existing mapping and available survey data. Cross sections are to be included at critical locations. Final centerline plans will be submitted to the City for review prior to inclusion in the Planning Report.

c. *Preferred Alternative*

The possible build alternatives shall be reviewed for environmental impacts, construction costs, and engineering characteristics. After this review the City, will make a recommendation of the Preferred Alternative. The recommendation will be based on the results of the land suitability mapping, and City and other agency comments.

1.7 ***Natural Resources***

For all work in this section, it is the City's intent that the Engineer only supplement or incorporate work already done for other contractual work to the City or Charlotte-Mecklenburg Schools.

a. *Data Review*

The Engineer shall review available information, e.g. National Wetlands Inventory (NWI) maps, Natural Resource Conservation Service (NRCS) soils maps, and the Natural Heritage Program (NHP) protected species database. Information obtained from these and related reference resources shall be applied during subsequent natural resources field investigations. Additionally, the Engineer shall initiate formal consultation with the N.C. Department of Cultural Resources regarding the potential presence of archaeological resources and historic properties.

a. *Field Reconnaissance*

The Engineer shall perform a field reconnaissance of the Project area to determine the approximate locations of any jurisdictional waters of the United States, including wetlands, and the likely presence of any protected species or sensitive environments, in keeping with the USACE 1987 manual. Any such areas shall not be marked in the field nor shall a survey be performed.

b. *Wetlands Delineation*

Following determination of the preferred alternate, any wetlands determined present within the proposed construction limits will be delineated in keeping with the USACE 1987 manual and the boundaries will be flagged accordingly. Representative photo-documentation of existing conditions will be filed for future reference. Following the wetland delineation, the Engineer shall coordinate with a USACE representative and City project personnel (including the City's Water Quality Program Administrator) to meet at the site for confirmation of the wetland boundaries, which shall subsequently be surveyed by a N.C. registered surveyor.

1.8 ***Conceptual Plans***

All conceptual roadway design for the Project shall conform to the appropriate current American Association of State Highway and Transportation Officials (AASHTO) Green Book, the *Roadside Design Guide*, the *Urban Street Design Guidelines*, the *Charlotte Land Development Standards Manual (CLDSM)*, the

requirements of the North Carolina Department of Transportation (NCDOT) where applicable, and the requirements of the City. Should there be a conflict between standards, the project team will make a determination as to which standard shall govern. Conceptual design and plans for structures and/or storm drainage improvements shall be developed by the Engineer to the extent necessary to establish arrangement of substructure, approximate hydraulic openings where applicable, geometrics, and type of construction. The conceptual plans shall identify any potential design exceptions that may be necessary, including those needed from third parties such as utilities.

a. *Base Map*

RESERVED

b. *Exhibit Maps/Scroll Drawings*

The Engineer shall prepare exhibit maps in scroll form for public presentations at a scale as directed by the City's Project Manager. The exhibit maps shall be prepared in accordance with the guidelines equivalent or similar to the NCDOT Roadway Design Manual for preparing Public Hearing Maps. Exhibit maps shall show the following:

- Proposed vertical and horizontal alignments;
- Proposed traffic lane lines, crosswalks, and stop bars;
- Proposed sidewalk, curb and gutter, and median locations;
- Proposed transit facilities, if applicable;
- Proposed bicycle facilities;
- Proposed right-of-way and easement lines;
- Typical roadway sections;
- Critical cross sections as directed by the City's Project Manager;
- Conceptual storm drainage improvements (including proposed pipes and ditches outside main roadway); and
- Major utilities relocation (overhead and underground) - per private and public utility companies.

The Engineer shall include on the scroll drawings all required data necessary to properly estimate the right-of-way cost. The required data shall consist of the property owner's name, street address, and tax parcel

number, and the approximate area in square feet of fee simple, temporary easements, and permanent easements. The Engineer shall show the approximate offset from the face of the existing curb or edge of pavement to the proposed new property lines and to the construction easements.

d. *Permanent Storm Drainage Easements*

The Engineer shall prepare a separate list indicating which property owners will be required to sign a permanent storm drainage easement (PSDE). The list shall include tax parcels and addresses.

1.9 ***Conceptual Traffic Control Plans***

The Engineer shall furnish conceptual traffic control plans for the recommended alternate that will indicate the Engineer's proposed phasing of construction for the Project including any utility construction and/or relocation. The Engineer shall prepare the conceptual traffic control plans in conjunction with the conceptual plans for the recommended alternate.

As directed by the Project Manager, a written description of phasing (if necessary), traffic flow, and traffic control measures may be submitted instead of conceptual plans.

1.10 ***Environmental Site Assessment***

RESERVED – to be performed by the City.

1.11 ***Geotechnical Subsurface Investigations***

The City will perform or contract all necessary geotechnical work. However, the Engineer shall identify to the City all necessary geotechnical subsurface investigations needed to design the Preferred Alternative, including material testing necessary for completion of final design documents. These investigations may include soil boring, pavement testing and design, analysis, laboratory testing, and engineering recommendations.

1.12 ***Private Development Coordination***

RESERVED -- to be performed by the City.

1.13 ***Coordination with Charlotte Area Transit System (CATS)***

RESERVED -- to be performed by the City.

1.14 ***Planning Technical Memorandum***

The Engineer shall prepare a planning technical memorandum (the "Memorandum") detailing all proposed alternates developed for the Project. The Memorandum shall address the following:

- projected route function;
- Conceptual drawings for the Preferred Alternative;
- Design criteria;
- Construction cost estimates in City-standard format;
- Statement of needed property and easement acquisition(s) including square footages to be acquired;
- A utilities coordination summary of private and public utilities;
- Document and identify all permits that will be required to complete the Project (e.g., erosion control, Corps of Engineers 404 Permit, storm water permits);
- A summary of the public involvement process; and
- Other attachments and documents developed by the Engineer, as determined by the Project Team.

1.15 ***Conceptual Landscape Plan***

RESERVED

2. FIELD SURVEY COORDINATION

2.1 ***Survey/Mapping Services to Be Provided By the City***

RESERVED.

2.2 ***Survey/Mapping Services To Be Provided By the Engineer***

The Engineer shall be responsible for requesting and coordinating all survey/mapping services as follows:

- Furnishing to Survey/Mapping any available survey data relevant to the Project;

- Conducting a field review of the baseline survey map and promptly reporting any deficiencies to the Surveyor;
- Responding in a timely manner to all requests for additional Project information;
- Preparing a right-of-way summary list in a format that can be uploaded into the City's REM Real Estate system. Tabulating all fee simple, permanent and/or temporary easements including underlying fee simple land currently maintained as right-of-way, and area remaining required for the Project. Including the lot number, property owner's name, address, and tax code in the table. The summary list shall incorporate the City's Visual Basic routine;
- Ensuring all construction plans shall display the name, address, and phone number of the survey firm that prepared the base mapping; and
- Requesting and facilitating project meetings as necessary.

3. COORDINATION OF UTILITIES AND UTILITIES BY OTHERS PLANS

The Engineer shall coordinate the design of all utility relocations required to construct the proposed Project improvements. The City's Utility Coordinator will provide the Engineer with the names, addresses and contact person of the utilities. The Engineer shall provide coordination with privately and publicly owned utilities which may be affected by the design of the Project and whose respective owners are responsible for the design and adjustments to these utilities. The City's Project Manager and Utility Coordinator shall be copied on all correspondence or communications and invited to any meetings between the Engineer and any utility, agency, and/or railroad. The Engineer shall maintain a log of all such transmittals, noting the Project name, date of transmittal, and date that responses were received. All tasks shall be completed in accordance with the City' of Charlotte – Engineering Services Utility Coordination and Relocation Process. Complete coordination of utilities and utility plans shall include, but not be limited to the following tasks.

3.1 The Engineer shall contact and meet with all utilities (private and public), agencies and railroad companies whose facilities (both existing and proposed) are located within the Project limits and may be affected by proposed alternate designs being considered for the Project. The Engineer shall request that the

utilities provide documentation that defines the location or description of existing easements of record, including blanket easements, within the Project limits.

3.2 a. The Engineer shall obtain horizontal location data from the City, as necessary, to determine the location of existing utility facilities (both above-ground and underground) that may impact the Project (refer to Section 2 – Field Survey Coordination).

b. The Engineer shall also obtain vertical location data, via the City Project Manager, as necessary to determine the location of existing underground utility facilities that may impact the Project. (The City's Project Manager, in conjunction with the City Utility Coordinator, may use subsurface utility engineering (i.e., vacuum excavations, etc.) to gather the required vertical data (refer to Section 2 – Field Survey Coordination).

3.3 a. The Engineer shall incorporate into the alternate designs the needs of the utilities as provided to the Engineer by the utilities affected by the alternate designs;

b. The Engineer shall also incorporate into the alternate designs the needs of CDOT regarding street lighting, traffic signals, interconnect, and traffic signal poles as provided to the Engineer by CDOT, the City's Utility Coordinator, and/or the City's Project Manager.

c. The Engineer shall coordinate the resolution of any conflicts (both private and public) identified for temporary and permanent utility relocations. The Engineer must also ensure that coordination between the utilities, (e.g., pole owners and attachees) has occurred. These resolutions shall be included in the preferred alternate design.

d. The Engineer must prepare a utility coordination summary consisting of information from Sections 3.3 a, b, and c. for inclusion in the Planning Report (see Exhibit 1 – Section 1.14 *Planning Report*).

e. The Engineer shall submit all plans for review to the City's Project

Manager, City's Utility Coordinator, and all affected utilities.

3.4 The Engineer shall design major relocations listed in the scope of services and all incidental adjustments for existing City-owned utilities (i.e., water, sewer, traffic signal interconnect, etc.) required to construct the Project. CDOT will design and provide to the Engineer any traffic signal installations and/or relocations.

3.5 RESERVED

3.6 The Engineer shall show the location of all existing and proposed utilities on the final design plans and shall indicate all proposed underground and overhead utilities to be reconstructed and/or relocated as part of the Project.

3.7 The Engineer shall also provide utilities-by-others (UBO) plans and a utility sequencing schedule with the final design plans. The UBO plans will include the following (all per CAD standards):

- All public and private utility information will show at 100%; all other plan information will be screened at 25% (percentage may vary slightly for different plotters/copiers as requested by project manager).
- Existing utility facilities, aerial lines, and underground lines will be thinner line weight.
- Proposed utility facilities, aerial lines, and underground lines will be thicker line weight.
- Plan symbols will differentiate existing vs. proposed.
- Notes for tree trimming will show at 100% (not screened).
- Utility Information Boxes (UIB) for each proposed pole will provide owner, attachees, depth of pole, pole height, attachment heights, cuts and fills, and show at 100% (not screened).
- Proposed aerial line angles will be noted and the need for guy wires and easements will be included.
- Proposed aerial lines will be noted with the name(s) of the utility owner.

The utility sequencing schedule shall include the estimated relocation durations,

as confirmed by each individual utility, for temporary and permanent utility relocations, as well as a determination of what utility relocation work can be completed prior to construction.

3.8 In cases where utility relocation cannot occur prior to the start of construction, the Engineer shall ensure that the information on the final pole locations, tree removals/clearing, grading , and sequencing work is included on the "Final Construction Plans," the "Utility-By-Others Plans" and/or in the Construction Contract as "Project Special Provisions – Utility Relocations."

3.9 The Engineer shall not be or become responsible for design or construction by utility companies as a result of performing the work of this section. The Engineer will be responsible for miscommunicated information on the utilities-by-others plans.

4. PRELIMINARY DESIGN PHASE

RESERVED

5. FINAL DESIGN PHASE

RESERVED

6. RIGHT-OF WAY-PHASE

RESERVED

7. CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES

RESERVED

8. PROJECT ADMINISTRATION

8.1 *Monthly Status Meetings*

Monthly status meetings shall be held between the City's Project Manager and the Engineer during the course of the Project. The Engineer shall prepare and submit minutes of these meetings to the City's Project Manager within ten (10) calendar days. The Engineer or the City's Project Manager shall schedule the meetings. The City's Project Manager reserves the right to cancel or call for additional meetings as deemed necessary.

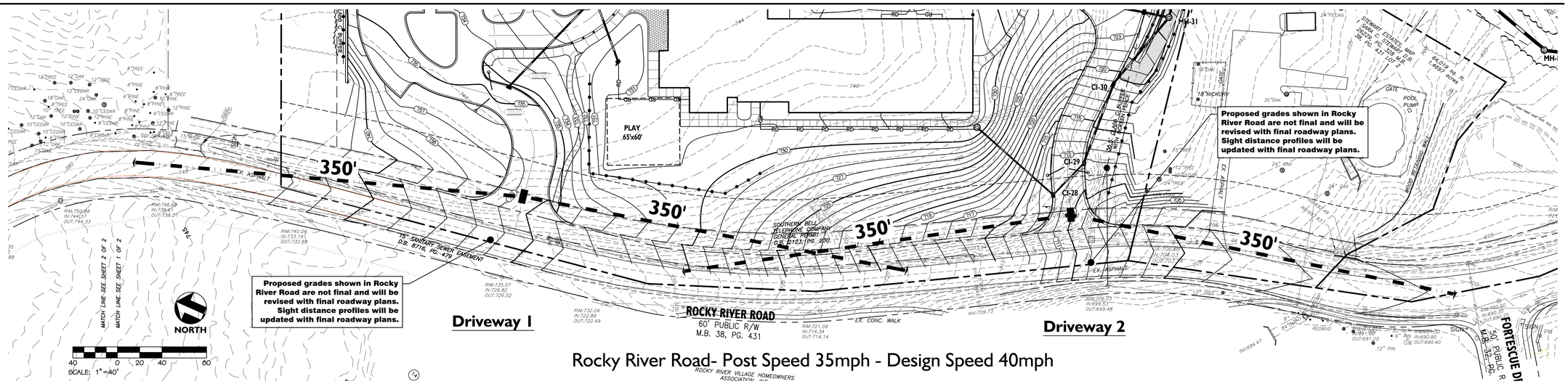
8.2 *Monthly Status Reports*

The Engineer shall prepare monthly status reports and deliver the reports to the City's Project Manager a minimum of three (3) business days prior to the monthly status meeting or by the 15th of every month if no meeting is scheduled. The status report shall summarize work completed and percent complete for the current month and the work scheduled to be completed for the upcoming month. The Engineer shall make all plans and Project work available for review and examination by City staff.

EXHIBIT C

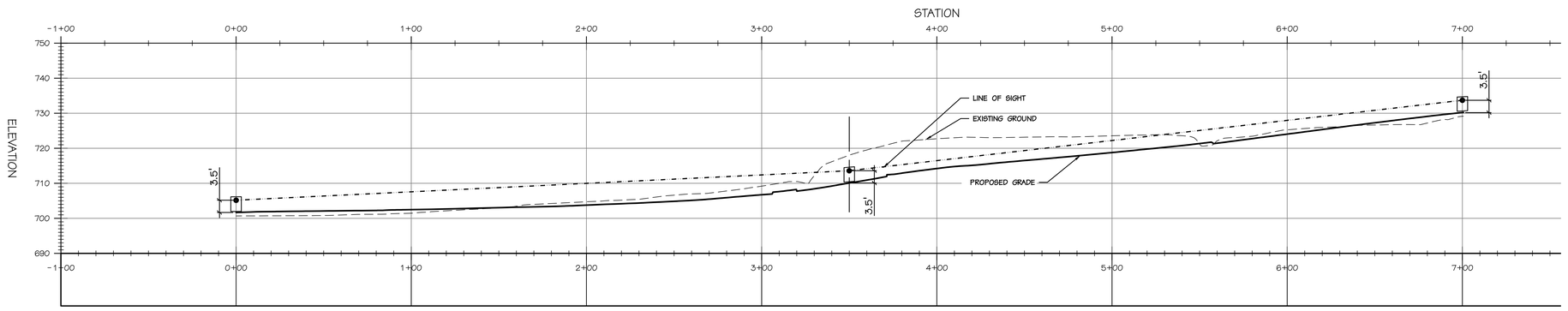
CITY APPROVED LAND DEVELOPMENT PLAN LDC-2013-00211

dated _____, 2014

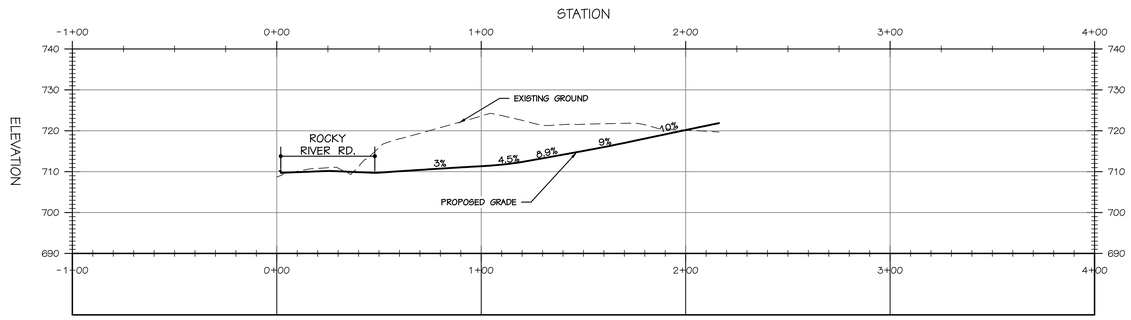


Rocky River Road- Post Speed 35mph - Design Speed 40mph

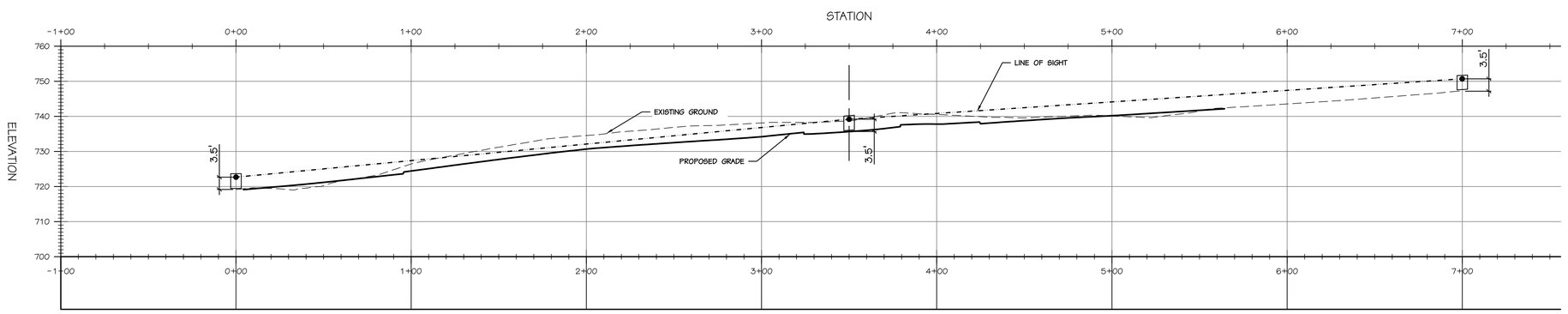
Sight Distance - Driveway 2-Profile H 1"=30V 1"=15



Driveway 2 Centerline-Profile H 1"=30V 1"=15



Sight Distance- Driveway 1-Profile H 1"=30V 1"=15



NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT NO. 979 HENRY W. GORMAN 11/14/13

SEAL

KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Driveway Sight Distance Profiles

SCALE:

C102.3

95% CONSTRUCTION DOCUMENTS

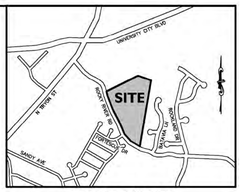
CMS PROJECT # 240-004

DATE: December 6, 2013

DEMOLITION/CLEARING NOTES

1. TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PREPARED BY RB PHARR AND ASSOCIATES DATED MAY 14, 2013. SEE SURVEY ORIGINAL FILE ATTACHED IN THE DOCUMENTS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL REMOVE ALL EXISTING TREES, CONCRETE, ASPHALT AND OTHER EXISTING STRUCTURES INDICATED ON PLAN. CONTRACTOR SHALL REVIEW EXISTING CONDITIONS FOR OBSERVANCE OF COMPLETE DEMO ITEMS REMOVAL PRIOR TO BIDDING. CONTRACTOR TO DISPOSE OF ALL DEBRIS TO AN APPROVED (LEGAL) OFF-SITE LOCATION.
3. PROTECT ADJACENT CURBS, TREES, BUILDINGS, UTILITIES AND OTHER ITEMS TO REMAIN FROM DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR PAYMENT OF ANY DAMAGED ITEMS TO REMAIN.
4. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK, BOTH PUBLIC AND PRIVATE. CONTRACTOR IS FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL REPAIR ANY DAMAGE AS A RESULT OF THIS CONTRACT.
5. SURVEYOR SHALL REPORT ANY ENCROACHMENTS OR DISCREPANCIES GENERATED BY THIS CLEARING PLAN IMMEDIATELY TO SITE SOLUTIONS LANDSCAPE ARCHITECTURE FOR DECISION.
6. SURVEYOR SHALL VERIFY CLOSURE AND ACCURACY OF CURVE DATA PRIOR TO COMMENCEMENT OF FIELD STAKING.
7. HATCHED AREA ON THIS PLAN INDICATES EXISTING WOODED AREA TO BE REMOVED. DUE TO A LACK OF AN INDIVIDUAL TREE SURVEY, TREE SAVE AREAS ARE SHOWN IN MASSES. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE ANY SPECIMEN TREES NEAR CLEARING LIMITS. CONTRACTOR SHALL REVIEW CLEARING LIMITS AND LIMITS OF CONSTRUCTION PRIOR TO REMOVALS. TREES, SHRUBS, SCRUB BRUSH, ECT. WITHIN LIMITS OF GRADING AND CONSTRUCTION NOT INDICATED AS SAVE AREAS SHALL BE INCLUDED IN THE DEMOLITION.
8. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE ADDITIONAL TREES WHEREVER FEASIBLE.
9. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE SAVE AREA.
10. CLEARING LIMITS ON THE PLAN INDICATE THE EXTENT OF ALL MAJOR CLEARING REQUIRED. CONTRACTOR IS ALSO RESPONSIBLE FOR ANY INCIDENTAL CLEARING REQUIRED FOR MINOR DISCREPANCIES IN GRADE, UTILITY INSTALLATIONS, EROSION CONTROL MEASURES, ETC.

SEE ATTACHED CONTRACT DOCUMENTS FOR ADDITIONAL REQUIREMENTS. ALL ROADWAY PLANS UNDER SEPARATE PACKAGE TO BE COORDINATED WITH THIS PROJECT.



VICINITY MAP
NTS

LEGEND FOR EXISTING CONDITIONS PLAN

- EXISTING SIGN
- EIP — EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W — RIGHT-OF-WAY
- EXISTING TREE TO REMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING STORM MANHOLE
- EXISTING ITEMS TO BE REMOVED
- EXISTING TREES TO BE CLEARED
- EXISTING CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- UE — EXISTING UNDERGROUND ELECTRIC LINE
- OH/U — EXISTING OVERHEAD UTILITY LINE
- T — EXISTING UNDERGROUND TELEPHONE LINE
- SS — EXISTING SANITARY SEWER LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- 710 — EXISTING CONTOUR LINE
- EXISTING STORM DRAINAGE PIPE
- TEMPORARY TREE PROTECTION BARRICADE
- DENUDED LIMITS/LIMITS OF CONSTRUCTION

NOTE:

-COORDINATE BETWEEN PLANS AND SPECIFICATIONS FOR ALL PROJECT REQUIREMENTS. REVIEW EROSION CONTROL AND EARTH MOVING REQUIREMENTS PRIOR TO MOBILIZING ON SITE.

-CONTRACTOR SHALL INCLUDE 3500 LF OF TEMPORARY CONSTRUCTION FENCE TO CLOSE OFF PROJECT AREA. FENCE SHALL REMAIN FOR THE PROJECT DURATION. INCLUDE NO TRESPASSING SIGNAGE ON FENCE EVERY 50'. CONTRACTOR MAY HAVE TO MOVE PORTIONS OF FENCE DURING CONSTRUCTION OPERATIONS.

-ANY ADDITIONAL DEBRIS SUCH AS TIRES, BUILDING MATERIALS, SOLID DEBRIS SHALL BE REMOVED FROM THE SITE IN THE CLEARING PHASE UNDER THE BASE BID.

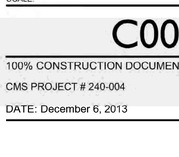
EXISTING RESIDENT SHALL REMAIN DURING CONSTRUCTION. COORDINATE ALL ACTIVITIES IN AND AROUND THIS PROPERTY WITH CMS STAFF PRIOR TO DISTURBANCE.

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRYAN JAMES PANNELLA
11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
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MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

Charlotte-Mecklenburg Schools
NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Existing Conditions Demolition Plan

SCALE:

C001

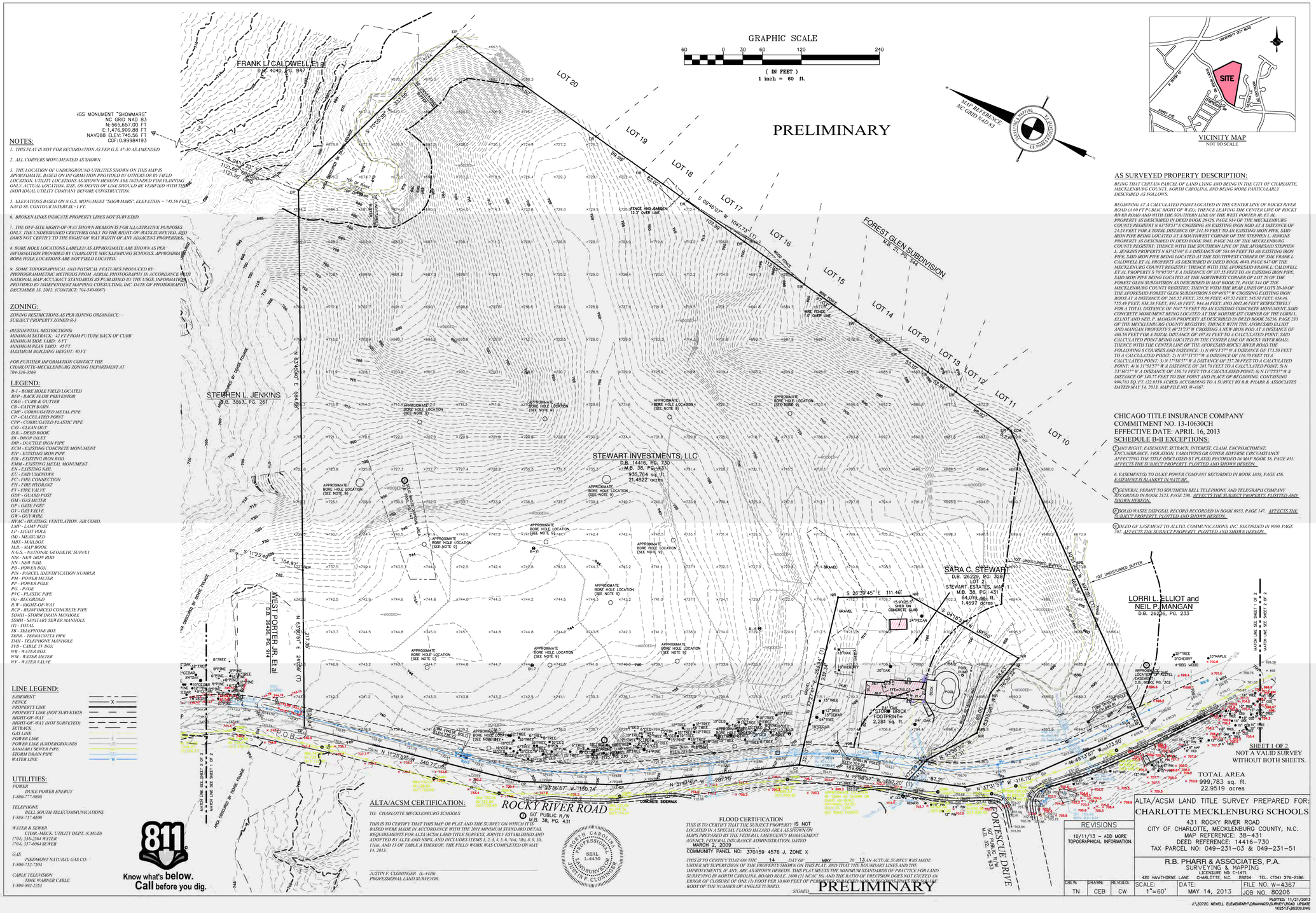
100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

SCALE: 1"=40'

J:\3072C Newell Elementary\Drawings\3072C-DD\3072 DEMO.dwg, 11/21/2013 1:27:40 PM, PDF-XChange for AcroPlot Pro



NOTES:

1. *THIS PLAT IS NOT FOR RECORDATION AS PER G.S. 47-30 AS AMENDED.*
2. *ALL CORNERS MONUMENTED AS SHOWN.*
3. *THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS MAP IS APPROXIMATE, BASED ON INFORMATION PROVIDED BY OTHERS OR BY FIELD LOCATION. UTILITY LOCATIONS AS SHOWN HEREON ARE INTENDED FOR PLANNING ONLY. ACTUAL LOCATION, SIZE, OR DEPTH OF LINE SHOULD BE VERIFIED WITH THE INDIVIDUAL UTILITY COMPANY BEFORE CONSTRUCTION.*
5. *ELEVATIONS BASED ON N.G.S. MONUMENT "SHOWMARS", ELEVATION = 745.56 FEET, NAVD 88. CONTOUR INTERVAL=1 FT.*
6. *BROKEN LINES INDICATE PROPERTY LINES NOT SURVEYED.*
7. *THE OFF-SITE RIGHT-OF-WAY SHOWN HEREON IS FOR ILLUSTRATIVE PURPOSES ONLY. THE UNDERSIGNED CERTIFIES ONLY TO THE RIGHT-OF-WAYS SURVEYED, AND DOES NOT CERTIFY TO THE RIGHT OF WAY WIDTH OF ANY ADJACENT PROPERTIES.*
8. *BORE HOLE LOCATIONS LABELED AS APPROXIMATE ARE SHOWN AS PER INFORMATION PROVIDED BY CHARLOTTE MECKLENBURG SCHOOLS. APPROXIMATE BORE HOLE LOCATIONS ARE NOT FIELD LOCATED.*
9. *SOME TOPOGRAPHICAL AND PHYSICAL FEATURES PRODUCED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS AS PUBLISHED BY THE USGS. INFORMATION PROVIDED BY INDEPENDENT MAPPING CONSULTING, INC. DATE OF PHOTOGRAPHY: DECEMBER 13, 2012. (CONTACT: 704-540-6087)*

ZONING:

ZONING RESTRICTIONS AS PER ZONING ORDINANCE:
SUBJECT PROPERTY ZONED R-3

(RESIDENTIAL RESTRICTIONS)
MINIMUM SETBACK: 42 FT FROM FUTURE BACK OF CURB
MINIMUM SIDE YARD: 6 FT
MINIMUM REAR YARD: 45 FT
MAXIMUM BUILDING HEIGHT: 40 FT

FOR FURTHER INFORMATION CONTACT THE CHARLOTTE-MECKLENBURG ZONING DEPARTMENT AT 704-336-3569.

LEGEND:

B-1 - BORE HOLE FIELD LOCATED
BFP - BACK FLOW PREVENTOR
C&G - CURB & GUTTER
CB - CATCH BASIN
CMP - CORUGATED METAL PIPE
CP - CALCULATED POINT
CPP - CORRUGATED PLASTIC PIPE
C/O - CLEAN OUT
D.B. - DEED BOOK
DI - DROP INLET
DIP - DUCTILE IRON PIPE
ECM - EXISTING CONCRETE MONUMENT
EIP - EXISTING IRON PIPE
EIR - EXISTING IRON ROD
EMM - EXISTING METAL MONUMENT
EN - EXISTING NAIL
EU - END UNKNOWN
FC - FIRE CONNECTION
FH - FIRE HYDRANT
FV - FIRE VALVE
GDP - GUARD POST
GM - GAS METER
GP - GATE POST
GV - GAS VALVE
GW - GUY WIRE
HVAC - HEATING, VENTILATION, AIR COND.
LMP - LAMP POST
LP - LIGHT POLE
(M) - MEASURED
MBX - MAILBOX
M.B. - MAP BOOK
N.G.S. - NATIONAL GEODETIC SURVEY
NIR - NEW IRON ROD
NN - NEW NAIL
PB - POWER BOX
PIN - PARCEL IDENTIFICATION NUMBER
PM - POWER METER
PP - POWER POLE
PG. - PAGE
PVC - PLASTIC PIPE
(R) - RECORDED
R/W - RIGHT-OF-WAY
RCP - REINFORCED CONCRETE PIPE
SDMH - STORM DRAIN MANHOLE
SSMH - SANITARY SEWER MANHOLE
(T) - TOTAL
TB - TELEPHONE BOX
TERR. - TERRACOTTA PIPE
TMH - TELEPHONE MANHOLE
TVB - CABLE TV BOX
WB - WATER BOX
WM - WATER METER
WV - WATER VALVE

LINE LEGEND:

EASEMENT
FENCE — X —
PROPERTY LINE
PROPERTY LINE (NOT SURVEYED)
RIGHT-OF-WAY
RIGHT-OF-WAY (NOT SURVEYED)
SETBACK
GAS LINE — G —
POWER LINE — E —
POWER LINE (UNDERGROUND) — UE —
SANITARY SEWER PIPE — SS —
STORM DRAIN PIPE — SD —
WATER LINE — W —

UTILITIES:

POWER
DUKE POWER ENERGY
1-800-777-9898

TELEPHONE
BELL SOUTH TELECOMMUNICATIONS
1-888-757-6500

WATER & SEWER
CHAR.-MECK. UTILITY DEPT. (CMUD)
(704) 336-2364 WATER
(704) 357-6064 SEWER

GAS
PIEDMONT NATURAL GAS CO.
1-800-752-7504

CABLE TELEVISION
TIME WARNER CABLE
1-800-892-2253

811 Know what's below. Call before you dig.

ALTA/ACSM CERTIFICATION:

TO: CHARLOTTE MECKLENBURG SCHOOLS

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 7(a), 7(b), 8, 9, 10, 11(a), AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON MAY 14, 2013.

JUSTIN F. CLONINGER (L-4430)
PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4430 LAND SURVEYOR JUSTIN F. CLONINGER

FLOOD CERTIFICATION

THIS IS TO CERTIFY THAT THE SUBJECT PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION, DATED MARCH 2, 2009 *COMMUNITY PANEL NO: 370159 4576 J, ZONE X*

THIS IS TO CERTIFY THAT ON THE 14 DAY OF MAY 20 13 AN ACTUAL SURVEY WAS MADE UNDER MY SUPERVISION OF THE PROPERTY SHOWN ON THIS PLAT, AND THAT THE BOUNDARY LINES AND THE IMPROVEMENTS, IF ANY, ARE AS SHOWN HEREON. THIS PLAT MEETS THE MINIMUM STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA, BOARD RULE, 1600 (21 NCAC 56) AND THE RATIO OF PRECISION DOES NOT EXCEED AN ERROR OF CLOSURE OF ONE (1) FOOT PER 10,000 FEET OF PERIMETER SURVEYED MEETING ACCURACY STANDARDS FOR THE ROOT OF THE NUMBER OF ANGLES TURNED.

SIGNED

PRELIMINARY

AS SURVEYED PROPERTY DESCRIPTION:

BEING THAT CERTAIN PARCEL OF LAND LYING AND BEING IN THE CITY OF CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A CALCULATED POINT LOCATED IN THE CENTER LINE OF ROCKY RIVER ROAD (A 60 FT PUBLIC RIGHT OF WAY); THENCE LEAVING THE CENTER LINE OF ROCKY RIVER ROAD AND WITH THE SOUTHERN LINE OF THE WEST PORTER JR. ET AL PROPERTY AS DESCRIBED IN DEED BOOK 26426, PAGE 914 OF THE MECKLENBURG COUNTY REGISTRY N 63°30'51" E CROSSING AN EXISTING IRON ROD AT 4 DISTANCE OF 24.24 FEET FOR A TOTAL DISTANCE OF 241.59 FEET TO AN EXISTING IRON PIPE, SAID IRON PIPE BEING LOCATED AT A SOUTHWEST CORNER OF THE STEPHEN L. JENKINS PROPERTY AS DESCRIBED IN DEED BOOK 3863, PAGE 261 OF THE MECKLENBURG COUNTY REGISTRY; THENCE, WITH THE SOUTHERN LINE OF THE AFORESAID STEPHEN L. JENKINS PROPERTY N 63°42'40" E A DISTANCE OF 584.68 FEET TO AN EXISTING IRON PIPE, SAID IRON PIPE BEING LOCATED AT THE SOUTHWEST CORNER OF THE FRANK L. CALDWELL ET AL PROPERTY AS DESCRIBED IN DEED BOOK 4040, PAGE 847 OF THE MECKLENURG COUNTY REGISTRY; THENCE WITH THE AFORESAID FRANK L. CALDWELL ET AL PROPERTY S 70°05'35" E A DISTANCE OF 337.55 FEET TO AN EXISTING IRON PIPE, SAID IRON PIPE BEING LOCATED AT THE NORTHWEST CORNER OF LOT 20 OF THE FOREST GLEN SUBDIVISION AS DESCRIBED IN MAP BOOK 21, PAGE 544 OF THE MECKLENBURG COUNTI REGISTRY; THENCE WITH THE REAR LINES OF LOTS 20-10 OF THE AFORESAID FOREST GLEN SUBDIVISION S 09°46'07" W CROSSING EXISTING IRON RODS AT A DISTANCE OF 265.52 FEET, 355.59 FEET, 447.53 FEET, 545.91 FEET, 658.46, 755.49 FEET, 838.38 FEET, 891.48 FEET, 944.44 FEET, AND 1042.46 FEET RESPECTIVELY FOR A TOTAL DISTANCE OF 1047.73 FEET TO AN EXISTING CONCRETE MONUMENT; SAID CONCRETE MONUMENT BEING LOCATED AT THE NORTHEAST CORNER OF THE LORRI L. ELLIOT AND NEIL P. MANGAN PROPERTY AS DESCRIBED IN DEED BOOK 26236, PAGE 233 OF THE MECKLENBURG COUNTI REGISTRY; THENCE WITH THE AFORESAID ELLIOT AND MANGAN PROPERTY S 40°21'25" W CROSSING A NEW IRON ROD AT A DISTANCE OF 468.56 FEET FOR A TOTAL DISTANCE OF 487.81 FEET TO A CALCULATED POINT, SAID CALCULATED POINT BEING LOCATED IN THE CENTER LINE OF ROCKY RIVER ROAD; THENCE WITH THE CENTER LINE OF THE AFORESAID ROCKY RIVER ROAD THE FOLLOWING 6 COURSES AND DISTANCES: 1) N 49°13'57" W A DISTANCE OF 173.50 FEET TO A CALCULATED POINT; 2) N 37°31'57" W A DISTANCE OF 116.70 FEET TO A CALCULATED POINT; 3) N 17°58'57" W A DISTANCE OF 257.20 FEET TO A CALCULATED POINT; 4) N 31°51'57" W A DISTANCE OF 281.70 FEET TO A CALCULATED POINT; 5) N 23°36'57" W A DISTANCE OF 150.74 FEET TO A CALCULATED POINT; 6) N 11°25'57" W A DISTANCE OF 340.77 FEET TO THE POINT AND PLACE OF BEGINNING, CONTAINING 999,763 SQ. FT. (22.9519 ACRES) ACCORDING TO A SURVEY BY R.B. PHARR & ASSOCIATES DATED MAY 14, 2013. MAP FILE NO. W-4367.

CHICAGO TITLE INSURANCE COMPANY COMMITMENT NO. 13-10630CH EFFECTIVE DATE: APRIL 16, 2013

SCHEDULE B-II EXCEPTIONS:

1. *ANY RIGHT, EASEMENT, SETBACK, INTEREST, CLAIM, ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATIONS OR OTHER ADVERSE CIRCUMSTANCE AFFECTING THE TITLE DISCLOSED BY PLAT(S) RECORDED IN MAP BOOK 38, PAGE 431. AFFECTS THE SUBJECT PROPERTY, PLOTTED AND SHOWN HEREON.*
6. *6. EASEMENT(S) TO DUKE POWER COMPANY RECORDED IN BOOK 1858, PAGE 456. EASEMENT IS BLANKET IN NATURE.*
7. *GENERAL PERMIT TO SOUTHERN BELL TELEPHONE AND TELEGRAPH COMPANY RECORDED IN BOOK 2123, PAGE 230. AFFECTS THE SUBJECT PROPERTY, PLOTTED AND SHOWN HEREON.*
8. *SOLID WASTE DISPOSAL RECORD RECORDED IN BOOK 6953, PAGE 147. AFFECTS THE SUBJECT PROPERTY, PLOTTED AND SHOWN HEREON.*
9. *DEED OF EASEMENT TO ALLTEL COMMUNICATIONS, INC. RECORDED IN 9090, PAGE 302. AFFECTS THE SUBJECT PROPERTY, PLOTTED AND SHOWN HEREON.*

TOTAL AREA
999,763 sq. ft.
22.9519 acres

SHEET 1 OF 2
NOT A VALID SURVEY WITHOUT BOTH SHEETS.

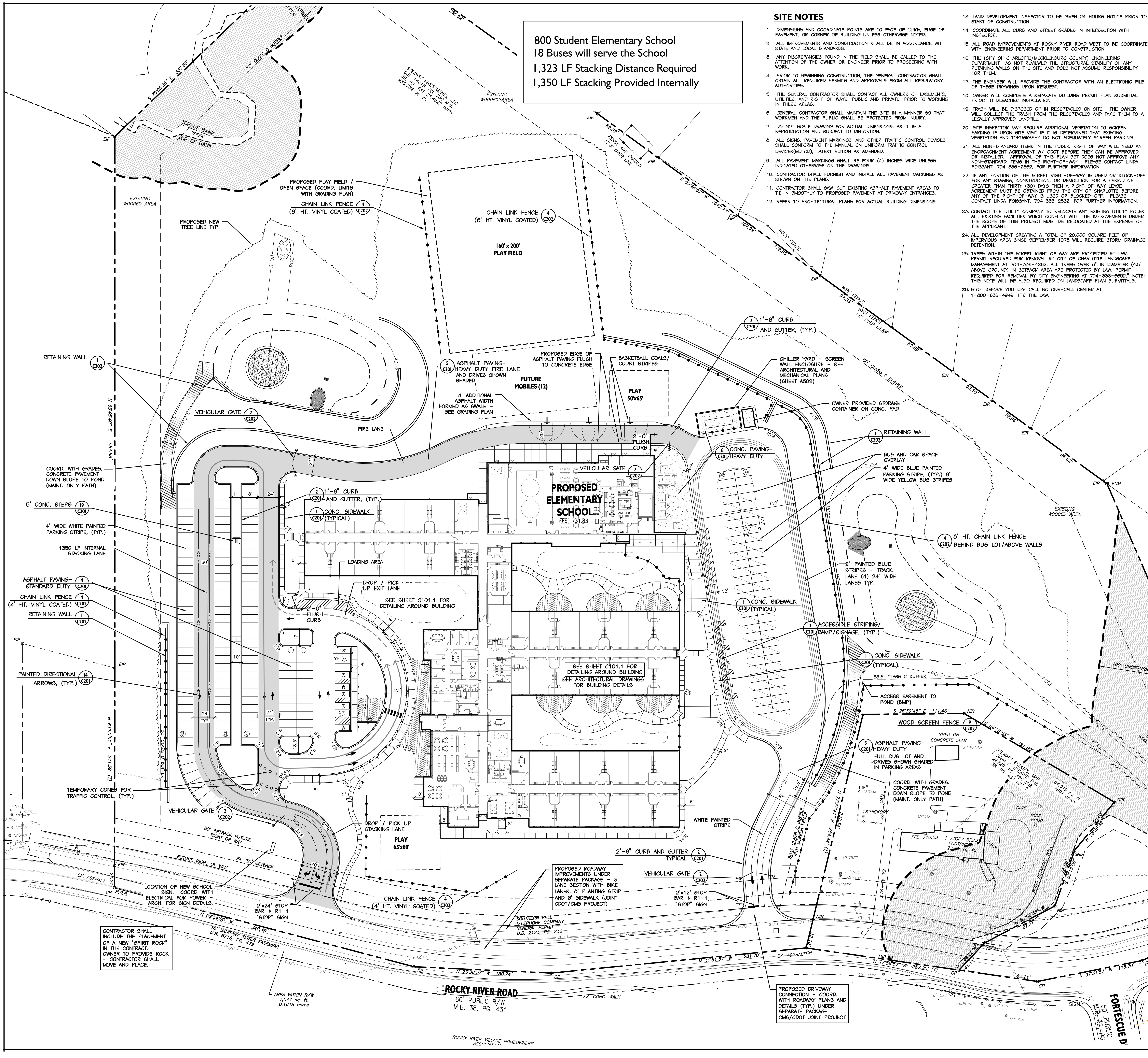
REVISIONS
10/11/13 - ADD MORE TOPOGRAPHICAL INFORMATION.

ALTA/ACSM LAND TITLE SURVEY PREPARED FOR:
CHARLOTTE MECKLENBURG SCHOOLS
431 ROCKY RIVER ROAD
CITY OF CHARLOTTE, MECKLENBURG COUNTY, N.C.
MAP REFERENCE: 38-431
DEED REFERENCE: 14416-730
TAX PARCEL NO: 049-231-03 & 049-231-51

R.B. PHARR & ASSOCIATES, P.A.
SURVEYING & MAPPING
LICENSURE NO. C-1471
420 HAWTHORNE LANE CHARLOTTE, N.C. 28204 TEL: (704) 376-2186

CREW:	DRAWN:	REVISED:	SCALE:	DATE:	FILE NO. W-4367
TN	CEB	CW	1"=60'	MAY 14, 2013	JOB NO. 80206

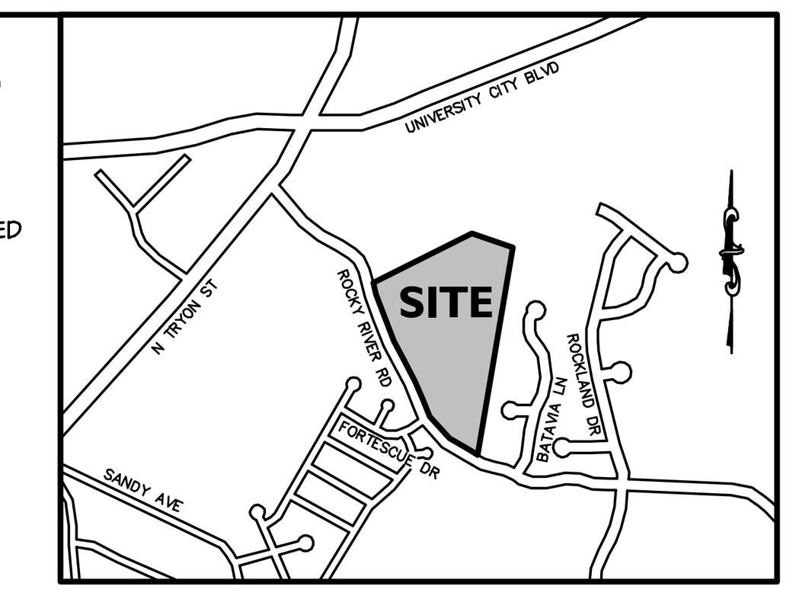
PLOTTED: 11/21/2013
J:\3072C NEWELL ELEMENTARY\DRAWINGS\SURVEY\ROAD UPDATE 102513\80206.DWG



800 Student Elementary School
18 Buses will serve the School
1,323 LF Stacking Distance Required
1,350 LF Stacking Provided Internally

SITE NOTES

1. DIMENSIONS AND COORDINATE POINTS ARE TO FACE OF CURB, EDGE OF PAVEMENT, OR CORNER OF BUILDING UNLESS OTHERWISE NOTED.
2. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL STANDARDS.
3. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE OWNER OR ENGINEER PRIOR TO PROCEEDING WITH WORK.
4. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND APPROVALS FROM ALL REGULATORY AUTHORITIES.
5. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND RIGHT-OF-WAYS, PUBLIC AND PRIVATE, PRIOR TO WORKING IN THESE AREAS.
6. GENERAL CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND THE PUBLIC SHALL BE PROTECTED FROM INJURY.
7. DO NOT SCALE DRAWING FOR ACTUAL DIMENSIONS, AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
8. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES(MUTCD), LATEST EDITION AS AMENDED.
9. ALL PAVEMENT MARKINGS SHALL BE FOUR (4) INCHES WIDE UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
10. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
11. CONTRACTOR SHALL SAW-CUT EXISTING ASPHALT PAVEMENT AREAS TO TIE IN SMOOTHLY TO PROPOSED PAVEMENT AT DRIVEWAY ENTRANCES.
12. REFER TO ARCHITECTURAL PLANS FOR ACTUAL BUILDING DIMENSIONS.
13. LAND DEVELOPMENT INSPECTOR TO BE GIVEN 24 HOURS NOTICE PRIOR TO START OF CONSTRUCTION.
14. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
15. ALL ROAD IMPROVEMENTS AT ROCKY RIVER ROAD WEST TO BE COORDINATED WITH ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
16. THE (CITY OF CHARLOTTE/MECKLENBURG COUNTY) ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM.
17. THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH AN ELECTRONIC FILE OF THESE DRAWINGS UPON REQUEST.
18. OWNER WILL COMPLETE A SEPARATE BUILDING PERMIT PLAN SUBMITTAL PRIOR TO BLEACHER INSTALLATION.
19. TRASH WILL BE DISPOSED OF IN RECEPTACLES ON SITE. THE OWNER WILL COLLECT THE TRASH FROM THE RECEPTACLES AND TAKE THEM TO A LEGALLY APPROVED LANDFILL.
20. SITE INSPECTOR MAY REQUIRE ADDITIONAL VEGETATION TO SCREEN PARKING IF UPON SITE VISIT IF IT IS DETERMINED THAT EXISTING VEGETATION AND TOPOGRAPHY DO NOT ADEQUATELY SCREEN PARKING.
21. ALL NON-STANDARD ITEMS IN THE PUBLIC RIGHT OF WAY WILL NEED AN ENCROACHMENT AGREEMENT W/ CDOT BEFORE THEY CAN BE APPROVED OR INSTALLED. APPROVAL OF THIS PLAN SET DOES NOT APPROVE ANY NON-STANDARD ITEMS IN THE RIGHT-OF-WAY. PLEASE CONTACT LINDA POISSANT, 704 336-2562, FOR FURTHER INFORMATION.
22. IF ANY PORTION OF THE STREET RIGHT-OF-WAY IS USED OR BLOCK-OFF FOR ANY STAGING, CONSTRUCTION, OR DEMOLITION FOR A PERIOD OF GREATER THAN THIRTY (30) DAYS THEN A RIGHT-OF-WAY LEASE AGREEMENT MUST BE OBTAINED FROM THE CITY OF CHARLOTTE BEFORE ANY OF THE RIGHT-OF-WAY IS USED OR BLOCKED-OFF. PLEASE CONTACT LINDA POISSANT, 704 336-2562, FOR FURTHER INFORMATION.
23. CONTACT THE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES. ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE APPLICANT.
24. ALL DEVELOPMENT CREATING A TOTAL OF 20,000 SQUARE FEET OF IMPERVIOUS AREA SINCE SEPTEMBER 1978 WILL REQUIRE STORM DRAINAGE DETENTION.
25. TREES WITHIN THE STREET RIGHT OF WAY ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY OF CHARLOTTE LANDSCAPE MANAGEMENT AT 704-336-4262. ALL TREES OVER 8" IN DIAMETER (4.5' ABOVE GROUND) IN SETBACK AREA ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY ENGINEERING AT 704-336-6692." NOTE: THIS NOTE WILL BE ALSO REQUIRED ON LANDSCAPE PLAN SUBMITTALS.
26. STOP BEFORE YOU DIG. CALL NC ONE-CALL CENTER AT 1-800-632-4949. IT'S THE LAW.



