Mayor
John Aneralla

Mayor Pro-Tem
Danny Phillips

Commissioners
Melinda Bales
Dan Boone
Mark Gibbons
Charles Guignard
Rob Kidwell

Town of Huntersville
NORTH CAROLINA

AGENDA
Regular Town Board Meeting
April 3, 2017 - 6:30 PM
TOWN HALL (101 Huntersville-Concord Road)

Department Heads
Vickie Brock, HR Director
Max Buchanan, Public Works
Jackie Huffman, Finance
Michael Jaycocks, Parks&Rec
Jack Simoneau, Planning
Cleveland Spruill, Police Chief

Assistant Town Manager
Gerry Vincent

Town Clerk
Janet Pierson

Town Attorney
Bob Blythe

I. Pre-meeting

A. Budget Work Session - External Agencies. (5:15 p.m.)
B. Police Updates - ETJ/Dispatch. (5:45 p.m.)

II. Call to Order

III. Invocation - Moment of Silence

IV. Pledge of Allegiance

V. Mayor and Commissioner Reports-Staff Questions

A. Mayor Aneralla (Metropolitan Transit Commission, Commerce Station Management Team, North Meck Alliance)
B. Commissioner Bales (Lake Norman EDC, Lake Norman Education Collaborative)
C. Commissioner Boone (Public Safety Liaison, Land Development Ordinances Advisory Board)
D. Commissioner Gibbons (NC 73 Council of Planning, Veterans Liaison)
E. Commissioner Guignard (Centralina Council of Governments, Planning Coordinating Committee)
F. Commissioner Kidwell (Charlotte Regional Transportation Planning Organization, Olde Huntersville Historic Society)
G. Commissioner Phillips (Lake Norman Chamber Board, Visit Lake Norman Board)

VI. Public Comments, Requests, or Presentations

VII. Agenda Changes

A. Agenda changes, if any.
B. Adoption of Agenda.

VIII. Public Hearings

A. Conduct public hearing on Petition #R16-07, a request by Skybrook, LLC to revise the existing Conditional District rezoning plan for approximately 171.88-acres to remain Transitional Residential Conditional District with an increase in density and other site plan changes. *(David Peete)*

B. Conduct public hearing on Petition #R16-12, Anchor Mill Conditional Rezoning, a request by Nate Bowman to rezone parcel 01902201 from Neighborhood Residential to Town Center Conditional District. *(Alison Adams)*

IX. Other Business

A. Consider approving proposals for investigative work/testing related to the uveal melanoma cancer cluster. *(Gerry Vincent)*

B. Consider adopting resolution requesting Mecklenburg County correct the distribution of ABC monies. *(Commissioner Guignard)*

X. Consent Agenda

A. Approve the minutes of the March 6, 2017 Regular Town Board Meeting. *(Janet Pierson)*

B. Award Town of Huntersville 2017 Wynfield Resurfacing contract to Ferebee Corporation. *(Max Buchanan)*

C. Call a public hearing for Monday, May 1, 2017 at 6:30 p.m. at Huntersville Town Hall on Petition #TA17-01, a request by Mecklenburg County Parks and Recreation to modify the parking standards in Article 6 of the Huntersville Zoning Ordinance. *(Brad Priest)*

D. Call a public hearing for Monday, May 1, 2017 at 6:30 p.m. at Huntersville Town Hall on Petition #TA17-02, a request by University City Church to amend Article 10.7 of the Huntersville Zoning Ordinance to modify the amount of times a changeable copy sign message can change per 24 hour period. *(Meredith Nesbitt)*

E. Approve agreement with Norfolk Southern to allow the Town to install a new storm water pipe underneath the railroad between Main Street and Church Street. *(Michael Jaycocks)*

XI. Closing Comments

XII. Adjourn

To speak concerning an item on the Agenda, please print your name and address on the sign-up sheet on the table outside the Board Room prior to the meeting. If you wish to speak concerning an item that is added to the Agenda during the meeting, please raise your hand during that item. Each speaker will be limited to no more than 3 minutes. The Mayor, as the presiding officer may, at his discretion, shorten the time limit for speakers when an unusually large number of persons have signed up to speak.

AS A COURTESY, PLEASE TURN CELL PHONES OFF WHILE MEETING IS IN PROGRESS

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: David Peete, AICP, Principal Planner
Subject: Oaks at Skybrook North CD Rezoning Revision

Request to hold a public hearing on Monday, April 3, 2017 at 6:30 PM, Huntersville Town Hall on Petition # R16-07, a request by Skybrook, LLC to revise the existing Conditional District rezoning plan for 175.05-acres to add 4-acres (currently zoned R) and to revise the Transitional Residential Conditional District (TR-CD) to increase density, adjust open space, streets and other site plan changes. TR-CD zoning is requested for the entire site to permit 220 single-family lots located north of Huntersville-Concord Road and west of Poplar Tent Church Road. Property is vacant, with a few single-family homes.

ACTION RECOMMENDED:
Hold Public Hearing on April 3, 2017

FINANCIAL IMPLICATIONS:
TBD

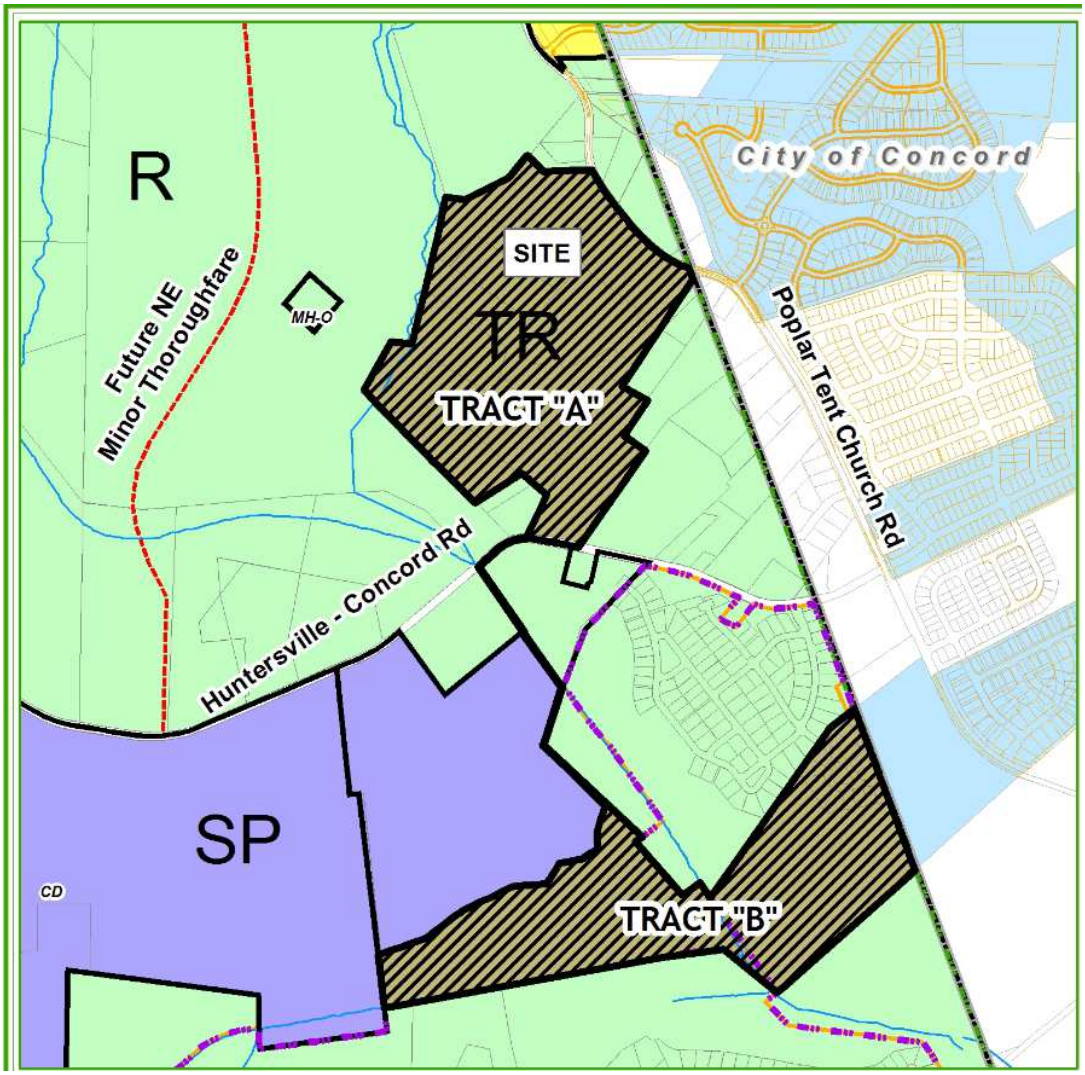
ATTACHMENTS:

Description	Type
Oaks at Skybrook North Staff Report	Cover Memo
Attachment A - Rezoning Application	Cover Memo
Attachment B - CD Rezoning Plan	Cover Memo
Attachment C - Neighborhood Mtg Report	Cover Memo
Attachment D - APF Letter of Determination	Cover Memo

Petition R16-07
Oaks at Skybrook North Conditional District Rezoning

NOTE: per email, received on 3/28/2017, the applicant for this Rezoning has requested to continue the public hearing to a future date to revise the proposed subdivision. The applicant and staff will continue to work on this development.

PART 1: PROJECT SUMMARY



Applicant: Skybrook, LLC

Property Owner: John T. Coley IV (see Attachment A).

Property Address: 15645 Poplar Tent Church Road.

Project Size: (+/-) 175.05-acres

Parcel Numbers:

011-103-01, -03, -04, -07, -09, -10, -11, -13, -16, -17, -18, -19, 011-102-01, -13 and 021-081-04, -06 (owned by Metrolina Greenhouses).

Current Zoning: Transitional Residential Conditional District (TR-CD) & Rural (R).

Current Land Use: vacant & a few homes.

Proposed Zoning: Revised Transitional Residential—Conditional District (TR-CD).

Proposed Land Use: 220 single-family homes

1. Purpose: Rezone 175.05 -acres north of Huntersville-Concord Road and east of Poplar Tent Church Road, near the Cabarrus County line (north of Parkside at Skybrook Subdivision) from Transitional Residential Conditional

District (TR-CD) and Rural (R) to Transitional Residential – Conditional District (TR-CD) to add approximately four (4) acres of land, to increase the lot count from 180 to 220 and to adjust open space and street layout.
NOTE – It is important to understand that Skybrook North, as a whole, includes 175.05-acres broken-out into two (2) large areas. The proposed TR-CD Rezoning for this site involves a 96.39-acre Tract A and a 78.66-acre Tract B (see map, above). The addition of a new parcel and the other proposed revisions only impact Tract A. Tract B has no revisions or changes proposed.
A Subdivision Sketch Plan for this project has also been submitted concurrent with this Rezoning Plan and will go to the Planning Board on April 25, 2017.

2. Adjoining Zoning and Land Uses.
   North: *Rural (R) – large-lot single-family & vacant.*
   South: *Rural (R) – single-family (Parkside at Skybrook Subdivision) & agri-business (Metrolina Greenhouses).*
   East: *Rural (R) – mostly vacant & a few large-lot single-family homes (along Cabarrus County line).*
   West: *Rural (R) – regional tourist attraction (Renaissance Festival) & vacant.*
3. A neighborhood meeting was held on Monday, February 27, 2017. The complete meeting summary is provided in Attachment C. Questions/concerns centered on possible road improvements and what type and number of homes are proposed to be built.
4. Notice for this rezoning petition was given via letters sent to adjoining property owners; a legal ad placed in the Charlotte Observer; and posting of rezoning signs on the property in two (2) locations.

PART 2: REZONING/SITE PLAN ISSUES

The proposed Conditional District Plan is generally compliant with the Zoning Ordinance and Subdivision Regulations, significant elements include:

- The Oaks at Skybrook North subdivision (Tract A) will be developed as one (1) phase.
- Additional right-of-way required along both Huntersville-Concord Road and Poplar Tent Church Road is to be dedicated, along with road improvements for both roads as part of previous approval (see Part 3 for details).
- A 0.80-acre square and a 0.71-acre square are proposed within the subdivision to serve as required Urban Open Space for the residents of Tract A. A 0.42-acre square is part of Parcel B. Overall, 94.29-acres (54%) of open space are provided within the subdivision (current TR zoning requires 40%, or more, of open space).
- An easement is being offered along the northern stream, where a new sewer line was recently installed, to accommodate a section of future County/Town greenway.
- Minimum Tree Preservation for the current TR zone is 35%. The proposed TR-CD Rezoning Plan saves 40% of the overall existing tree canopy.
- A grass path has been indicated to run within both gas-line easements. These paths should be clearly labeled.
- An “emergency-access only” path is proposed to cross one of the gas line easements in order to provide multiple accesses to the western portion of the subdivision.