VICINITY MAP
NTS

LEGEND

EXISTING SIGN
EIP EXISTING IRON PIN
EXISTING LIGHT POLE
EXISTING UTILITY POLE
R/W RIGHT-OF-WAY
HC ACCESSIBLE SPACE
EXISTING TREE TO REMAIN
EXISTING FIRE HYDRANT
(12) # OF PARKING SPACES
CENTERLINE
EXISTING CURB AND GUTTER
PROPOSED CURB AND GUTTER
PROPERTY LINE
EXISTING FENCE
PROPOSED FENCE
EXISTING OVERHEAD UTILITY LINE
STANDARD DUTY ASPHALT PAVING
HEAVY DUTY ASPHALT PAVING
VEHICULAR CONCRETE PAVING

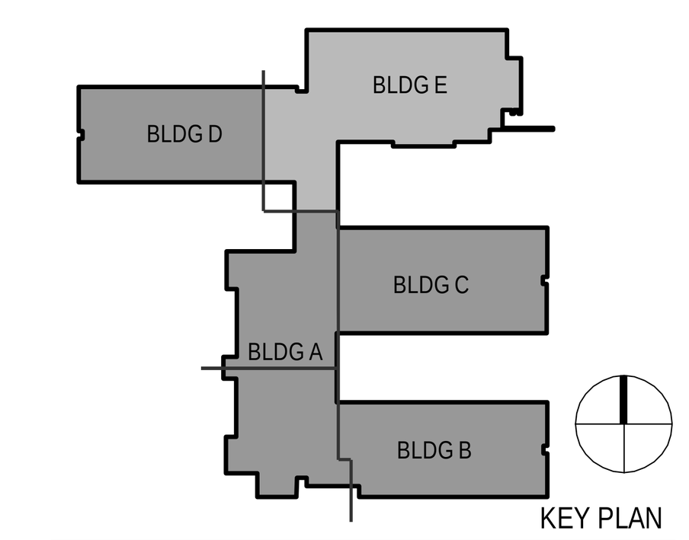
NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES CAMELLA

11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY
SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Plan

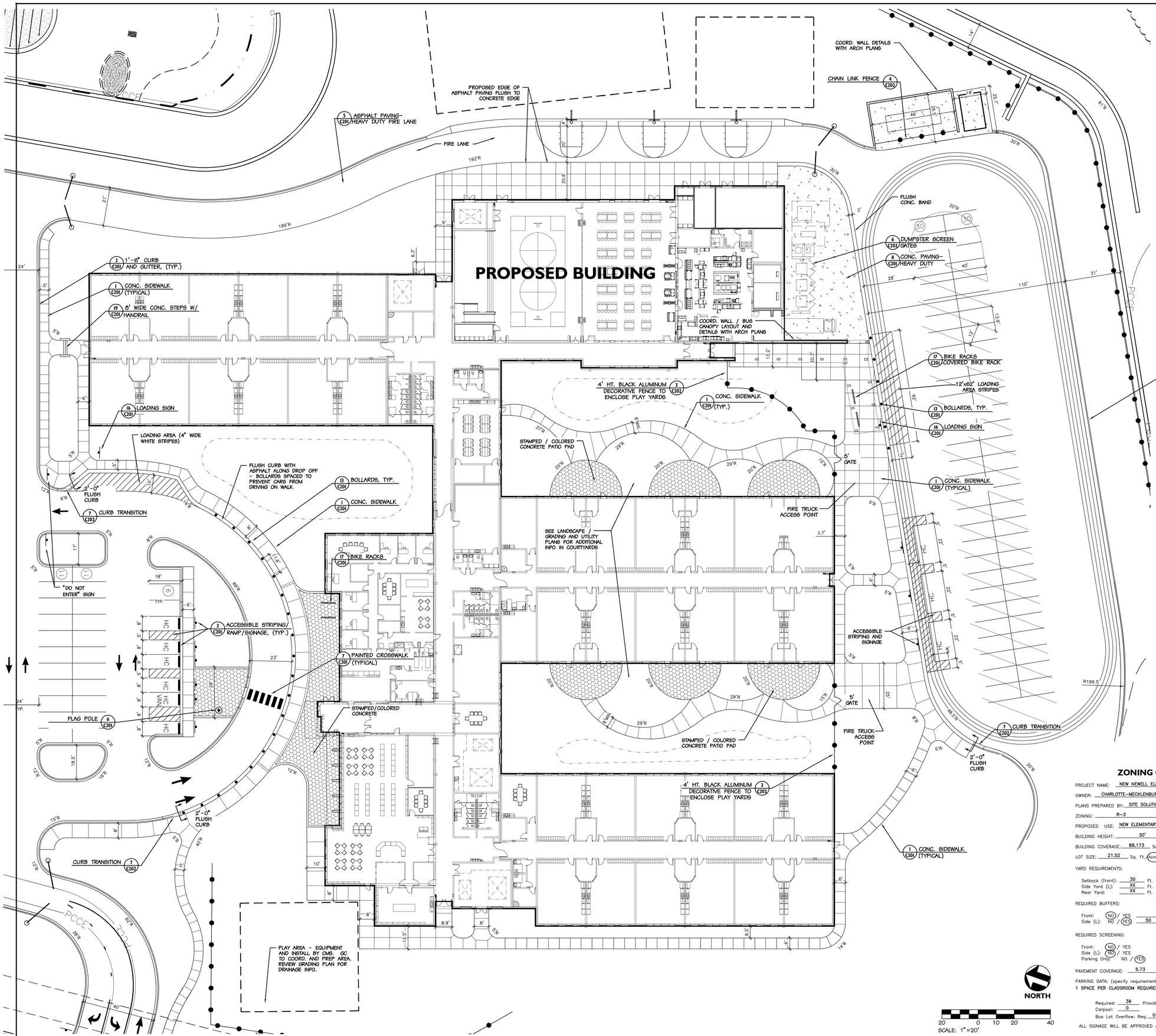
SCALE:

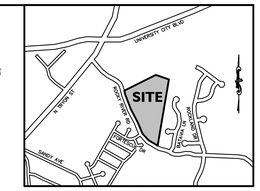
C101

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013





VICINITY MAP
NTS

LEGEND

- EXISTING SIGN
- EIP — EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W — RIGHT-OF-WAY
- HC — ACCESSIBLE SPACE
- EXISTING TREE TO REMAIN
- EXISTING FIRE HYDRANT
- (12) — # OF PARKING SPACES
- CENTERLINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- PROPOSED FENCE
- OH/U — EXISTING OVERHEAD UTILITY LINE
- STANDARD DUTY ASPHALT PAVING
- VEHICULAR CONCRETE PAVING

ZONING CODE SUMMARY

PROJECT NAME: NEW NEWELL ELEMENTARY SCHOOL

OWNER: CHARLOTTE-MECKLENBURG SCHOOLS PHONE # 980-343-6050

PLANS PREPARED BY: SITE SOLUTIONS PHONE # 704-521-9880

ZONING: R-3 JURISDICTION: CITY OF CHARLOTTE

PROPOSED USE: NEW ELEMENTARY SCHOOL TAX PARCEL #: 049-23-103/049-23-151

BUILDING HEIGHT: 30' Feet, Stories: 1

BUILDING COVERAGE: 88,173 Sq. Ft. GROSS FLOOR AREA: 88,173 Sq. Ft.

LOT SIZE: 21.52 Sq. Ft./(Acres) NUMBER OF UNITS/SUITES: 1

YARD REQUIREMENTS:

Setback (front): 30 Ft. from R/W, XX Ft. from C/L of R/W
Side Yard (L): XX Ft. Side Yard (R): XX Ft.
Rear Yard: XX Ft.

REQUIRED BUFFERS:

Front: (NO) / YES ____ Ft. Rear: NO / (YES) 50 Ft.
Side (L): NO / (YES) 50 Ft. Side (R): NO / (YES) 50 Ft.

REQUIRED SCREENING:

Front: (NO) / YES Rear: (NO) / YES
Side (L): (NO) / YES Side (R): (NO) / YES
Parking Only: NO / (YES)

PAVEMENT COVERAGE: 5.73 Sq. Ft. / (Acres)

PARKING DATA: (specify requirement)
1 SPACE PER CLASSROOM REQUIRED:

Required: 39 Provided: 135 Handicap: 6 Compact: 0
Carpool: 0 Loading Spaces: 1
Bus Lot Overflow: Req: 0 Prov. 60 HC: 3

ALL SIGNAGE WILL BE APPROVED AND PERMITTED SEPARATELY.

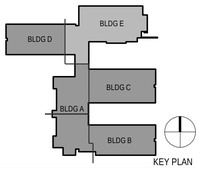
NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 JAMES DANIELLA

11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 942 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION
CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Plan Enlargement

SCALE:

C101.1

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

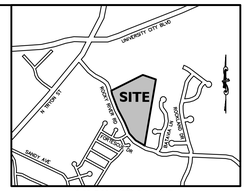
J:\3072C Newell Elementary\Drawings\3072C-DD\3072SITE.dwg, 11/21/2013 2:03:24 PM, PDF-XChange for AcroPlot Pro

IN THIS CONTRACT WHERE PERMANENT SLOPE MATTING IS INSTALLED THE GENERAL CONTRACTOR SHALL FIRST RE-SPREAD THE 6" OF TOPSOIL REQUIRED ON THE SLOPES TO BRING THE SLOPE TO FINAL GRADE. THE SLOPES SHALL BE SEEDED WITH PERMANENT SEED MIXTURE PER SPECIFICATIONS OR AS PER LANDSCAPE PLAN REQUIRED.

ALL RELATED ROADWAY DRAINAGE AND EROSION CONTROL ARE PROVIDED UNDER SEPARATE COVER PER JOINT CMS / CDOT IMPROVEMENT PROJECT.

SEE SHEET C103 FOR ALL EROSION CONTROL NOTES, MAINTENANCE PLAN, CONSTRUCTION SEQUENCE, AND SELF INSPECTION REQUIREMENTS.

TOPSOIL STOCK PILE NOTE:
CONTRACTOR SHALL STRIP AND STOCK PILE EXISTING TOP SOIL. STOCK PILE ENOUGH TO PLACE 6" OVER ENTIRE VEGETATED SITE. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. TOP SOIL SHALL BE CLEAN, FREE OF ROOT, DEBRIS, ROCK AND STUMPS. CONTRACTOR SHALL PROVIDE A SOIL SAMPLE TEST OF EXISTING MATERIAL. CONTRACTOR SHALL SUPPLEMENT WITH HAUL IN TOPSOIL IF ONSITE QUANTITY IS NOT SUFFICIENT. CONTRACTOR SHALL AMMEND EXISTING SOIL PER SPECIFICATIONS AND TESTING RESULTS WHEN DEFICIENT IN NUTRIENTS OR ORGANICS.



VICINITY MAP
NTS

LEGEND

	EXISTING SIGN	CO	EXISTING CLEANOUT
EIP	EXISTING IRON PIN		EXISTING CURB AND GUTTER
	EXISTING LIGHT POLE		PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE		PROPERTY LINE
R/W	RIGHT-OF-WAY		EXISTING FENCE
HC	ACCESSIBLE SPACE	UGE	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING TREE TO REMAIN	OH/U	EXISTING OVERHEAD UTILITY LINE
	EXISTING FIRE HYDRANT	SS	EXISTING SANITARY SEWER LINE
WV	EXISTING WATER VALVE	W	EXISTING WATER LINE
WM	EXISTING WATER METER	G	EXISTING GAS LINE
S	EXISTING SEWER MANHOLE	XXX	EXISTING CONTOUR LINE
D	EXISTING STORM MANHOLE	XXX	PROPOSED CONTOUR LINE
MH 1	PROPOSED STORM MANHOLE		TEMPORARY TREE PROTECTION BARRICADE
FES 1	PROPOSED FLARED END SECTION		EXISTING STORM DRAINAGE PIPE
	EXISTING DRAINAGE STRUCTURE		PROPOSED STORM DRAINAGE PIPE
DI 1	PROPOSED DRAINAGE STRUCTURE	RD	PROPOSED ROOF DRAIN PIPE
+XXX.X	EXISTING SPOT ELEVATION		EXISTING TREE LINE
XXX.XX	PROPOSED SPOT ELEVATION	GV	EXISTING GAS VALVE
		GM	EXISTING GAS METER

GRADING AND DRAINAGE NOTES

SEE SHEET C102.1 FOR ALL GRADING / DRAINAGE NOTES AND STORM CHARTS.

COORDINATE WITH LANDSCAPE PLANS FOR PLANTING OF ALL SLOPES. INSTALL PERMANENT MIXES / PLANTS ON SLOPES DURING THE EROSION CONTROL PHASE. SEE ADDITIONAL NOTES RELATED TO TOPSOIL REQUIREMENTS.

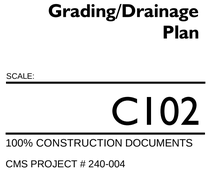
NORTH
SCALE: 1"=40'

NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT NO. 979 HENRY GORMAN 11/14/13

SEAL



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3633 STRAUSSBURG WOODS LANE
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Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Grading/Drainage Plan

SCALE:

C102

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

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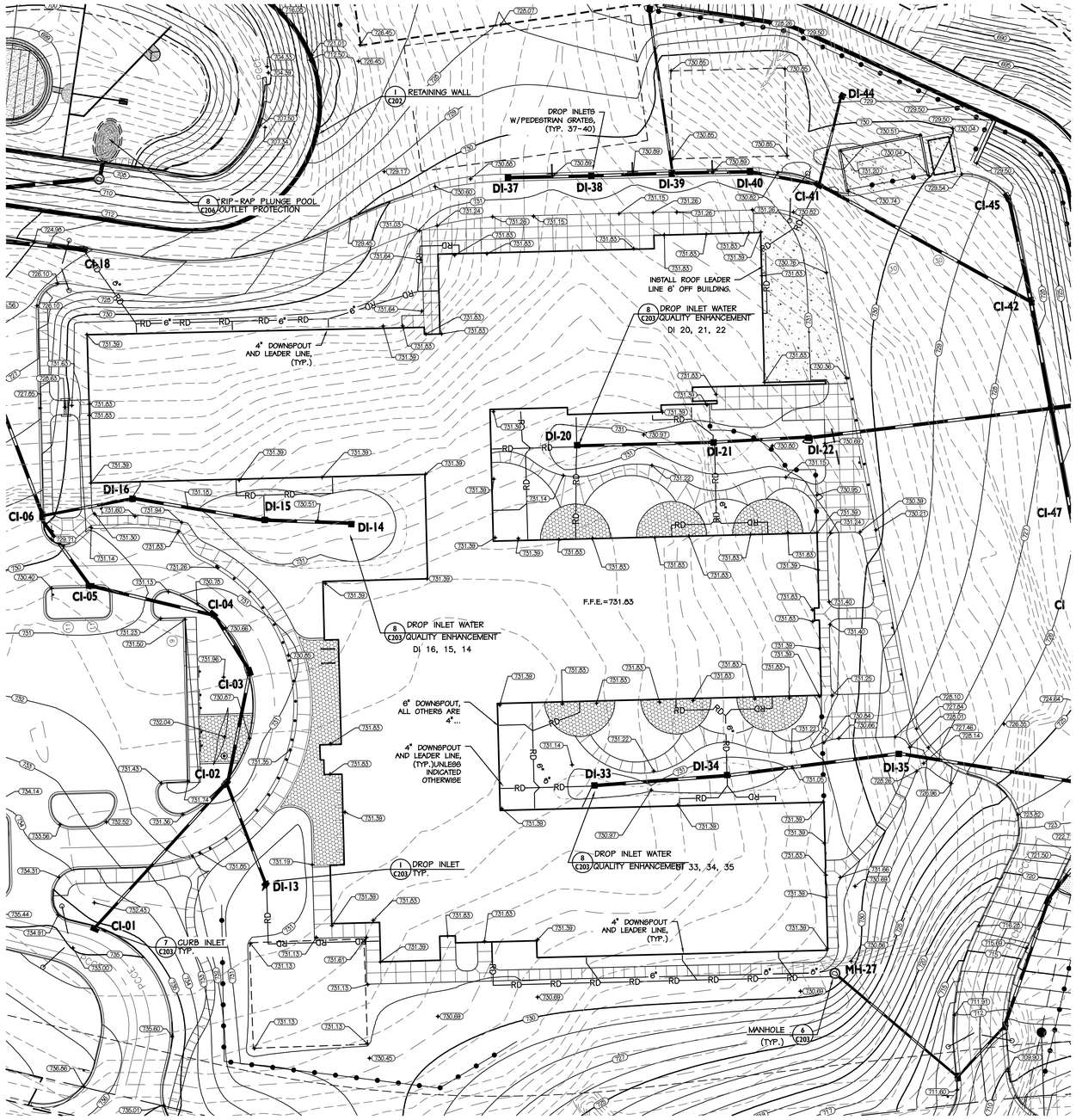

LEGEND

- EXISTING SIGN
- EIP EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W RIGHT-OF-WAY
- HC ACCESSIBLE SPACE
- EXISTING TREE TO REMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING STORM MANHOLE
- MH 1 PROPOSED STORM MANHOLE
- FES 1 PROPOSED FLARED END SECTION
- EXISTING DRAINAGE STRUCTURE
- DI 1 PROPOSED DRAINAGE STRUCTURE
- +XXX.X EXISTING SPOT ELEVATION
- XXX.XX PROPOSED SPOT ELEVATION
- CO EXISTING CLEANOUT
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
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- W EXISTING WATER LINE
- G EXISTING GAS LINE
- XXX EXISTING CONTOUR LINE
- XXX PROPOSED CONTOUR LINE
- TEMPORARY TREE PROTECTION BARRICADE
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- RD PROPOSED ROOF DRAIN PIPE
- EXISTING TREE LINE
- GV EXISTING GAS VALVE
- GM EXISTING GAS METER

NORTH

30 0 15 30 60

SCALE: 1" = 30'

TOPSOIL STOCK PILE NOTE:
CONTRACTOR SHALL STRIP AND STOCK PILE EXISTING TOP SOIL. STOCK PILE ENOUGH TO PLACE 6" OVER ENTIRE VEGETATED SITE. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. TOP SOIL SHALL BE CLEAN, FREE OF ROOT, DEBRIS, ROCK AND STUMPS. CONTRACTOR SHALL PROVIDE A SOIL SAMPLE TEST OF EXISTING MATERIAL. CONTRACTOR SHALL SUPPLEMENT WITH HAUL IN TOPSOIL IF ONSITE QUANTITY IS NOT SUFFICIENT. CONTRACTOR SHALL AMMEND EXISTING SOIL PER SPECIFICATIONS AND TESTING RESULTS WHEN DEFICIENT IN NUTRIENTS OR ORGANICS.

EROSION CONTROL BLANKET:
ALL DISTURBED AREAS WITH GRADED SLOPES AT 2:1 OR STEEPER PER GRADING PLAN SHALL RECEIVE THE FOLLOWING EROSION CONTROL BLANKET:

70% STRAW FIBER (.35 LBS/SQ YRD.) 30% COCONUT FIBER (0.15 LBS/SQ. YRD.) NETTING ON BOTH SIDES, LENO WOVEN, 100% BIODEGRADABLE ORGANIC JUTE FIBER, 9.3 LBS./1000 SQ. FT. STAPLE WITH .11 GA, 8" U STAPLES AT 2' O.C. DOWN THE SLOPE AND 1.6' O.C. ACROSS THE SLOPE.

ONE YEAR CONTINUED MAINTENANCE AGREEMENT

THE INFORMATION BELOW SHALL BE INCLUDED IN THE CONTRACT BY THE CONTRACTOR AS REQUIRED IN THE CONTINUED ONE YEAR MAINTENANCE AGREEMENT WITH THE OWNER.

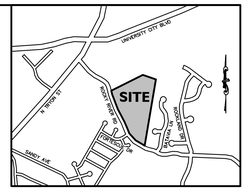
MAINTENANCE INSPECTION REPORTS

AS INDICATED IN THE POST-CONSTRUCTION STORM WATER ORDINANCE, ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SUBMITTED TO THE STORM WATER ADMINISTRATOR. THE FIRST REPORT SHALL BE SUBMITTED ONE YEAR FOLLOWING THE FINAL APPROVAL DATE OF THE BMP PER THIS CONTRACT. SUBSEQUENT REPORTS WILL THEN BE THE RESPONSIBILITY OF THE OWNER EACH YEAR THEREAFTER ON OR BEFORE THE APPROVAL ANNIVERSARY DATE. ALL MAINTENANCE ACTIVITIES AND INSPECTION REPORTS SHALL BE DOCUMENTED USING THE FORMS CONTAINED IN THE ADMINISTRATIVE MANUAL. ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SEALED BY A REGISTERED NORTH CAROLINA PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT. THESE INSPECTIONS SHALL BE DISCONTINUED ONLY IF THE BMPS ARE ACCEPTED FOR MAINTENANCE BY THE APPLICABLE JURISDICTION.

NOTE: THE MAINTENANCE AGREEMENT SHALL BEGIN UPON FULL ACCEPTANCE OF THE BMP, NOT NECESSARILY AT SUBSTANTIAL COMPLETION OF THE PROJECT. THE FIRST REPORT BY THE CONTRACTOR SHALL BE PROVIDED AT THE 11 MONTH IN THE 12 MONTH AGREEMENT.

ROUTINE MAINTENANCE TASKS AND SCHEDULE (PER POND DETAILS AND NOTES INCLUDED IN THIS SET OF PLANS AND PER SAND FILTER BASIN REQUIREMENTS IN THE STORM WATER BMP MANUAL)

NOTE: WHERE MAINTENANCE IS INDICATED IN THE TABLE AS "YEARLY", THE TASK SHALL BE PERFORMED AT THE 11 MONTH MARK IN THE 12 MONTH CONTRACT.



VICINITY MAP
NTS

GRADING AND DRAINAGE NOTES

1. EARTHWORK QUANTITIES HAVE NOT BEEN ESTIMATED AND SITE AS SHOWN IS NOT ASSUMED TO REPRESENT A BALANCED CUT/FILL CONDITION.
2. CONTRACTOR SHALL PERFORM HIS OWN ESTIMATES AND SHALL PROVIDE ALL EARTHWORK NECESSARY TO ACHIEVE THE DESIGN GRADE, INCLUDING ANY OFFSITE BORROW OR SPOILS REQUIRED.
3. ROOF LEADERS SHALL BE SCH 35 PVC MINIMUM COVER SHALL BE 18", MINIMUM SLOPE SHALL BE 1%. PROVIDE CLEANOUTS AT ALL CONNECTIONS WITH BUILDING DRAIN AND WHERE INDICATED. REFER TO PLUMBING PLANS FOR THE EXACT LOCATION OF ROOF DRAINS AT THE BUILDING.
4. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL GRADED AREAS, INCLUDING PAVING, LAWN AND LANDSCAPE AREAS.
5. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
6. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK. BOTH PUBLIC AND PRIVATE. CONTRACTOR IS FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL REPAIR ANY DAMAGE AS A RESULT OF THIS CONTRACT.
7. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
8. THE PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN DRIVES, PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
9. ALL "STD." NUMBERS REFER TO THE CHARLOTTE/MECKLENBURG LAND DEVELOPMENT STANDARDS MANUAL.
10. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
11. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY/COUNTY ENGINEERING DEPARTMENT.
12. ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN, IS SUBJECT TO A FINE.
13. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS SUBJECT TO A FINE.
14. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLAN. APPLY TEMPORARY SEED & MULCH TO ALL DENUDED AREAS WITHIN 21 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING THAT IS NOT BROUGHT TO FINAL GRADE. APPLY PERMANENT SEED & MULCH TO ALL DENUDED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) AFTER FINAL GRADE IS REACHED. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
15. PIPE LENGTHS SHOWN ARE THE ENGINEER'S ESTIMATE USED TO COMPUTE PIPE SLOPES AND INVERTS AND SHALL NOT BE CONSTRUED BY THE CONTRACTOR TO REPRESENT THE ACTUAL QUANTITY OF PIPE REQUIRED.
16. CROSS SLOPE OF SIDEWALKS SHALL BE 1/4"/FT. (MAX).
17. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1
18. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
19. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/CLEARING/GRADING/ CONSTRUCTION, AND NOT REMOVED UNTIL AFTER FINAL INSPECTION BY URBAN FORESTER.
20. NO DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.
21. TREE PROTECTION BARRICADES MUST MEET OR EXCEED TREE ORDINANCE STANDARDS (IN THE CITY OF CHARLOTTE TREE ORDINANCE GUIDELINES APPENDIX 9 OR LAND DEVELOPMENT STANDARDS MANUAL 40.04).
22. BEFORE GRADING/CLEARING/CONSTRUCTION BEGINS, CALL 336-3822 FOR INSPECTION OF TREE PROTECTION BARRICADES BY URBAN FORESTER.
23. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED; SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS.
24. BRUSH, VINES AND SMALL TREES (.6 IN. DIA., OR AS SMALL AS 2 IN. CALIPER) MAY BE HAND CLEARED ONLY CUT FLUSH WITH GROUND SURFACE. EXISTING TREES MAY BE LIMBED UP 6 FEET (AT LEAST 2/3 OF THE BRANCHES SHOULD BE LEFT) TO IMPROVE VISIBILITY.
25. EXPOSED TREE ROOTS MUST BE CLEANLY CUT WITH A SHARP PRUNING TOOL; BACKFILL ASAP TO MINIMIZE EXPOSURE TO THE AIR.
26. ANY TREES IN TREE PROTECTION SETBACK THAT COUNT TOWARD TREE ORDINANCE REQUIREMENTS THAT DIE DURING CONSTRUCTION WILL BE MITIGATED AS DIRECTED BY URBAN FORESTER.
27. UNLESS OTHERWISE NOTED, THE PHYSICAL CONNECTION BETWEEN THE SITE ROOF DRAIN PIPE AND THE PIPE INSTALLED BY THE PLUMBING CONTRACTOR SHALL BE MADE BY THE SITE UTILITY CONTRACTOR.
28. PIPE LENGTHS SHOWN ON CULVERTS INCLUDE FLARED END SECTIONS.
29. IN ORDER TO ENSURE ADEQUATE DRAINAGE FLOW LINES IN GUTTERS SHALL BE 0.50% MINIMUM.
30. HDPE STORM DRAINAGE INSTALLED WITHIN EXISTING OR PROPOSED ROW MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL IN THE PUBLIC STREET ROW.
31. PER SECTION 18-175(E) OF THE CITY CODE AND SECTION 10.0 OF THE CITY'S POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCCEs) MUST BE RECORDED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
32. CERTIFICATION OF STREET CUT PERMITS ARE REQUIRED FOR UTILITY CUTS ON CITY STREETS. ALLOW 7 DAYS PROCESSING FOR PERMIT. FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4025) OR VISIT HTTP://WWW.CHARMECK.ORG/DEPARTMENTS/TRANSPORTATION/STREET+MAINTENANCE/HOME.HTM
34. IN THIS CONTRACT WHERE PERMANENT SLOPE MATTING IS INSTALLED THE GENERAL CONTRACTOR SHALL FIRST RE-SPREAD THE 6" OF TOPSOIL REQUIRED ON THE SLOPES TO BRING THE SLOPE TO FINAL GRADE. THE SLOPES SHALL BE SEEDED WITH PERMANENT SEED MIXTURE PER SPECIFICATIONS OR AS PER LANDSCAPE PLAN REQUIRES.

Site Storm Schedule

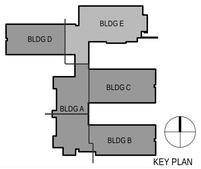
Upstream Str.	Upstream Rim	Invert El. (Upstream)	Downstream Str.	Invert El. (Downstream)	Length (ft.)	Diameter (in.)	Material	Slope (ft/ft)	Notes
CI-01	734.58	731.08	CI-02	726.13	112	15	Concrete	0.044	
CI-02	730.49	725.93	CI-03	725.61	64	15	Concrete	0.005	
CI-03	730.37	725.16	CI-04	724.97	38	18	Concrete	0.005	
CI-04	730.56	724.77	CI-05	724.41	72	18	Concrete	0.005	
CI-05	729.97	724.21	CI-06	723.97	48	18	Concrete	0.005	
CI-06	729.36	723.77	CI-07	720.82	124	18	Concrete	0.024	
CI-07	725.27	720.82	CI-08	719.43	12	18	Concrete	0.100	
CI-08	723.18	716.98	MH-09	714.22	71	30	Concrete	0.039	
MH-09	721.60	714.02	MH-10	707.75	63	30	Concrete	0.100	
MH-10	712.50	707.55	MH-11	699.76	154	30	Concrete	0.050	
MH-11	708.75	699.56	INV-12	699.50	11	30	Concrete	0.006	O-RING
DI-13	729.94	726.44	CI-02	726.13	62	15	Concrete	0.005	
DI-14	730.12	726.62	DI-15	726.37	50	15	Concrete	0.005	
DI-15	729.91	726.17	DI-16	725.79	76	15	Concrete	0.005	
DI-16	731.23	725.59	CI-06	724.22	52	15	Concrete	0.026	
CI-17	728.95	725.45	CI-08	718.43	150	15	Concrete	0.047	
CI-18	725.92	722.42	DCI-19	718.85	80	15	Concrete	0.045	
DCI-19	722.35	718.65	CI-08	718.43	44	15	Concrete	0.005	
DI-20	730.40	726.90	DI-21	726.51	78	15	Concrete	0.005	
DI-21	730.34	726.31	DI-22	726.04	54	15	Concrete	0.005	
DI-22	729.83	725.84	CI-23	719.31	139	15	Concrete	0.047	
CI-23	726.94	718.36	MH-24	718.24	23	24	Concrete	0.005	
MH-24	722.80	707.03	MH-25	705.26	18	24	Concrete	0.099	O-RING
MH-25	709.50	704.56	WW-26	704.50	10	30	Concrete	0.006	O-RING
MH-27	730.90	717.34	CI-28	708.15	92	15	Concrete	0.100	
CI-28	711.65	707.95	CI-29	707.71	41	15	Concrete	0.006	
CI-29	711.21	707.51	CI-30	707.14	74	15	Concrete	0.005	
CI-30	718.66	706.94	MH-31	706.45	79	15	Concrete	0.006	
MH-31	719.25	705.70	MH-32	705.19	101	24	Concrete	0.005	O-RING
MH-32	711.21	705.19	MH-25	704.56	128	24	Concrete	0.005	O-RING
DI-33	730.34	726.84	DI-34	726.46	76	15	Concrete	0.005	
DI-34	730.34	726.26	DI-35	724.87	99	15	Concrete	0.014	
DI-35	728.37	724.67	CI-36	718.25	112	15	Concrete	0.057	
CI-36	723.50	718.05	MH-31	715.75	23	15	Concrete	0.100	
DI-37	730.88	726.00	DI-38	723.60	47	15	Concrete	0.051	
DI-38	730.67	723.40	DI-39	723.17	46	15	Concrete	0.005	
DI-39	730.67	721.33	DI-40	721.11	45	15	Concrete	0.005	
DI-40	730.67	720.91	CI-41	720.71	40	15	Concrete	0.005	
CI-41	730.39	720.51	CI-42	719.82	138	15	Concrete	0.005	
CI-42	727.75	719.62	CI-23	719.31	62	15	Concrete	0.005	
DI-43	725.50	722.00	DI-39	721.53	94	15	Concrete	0.005	
DI-44	728.70	725.20	CI-41	720.71	52	15	Concrete	0.087	
CI-45	728.52	725.02	CI-42	719.82	61	15	Concrete	0.085	
CI-46	725.45	721.95	CI-47	721.68	54	15	Concrete	0.005	
CI-47	728.17	721.48	CI-23	719.31	58	15	Concrete	0.037	
OS-A	703.00	690.91	MH-A.1	687.27	55	24	Concrete	0.066	
MH-A.1	695.00	687.07	WW-A.2	687.00	14	24	Concrete	0.005	
OS-B	708.00	698.75	MH-B.1	693.86	54	24	Concrete	0.091	
MH-B.1	699.80	693.66	MH-B.2	688.41	177	24	Concrete	0.030	
MH-B.2	693.20	688.21	WW-B.3	688.00	42	24	Concrete	0.005	

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT NO. 979 HENRY N. GORMAN 11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION
CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Grading/Drainage Notes / Enlargement

SCALE:

C102.1

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

J:\3072C Newell Elementary\Drawings\3072C-DD\3072GRADING.dwg, 11/21/2013 2:23:10 PM, PDF-XChange for AcroPlot Pro

50' PCO Undisturbed Stream Buffer

PCO Natural Area-3.79 Acres

FRANK L. CALDWELL Et al
D.B. 4040, PG. 847

STEPHEN L. JENKINS
D.B. 3863, PG. 261

WEST PORTER JR. Et al
D.B. 25426, PG. 914

LORRI L. ELLIOT and
NEIL P. MANGAN
D.B. 26236, PG. 233

FOREST GLEN SUBDIVISION
M.B. 21, PG. 344

LOT 20 · LOT 19 · LOT 18 · LOT 17 · LOT 16 · LOT 15 · LOT 14 · LOT 20 · LOT 13 · LOT 12 · LOT 11 · LOT 10

Basin 1
5.34 Ac.
3.22 Acres BUA Phase 1
0.25 Acres BUA Future
3.48 BUA Total

Basin 2
4.27 Ac.
2.26 Acres BUA Phase

BMP Inset Table
Sand Filter Basin #2

Project Name:	**CMS Newell Elem. School**
Sequence ID:	Sand Filter
Drainage Area (acres):	4.27Ac.
Land Use/Development Type:	Elementary School
On-site BUA	2.26Ac.
Future On-Site BUA	0.00Ac.
Off-Site BUA	0
Total BUA to BMP	***2.26Ac.***
Percent Built-Upon Area:	52.93%
Sediment Chamber Length (ft.):	67 +/-
Sediment Chamber Width (ft.):	83 +/-
Sediment Chamber Height (ft.):	2
Sand Filter Type:	Surface
Media Depth (ft.):	2.5
Media Surface Area (ft2):	1,385
Flow Diverter Present (Y/N):	N
Regulated By:	Charlotte PCO
Treatment Effectiveness:	Optimal
NC State Plane X (easting):	E 1476837.6794
NC State Plane Y (northing):	Y 564275.6442

PCO Site Summary

Project Name:	**CMS Newell Elem. School**
Parcel ID	4923103 & 04923151
Site Area (acres):	21.52Ac.
Land Use/Development Type:	Elementary School
PCO District	Yadkin-Southeast Catawba
Existing BUA to remain	0.30Ac.
New on-site BUA	5.48Ac.
Future On-Site BUA	0.25Ac.
Off-Site BUA	0
Total BUA	***5.73Ac.***
Percent Built-Upon Area:	26.63%
Required Natural Area (17.5%):	3.77Ac.

LEGEND

- **Existing Built-Upon Area**
- **Built-Upon Area: Phase One**
- **Built-Upon Area: Future**
- **PCO Natural Area**

BMP Inset Table
Sand Filter Basin #1

Project Name:	**CMS Newell Elem. School**
Sequence ID:	Sand Filter
Drainage Area (acres):	5.34Ac.
Land Use/Development Type:	Elementary School
On-site BUA	3.22Ac.
Future On-Site BUA	0.25Ac.
Off-Site BUA	0
Total BUA to BMP	***3.47Ac.***
Percent Built-Upon Area:	64.98%
Sediment Chamber Length (ft.):	109 +/-
Sediment Chamber Width (ft.):	43 +/-
Sediment Chamber Height (ft.):	2
Sand Filter Type:	Surface
Media Depth (ft.):	2.5
Media Surface Area (ft2):	1,385
Flow Diverter Present (Y/N):	N
Regulated By:	Charlotte PCO
Treatment Effectiveness:	Optimal
NC State Plane X (easting):	E 1476912.0696
NC State Plane Y (northing):	Y 563516.8733

100' PCO Undisturbed Stream Buffer

PCO Site Boundary - 21.52 Acres

Proposed ROW Dedication - 0.32 Acres

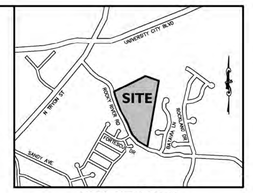
AREA OBSCURED BY DENSE FOLIAGE

AREA NOT OBSCURED

NORTH

50 0 25 50 100
1" =50'

STOP!
BEFORE YOU DIG CALL
THE NC ONE CALL CENTER
1-800-632-4949
IT'S THE LAW!



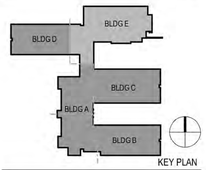
VICINITY MAP
NTS

NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT SEAL 3179 HENRY GORMAN 12/19/13

SEAL



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MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY
SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Stormwater Management Plan

SCALE:

C102.2

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

EROSION CONTROL BLANKET:
ALL DISTURBED AREAS WITH GRADED SLOPES AT 3:1 OR STEEPER PER GRADING PLAN SHALL RECEIVE THE FOLLOWING EROSION CONTROL BLANKET:

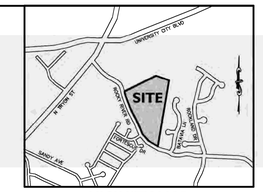
70% STRAW FIBER (.35 LBS/SQ YRD.) 30% COCONUT FIBER (0.15 LBS/SQ. YRD.) NETTING ON BOTH SIDES, LENO WOVEN, 100% BIODEGRADABLE ORGANIC JUTE FIBER, 9.3 LBS./1000 SQ. FT. STAPLE WITH .11 GA, 6" U STAPLES AT 2' O.C. DOWN THE SLOPE AND 1.6' O.C. ACROSS THE SLOPE.

NOTE: CONTRACTOR TO PROVIDE TREE PROTECTION AT THE COMMENCEMENT OF INITIAL EROSION CONTROL STAGE. SEE ADDITIONAL PLANS FOR TREE PROTECTION LOCATIONS.

NOTE: CONTRACTOR TO REVIEW AND COMPLETE THE REQUIRED SWPPP PLAN IN THE CONTRACT DOCUMENTS. SUBMIT PLAN FOR REVIEW WITHIN 15 DAYS OF NTP.

LEGEND FOR EROSION CONTROL PLAN

- EXISTING SIGN
- EIP EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W RIGHT-OF-WAY
- EXISTING TREE TO REMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING STORM MANHOLE
- MH1 PROPOSED STORM MANHOLE
- EXISTING DRAINAGE STRUCTURE
- DI1 PROPOSED DRAINAGE STRUCTURE
- DRAINAGE INLET PROTECTION
- TEMPORARY ROCK CHECK DAM
- TEMPORARY FILTER BERM BASIN
- TEMPORARY GRAVEL ENTRANCE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- TEMPORARY SILT FENCE
- TEMPORARY STONE DAM IN SILT FENCE OPENING
- TEMPORARY TREE PROTECTION BARRICADE
- LIMITS OF GRADING/CONSTRUCTION
- LINED GRASS SWALE
- GRASS SWALE
- TEMPORARY DIVERSION SWALE



VICINITY MAP
NTS

S.W.I.M. STREAM BUFFER NOTES:

1. THE S.W.I.M. BUFFER IS MEASURED HORIZONTALLY ON A LINE PERPENDICULAR TO THE SURFACE WATER, LANDWARD FROM THE TOP OF THE BANK ON EACH SIDE OF THE STREAM.
2. THE STREAM SIDE ZONE OF THE BUFFER MUST BE LEFT COMPLETELY UNDISTURBED. IN THE MANAGED USE ZONE, A LIMITED NUMBER OF TREES CAN BE REMOVED PROVIDED THAT THE TREE DENSITY REMAINING IS A MINIMUM OF 8 HEALTHY TREES OF A MIN. 6" CALIPER PER 1,000SQFT. REMOVAL OF EXISTING VEGETATION MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO ROOTS OF REMAINING TREES.
3. GRADING AND OTHER LAND DISTURBING ACTIVITIES ARE ALLOWED ONLY IN THE UPLAND ZONE; HOWEVER, THESE ACTIVITIES MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO THE ROOTS OF REMAINING TREES. GRASS OR OTHER SUITABLE GROUND COVER CAN BE APPLIED TO THE UPLAND ZONE.
4. NO OCCUPIED STRUCTURES CAN BE PLACED IN ANY OF THE THREE (3) BUFFER ZONES. NON BUILDINGS FOR STORAGE CAN BE PLACED IN THE UPLAND ZONES PROVIDED THEY DO NOT EXCEED 150 SQUARE
5. ENGINEERED OR IMPROVED CHANNELS AND PIPED STORM WATER ARE NOT ALLOWED IN OR THROUGH THE BUFFER. TEMPORARY SEDIMENT BASINS CANNOT BE PLACED IN THE STREAM SIDE OR MANAGED USE ZONES. DRAINAGE AREAS WILL BE DESIGNED TO ALLOW WATER TO SHEET FLOW ACROSS THE BUFFER TO FILTER OUT POLLUTANTS. PLUNGE POOLS, ENERGY DISSIPATERS, DIVERSION DEVICES OR WETLAND FLOW WILL BE USED. DESIGN DETAILS FOR THESE DEVICES CAN BE OBTAINED FROM CHARLOTTE MECKLENLENBURG LAND DEVELOPMENT STANDARDS MANUAL.
6. THE OUTSIDE BOUNDARY OF THE BUFFER MUST BE CLEARLY MARKED WITH ORANGE FABRIC FENCING PRIOR TO ANY LAND DISTURBING ACTIVITIES (GRADING, TREE CUTTING OR STUMPING, ETC.) AT THE SITE.
7. THE OUTSIDE BOUNDARY OF THE STREAM BUFFER MUST BE PERMANENTLY MARKED WITH AN IRON PIN OR OTHER ACCEPTABLE PROPERTY CORNER MARKER AT STREET CROSSINGS.
8. ANY ACTIVITY IN THE BUFFER WILL COMPLY WITH S.W.I.M. STREAM BUFFER SECTION OF THE LAND DEVELOPMENT STANDARDS MANUAL.
9. ALL SUB-CONTRACTORS OF THE LAND DEVELOPER AND HOME BUILDER WILL BE NOTIFIED OF THE BUFFER REGULATIONS BY THE CONTRACTOR PRIOR TO DEVELOPMENT.

PERMANENT SEEDING

SURFACE PREPARATION
CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE. RIP THE ENTIRE AREA TO 6 INCHES DEPTH. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.

SOIL AMENDMENTS
SEE SPECIFICATIONS

AFTER COMPLETED SURFACE PREPARATION, SEED AND MULCH AS SPECIFIED BELOW:
SEEDING MIXTURE (Non-Aethletic Field Areas)

SPECIES	*RATE (LB/1000SF)*
COMMON BERMUDA	*3*
REBEL III FESCUE	*5*

SEEDING DATES: APRIL 1–AUG. 15.
NURSE CROP: BEFORE MAY 1 OR AFTER AUG 15–ADD RYE GRAIN @ 40LB/ACRE.

MULCH
APPLY 4,000 LB/ACRE STRAW (GRAIN). ANCHOR STRAW BY TACKING WITH EMULSIFIED ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. EROSION CONTROL BLANKETS SHALL BE USED WHERE INDICATED.
MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TOPSOIL STOCK PILE NOTE:
CONTRACTOR SHALL STRIP AND STOCK PILE EXISTING TOP SOIL. STOCK PILE ENOUGH TO PLACE 6" OVER ENTIRE VEGETATED SITE. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. TOP SOIL SHALL BE CLEAN, FREE OF ROOT, DEBRIS, ROCK AND STUMPS. CONTRACTOR SHALL PROVIDE A SOIL SAMPLE TEST OF EXISTING MATERIAL. CONTRACTOR SHALL SUPPLEMENT WITH HAUL IN TOPSOIL IF ONSITE QUANTITY IS NOT SUFFICIENT.

CONSTRUCTION SEQUENCE:

A. CONTACT NCDENR EROSION CONTROL INSPECTOR TO INFORM HIM THAT CONSTRUCTION IS READY TO BEGIN.

B. SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE NCDENR EROSION CONTROL INSPECTOR, CONTRACTOR, AND SITE SOLUTIONS TO DISCUSS EROSION CONTROL MEASURES.

C. INSTALL CONSTRUCTION ENTRANCES, SILT FENCE, AND TREE PROTECTION AS SHOWN ON SHEET C103.1 AND L100, CLEARING ONLY AS NECESSARY TO INSTALL THESE MEASURES.

C. BEGIN MOVING SOIL TO CONSTRUCT THE SEDIMENT BASINS. ONCE BASINS HAVE BEEN CONSTRUCTED, INSTALL DIVERSION SWALES, STORM PIPES AND ALL OTHER MEASURES SHOWN ON SHEET C103.1.

D. CLEAR AND GRUB THE REMAINING SITE WITHIN THE DISTURBED LIMITS.

E. COMPLETE NCDENR SELF INSPECTION REPORT FOR THE PRE EROSION CONTOL PHASE.

F. TEMP. SEED/HYDRO SEED ALL NEW DENUDED AREAS FROM THE INSTALLATION OF ANY NEWLY INSTALLED EROSION CONTROL MEASURES. SEE SEEDING SCHEDULE FOR SEED TYPE, DATES, AND RATES FOR DISTURBED AREAS WITH GRADED SLOPES FLATTER THAN 3:1. SEE EROSION CONTROL BLANKET NOTE (THIS SHEET) FOR SEEDING ON DISTURBED AREAS WITH GRADED SLOPES AT 3:1 OR STEEPER.

G. BEGIN BRINGING SITE UP TO GRADE. WHILE SITE IS BEING BROUGHT TO GRADE INCREASE WALL HEIGHTS AND STRUCTURE ELEVATIONS ENSURING WATER FROM TEMPORARY DIVERSION SWALES FLOW INTO THE STRUCTURES. CONTINUALLY RAISE THE GRADE OF THE TEMPORARY DIVERSION SWALES TO ENSURE POSITIVE FLOW TO THEIR OUTLETS.

H. ONCE STORM STRUCTURES HAVE BEEN INSTALLED TO THE FINAL GRADES, IMMEDIATELY INSTALL TEMPORARY INLET PROTECTION AS SHOWN ON SHEET C103.2.

I. COMPLETE NCDENR SELF INSPECTION REPORT FOR THE POST EROSION CONTROL PHASE.

J. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:

J.A. ALL PERIMETER DIKES, SWALES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

J.B. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

J.C. CONDITIONS – IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:

J.D. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.

J.E. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY REQUIREMENT APPLIES.

J.F. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT.

J.G. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.

J.H. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.

J.I. FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION-DEFINED "HIGH QUALITY WATER ZONE" (15A NCAC 04A. 0105), STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.

J.J. PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E+SC PLAN OR ADDED BY THE PERMITTING AUTHORITY.

K. COMPLETE ALL CONSTRUCTION WITHIN THESE PROJECT LIMITS.

L. EROSION CONTROL MEASURES (BASINS, FENCES, DIVERSION SWALES) DIRECTLY AFFECTED BY THIS CONTRACT SHALL BE MAINTAINED/REMOVED UNDER THIS CONTRACT. DEVICES SHALL BE MAINTAINED TO MAX. 50% CAPACITY UNTIL AREAS THEY SERVE ARE FULLY STABILIZED.