The rezoning plan has been reviewed and several issues must be addressed:

- Density – to be discussed with the applicant.
- Four (4) waivers are requested:
  - Waiver to reduce side yard setback to 5 ft. minimum with 16 ft. building separation. This waiver was approved on 10-16-06 and is on the current 2010 version of the CD Rezoning.
  - Waiver to increase block length per block length table. This waiver was approved on 10-16-06 and is on the current 2010 version of the CD Rezoning. It should be noted that there were three (3) blocks that required a waiver in 2010, but there are only two (2) on the proposed plan.

  - Waiver to eliminate curb and gutter requirement on Huntersville-Concord Road and Poplar Tent Church Road. This waiver was approved on 10-16-06 and is on the current 2010 version of the CD Rezoning.
  - Waiver to decrease the 80 ft. buffer along Poplar Tent Church Road. This is a new waiver request. The 2010 CD Rezoning provides an 80 ft. buffer in this location.
- Several lots are not located within ¼ of Urban Open Space. Additional Urban Open Space will need to be provided.
- Lot 88 is proposed to have access only via a driveway easement running in front of another lot. This access is not permitted. Another solution will be needed for lot access or the lot can revert to open space.
- A side yard setback of 5 ft. with a minimum of 16 ft. of building separation is a hold-over from the 2010 CD Rezoning. However, the lots at that time were a minimum of 85 ft. wide, thus 16 ft. could be accommodated. The current plan permits a 70 ft. wide lot and there is concern 16 ft. of separation cannot be met. Fire Code only requires 10 ft. of building separation.
- A build-to range of 20 ft. – 50 ft. is proposed. This range is acceptable, however, a provision that there will not be more than 5ft. – 10 ft. of variation from one home to another is recommended.
- As part of this CD Rezoning, a reservation of land (dedication or easement) is required to be provided to facilitate the development of the greenway, per Article 11.3.7(h) of the Zoning Ordinance, which stipulates that "in approving a petition to reclassify property to conditional zoning district… Conditions and site-specific standards imposed in a conditional district shall be limited to those that address the conformance of the development and use of the site to town ordinances, the officially adopted Huntersville Community Plan, other applicable adopted long range plans and those that address the impacts reasonable expected to be generated by the development or use of the site." In summary, adequate accommodation, such as a dedication of land (preferred) or an easement, should be provided for future greenway development.
- In addition to the greenway-land reservation, the applicant has indicated that they will provide a private trail connection to the proposed subdivision.
- The properties involved in this CD-Rezoning have not been offered for voluntary annexation into the Town of Huntersville.

PART 3: TRANSPORTATION ISSUES

Traffic Impact Analysis (TIA) - The addition of 40 lots (from 180 to 220) to the approved plan did not exceed the threshold to require a TIA for the Town.

Site Plan Comments

- The street centerline radius in three locations does not meet the minimum in the Engineering Standards and Procedures Manual.
- Several of the end-of-the-street turnarounds may need to be shifted to accommodate the minimum design vehicle.
- Storm water layout will need minor modifications to meet the minimum design standards.
- Preliminary grading is inconsistent with the proposed layout for the cul-de-sac on street 9. The layout may require a grading easement from the adjacent property owner.
- Minor changes to the cross section for the divided residential street
- Other minor changes to plan notes/references.

PART 4: ADEQUATE PUBLIC FACILITIES (APF)

Under the provisions of the APF Ordinance, all residential development greater than twenty (20) lots are required to receive a "Determination of Adequacy (DOA)" for the following public facilities: fire station, fire vehicles, police station, police vehicles, indoor park and recreation facilities, and parks acreage. An APF Ordinance Determination of Adequacy was not required, as Skybrook North pre-dates the APF Ordinance.

PART 5: REZONING CRITERIA

Article 11.4.7(d) of the Zoning Ordinance states that "in considering any petition to reclassify property, the Planning Board in its recommendation and the Town Board in its decision shall take into consideration any identified relevant adopted land-use plans for the area including, but not limited to, comprehensive plans, strategic plans, district plans, area plans, neighborhood plans, corridor plans, and other land-use policy documents".

STAFF COMMENT – The 2030 Huntersville Community Plan supports this project through the following sections:

- **Policy E-1, E-2 & E-3: Preservation and Enhancement**. Support the preservation and enhancement of the natural environment, along with its scenic and cultural assets.
  Comment: The proposed development provides adequate open space buffers along Huntersville-Concord Road (80+ feet wide). However, the buffer along Poplar Tent Church Road is not the minimum width of 80 feet. The minimum width must be provided. In addition, 54% of the site is set aside as open space.
- **Policy H-1 & H-9: Development Pattern**. Continue to follow existing residential development pattern as reflected in "Map of Zoning Districts," focusing higher intensity development generally within two miles of the I-77/NC 115 corridor.
- Comment: The proposed CD Rezoning subdivision is located within the Low Intensity Areas of the 2030 Community Plan, which is the area the Comprehensive Plan does not support considering increases in density. The Oaks at Skybrook North subdivision has a proposed density of 1.26 units per acre (2.12 for Tract A only). The only surrounding development, Parkside at Skybrook North, is 1.44, (note that the majority of the land to the north, east and west conforms to the Rural (R) zoning.

North	South	East	West
n/a	Parkside at Skybrook =	n/a	n/a

- **Policy T-5: Context-sensitive Design of Streets**: Continue to support "context-sensitive" design of streets and the selection of appropriate street section designs for residential, commercial and industrial developments.
  Comment: The internal streets are appropriately sized and create short blocks to encourage pedestrian activity. The proposed cross-section to be used through the development follows context sensitive design by providing adequate lane widths, green zones for street trees and sidewalks.
- **Policy T-7: Traffic Impact Analysis Ordinance**: Continue to apply requirements of "Traffic Impact Analysis" Ordinance, including Level of Service and mitigation of impacts generated by new development.
  Comment: A TIA was not required, however transportation enhancements are outlined in Part 3 of this staff analysis.
- **Policy T-8: Street Connectivity**: Promote and require street connectivity in the Town of Huntersville among residential, employment, recreational and institutional uses.

Comment: The proposed development provides two (2) connections to existing thoroughfares (Huntersville-Concord Road & Poplar Tent Church Road). In addition, there are six (6) stub streets: two to the north, two to the south, two to the east and two to the west.

- **Policy CD-5: Street Infrastructure**: Continue to require that adequate public infrastructure (roads, utilities, etc.) either exist or will be made available to support all new development.
  Comment: The proposed development will provide all TIA-required improvements to external public roads, extend public water and sewer, provide two (2) connections to existing roads, provide six (6) stubs for future connections and provide a greenway reservation.
- **Policy PF-2: Adequate Public Facilities**: Continue use of "Adequate Public Facilities Ordinance" to ensure that demand generated by existing and future growth and development for police, fire and parks & recreation capital facilities can be met by available supply of facilities.
  Comment: see Part 4 of this report.

STAFF COMMENT – The 2030 Huntersville Community Plan would not support this project through the following sections at this time, but could with plan modifications:

Article 11 Section 11.4.7(e) of the Zoning Ordinance states that: "in considering any petition to reclassify property the Planning Board in its recommendation and the Town Board in its decision should consider:

1. **Whether the proposed reclassification is consistent with the overall character of existing development in the immediate vicinity of the subject property.**
   STAFF COMMENT:
   The proposed Conditional District Rezoning for the Oaks at Skybrook North subdivision is supported by the 2030 Comprehensive Plan, as the zoning district is not changing, only the provision of the CD rezoning plan. The Oaks at Skybrook North's proposed density is 1.26 units per acre, which is slightly lower than nearby development Parkside at Skybrook North (1.44). The TR zoning district does not have a density limit, however, as this proposed subdivision is located along the outer edge of the intensification zone, the proposed density is appropriate as development transitions from the NR zone into the lower-density Transitional Residential (TR) zoning district. The proposal is also appropriate for the area by providing adequate infrastructure (which includes appropriate new roads, existing road upgrades and other transportation enhancements as well as providing ample open space). As long as accommodations are provided for the future greenway, all public infrastructure needs will be provided.

2. **The adequacy of public facilities and services intended to serve the subject property, including but not limited to roadways, transit service, parks and recreational facilities, police and fire protection, hospitals and medical services, schools, storm water drainage systems, water supplies, and wastewater and refuse disposal.**
   STAFF COMMENT:
   - A Transportation Impact Analysis was required – see Part 3 of this report.
   - The APF Ordinance Determination of Adequacy was required – see Part 4 of this report.
   - Storm water drainage, water supplies and wastewater and refuse disposal and a Willingness-to-serve letter must be provided by Charlotte Water, as well as PCO-1 storm water approval from Mecklenburg County.

3. **Whether the proposed reclassification will adversely affect a known archeological, environmental, historical or cultural resource."**
   STAFF COMMENT:

Planning staff has no indication that the request will adversely affect known archeological, environmental, historical or cultural resources.

PART 6: STAFF RECOMMENDATION

The applicant for this CD Rezoning is looking to make significant changes to the plan (see note, top of staff report), therefore, staff withholds recommendation pending changes.

PART 7: PUBLIC HEARING COMMENTS

Public Hearing scheduled to be held on Monday, April 03, 2017. **ITEM TO BE CONTINUED**.

PART 8: PLANNING BOARD RECOMMENDATION

TBD

PART 9: ATTACHMENTS/ENCLOSURES

Attachments

A – Rezoning Application
B – Proposed CD Rezoning Plan
C - Neighborhood Meeting Report from February 27, 2017.
D – APF Letter of Determination

PART 10: CONSISTENCY STATEMENT - R 16-07 Oaks at Skybrook North Subdivision

Planning Department	Planning Board	Board of Commissioners
APPROVAL: In considering the proposed rezoning application R16-07; Oaks at Skybrook North Subdivision Conditional District Rezoning, the Planning staff recommends conditional approval as it is consistent with Implementation Goals E-1, E-2, E-3, H-1, H-9, T-5, T-7, T-8, CD-5 and PF-2 of the 2030 Community Plan. The property is located within the low intensity development area of the 2030 Comprehensive Plan and the proposed "overall" density is consistent with surrounding developments (see Part 5). Recommendation of approval is also based on all provisions outlined in Part 6 being addressed. **With those provision, it is reasonable and in the public interest to approve the Conditional District Rezoning Plan.**	APPROVAL: In considering the proposed rezoning application R16-07; Oaks at Skybrook North Subdivision Subdivision Conditional District, the Planning Board recommends approval based on the Plan being consistent with **(insert applicable plan reference).** **It is reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**	APPROVAL: In considering the proposed rezoning application R16-07; Oaks at Skybrook North Subdivision Subdivision Conditional District, the Town Board recommends approval based on the Plan being consistent with **(insert applicable plan reference)**. **It is reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**
DENIAL:	DENIAL: In considering the proposed rezoning application R16-07; Oaks at Skybrook North Subdivision Conditional District, the Planning Board recommends denial based on **(consistent OR inconsistent) with (insert applicable plan reference).** **It is not reasonable and not in the public interest to amend the approved Rezoning Plan because… (Explain)**	DENIAL: In considering the proposed rezoning application R16-07; Oaks at Skybrook North Subdivision Conditional District, the Town Board recommends denial based on the Plan being **(consistent OR inconsistent) with (insert applicable plan reference).** **It is not reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**

General Application

Incomplete submissions will not be accepted. Please check all items carefully.

1. Application Type

Please indicate the type of application you are submitting. If you are applying for two (2) actions, provide a separate application for each action. **In addition to the application, the submission process for each application type can be found at**
http://www.huntersville.org/Departments/Planning/PermitsProcess.aspx

- ☐ CHANGE OF USE
- ☐ COMMERCIAL SITE PLAN
- ☑ CONDITIONAL REZONING
- ☐ GENERAL REZONING
- ☐ MASTER SIGNAGE PROGRAM
- ☐ REVISION to _____
- ☐ SPECIAL USE PERMIT

SUBDIVISION CATEGORIES: *Per the Huntersville Subdivision Ordinance*

- ☐ SKETCH PLAN
- ☐ PRELIMINARY PLAN
- ☐ FINAL PLAT(includes minor and exempt plats)
- ☐ FINAL PLAT REVISION
- ☐ FARMHOUSE CLUSTER

2. Project Data

Date of Application 1/10/17 (Updated from 5/24/16)

Name of Project Skybrook North Phase # (if subdivision) NA

Location Poplar Tent Road and Huntersville-Concord Road

Parcel Identification Number(s) (PIN) 011-102-01,13, 011-103-01,03,04,07,09,10,11,13,16,17,18,19, 021-081-04,06

Current Zoning District TR(CD) & R Proposed District (for rezonings only) TR-CD (New)

Property Size (acres) 175.05 Street Frontage (feet) _____

Current Land Use Vacant

Proposed Land Use(s) Residential (Single Family)

Is the project within Huntersville's corporate limits?
Yes ☐ No ☑ If no, does the applicant intend to voluntarily annex? Yes

3. Description of Request

Briefly explain the nature of this request. If a separate sheet is necessary, please attach to this application.
Remove a road crossing over PNG existing gas line, make minor internal revisions to the overall layout, increase open space & tree save and increase density from 180 to 220 single family lots.

4. Site Plan Submittals

Consult the particular type of *Review Process* for the application type selected above. These can be found at. http://www.huntersville.org/Departments/Planning/PermitsProcess.aspx .

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5. Outside Agency Information

Other agencies may have applications and fees associated with the land development process. The *Review Process* list includes plan documents needed for most town and county reviewing agencies.

For major subdivisions, commercial site plans, and rezoning petitions please enclose a copy of the Charlotte-Mecklenburg Utility *Willingness to Serve* letter for the subject property.

6. Signatures

*Applicant's Signature John T. Coley IV Printed Name John T. Coley IV

Address of Applicant P.O. Box 38 Holly Springs, NC 27540

Email coley@bpropnc.com

Property Owner's Signature (if different than applicant) _____

Printed Name John T. Coley IV

Property Owner's Address P.O. Box 38 Holly Springs, NC 27540 Email coley@bpropnc.com

* Applicant hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Skybrook, LLC.	Brian Pace	704-3651208	bpace@pacedevelop.com
Development Firm	Name of contact	Phone	Email
Yarbrough-Williams & Houle, Inc.	Marc Houle	704-556-1990	march@y-wh.com
Design Firm	Name of contact	Phone	Email

If Applying for a General Rezoning:
Please provide the name and Address of owner(s) of fee simple title of **each** parcel that is included in this rezoning petition. If additional space is needed for signatures, attach an addendum to this application.

If Applying for a Conditional Rezoning:
Every owner of each parcel included in this rezoning petition, or the owner (s) duly authorized agent, must sign this petition. If signed by an agent, this petition MUST be accompanied by a statement signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in filing this petition. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID PETITION. **If additional space is needed for signatures, attach an addendum to this application.**

Signature, name, firm, address, phone number and email of Duly Authorized Agent by owner needed below:

John T. Coley IV, Skybrook, LLC. P.O. Box 38 Holly Springs, NC 27540 919-869-2702 coley@bpropnc.com

If Applying for a Subdivision:
By signature below, I hereby acknowledge my understanding that the Major Subdivision Sketch Plan Process is a quasi-judicial procedure and contact with the Board of Commissioners shall **only** occur under sworn testimony at the public hearing.

John T. Coley IV

Contact Information

Town of Huntersville	Phone:	704-875-7000
Planning Department	Fax:	704-992-5528
PO Box 664	Physical Address:	105 Gilead Road, Third Floor
Huntersville, NC 28070	Website:	http://www.huntersville.org/Departments/Planning.aspx

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6. Signatures

*Applicant's Signature George H Jordan III Printed Name George H Jordan III

Address of Applicant P.O. Box 4422 Cary, N.C. 27519

Email George@GHJordan.com

Manager of Jordan Real Estate Holdings LLC.

Property Owner's Signature (if different than applicant) _____

Printed Name _____

Property Owner's Address _____ Email _____

* Applicant hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Development Firm	Name of contact	Phone	Email

Design Firm	Name of contact	Phone	Email

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Please provide the name and Address of owner(s) of fee simple title of **each** parcel that is included in this rezoning petition. If additional space is needed for signatures, attach an addendum to this application.

If Applying for a Conditional Rezoning:
Every owner of each parcel included in this rezoning petition, or the owner (s) duly authorized agent, must sign this petition. If signed by an agent, this petition MUST be accompanied by a statement signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in filing this petition. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID PETITION. **If additional space is needed for signatures, attach an addendum to this application.**

Signature, name, firm, address, phone number and email of Duly Authorized Agent by owner needed below:

_____

_____

If Applying for a Subdivision:
By signature below, I hereby acknowledge my understanding that the Major Subdivision Sketch Plan Process is a quasi-judicial procedure and contact with the Board of Commissioners shall **only** occur under sworn testimony at the public hearing.

_____

Contact Information

Town of Huntersville
Planning Department
PO Box 664
Huntersville, NC 28070

Phone: 704-875-7000
Fax: 704-992-5528
Physical Address: 105 Gilead Road, Third Floor
Website: http://www.huntersville.org/Departments/Planning.aspx

Last updated on 9/15/2015

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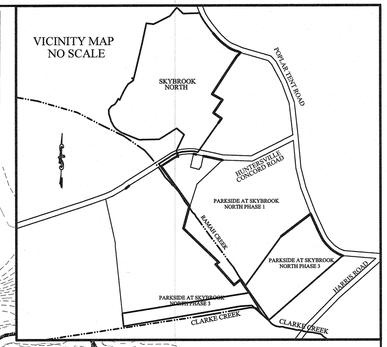
SHEET INDEX
SHEET 1 COVER SHEET
SHEET 2 PARCEL "A" REZONING PLAN

PERCENTAGE OF CHANGE					
PARCEL	ACREAGE	#LOTS	OPEN SPACE	TREE PRESERVATION TOTAL / SAVED	SPECIMEN TREES TOTAL / SAVED
A	approved 93.22 revision 96.39 +3.40%	approved 164 revision 204 +24.39%	approved 18.39 revision 22.68 +23.33%	approved 63.80/4.87 (7.6%) revision 66.5/9.02 (13.56%) +4.23% / +85.21%	approved 269/121 (45%) revision 269/121 (45%) 0.00%
B	approved 78.66 revision 78.66 0.00%	approved 16 revision 16 0.00%	approved 71.68 revision 71.62 0.00%	approved 75.88/44.11 (58.1%) revision 75.88/44.11 (58.1%) 0.00% / 0.00%	approved 63/27 (42.9%) revision 63/27 (42.9%) 0.00%
TOTAL	approved 171.88 revision 175.05 +1.84%	approved 180 revision 220 +22.22%	approved 90.07(52.4%) revision 94.30(53.8%) +4.70%	approved 139.68/48.98 (35%) revision 142.38/53.13 (37.3%) +1.93%/+8.47% (+6.5)	approved 332/148 (44.6%) revision 332/148 (44.6%) 0.00%

THE OAKS AT SKYBROOK NORTH
SKETCH/CONCEPT PLAN
EPM #366626

VICINITY MAP
NO SCALE



FORESTRY PROGRAM AREA
OPEN SPACE AREA
TREE SAVE AREA

PARCEL B TRACT 1

PARCEL B TRACT 2

Clarke Creek

METROLINA GREENHOUSES

18.91 ACRES PROPOSED FORESTRY PROGRAM AREA

100' S.W.I.M. BUFFER (UNDISTURBED)

100' S.W.I.M. BUFFER UNDISTURBED

30' EASEMENT RESERVED FOR MECKLENBURG COUNTY GREENWAY TRAIL WITHIN CMUD R/W

8.97 ACRES TREE SAVE AREA WITHIN 60' BUFFER

0.97 ACRES REFORESTED BUFFER IN ACCORDANCE WITH NC DIVISION OF FORESTRY GUIDLINES

AREA OF SCREENING CONSISTING OF A DOUBLE STAGGERED ROW OF LEYLAND CYPRESS

FEMA FLOOD FRINGE LINE-UPLAND SWIM BUFFER

FEMA FLOODWAY ENCROACHMENT LINE (0.5')

COMMUNITY ENCROACHMENT LINE (0.1')

PROPOSED HAMMERHEAD TURN AROUND

PARKSIDE AT SKYBROOK NORTH PHASE 1 DEVELOPMENT
DEED: 24275-184
TAX ID: 021-052-96
ZONED - R

100' SWIM BUFFER DEDICATED TO MECKLENBURG COUNTY GREENWAY

EXISTING PARKSIDE AT SKYBROOK NORTH PHASE 1

EXISTING VILLAGES AT SKYBROOK NORTH PHASE 2

HUNTERSVILLE-CONCORD ROAD SR #2448

MECKLENBURG COUNTY
CABARRUS COUNTY

MIDDLECREST DR. NW

ZONED - R

ZONED - TR(CD)

ZONED - OPS (VESTED)

TREESAVE AREA 8.88 AC.

TREESAVE AREA 6.94 AC.

FAIRWAY #17

FAIRWAY #16

30' EASEMENT RESERVED FOR MECKLENBURG COUNTY GREENWAY TRAIL WITHIN CMUD R/W

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED FOR COMPLIANCE PER ALL TOWN, COUNTY AND STATE REGULATIONS IN EFFECT AT TIME OF SUBMITTAL

NOTES:

1. ALL COMMON OPEN SPACE AND TREE SAVE AREAS SHALL REMAIN "IN PERPETUITY" AND A DEED RESTRICTION RECORDED
2. A 30' WIDE EASEMENT WITHIN THE CMUD SEWER RIGHT-OF-WAY FOR CONSTRUCTION OF A GREENWAY TRAIL IS TO BE PROVIDED. IF THIS IS ACCEPTABLE, THERE MUST BE CLARIFICATION THAT THE GREENWAY EASEMENT WILL BE ADJUSTED AT THE CONFLUENCE OF THE TWO CREEKS BASED ON DESIGN AND REQUIRED PERMITS (EX. CREEK CROSSING LOCATIONS). ASSIGNMENT OF WHEN EACH SECTION OF THE GREENWAY TRAIL WILL BE CONSTRUCTED, SHALL BE PROVIDED. (EX. AS PART OF TRACT "A"...)

SITE IS LOCATED IN THE CLARKE WATERSHED BASIN

EPM REFERENCE NUMBERS:
#366542 REZONING PLAN
#366626 SKETCH/CONCEPT PLAN

DEVELOPMENT SUMMARY:
TAX PARCELS: 011-103-01, 011-103-03 011-103-04, 011-103-07, 011-103-09, 011-103-10, 011-103-11, 011-103-13, 011-103-16, 011-103-17, 011-103-18, 011-103-19, 011-102-01, 011-102-13, 021-081-01, 021-081-04, 021-081-06, 021-081-14

LOCATION: NORTH & SOUTH OF HUNTERSVILLE-CONCORD ROAD SOUTH OF EASTFIELD ROAD
PRINCIPLE USE: RESIDENTIAL-SINGLE FAMILY
TOTAL SITE ACREAGE: 175.05 ACRES TOTAL
EXISTING ZONING: TR(CD)
PROPOSED ZONING: TR(CD)

LOT DATA:
AVERAGE LOT SIZE: 12,000 SF
MINIMUM LOT SIZE: 10,000 SF
AVERAGE LOT WIDTH: 77'
MINIMUM LOT WIDTH: 70'

OPEN SPACE CALCULATIONS:
URBAN OPEN SPACE: 1.93 AC. (SQUARE)
OPEN SPACE: 83.49 AC. (47.82%)
BMP OPEN SPACE: 8.87 AC.
TOTAL OPEN SPACE: 94.29 AC. (53.86%)

TREE PRESERVATION SUMMARY PARCELS "A" & "B":
% OF SITE COVERED BY TREE CANOPY - 81.32% (142.38 AC.)
% OF TREE CANOPY PRESERVATION REQUIRED - 35% (49.83 AC.)
% OF TREE CANOPY ACTUALLY SAVED - 40.24% (57.29 AC.)