M. PROVIDE PERMANENT GRASSING FOR ALL DISTURBED AREAS.

N. CONTACT NCDENR FOR PERMISSION TO REMOVE EROSION CONTROL DEVICES.

O. REMOVE ALL EROSION CONTROL DEVICES. SPREAD AND SEED ACCUMULATED SEDIMENT.

P. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND THE SCS EROSION CONTROL ORDINANCE.

Q. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION.

R. ESTIMATED TIME BEFORE FINAL STABILIZATION IS 6 MONTHS.

EROSION CONTROL NOTES:

1. SOIL STABILIZATION SHALL BE IMPLEMENTED PER THE CONSTRUCTION SEQUENCE NOTES.
2. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDENR STAFF. ANY LAND-DISTURBING ACTIVITY >1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT NCJNCG010000). ANY PERMIT NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES.
3. ANY BORROW OR WASTE MATERIAL SHALL BE TAKEN/PLACED ON A SITE THAT HAS AN ACTIVE APPROVED GRADING PERMIT. IF THIS IS NOT OBTAINABLE, THEN CONTRACTOR MAY SUBMIT PLAN FOR APPROVAL TO NCDENR PRIOR TO ANY OFF-SITE BORROW/WASTE AREAS BEING DENUDED AND ANY GRADING OPERATIONS STARTING ON THIS SITE.
4. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE NCDENR EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
5. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE NCDENR EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
6. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
7. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.
8. TOTAL DENUDED AREA: 13.99 AC.

MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGN.
2. SEDIMENT WILL BE REMOVED FROM THE TEMPORARY SEDIMENT TRAPS WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
3. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP AT THE FENCE.
4. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. THE ENGINEER MAY DIRECT THAT ADDITIONAL SILT FENCING OR EROSION CONTROL MATTING BE INSTALLED AT ANY TIME PRIOR TO FINAL ACCEPTANCE.
5. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS INCLUDED IN THESE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED ONCE THE ENTIRE SITE IS STABILIZED.

SELF INSPECTION REQUIREMENTS

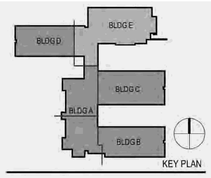
1. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING SEDIMENTATION CONTROL BASINS, SEDIMENTATION TRAPS, SEDIMENTATION PONDS, ROCK DAMS, TEMPORARY DIVERSIONS, TEMPORARY SLOPE DRAINS, ROCK CHECK DAMS, SEDIMENT FENCE OR BARRIERS, ALL FORMS OF INLET PROTECTION, STORM DRAINAGE FACILITIES, ENERGY DISSIPATERS, STABILIZATION METHODS OF OPEN CHANNELS, AND GROUND COVER SHALL BE INSPECTED BY THE OWNER OR DESIGNATED REPRESENTATIVE.
2. THE DIMENSIONS OF THE BASINS SHALL BE CHECKED AND COMPARED TO THE DIMENSIONS ON THE APPROVED SEDIMENTATION AND EROSION CONTROL PLAN. NOTIFY SITE SOLUTIONS IF THE DIMENSIONS OF ANY OF THE EROSION CONTROL MEASURES DEVIATE FROM THE PLANS.
3. A "SELF-INSPECTION REPORT FORM FOR LAND DISTURBING ACTIVITY" (AS REQUIRED BY NCGS 113A-54.1) IS PROVIDED WITHIN THE SPECS. ALTERNATIVELY THE OWNER OR DESIGNATED REPRESENTATIVE COMPLETING THE INSPECTIONS MAY MAKE NOTATIONS ON THE COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN THAT IS KEPT ON THE PROJECT SITE. DOCUMENTATION SHALL BE ACCOMPLISHED BY INITIALING AND DATING EACH MEASURE OR PRACTICE SHOWN ON A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR BY COMPLETING, DATING AND SIGNING AN INSPECTION REPORT THAT LISTS EACH MEASURE, PRACTICE OR DEVICE SHOWN ON THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. ALL DOCUMENTATION AND/OR REPORTS OF INSPECTIONS MUST BE MADE AVAILABLE ON THE SITE.
4. THE SELF-INSPECTION REPORT IS TO BE COMPLETED AFTER EACH PHASE OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS COMPLETE. THESE PHASES APPLY FOR THIS PROJECT:
   - 4.1. INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL MEASURES;
   - 4.2. CLEARING AND GRUBBING OF EXISTING GROUND COVER;
   - 4.3. COMPLETION OF ANY PHASE OF GRADING OF SLOPES OR FILLS;
   - 4.4. INSTALLATION OF STORM DRAINAGE FACILITIES;
   - 4.5. COMPLETION OF CONSTRUCTION OR DEVELOPMENT;
   - 4.6. ESTABLISHMENT OF PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION.

NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES DANIELS
11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T 704 940 0501
F 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Erosion Control Notes

SCALE:

C103

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

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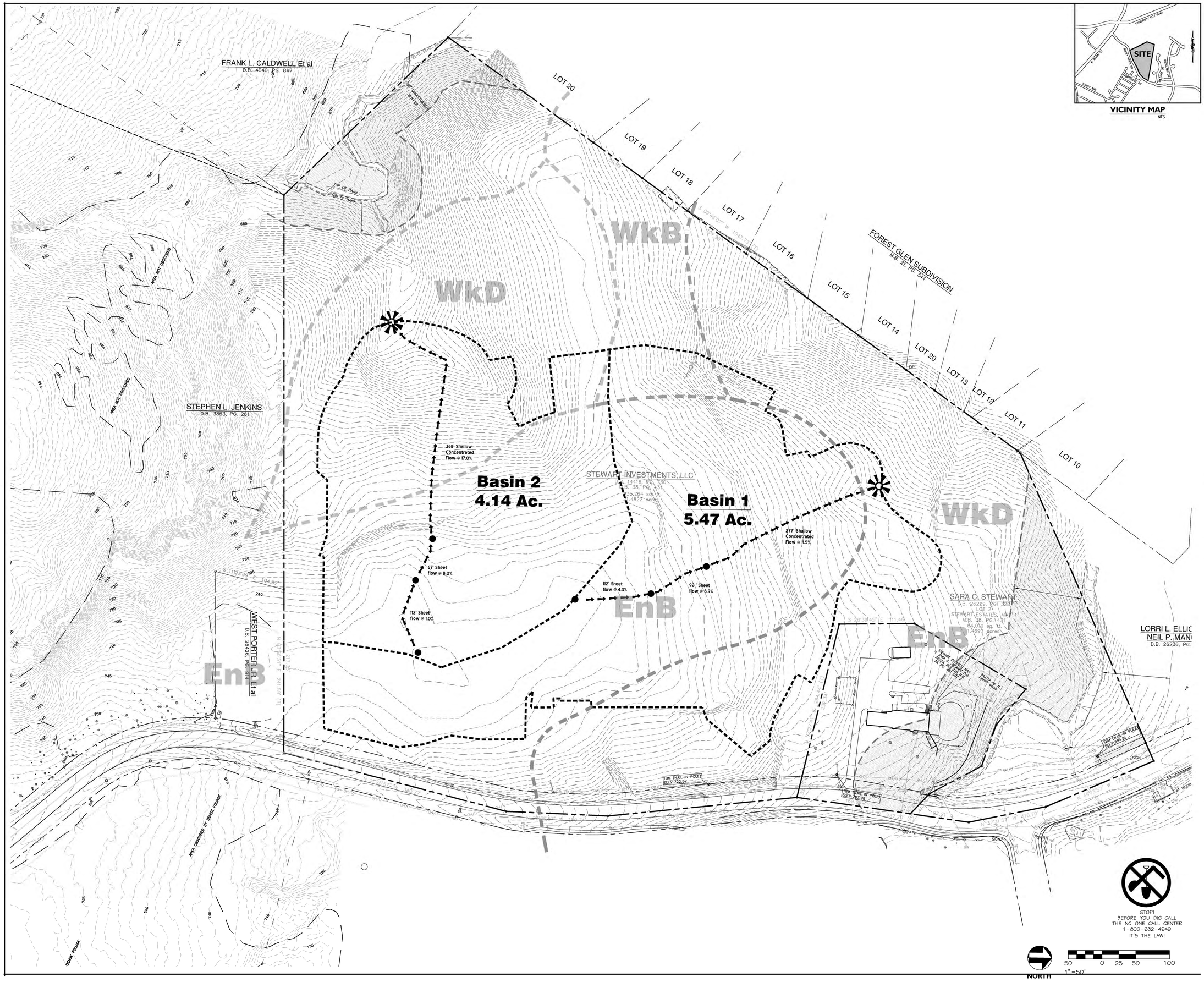

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT HENRY C. GORMAN NO. 671 11/12/13

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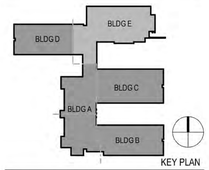

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DRAWING TITLE:

Pre-Development Drainage Area Map

SCALE:

C102.3

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

LEGEND FOR EROSION CONTROL PLAN

- EXISTING SIGN
- EIP — EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W — RIGHT-OF-WAY
- EXISTING TREE TO REMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING STORM MANHOLE
- MH1 — PROPOSED STORM MANHOLE
- DI1 — EXISTING DRAINAGE STRUCTURE
- PROPOSED DRAINAGE STRUCTURE
- DRAINAGE INLET PROTECTION
- TEMPORARY ROCK CHECK DAM
- TEMPORARY FILTER BERM BASIN
- TEMPORARY GRAVEL ENTRANCE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- UE — EXISTING UNDERGROUND ELECTRIC LINE
- OH/UT — EXISTING OVERHEAD UTILITY LINE
- T — EXISTING UNDERGROUND TELEPHONE LINE
- SS — EXISTING SANITARY SEWER LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- 710 — EXISTING CONTOUR LINE
- 710 — PROPOSED CONTOUR LINE
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- TEMPORARY SILT FENCE
- TEMPORARY STONE DAM IN SILT FENCE OPENING
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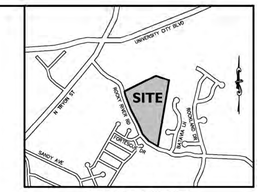


VICINITY MAP
NTS

SEE SHEET C103 FOR ALL EROSION CONTROL NOTES, MAINTENANCE PLAN, CONSTRUCTION SEQUENCE, AND SELF INSPECTION REQUIREMENTS.

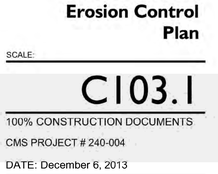
CLEAN ONLY AS NEEDED TO INSTALL INITIAL MEASURES SHOWN ON THIS SHEET

NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES CANNELLA
11/14/13

SEAL



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PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

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CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

PRE Conditions Erosion Control Plan

SCALE:

C103.1

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

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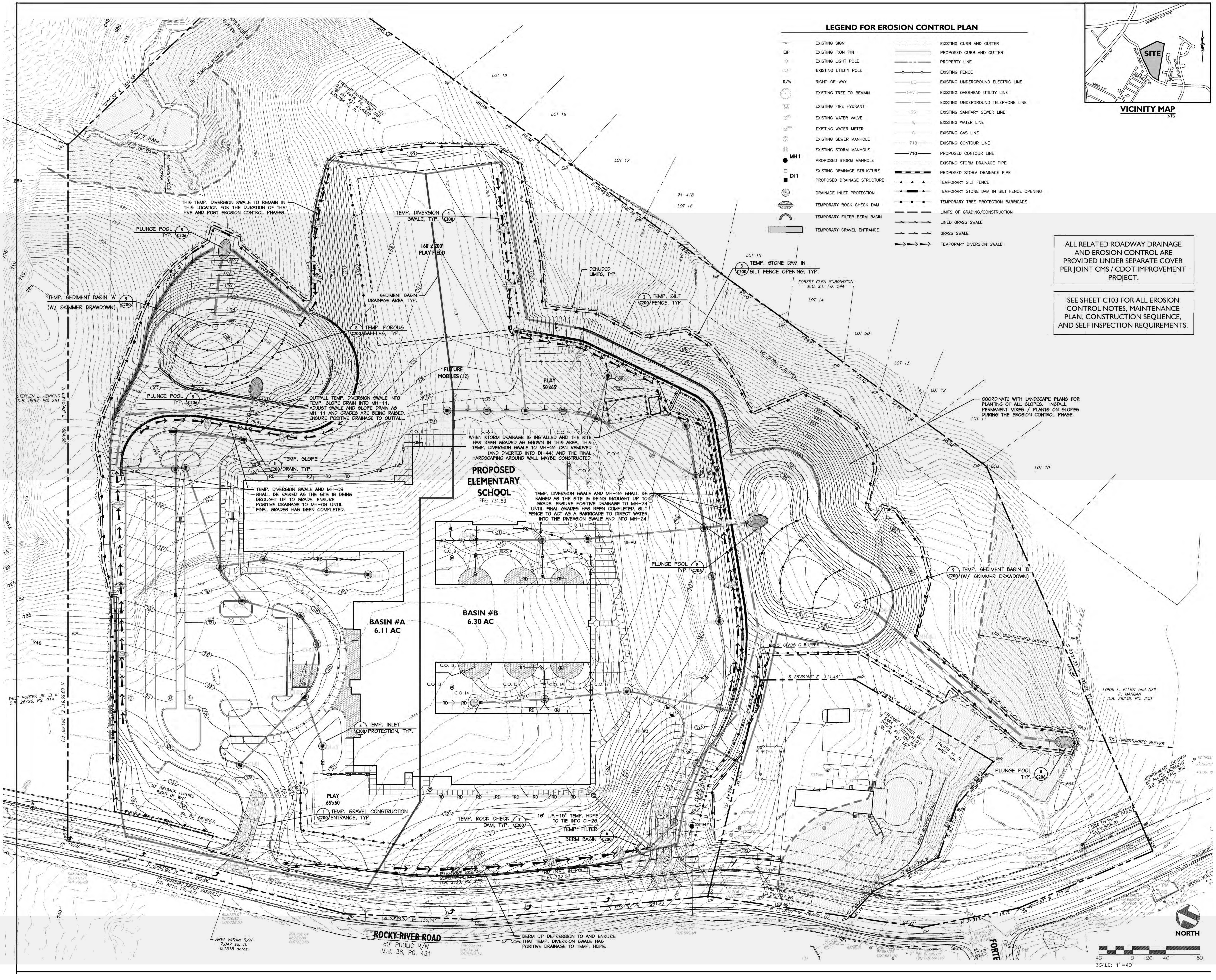

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PROJECT No: 32041.00

DRAWING TITLE:
POST Conditions Erosion Control Plan

SCALE:

C103.2

100% CONSTRUCTION DOCUMENTS
CMS PROJECT # 240-004
DATE: December 6, 2013

PROPOSED SANITARY SEWER SCHEDULE

STRUCTURE	RIM ELEV.	INVERT IN	INVERT OUT	PIPE INFO
SSMH#1	711.50	701.26	701.06	SEE CMUD PLANS
SSMH#2	725.00	714.92 (3) 721.25 (17)	714.72	124LF– 6"PVC @11.08%
SSMH#3	730.00	719.45 (10) 719.45 (7)	719.25	220LF– 6"PVC @1.98%
C.O. 1	731.40	–	728.74	98LF– 4"PVC @2.08%
C.O. 2	730.25	–	727.63	43LF– 4"PVC @2.08%
C.O. 3	731.40	–	726.74	91LF– 4"PVC @2.08%
C.O. 4	731.10	–	724.84	46LF– 6"PVC @2.08%
C.O. 5	731.20	–	723.88	50LF– 6"PVC @2.08%
C.O. 6	731.40	–	724.42	38LF– 4"PVC @2.08%
C.O. 7	730.20	–	722.84	55LF– 6"PVC @6.16%
C.O. 8	730.00	–	723.89	80LF– 6"PVC @2.08%
C.O. 9	731.00	–	722.30	80LF– 6"PVC @2.08%

PROPOSED SANITARY SEWER SCHEDULE

STRUCTURE	RIM ELEV.	INVERT IN	INVERT OUT	PIPE INFO
C.O. 10	730.80	–	720.64	57LF– 6"PVC @2.08%
C.O. 11	731.00	–	727.00	23LF– 4"PVC @27.65%
C.O. 12	731.40	–	729.00	26LF– 4"PVC @2.08%
C.O. 13	731.40	–	728.46	40LF– 4"PVC @2.08%
C.O. 14	731.10	–	727.75	55LF– 6"PVC @2.08%
C.O. 15	731.10	–	726.61	54LF– 6"PVC @2.08%
C.O. 16	731.10	–	725.48	33LF– 6"PVC @7.34%
C.O. 17	730.70	–	723.02	86LF– 6"PVC @2.08%

CMU Tracking Number: 600-13-599

DOMESTIC AND FIRE WATER LINES TO BE PERMITTED		
Size (inches)	Material	Length (lf)
8	PVC	604
4	PVC	606
	Total LF	1,210

Issuing Project Permit Number _____ **Date** _____

Signing Official _____ **Title** _____

CERTIFICATION NOTE:

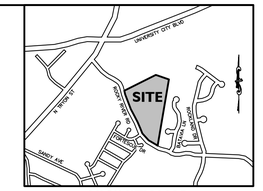
1. CONTRACTOR SHALL ASSIST ENGINEER IN DETERMINING QUALITY OF WATER AND CONSTRUCTION OF WATER AND SEWER MAINS. ENGINEER, OR HIS REPRESENTATIVE, TO PERIODICALLY INSPECT WATER AND SEWER LINE INSTALLATION. CONTRACTOR TO PROVIDE A MINIMUM OF 24 HOURS NOTICE BEFORE BEGINNING INSTALLATION. FAILURE TO NOTIFY THE ENGINEER MAY RESULT IN THE UNCOVERING OF INSTALLED LINES AT THE DISCRETION OF THE ENGINEER. ALL SUCH WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
2. CONTRACTOR SHALL COORDINATE WITH SURVEYOR FOR ACQUIRING ELEVATIONS ON RIMS AND INVERTS (IN & OUT), MANHOLE LOCATIONS, AND DISTANCES. SURVEYOR'S INFORMATION WILL NEED TO BE SEALED.
3. CONTRACTOR SHALL PROVIDE ENGINEER A *COPY* OF AS-BUILTS OF WATER AND SEWER MAIN LINES WITH THE SERVICES AND LATERALS. SERVICE AND VALVE LOCATIONS ARE TO BE TIED TO TWO FIXED POINTS (IE. STORM CATCH BASINS, 90° CURBS, FIRE HYDRANTS, MANHOLES, ETC.) AND THE LATERALS ARE TO BE MEASURED FROM THE DOWN STREAM MANHOLE.
4. AN ORIGINAL REPORT FROM THE LAB OF THE PASSING WATER QUALITY TEST SHALL BE FORWARDED TO THE ENGINEER. A STATEMENT FROM THE LAB NEEDS TO SAY THAT THE WATER IS SUITABLE FOR DOMESTIC USE.
5. A LETTER STATING THE RESULTS OF THE PRESSURE TESTS PERFORMED ON THE WATER MAINS SHALL BE SUBMITTED TO THE ENGINEER.
6. AIR TESTS ON MANHOLES, MAINS, OR LATERALS WILL BE REQUIRED. CONTRACTOR SHOULD ANTICIPATE PULLING A MANDREL FOR 100% OF SEWER MAINS. FLOWING WATER IN LATERALS WILL ALSO BE REQUIRED.
7. ALL VALVES WILL BE INSPECTED AND OPERATED. ALL SERVICES, YARD HYDRANTS AND FIRE HYDRANTS WILL BE TESTED. TRACER WIRES WILL BE INSPECTED.
8. CONTRACTOR TO PROVIDE KEYS NECESSARY TO OPERATE ALL VALVES.
9. CERTIFICATION FROM ENGINEER AND ACCEPTANCE WITH APPROPRIATE JURISDICTION MUST BE OBTAINED PRIOR TO PUTTING RESPECTIVE UTILITIES IN SERVICE FOR USE.

SEE ALLOWANCE FOR RELATED UTILITY TAP FEES.

NOTE: UTILITIES TO BE RELOCATED BY RESPECTIVE UTILITY OWNERS AS NECESSARY. CONTRACTOR SHALL COORDINATE ALL RELOCATIONS.

NOTE: CONTRACTOR SHALL COORDINATE ALL SANITARY SEWER LOCATIONS AS EXIT BUILDING WITH SITE SEWER PLAN PRIOR TO INSTALLATION.

COORDINATE ALL GAS / ELECTRICAL / CABLE AND PHONE SERVICE LINES INTO THE SITE.



VICINITY MAP
NTS

UTILITY NOTES

1. UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODE REQUIREMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES (STORM DRAINAGE, ELECTRIC, GAS, TELEPHONE, ETC.) PRIOR TO CONSTRUCTION. INFORMATION SHOWN ON THIS PLAN IS FOR REFERENCE ONLY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IF ANY DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND ACTUAL FIELD CONDITIONS ARE FOUND.
4. MINIMUM COVER FOR ALL SANITARY SEWER MAINS SHALL BE 3'-0". DUCTILE IRON PIPE WILL BE SUBSTITUTED WHEN MINIMUM COVER CAN NOT BE MAINTAINED.
5. THE STANDARD DEPTH OF COVER FOR WATER MAINS SHALL BE 3'-0" MIN. EXCEPT AT VALVE OR HYDRANT LOCATIONS, OR OTHER SPECIAL CONDITIONS.
6. THE CONNECTION TO EXISTING WATER MAINS SHALL BE PERFORMED ONLY AFTER ALL PRESSURE TESTING AND CHLORINATION ARE SUCCESSFULLY COMPLETED AND THE LOCAL REVIEW AUTHORITY HAS APPROVED THE CONNECTION. THE CONTRACTOR SHALL AVOID DISRUPTION OF EXISTING SERVICE.
7. REFER TO PLUMBING DRAWING SERIES FOR THE LOCATION OF WATER AND SANITARY SEWER SERVICE CONNECTIONS AT THE BUILDING.
8. UNLESS OTHERWISE NOTED, THE PHYSICAL CONNECTION BETWEEN THE SITE UTILITY LINES AND THE PIPE INSTALLED BY THE PLUMBING CONTRACTOR SHALL BE MADE BY THE PLUMBING CONTRACTOR.
9. PIPE LENGTHS SHOWN ON PLAN ARE THE ENGINEER'S ESTIMATE USED TO COMPUTE PIPE SLOPES AND INVERTS AND SHALL NOT BE CONSTRUED BY THE CONTRACTOR TO REPRESENT THE ACTUAL QUANTITY OF PIPE REQUIRED.
10. IF WATER LINE CROSSES OVER SANITARY SEWER WITH LESS THAN 18 INCHES VERTICAL CLEARANCE BOTH PIPES SHALL BE DUCTILE IRON 10' EACH SIDE. IF WATER CROSSES UNDER THE SEWER REGARDLESS OF CLEARANCE, BOTH PIPES SHALL BE DUCTILE IRON 10' EACH SIDE. IF WATER LINE RUNS PARALLEL TO SEWER LINE WITH LESS THAN 18" VERTICAL CLEARANCE AND LESS THAN 10' SIDE CLEARANCE BOTH PIPES SHALL BE DUCTILE IRON.
11. IF REQUIRED BY NUMBER 10 ABOVE, REPLACE EXISTING SEWER WITH DUCTILE IRON PIPE, CLASS 350 WORKING PRESSURE WITH GASKETED JOINTS, 10' EACH SIDE OF WATER MAIN.
12. ALL FIRE LINE PIPE SHALL BE PVC C900 UNLESS OTHERWISE NOTED ON THE PLANS.
13. ALL UNDERGROUND PLASTIC PIPING SHALL BE MARKED WITH MULTI-PLY MARKER TAPE AND TRACER WIRE LOCATED AT LEAST 12" ABOVE PIPE.
14. INSTALLER MUST OBTAIN FIELD INSPECTION/APPROVAL OF EACH CMUD REQUIRED BACKFLOW PREVENTER INSTALLATION FROM A CMUD BACKFLOW CONSTRUCTION INSPECTOR BY CALLING 704-391-5166.
15. EACH CMU-REQUIRED BPA IS REQUIRED TO BE TESTED BY A CMU-APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
16. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPINS, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CMU-REQUIRED BACKFLOW PREVENTER.
17. UTILITY CONTRACTOR IS RESPONSIBLE FOR OBTAINING ENGINEERS CERTIFICATION OF WATER & SEWER LINES. THIS PROJECT REQUIRES INSPECTION BY A REGISTERED ENGINEER, OR HIS REPRESENTATIVE, AND PREPARATION OF AS-BUILT WATER & SEWER DRAWINGS FOR THE OWNER AND STATE. (SEE CERTIFICATION NOTE). THESE LINES INCLUDE ALL WATERLINES 2" DIAMETER AND GREATER AND ALL SANITARY SEWER LINES THAT ARE 6" DIAMETER AND GREATER. ALL REMAINING LINES ARE TO BE INSPECTED BY THE BUILDING/PLUMBING INSPECTOR.

LEGEND

- EXISTING SIGN
- EIP — EXISTING IRON PIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- R/W — RIGHT-OF-WAY
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- PROPOSED CHECK VALVE
- PROPOSED POST INDICATOR VALVE
- EXISTING WATER METER
- PROPOSED WATER METER
- BFP — PROPOSED BACKFLOW PREVENTER
- EXISTING SEWER MANHOLE
- SSMH 1 — PROPOSED SEWER MANHOLE
- EXISTING CLEANOUT
- PROPOSED CLEANOUT
- EXISTING DRAINAGE STRUCTURE
- DI 1 — PROPOSED DRAINAGE STRUCTURE
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- OH/U — EXISTING OVERHEAD ELECTRIC LINE
- SS — EXISTING SANITARY SEWER LINE
- SS — PROPOSED SANITARY SEWER LINE
- W — EXISTING WATER LINE
- W — PROPOSED WATER LINE
- XXX — EXISTING CONTOUR LINE
- XXX — PROPOSED CONTOUR LINE
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- G — EXISTING GAS LINE
- G — PROPOSED GAS LINE
- D — EXISTING STORM MANHOLE
- MH 1 — PROPOSED STORM MANHOLE

NORTH

SCALE: 1"=40'

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Utility Plan

SCALE:

C104

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

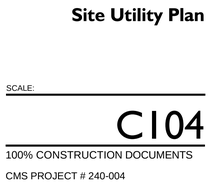
DATE: December 6, 2013

NO.	DATE	REVISION

Date:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 029026 ENGINEER MARK N. BREER 11/14/13

SEAL



KEY PLAN

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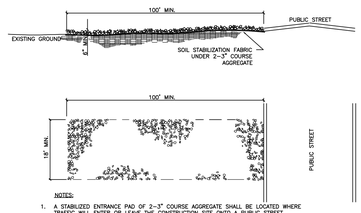

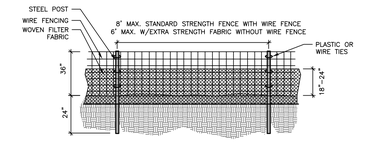

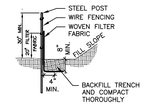

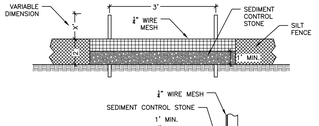

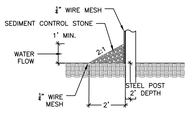

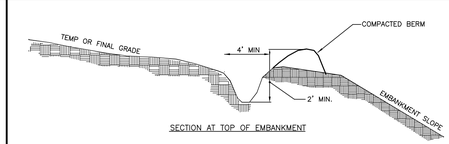

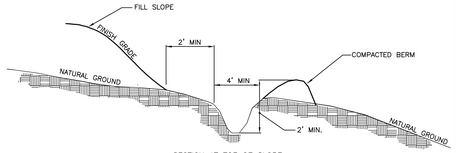

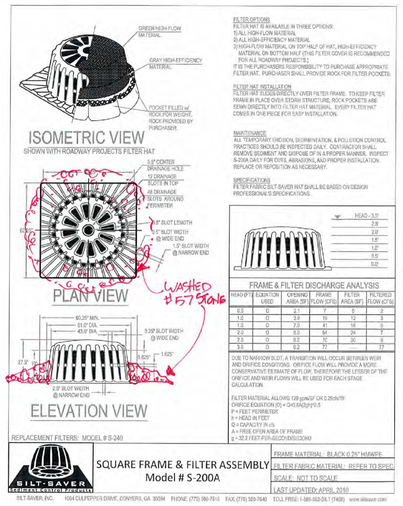

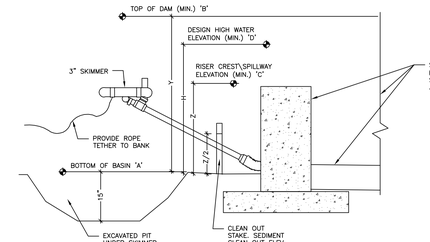

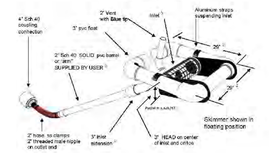

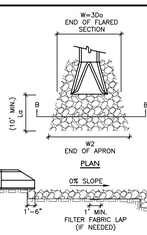

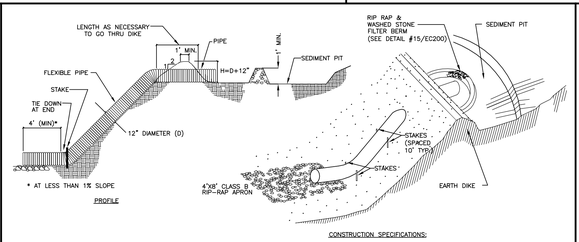

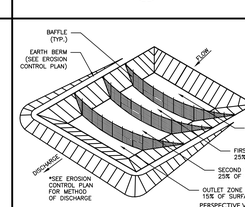

NOTES:

1. A STABILIZED ENTRANCE PAD OF 2–3" COURSE AGGREGATE SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE MAY BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.
6. SOIL STABILIZATION FABRIC (AS SPECIFIED BY THE DESIGNER) SHALL BE USED.

1 Temporary Gravel Construction Entrance
NCDENR STD. 6.06

GENERAL NOTES:

1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 13 GAGE WITH MAXIMUM 12" OPENINGS.
7. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE (WITHIN 5 FT.) WHEN GRADING IS ADJACENT TO SWIM BUFFERS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES).

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

2 Temporary Silt Fence Detail
NCDENR STD. 6.62

NOTES

1. USE #5 OR #57 STONE FOR SEDIMENT CONTROL STONE.
2. USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH 1/4" MESH OPENINGS.
3. INSTALL 5' SELF FASTENER ANGLE STEEL POST 2' DEEP MINIMUM.
4. SPACE POST A MAXIMUM OF 3'.
5. FOR INSTALLATION BETWEEN SECTIONS OF SILT FENCE, EXTEND SEDIMENT CONTROL STONE A MINIMUM OF 12" IN WIDTH ON EACH SIDE OF SPECIAL SEDIMENT CONTROL FENCE SECTION.

3 Temporary Stone Dam in Silt Fence Opening
N.T.S.

4 Temporary Diversion Swale
NCDENR STD. 6.20

FILTER OPTIONS
FILTER HAT IS AVAILABLE IN THREE OPTIONS:
1) ALL HIGH-FLOW MATERIAL
2) ALL HIGH-EFFICIENCY MATERIAL
3) HIGH-FLOW MATERIAL ON TOP HALF OF HAT, HIGH-EFFICIENCY MATERIAL ON BOTTOM HALF (THIS FILTER COVER IS RECOMMENDED FOR ALL ROADWAY PROJECTS.)
IT IS THE PURCHASERS RESPONSIBILITY TO PURCHASE APPROPRIATE FILTER HAT. PURCHASER SHALL PROVIDE ROCK FOR FILTER POCKETS.

FILTER HAT INSTALLATION
FILTER HAT SLIDES DIRECTLY OVER FILTER FRAME. TO KEEP FILTER FRAME IN PLACE OVER STORM STRUCTURE, ROCK POCKETS ARE SEWN DIRECTLY INTO FILTER HAT MATERIAL. EVERY FILTER HAT COMES IN ONE PIECE FOR EASY INSTALLATION.

MAINTENANCE
ALL TEMPORARY EROSION, SEDIMENTATION, & POLLUTION CONTROL PRACTICES SHOULD BE INSPECTED DAILY. CONTRACTOR SHALL REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER. INSPECT S-200A DAILY FOR CUTS, ABRASIONS, AND PROPER INSTALLATION. REPLACE OR REPOSITION AS NECESSARY.

SPECIFICATIONS
FILTER FABRIC SILT-SAVER HAT SHALL BE BASED ON DESIGN PROFESSIONAL'S SPECIFICATIONS.

FRAME & FILTER DISCHARGE ANALYSIS

HEAD (FT)	EQUATION USED	OPENING AREA (SF)	FRAME FLOW (CFS)	FILTER AREA (SF)	FILTERED FLOW (CFS)
0.5	O	2.1	7	6	2
1.0	O	3.9	19	12	3
1.5	O	7.0	41	18	5
2.0	O	8.0	54	24	7
2.5	O	9.2	70	30	8
3.0	O	9.2	77	—	77

DUE TO NARROW SLOT, A TRANSITION WILL OCCUR BETWEEN WEIR AND ORIFICE CONDITIONS. ORIFICE FLOW WILL PROVIDE A MORE CONSERVATIVE ESTIMATE OF FLOW, THEREFORE THE LESSER OF THE ORIFICE AND WEIR FLOWS WILL BE USED FOR EACH STAGE CALCULATION.

FILTER MATERIAL ALLOWS 129 gpm/SF OR 0.29cfs/SF
ORIFICE EQUATION (O) = Q=0.6A(2gh)^0.5
P = FEET PERIMETER
h = HEAD IN FEET
Q = CAPACITY IN cfs
A = FREE OPEN AREA OF FRAME
g = 32.2 FEET-PER-SECOND/SECOND

REPLACEMENT FILTERS: MODEL # S-240

SQUARE FRAME & FILTER ASSEMBLY
Model # S-200A

FRAME MATERIAL: BLACK 0.25" HMWPE
FILTER FABRIC MATERIAL: REFER TO SPEC
SCALE: NOT TO SCALE
LAST UPDATED: APRIL 2010

SILT-SAVER, INC. 1094 CULPEPPER DRIVE, CONYERS, GA 30094 PHONE: (770) 388-7818 FAX: (770) 388-7640 TOLL FREE: 1-888-382-SILT (7458) www.siltsaver.com

5 Temporary Inlet protection

NOTE: THE WEIR OPENING IN THE OUTLET FOR BASIN 'A' SHALL BE BLOCKED UP TO AN ELEVATION OF 701.60. THE CONTRACTOR SHALL ENSURE NO WATER IS ABLE TO ENTER INTO THE OUTLET STRUCTURE BELOW THE ELEVATION OF 701.60.

DATA BLOCK

BASIN NO.	DRAINAGE AREA (AC.)	DENUDED AREA (AC.)	Q25 (CFS)	RISER STRUCTURE	BARREL SIZE	BARREL SLOPE	BASIN VOLUME		BASIN SURFACE AREA		CLEANOUT DEPTH (FT.) H/2	Y (FEET)	H (FEET)	Z (FEET)	SPILLWAY LENGTH (FEET)	ELEV. A	ELEV. B	ELEV. C	ELEV. D	SKIMMER ø (IN.)	SKIMMER QUANITY
							REQUIRED (CU. FT.)	PROVIDE (CU. FT.)	REQUIRED (SQ. FT.)	PROVIDE (SQ. FT.)											
A (PRE)	5.06	5.06	22.85	5' x 5'	24"	6.6%	9,108	15,388	9,939	10,007	0.80	3.30	1.96	1.60	N/A	700.00	703.30	701.60	702.30	3	1
A (POST)	6.05	6.05	27.32	5' x 5'	24"	6.6%	10,890	11,940	11,884	12,501	0.80	2.99	1.45	1.05	N/A	700.00	702.99	701.05	701.99	3	1
B (PRE)	6.09	6.09	27.50	5' x 5'	24"	9.1%	10,962	17,511	11,962	13,218	0.70	2.96	1.40	1.00	N/A	704.50	707.46	705.50	706.46	3	1
B (POST)	6.30	6.30	28.45	5' x 5'	24"	9.1%	11,340	12,633	12,375	11,570	0.75	3.06	1.51	1.10	N/A	704.50	707.56	705.60	706.56	3	1

GENERAL NOTES:

1. CONSTRUCTION OPERATION SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED. CLEAR, GRUB, AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE BEING CONSTRUCTED. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVERFILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT. SPILLWAYS SHOULD NOT BE CONSTRUCTED THROUGH FILL SECTIONS. ALL SPILLWAYS SHOULD BE LINED AND/OR RIPRAPPED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER, UNLESS CERTIFIED BY REGISTERED GEOTECHNICAL ENGINEER.
4. SEDIMENT BASIN EMBANKMENTS SHOULD BE PROVIDED WITH EROSION CONTROL AND STABILIZATION.
5. STORAGE AREA IS SHOWN AS RECTANGULAR FOR ILLUSTRATIVE PURPOSES ONLY. AND MAY BE CONSTRUCTED IN ANY SHAPE PROVIDED THE MINIMUM STORAGE VOLUME REQUIREMENT IS MET. THE BASIN SHOULD ALSO BE ORIENTED SUCH THAT THE FILTER AND THE MAIN FLOW OF WATER AND SEDIMENT ARE ON OPPOSITE ENDS ON THE LONGER BASIN DIMENSIONS.
6. REQUIRED STORAGE IS 3600 CUBIC FEET OF STORAGE VOLUME PER ACRES OF DISTURBED AREA. MINIMUM REQUIRED SURFACE AREA REQUIRED SHALL BE 435 ST PER CFS OF Q10 PEAK INFLOW.
7. THE LENGTH OF THE STONE OUTLET (SPILLWAY) IS TO BE BASED ON A 10 YEAR STORM. EARTHEN SPILLWAYS–INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADES, DESIGN, WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY. THE SPILLWAY SHOULD BE LINED WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTOM AND SIDES AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8–INCH STAPLES OR PINS. THE FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPLICED; OTHERWISE WATER CAN GET UNDER THE FABRIC. IF THE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE SPILLWAY, MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTIONS(S) SHOULD OVERLAP THE LOWER SECTIONS(S) SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGES AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
8. INLETS–DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT–LADEN WATER IN UPPER END OF THE TRAP.
9. EROSION CONTROL – CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION
10. WHENEVER TOPOGRAPHY ALLOWS, THE BASIN LENGTH SHOULD BE TWICE (2X) THE BASIN WIDTH, TO ALLOW FOR SETTLING. BAFFLES SHOULD BE PROVIDED IN THE BASIN, BASED ON SECTION 6.65.
11. CLEANOUT STAKES SHALL BE PLACED IN ALL SEDIMENT BASINS AT THE LOW POINT IN THE BASIN. THE STAKES SHALL BE MARKED SHOWING THE HALF FULL, CLEANOUT POINT, OF THE BASIN.
12. SAFETY FENCING 3' HIGH SHOULD BE PLACED AROUND ALL SEDIMENT TRAPS THAT ARE IN VICINITY TO NON–CONSTRUCTION PEDESTRIAN TRAFFIC AND NOT ALREADY PROTECTED BY FENCING.
13. FOR SLOPES GREATER THAN 10' IN LENGTH AND PROTECTED BY SILT FENCE AT THE TOE OF THE SLOPE, SLOPE TERRACING WILL BE REQUIRED.
14. THE BERM ON SEDIMENT BASINS SHALL BE SEEDED ONCE FINAL GRADE HAS BEEN REACHED. THE SILT FENCE AND BASIN MAY BE REMOVED IF PERMISSION HAS BEEN GRANTED BY NCDENR LAND DEVELOPMENT INSPECTOR AFTER THE GRASS HAS GERMINATED AND STABLE GROUND HAS BEEN ESTABLISHED.
15. ALL EROSION CONTROL MEASURES ARE TO BE DESIGNED TO THE STANDARDS DOCUMENTED IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES, EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SKIMMER CONSTRUCTION SPECIFICATIONS

1. SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OR PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.
2. PLACE THE BARREL (TYPICALLY 4–INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE OR AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM THE FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
3. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURES INSTRUCTIONS, OR AS DESIGNED.
4. LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE. ATTACH THE FLEXIBLE JOINT TO THE BARREL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACHA A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.

MAINTENANCE

1. INSPECT SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE–HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE–HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOW OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.
2. REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE–ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.
3. IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALYY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IT IF IS CLOGGED; IF SO REMOVE THE DEBRIS.
4. IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.
5. CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.
6. FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

3" *Faircloth Skimmer®* Cut Sheet
J. W. Faircloth & Son, Inc.
www.FairclothSkimmer.com

1. Coupling can be removed and hose attached to outlet using the threaded 2" nipple. Typical methods used: on a metal structure a steel stubout welded on the side at the bottom with a 2" threaded coupling or reducers; on a concrete structure with a hole or orifice at the bottom, use a steel plate with a hole cut in it and coupling welded to it that will fit over the hole in the concrete and bolted to the structure with sealant; grout a 4" pvc pipe in a hole in the concrete to connect the skimmer. It can be attached to a straight 4" sch 40 pipe through the dam but the pipe needs to be anchored to the bottom at the connection so it is secure.
2. Dimensions are approximate, not intended as plans for construction.
3. Barrel (solid, not foam core pipe) should be 1.4 times the depth of water with a minimum length of 8' so the inlet can be pulled to the side for maintenance. If more than 10' long weight may have to be added to inlet to counter the increased buoyancy.
4. Inlet tapers down from a 3" maximum inlet to a 2" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The inlet orifice can be reduced using the plug and cutter provided to control the outflow rate.
5. Inlet is 6" pipe between the straps with aluminum screen door for access to the 3" inlet and orifice inside.
6. **Capacity** 9,774 cubic feet per day maximum with 3" inlet and 3" head. Inlet can be reduced by installing a smaller orifice using the plug and cutter provided to adjust flow rate for the particular basin volume and drawdown time required.
7. Shipped assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plug and attaches to outlet pipe or structure. Includes flexible hose, rope, orifice cutter, etc.

3" SKIMMER FIXTURE

9 Temporary Sediment Basin
NCDENR STD. 6.61

PERSPECTIVE VIEW

SECTION

6 Temporary Filter Berm Basin
NCDENR STD. 6.55

PLAN VIEW

CROSS-SECTION VIEW

NOTES:

1. PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2. KEE THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CANNEL BANKS.
3. EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
5. PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.
7. ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FORM DISPLACED STONES.

7 Temp. Rock Check Dam
NCDENR STD. 6.83

PERSPECTIVE VIEW

BAFFLE DETAIL

CONSTRUCTION SPECIFICATION

1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
2. INSTALL POSTS ACROSS THE WIDTH OF THE SEDIMENT TRAP, SEDIMENT BASIN AND/OR SKIMMER BASIN AS SHOWN.
3. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
4. BAFFLE MATERIAL SHALL BE 700 G/M² COIR EROSION FABRIC.
5. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES THAT DIVIDES THE BASIN IN THIRDS.
6. ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
7. WRAP BAFFLE MATERIAL OVER THE TOP WIRE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE, OR STAPLES. USE 3 TIES PER POST ALL WITHIN TOP 8" OF FABRIC.
8. THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH 8" DEEP. IN LIEU OF EXCAVATING A TRENCH, THE FABRIC MAY BE INSTALLED WITH A PIECE OF EQUIPMENT SPECIFICALLY DESIGNED TO SLICE THE GROUND WITH A DISC.
9. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.

MAINTENANCE
- INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

8 Temporary Baffle Installation
NCDENR STD. 6.65

PLAN

ELEVATION

SECTION B-B

* d50 (SEE FIG. 8.06 A&B "NC SEDIMENT AND EROSION CONTROL MANUAL"
DMAX = 1.5 X d50
T = 1.5 X DMAX

NOTES:

1. CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. REFER TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES' EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL FOR RIPRAP APRON DESIGN STANDARDS.
3. RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
4. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE ATTHE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
5. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1
6. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
7. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
8. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
9. FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIP RAP.
10. ANY DISTURBED AREA FROM END OF APRON TO RECIEVING CHANNEL MUST BE STABILIZED.

DESIGN DATA TAKEN FROM THE USDA NOMOGRAPH LOCATED
IN THE NC SEDIMENT AND EROSION CONTROL MANUAL

OUTLET PROTECTION SUMMARY

OUTLET	La	W1	W2	*T	H	RR CLASS
TSD #1	13	3	14	18 IN.	0.75	B

RIP RAP GRADATION PER NCDOT SPECIFICATIONS

RIP-RAP CLASS	MINIMUM (IN.)	MIDRANGE (IN.)	MAXIMUM (IN.)
A	2	4	6
B	5	8	12
1	5	10	17
2	9	12	23

10 Outlet Protection
NCDENR STD. 6.41

CONSTRUCTION SPECIFICATIONS:

1. THE TOP OF THE EARTH DIKE OVER THE INLET PIPE AND THOSE DIKES CARRYING WATER TO THE PIPE SHALL BE AT LEAST 1 FOOT HIGHER AT ALL POINTS THAN THE TOP OF THE INLET PIPE.
2. THE PIPE SHALL BE FLEXIBLE WITH WATER TIGHT CONNECTING BANDS. FLEXIBLE PIPE SHOULD BE STAKED ON EITHER SIDE AND SPACED NO MORE THAN 10' APART. SECURELY FASTEN THE EXPOSED SECTIONS OF DRAIN WITH GROMMETS AT STAKES.
3. A RIP RAP APRON SHALL BE PROVIDED AT THE OUTLET.
4. THE SOIL AROUND AND UNDER THE INLET PIPE AND ENTRANCE SECTION SHALL BE HAND TAMPED IN 4" LIFTS TO THE TOP OF THE EARTH DIKE.
5. FOLLOW–UP INSPECTION AND ANY NEEDED MAINTENANCE SHALL BE PERFORMED AFTER EACH STORM.

11 Temporary Slope Drain
NCDENR STD. 6.32

Seeding mixture
Species — **Rate (lb/acre)**
Rye (grain) — 120

Seeding dates
Mountains—Aug. 15 - Dec. 15
Coastal Plain and Piedmont—Aug. 15 - Dec. 30

Soil amendments
Follow soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extent temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

Seeding mixture
Species — **Rate (lb/acre)**
German millet — 40

In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.

Seeding dates
Mountains—May 15 - Aug. 15
Piedmont—May 1 - Aug. 15
Coastal Plain—Apr. 15 - Aug. 15

Soil amendments
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

Seeding mixture
Species — **Rate (lb/acre)**
Rye (grain) — 120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) — 50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

Seeding dates
Mountains—Above 2500 feet: Feb. 15 - May 15
Below 2500 feet: Feb. 1- May 1
Piedmont—Jan. 1 - May 1
Coastal Plain—Dec. 1 - Apr. 15

Soil amendments
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONSFOR LATE WINTER AND EARLY SPRING

12 Seeding Specifications for Temporary Erosion Control
NCDENR STD. 6.10

SLOPES (3:1 TO 2:1)

DATE	TYPE	PLANTING RATE
AUG 15 – NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 – MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE 25 LBS/ACRE
MAR 1 – APR 15	TALL FESCUE	300 LBS/ACRE
APR 15 – JUN 30	HULLED COMMON BERMUDA GRASS	25 LBS/ACRE
JUL 1 – AUG 15	TALL FESCUE AND ***BROWNTOP MILLET *** OR SORGHUM–SUDAN HYBRIDS	120 LBS/ACRE 35 LBS/ACRE 30 LBS/ACRE

SLOPES (3:1 TO 2:1)

DATE	TYPE	PLANTING RATE
MAR 1 – JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND	50 LBS/ACRE
MAR 1 – APR 15	ADD TALL FESCUE	120 LBS/ACRE
MAR 1 – JUN 30	OR ADD HULLED COMMON BERMUDA GRASS	25 LBS/ACRE
JUN 1 – SEP 1	***TALL FESCUE AND ***BROWNTOP MILLET ***OR SORGHUM–SUDAN HYBRIDS	120 LBS/ACRE 35 LBS/ACRE 30 LBS/ACRE
SEP 1 – MAR 1	SERICEA LESPEDEZA (UNHULLED– UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE 120 LBS/ACRE
NOV 1 – MAR 1	ADD ABRUZZI RYE	25 LBS/ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY – RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

SOW SEED USING A SPREADER OR SEEDING MACHINE. DO NOT SEED WHEN WIND VELOCITY EXCEEDS 5 MPH. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.

SOW NOT LESS THAN THE QUANTITY OF SEED SPECIFIED OR SCHEDULED.

RAKE SEED LIGHTLY INTO TOP 1/8" OF SOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY.

PROTECT SEEDED SLOPES OF GREATER THAN 3:1 AGAINST EROSION WITH EROSION NETTING OR OTHER METHODS ACCEPTABLE TO THE LANDSCAPE ARCHITECT.

PROTECT SEEDED AREAS AGAINST EROSION BY SPREADING SPECIFIED LAWN MULCH AFTER COMPLETION OF SEEDING OPERATIONS. SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET NOT LESS THAN 1 1/2" LOOSE MEASUREMENT OVER SEEDED AREAS.

ANCHOR MULCH BY SPRAYING WITH ASPHALT EMULSION AT THE RATE OF 10–13 GALLONS PER 1,000 S.F. TAKE PRECAUTIONS TO PREVENT DAMAGE OR STAINING OF CONSTRUCTION OR OTHER PLANTINGS ADJACENT TO MULCHED AREAS.

SEEDBED PREPARATION
1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW*).
5. CONTINUE TILLAGE UNTIL A WELL–PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4–6" DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIR OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

* APPLY: AGRICULTURAL LIMESTONE – 2 TONS/ACRE
FERTILIZER – 1000 LBS/ACRE 10–10–10
SUPERPHOSPHATE – 500 LBS/ACRE 20%
MULCH – 2 TONS/ACRE –SMALL GRAIN STRAW
ANCHOR – ASPHALT EMULSION

13 Seeding Specifications for Permanent Erosion Control
NCDENR STD. 6.11

NO. DATE REVISION

Date:

1120
11/14/13

SEAL

KEY PLAN

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PROJECT TITLE:

cms
Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY
SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Construction Details

SCALE:

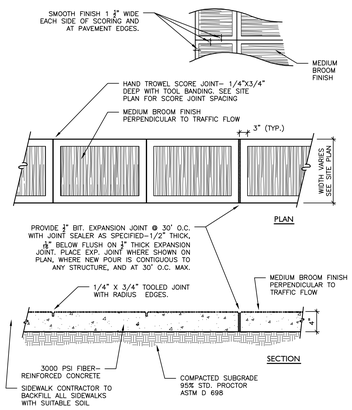
C200

100% CONSTRUCTION DOCUMENTS

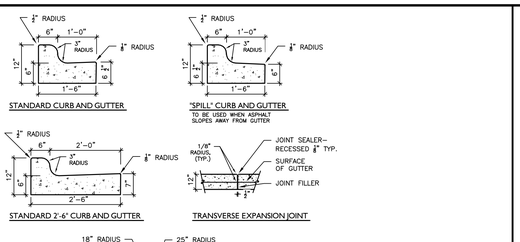
CMS PROJECT # 240-004

DATE: December 6, 2013

J:\3072C Newell Elementary\Drawings\3072C-DD\3072DETAILS.dwg, 11/21/2013 2:38:28 PM, PDF-XChange for AcroPlot Pro

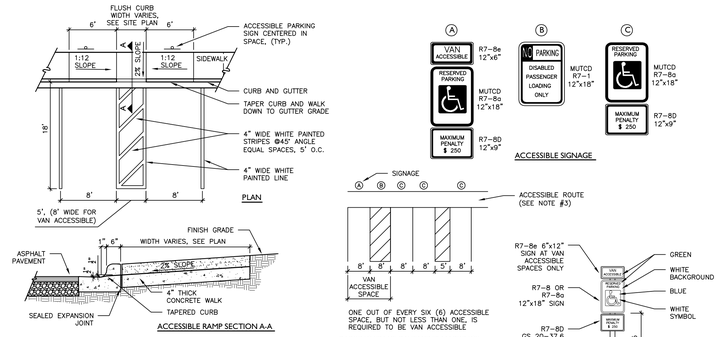


1 Concrete Sidewalk Detail
N.T.S. (CMLDS. 10.22)



NOTES
1. CONTRACTION JOINTS SHALL BE SPACED AT 10–FOOT INTERVALS. FOR VALLEY GUTTER, A 15–FOOT SPACING MAY BE USED WHEN A MACHINE IS USED. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
3. ALL EXPANSION JOINTS SHALL BE SPACED AT 90 FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
4. TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.
5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
6. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.

2 Concrete Curb and Gutter Detail
N.T.S. (CMLDS. 10.17A)

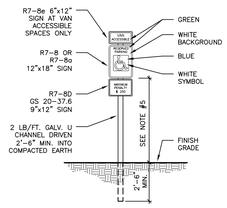


NOTES
1. RAMP AND WING SLOPES SHALL NOT BE STEEPER THAN 1:12.
2. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA.
3. IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.
4. COORDINATE CONSTRUCTION TO COMPLY WITH LOCAL AND FEDERAL ADA STANDARDS.
5. ALL 12"x18" ACCESSIBLE SIGNS (R7–8a AND R7–1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
6. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
7. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.

ACCESSIBLE SIGNAGE

ONE OUT OF EVERY SIX (6) ACCESSIBLE SPACE, BUT NOT LESS THAN ONE, IS REQUIRED TO BE VAN ACCESSIBLE

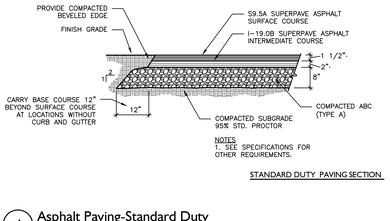
PARKING SPACE PAVEMENT MARKINGS



ACCESSIBLE SIGNAGE ELEVATION

3 Accessible Parking/Signage/Striping Detail
(FOR USE OUTSIDE PUBLIC R/W) CMLDS. #50.10A

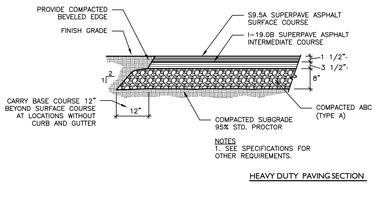
See Sht C203 for CLD Std. 50.10B & 50.10C



NOTES
1. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

STANDARD DUTY PAVING SECTION

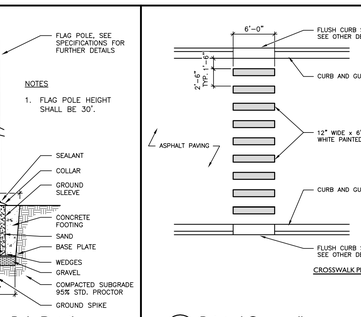
4 Asphalt Paving-Standard Duty
N.T.S.



NOTES
1. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

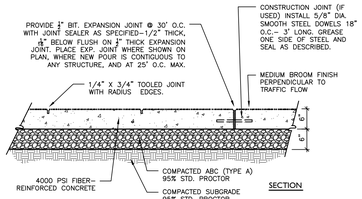
HEAVY DUTY PAVING SECTION

5 Asphalt Paving-Heavy Duty
N.T.S.

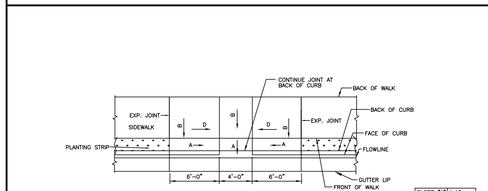


6 Flag Pole Detail
N.T.S.

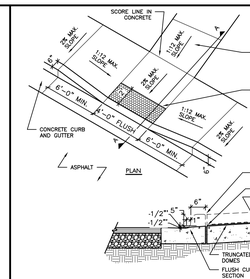
7 Painted Crosswalk
N.T.S.



8 Concrete Paving - Vehicular
N.T.S.



11 Accessible Ramp Standard with Planting Strip
N.T.S. (CMLDS. 10.31A)



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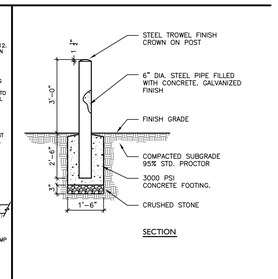
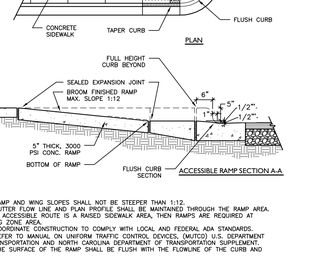
4. COORDINATE CONSTRUCTION TO COMPLY WITH LOCAL AND FEDERAL ADA STANDARDS.
5. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
6. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.

12 Accessible Ramp - Condition #2
N.T.S.



13 Steel Bollard Detail
N.T.S.



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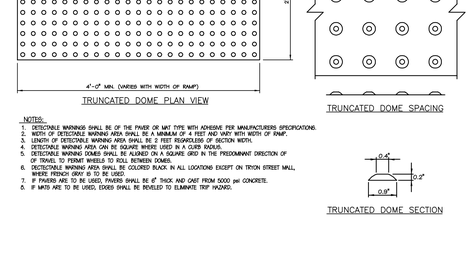
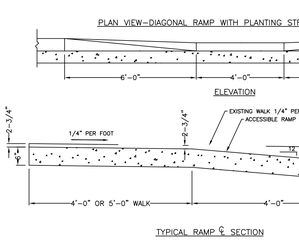
6. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.

9 Accessible Ramp-Condition #1
N.T.S.

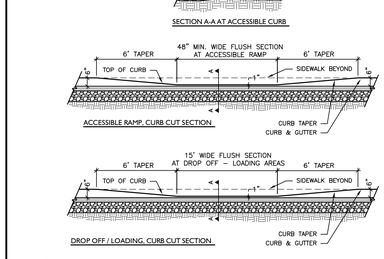


NOTES:
1. DETECTABLE WARNINGS SHALL BE OF THE PAVER OR MAT TYPE WITH ADHESIVE PER MANUFACTURERS SPECIFICATIONS.
2. WIDTH OF DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET AND VARY WITH WIDTH OF RAMP.
3. LENGTH OF DETECTABLE WARNING AREA SHALL BE 2 FEET REGARDLESS OF SECTION WIDTH.
4. DETECTABLE WARNING AREA CAN BE SQUARE WHERE USED IN A CURB RADIUS.
5. DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
6. DETECTABLE WARNING AREA SHALL BE COLORED BLACK IN ALL LOCATIONS EXCEPT ON TRYON STREET MALL, WHERE FRENCH GRAY IS TO BE USED.
7. IF PAVERS ARE TO BE USED, PAVERS SHALL BE 4" THICK AND CAST FROM 5000 psi CONCRETE.
8. IF MATS ARE TO BE USED, EDGES SHALL BE BEVELED TO ELIMINATE TRIP HAZARD.

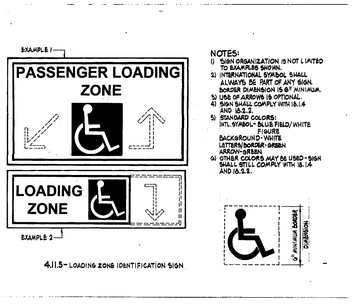
10 Accessible Ramp Truncated Domes
N.T.S.(CMLDS. 10.35B)



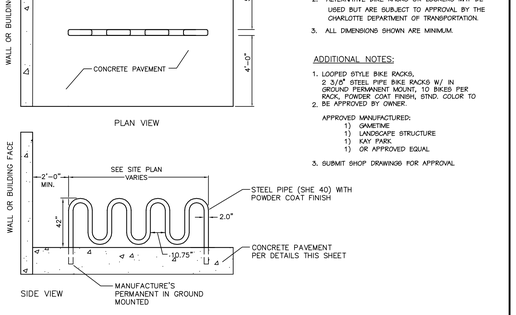
14 Painted Directional Arrows
N.T.S. (FOR INTERNAL USE ONLY)



15 Curb Ramp Detail
N.T.S.



16 Loading Zone Identification Sign



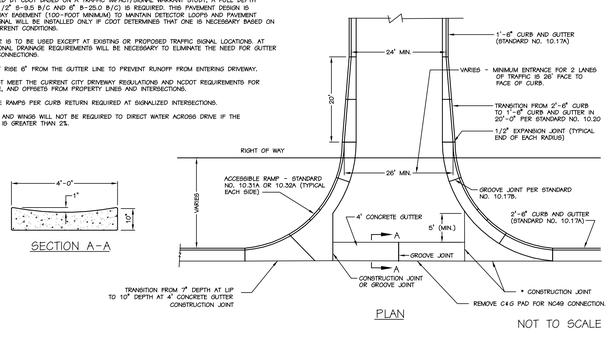
NOTES:
1. BIKE RACKS SHOULD BE INSTALLED AS PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
2. ALTERNATIVE BIKE RACKS OR LOCKERS MAY BE USED BUT ARE SUBJECT TO APPROVAL BY THE CHARLOTTE DEPARTMENT OF TRANSPORTATION.
3. ALL DIMENSIONS SHOWN ARE MINIMUM.

ADDITIONAL NOTES:
1. LOOPED STYLE BIKE RACKS, 2 3/8" STEEL PIPE BIKE RACKS W/ IN GROUND PERMANENT MOUNT, 10 BIKES PER RACK, POWDER COAT FINISH, STND. COLOR TO BE APPROVED BY OWNER.
   APPROVED MANUFACTURED:
   1) GAMETIME
   1) LANDSCAPE STRUCTURE
   1) KAY PARK
   1) OR APPROVED EQUAL
3. SUBMIT SHOP DRAWINGS FOR APPROVAL

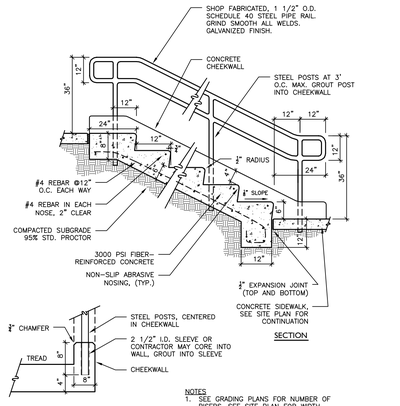
17 Bike Racks

NOTES:
1. WHERE A TYPE III DRIVEWAY IS APPROVED BY THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (CDOT) THAT CONNECTS TO AN EXISTING SIGNALIZED INTERSECTION, OR AT A LOCATION WHERE A TRAFFIC SIGNAL INSTALLATION IS PROPOSED BY CDOT BASED ON A TRAFFIC IMPACT/SIGNAL WARRANT STUDY, A FULL DEPTH ASPHALT PAVEMENT (2–1/2" S–9.5 B/C AND 6" B–25.0 B/C) IS REQUIRED. THIS PAVEMENT DESIGN IS REQUIRED IN THE DRIVEWAY EASEMENT (100–FOOT MINIMUM) TO MAINTAIN DETECTOR LOOPS AND PAVEMENT MARKINGS. A TRAFFIC SIGNAL WILL BE INSTALLED ONLY IF CDOT DETERMINES THAT ONE IS NECESSARY BASED ON A TRAFFIC STUDY OF CURRENT CONDITIONS.
2. A CONCRETE GUTTER IS TO BE USED EXCEPT AT EXISTING OR PROPOSED TRAFFIC SIGNAL LOCATIONS. AT THESE LOCATIONS ADDITIONAL DRAINAGE REQUIREMENTS WILL BE NECESSARY TO ELIMINATE THE NEED FOR GUTTER ACROSS THE DRIVEWAY CONNECTIONS.
3. THE DRIVEWAY MUST RISE 6" FROM THE GUTTER LINE TO PREVENT RUNOFF FROM ENTERING DRIVEWAY.
4. ALL DRIVEWAYS MUST MEET THE CURRENT CITY DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
5. TWO (2) ACCESSIBLE RAMPS PER CURB RETURN REQUIRED AT SIGNALIZED INTERSECTIONS.

*FOUR (4) FOOT GUTTER AND WINGS WILL NOT BE REQUIRED TO DIRECT WATER ACROSS DRIVE IF THE DRIVEWAY GUTTER SLOPE IS GREATER THAN 2%.



18 Commercial And Residential Drop Curb Type III Driveway Entrance
N.T.S. (CMLDS. 10.25)



NOTES
1. SEE GRADING PLANS FOR NUMBER OF RISERS. SEE SITE PLAN FOR WIDTH.

19 Concrete Steps with Handrail
N.T.S.

NO. DATE REVISION

Date:

11/14/13

SEAL

KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION
CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

Charlotte-Mecklenburg Schools
NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

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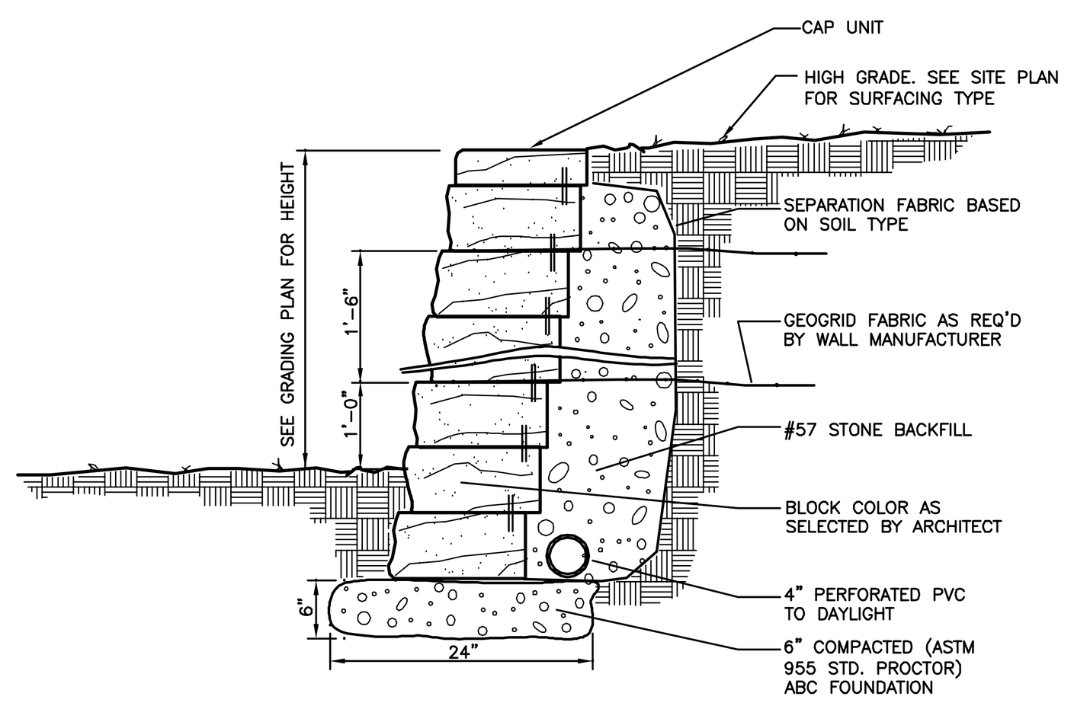


NOTE:

GENERAL CONTRACTOR SHALL EMPLOY PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF NORTH CAROLINA, TO PREPARE & SEAL FULL CONSTRUCTION SHOP DRAWINGS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. TYPICAL SECTION SHOWING FULL RANGE OF WALL HEIGHTS & CONDITIONS, GRID PLACEMENTS.
2. WALL ELEVATION INDICATING TOP, BOTTOM & EXTENT OF WALL, GRID SPACING.
3. WALL HEIGHT/GEOGRID SCHEDULE FOR ALL CONDITIONS GIVING LENGTH, SPACING, GRID SPEC, ETC.
4. WALL CAPPING DETAIL.
5. CONSTRUCTION SPECIFICATIONS FOR ALL MATERIALS, METHODS, EXECUTION ETC.

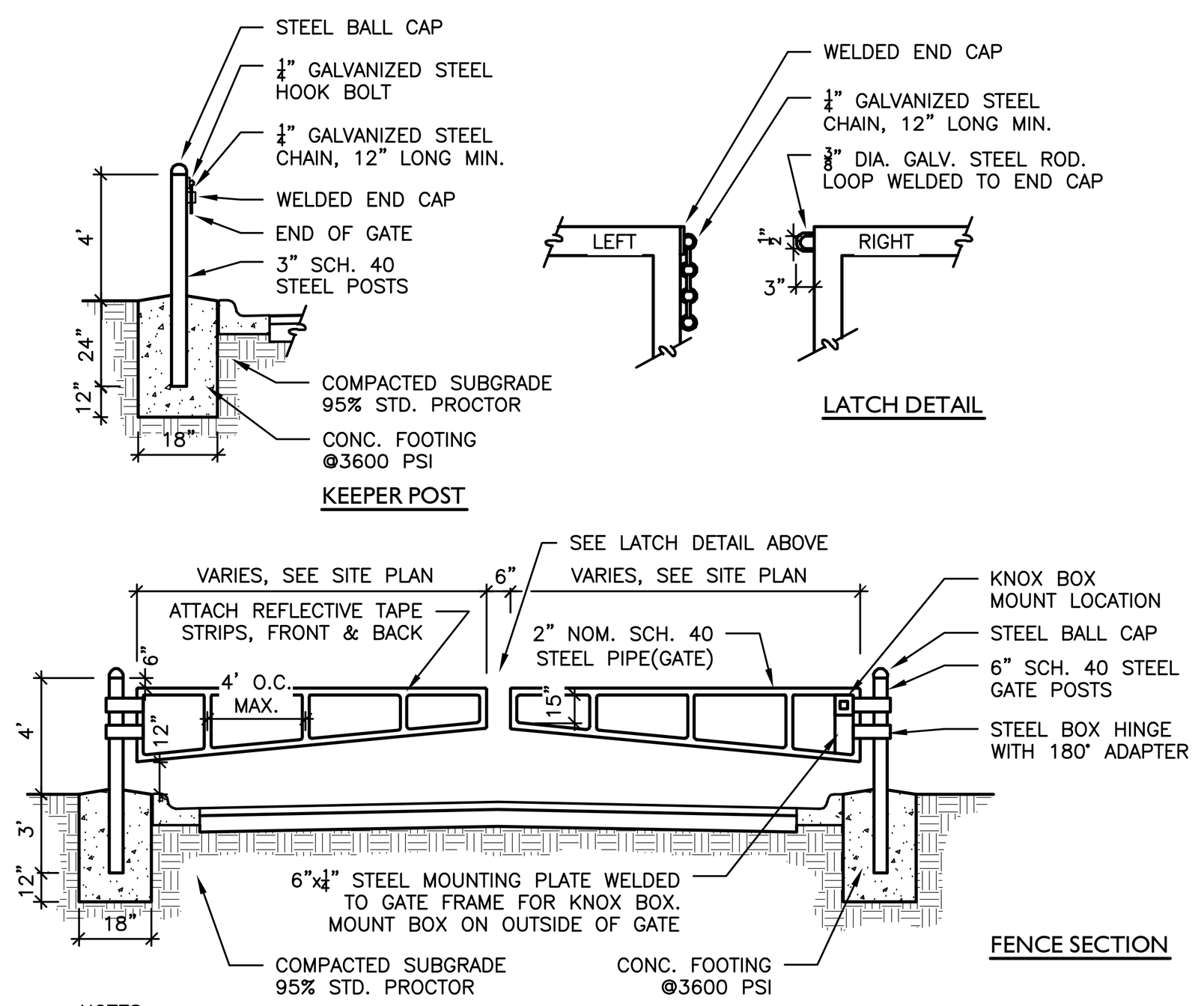
THE ABOVE DATA SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO BEGINNING EARTHWORK.

6. APPROVED MANUFACTURER'S: VERSA-A-LOK, KEYSTONE, ALLAN BLOCK, RIDGEROCK OR ROCKWOOD.
7. CONTRACTOR SHALL PROVIDE ALL WALL CERTIFICATIONS IF REQUIRED.
8. CONTRACTOR SHALL OBTAIN WALL PERMITS AS REQUIRED.

NOTE:

CONTRACTORS WALL ENGINEER OF RECORD SHALL PROVIDE PROOF OF PROFESSIONAL LIABILITY INSURANCE IN THE AMOUNT OF NOT LESS THAN $1,000,000.00 WITH AN ADDITIONAL $1,000,000.00 IN EXCESS PROFESSIONAL LIABILITY AND NAME SITE SOLUTIONS INC., AS AN ADDITIONAL INSURED. THE PROJECT NAME AND ADDRESS SHALL BE SHOWN ON THE INSURANCE CERTIFICATE. A CERTIFICATE OF INSURANCE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL PRIOR TO MOBILIZATION FOR WALL CONSTRUCTION.

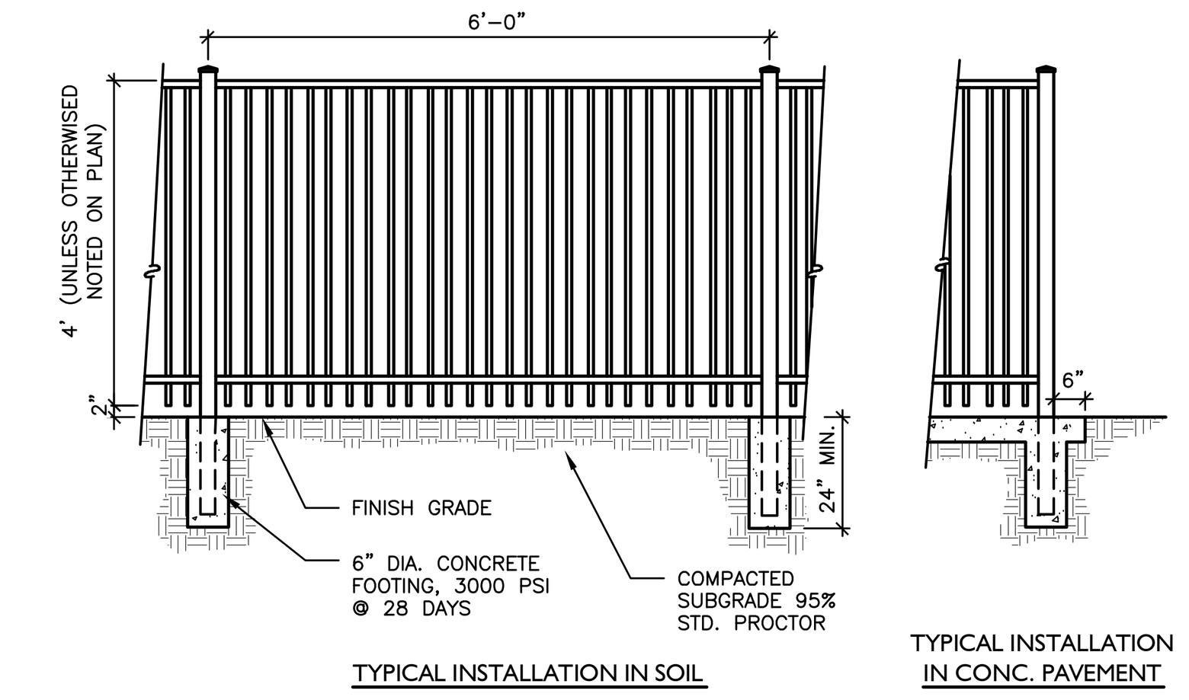
1 Modular Block Retaining Wall



NOTES

1. PROVIDE 6" O.D. GATE POST (2 REQ'D.) SET IN 3' DEEP x18" DIA. CONC. FOOTING. PROVIDE 180° HINGE SWING ADAPTER TO OPEN POSITION.
2. GATES SHALL INCLUDE KEEPER POSTS TO SECURE ACCESS. KEEPER POSTS SHALL BE 3" SCH. 40 STEEL POST INSTALLED IN 18"x24" FOOTING AND SHALL INCLUDE CHAIN TO SECURE GATE ARM. (ONE KEEPER POST PER ARM).
3. GATES TO BE GALVANIZED (G-90).
4. CONTRACTOR TO MOUNT REFLECTIVE TAPE ON ALL HORIZONTAL AND VERTICAL SECTIONS OF THE GATES. PROVIDE THE REFLECTION TAPE ON BOTH THE INSIDE AND OUTSIDE OF THE GATES.
5. CONTRACTOR TO PROVIDE A KNOX PADLOCK ON CHAIN.
6. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL.

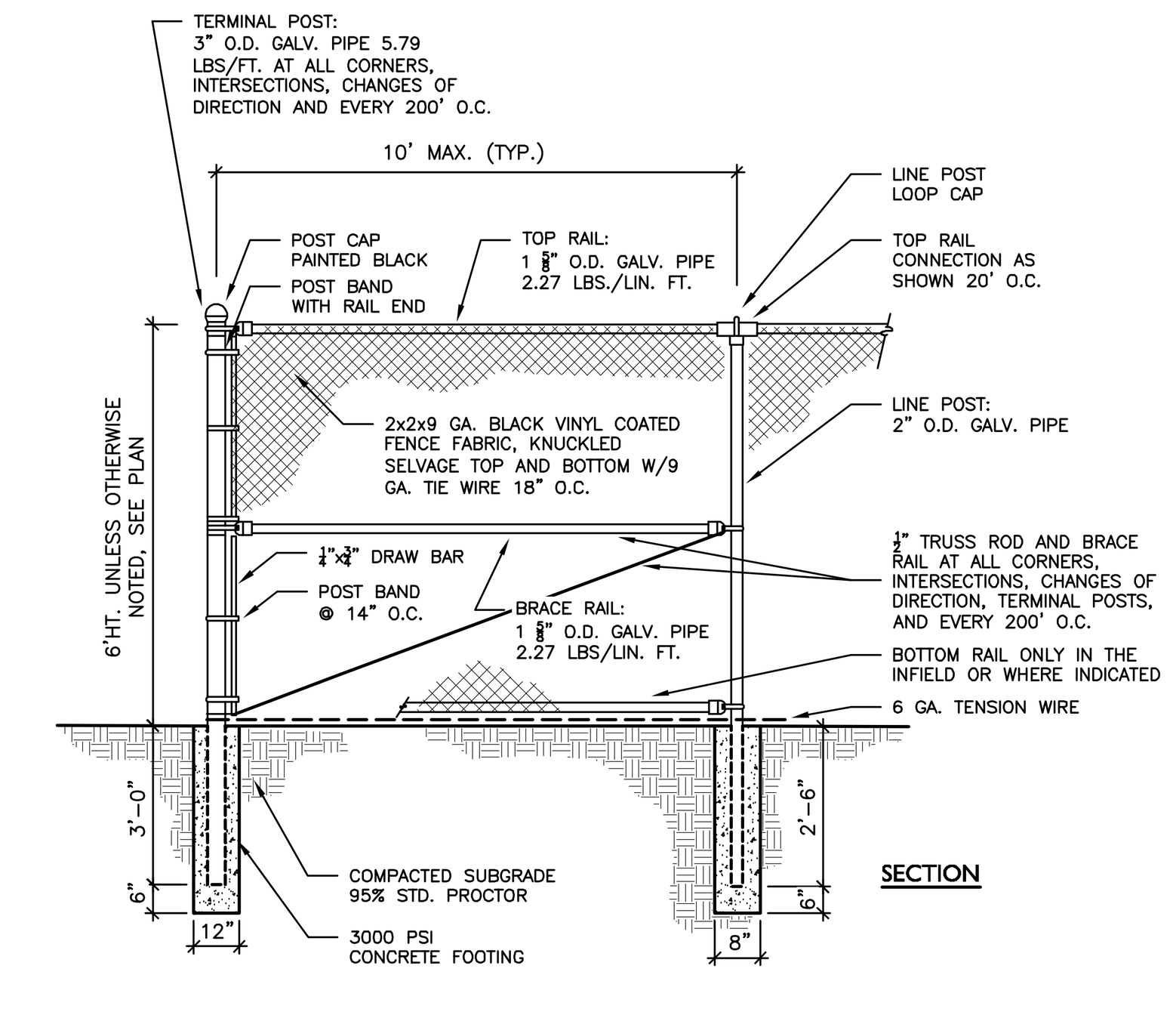
2 Vehicular Gate
N.T.S.



NOTES

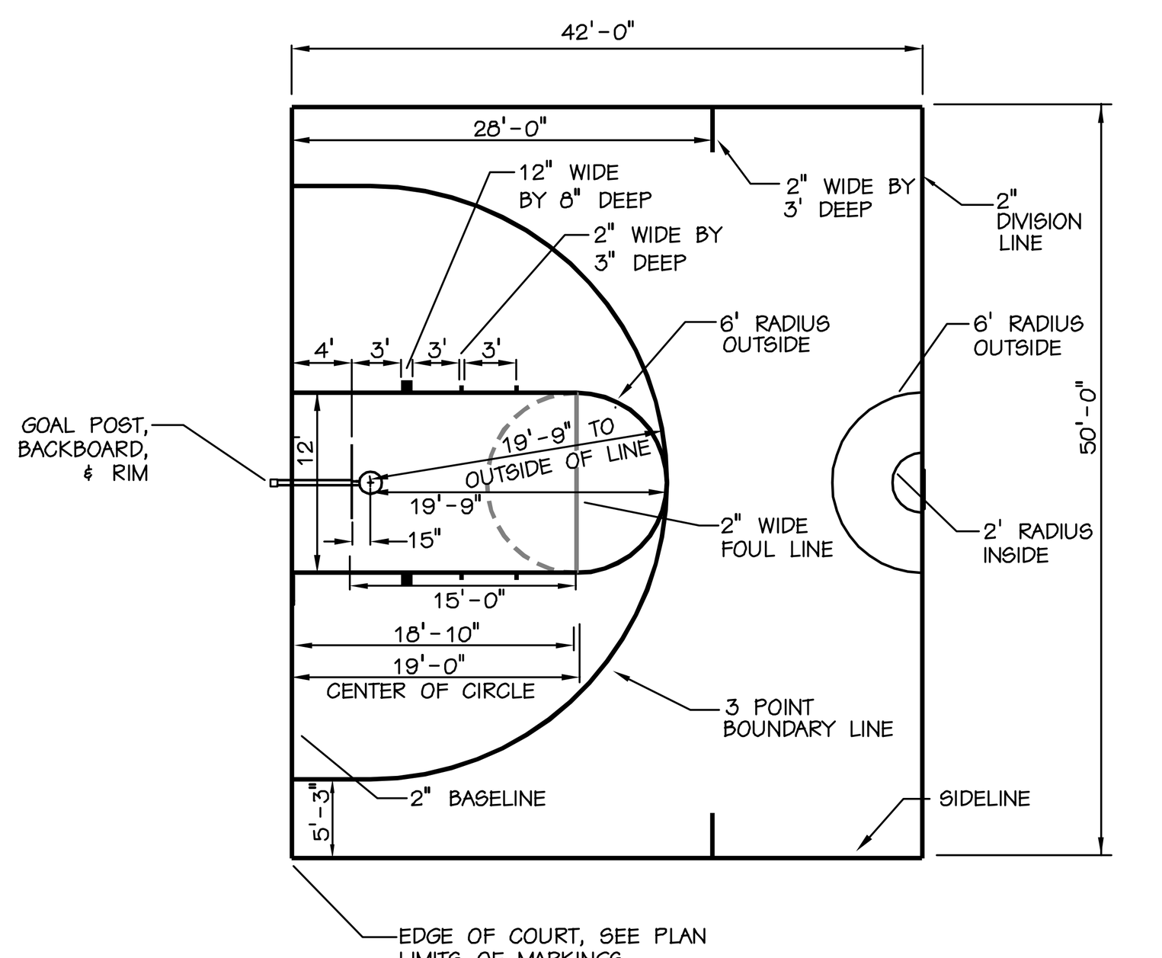
1. PROVIDE MATCHING GATES WITH ACCESSIBLE LATCH. SEE SITE PLAN FOR LOCATIONS AND WIDTHS.
2. FIELD VERIFY LOCATION WITH ARCHITECT PRIOR TO INSTALLATION..
3. ACCEPTABLE MANUFACTURER'S:
4. A. JERITH ORNAMENTAL FENCE STYLE #202 1-800-344-2242 WWW.JERITH.COM
   B. MERCHANT METALS WWW.MERCHANTMETALS.COM
   C. MASTER-HALCO 1-800-229-5615 WWW.FENCEONLINE.COM
   D. APPROVED EQUAL

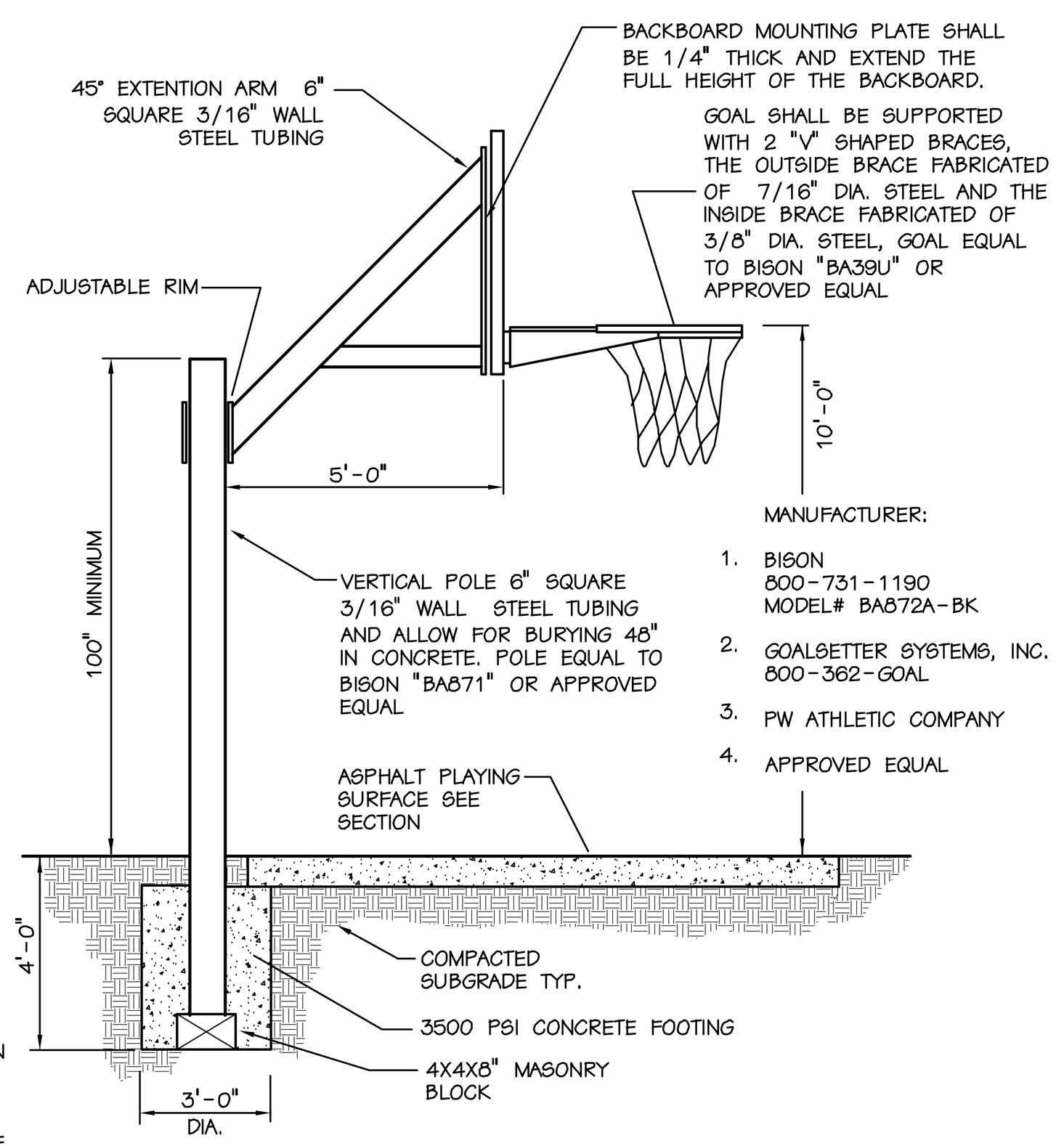
3 Black Ornamental Aluminum Fence
N.T.S.



NOTES
1. POSTS, RAILS AND FITTINGS SHALL BE HOT DIP GALVANIZED, THEN FIELD PAINTED, 2 COATS OF BLACK ENAMEL AFTER INSTALLATION, PRIOR TO INSTALLING FENCE FABRIC.
2. SEE SPECIFICATIONS FOR FURTHER MATERIAL AND INSTALLATION REQUIREMENTS.

4 Vinyl Coated Chain Link Fence Detail
N.T.S.



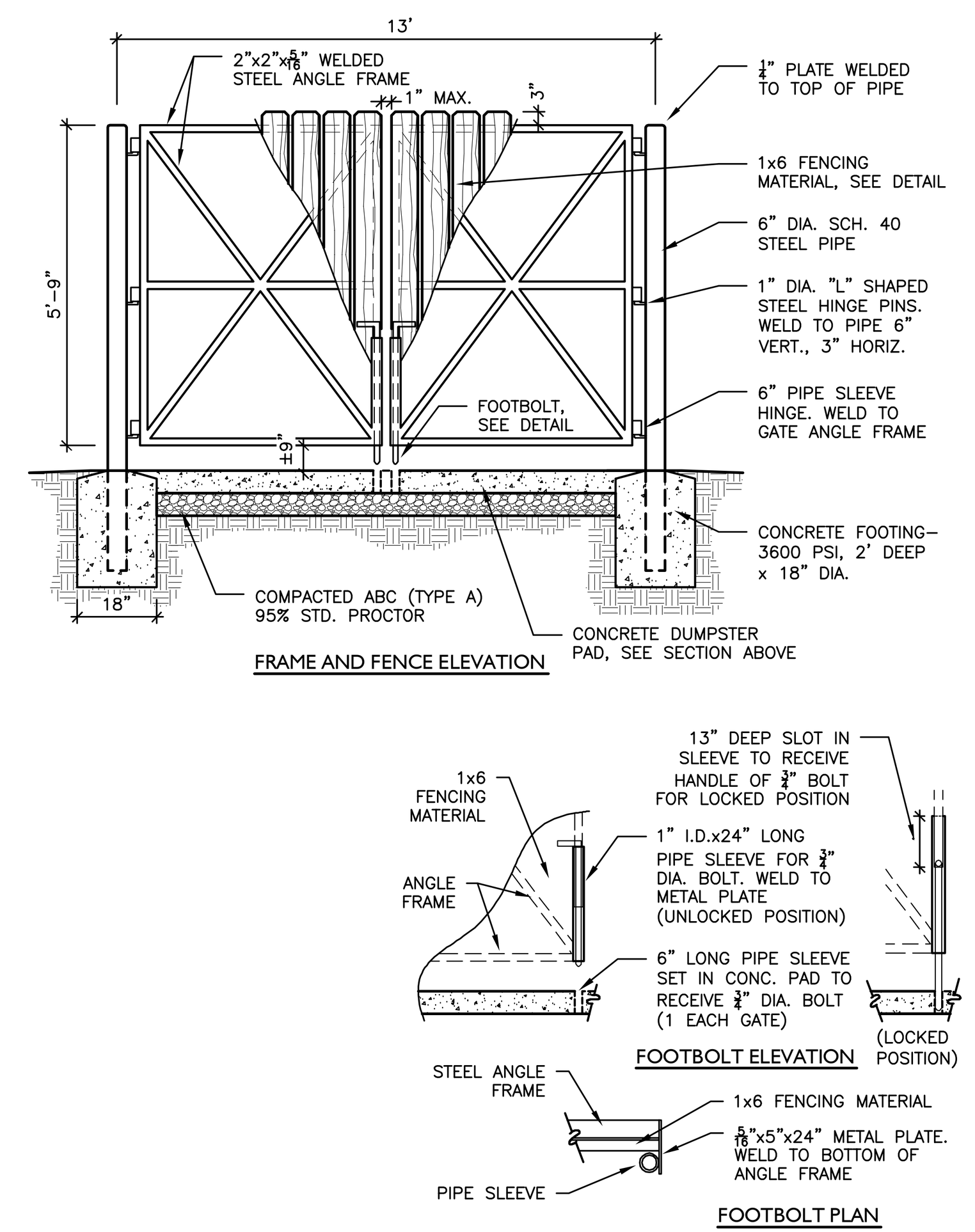


NOTES:

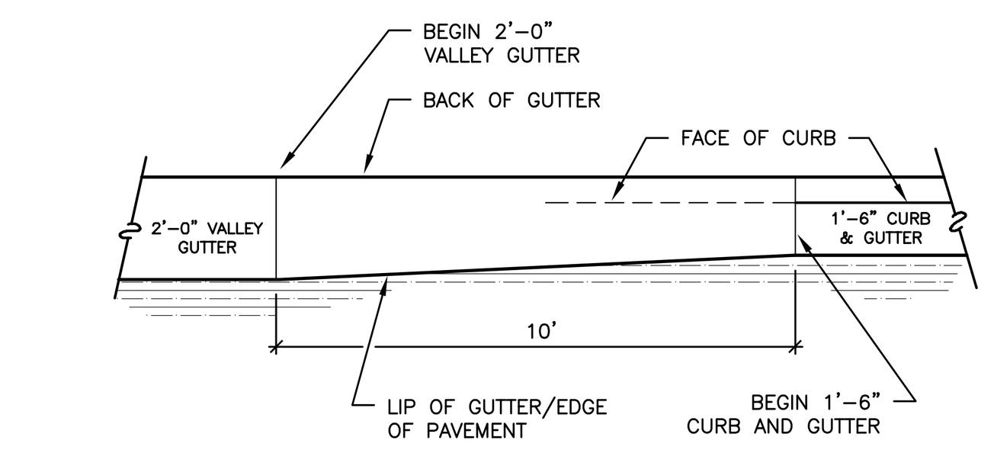
1. TO MEASURE 3 POINT BOUNDARY LINE, DROP PLUMB LINE FROM CENTER OF BASKET RIM. MEASURE 19'-9" FROM THAT POINT TO FORM 180° HALF CIRCLE. CONTINUE LINES TO A POINT ON BASELINE 5'-3" FROM SIDELINES.
2. HALF-COURT STRIPING: INCLUDE HALF OF BOTH CENTER CIRCLES (2' RAD. AND 6' RAD.), AND 2" WIDE DIVISION LINE.
3. FOR THE BROKEN LINE SEMICIRCLE IN THE FREE THROW LANE, THERE SHALL BE 8 MARKS 16" LONG AND 7 SPACES, 14" LONG.
4. SEE SPECS FOR GOAL POSTS, BACKBOARD, RIMS AND NET REQUIREMENTS.
5. SEE SITE PLAN FOR COURT CONSTRUCTION DETAILS.
6. SEE SPECIFICATIONS FOR OTHER MATERIALS REQUIREMENTS.
7. CONTRACTOR SHALL FURNISH ONE PAIR OF BASKETBALL GOALS FOR EACH COURT SHOWN ON DRAWINGS. SEE CONSTRUCTION DRAWINGS FOR DETAILS OF INSTALLATION. PROVIDE 10 GA. ALUMINUM BACKBOARD, WHITE, RECTANGULAR SHAPED 42"X60" WITH ORANGE SHOOTER'S SQUARE/BORDER, DOUBLE RIM WITH NET, BLACK POWDER COATED POLE FINISH.
8. ALL PAVEMENT STRIPES SHALL BE WHITE.
9. BACKBOARD SHALL HAVE ORANGE SHOOTERS TARGET BOX.

NOTES
1. THE STANDARD RIM SHALL BE FABRICATED FROM 3/16" BACK PLATES AND SIDE PLATES FULLY WELDED. RIM SHALL BE DOUBLE 5/8" DIAMETER HIGH STRENGTH STEEL WELDED TOGETHER AT A MINIMUM OF SIX PLACES. NETS SHALL BE ATTACHED BY MEANS OF A NETLOCK SYSTEM CONSISTING OF A CONTINUOUS 3/16" X 1" STEEL BAND STAMPED WITH HOLES TO FACILITATE EITHER NYLON OR CHAIN NETS. THE BAND SHALL BE ROLLED TO 18" DIAMETER AND WELDED TO THE BOTTOM OF THE TWO RINGS AND ADD SUPPORT TO THE RIM. THE ENTIRE RIM SHALL BE POWDER COATED ORANGE.
2. SEE SPECIFICATIONS FOR OTHER MATERIAL REQUIREMENTS.

5 Basketball Court Details
N.T.S.



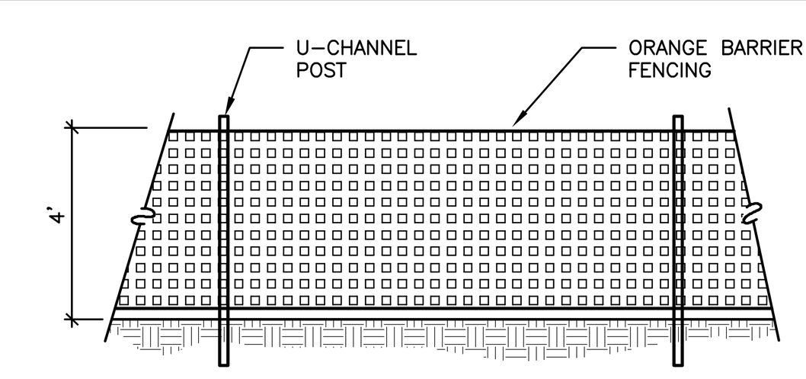
6 Dumpste Screen Gate
N.T.S.