SPECIMEN TREES
332 ON SITE
REQUIRED TO SAVE - 117 (35%)
ACTUALLY SAVED - 148 (44.6%)

NO.	DATE	REVISION	BY
5	1/13/17	REVISED PER TOWN OF HUNTERSVILLE AND LUESA COMMENTS AND ADDED 35 LOTS	WKD
4	5/10/16	REMOVED ROAD/GAS CROSSING, REVISED LOTS 14-18, ADDED LOTS 166-169	BTG
3	4/02/14	PER COMMENTS	YWH
2	10/02/13	UPDATED TREE SAVE AREA	YWH
1	3/13/12	ADDED NOTES 1-4 PER TOWN OF HUNTERSVILLE COMMENTS	BTG

SHEET TITLE
REZONING COVER SHEET

PROJECT
THE OAKS AT SKYBROOK NORTH SKETCH PLAN REVISION
TOWN OF HUNTERSVILLE, MECK. CO., N.C.
FOR: SKYBROOK, LLC

PROJECT NO.
SCALE 1"=200'
DATE 7/20/10
DRAWN BY BTG
CHECKED BY MAH
DRAWING NO.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14906 MARC ANTHONY HOULE
5/13/17

YARBROUGH-WILLIAMS & HOULE, INC.
Planning ○ Surveying ○ Engineering
(courier) 720 Windsor Oak Court Charlotte, North Carolina, 28273
(mailing) P.O. Box 1198 Pineville, North Carolina, 28134
704.556.1990 704.556.0505(fax)
NC Corporate Registration #C-0475

SHT 1 OF 2 SHTS

P:\PACS\Skybrook North\REZONING\REZONING.dwg, 3/13/2017 12:30:49 PM

TYPE "A" TYPICAL CONDITION ALL RESIDENTIAL

TYPE "A" TYPICAL SIDEYARD CONDITION ALL RESIDENTIAL

THIS DETAIL SHALL BE USED FOR ALL STREET CROSS SECTION AND LOT SIZES.

TYPE "A" TYPICAL SIDEYARD CONDITION ALL RESIDENTIAL

*Side load driveway must be located outside the sight triangle and the minimum distance from the face of the garage to the back of sidewalk is 20 feet

20' DEEP PARKING AREA REQUIRED REGARDLESS OF GARAGE ACCESS

BUILDING TYPE: TYPE "A" DETACHED HOUSE
BTL – BUILD TO LINE
SCSB – SIDE CORNER SETBACK

SCSB – MIN 10' (20' IF SIDE LOAD GARAGE) MAX 15'
BTL – MIN 20' MAX 50'
REARYARD – 25'
SIDEYARD – 5' MIN. W/16' BLDG SEPARATION

SLOPE ANALYSIS

%RANGE BEG.	%RANGE END	PERCENT
25.00	50.00	0.0
15.00	25.00	3.11
10.00	15.00	7.53
0.00	10.00	89.36

- SITE IS LOCATED IN THE CLARKE WATERSHED BASIN
- THERE ARE NO HERITAGE TREES LOCATED ON-SITE
- THERE ARE NO PERENNIAL STREAMS LOCATED ON-SITE

PROPERTY TO BE REZONED

TAX#	DB	OWNER	ADDRESS	ACREAGE
011-102-13	21419-628	MVC, LLC AND BRYAN PROPERTIES, INC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	11.77
011-103-01	21687-745	MVC, LLC BRYAN PROPERTIES, INC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	4.235
011-103-03	21363-888	MVC, LLC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	6.35
011-103-04	21606-153	CARMEN BELL COLEY AND BRYAN PROPERTIES, INC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	1.653
011-103-16	21538-755	MVC, LLC BRYAN PROPERTIES, INC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	7.255
011-103-07	21363-880	JOHN THOMAS COLEY III AND BARBARA BELL COLEY AND CARMEN BELL COLEY AND FAMILY TRUSTS	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	12.765
011-103-09	21364-821	JOHN THOMAS COLEY III AND BARBARA BELL COLEY AND CARMEN BELL COLEY AND FAMILY TRUSTS	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	4.797
011-103-10	22499-690	JOHN THOMAS COLEY III AND BARBARA BELL COLEY AND CARMEN BELL COLEY	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	4.982
011-103-11	22499-690	JOHN THOMAS COLEY III AND BARBARA BELL COLEY AND CARMEN BELL COLEY AND FAMILY TRUSTS	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	9.501
011-103-13	21363-867	MVC, LLC AND BRYAN PROPERTIES, INC	410 MARKET ST, SUITE 420 CHAPEL HILL, N.C., 27516	2.834
011-103-17	22096-670	JORDAN HOLDINGS, LLC	P.O. BOX 4422 CARY, NC, 27519	7.467
011-103-18	22096-662	JORDAN HOLDINGS, LLC	P.O. BOX 4422 CARY, NC, 27519	11.322
011-103-19	22096-653	BRANCH BANKING AND TRUST CO. FAMILY TRUST B (U/W-GEORGE H JORDAN JR)	P.O. BOX 2907 WILSON, NC, 27894	7.928
011-102-01	21454-146	MVC, LLC AND BRYAN PROPERTIES, INC	P.O. BOX 38 HOLLY SPRINGS, N.C., 27540	2.834

ADJOINING PROPERTIES

TAX#	DB	OWNER	ADDRESS	ACREAGE
011-302-01	27471-117	FAIRHAVEN, LLC	12601 EAST US HIGHWAY 60 GOLD CANYON, AZ, 85118	237.98
011-302-04	28297-174	FAIRHAVEN, LLC	12601 EAST US HIGHWAY 60 GOLD CANYON, AZ, 85118	37.03
011-103-05	02874-451	JOEY D DONNELL	15949 POPLAR TENT ROAD HUNTERSVILLE, NC, 28078	1.0
011-103-14	06176-870	JOEY D DONNELL	15949 POPLAR TENT ROAD HUNTERSVILLE, NC, 28078	1.0
011-101-08	03908-362	ALBERTA C. DIXON	15924 POPLAR TENT ROAD HUNTERSVILLE, NC, 28078	1.01
011-101-10	27002-374	KY INVESTMENT AND MANAGEMENT, INC	127 HILLANDALE DR CHARLOTTE, NC, 28270	2.108
011-101-07	09294-384	STEPHEN P. DUFFEY AND TERESA D. DUFFEY	15712 POPLAR TENT ROAD HUNTERSVILLE, NC, 28078	4.147
011-101-09	03170-589	WILLIAM MERCER AND MARY MERCER	15700 POPLAR TENT ROAD HUNTERSVILLE, NC, 28078	0.14
011-102-16	19339-971	NEW DIRECTION CHURCH OF JESUS CHRIST, INC	8031 GERA EMMA DRIVE CHARLOTTE, NC, 28215	1.57
011-102-17	29466-636	EGW ENTERPRISES, LLC SAS INVESTMENTS, LLC	38 SALEM ST. THOMASVILLE, NC, 27360	6.41
011-102-15	19261-910	RICHARD O. SHIREY AND STACIE B. SHIREY	6207 GLENCAIRN CR. CHARLOTTE, NC, 28269	13.66
021-081-12	30581-595	METROLINA GREENHOUSES	17200 HUNTERSVILLE-CONCORD ROAD HUNTERSVILLE, NC, 28078	1.27
021-081-04	06220-611	METROLINA GREENHOUSES, INC.	16400 HUNTERSVILLE-CONCORD ROAD, HUNTERSVILLE, NC, 28078	13.22
011-103-02	16263-913	MARY DEOLA SIMMONS WILSON	1717 HUNTERSVILLE-CONCORD ROAD, HUNTERSVILLE, NC, 28078	2.0
021-081-14	25716-578	METROLINA GREENHOUSES, INC.	16400 HUNTERSVILLE-CONCORD ROAD, HUNTERSVILLE, NC, 28078	10.14
011-122-03	26997-527	TODD JOHNSON HELEN JOHNSON	16959 HUNTERSVILLE-CONCORD ROAD, HUNTERSVILLE, NC, 28078	18.88

PARCEL "A" DEVELOPMENT SUMMARY:

TAX PARCELS:
011-102-01, 011-102-13, 011-103-01, 011-103-03, 011-103-04, 011-103-07, 011-103-09, 011-103-10, 011-103-11, 011-103-13, 011-103-16, 011-103-17, 011-103-18, 011-103-19, 021-081-04

LOCATION: NORTH OF HUNTERSVILLE-CONCORD ROAD
PRINCIPLE USE: RESIDENTIAL-SINGLE FAMILY (DETACHED HOUSE)
TOTAL SITE ACREAGE: 96.39 ACRES
EXISTING ZONING: TR(CD)
PROPOSED ZONING: TR(CD)

LOT CALCULATIONS:

PROPOSED NUMBER OF LOTS:
PARCEL A – 204 (183–70' LOTS, 21–85' LOTS)
AVERAGE LOT SIZE: 12,123 SF
MINIMUM LOT SIZE: 70'x150', 85'x125'
MINIMUM LOT WIDTH: 70'
AVERAGE LOT WIDTH: 75.8'

PARCEL "A" OPEN SPACE CALCULATIONS:

URBAN OPEN SPACE: 1.51 AC (SQUARE)
BMP OPEN SPACE: 5.72 AC
OPEN SPACE: 15.45 AC
TOTAL OPEN SPACE: 22.68 AC (23.53%)

PARCEL "A" IMPERVIOUS AREA CALCULATIONS:

SITE AREA: 96.39 AC – CLARKE WATERSHED DISTRICT
IMPERVIOUS AREAS: ALLOWED– ACTUAL–
SIDEWALK: 142,946 SQ.FT (3.28 AC)
PAVEMENT: 334,589 SQ.FT (7.68 AC)
LOTS: 204 LOTS @ 4,500 SQ. FT/LOT = 918,000 SQ. FT (21.07 AC)
TOTAL IMPERVIOUS AREAS: 32.03 AC

TREE PRESERVATION SUMMARY PARCELS "A"

% OF SITE COVERED BY TREE CANOPY – 68.99% (66.5 AC)
% OF TREE CANOPY ACTUALLY SAVED – 13.56% (9.02 AC)

SPECIMEN TREES
269 ON SITE
121 (45.0%) SAVED — THERE ARE NO HERITAGE TREES ON-SITE

THE OAKS- LOT SF SUMMARY

LOT #	LOT SF	LOT WIDTH			
1	12616	86	103	10500	70
2	14856	110	104	11501	70
3	15068	88	105	12143	70
4	12750	85	106	10500	70
5	12750	85	107	10500	70
6	12750	85	108	13665	92
7	13668	87.4	109	10680	70
8	11013	70	110	12585	70
9	10875	70	111	12077	70
10	10494	75	112	10680	80
11	12662	70	113	10680	72
12	11088	70	114	10680	71
13	11088	70	115	10680	71
14	11088	70	116	10680	71
15	11088	70	117	10680	71
16	11088	70	118	12238	100
17	11088	70	119	11877	80
18	11994	70	120	13130	80
19	13190	66	121	13177	73
20	12628	65	122	10680	71
21	10061	65	123	10680	71
22	10926	65	124	10680	71
23	10807	65	125	10680	75
24	10787	65	126	10405	70
25	11582	75	127	10389	70
26	10500	70	128	10435	70
27	10500	70	129	10512	70
28	13302	70	130	10282	70
29	22703	70	131	10512	70
30	17636	75	132	10505	70
31	11838	73	133	10477	70
32	11354	81	134	10474	70
33	10822	77	135	10549	70
34	10067	70	136	10609	70
35	11302	95	137	10624	70
36	10220	73	138	10615	70
37	14162	101	139	10565	70
38	13598	97	140	10557	70
39	13789	86	141	10535	70
40	15794	70	142	10522	70
41	14997	70	143	10468	70
42	16063	70	144	10455	70
43	27877	70	145	10465	70
44	16646	70	146	10520	70
45	16582	70	147	10591	70
46	15917	70	148	10583	70
47	16025	70	149	10551	70
48	16579	70	150	10537	70
49	19624	70	151	10811	70
50	14819	100	152	10525	70
51	14243	94	153	10600	70
52	11764	70	154	10642	70
53	10745	70	155	10621	70
54	10036	70	156	10612	70
55	10080	70	157	10412	70
56	10216	70	158	11319	70
57	10036	70	159	11143	80
58	10006	70	160	12638	73
59	12817	120	161	10530	70
60	13124	82	162	10500	70
61	11840	74	163	10922	75
62	11840	74	164	11415	77
63	12889	74	165	10800	72
64	11840	74	166	10800	72
65	11840	74	167	10800	72
66	11840	74	168	10800	72
67	11840	74	169	10800	72
68	11840	74	170	10800	72
69	11840	74	171	10800	72
70	14310	90	172	10800	72
71	13249	85	173	11598	77
72	12000	80	174	11221	77
73	12000	80	175	10800	72
74	12000	80	176	10800	72
75	12000	80	177	10800	72
76	13402	85	178	10800	72
77	14155	90	179	10800	72
78	11400	76	180	10800	72
79	11400	76	181	10800	72
80	11400	76	182	12679	75
81	11400	76	183	17302	80
82	15330	100	184	13222	75
83	12338	80	185	11250	75
84	10800	72	186	13194	100
85	10800	72	187	17441	120
86	12937	85	188	14249	70
87	14044	75	189	13178	70
88	11250	75	190	12106	70
89	12180	85	191	11035	70
90	13719	92	192	14527	108
91	10500	70	193	10500	70
92	10500	70	194	11376	70
93	11384	70	195	12250	70
94	11500	75	196	12250	70
95	10813	70	197	17272	93
96	10500	70	198	15630	85
97	10500	70	199	15341	85
98	10500	70	200	19948	113
99	12366	81	201	18916	130
100	14257	95	202	15905	86
101	10500	70	203	12596	85
102	10500	70	204	12017	85
			LOT SF AVERAGE:	12123.21	
			LOT WIDTH AVERAGE:	75.8402	