NOTES

1. TRANSITION TO BE ALONG GUTTER LINE.

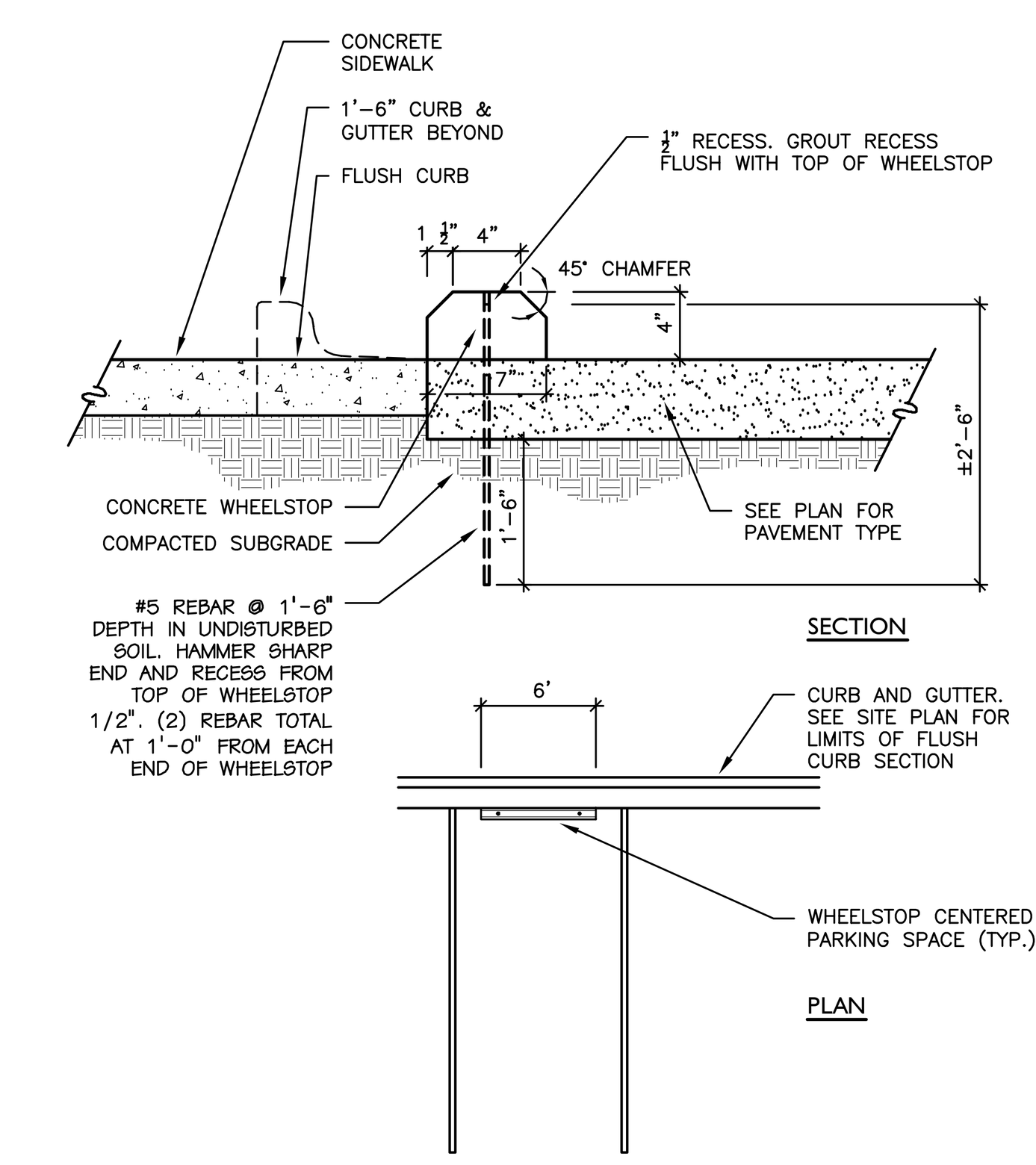
7 Curb Transition 2'-0" Valley Gutter to 1'-6" Curb & Gutter
N.T.S. (CMLDS. #10.20)



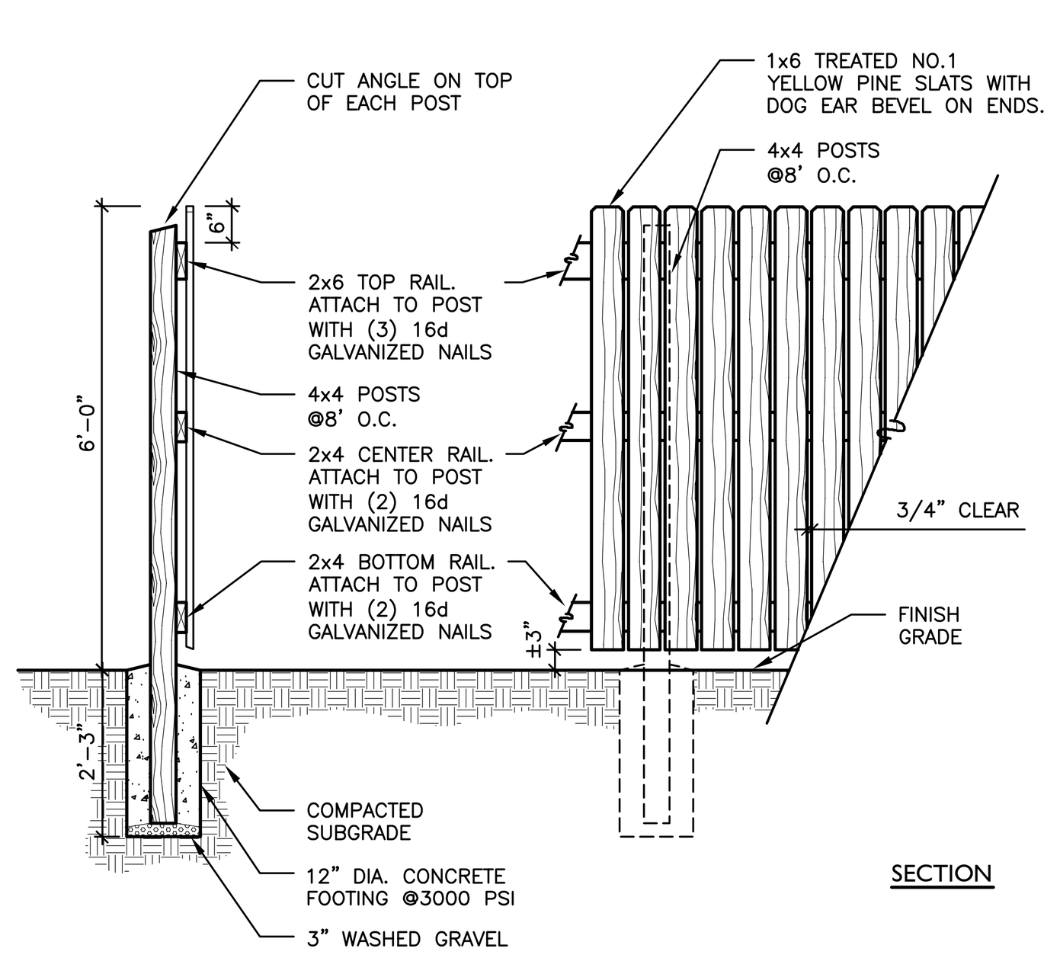
NOTES

1. CONTRACTOR TO INSTALL AND MAINTAIN ORANGE BARRIER FENCING AROUND EXISTING TREES WHERE DELINEATED ON PLAN.
2. NO PARKING OF EQUIPMENT OR MATERIALS SHALL BE PERMITTED INSIDE THIS AREA.
3. MAINTAIN BARRIER FENCING THROUGH CONSTRUCTION. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
4. REFER TO NCDENR STANDARDS FOR GENERAL SPECIFICATIONS REGARDING TREE PROTECTION.
5. 6' MINIMUM WIDTH FOR 2" CAL. TREES OR SMALLER.
6. ONE FOOT OF LINEAR DISTANCE FROM THE TREE TRUNK FOR EACH INCH OF TRUNK DIAMETER, OR 1/2 HEIGHT OF THE TREE WHICHEVER IS GREATER UNLESS OTHERWISE SHOWN ON PLAN.

9 Temporary Tree Protection Barricade
N.T.S.



8 Concrete Wheelstop Detail
N.T.S. (AT ACCESSIBLE SPACES IN PARKING LOT)



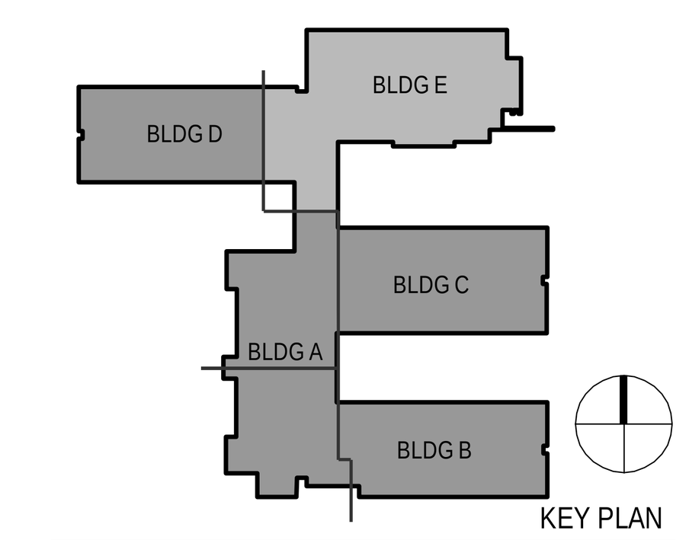
NOTES
1. POSTS, RAILS, AND SLATS TO BE NO. 2 PRESSURE TREATED YELLOW PINE FRAMING WOOD.
2. ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED.
3. FINISHED SIDE OF FENCE SHALL FACE THE ABUTTING PROPERTY.
4. SEE SPECIFICATIONS FOR FURTHER MATERIAL AND INSTALLATION DATA.

9 Wood Screen Fence Detail
N.T.S.

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES CONNELLA
11/14/13
SEAL



Perkins Eastman
520 WEST SIXTH STREET
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T. 704 940 0501
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

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1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms
Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY
SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Construction Details

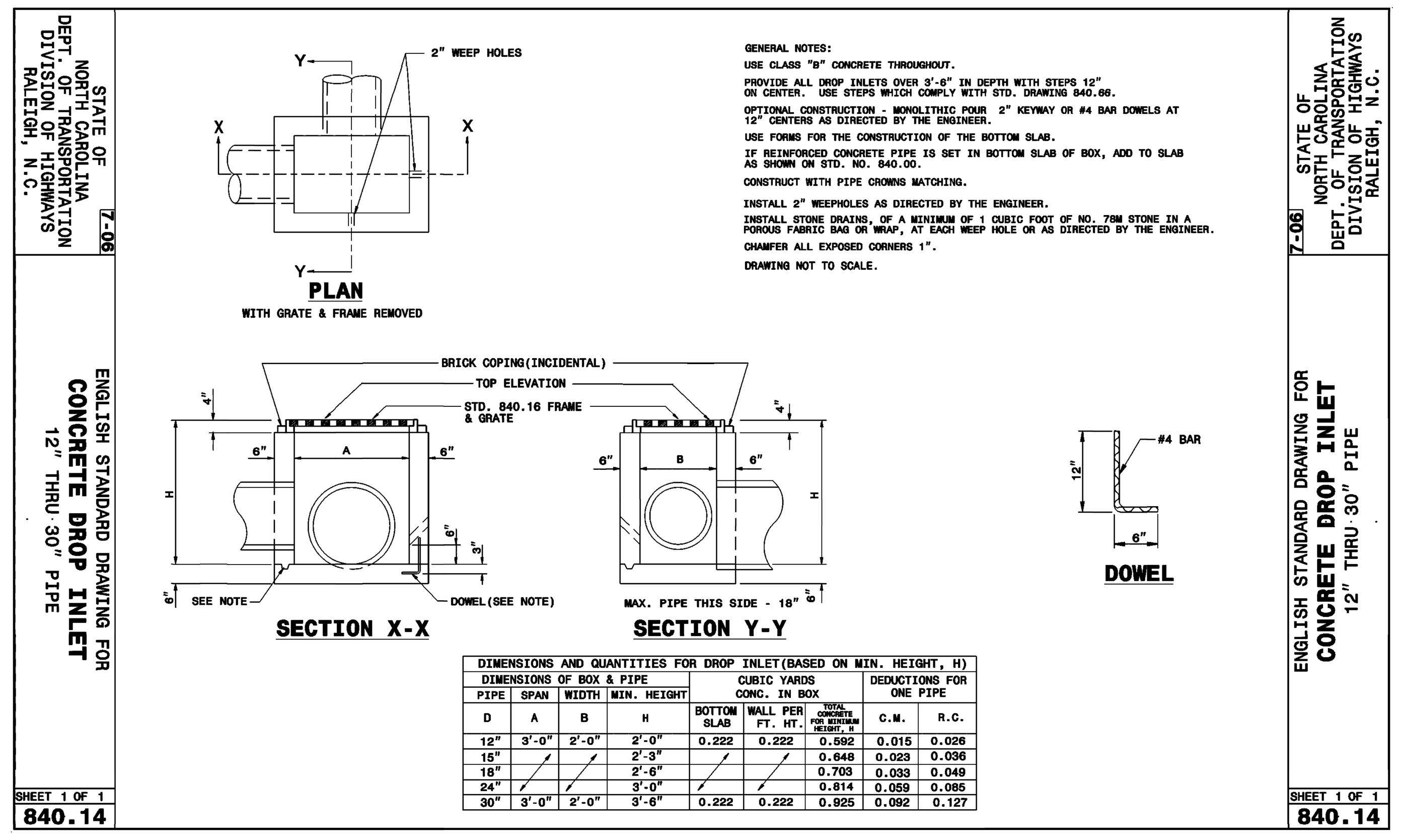
SCALE:

C202

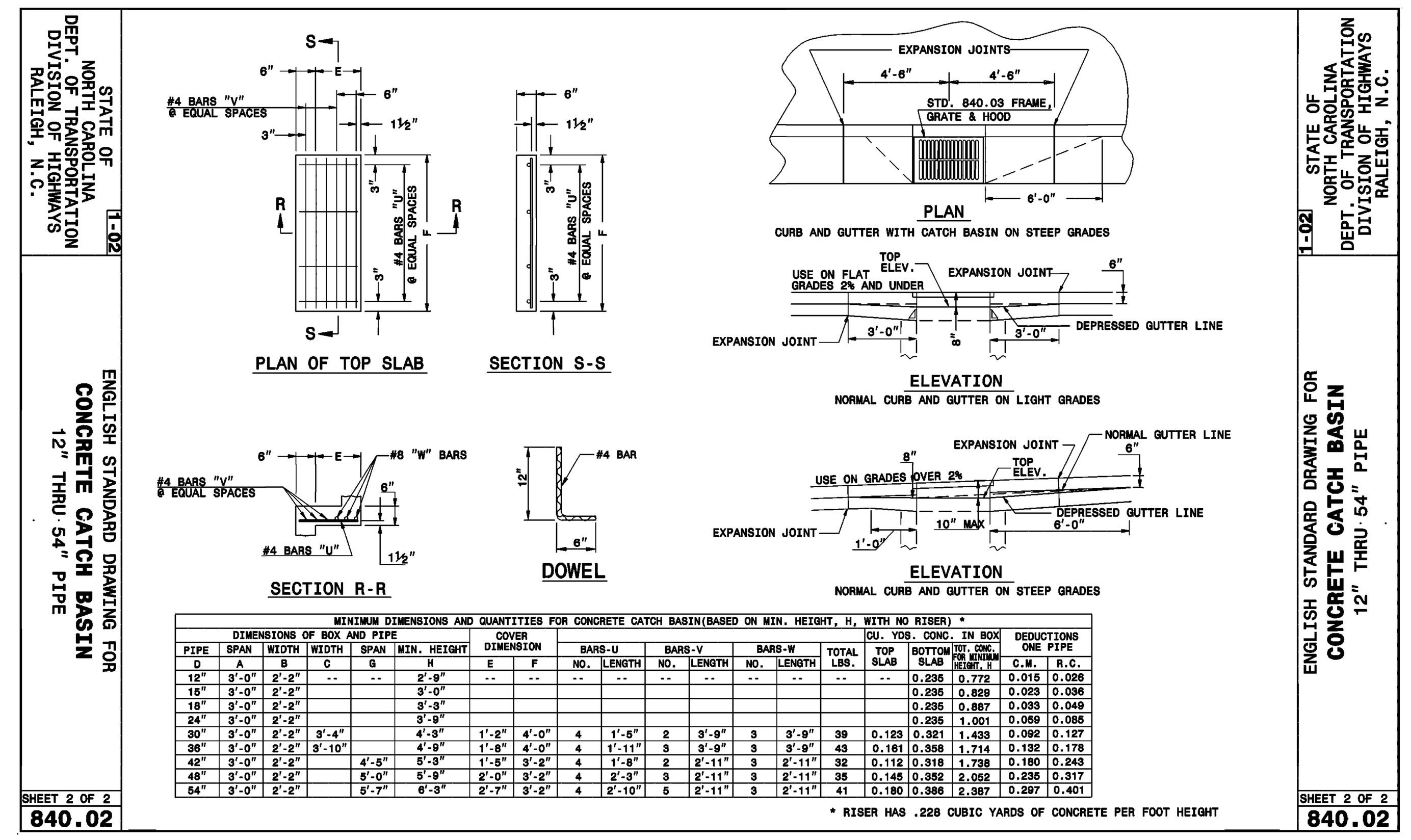
100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

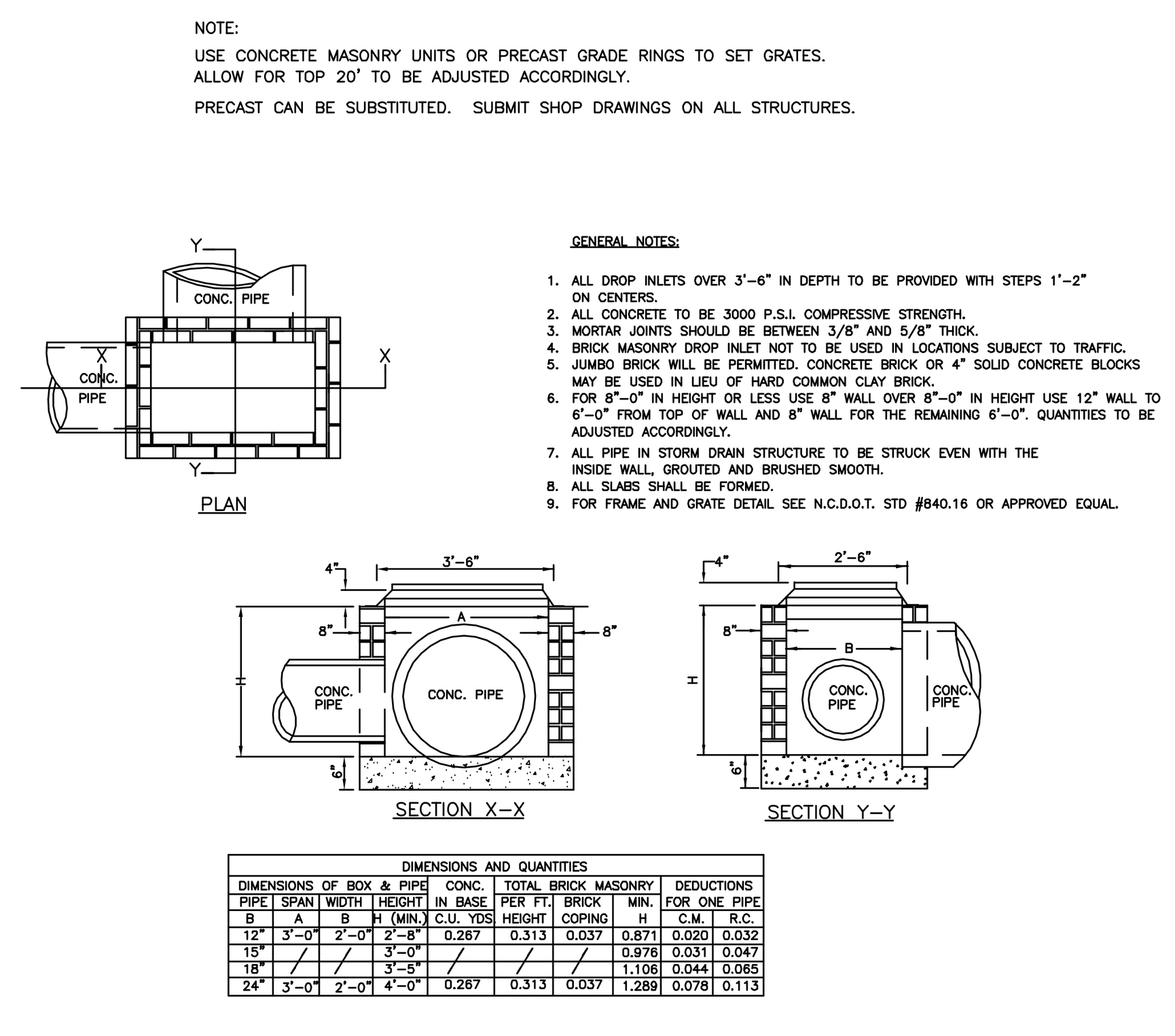
DATE: December 6, 2013



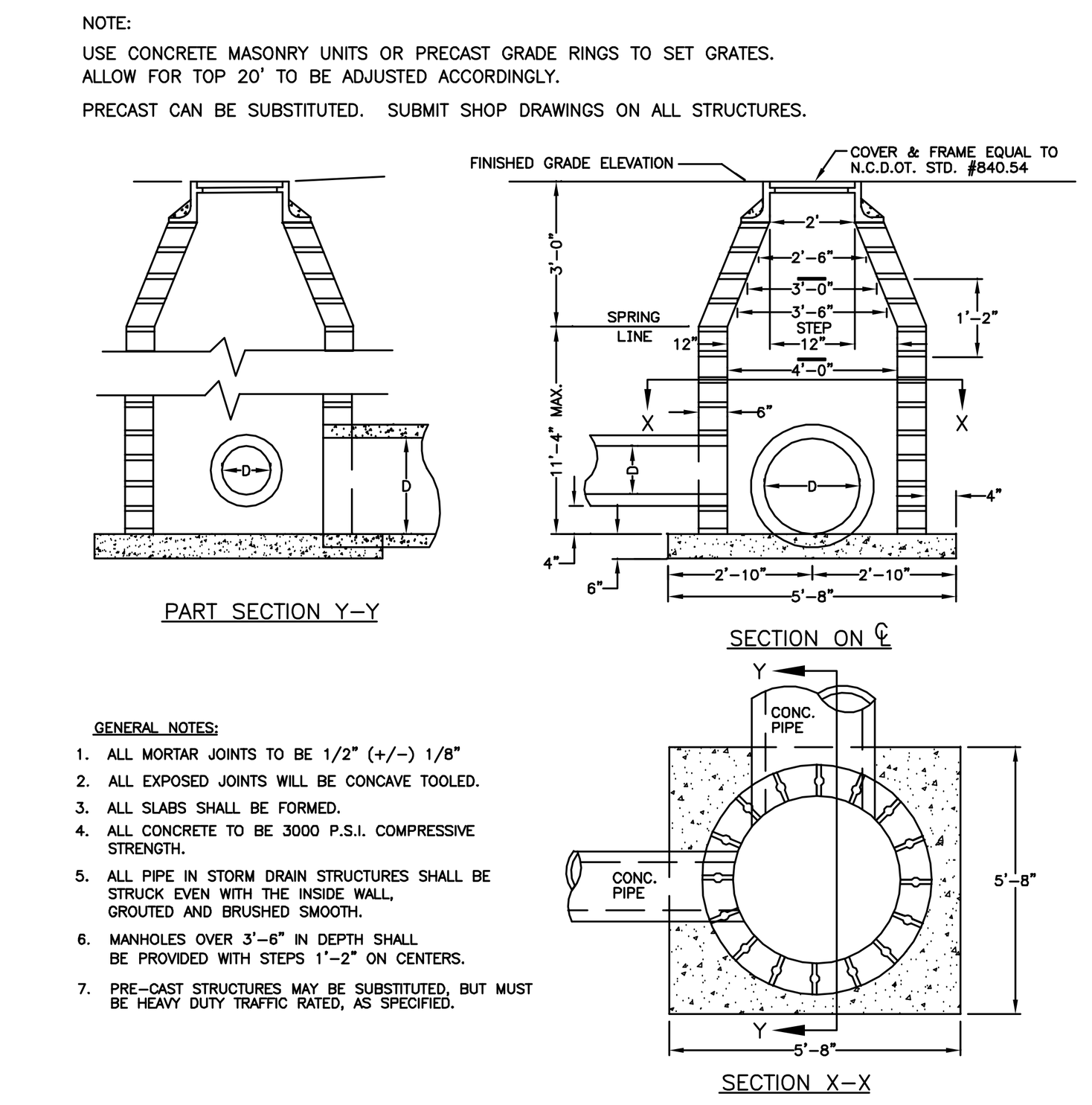
1 Concrete Drop Inlet
N.T.S.



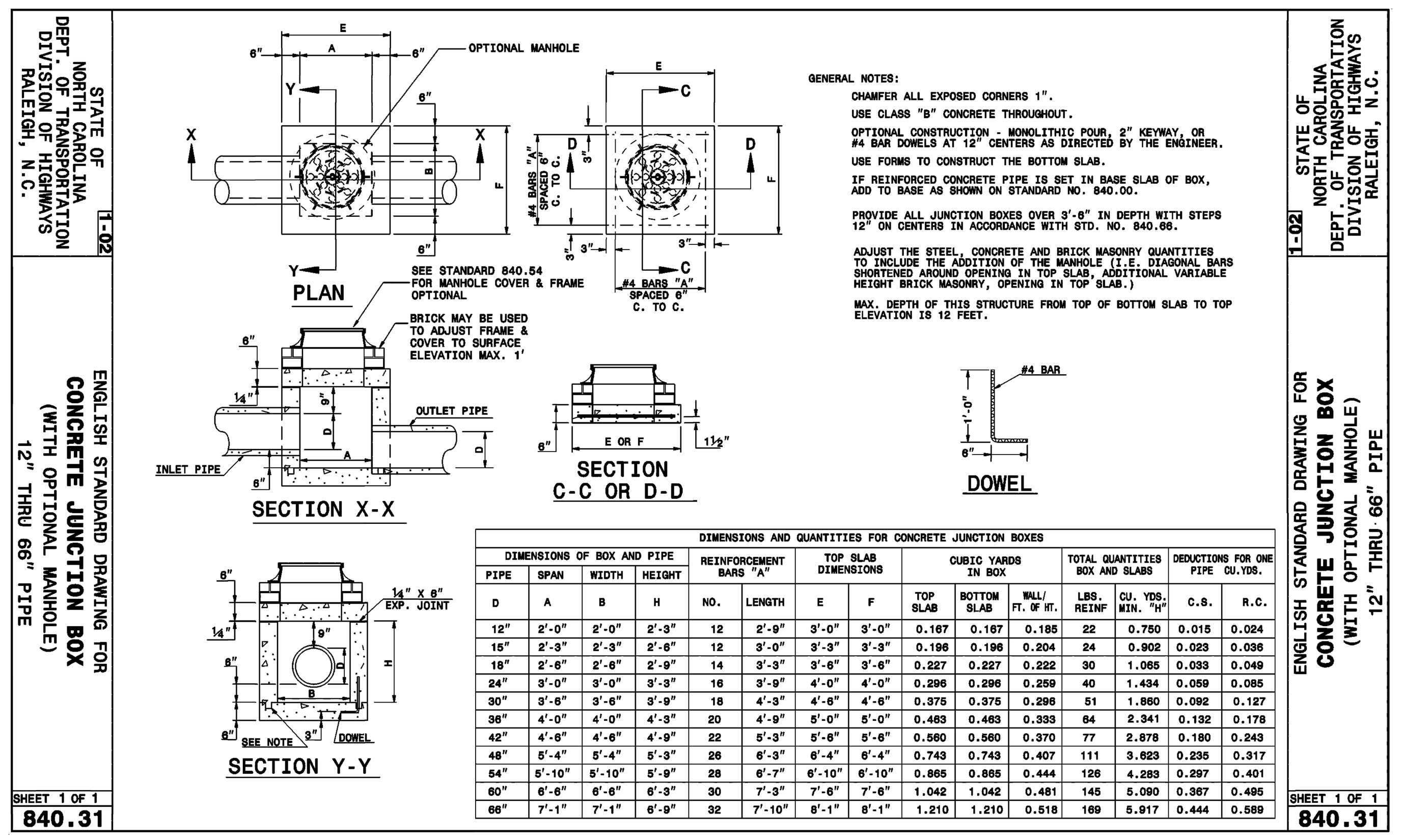
2 Concrete Catch Basin
N.T.S.



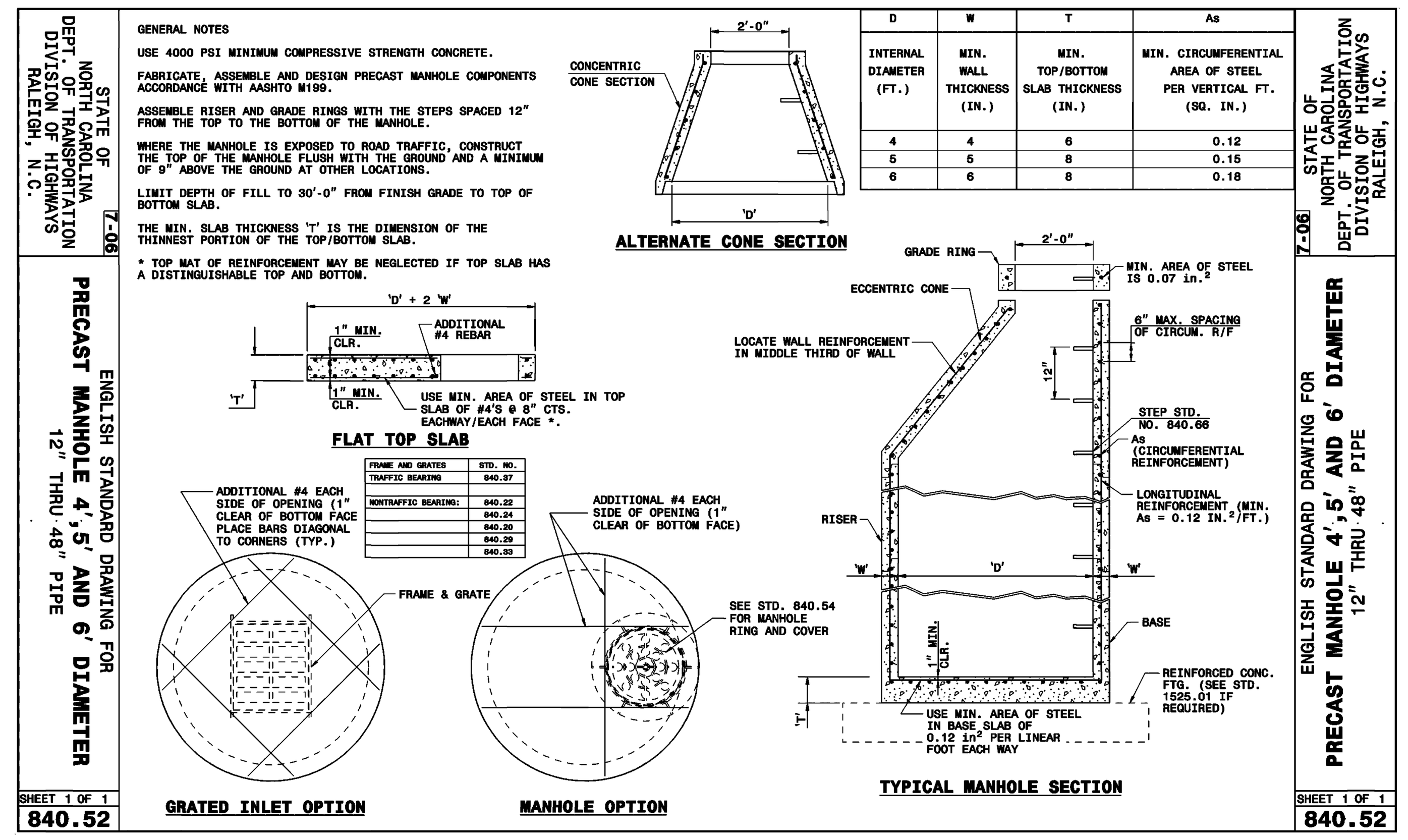
3 Brick Drop Inlet Detail
INTERIOR SITE



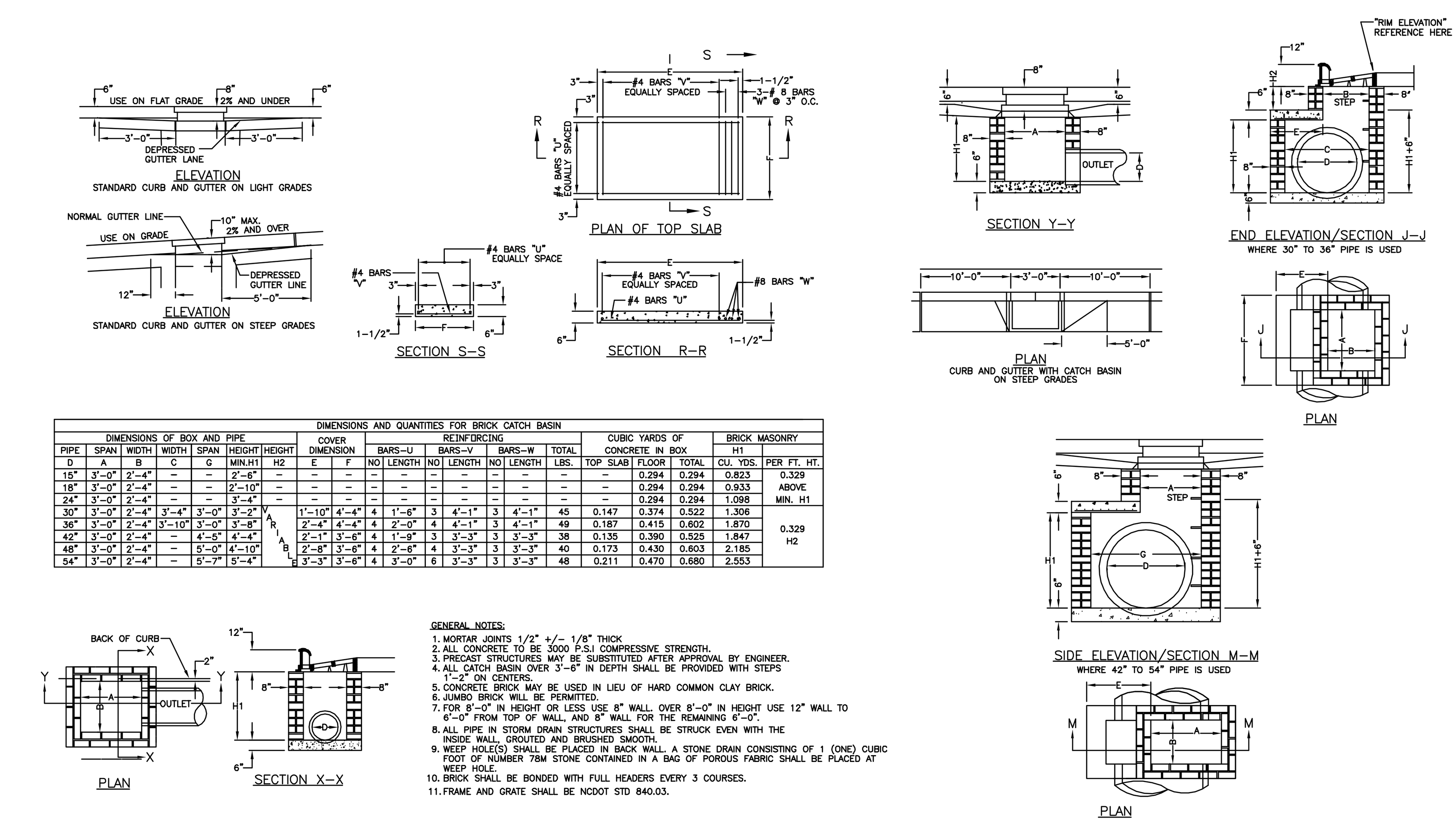
4 Storm Drain Manhole Detail
INTERIOR SITE



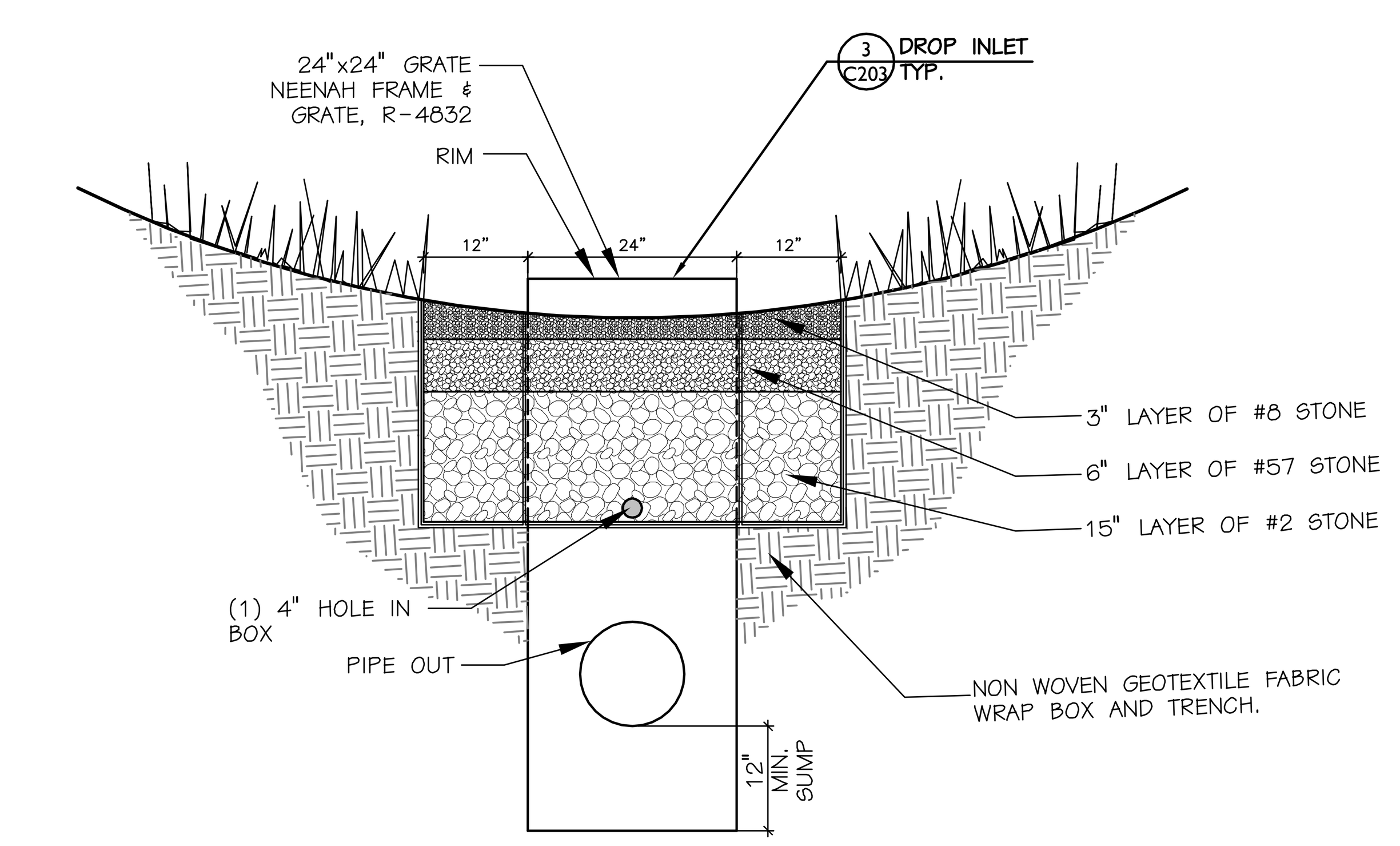
5 Concrete Junction Box
N.T.S.



6 Concrete Storm Manhole
N.T.S.



7 Curb Inlet Detail



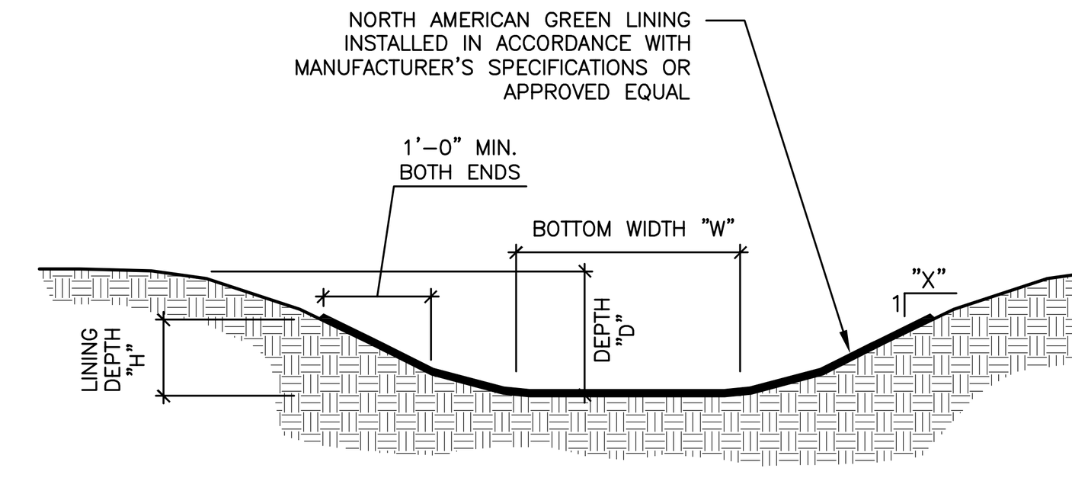
NOTES:
DO NOT INSTALL STONE UNTIL SITE IS STABILIZED

SEE GRADING PLAN ENLARGEMENT FOR DRAINAGE INLET LOCATIONS AROUND BUILDING

8 Drop Inlet Water Quality Enhancement
N.T.S.

SWALE CHART

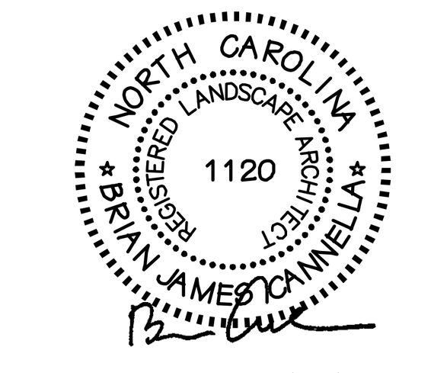
SEE GRADING AND DRAINAGE PLAN FOR SWALE LOCATIONS	GRASS SWALE #1	GRASS SWALE #2
BOTTOM WIDTH "W" - FT.	1	1
BOTTOM SLOPE FT./FT.	0.15	0.15
SIDE SLOPE "M"	2	2
DITCH DEPTH "D" - FT.	1.0	1.0
MIN. LINING DEPTH "H" - FT.	0.50	0.50
TEMP./PERM. LINING TYPE	NAG C125	NAG C125



9 Grassed Lined Swale
N.T.S.

NO. DATE REVISION

Date:



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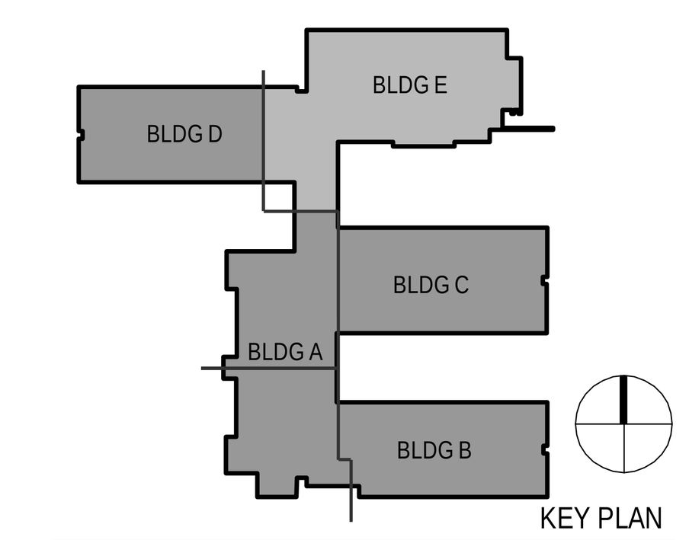

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NEWELL ELEMENTARY SCHOOL REPLACEMENT

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CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Construction Storm Details

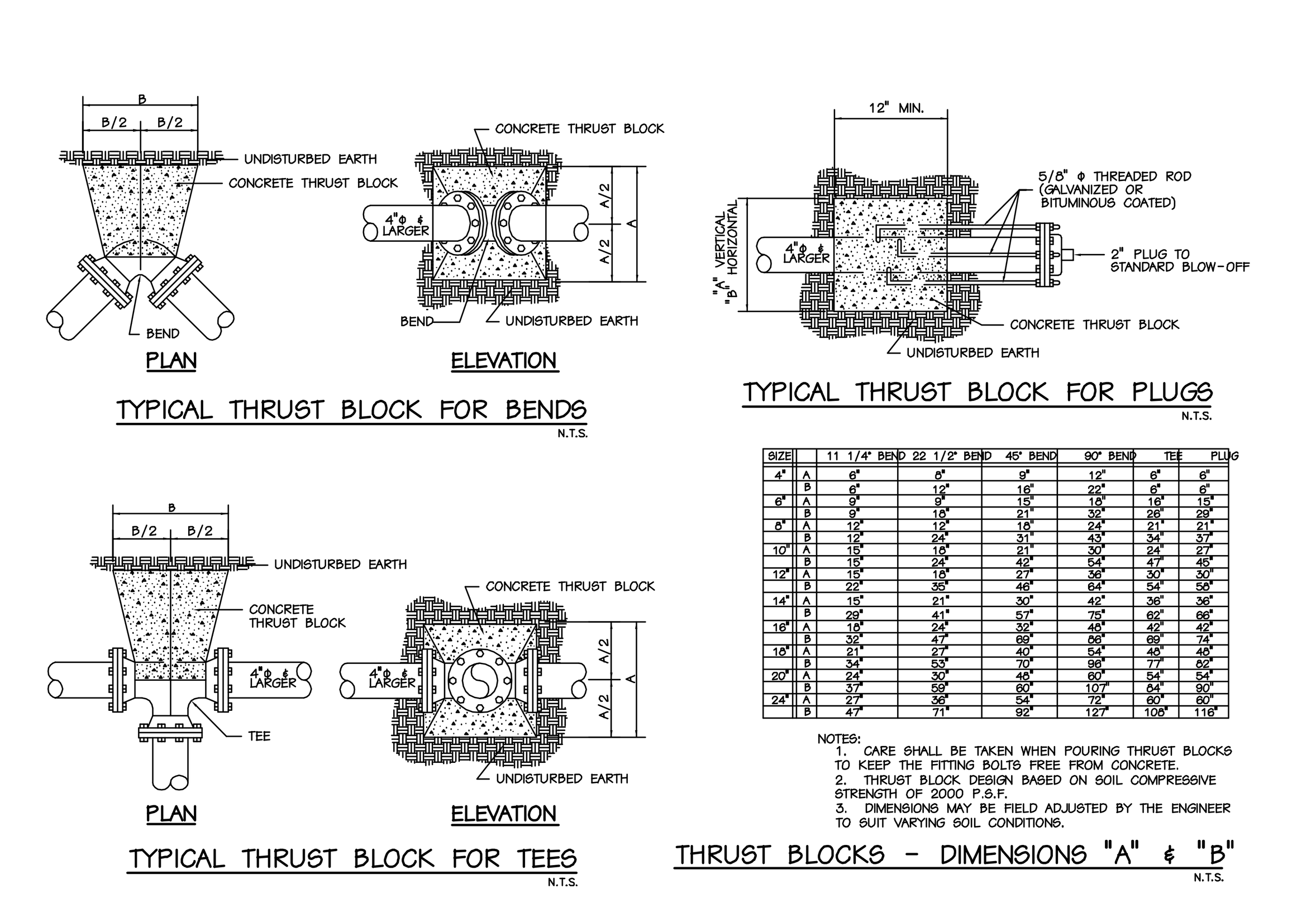
SCALE:

C203

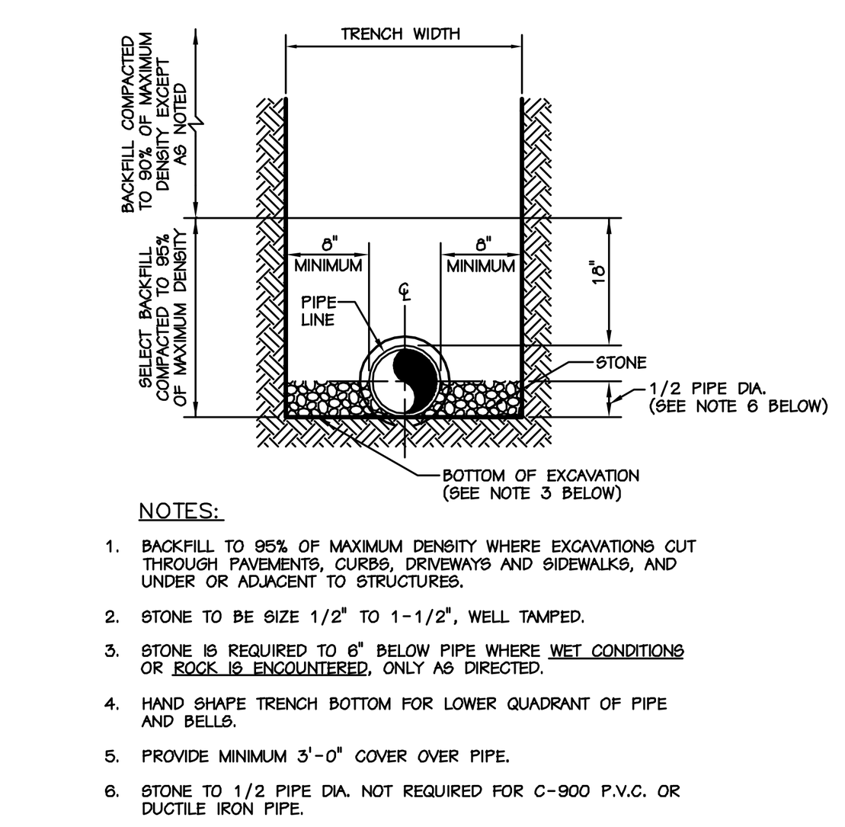
100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

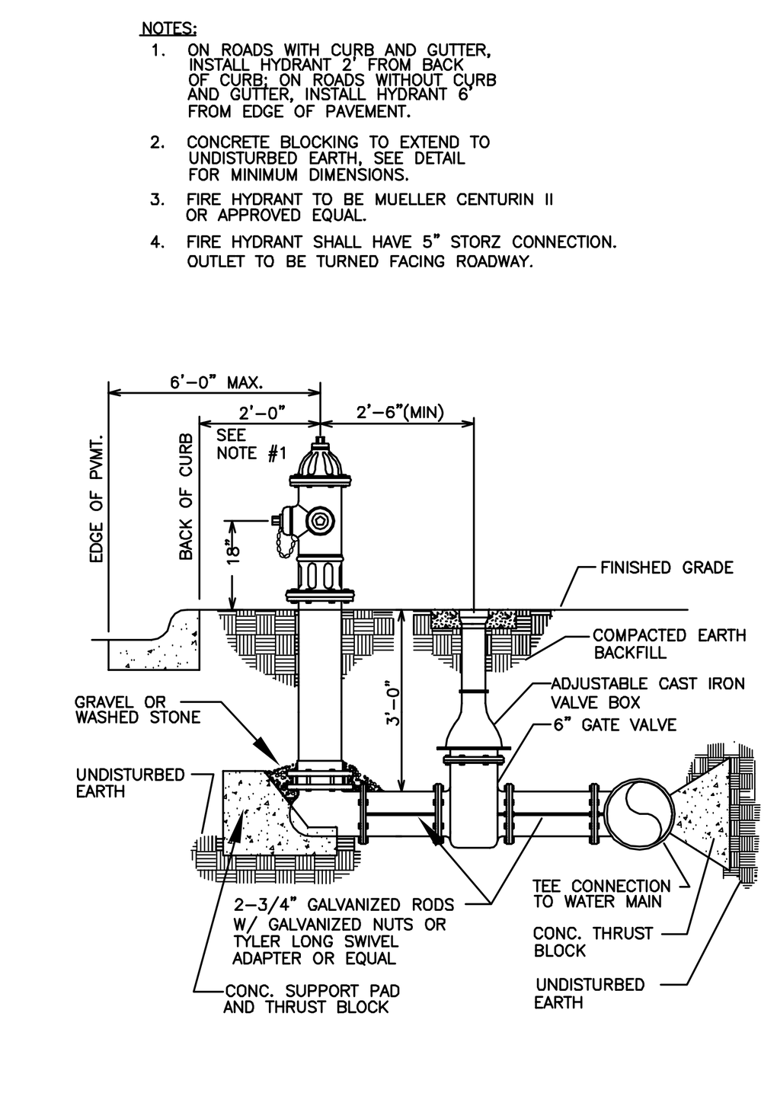
DATE: December 6, 2013



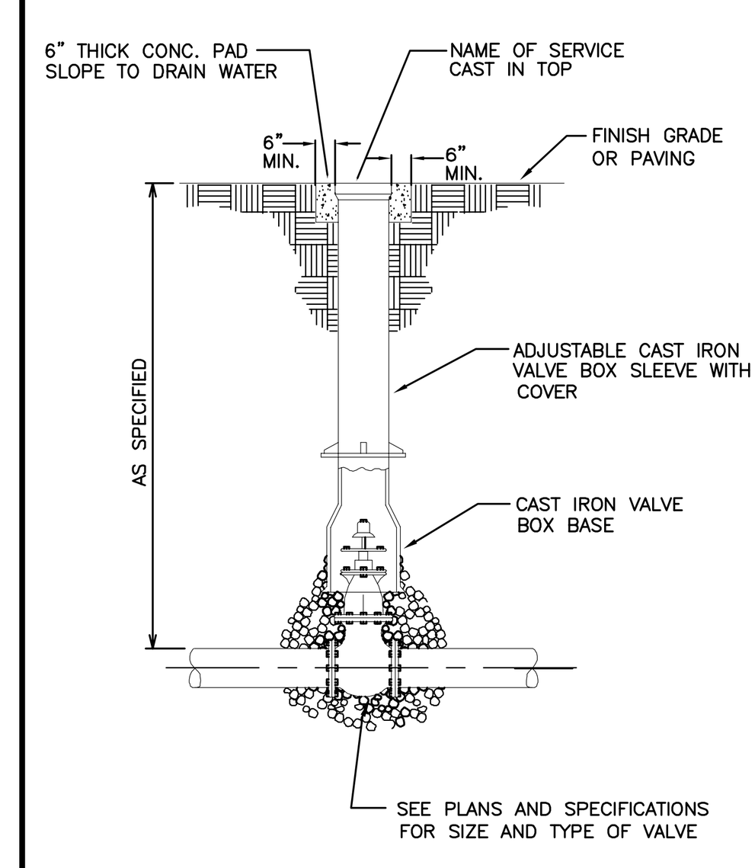
1 Thrust Block Details
N.T.S.



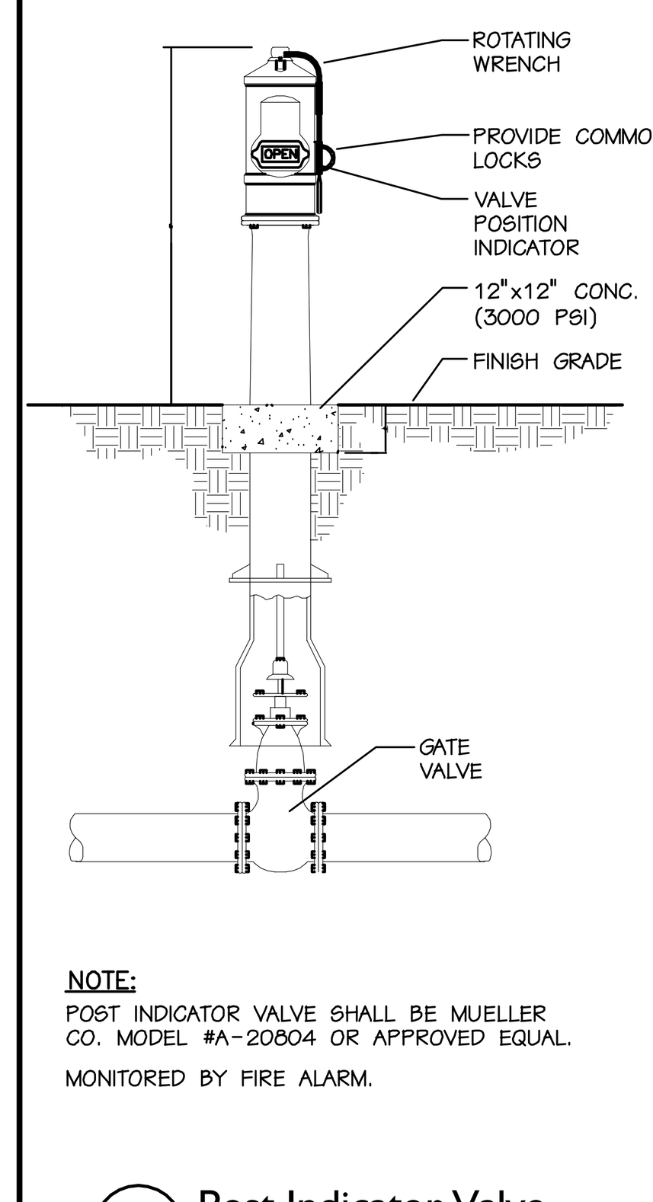
2 Utility Trench Detail
N.T.S.



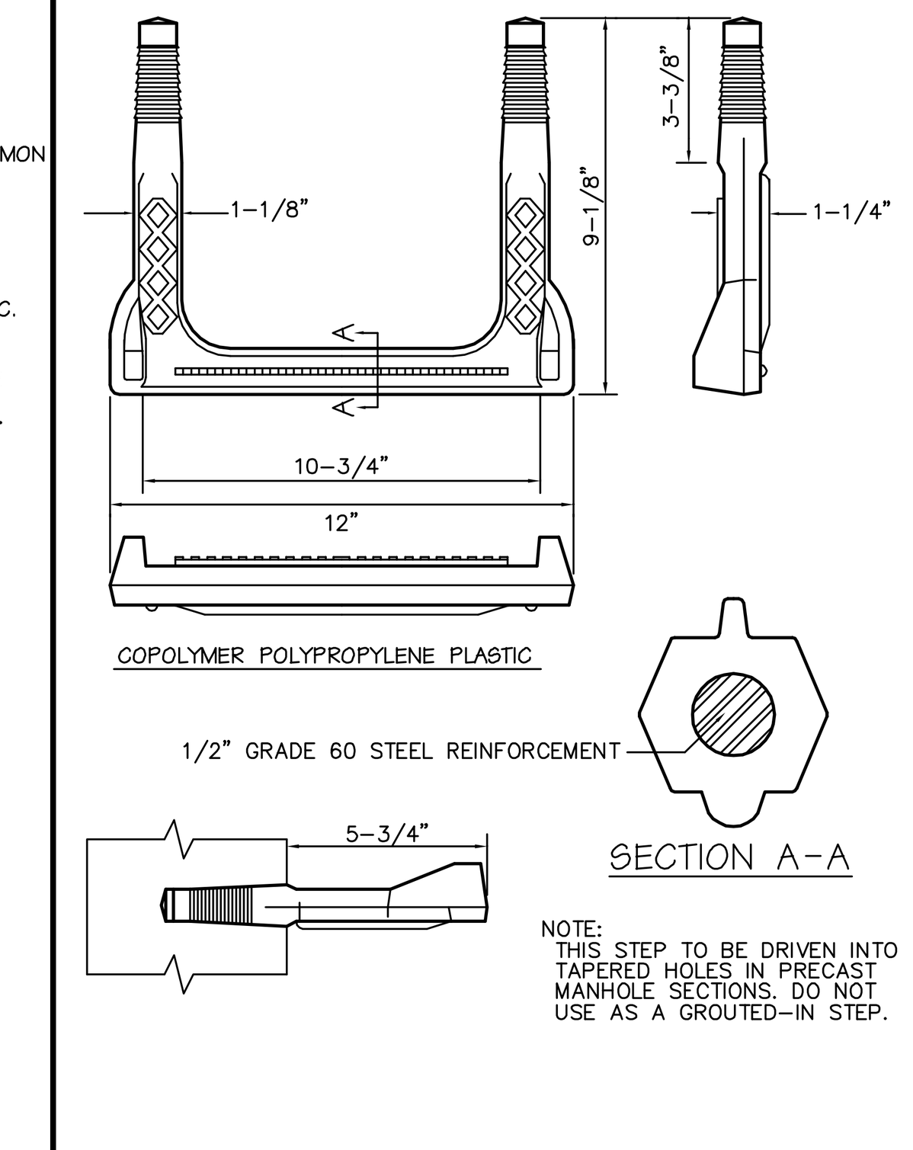
3 Fire Hydrant detail
N.T.S.



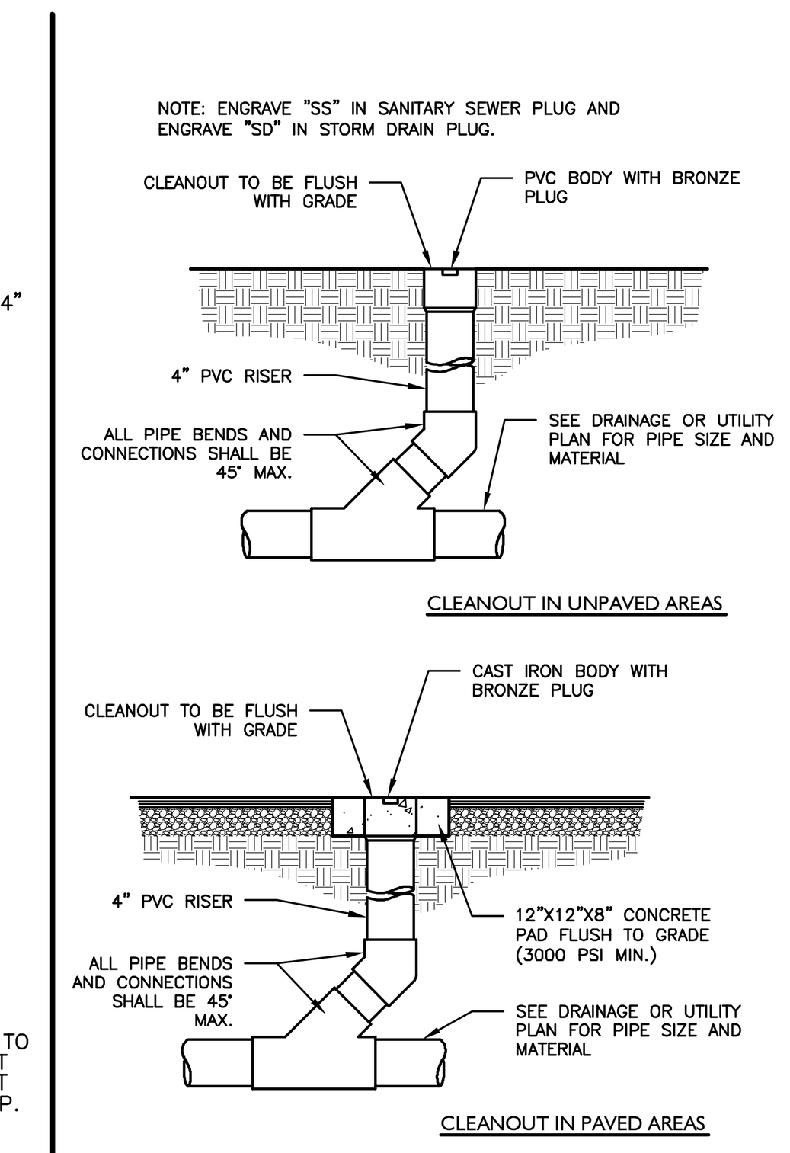
4 Valve & Valve Box
N.T.S.



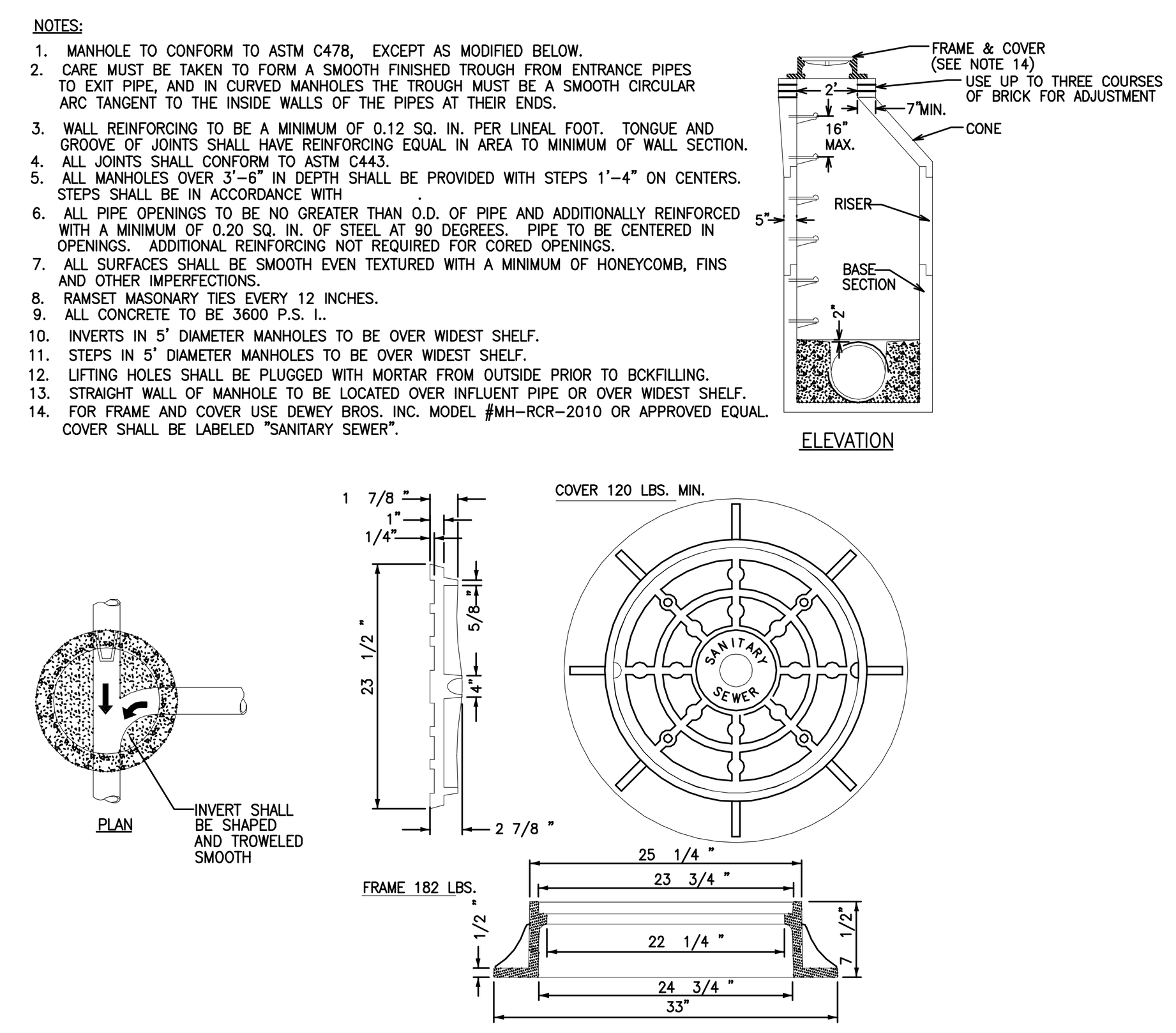
5 Post Indicator Valve
N.T.S.



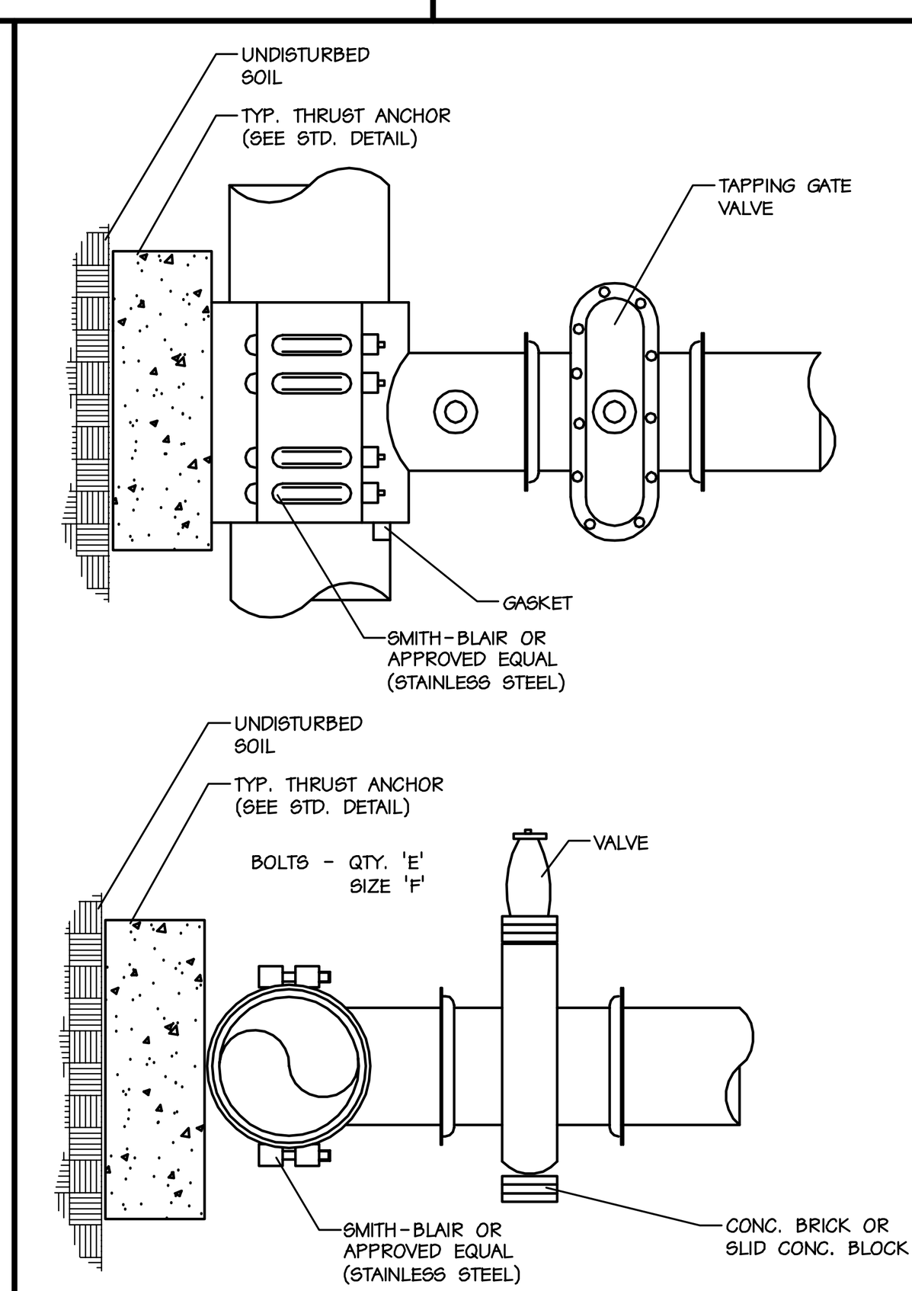
6 Drainage/SS Structure Step
N.T.S.



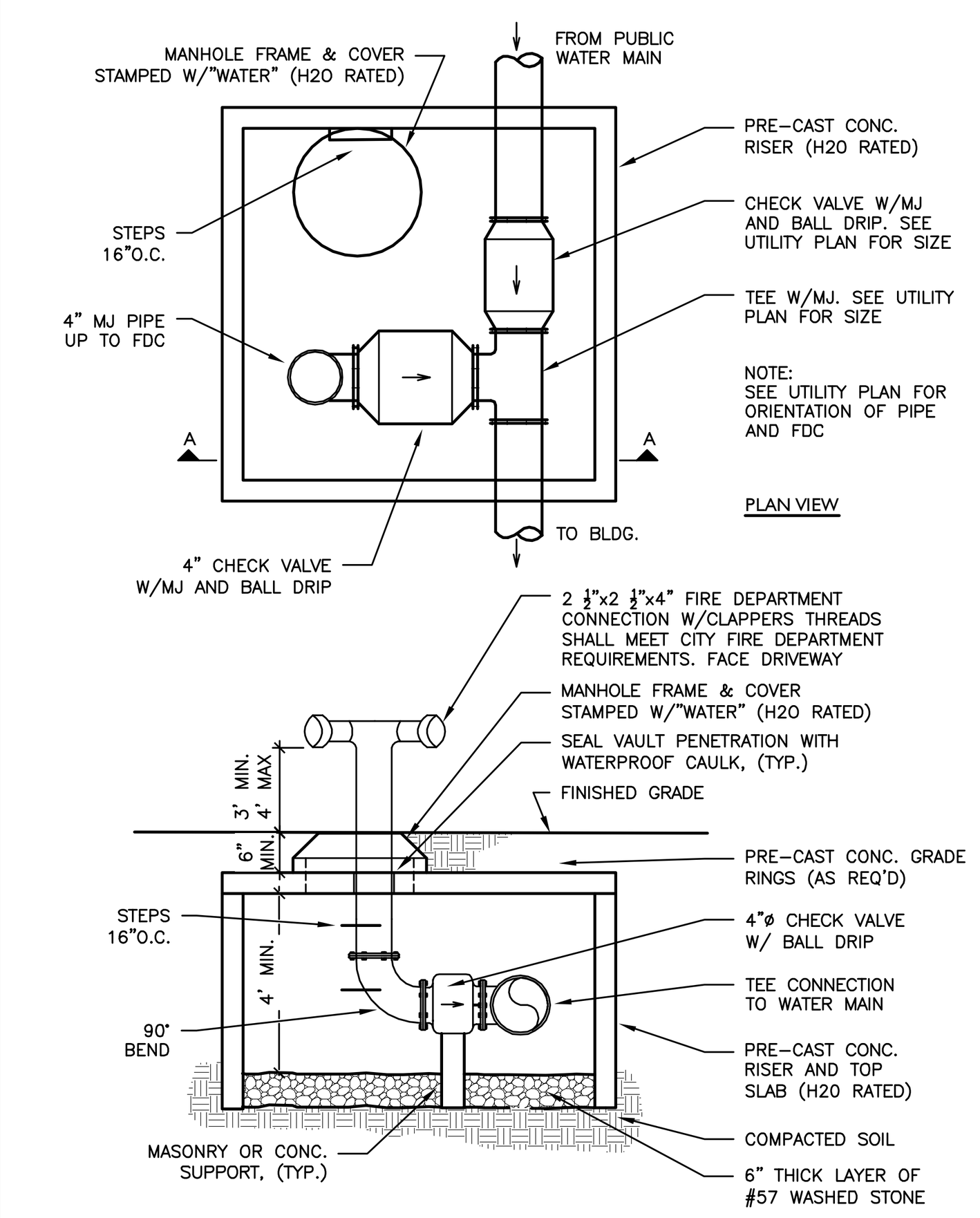
10 Cleanout
N.T.S.



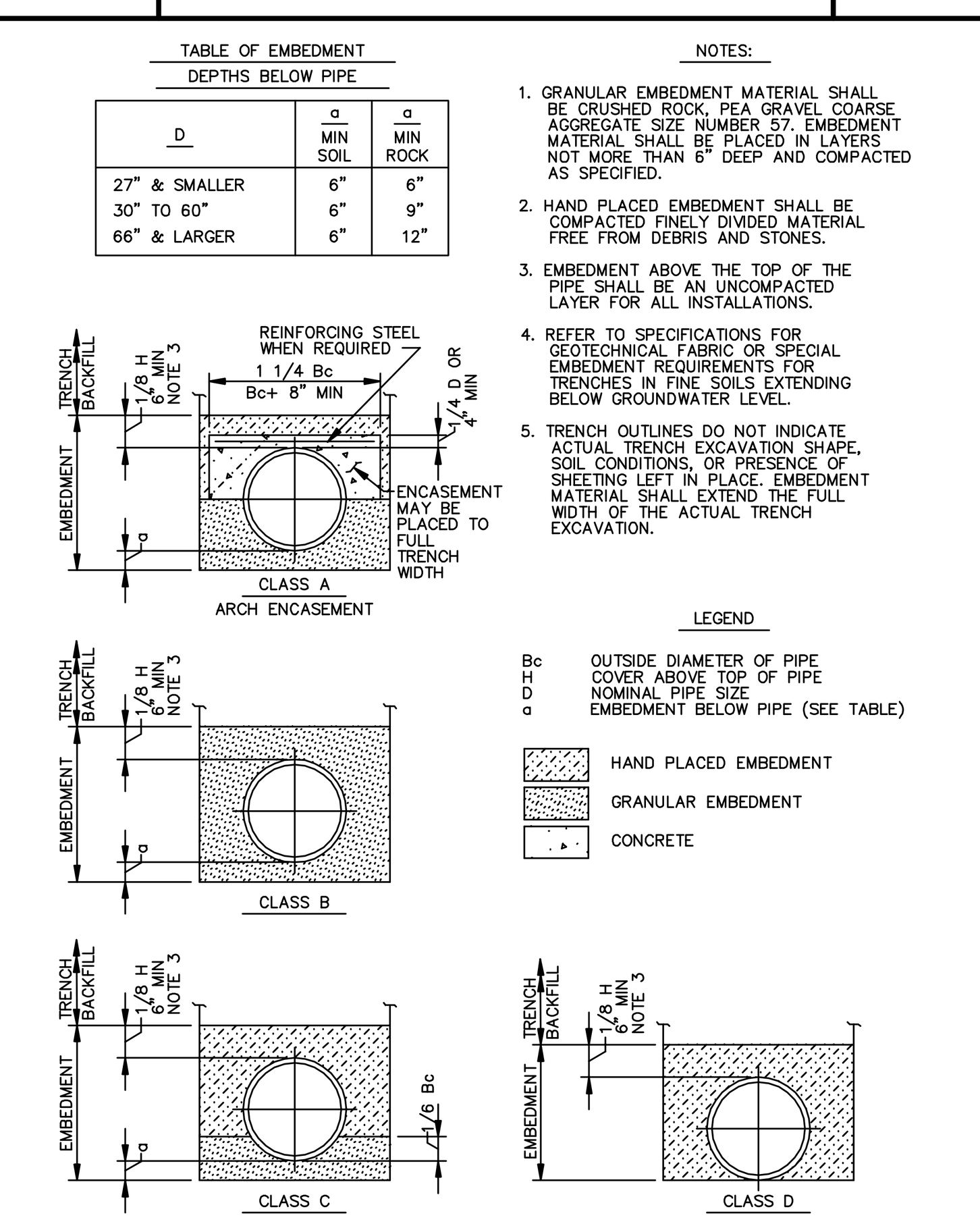
7 Precast Sanitary Sewer Manhole
N.T.S.



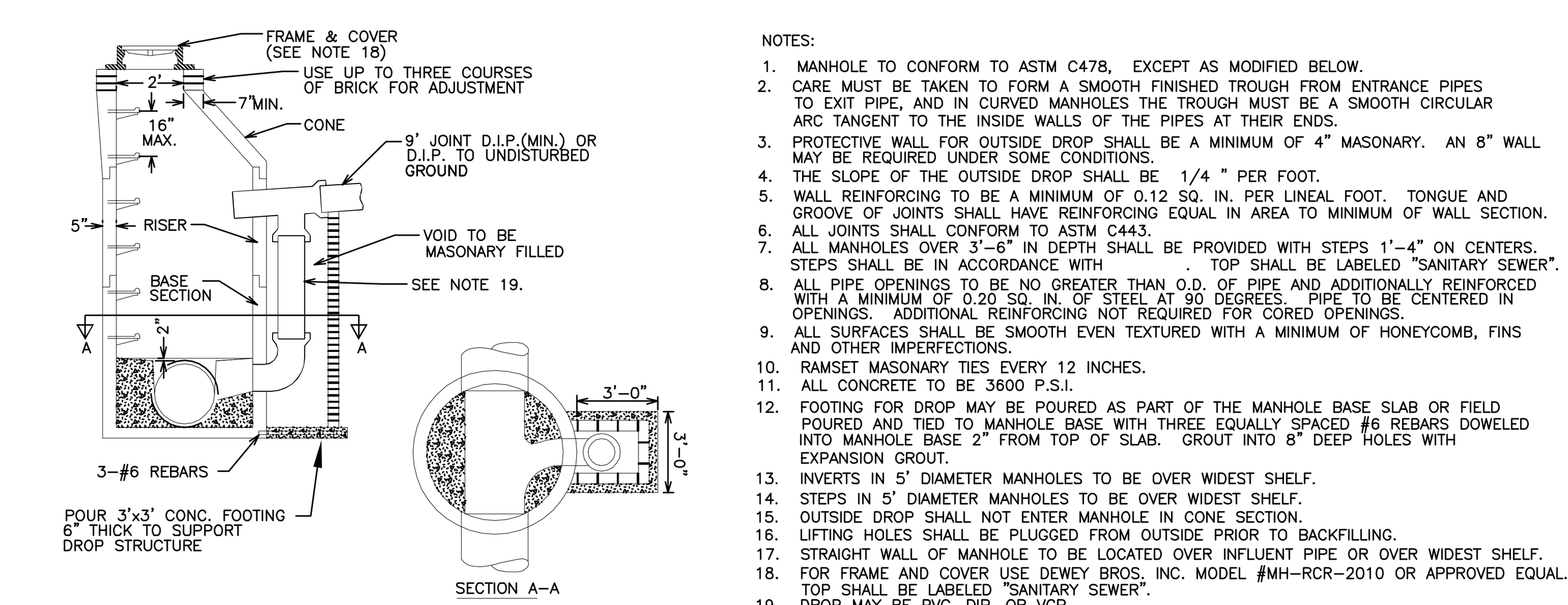
8 Typical Tapping Valve & Sleeve
N.T.S.



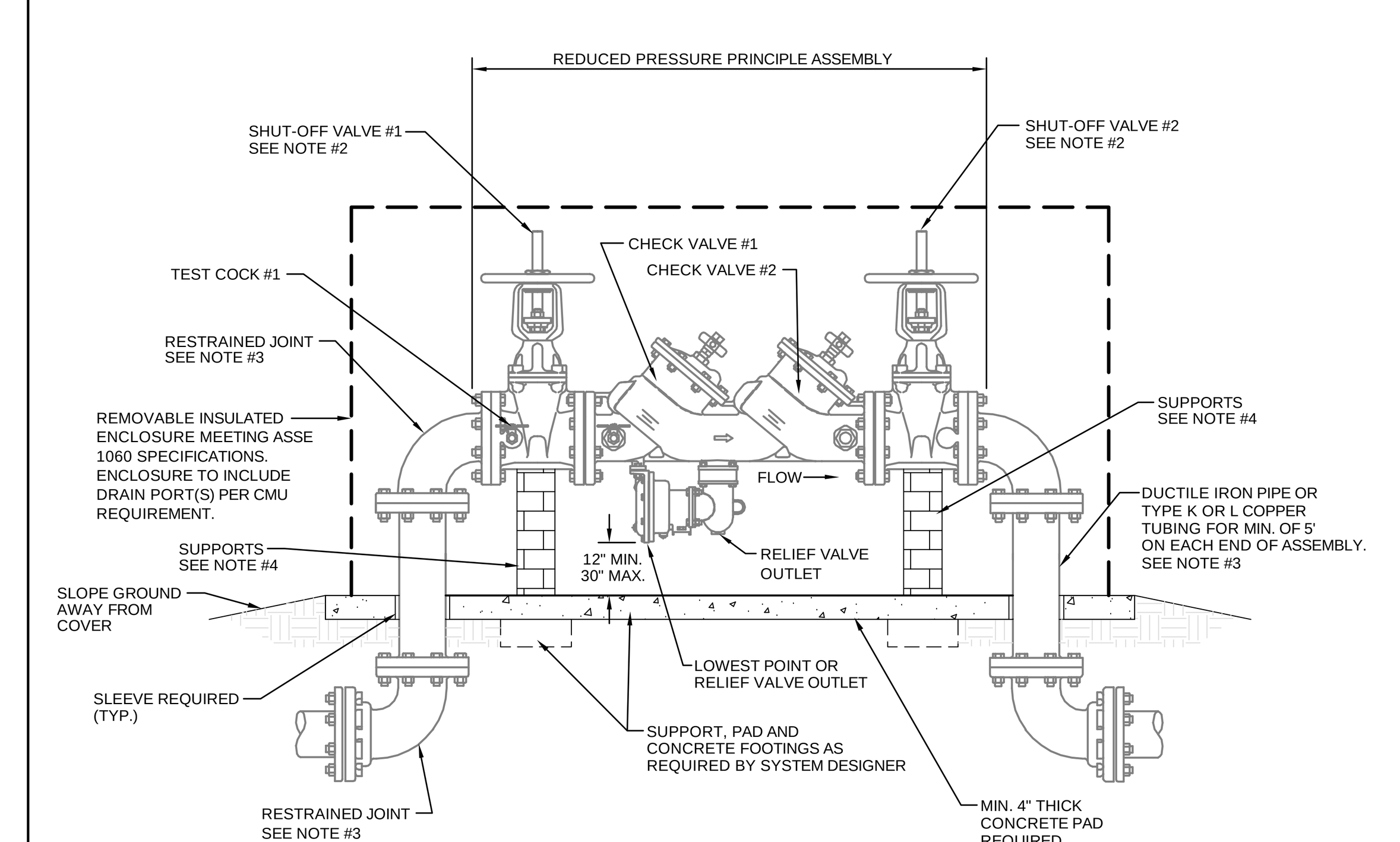
9 Fire Department Connection
NTS



11 Embedments For Conduits
N.T.S.

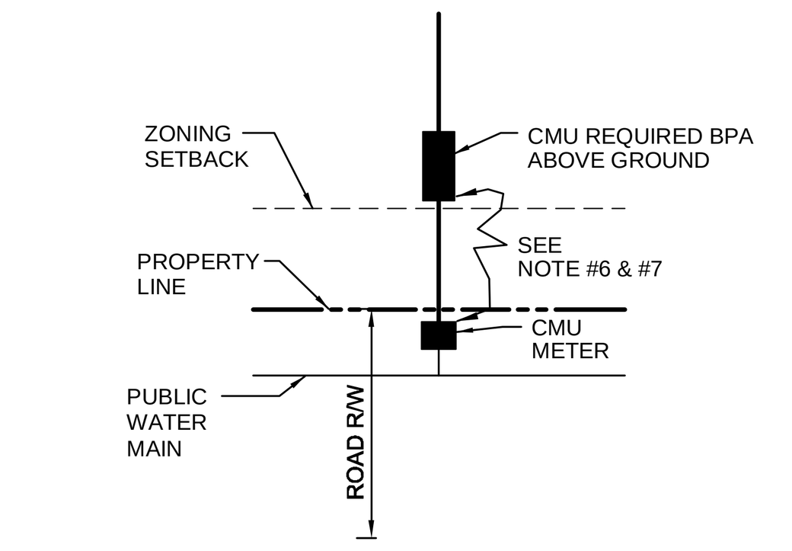


12 Outside Drop Sanitary Sewer manhole
N.T.S.



NOTES:

1. BACKFLOW PREVENTION ASSEMBLIES (BPA's) SHALL CONFORM TO CMU SPECIFICATIONS. SHUT-OFF VALVES ARE SPECIFIC TO EACH APPROVED BPA AND NO SUBSTITUTIONS OF SHUT-OFF VALVES ARE PERMITTED. REFER TO CMU APPROVED LIST OF BPA's.
2. FIRE LINE SERVICES SHALL HAVE OUTSIDE STEM AND YOKE (OS & Y) HANDWHEEL OPERATORS. IF SERVING FIRE SPRINKLERS, TAMPER SWITCHES ARE REQUIRED.
3. PIPE MATERIAL AND FITTINGS SHALL BE AS SPECIFIED IN CMU STANDARDS SPECIFICATION. ALL JOINTS SHALL BE RESTRAINED WITH MEGALUG RESTRAINTS OR APPROVED EQUAL.
4. SUPPORT OF ASSEMBLY SHALL BE DESIGNED BY OWNER, 8" - 12" SHALL BE SUPPORTED AT EACH VALVE AND SHALL NOT BLOCK RELIEF VALVE ON DRAIN PORT.
5. INSULATED ENCLOSURE SHALL BE AS SPECIFIED IN CMU ENCLOSURE INFORMATION - HEATED INSULATED ENCLOSURE ARE REQUIRED FOR FIRE LINE SERVICES. NO INSULATION SHALL BE WRAPPED AROUND BPA.
6. ALL LOCATIONS FOR BPA'S REQUIRE CMU APPROVAL AND MUST BE OUTSIDE OF ZONING SET-BACK.
7. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER - USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CMU - REQUIRED BACKFLOW PREVENTER.
8. EACH CMU-REQUIRED BPA IS REQUIRED TO BE TESTED BY A CMU - APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
9. ALL BACKFLOW PREVENTERS INTENDED FOR ADDRESSING CHARLOTTE-MECKLENBURG UTILITIES REQUIREMENTS, REQUIRE PRIOR APPROVAL FROM THE APPROPRIATE CHARLOTTE-MECKLENBURG UTILITIES BACKFLOW INSPECTOR.



TYPICAL LOCATION REQUIREMENT FOR ABOVE GROUND INSTALLATION
N.T.S.

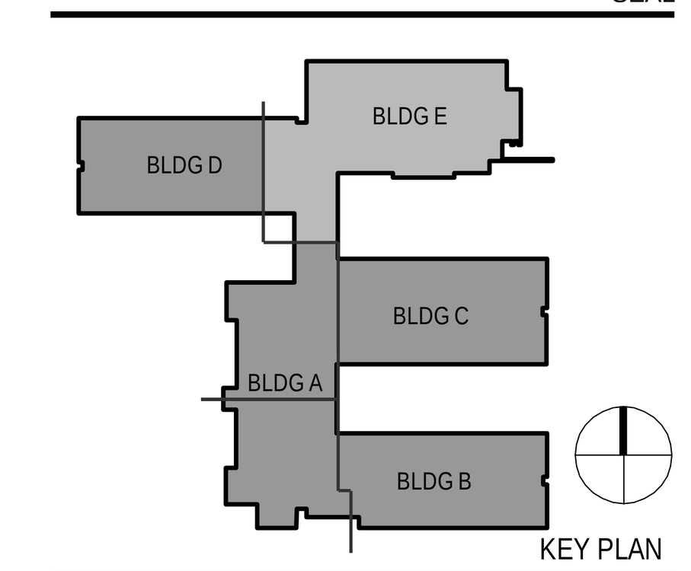
NO SCALE
STANDARD NO. 2
REDUCED PRESSURE PRINCIPLE ASSEMBLY (RP) 2 1/2" - 12" ABOVE GROUND
CHARLOTTE-MECKLENBURG UTILITIES
STANDARD DETAILS
BACKFLOW PREVENTION

14 2-1/2"-12" Reduced Pressure Principle Assembly
N.T.S.

NO. DATE REVISION

Date:

SEAL



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CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Site Construction Utility Details

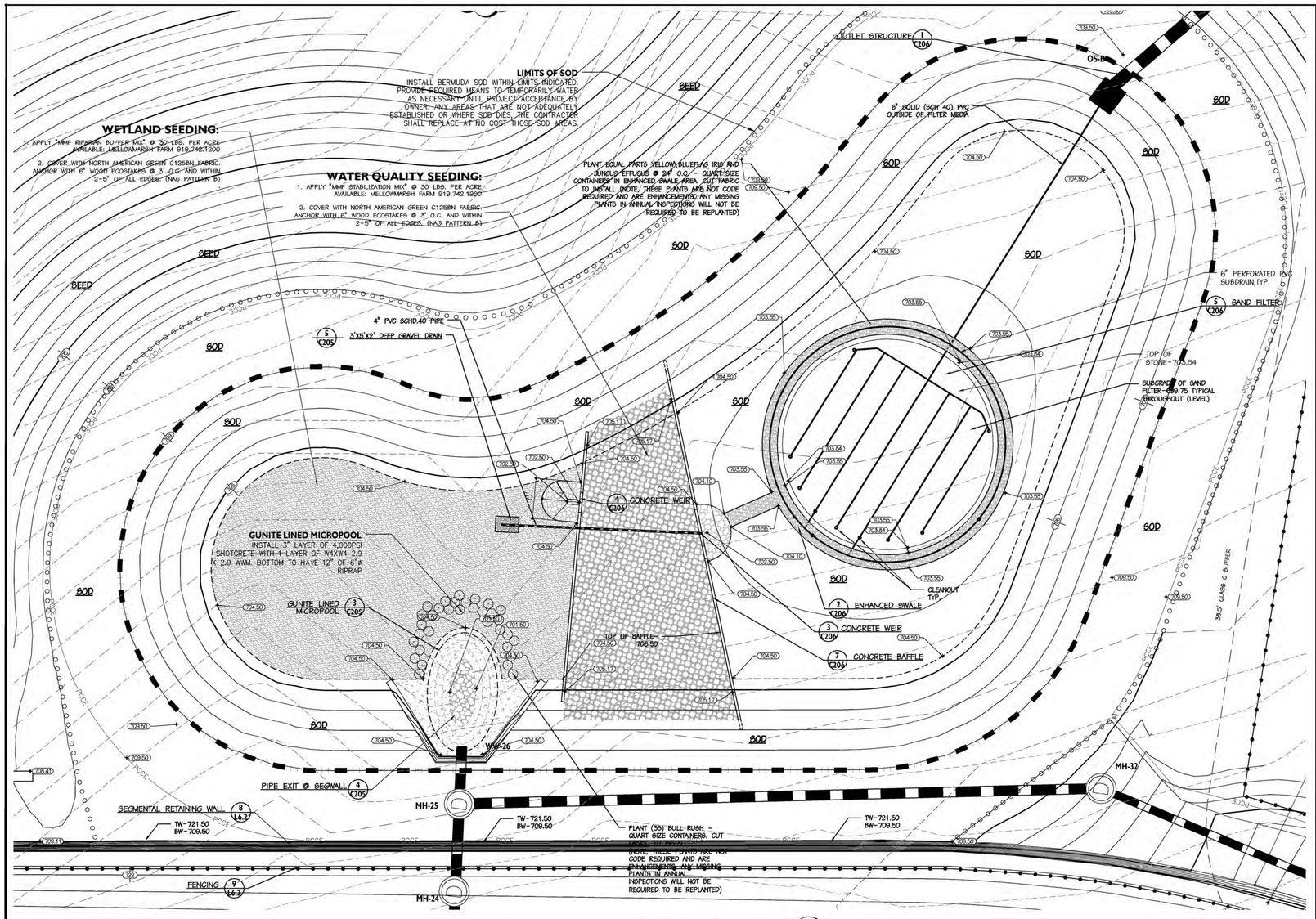
SCALE:

C204

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013



1 Sand Filter #1 Plan

1" = 10'

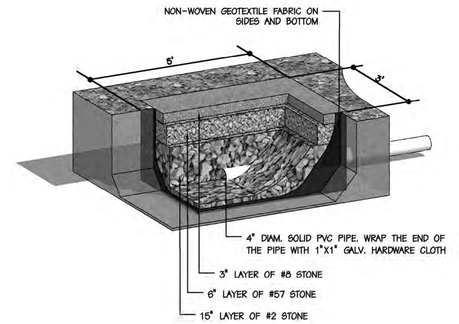
NORTH

BMP MAINTENANCE

THE BMP LANDSCAPE CONTRACTOR SHALL MAINTAIN THE VEGETATION WITHIN THE SAND FILTER BASIN UNTIL THE PROJECT IS ACCEPTED BY THE OWNER AND THEN FOR A PERIOD OF ONE YEAR FROM THAT DATE. CONTRACTOR SHALL ENSURE PLANTINGS ARE ADEQUATELY WATERED AND PROVIDE MEANS OF WATERING WHEN NECESSARY TO PROMOTE GROWTH. CONTRACTOR SHALL ALSO MAINTAIN INLET AND OUTLETS OF THE BASIN TO MAKE SURE THEY ARE WORKING PROPERLY AND WATER LEVELS ARE MAINTAINED. CONTRACTOR SHALL ALSO RE-PLANT ANY AREAS THAT DID NOT ESTABLISH ADEQUATELY. VEGETATION INCLUDES SOD AREAS, WETLAND PLANTS, AND WETLAND SEEDED AREAS.

BMP PLANTING NOTES:

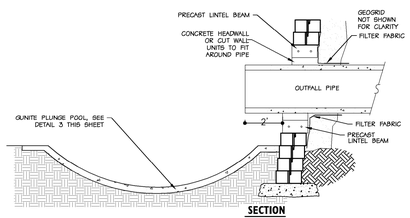
1. IF PLANT SPECIMENS ARE NOT TO BE USED WITHIN 4 DAYS, THEY SHOULD BE PLANTED IN SUITABLE BEDS WITH THE ASSUMPTION THAT IT WILL BE A WHILE BEFORE THEY CAN BE USED, AND THEY SHOULD BE PROVIDED WITH CONDITIONS MAKING IT POSSIBLE FOR THEM TO SURVIVE AND GROW AS OPTIMALLY AS POSSIBLE.
2. CONTAINER PLANTS WILL NEED TO BE WATERED REGULARLY (SEVERAL TIMES DAILY WHEN WEATHER IS HOT)
3. PIN ALL SUBMERGED PLANT MATERIAL SECURELY TO THE BOTTOM OF POND WITH 12" BENT WIRE PINS.
4. CUT BACK TALL AND EASILY BROKEN LEAVES AND STEMS AT THE TIME OF TRANSPLANTING.
5. NEWLY RECEIVED NURSERY STOCK AND DISTURBED TRANSPLANTS SHOULD NOT BE EXPOSED TO DIRECT SUN ANY MORE THAN NECESSARY UNTIL THEY ARE PLACED IN THEIR PERMANENT POSITIONS.
6. INSERT DRY FERTILIZER TABLETS OR SPIKES NEAR THE PLANTS AT THE TIME OF TRANSPLANTING.
7. ALL PLANT MATERIAL SHALL BE OF A HEIGHT THAT SHALL HAVE 6" MINIMUM FOLIAGE ABOVE NORMAL WATER LEVEL AT TIME OF PLANTING.
8. PLANT QUANTITIES ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION. PLANTS SHALL NOT BE COMPLETELY SUBMERGED WHEN PLANTED.
9. POTTED OR PLUG PLANT MATERIAL SHOULD BE INSTALLED BETWEEN APRIL AND JUNE.



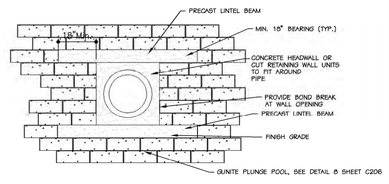
5 Forebay Draw-Down Drain

SCALE: N.T.S.

LINTEL NOTES:
1. FINAL BEAM SIZE, REINFORCEMENT, AND CONFIGURATION TO BE DESIGNED BY WALL ENGINEER
2. LINTEL BEAMS SHALL BE PRECAST WITH MINIMUM 7 DAYS CURE
3. HEIGHT OF BEAM SHALL CORRESPOND TO HEIGHT OF WALL UNIT(S)
4. PLACEMENT OF LINTEL BEAMS SHALL BE CONSISTANT WITH THE PLACEMENT OF THE OUTFALL PIPE
5. INSTALL OUTFALL PIPE PRIOR TO CONSTRUCTION OF WALL ABOVE
6. OUTFALL PIPE TO EXTEND BEYOND BASE COURSE OF WALL NO LESS THAN 6"
7. GEOTEXTILE FABRIC SHALL BE INSTALLED AROUND PIPE OPENING
8. LINTEL TO EXTEND MINIMUM 18" EITHER SIDE OF OPENING



SECTION



ELEVATION

4 Wall Penetration with Storm Pipe

N.T.S.