NOTES:

1. Access (ingress/egress) locations and design shown on this sketch plan are subject to achieving vertical and horizontal sight distance(s), turn lane improvements (including right–of–way) and interaction with adjacent and opposing access points. Modifications to plan may result.
2. Build–to–line A line extending through a lot, which is generally parallel to the front property line and marks the location from which the principle vertical plane of the front building elevation must be erected; intended to create an even building facade line on a street. A Build–to range is established for each residential lot type.
3. For lots wider than 60 feet, driveways shall be no more than 20 feet wide as measured along the public street right–of–way for a detached house and two–unit attached house type. For three or more unit attached house types, driveway width shall not occupy more than 50% of the public street front of a lot as measured along the public street right–of–way. Driveways shall extend at least twenty (20) feet from a public right–of–way and public sidewalk easement to prevent on–site residential parking from encroaching into the public right–of–way or easement for a public sidewalk.
4. Large maturing street trees will be planted 40' on center within the required planting strip along both sides of all streets with the exception of rural parkways where existing trees can satisfy the street tree requirement. Small maturing street trees are to be used where overhead power lines exist.
5. All signage will be reviewed and permitted with preliminary plans.
6. Sewer and water services will be provide by Charlotte Water.
7. All intersections shall comply with Sight Triangles (35'x35') and Sight Distance (15'x250'),see Town of Huntersville Engineering Standards and Procedures Manual and Article 8.9 for required sight distances, and must be approved by the Town of Huntersville.
8. All applicable federal, state, and local environmental permits and approvals will be obtained by developer.
9. Street lighting plan shall be prepared by the power company in compliance with the Town of Huntersville Standards, and NCDOT where applicable.
10. All open space to be dedicated to the HOA. All common open space and tree save areas shall remain "in perpetuity" and a deed restriction recorded.
11. All lots will have roll out trash service and be served by cluster mailboxes per USPS.
12. No mechanical, electrical, ect. units may encroach into any setbacks.
13. Lots with 10,000 – 15,000 sf require 1 front yard tree and 2 rear yard trees, 15,001sf – 20,000sf require 2 front yard trees and 2 rear yard trees.(Article 7.7.3) Lots greater than 20,000sf require 3 front yard trees and 3 rear yard trees.(Article 7.7.3)
14. The property is subject to any easement and/or right–of–way of record.
15. Property is being rezoned to TR–CD to match with adjacent Parkside at Skybrook North Development. The purpose of this revision is to add 40 residential lots, make minor revisions to the open space and road layout.
16. All development and construction shall comply with all zoning and subdivision standards of the Town of Huntersville.
17. Building Elevations will be reviewed and approved with permitting of the house on each lot.
18. No mass grading will take place. Existing trees within the lots may be saved in addition to the tree save areas shown.
19. Any construction or use within the areas delineated by floodway fringe district boundary line and floodway district encroachment line is subject to all restrictions imposed by floodway regulations.
20. The property shall comply with Town of Huntersville and Mecklenburg County Bicycle and Greenway Master Plan.
21. Lots subject to flooding shall not be established in subdivisions except as provided in Section 7.280.
22. Direct access from lots to a thoroughfare is prohibited.
23. The developers of Skybrook North will work with Town of Huntersville to achieve the intent of the Master Greenway plan.
24. All retaining walls requiring special inspections (>5' in height) shall meet the requirements of the MCSBC chapter 17–special instructions as detailed per the Mecklenburg County Code Enforcement Special Inspections Process. Additionally, copies of the retaining wall plans shall be submitted to the Huntersville Engineering Department for review and approval. The Town of Huntersville shall be copied on all statements as special inspections, special inspections final reports, and design principal in responsible charge (DPIRC) letters.
25. The Town of Huntersville requires that all streets proposed to be taken over by the Town for maintenance be reviewed, inspected, and certified by a licensed professional engineer registered in the state of North Carolina for adequate construction. Review of street construction by the certifying Engineer is required throughout the construction process. Refer to the Town of Huntersville Engineering Standards and Procedures Manual for additional information including the required certification form.
26. This property may be subject to any easements and/or right–of–way of record.
27. All areas designated as common and/or urban open space shall be owned and maintained by the homeowners association and dedicated for perpetuity.

PARCEL 'A' TREE SAVE AREA
TREE SAVE IN LOTS: 0.82 AC.
TOTAL TREE SAVE: 9.02 AC.

SUMMARY OF APPROVED VARIANCES
(PER 10–16–06 REZONING AND SKETCH PLAN APPROVAL)

- WAIVER TO REDUCE SIDEYARD SETBACK TO 5FT MINIMUM WITH 16FT BUILDING SEPARATION
- WAIVER TO INCREASE BLOCK LENGTH PER BLOCK LENGTH TABLE
- WAIVER TO ELIMINATE CURB AND GUTTER REQUIREMENT ON HUNTERSVILLE–CONCORD ROAD AND POPLAR TENT ROAD
- WAIVER TO DECREASE THE 80' BUFFER ALONG POPLAR TENT ROAD

NO.	DATE	REVISION	BY
4	1/13/17	REVISED PER TOWN OF HUNTERSVILLE AND LUESA COMMENTS AND ADDED 35 LOTS	WKD
3	7/19/16	ADDED PARCEL(TAX PARCEL 011–102–01)	BTG
2	5/10/16	REMOVED ROAD/GAS CROSSING, REVISED LOTS 14–18, ADDED LOTS 165–169	BTG
1	3/13/2	ADDED NOTES 1–4 PER TOWN OF HUNTERSVILLE COMMENTS	BTG

SHEET TITLE

PARCEL "A" SKETCH PLAN

PROJECT

THE OAKS AT SKYBROOK NORTH
TOWN OF HUNTERSVILLE, MECK. CO., N.C.
FOR: SKYBROOK ,LLC

PROJECT NO.
SCALE 1"=100'
DATE 7/13/10
DRAWN BY YWH
CHECKED BY MAH
DRAWING NO.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14906 MARC ANTHONY HOULE 3/13/17

YWH NC Corporate Registration #C–0475

YARBROUGH-WILLIAMS & HOULE, INC.
Planning ◦ Surveying ◦ Engineering
(physical) 730 Windsor Oak Court Charlotte, North Carolina, 28273 704.556.1990
(mailing) P.O. Box 1198 Pineville, North Carolina, 28134 704.556.0505(fax)

SHT 2 OF 2 SHTS

P:\PACE\Skybrook North\REZONING\REZONING.dwg, 3/13/2017 12:31:03 PM

SKYBROOK

February 28, 2017

To: Janet Pierson, Town of Huntersville

From: Scott Moore, Skybrook Project Manager

CC: David Peete, Town of Huntersville
John Coley, Skybrook, LLC
Brian Pace, Skybrook, LLC
Marc Houle, YW&H

RE: Community Meeting Minutes for Rezoning Case R#16-07 (Skybrook North Plan Revision)

The R#16-07 community meeting was held at Huntersville Town Hall on Monday, February 27, 2017 and was opened at 6:03 PM.

In attendance, representing the Petitioners:
Scott Moore, Skybrook Project Manager

In attendance, representing the Town of Huntersville:
David Peete, Principal Planner
Dan Boone, Board of Commissioners
Charles Guignard, Board of Commissioners
Jennifer Davis, Planning Board

Representing the Adjacent Property Owners and/or Homeowners Associations:
Annie Dixon
Cheryl Milam
Steve & Teresa Duffy
Joey Donnell
Matt Siegel

Summary of items discussed at the meeting:

- Overall review of the plan's history and design which includes minor revisions to the layout, an increase in open space and tree save areas, an increase in density from 180 to 220 single-family lots, and the removal of an internal road crossing over a Piedmont Natural Gas line.
- How will drainage from this site affect the neighboring properties?
    - All drainage and run off will be directed to the water quality basins on site. By design there will be no issues with any drainage adversely affecting the adjacent properties.
- What is the minimum lot size being proposed for this project?
    - All lots will be above the minimum 10,000 square foot requirement (as stipulated in the TR Zoning District).
- Will this development be a part of Parkside at Skybrook North community?
    - There are no plans on making this a part of Parkside at Skybrook North. This will be a separate neighborhood which is currently named the Oaks at Skybrook North.
- How many total lots will there be for Parcel A (as identified on the plan) of the project?
    - The original approval shows 164 lots for Parcel A; this proposal will increase that number to 204. The other 16 lots were part of the overall original approval to the Skybrook North Plan (and they are located within the Parkside at Skybrook North community). These 16 lots are currently developed and recorded.
- You have identified and shown two entrances into the community, which entrance are you planning on installing first, once you start construction?
    - The first entrance has not been finalized but we are leaning towards starting on Huntersville-Concord Road.

- David Peete explained that as a part of the review, road improvements are looked at by staff and NCDOT. He stated that the original plan in 2006 required a TIA (Traffic Improvement Analysis). The TIA had identified several improvements including a stop light and turn lanes on Poplar Tent and Huntersville-Concord Roads. Those improvements have been installed due to development in adjacent communities. The staff and NCDOT have reviewed the TIA in reference to developing this section (Parcel A) in Skybrook North and have concluded that the increase in density of 40 lots will not warrant a change in recommendations on the roadway improvements that are required in developing this land.
    - Scott had explained that the improvements for this project call for roadway widening and turn lanes across the areas in front of community. The plan also will have a bike lane and sidewalks along the frontage.
    - There was a follow up question if these improvements will extend to Highway 73.
        - Scott explained that these improvements will be directly in front of the land that is owned for this project and that the improvements are not called for beyond those boundaries.
- A resident had pointed out that there was a plan for Poplar Tent was to be a four lane road in the future. They asked if the city will build this as a result of this community being developed.
    - David Peete had explained that these roads are owned by NCDOT and they would be responsible for constructing the future designs of these streets. (There was no timeline set or determined at the meeting that indicated when Poplar Tent would be widened to a four lane road. There were further comments about NCDOT straightening out a curve in the road near the site).
- There was a comment, that the traffic volume on Poplar Tent and Huntersville-Concord Roads was very high. One resident commented that they would prefer that the plan remain at 164 single family lots and not increase to 204 specifically just related to traffic volume.
- Given the lot sizes that are being provided, what is the developer projecting for a price point in this community?
    - This project is very similar to what we are developing in Parkside at Skybrook North with 70' and 85' wide lots. As of today and with this market we are seeing homes close in the $400s.
- When do you plan on starting construction on these lots?
    - We are currently going through the rezoning process and if everything is approved, we would have to go through construction plan approvals. We are projecting that a start will take place in October 2017 with homes being constructed in spring 2018.
    - David Peete explained the current track of the plans going through the rezoning revision and all the steps that remain before construction could start.
- Will city water be extended to this site?
    - Yes, we are making arrangements with Charlotte Water for all pipes to be extended to deliver service to this site.
- Will the zoning of our property (adjacent properties outside of this proposal) change from R-1?
    - David Peete explained that R-1 was an old Mecklenburg County Zoning Designation that the current zoning for this proposal is TR-CD. He explained the zoning districts and concluded that this proposal will not change their current zoning designation.
    - David also explained that part of the development process requires that the proposed plan be annexed into the town limits. This will not affect parcels outside of the proposal, but they could also consider annexing their properties into the town as well. Further discussion was held regarding what would need to take place and the benefits of annexing their property.
- David Peete explained that the town staff is still reviewing the current proposal and that if anyone is interested, the staff report will be available to them one week before the public hearing. David also explained the notification process that the town provides regarding the hearings and that they will be invited to participate.

The meeting was adjourned at 6:40 PM.

All neighborhood meeting notifications, materials, and minutes along with all items described in Article 11.4.3 (d) were delivered to the Huntersville Town Clerk's office on February 28, 2017.

SKYBROOK

February 9, 2017

Re: Rezoning Case R#16-07 Revisions to the Skybrook North Conditional Rezoning & Subdivision Sketch Plans; 175.05 Acres on Poplar Tent Road & Huntersville-Concord Road in Huntersville, NC. (Parcel IDs# 011-102-01, 13, 011-103-01, 03, 04, 07, 09, 10, 11, 13, 16, 17, 18, 19, 021-081-04)

Dear Property Owner,

On behalf of the applicants, we would like to invite you to attend a Neighborhood Meeting scheduled for February 27, 2017 at 6:00 PM at the Huntersville Town Hall (101 Huntersville-Concord Road) in Huntersville, NC to review revisions to the approved rezoning and subdivision sketch plans on the above-referenced properties. These plans are currently being reviewed by the Town of Huntersville Planning staff to make minor revisions to the overall layout including an increase in open space and tree save areas, to increase the overall density from 180 to 220 single family lots and to remove an internal road crossing over a Piedmont Natural Gas line. Please note that we have attached a site plan of the proposal on the back of this letter for your review.

If you have any questions or need additional information, please call me at 704.995.2507 or email me at scott@bpropnc.com. We look forward to seeing your there.

Sincerely,

Scott Moore
Project Manager
Skybrook Subdivision

SLOPE ANALYSIS
XRANGE BEG.
XRANGE END
PERCENT
25.00
50.00
0.0
15.00
25.00
3.11
10.00
15.00
7.53
0.00
10.00
99.36
RESERVED CORRIDOR FOR FUTURE GREENWAY TRAIL
2.00 AC TO BE DEDICATED TO MECKLENBURG COUNTY FOR GREENWAY PARK
NOW OR FORMERLY FAIRHAVEN, LLC TAX PIN# 3027-11-7717 DEED: 27417-117
PROPOSED 20' BELLSOUTH NATIONAL DOG EASEMENT (NOT ACCEPTED)
30' SWM BUFFER
BMP OPEN SPACE 1.97 AC.
BMP OPEN SPACE 7.65 AC.
BMP OPEN SPACE 2.82 AC.
OPEN SPACE 0.53 AC.
OPEN SPACE 0.08 AC.
URBAN SQUARE 0.20 AC.
URBAN SQUARE 0.21 AC.
20' RESIDENTIAL TREE SAVE 0.51 AC.
20' RESIDENTIAL TREE SAVE 0.22 AC.
20' RESIDENTIAL TREE SAVE - 0.13 AC.
20' RESIDENTIAL TREE SAVE - 0.09 AC.
20' RESIDENTIAL TREE SAVE - 0.08 AC.
20' RESIDENTIAL TREE SAVE - 0.28 AC.
20' REVEGETATED BUFFER
20' REVEGETATED BUFFER
NOW OR FORMERLY FAIRHAVEN, LLC TAX PIN# 3027-11-7717 DEED: 27417-117
NOW OR FORMERLY MARY SHANNON WILSON TAX PIN# 011-102-15 DEED: 10900-601
NOW OR FORMERLY RICHARD D. SHIBLEY, STACIE B. SHIBLEY DEED: 12231-910 TAX ID# 011-102-16
NOW OR FORMERLY ROW ENTERPRISES, LLC TAX PIN# 3027-10-6206 DEED: 20466-606 ZONED: R
NOW OR FORMERLY CONNECTION CHURCH RESURRECTION CHRIST, INC. DEED: 16288-0 TAX #01
NOW OR FORMERLY MARY MERRITT
EXISTING 60' PUBLIC R/W
PROPOSED ADDITIONAL 30' PUBLIC R/W
EXISTING 60' PUBLIC R/W
EXISTING 60' PUBLIC R/W
BARRICADE(TYP.) TOWN OF HUNTERSVILLE STANDARD, #706.1
BARRICADE(TYP.) TOWN OF HUNTERSVILLE STANDARD, #706.1
BARRICADE(TYP.) TOWN OF HUNTERSVILLE STANDARD, #706.1
SUPERCEDED BY TOWN OF HUNTERSVILLE STANDARD, #706.1
EXISTING 60' PUBLIC R/W
PROPOSED ADDITIONAL 30' PUBLIC R/W
EXISTING EASEMENT (SURVEYED LOCATION)
STREET 'A'
STREET 'B'
STREET 'C'
STREET 'D'
STREET 'E'
STREET 'F'
STREET 'G'
STREET 'H'
STREET 'I'
STREET 'J'
STREET 'K'
STREET 'L'
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STREET 'N'
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STREET 'OOO'
STREET 'PPP'
STREET 'QQQ'
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STREET 'TTTTT'
STREET 'UUUUU'
STREET 'VVVVV'
STREET 'WWWWW'
STREET 'XXXXX'
STREET 'YYYYY'
STREET 'ZZZZZ'
PROPERTY TO BE REZONED
ADJOINING PROPERTIES
PARCEL "A" DEVELOPMENT SUMMARY:
TAX PARCELS:
011-103-03, 011-103-13, 011-103-11, 011-103-01, 011-103-04, 011-103-12, 011-103-07, 011-103-08, 011-103-13, 011-103-14, 011-103-17, 011-103-16, 011-103-19, 021-061-04
LOCATION: NORTH OF HUNTERSVILLE-CONCORD ROAD
PRINCIPLE USE: RESIDENTIAL-SINGLE FAMILY (DETACHED HOUSE)
TOTAL SITE ACREAGE: 95.39 ACRES
EXISTING ZONING: TR(CD)
PROPOSED ZONING: TR(CD)
LOT CALCULATIONS:
PROPOSED NUMBER OF LOTS:
PARCEL A – 304 (183–70' LOTS, 21–80' LOTS)
MINIMUM LOT SIZE: 12,094 S.F.
MINIMUM LOT WIDTH: 70'
AVERAGE LOT WIDTH: 75.6'
PARCEL "A" OPEN SPACE CALCULATIONS:
URBAN OPEN SPACE: 1.31 AC (SQUARE)
BMP OPEN SPACE: 9.81 AC
OPEN SPACE: 10.93 AC
TOTAL OPEN SPACE: 22.08 AC (23.84%)
PARCEL "A" IMPERVIOUS AREA CALCULATIONS:
GROSS SITE AREA: 95.39 AC – CLARKE WATERSHED DISTRICT
IMPERVIOUS AREAS: ALLOWED= ACTUAL=
SIDEWALKS 145,649 SQ.FT (3.28 AC)
PAVEMENT 334,589 SQ.FT (7.68 AC)
LOTS 304 LOTS @ 4,500 SQ. FT/LOT = 1,368,000 SQ. FT (31.07 AC)
TOTAL IMPERVIOUS AREAS 32.03 AC
TREE PRESERVATION SUMMARY PARCELS "A"
% OF SITE COVERED BY TREE CANOPY = 65.06% (66.5 AC)
% OF TREE CANOPY ACTUALLY SAVED = 13.56% (9.02 AC)
SECONDARY TREES
289 (9.76%)
121 (45.0%) SAVED
PARCEL 'A' TREE SAVE AREA
TREE SAVE IN LOTS: 0.82 AC.
TOTAL TREE SAVE: 9.02 AC.
SUMMARY OF APPROVED VARIANCES
-WAIVER TO REDUCE SIDEYARD SETBACK TO 6FT MINIMUM WITH 16FT BUILDING SEPARATION
-WAIVER TO INCREASE BLOCK LENGTHS PER BLOCK LENGTH TABLE
-WAIVER TO ELIMINATE CURB AND GUTTER REQUIREMENT ON HUNTERSVILLE–CONCORD ROAD AND POPLAR TENT ROAD
SHEET TITLE
PARCEL "A" SKETCH PLAN
PROJECT
THE OAKS AT SKYBROOK NORTH
TOWN OF HUNTERSVILLE, MECK. CO., N.C.
FOR: SKYBROOK, LLC
YARBROUGH-WILLIAMS & HOULE, INC.
Planning ○ Surveying ○ Engineering
NC Corporate Registration #C-0475
DRAWING NO. 217-49C
SHT 3 OF 7

RH 16-07 Skybrook North
Neighborhood Meeting Mailing List
Mailed: USPS 2/9/17 12:30PM

ROBERT BANNER
1505 BURNING LANTERN LN
KANNAPOLIS, NC 28081

CORA BATTIES
16325 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

MARY BRADFORD BOST
16418 MCAULEY RD
HUNTERSVILLE, NC 28078

PAUL J CAPALDI
16317 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

JOHN T III MARITAL & COLEY
PO BOX 38
HOLLY SPRINGS, NC 27540

ALBERTA C DIXON
15924 POPLAR TENT CHURCH RD
HUNTERSVILLE, NC 28078

JOEY D DONNELL
15949 POPLAR TENT CHURCH RD
HUNTERSVILLE, NC 28078

STEPHEN P DUFFEY
15712 POPLAR TENT RD
HUNTERSVILLE, NC 28078

EGW ENTERPRISES LLC
38 SALEM ST
THOMASVILLE, NC 27360

FAIRHAVEN LLC
12601 EAST US HIGHWAY 60
GOLD CANYON, AZ 85118

DAVID N FARACE
15126 SKYPARK DR
HUNTERSVILLE, NC 28078

H KEVIN GEDNEY
15026 SKYPARK DR
HUNTERSVILLE, NC 28078

DONNA M GILMORE
16311 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

HD SPE SKYBROOK LLC
ONE MARITIME PLAZA
SAN FRANCISCO, CA 94111

DWAYNE NELSON HENSLEY
10120 HARRIS RD
HUNTERSVILLE, NC 28078

KENMORE HINKSON
16321 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

TODD JOHNSON
16959 HUNTERSVILLE-CONCORD RD
HUNTERSVILLE, NC 28078

GEORGE H III JORDAN
PO BOX 4422
CARY, NC 27519

BRIAN KEITH
15120 SKYPARK DR
HUNTERSVILLE, NC 28078

KY INVESTMENT & MANAGEMENT INC
127 HILLANDALE DR
CHARLOTTE, NC 28270

LANRE M LADIPO
15107 SKYPARK DR
HUNTERSVILLE, NC 28078

GREGG A MATTHIESEN
16329 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

DAVID G MCALEXANDER
14703 LONG IRON DR
HUNTERSVILLE, NC 28078

DIANNE JONES MCVAY
16241 GRASSY CREEK DR
HUNTERSVILLE, NC 28078

WILLIAM MERCER
15700 POPLAR TENT CHURCH RD
HUNTERSVILLE, NC 28078

METROLINA GREENHOUSES INC
16400 HUNTERSVILLE CONCORD RD
HUNTERSVILLE, NC 28078

METROLINA GREENHOUSES INC
17200 HUNTERSVILLE-CONCORD RD
HUNTERSVILLE, NC 28078

MVC LLC
PO BOX 38
HOLLY SPRINGS, NC 27540

CHRIST INC NEW DIRECTION CHURCH OF JESUS
8031 GERA EMMA DR
CHARLOTTE, NC 28215

ELEASAR NGASSA
15102 SKYPARK DR
HUNTERSVILLE, NC 28078

EDDIE C PALMER
15114 SYKPARK DR
HUNTERSVILLE, NC 28078

PARKSIDE AT SKYBROOK NORTH HOA
6719-C FAIRVIEW RD
CHARLOTTE, NC 28210

KAREN A PORETTI
15034 SKYPARK DR
HUNTERSVILLE, NC 28078

DENNIS R RANAGAN
15018 SKYPARK DR
HUNTERSVILLE, NC 28078

BRYAN REDDING
15108 SKYPARK DR
HUNTERSVILLE, NC 28078

RICHARD O SHIREY
6207 GLENCAIRN CR
CHARLOTTE, NC 28269

SKYBROOK HOA
830 SKYBROOK DR
HUNTERSVILLE, NC 28078

SKYBROOK LLC
PO BOX 38
HOLLY SPRINGS, NC 27540

COMMUNITY ASSOC INC SKYBROOK
RIDGE TOWNHOMES
6719-C FAIRVIEW RD
CHARLOTTE, NC 28210

MARY DEOLA SIMMONS WILSON
17117 HUNTERSVILL CONCORD
HUNTERSVILLE, NC 28078

THE PAVILION HOA
1910 S BLVD STE 200
CHARLOTTE, NC 28203

Mayor John Aneralla
15705 Framingham Lane
Huntersville, NC 28078

Commissioner Melinda Bales
15426 Ranson Road
Huntersville, NC 28078

Commissioner Dan Boone
317 Southland Road
Huntersville, NC 28078

Commissioner Mark Gibbons
13818 Bramborough Road
Huntersville, NC 28078

Commissioner Rob Kidwell
7603 Rolling Meadows Ln
Huntersville, NC 28078

Commissioner Danny Phillips
14720 Brown Mill Road
Huntersville, NC 28078

Commissioner Charles Guignard
P.O. Box 1766 (201 Sherwood Drive)
Huntersville, NC 28070