ONE YEAR CONTINUED MAINTENANCE AGREEMENT

THE INFORMATION BELOW SHALL BE INCLUDED IN THE CONTRACT BY THE CONTRACTOR AS REQUIRED IN THE CONTINUED ONE YEAR MAINTENANCE AGREEMENT WITH THE OWNER.

MAINTENANCE INSPECTION REPORTS

AS INDICATED IN THE POST-CONSTRUCTION STORM WATER ORDINANCE, ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SUBMITTED TO THE STORM WATER ADMINISTRATOR. THE FIRST REPORT SHALL BE SUBMITTED ONE YEAR FOLLOWING THE FINAL APPROVAL DATE OF THE BMP PER THIS CONTRACT. SUBSEQUENT REPORTS WILL THEN BE THE RESPONSIBILITY OF THE OWNER EACH YEAR THEREAFTER ON OR BEFORE THE APPROVAL ANNIVERSARY DATE. ALL MAINTENANCE ACTIVITIES AND INSPECTION REPORTS SHALL BE DOCUMENTED USING THE FORMS CONTAINED IN THE ADMINISTRATIVE MANUAL. ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SEALED BY A REGISTERED NORTH CAROLINA PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT. THESE INSPECTIONS SHALL BE DISCONTINUED ONLY IF THE BMPS ARE ACCEPTED FOR MAINTENANCE BY THE APPLICABLE JURISDICTION.

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ROUTINE MAINTENANCE TASKS AND SCHEDULE (PER POND DETAILS AND NOTES INCLUDED IN THIS SET OF PLANS AND PER SAND FILTER BASIN REQUIREMENTS IN THE STORM WATER BMP MANUAL)

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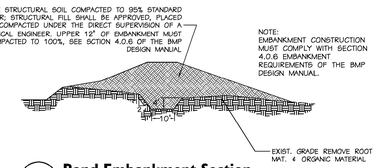
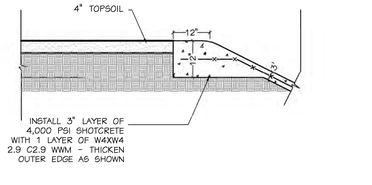


2 Pond Embankment Section

SCALE: N.T.S.



3 Gunite Lined Micropool

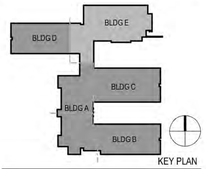
SCALE: N.T.S.

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 979 HENRY W. GORMAN

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0301
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

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2459 WILKINSON BOULEVARD, SUITE 200
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CHARLOTTE, NC 28270

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CORBAN ENGINEERING COMPANY, PC
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MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

BMP-1 Plan & Details

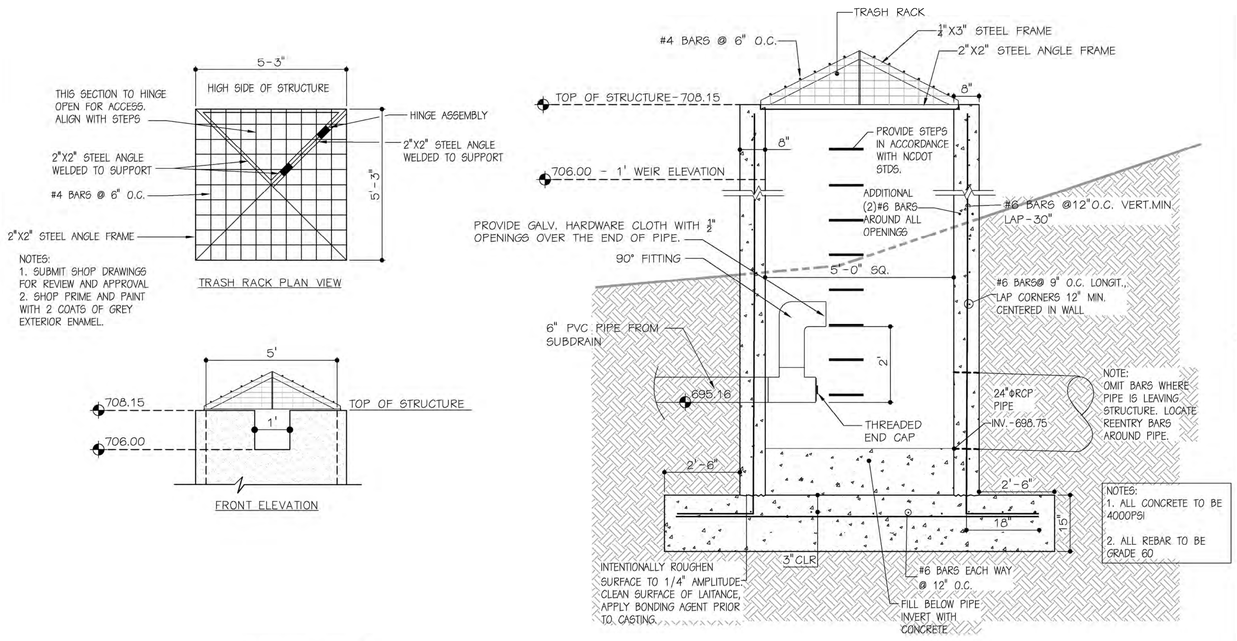
SCALE:

C205

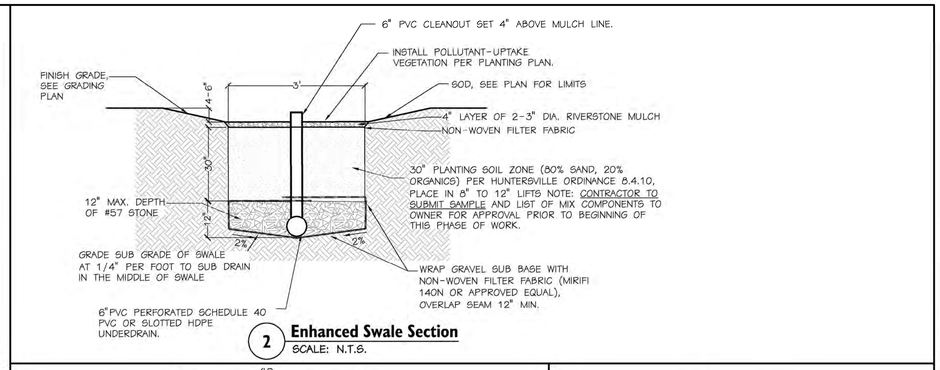
100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013



1 Basin Control Structure
SCALE: N.T.S.



2 Enhanced Swale Section
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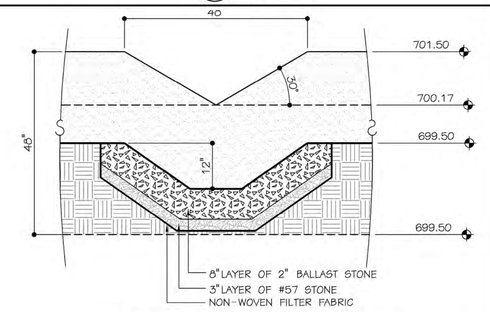
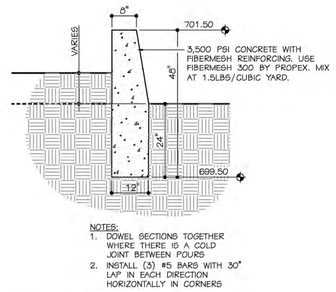
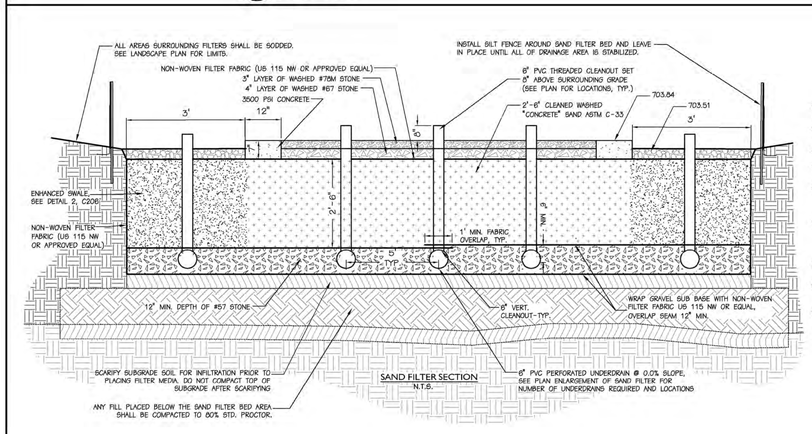


4 Small V-notch weir in lower baffle wall
SCALE: N.T.S.



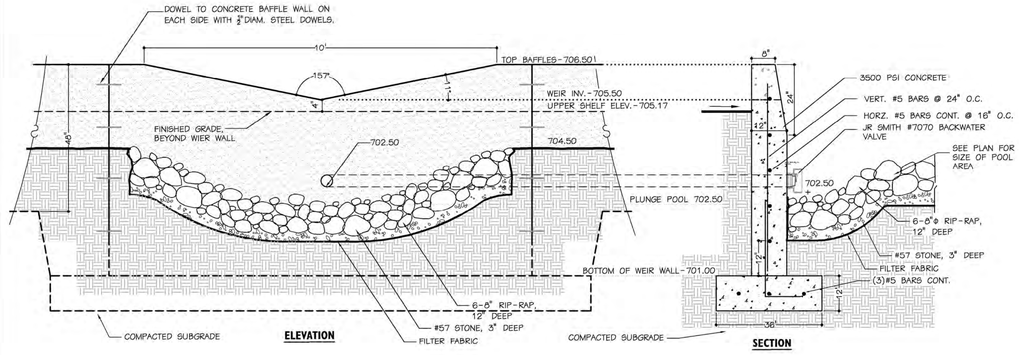
7 Concrete Baffle
SCALE: N.T.S.



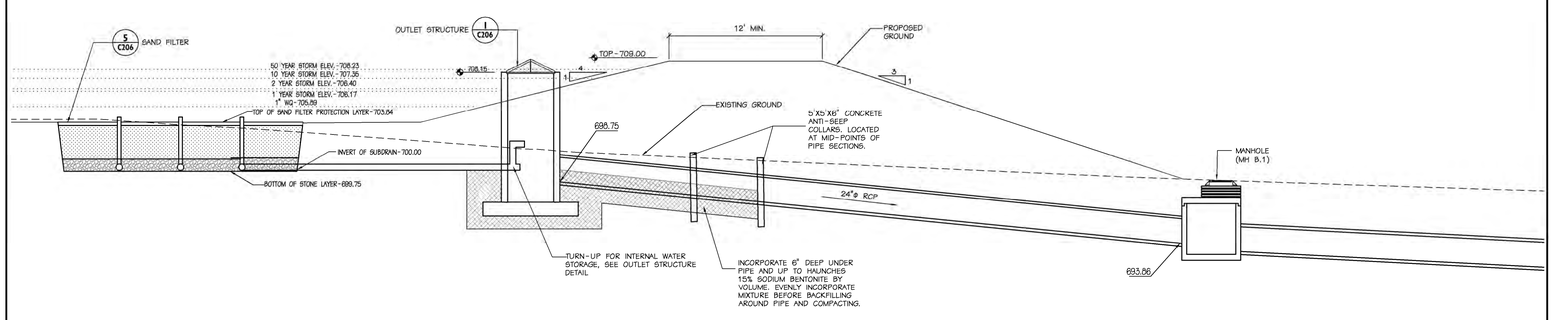
SAND FILTER NOTES:

1. EXCAVATE THE SAND FILTER TO THE DESIGN DIMENSIONS, AFTER SEDIMENT BASIN IS NO LONGER REQUIRED.
2. UNDERDRAIN SYSTEMS SHALL BE SCHEDULE 40 PVC (PERFORATED AND NON-PERFORATED) PIPE MATERIAL.
3. GRAVEL COVER OVER THE UNDERDRAIN SHALL BE AT LEAST 6" IN DEPTH.
4. GRAVEL BED MATERIALS (STONE) SIZE SHALL NOT BE GREATER THAN 1/2 TO 1 1/2 INCHES IN DIAMETER (BLUE STONE, DOUBLE WASHED, #57). DEPTH OF GRAVEL SHALL NOT EXCEED 12 INCHES.
5. FILTER FABRIC MUST MEET A MINIMUM PERMEABILITY RATE OF 75 GALLONS/MINUTE/SQUARE FOOT AND SHALL NOT IMPEDE THE INFILTRATION RATE OF THE SOIL MEDIUM. NON-WOVEN FABRIC IS PREFERRED OVER WOVEN AND INSTALLATION REQUIRES AT LEAST 1 FOOT OVERLAP AT THE ENDS AND SIDINGS IN PLACE DURING CONSTRUCTION AT THE TURNED SURFACES.
6. AN OBSERVATION/CLEANOUT STANDPIPE MUST BE INSTALLED IN EVERY SAND FILTER FACILITY THAT HAS A DEPTH GREATER THAN 2 FEET AND/OR AN UNDERDRAIN SYSTEM. THE STAND PIPE MUST CONSIST OF A RIGID NON-PERFORATED PVC PIPE, 4 TO 6 INCHES IN DIAMETER. IT SHOULD BE CAPPED FLUSH WITH THE GROUND ELEVATION OF THE FACILITY. THE TOP OF THE WELL SHALL BE CAPPED WITH A WATERTIGHT CAP.
7. DRAINAGE AREA TO SAND FILTER TO BE STABILIZED BEFORE FILTRATION CONTROLS AND FILTER MEDIA ARE INSTALLED.
8. SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE DESIGN TEAM AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY BMPS WITH LUESA WG INSPECTOR COREY PISSOY AT 980-721-9058
9. SOIL COMPACTION TESTS ARE REQUIRED ON ANY BERMS >/= 5FT IN HEIGHT FROM THE NATURAL GRADE. SOIL COMPACTION MUST BE AT LEAST 95% PROCTOR AND CERTIFIED BY A LICENSED SOIL ENGINEER.

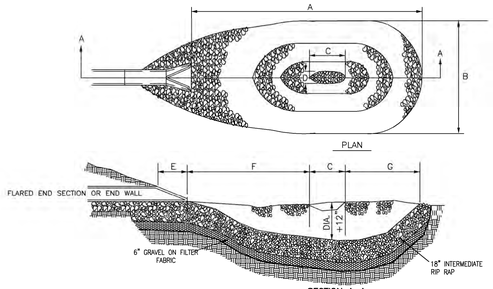
5 Sand Filter Detail
SCALE: N.T.S.



3 Weir Wall Detail
SCALE: N.T.S.



6 Outlet Pipe Profile
SCALE: N.T.S.



PIPE SIZE	A	B	C	D	E	F	G	WT. RIP RAP IN TONS
15"	10'	7'	1 1/2'	1'	1'	4 1/2'	3'	6
18"	12'	8'	2'	1'	1'	5'	4'	8
21"	15'	9'	2 1/2'	1 1/2'	1'	7'	4 1/2'	12
24"	17'	10'	2 1/2'	1 1/2'	1'	8'	5 1/2'	15
30"	20'	13'	3'	2'	2'	9'	6'	22
36"	24'	16'	3 1/2'	2'	2'	9 1/2'	7'	33
48"	28'	19'	4'	2'	2'	10'	8'	49

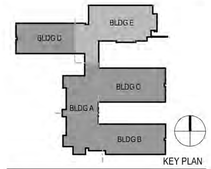
8 Outlet Protection at BMP Outfalls

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT NO. 979 JENNIFER L. GORMAN 11/14/13

SEAL



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cms Charlotte-Mecklenburg Schools

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CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

BMP-1 Details

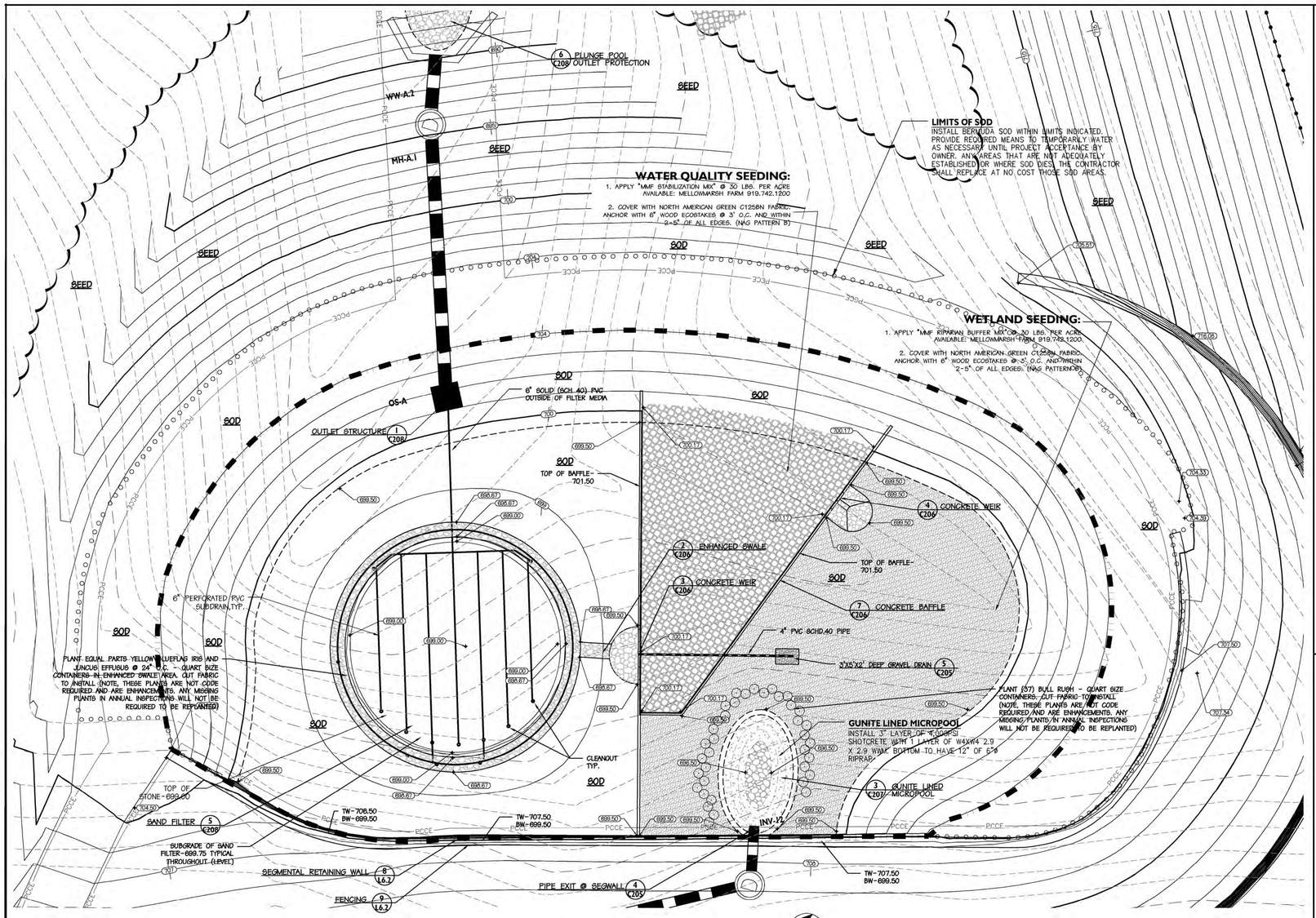
SCALE:

C206

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013



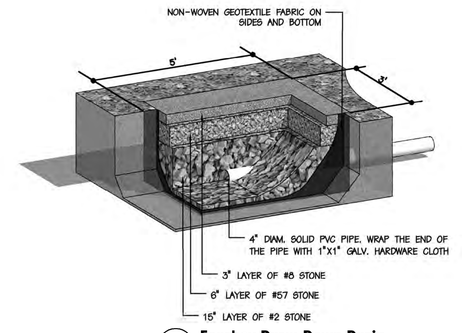
1 **Sand Filter #1 Plan**

BMP MAINTENANCE

THE BMP LANDSCAPE CONTRACTOR SHALL MAINTAIN THE VEGETATION WITHIN THE SAND FILTER BASIN UNTIL THE PROJECT IS ACCEPTED BY THE OWNER AND THEN FOR A PERIOD OF ONE YEAR FROM THAT DATE. CONTRACTOR SHALL ENSURE PLANTINGS ARE ADEQUATELY WATERED AND PROVIDE MEANS OF WATERING WHEN NECESSARY TO PROMOTE GROWTH. CONTRACTOR SHALL ALSO MAINTAIN INLET AND OUTLETS OF THE BASIN TO MAKE SURE THEY ARE WORKING PROPERLY AND WATER LEVELS ARE MAINTAINED. CONTRACTOR SHALL ALSO RE-PLANT ANY AREAS THAT DID NOT ESTABLISH ADEQUATELY. VEGETATION INCLUDES SOD AREAS, WETLAND PLANTS, AND WETLAND SEEDED AREAS.

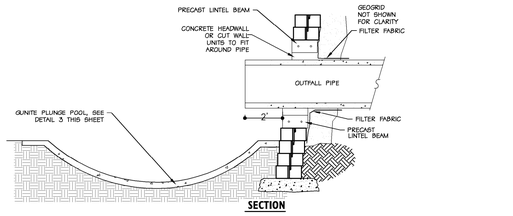
BMP PLANTING NOTES:

1. IF PLANT SPECIMENS ARE NOT TO BE USED WITHIN 4 DAYS, THEY SHOULD BE PLANTED IN SUITABLE BEDS WITH THE ASSUMPTION THAT IT WILL BE A WHILE BEFORE THEY CAN BE USED, AND THEY SHOULD BE PROVIDED WITH CONDITIONS MAKING IT POSSIBLE FOR THEM TO SURVIVE AND GROW AS OPTIMALLY AS POSSIBLE.
2. CONTAINER PLANTS WILL NEED TO BE WATERED REGULARLY (SEVERAL TIMES DAILY WHEN WEATHER IS HOT)
3. PIN ALL SUBMERGED PLANT MATERIAL SECURELY TO THE BOTTOM OF POND WITH 12" BENT WIRE PINS.
4. CUT BACK TALL AND EASILY BROKEN LEAVES AND STEMS AT THE TIME OF TRANSPLANTING.
5. NEWLY RECEIVED NURSERY STOCK AND DISTURBED TRANSPLANTS SHOULD NOT BE EXPOSED TO DIRECT SUN ANY MORE THAN NECESSARY UNTIL THEY ARE PLACED IN THEIR PERMANENT POSITIONS.
6. INSERT DRY FERTILIZER TABLETS OR SPIKES NEAR THE PLANTS AT THE TIME OF TRANSPLANTING.
7. ALL PLANT MATERIAL SHALL BE OF A HEIGHT THAT SHALL HAVE 6" MINIMUM FOLIAGE ABOVE NORMAL WATER LEVEL AT TIME OF PLANTING.
8. PLANT QUANTITIES ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION. PLANTS SHALL NOT BE COMPLETELY SUBMERGED WHEN PLANTED.
9. POTTED OR PLUG PLANT MATERIAL SHOULD BE INSTALLED BETWEEN APRIL AND JUNE.



5 **Forebay Draw-Down Drain**
SCALE: N.T.S.

LINTEL NOTES:
1. FINAL BEAM SIZE, REINFORCEMENT, AND CONFIGURATION TO BE DESIGNED BY WALL ENGINEER
2. LINTEL BEAMS SHALL BE PRECAST WITH MINIMUM 7 DAYS CURE
3. HEIGHT OF BEAM SHALL CORRESPOND TO HEIGHT OF WALL UNIT(S)
4. PLACEMENT OF LINTEL BEAMS SHALL BE CONSISTANT WITH THE PLACEMENT OF THE OUTFALL PIPE
5. INSTALL OUTFALL PIPE PRIOR TO CONSTRUCTION OF WALL ABOVE
6. OUTFALL PIPE TO EXTEND BEYOND BASE COURSE OF WALL NO LESS THAN 6"
7. GEOTEXTILE FABRIC SHALL BE INSTALLED AROUND PIPE OPENINGS
8. LINTEL TO EXTEND MINIMUM 18" EITHER SIDE OF OPENING



4 **Wall Penetration with Storm Pipe**
N.T.S.

ONE YEAR CONTINUED MAINTENANCE AGREEMENT

THE INFORMATION BELOW SHALL BE INCLUDED IN THE CONTRACT BY THE CONTRACTOR AS REQUIRED IN THE CONTINUED ONE YEAR MAINTENANCE AGREEMENT WITH THE OWNER.

MAINTENANCE INSPECTION REPORTS

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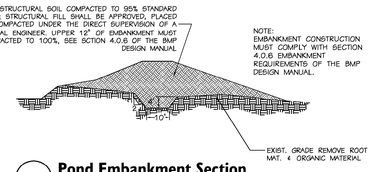
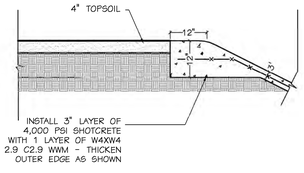


2 **Pond Embankment Section**
SCALE: N.T.S.



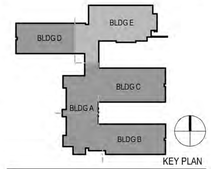
3 **Gunite Lined Micropool**
SCALE: N.T.S.

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT KENNETH R. GORMAN 11/14/13

SEAL



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CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

BMP-2 Plan & Details

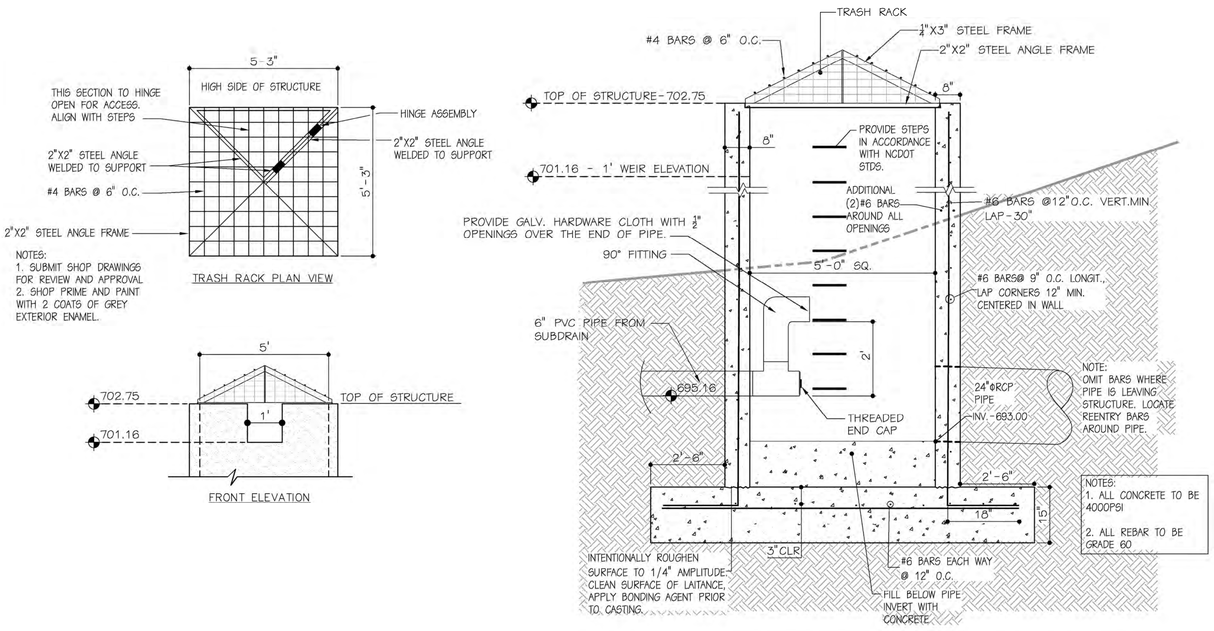
SCALE:

C207

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013



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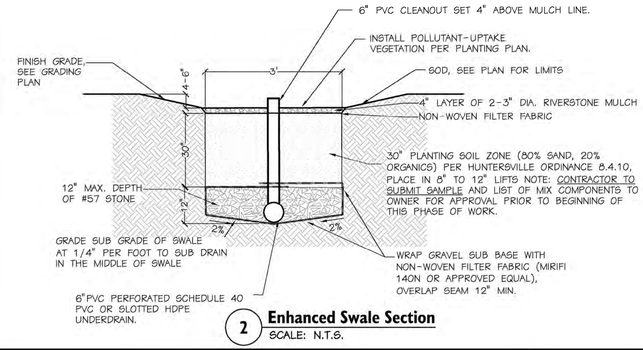

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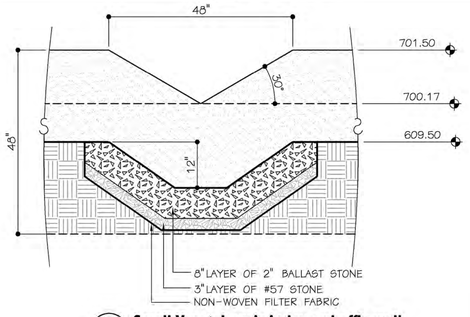

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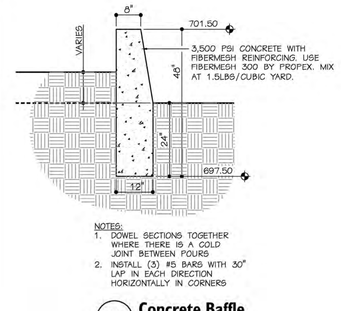

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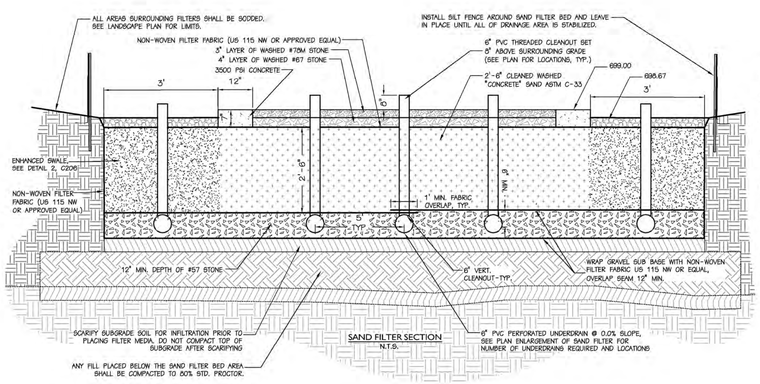

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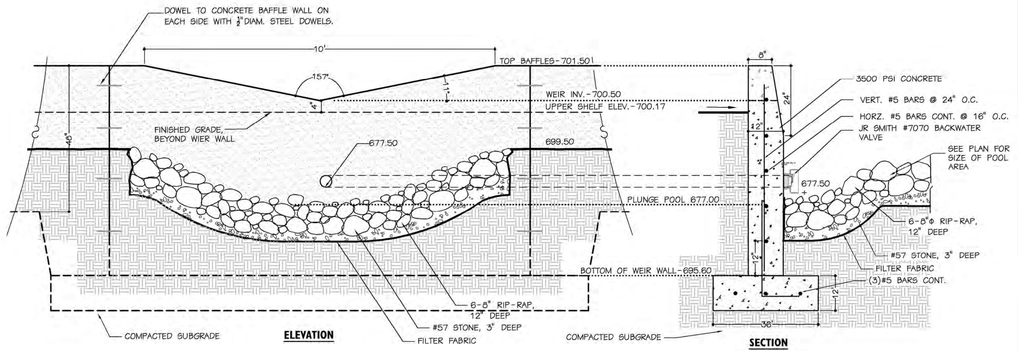
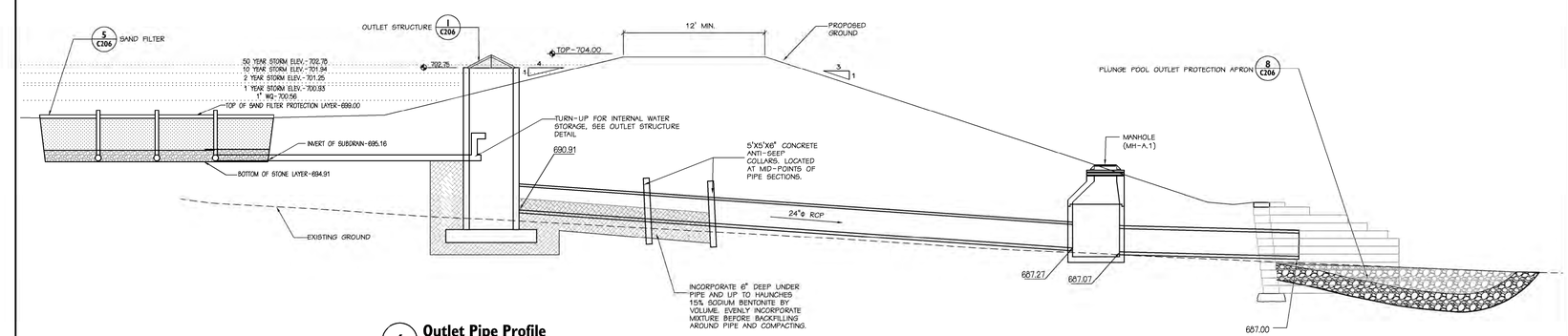
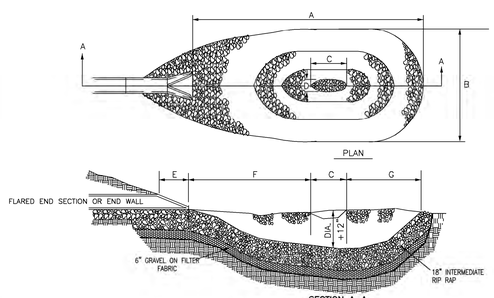
5 Sand Filter Detail
SCALE: N.T.S.



3 Weir Wall Detail
SCALE: N.T.S.



6 Outlet Pipe Profile
SCALE: N.T.S.



PIPE SIZE	A	B	C	D	E	F	G	WT. RIP RAP IN TONS
15"	10'	7'	1 1/2'	1"	1'	4 1/2'	3'	6
18"	12'	8'	2'	1"	1'	5'	4'	8
21"	15'	8'	2 1/2'	1 1/2'	1'	7'	4 1/2'	12
24"	17'	10'	2 1/2'	1 1/2'	1'	8'	5 1/2'	15
30"	20'	13'	3'	2'	2'	9'	6'	22
36"	24'	16'	3 1/2'	2'	2'	9 1/2'	7'	35
48"	25'	19'	4'	2'	2'	10'	8'	49

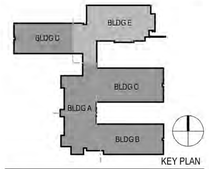
8 Outlet Protection at BMP Outfalls

NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT HENRY L. NORMAN NO. 1111 11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T. 704 940 0301
F. 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms Charlotte-Mecklenburg Schools

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

BMP-2 Details

SCALE:

C208

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

SLOPE STABILIZATION LESPEDEZA MIX:

ALL SLOPES 3:1 OR GREATER SHALL BE PLANTED WITH THE FOLLOWING MIXTURE FOR LONG TERM GROWTH - LOW MAINTENANCE:

TALL FESCUE	100 LBS/ACRE
KOBE LESPEDEZA	20 LBS/ACRE
KOREAN LESPEDEZA	20 LBS/ACRE
COMMON BERMUDA	15 LBS/ACRE

**EXISTING TOPSOIL STRIPPING TO BE TILLED INTO SLOPES TO 6" DEPTH.

LEGEND

- SIGN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- HC ACCESSIBLE SPACE
- EXISTING FIRE HYDRANT
- (12) # OF PARKING SPACES
- EXISTING TREE TO REMAIN
- PROPOSED TREE
- PROPOSED SHRUBS
- XX/XX PLANT LABEL / PLANT QUANTITY
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPERTY LINE
- EXISTING FENCE
- PROPOSED FENCE
- UE EXISTING UNDERGROUND ELECTRIC LINE
- OH/U EXISTING OVERHEAD UTILITY LINE
- EXISTING TREELINE
- PROPOSED TREELINE AFTER CLEARING

MELLOW MARSH FARM STABILIZATION MIX: 20-25 LBS./ ACRE

**EXISTING TOPSOIL STRIPPING TO BE TILLED INTO SLOPES TO 6" DEPTH.

Species	Common Name	Percent
Elymus virginicus	Virginia wild rye	15
Tripsacum dactyloides	Eastern gammagrass	13
Panicum virgatum	Switchgrass	12
Agrostis scabra	Rough bentgrass	12
Carex vulpinoidea	Fox sedge	10
Tridens flavus	Purple top	10
Schizachyrium scoparium	Little bluestem	6
Coreopsis lanceolata	Lance leaf tickseed	5
Sorghastrum nutans	Indian grass	5
Elymus hystrix	Bottlebrush grass	5
Festuca ovina var. duriuscala	Hard fescue	4
Rudbeckia hirta	Blackeyed susan	1
		100

PERIMETER TREE REQUIREMENTS:

Linear feet of road frontage along maintained right of way including driveways
Street: ROCKY RIVER ROAD WEST / ± 1,302 ft.- 70LF for drives =1,232 LF
Required = 33 Large Maturing or 43 Small Maturing trees
Provided = 6 Existing Large Maturing + 17 New Large maturing
+ 15 New Small Maturing
= (36) Total trees provided

Where overhead distribution power lines exist, only small maturing trees are allowed. Otherwise 75% of new trees must be large maturing species.

INTERNAL TREE REQUIREMENTS:

One (1) tree per 10,000 sq. ft. of impervious area is required.
All parking spaces must be within 40 ft. of the trunk of a tree.
Minimum landscape area as a percentage of entire site is 10% for new site.

Calculations:
Entire site = 21.52 Acres = 937,407.2 sq.ft.
New impervious area (and future) = 249,599 sq. ft. (5.73 Ac.)
Existing impervious area to remain = ± 12,958 sq.ft
Total impervious area = ± 262,557 sq. ft.
Required landscape area = 10% of total impervious area = 26,256 sq. ft. = 0.60 Ac.
Provided landscape area = ± 667,601 sq. ft. = 71% of site.
*internal tree requirement: 1 Tree/ 10,000 impervious area = 27 Minimum trees.
Provided internal trees = (47+) New Trees + Excess Existing Trees to remain

TREE SAVE AREA REQUIREMENTS:

SITE AREA = 21.52 AC (937,407 SF)
15% REQ'D TREE SAVE AREA = 0.15 X 21.52 AC = 3.23 AC
PROPOSED TREE SAVE AREA = 3.23 Ac.

GROUNDCOVER LEGEND

- Bermuda Sod
- Bermuda Seed
- Mellow Marsh Farm Stabilization Mix
- Lawn Area Seed Mix
- Slope Stabilization Mix

NOTE

ALL SLOPES 3:1 OR GREATER SHALL BE PLANTED WITH THE FOLLOWING MIXTURE FOR LONG TERM GROWTH - LOW MAINTENANCE:
TALL FESCUE 100 LBS/ACRE
KOBE LESPEDEZA 20 LBS/ACRE
KOREAN LESPEDEZA 20 LBS/ACRE
COMMON BERMUDA 15 LBS/ACRE
EXISTING TOPSOIL STRIPPING TO BE TILLED INTO SLOPES TO 6" DEPTH.

NOTE

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KOBE LESPEDEZA 20 LBS/ACRE
KOREAN LESPEDEZA 20 LBS/ACRE
COMMON BERMUDA 15 LBS/ACRE
EXISTING TOPSOIL STRIPPING TO BE TILLED INTO SLOPES TO 6" DEPTH.

SEE SHEET L101.1 FOR PLANT SCHEDULE & DETAILS & NOTES.

VICINITY MAP
NTS

NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES CANNIELLA
11/14/13
SEAL

KEY PLAN

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520 WEST SIXTH STREET
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7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:
cms Charlotte-Mecklenburg Schools
NEWELL ELEMENTARY SCHOOL REPLACEMENT
431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:
Overall Landscape Plan

SCALE:
L101

100% CONSTRUCTION DOCUMENTS
CMS PROJECT # 240-004
DATE: December 6, 2013

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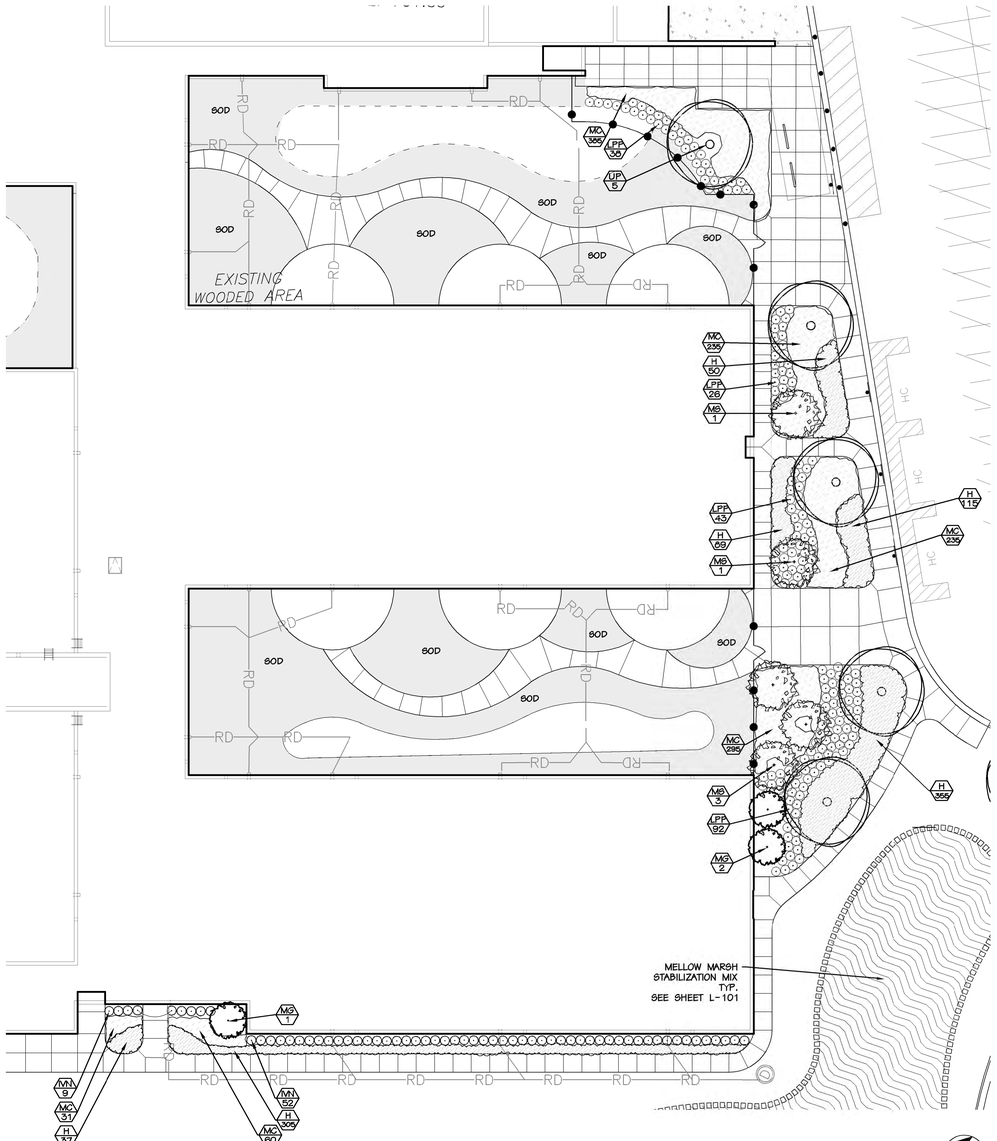
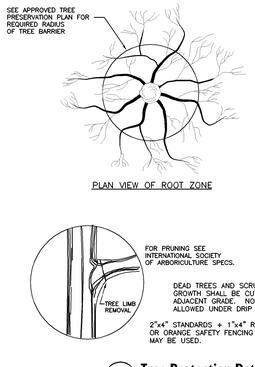


PLANTING SCHEDULE—COURTYARDS						
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE / COND	REMARKS	HEIGHT / SPREAD
TREES						
CC	13	Cercis canadensis	Redbud	2" cal. / B & B	Straight, Matched / Full Specimen	8'
JV	30	Juniperus virginiana	Eastern Red Cedar	n/a / B&B	Full to Ground / Matched	8' / 4'
MG	3	Magnolia grandiflolia 'Little Gem'	Little Gem Magnolia	n/a / B & B	Full to Ground / Matched Specimen	8' / 4'
MS	5	Magnolia x soulangeana	Saucer Magnolia	1 1/2"/stem / B & B	3-5 stem Full / Matched Specimen	8' / 4'
QN	12	Quercus nuttallii	Nuttall Oak	2 1/2" / B & B	Straight, Matched, / Full Specimen	12-14' / 6-8'
QP	19	Quercus phellos	Willow Oak	2 1/2" / B & B	Straight, Matched, / Full Specimen	12-14' / 6-8'
UP	16	Ulmus parvifolia 'Allee'	Allee Elm	2.5" / B & B	Full Straight / Matched Specimen	12' / 6'
SHRUBS & GROUNDCOVERS						
H	951	Hemerocallis 'Happy Returns'	Happy Returns Daylillies	1 gal	Full Specimen / 18" oc	
IVN	61	Ilex vomitoria 'Nana'	Dwarf Yaupon Holly	3 gal.	Full Specimen / 3' o/c	12-15" / 15-18"
LPP	199	Loropetalum chinenses 'Purple Pixie'	Purple Pixie Loropetalum	3 gal.	Full Specimen / 3' o/c	6-8" / 14-16"
MC	1,301	Muhlenbergia capillaris	Pink Muhly Grass	n/a / 1 gal	Full Specimen / 18" oc	

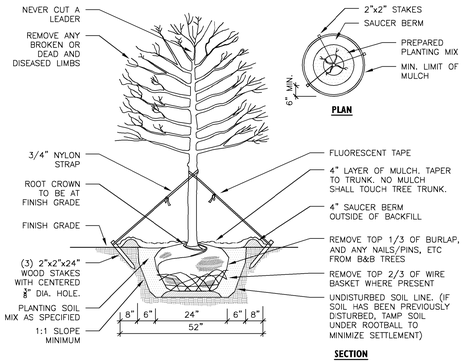
*ATTENTION LANDSCAPE CONTRACTOR: NOTIFY URBAN FORESTER OF ANY SIGN, POWER LINE, OR OTHER CONFLICTS BEFORE PLANTING NEW TREES.

**QUANTITIES SHOWN ARE FOR ESTIMATION PURPOSES ONLY. CONTRACTOR RESPONSIBLE FOR ACTUALLY QUANTIES SHOWN PER PLAN. (SCREENING SHRUB REQUIREMENT IS 2' MINIMUM HEIGHT WITH A 2'MINIMUM SPREAD AT INSTALLATION BY CODE - REQUIRED 30" HEIGHT MIN.)



1 Tree Protection Detail

CHARLOTTE STD. DETAIL 40.02



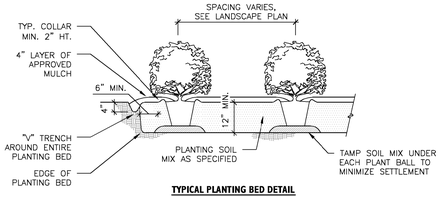
ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1–2004)

FOR EXAMPLE: CALIPER	HEIGHT (RANGE)	MAX. HT.	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12–14'	16'	24"	16"
3"	14–15'	18'	32"	21"

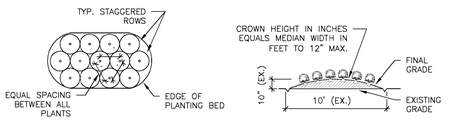
NOTES
1. ALL TREES ARE TO BE NURSERY GROWN, BALL AND BURLAP (B&B) PREFERRED.
2. REMOVE ALL TREATED OR PLASTIC-COATED BURLAP, STRAPPING, WIRE OR NYLON TWINE FROM ROOT BALL AND CANOPY. AFTER SETTING IN HOLE, CUT AWAY TOP 2/3 OF WIRE BASKET, IF PRESENT, AND TOP 1/3 OF BURLAP.
3. SOAK PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
4. INSTALL TOP OF PLANT BALL 2" ABOVE FINISH GRADE.
5. 4" SAUCER WILL BE OUTSIDE OF BACKFILL.
6. NO BACKFILL ALLOWED ON TOP OF ROOT BALL.
7. WHERE STRAPPING OR GUYING IS INSTALLED, CONTRACTOR SHALL REMOVE ALL STAKES, GUYING ETC. AT END OF WARRANTY PERIOD.
8. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.
9. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
10. RE-SEED UNMULCHED, DISTURBED AREAS.
11. STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.

2 Tree Planting Detail

N.T.S.(CMLDS. #40.01)



TYPICAL PLANTING BED DETAIL

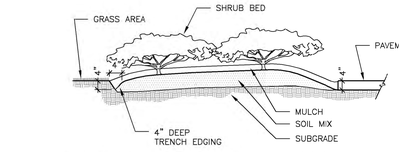


TYPICAL PLANTING BED PLAN — TYPICAL BED CROWNING

NOTES
1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
2. INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
6. SEE SPECIFICATIONS FOR FURTHER SOIL AND PLANTING REQUIREMENTS.

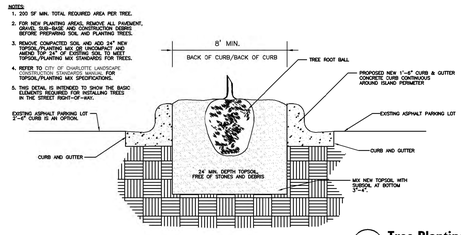
3 Shrub Planting Detail

N.T.S.