Hal Bankirer
17206 Linksview Lane
Huntersville, NC 28078

Jennifer Davis
7530 McIlwaine Road
Huntersville, NC 28078

Catherine Graffy
15120 Pavilion Loop Drive
Huntersville, NC 28078

JoAnne Miller
13900 Asbury Chapel Road
Huntersville, NC 28078

Adam Planty
12327 Cross Meadow Road
Huntersville, NC 28078

Joe Sailers
9332 Westminster Drive
Huntersville, NC 28078

Ron Smith
15902 Gathering Oaks
Huntersville, NC 28078

Stephen Swanick
12903 Heath Grove Drive
Huntersville, NC 28078

Susan Thomas
10215 Lasaro Way
Huntersville, NC 28078

Gerry Vincent
PO Box 664
Huntersville, NC 28070

Janet Pierson
PO Box 664
Huntersville, NC 28070

David Peete
PO Box 664
Huntersville, NC 28070

Town of Huntersville
NORTH CAROLINA

Received:_____
Complete Application:
Yes:_____
No:_____

Adequate Public Facilities (APF) Application

Section I: Background Information

Unless otherwise exempt by the terms of the Adequate Public Facilities Ordinance (APFO), this APF Application shall be completed and approved prior to the submission of an application for any of the following "development proposals," which are defined by Section 13.3 of the Town Zoning Ordinance to include the following applications for development:

- apartment building or attached house site plans involving twenty (20) or more dwelling units
- subdivisions involving more than twenty (20) lots
- nonresidential developments or uses of 10,000 square feet or more of floor area or creating fifty (50) or more peak hour vehicle trips or 500 or more daily vehicle trips, whichever is less; and
- developments meeting any one of the thresholds above, which requires any one of the following
  - a special use permit
  - any overlay district for which a site specific development plan is required under the provisions of this ordinance
  - a conditional zoning district
  - a subdivision sketch plan or a preliminary plan when required by the subdivision ordinance
  - a final plat when no sketch plan or preliminary plan is required

Note: Please refer to Article 14, Zoning Ordinance, to determine whether a separate Traffic Impact Assessment is required to be submitted with an application for the Development Proposal.

Pursuant to Section 13.6.2, Zoning Ordinance, a Pre-Submittal Meeting with the Zoning Administrator is required prior to submitting this application form. However, it is recommended that the Applicant become familiar with the requirements of this Application and of Article 13, Zoning Ordinance, prior to the Pre-Submittal Meeting

No application for a Development Proposal shall be accepted by the Town, until a Determination of Adequacy has been issued by the Zoning Administrator, pursuant to Article 13 of the Zoning Ordinance and other applicable Town Laws.

The APFO tests the capacity of three (3) Public Facilities to determine whether each is sufficient to absorb the impacts of the Development Proposal when it submitted. They are:

- Law Enforcement
- Parks and Recreation; and
- Fire Protection

Section II: Development Project Information

Please provide the following information.

Name of Applicant: Skybrook LLC.

Address of Applicant: 6719 -C Fairview Road, Charlotte NC 28210

Name of Property Owner: Skybrook LLC.

Address of Subject Property: 15645 Poplar Tent Church Road

Zoning - Current TR(CD)

Zoning - Proposed TR(CD)

Phone Number(s) of Applicant: 704-365-1208

Parcel Number of Subject Property: 011-102-11, 13, 011-103-01, 03, 04, 07, 09, 10, 11, 13, 16 011-103-17, 18, 19, 021-081-04

Size of Subject Property: 96.39 Ac.

Number of Phases & Total Sq. Ft.: One Phase

(If this Development Proposal will be phased, please see Section III below.)

Number of Phases & Sq. Ft. Included in this APF Request: _____

Number of Phases & Sq. Ft. Included in TIA Request (if applicable)

(Phases not included in initial calculations for APF and TIA will be subject to APF & TIA requirements prior to development of those phases)

Has any property adjacent to or within 300 feet of the Subject Property been developed by the Applicant or Property Owner since November 20, 2007? If so, please describe the nature, extent, and timing of that development and its location.

None

Describe in detail the nature of the proposed land use. Please address such matters as whether goods or services are to be sold or provided, any special transportation characteristics, the use of all enclosed and unenclosed portions of the property, and the square footage to be allocated to each land use. Space has been provided for indicating the extent of each proposed new land use as well as for a narrative description. Please attach additional pages as needed.

Non-Residential Land Uses Proposed	**Square Feet Gross Floor Area**

Residential Land Uses Proposed (please indicate whether single- or multi-family)	**Number of New Dwelling Units**
Single Family	220

Section III: Phasing

If the Proposed Development is to be completed pursuant to a Phasing Schedule, please indicate when each phase is to be completed and the extent of development proposed for each use within each Phase. Describe when approvals are expected to be sought including preliminary subdivisions, site plans, rezonings, building permits, and certificates of occupancy.

Preliminary Plan Review will begin immediately following the Rezoning and Sketch Plan Approval, with an anticipated approval set for September 2017.

Construction on the site will start in October 2017, with builder permits being sought after in March 2018.

This phasing and takedown of lots is dependent upon the real estate market.

Section IV: Past or Proposed Public Facility Contributions

Please describe any past or proposed dedication, construction, or funding provided by the applicant or the property owner in order to address the impacts of the Proposed Development on Public Facility capacity. Please explain the nature and timing of such contributions and whether or to what extent they will mitigate the impacts of the Proposed Development on Public Facility Capacity.

If the applicant is proposing a Mitigation Plan, as described in Article 13, Zoning Ordinance, where capacity of one or more Public Facility is not otherwise adequate to support the demand resulting from a Proposed Development, please include a draft Mitigation Plan with this Application.

John T. Cray IV 3/13/17

Applicant's Signature Date

Property Owner's Signature Date

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Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Alison Adams, Senior Planner
Subject: R16-12 Anchor Mill Conditional Rezoning

Petition #R16-12 Anchor Mill Conditional Rezoning, a request by Nate Bowman to rezone parcel 01902201 (+/- 30 acres), from Neighborhood Residential (NR) to Town Center Conditional District (TC-CD).

ACTION RECOMMENDED:
Introduction to the project

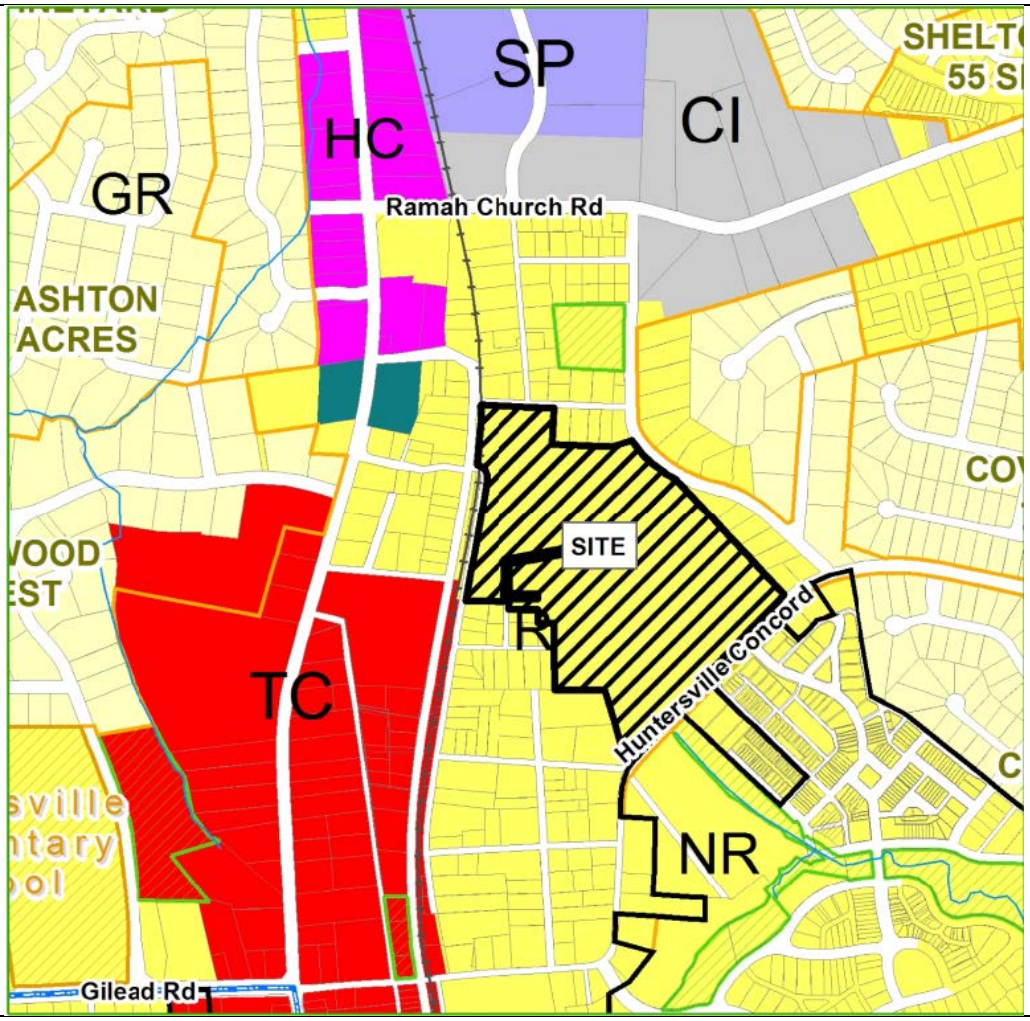
FINANCIAL IMPLICATIONS:

ATTACHMENTS:

	Description	Type
🗋	R16-12 Anchor Mill Staff Report Joint PH	Staff Report
🗋	R16-12 Anchor Mill Attachment A Application	Backup Material
🗋	R16-12 Anchor Mill Attachment B Plans	Backup Material
🗋	R16-12 Anchor Mill Attachment C Neighborhood Meeting Minutes	Backup Material
🗋	R16-12 Anchor Mill Attachment D APO Determination	Backup Material

Petition R16-12
Anchor Mill Conditional District Rezoning

PART 1: PROJECT SUMMARY



Applicant: Nate Bowman, Bowman Development (Attachment A: Application)

Property Owner: Town of Huntersville

Property Address: N/A

Project Size: (+/-) 30 acres

Parcel Numbers:

01902201

Current Zoning: Neighborhood Residential (NR)

Current Land Use: vacant

Proposed Zoning: Town Center—Conditional District (TC-CD).