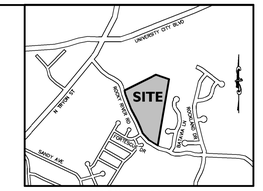
4 Trench Edging Detail

N.T.S.



5 Tree Planting Island Detail

CHARLOTTE STD. DETAIL 40.09



VICINITY MAP

NTS

LEGEND

	SIGN		EXISTING CURB AND GUTTER
	EXISTING LIGHT POLE		PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE		PROPERTY LINE
HC	ACCESSIBLE SPACE	-x-x-x-	EXISTING FENCE
	EXISTING FIRE HYDRANT		PROPOSED FENCE
12	# OF PARKING SPACES	UE	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING TREE TO REMAIN	OH/U	EXISTING OVERHEAD UTILITY LINE
	PROPOSED TREE		EXISTING TREELINE
	PROPOSED SHRUBS		PROPOSED TREELINE AFTER CLEARING
XX / XX	PLANT LABEL / PLANT QUANTITY		

ADDITIONAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ONE YEAR MAINTENANCE WARRANTY PERIOD AS DESCRIBED IN THE PROJECT DOCUMENTS – FRONT END AND TECHNICAL SPEC. LAWNS AND GRASSES. ALL PLANTS MAINTENANCE TO INCLUDE BUT NOT LIMITED TO ONE YEAR OF MOWING, TRIMMING, WEEDING, WATERING AND PRUNING OF THE SITE AND LANDSCAPE UPON ACCEPTANCE OF THE PROJECT.
2. REFER TO PROJECT SPECIFICATION FOR SPECIFIC REQUIREMENTS RELATED TO PLANTING BED PREPARATION, ROCK AND DEBRIS REMOVAL, FINE GRADING AND ESTABLISHMENT OF LAWN AREAS.
3. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE WORK TO ALLOW FOR ESTABLISHMENT OF REQUIRED LAWN. UTILIZE SCHEDULING AND THE RECOMMENDED TOOLS BASED ON THE PROJECT CONTRACT TO ESTABLISH LAWN PRIOR TO ACCEPTANCE OF THE JOB. SEE LAWNS AND GRASSES SPEC.
4. CONTRACTOR SHALL CONFIRM ALL PROPOSED AND EXISTING UTILITY LOCATIONS PRIOR TO PLANT INSTALLATIONS. THERE ARE SOME TIGHT PLANTING SPACES IN THIS PROJECT. MAKE LANDSCAPE ARCHITECT AWARE OF ANY CONFLICTS DURING CONSTRUCTION.
5. CONTRACTOR SHALL THOROUGHLY LOOSEN AND REWORK ALL PLANTING AREAS / LAWN AREAS ON SITE AND ESPECIALLY AROUND THE BUILDING PRIOR TO SEEDING. LANDSCAPE ARCHITECT AND OWNER MUST APPROVE SUBGRADE PRIOR TO PERMANENT SEEDING OPERATIONS.

CONTRACTOR IS RESPONSIBLE FOR WATERING LAWNS AND PLANTS TO ESTABLISHMENT.

LANDSCAPE NOTES

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUANTITY OF PLANTS SHOWN ON THE PLAN. ANY DISCREPANCIES BETWEEN QUANTITIES ON PLAN AND PLANT LIST SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND ANY FIELD ADJUSTMENTS OR QUANTITY ADJUSTMENTS MUST BE AUTHORIZED PRIOR TO PLANTING.
2. ALL TREES, SHRUBS AND PLANTS SHALL CONFORM TO ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (ANSI Z60.1)
3. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
4. THE TOP OF ALL ROOT BALLS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE, AS BORN TO PREVIOUS GROWING CONDITIONS.
5. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
6. ALL PLANTS SHALL BE GUARANTEED TO BE IN HEALTHY CONDITION FOR ONE (1) YEAR AFTER ACCEPTANCE BY OWNER OF ALL PLANT MATERIAL.
7. MULCH A MINIMUM 4 FOOT AREA AROUND EACH TREE AND - MULCH A CONTINUOUS AREA AROUND ALL SHRUB BEDS, AS INDICATED ON THE PLAN. MULCH SHALL BE 3-4" THICK. SEE SPECIFICATIONS FOR TYPE.
8. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
9. CONTRACTOR IS RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITIES LOCATED AND CLEARLY PAINTED WITHIN 10 DAYS OF ANY GROUND DISTURBING ACTIVITY. OWNER WILL NOT PAY FOR UTILITY REPAIRS DUE TO FAILURE TO MARK AND OBSERVE UTILITY LOCATIONS.
10. ALL DISTURBED AREAS SHALL BE SEEDED AS SPECIFIED.
11. VIOLATION OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES AND/OR IMMEDIATE CORRECTIVE ACTION/MITIGATION.
12. MINIMUM TREE SIZE AT PLANTING IS 2-INCH CALIPER (FOR SINGLE STEM TREES). TREES MUST MEET ANSI STANDARDS AND HAVE A SINGLE LEADER ALL THE WAY TO THE TOP. ALL MULTI-STEM PLANTS MUST BE TREE FORM, MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 6 FEET TALL.
13. UNLESS APPROVED BY URBAN FORESTRY STAFF ALL REQUIRED TREES MUST HAVE SINGLE STEM TRUNKS WITH NO CO-DOMINANT TRUNKS OR BRANCHES. TREE TRUNKS SHALL BE STRAIGHT IN FORM AND FREE OF DAMAGE OR CRACKS. PRUNING SHALL BE CALLIPED OVER. BRANCH LENGTH SHALL BE TYPICAL FOR THE TREES AGE AND NOT BE BROKEN, DISEASED, OR INJURED. ROOT FLARE SHALL BE LOCATED AT GRADE AND BE FREE OF ADVENTITIOUS ROOT GROWTH.
14. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 24" NEW TOPSOIL, OR TILL AND AMEND THE TOP 24" OF EXISTING SOIL TO MEET TOPSOIL / PLANTING MIX STANDARDS FOR TREES (WITHIN ENTIRE MINIMUM AREA OF 274 SQUARE FEET PER TREE). CALL 336-6769 FOR AN INSPECTION OF SOIL BEFORE PLANTING TREES.
15. ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES- PLANT 15' FROM ALL UNDERGROUND UTILITIES (SEWER AND STORM DRAINAGE, GAS WATER, PHONE AND ELECTRICAL LINES).
16. TREES TO BE PLANTED TO CITY OF CHARLOTTE STANDARD 40.01 AND 40.09.
17. PLEASE CALL 336-6769 FOR AN INSPECTION OF TREE PROTECTION AND/OR TREE PLANTING AREAS, 1 TO 2 DAYS BEFORE THE TEMPORARY OR FINAL CERTIFICATE OF OCCUPANCY IS NEEDED.
18. LARGE MATURING TREES MUST BE A MINIMUM 25 TO 30 FEET FROM THE OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL URBAN FORESTER TO RESOLVE BEFORE PLANTING.
19. SEE GRADING PLAN FOR ADDITIONAL TREE PRESERVATION NOTES.
20. *TREES WITHIN THE STREET RIGHT OF WAY ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY OF CHARLOTTE LANDSCAPE MANAGEMENT AT 704-336-4082. ALL TREES OVER 6" IN DIAMETER (4.5' ABOVE GROUND) IN SETBACK AREA ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY ENGINEERING AT 704-336-6692.* NOTE: THIS NOTE WILL BE ALSO REQUIRED ON LANDSCAPE PLAN SUBMITTALS.
21. SITE LIGHTING MUST BE A MINIMUM THIRTY (30) FEET AWAY FROM A TREE. IF PEDESTRIAN SCALE LIGHTING IS BEING USED, THEN LIGHTING MUST BE A MINIMUM OF FIFTEEN (15) FEET AWAY FROM A TREE, UNLESS APPROVED OTHERWISE BY THE CITY. SHOW SITE LIGHTING PLAN. NO LIGHT POLES IN TREE ISLANDS.
22. COMMERCIAL TREE SAVE AREAS MUST BE RECORDED IN ACCORDANCE WITH THE APPROVED PLAN ON A FINAL PLAT AT THE REGISTER OF DEEDS OFFICE BEFORE URBAN FORESTRY HOLDS CAN BE RELEASED.
23. ATTENTION LANDSCAPE CONTRACTOR: NOTIFY URBAN FORESTER OF ANY SIGN, POWER LINE, OR OTHER CONFLICTS BEFORE PLANTING NEW TREES.
24. A MINIMUM OF FIFTY (50) PERCENT OF NEW TREES MUST BE NATIVE SPECIES, AND SITES WITH MORE THAN TWENTY (20) TREES REQUIRED WILL HAVE TO INSTALL MULTIPLE SPECIES PURSUANT TO THE TREE ORDINANCE GUIDELINES.
25. ANY REQUIRED TREES ON SITE THAT HAVE EXPIRED WILL NEED TO BE REPLACE TO BRING THE SITE INTO COMPLIANCE WITH THE TREE ORDINANCE.

TOPSOIL STOCK PILE NOTE:
CONTRACTOR SHALL STRIP AND STOCK PILE EXISTING TOP SOIL. STOCK PILE ENOUGH TO PLACE 6" OVER ENTIRE VEGETATED SITE. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. TOP SOIL SHALL BE CLEAN, FREE OF ROOT, DEBRIS, ROCK AND STUMPS. CONTRACTOR SHALL PROVIDE A SOIL SAMPLE TEST OF EXISTING MATERIAL. CONTRACTOR SHALL SUPPLEMENT WITH HAUL IN TOPSOIL IF ONSITE QUANTITY IS NOT SUFFICIENT. CONTRACTOR SHALL AMMEND EXISTING SOIL PER SPECIFICATIONS AND TESTING RESULTS WHEN DEFICIENT IN NUTRIENTS OR ORGANICS.

IN THIS CONTRACT WHERE PERMANENT SLOPE MATTING IS INSTALLED THE GENERAL CONTRACTOR SHALL FIRST RE-SPREAD THE 6" OF TOPSOIL REQUIRED ON THE SLOPES TO BRING THE SLOPE TO FINAL GRADE. THE SLOPES SHALL BE SEEDED WITH PERMANENT SEED MIXTURE PER SPECIFICATIONS OR AS PER LANDSCAPE PLAN REQUIRES.

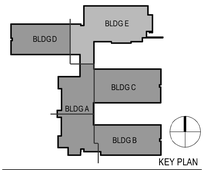
NO.	DATE	REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1120 BRIAN JAMES CANNIVELLA

11/14/13

SEAL



KEY PLAN

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T 704 940 0501
F 704 362 4602

Owner:
CHARLOTTE - MECKLENBURG
BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

Charlotte-Mecklenburg Schools
NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Landscape Plan Enlargement and Notes

SCALE:

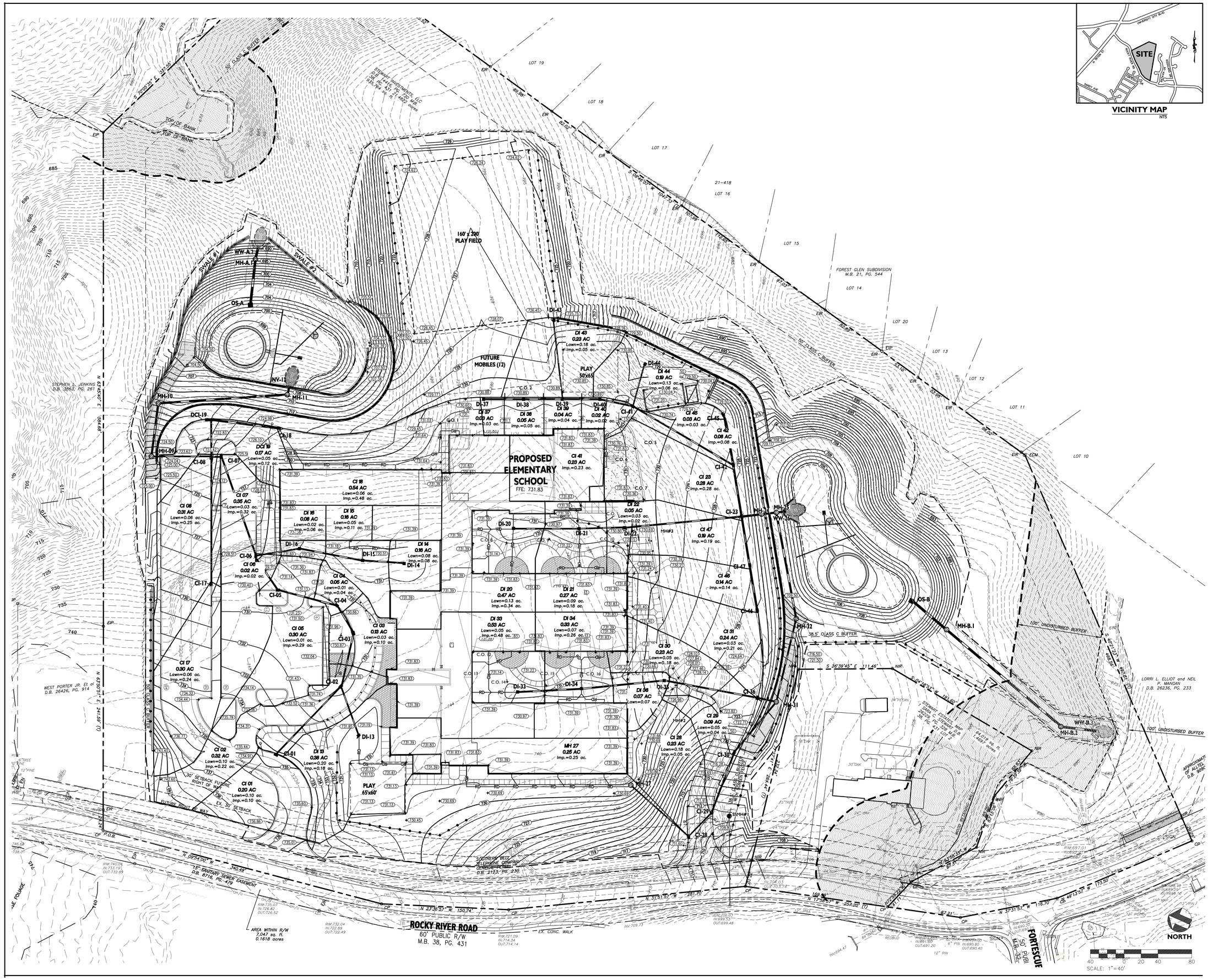
L101.1

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

J:\3072C Newell Elementary\Drawings\3072C-DD\3072LANDSCAPE.dwg, 11/21/2013 2:45:47 PM, PDF-XChange for AcroPlot P ro



NO. DATE REVISION

Date:

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT NO. 979 TERRENCE W. GORMAN 11/14/13

SEAL

Perkins Eastman
520 WEST SIXTH STREET
CHARLOTTE, NC 28202
T 704 940 0501
F 704 342 4602

Owner:
CHARLOTTE - MECKLENBURG BOARD OF EDUCATION

CHARLOTTE MECKLENBURG SCHOOLS
701 EAST SECOND STREET
CHARLOTTE, NC 28202-2825

Civil / Landscape:
SITE SOLUTIONS
2320 WEST MOREHEAD STREET
CHARLOTTE, NC 28208

Traffic:
DESIGN RESOURCE GROUP
2459 WILKINSON BOULEVARD, SUITE 200
CHARLOTTE, NC 28208

Structural:
STEWART
200 SOUTH COLLEGE STREET, SUITE 720
CHARLOTTE, NC 28202

Mechanical, Plumbing, & Fire Protection:
PROFESSIONAL ENGINEERING ASSOC., PA
1805 SARDIS ROAD NORTH, SUITE 100
CHARLOTTE, NC 28270

Electrical:
CORBAN ENGINEERING COMPANY, PC
3633 STRAUSSBURG WOODS LANE
MATTHEWS, NC 28105

Food Service:
HERBIN DESIGN
7525 DORN CIRCLE
CHARLOTTE, NC 28212

PROJECT TITLE:

cms

NEWELL ELEMENTARY SCHOOL REPLACEMENT

431 WEST ROCKY RIVER ROAD
CHARLOTTE, NC 28213

PROJECT No: 32041.00

DRAWING TITLE:

Composite Drainage Area Map

SCALE:

C102.4

100% CONSTRUCTION DOCUMENTS

CMS PROJECT # 240-004

DATE: December 6, 2013

RESOLUTION AUTHORIZING AN INTERLOCAL AGREEMENT BETWEEN THE CITY OF CHARLOTTE AND THE CHARLOTTE-MECKLENBURG BOARD OF EDUCATION

WHEREAS, in order to accommodate certain public improvements for the Rocky River Road West Project ("Project"), the City of Charlotte ("City") intends to enter into an interlocal agreement with the Charlotte-Mecklenburg Board of Education (the School Board), a corporate body existing under the laws of the state of North Carolina. The School Board is currently planning to construct a new elementary school in the vicinity of the proposed Project area; and

WHEREAS, the roadway improvements that the School Board is required to make for its school construction will be ready ahead of when the City would design and construct its Project, and if the School Board makes its roadway improvements first, as currently scheduled, the City would be forced to remove such School Board improvements before making its own Project improvements resulting in a waste of the School Board's investment. Accordingly, the City has requested to reimburse the School Board, through an interlocal agreement, for the preliminary design services for the City portion of improvements along with the design work for the new school improvements. Such a joint exercise will minimize disruption to the public, students, the local community and businesses in the area and would achieve cost savings to the City and the School Board by avoiding the need for separate preliminary design service agreements at a later date for the City Project; and

WHEREAS, through the interlocal agreement, the City proposes to reimburse the School Board an amount not to exceed One Hundred and Thirty-Five Thousand Dollars ($135,000) in compensation for preliminary design services for the City's portion of road improvements; and

WHEREAS, the City Council of the City of Charlotte has determined that the reimbursement of funds to the School Board will expedite the design of the Project, be more practicable and less costly for the realignment necessitated by both projects, improves efficiency, and minimize inconvenience to the taxpaying public; and

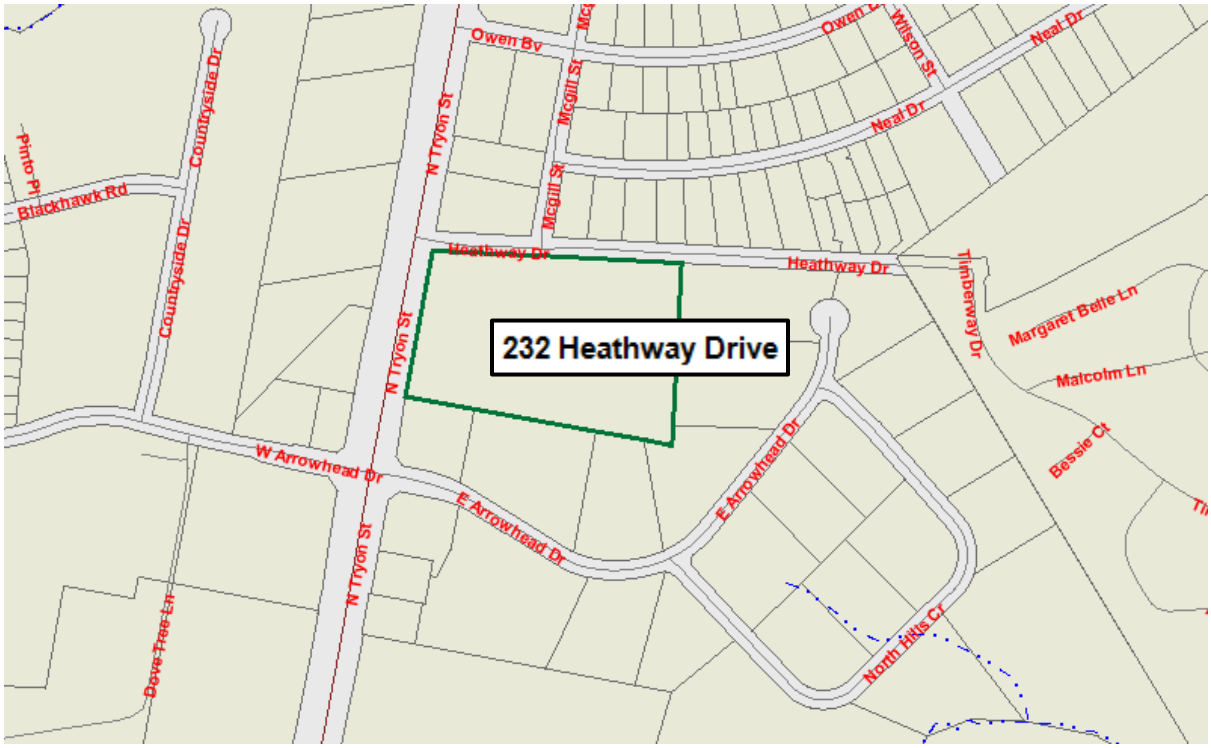
NOW THEREFORE, BE IT RESOLVED by the City Council for the City of Charlotte, pursuant to Section 8-124 of the City of Charlotte Charter, that it hereby authorizes the City to enter into an interlocal agreement with the School Board as follows:

The City will reimburse the School Board up to $135,000 for preliminary design services for the Project. The City Manager or said Designee is authorized to negotiate the terms and execute an interlocal agreement and any subsequent amendments necessary to complete the design of the Project in accordance with this resolution.

THIS THE 10TH DAY OF February, 2014.

Location Map: Charlotte-Mecklenburg Police Department Westover Division Station

New Communications Site Collocation Map



Property Tax Refund Requests

ASPEN PEAK APARTMENTS	$	21.17
CENTEX HOMES		183.44
CITY OF CHARLOTTE		47.00
CITY OF CHARLOTTE		45.00
CITY OF CHARLOTTE		47.00
DOLE & WALLACE PLLC TRUST ACCOUNT		154.26
HOMESELECT SETTLEMENT SOLUTIONS LLC		40.30
JACOBUS, DAVID		278.37
JANT, WILLIE MAE		405.09
M&T BANK/REO		31.40
MULLINS, MICHAEL CAREER CONSULTING ASSOCIATES		0.82
MV TRYON III LLC		96.08
PNC MORTGAGE		1,595.92
STATE EMPLOYEES' CREDIT UNION		1,123.48
STATE EMPLOYEE'S CREDIT UNION		39.38
WELLS FARGO HOME MORTGAGE		25.31
WELLS FARGO HOME MORTGAGE		37.03
WELLS FARGO HOME MORTGAGE		38.44
WELLS FARGO HOME MORTGAGE		253.57
YEE, JONATHAN		857.54
	$	**5,320.60**

A RESOLUTION AUTHORIZING THE REFUND OF PROPERTY TAXES

Reference is made to the schedule of "Taxpayers and Refunds Requested" attached to the Docket for consideration of the City Council. On the basis of that schedule, which is incorporated herein, the following facts are found:

1. The City-County Tax Collector has collected property taxes from the taxpayers set out on the list attached to the Docket.

2. The City-County Tax Collector has certified that those taxpayers have made proper demand in writing for refund of the amounts set out on the schedule within the required time limits.

3. The amounts listed on the schedule were collected through either a clerical or assessor error.

NOW, THEREFORE, BE RESOLVED by the City Council of the City of Charlotte, North Carolina, in regular session assembled this 10th day of February 2014 that those taxpayers listed on the schedule of "Taxpayers and Refunds Requested" be refunded in the amounts therein set up and that the schedule and this resolution be spread upon the minutes of this meeting.

CERTIFICATION

I,_____ , _____City Clerk of the City of Charlotte, North Carolina, DO HEREBY CERTIFY that the foregoing is a true and exact copy of a Resolution adopted by the City Council of the City of Charlotte, North Carolina, in regular session convened on the_____ day of_____ 2014 the reference having been made in Minute Book _____and recorded in full in Resolution Book_____ Page(s)_____.

WITNESS my hand and the corporate seal of the City of Charlotte, North Carolina, this the day of _____, 2014.

_____

ORDINANCE

AN ORDINANCE ORDERING THE DEMOLITION AND REMOVAL OF THE DWELLING AT 6023 & 6023-2 OLINDA STREET PURSUANT TO THE HOUSING CODE OF THE CITY OF CHARLOTTE AND ARTICLE 19, PART 6, CHAPTER 160A OF THE GENERAL STATUTES OF NORTH CAROLINA, SAID BUILDING BEING THE PROPERTY OF DEVLOUS D. BORDERS 1647 FRIENDSHIP ROAD SHELBY, NC 28150

WHEREAS, the dwelling located at 6023 & 6023-2 Olinda Street in the City of Charlotte has been found by the Code Enforcement Official of the City of Charlotte to be in violation of the Housing Code of the City of Charlotte and the owners thereof have been ordered to demolish and remove said dwelling; and

WHEREAS, said owner(s) have failed to comply in a timely fashion.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Charlotte, North Carolina, that the Code Enforcement Official of the City of Charlotte is hereby ordered to cause the demolition and removal of the dwelling located at 6023 & 6023-2 Olinda Street in the City of Charlotte in accordance with the Housing Code of the City of Charlotte. This Ordinance shall become effective upon its adoption.

APPROVED AS TO FORM:

_____

Senior Assistant City Attorney

GENERAL INFORMATION	
Property Address	6023 & 6023-2 Olinda Street
Neighborhood	Neighborhood Profile Area 223
Council District	#1
Owner(s)	Devlous D. Borders
Owner(s) Address	1647 Friendship Road Shelby, NC 28150
KEY FACTS	
Focus Area	Housing & Neighborhood Development & Community Safety Plan
CODE ENFORCEMENT INFORMATION	
♦ Reason for Inspection:	Public Agency (Charlotte Fire Department)
♦ Date of the Inspection:	12/6/2010
♦ Title report received, revealing parties in interest:	12/6/2010
♦ Owner(s) and parties in interest notified of Complaint and Notice of Hearing by advertisement and certified mail by:	12/8/2010
♦ Held hearings for owner(s) and parties in interest by:	1/5/2011
♦ Owner(s) and parties in interest attend hearing:	No
♦ Filed Lis Pendens:	2/9/2011
♦ Owner(s) and parties in interest ordered to demolish structure by:	2/25/2011
♦ Updated title search revealing additional parties in interest:	4/18/2013
♦ Parties in interest notified of Complaint and Notice of Hearing by advertisement and certified mail by:	
♦ Held hearings for parties in interest by:	5/23/2013
♦ Parties in interest ordered to demolish structure by:	7/23/2013
♦ Owner(s) have not repaired, or complied with order to demolish.	
♦ Structure occupied:	No
♦ Demolition cost:	$7,588
♦ Lien will be placed on the property for the cost of Demolition.	

NOTIFICATION TO OWNER

Owner and parties of interest have been advised that failure to comply with the Order to Demolish the structure would result in City Council being requested to approve demolition by the City and a lien being placed on the property for the cost of demolition.

OPTIONS

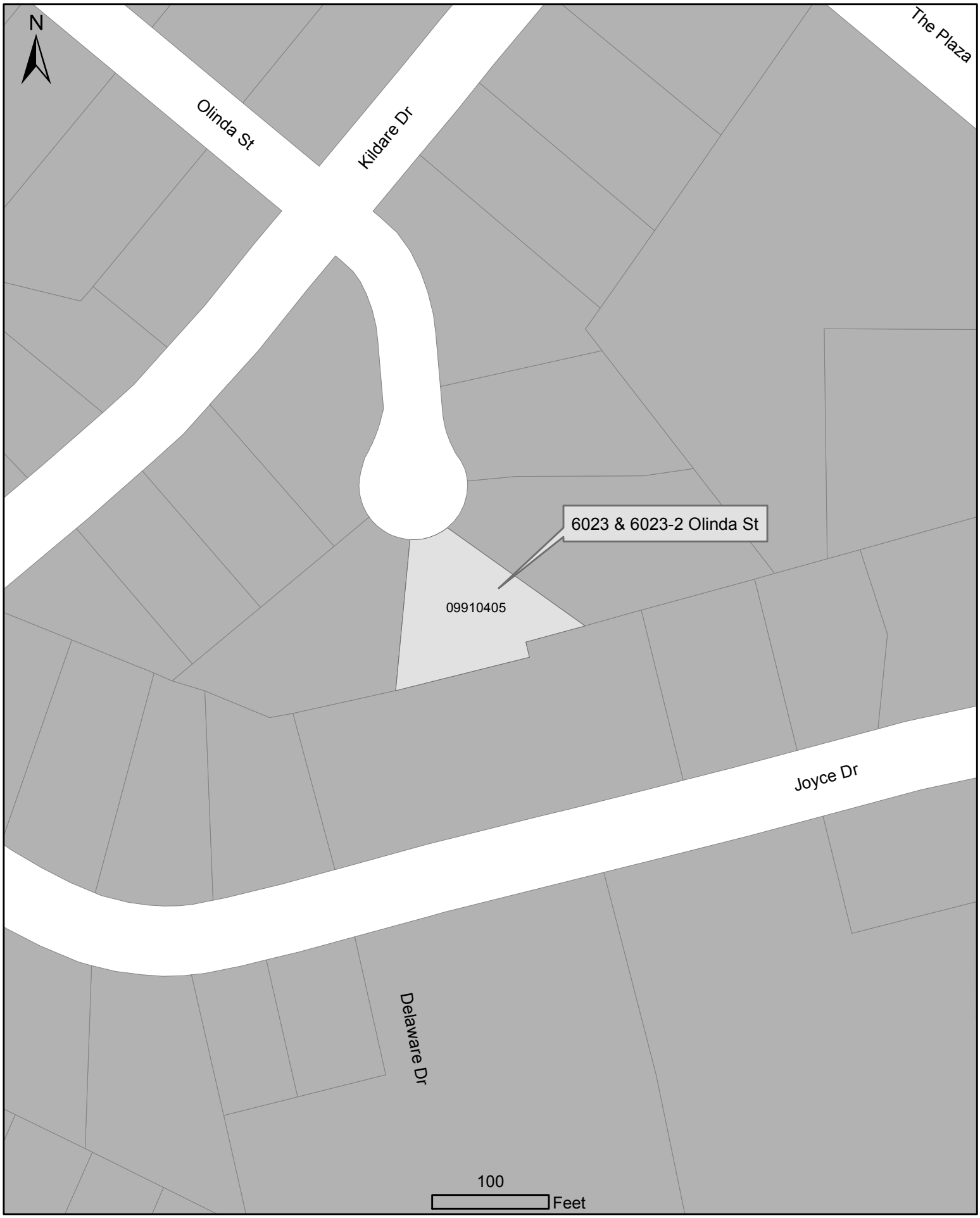
IN-REM REPAIR	REHAB TO CITY STANDARD	REPLACEMENT HOUSING	DEMOLITION
Estimated In-Rem Repair Cost: $87,681	Acquisition & Rehabilitation Cost (Existing structure: 2,068 sq. ft. total) Economic Life: 15-20 years Estimated cost-$333,500	New Replacement Structure Cost (Structure: 2,068 sq. ft. total) Economic Life: 50 years Estimated cost-$380,380	Demolition Cost $7,588
In-Rem Repair is not recommended because the In-Rem Repair cost is greater than 65% of the tax value.	Acquisition: Tax values: - Structure: $ 92,700 - Garage/Shed/Porch: $ 2,200 - Land: $ 15,200 Total Acquisition: $ 110,100 Estimated Rehabilitation Cost: $ 103,400 Outstanding Loans $ 120,000 Property Taxes owed: $ 0 Interest on Taxes owed: $ 0 Total: $ 223,400	Acquisition: Tax values - Structure: $ 92,700 - Garage/Shed/Patio: $ 2,200 - Land: $ 15,200 Total Acquisition: $ 110,100 New structure: $ 142,692 Demolition: $ 7,588 Outstanding Loans: $ 120,000 Property Taxes owed: $ 0 Interest on Taxes owed: $ 0 Total: $ 270,280	

RECOMMENDATION FOR DEMOLITION

Demolition is recommended because:

- Estimated In-Rem Repair cost of: $87,681 ($42.39 /sq. ft.), which is 94.585 % of the structure tax value, which is $92,700.
- City rehab costs analysis shows that rehabilitation is not feasible because the cost is prohibitive.
- New construction analysis shows that new construction is not feasible because the cost is prohibitive.
- Violations include: Structural, plumbing, heating and electrical violations: Wall framing fire damaged. Exterior siding and trim fire damaged. Interior ceiling and wall covering fire damaged. Windows fire damaged. Roof rafters and covering fire damaged. Plumbing fixtures fire damaged. Heating equipment fire damaged. Electrical wiring/fixtures fire damaged.
- The building is 40 years old and consists of 2,068 square feet total.
- A new 2,068 sq. ft. structure can be built for $142,692.
-

6023 & 6023-2 Olinda Street



6023 & 6023-2 Olinda Street

ORDINANCE

AN ORDINANCE ORDERING THE DEMOLITION AND REMOVAL OF THE DWELLING AT 12334 PANTHERSVILLE DRIVE PURSUANT TO THE HOUSING CODE OF THE CITY OF CHARLOTTE AND ARTICLE 19, PART 6, CHAPTER 160A OF THE GENERAL STATUTES OF NORTH CAROLINA, SAID BUILDING BEING THE PROPERTY OF KEITH M. ALLEN AND DIDI MARSHALL 11751 BLUE TICK CT. CHARLOTTE, NC 28269

WHEREAS, the dwelling located at 12334 Panthersville Drive in the City of Charlotte has been found by the Code Enforcement Official of the City of Charlotte to be in violation of the Housing Code of the City of Charlotte and the owners thereof have been ordered to demolish and remove said dwelling; and

WHEREAS, said owner(s) have failed to comply in a timely fashion.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Charlotte, North Carolina, that the Code Enforcement Official of the City of Charlotte is hereby ordered to cause the demolition and removal of the dwelling located at 12334 Panthersville Drive in the City of Charlotte in accordance with the Housing Code of the City of Charlotte. This Ordinance shall become effective upon its adoption.

APPROVED AS TO FORM:

_____
Senior Assistant City Attorney

GENERAL INFORMATION	
Property Address	12334 Panthersville Drive
Neighborhood	Neighborhood Profile Area 265
Council District	#4
Owner(s)	Keith M. Allen, Didi Marshall
Owner(s) Address	11751 Blue Tick Ct Charlotte, NC 28269
KEY FACTS	
Focus Area	Housing & Neighborhood Development & Community Safety Plan
CODE ENFORCEMENT INFORMATION	
♦ Reason for Inspection:	Public Agency (Charlotte Fire Department)
♦ Title report received, revealing parties in interest:	3/28/2013
♦ Date of the Inspection:	9/30/2013
♦ Owner(s) and parties in interest notified of Complaint and Notice of Hearing by advertisement and certified mail by:	10/4/2013
♦ Held hearings for owner(s) and parties in interest by:	10/28/2013
♦ Owner(s) and parties in interest attend hearing:	No
♦ Owner(s) and parties in interest ordered to demolish structure by:	11/25/2013
♦ Filed Lis Pendens:	12/6/2013
♦ Owner(s) have not repaired, or complied with order to demolish.	
♦ Structure occupied:	No
♦ Demolition cost:	$8,525
♦ Lien will be placed on the property for the cost of Demolition.	

NOTIFICATION TO OWNER

Owner and parties of interest have been advised that failure to comply with the Order to Demolish the structure would result in City Council being requested to approve demolition by the City and a lien being placed on the property for the cost of demolition.

OPTIONS

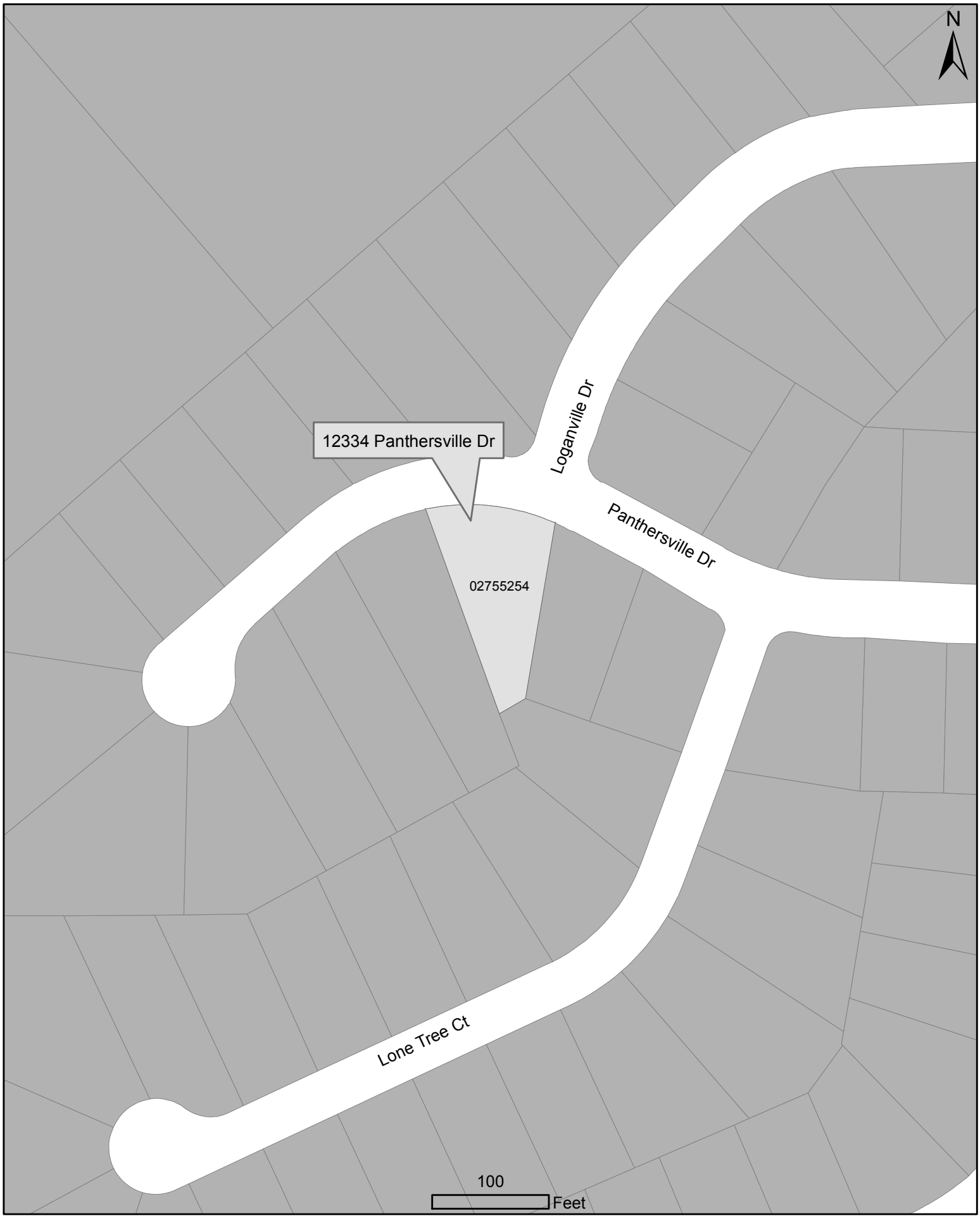
IN-REM REPAIR	REHAB TO CITY STANDARD	REPLACEMENT HOUSING	DEMOLITION
Estimated In-Rem Repair Cost: $117,190	Acquisition & Rehabilitation Cost (Existing structure: 3,652 sq. ft. total) Economic Life: 15-20 years Estimated cost-$549,500	New Replacement Structure Cost (Structure: 3,652 sq. ft. total) Economic Life: 50 years Estimated cost-$591,413	Demolition Cost $8,525
In-Rem Repair is not recommended because the In-Rem Repair cost is greater than 65% of the tax value.	Acquisition: Tax values: - Structure: $ 158,300 - Garage/Shed/Patio: $ 600 - Land: $ 28,000 Total Acquisition: $ 186,900 Estimated Rehabilitation Cost: $ 182,600 Outstanding Loans $ 180,000 Property Taxes owed: $ 0 Interest on Taxes owed: $ 0 Total: $ 362,600	Acquisition: Tax values - Structure: $ 158,300 - Garage/Shed/Patio: $ 600 - Land: $ 28,000 Total Acquisition: $ 186,900 New structure: $ 251,988 Demolition: $ 8,525 Outstanding Loans: $ 180,000 Property Taxes owed: $ 0 Interest on Taxes owed: $ 0 Total: $ 404,51	

RECOMMENDATION FOR DEMOLITION

Demolition is recommended because:

- Estimated In-Rem Repair cost of: $117,190 ($32.08 /sq. ft.), which is 74.030 % of the structure tax value, which is $158,300.
- City rehab costs analysis shows that rehabilitation is not feasible because the cost is prohibitive.
- New construction analysis shows that new construction is not feasible because the cost is prohibitive.
- Violations include: Structural, plumbing, heating and electrical violations: Walls and floor framing fire damaged. Exterior siding and trim fire damaged. Interior ceiling and wall covering fire damaged. Windows fire damaged. Plumbing fixtures fire damaged. Heating equipment fire damaged. Electrical wiring/fixtures fire damaged.
- The building is 18 years old and consists of 3,652 square feet total.
- A new 3,652 sq. ft. structure can be built for $251,988.
-

12334 Panthersville Drive



12334 Panthersville Drive

ORDINANCE

AN ORDINANCE ORDERING THE DEMOLITION AND REMOVAL OF THE DWELLING AT 1016 STATE STREET PURSUANT TO THE HOUSING CODE OF THE CITY OF CHARLOTTE AND ARTICLE 19, PART 6, CHAPTER 160A OF THE GENERAL STATUTES OF NORTH CAROLINA, SAID BUILDING BEING THE PROPERTY OF EARL DICKS, TINA CAROLYN DICKS, HEIRS OF ANN DICKS FULLER 422 CUMBERLAND STREET APT#1 BROOKLYN, NY 11238

WHEREAS, the dwelling located at 1016 State Street in the City of Charlotte has been found by the Code Enforcement Official of the City of Charlotte to be in violation of the Housing Code of the City of Charlotte and the owners thereof have been ordered to demolish and remove said dwelling; and

WHEREAS, said owner(s) have failed to comply in a timely fashion.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Charlotte, North Carolina, that the Code Enforcement Official of the City of Charlotte is hereby ordered to cause the demolition and removal of the dwelling located at 1016 State Street in the City of Charlotte in accordance with the Housing Code of the City of Charlotte. This Ordinance shall become effective upon its adoption.

APPROVED AS TO FORM:

_____
Senior Assistant City Attorney

GENERAL INFORMATION	
Property Address	1016 State Street
Neighborhood	Neighborhood Profile Area 293
Council District	#3
Owner(s)	Earl Dicks, Tina Carolyn Dicks, Heirs of Ann Dicks Fuller
Owner(s) Address	422 Cumberland Street Apt#1 Brooklyn, NY 11238
KEY FACTS	
Focus Area	Housing & Neighborhood Development & Community Safety Plan
CODE ENFORCEMENT INFORMATION	
♦ Reason for Inspection:	Field Observation
♦ Date of the Inspection:	4/15/2013
♦ Title report received:	5/14/2013
♦ Owner(s) notified of Complaint and Notice of Hearing by advertisement and certified mail by:	7/2/2013
♦ Held hearings for owner(s) by:	7/18/2013
♦ Owner(s) attend hearing:	No
♦ Filed Lis Pendens:	8/2/2013
♦ Received letter of appeal from owner:	8/2/2013
♦ Owner(s) ordered to demolish structure by:	8/22/2013
♦ Housing Appeal Board met on 11/12/2013 and upheld the Findings of Fact and Order to Demolish.	
♦ Owner(s) have not repaired, or complied with order to demolish.	
♦ Structure occupied:	No
♦ Demolition cost:	$7,305
♦ Lien will be placed on the property for the cost of Demolition.	

NOTIFICATION TO OWNER

Owner and parties of interest have been advised that failure to comply with the Order to Demolish the structure would result in City Council being requested to approve demolition by the City and a lien being placed on the property for the cost of demolition.

OPTIONS

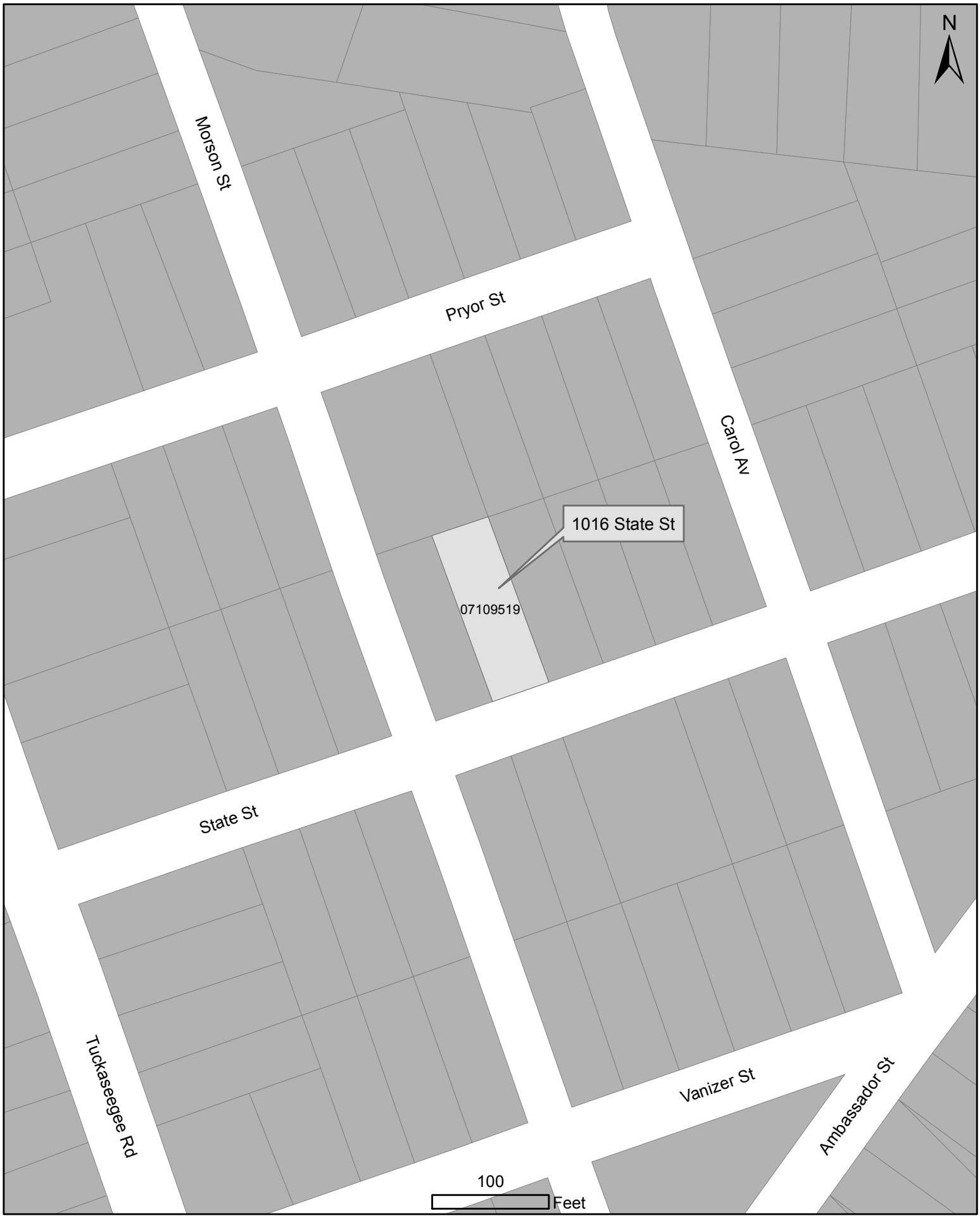
IN-REM REPAIR	**REHAB TO CITY STANDARD**	**REPLACEMENT HOUSING**	**DEMOLITION**
Estimated In-Rem Repair Cost: $48,750	Acquisition & Rehabilitation Cost (Existing structure: 1,426 sq. ft. total) Economic Life: 15-20 years Estimated cost-$157,701	New Replacement Structure Cost (Structure: 1,426 sq. ft. total) Economic Life: 50 years Estimated cost-$192,100	Demolition Cost $7,305
In-Rem Repair is not recommended because the In-Rem Repair cost is greater than 65% of the tax value.	Acquisition: Tax values: - Structure: $ 66,000 - Garage/Shed: $ 4,400 - Land: $ 10,000 Total Acquisition: $ 80,400 Estimated Rehabilitation Cost: $ 71,300 Outstanding Loans $ 0 Property Taxes owed: $ 5,018 Interest on Taxes owed: $ 983 Total: $ 77,301	Acquisition: Tax values - Structure: $ 66,000 - Garage/Shed: $ 4,400 - Land: $ 10,000 Total Acquisition: $ 80,400 New structure: $ 98,394 Demolition: $ 7,305 Outstanding Loans: $ 0 Property Taxes owed: $ 5,018 Interest on Taxes owed: $ 983 Total: $ 111,700	

RECOMMENDATION FOR DEMOLITION

Demolition is recommended because:

- Estimated In-Rem Repair cost of: $48,750 ($34.18 /sq. ft.), which is 73.863% of the structure tax value, which is $66,000.
- City rehab costs analysis shows that rehabilitation is not feasible because the cost is prohibitive.
- New construction analysis shows that new construction is not feasible because the cost is prohibitive.
- Violations include: Structural, heating, plumbing and electrical violations: Flooring and sub-structure is loose, rotted, or missing in several places. Holes in interior wall covering. Broken window panes. Decayed roof sheathing. Leaning piers. Heating equipment missing. Water supply lines disconnected. Damaged water heater. Electrical wiring damaged/cut/missing.
- The building is 81 years old and consists of 1,426 square feet total.
- A new 1,426 sq. ft. structure can be built for $98,394.

1016 State Street



1016 State Street