Proposed Land Use: Mixed Use Development

1. Purpose: Rezone 30 acres north of Huntersville-Concord Road (west of Vermillion Subdivision) from Neighborhood Residential to Town Center – Conditional District (TC-CD). The purpose of the rezoning is to create a mixed use center with 165,000 square feet of commercial and 400 residential units. A Subdivision Sketch Plan and a Special Use Permit for this project has also been submitted concurrent with this Rezoning Plan and will go to the Planning Board on March 28, 2017. Attachment B: Conditional Rezoning Plan
2. Adjoining Zoning and Land Uses.
   North: *Neighborhood Residential (NR) – single-family Mill Village*.
   South: *Neighborhood Residential (NR) - single-family lots.*
   East: *Neighborhood Residential – Traditional Neighborhood Development Overlay (NR TND- O) – mixed use development (Vermillion Subdivision).*
   West: *Neighborhood Residential (NR) – single-family and Town Center (TC) – Civic and Residential development.*

3. A neighborhood meeting was held on January 26, 2016. The complete meeting summary is provided in Attachment C. Questions/concerns centered mainly on traffic and transportation improvements.
4. Notice for this rezoning petition was given via letters sent to adjoining property owners, a legal ad placed in the Charlotte Observer and posting rezoning signs on the property in four (4) locations.

PART 2: REZONING/SITE PLAN ISSUES

The proposed Conditional District Plan is generally compliant with the Zoning Ordinance and Subdivision Regulations, significant elements include:

- Public Street Connections are being made to Huntersville-Concord Road, Fourth Street, North Church Street, and Seagle Street to aid traffic to and from the site, as well as support the network of streets being created by the northern most round-about.
- Mixed Use: Residential (Townhomes, Condos and Apartments), Office, Retail, Civic and Recreational.
- Greenway land is being dedicated to aid the connection of the greenway in Vermillion to the Carolina Thread Trail (Mooresville to Charlotte Trail). Along the western property boundary abutting the rail line the Carolina Thread Trail is being installed.
- A Special Use Permit is being requested by the applicant to obtain a retail use over 50,000 sq. ft. within a Shopfront Building located in Town Center.

The rezoning plan has been reviewed and several issues must be addressed:

- A storefront buildings primary entrance is required to be located on a public street
- Block length is over 500 feet on two of the internal streets
- Internal and external parking lot landscape
- Cross-section of Fourth Street
- Bike Lane is required along the entire frontage of development on Huntersville-Concord Road
- Possible non-conforming lots with the Glendale realignment
- Greenway location

Staff met with the applicant on February 22, 2017 to discuss the outstanding items. The applicant agreed to correct all items.

PART 3: TRANSPORTATION ISSUES

A TIA for the development was received on 1/31/17 with review comments provided to the applicant on 2/17/17. The review comments identified major issues with the results of the TIA to require a resubmittal. A revised TIA was received on 2/21/17 and is currently under review. NCDOT provided initial comments that stated that the Town comments needed to be addressed prior to NCDOT completing their review.

Comments on the site plan include:

- Revisions to the preliminary stormwater layout to comply with design standards
- Revisions to the Huntersville-Concord Road typical section
- A concept of how to reroute the existing sewer line that goes across the middle of the site
- A list of roadway improvements to meet the requirements of Article 14 (Traffic Impact Analysis) of the Zoning Ordinance
- Bike lane to be added along entire site frontage
- Phasing plan not provided
- Revisions to parallel parking space locations due to sight distance issues

- Revisions to site access driveways along Seagle/Walters Street
- Revisions and additional information needed regarding Church Street connection and Glendale Drive connections
- Revisions to the public street in front of Retail Building A
- Minimum of 7 feet of sidewalk needed between parking spaces directly adjacent to the sidewalk
- Depict how improvements to Huntersville-Concord Road will conceptually tie into existing Huntersville-Concord Road.
- Additional improvements will likely be required to existing Cinnabar Place. Those need to be conceptually shown on the plans
- Access to Hill Street from Huntersville Concord Road to be revised to right-in/out only with a median
- Version 1 of the TIA recommended a mini-circle at the intersection of Glendale Drive at Cinnabar Place
- Revisions and additional site plan notes

Staff met with NCDOT and the Development Team on March 17th. Progress was made to determine what both NCDOT and Staff would support; therefore comments should be addressed per the next submittal.

PART 4: ADEQUATE PUBLIC FACILITIES (APF)

Under the provisions of the APF Ordinance, all residential development greater than twenty (20) lots are required to receive a "Determination of Adequacy (DOA)" for the following public facilities: fire station, fire vehicles, police station, police vehicles, indoor park and recreation facilities, and parks acreage. The proposed CD Rezoning met the required threshold for submission of an APF application, and the proposed subdivision is subject to the requirements of the APFO.

A Determination of Adequacy (DOA) has been issued for the following public facilities: Fire Vehicles, Fire Stations, Police Vehicles, Stations, Indoor Park & Recreation Facilities and Park Acreage.

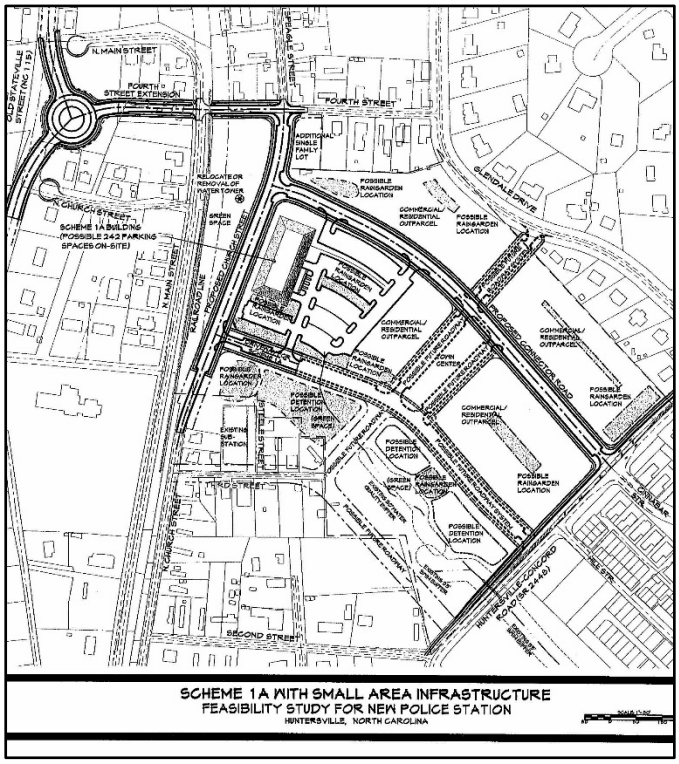
PART 5: REZONING CRITERIA

Article 11.4.7(d) of the Zoning Ordinance states that "in considering any petition to reclassify property, the Planning Board in its recommendation and the Town Board in its decision shall take into consideration any identified relevant adopted land-use plans for the area including, but not limited to, comprehensive plans, strategic plans, district plans, area plans, neighborhood plans, corridor plans, and other land-use policy documents".

Anchor Mill Charrette Master Plan was completed in 2000 showing the importance of a grid street network, combination of uses and an increase in density were prescribed to aid development. This area was believed to be the home of a transit station. Through the incorporation of parks, greenway connections and green space a sense of place was to be created. The design promoted multi-modal development with a focus on walkability.

In 2005, the Downtown Master Plan was completed stating the Anchor Mill site could have a multitude of uses. As an example, the plan showed the site to be redeveloped into higher density age targeted residential design. The transit station at that time had moved from Anchor Mill to just south within a ¼ mile of downtown (approximately Veteran's Park).

Upon the completion of the East Huntersville Plan (2007, shown below on the left), the area was labeled as an appropriate Transit-Oriented Development location, with a layout showing a network of streets, multi-uses, and green space.



2011, a mockup was presented to the Town Board to relocate the Huntersville Police Department within the Anchor Mill site (reference plan above on top right). A strategic road network was planned for the development. After discussion and a cost analysis was completed for the needed infrastructure, the Police Department would be located elsewhere.

The Town of Huntersville in 2011 adopted the 2030 Community Plan, stating the downtown area is proposed to be a thriving mixed-use center with a variety of housing types, retail establishments, restaurants, offices, civic and recreational uses. Within the 2030 Community Plan it was recommended that a Downtown Transportation System Plan and the Huntersville Strategic Economic Development Plan be created. The outcome of both plans identified that before tax base would increase investment in the downtown area would be required.

In each of the plans (Anchor Mill Charrette Master Plan, Downtown Master Plan, East Huntersville Plan, Feasibility study for the Police Station, 2030 Community Plan, Downtown Transportation System Plan and the Huntersville Strategic Economic Development Plan) referenced above consistently there is a desire for a connected street network, mixed use development and green infrastructure to be incorporated on the Anchor Mill site. The rezoning plan is supported by the following policies:

STAFF COMMENT – The 2030 Huntersville Community Plan <u>supports</u> this project through the following sections:

- **Policy H-1 & H-9: Development Pattern**. Continue to follow existing residential development pattern as reflected in "Map of Zoning Districts," focusing higher intensity development generally within two miles of the I-77/NC 115 corridor.
  <u>Comment:</u> The site is located within a mile of I-77 and adjacent to NC 115. The Anchor Mill site is adjacent to Town Center zoning to the west. Town Center allows for a mix of uses and does not regulate density. To the south east of the site, Vermillion is zoned Neighborhood Residential Traditional

Neighborhood Development Overlay (NR TND-O), which allows for an increase in density and a mix of uses due to the proximity of the proposed transit stop. Anchor Mill is in keeping with the surrounding development.

- **Policy H-3:** Mixed-Use Development Support and encourage self-sustained developments, where commercial and employment uses are in proximity to residential uses (see Commercial Development Policy CD-1 & CD-3).
  Comment: Due to the proposed uses within the Anchor Mill Plan a citizen can live, work and play without entering a vehicle.
- **Policy E-5: Vehicle Miles Travelled (VMT)** Support reduction in vehicle miles travelled (VMT), through capital investments in sidewalks, greenways, enhanced connectivity and mass transit (bus & rail).
  Comment: Sidewalks are being installed on all proposed Town Streets and along Huntersville-Concord Road. Greenway connections are being made as prescribed in the Town of Huntersville's Greenway and Bikeway Master Plan. In the future, the site is in proximity of a transit stop, should the rail line be used in that respect.
- **Policy T-5: Context-sensitive Design of Streets**: Continue to support "context-sensitive" design of streets and the selection of appropriate street section designs for residential, commercial and industrial developments.
  Comment: The internal streets are appropriately sized and once redline comments are addressed will create appropriate block lengths to slow traffic and encourage pedestrian activity. Also, the proposed cross-section for the portion of Huntersville-Concord Road provides context-sensitive design by providing adequate lane widths, bike lane (along the project frontage) and a sidewalk (10' wide to accommodate the proposed Greenway).
- **Policy T-6: Pedestrian Connections**: Support the installation of sidewalks, bikeways and greenway trails connecting residential, commercial, employment, recreational and institutional uses.
  Comment: The proposed cross-sections for Huntersville-Concord Road and the interior Town streets all provide sidewalks and street trees. Huntersville-Concord Road will provide a sidewalk and a bike lane on the north side along the project frontage (after redline comments are addressed). From the proposed signal west past the culvert along the frontage a 10' sidewalk is proposed to serve the greenway connection from Vermillion. The greenway will then head north into the site along the creek as proposed on the Town's Greenway/Bikeway Master Plan and connect the Carolina Thread Trail (Mooresville to Charlotte Trail).
- **Policy T-7: Traffic Impact Analysis Ordinance**: Continue to apply requirements of "Traffic Impact Analysis" Ordinance, including Level of Service and mitigation of impacts generated by new development.
  Comment: A TIA was required and the required transportation enhancements are outlined in Part 3 of this staff analysis.
- **Policy T-8: Street Connectivity**: Promote and require street connectivity in the Town of Huntersville among residential, employment, recreational and institutional uses.
  Comment: The proposed development provides two (2) connections to Huntersville-Concord Road, one connection to Fourth Street, one connection to North Church Street, extends Seagle Street to the southern property line, and realigns Glendale Drive to remove the curve.
- **Policy CD-3: Commercial Development Principles** Encourage mixed-use development pattern at key nodes as identified in Small Area Plans, ensuring an appropriate mix of residential, commercial and employment uses to maximize land use and transportation efficiencies, while minimizing environmental impacts.

Comment**:** The plan is proposing a combination of residential, commercial, civic and recreational uses incorporated within a dense design to aid multi-modal travel**.** The development is not encroaching into storm-water or post-construction buffers. The area designated for County greenway dedication is heavily wooded and will not be compromised.

- **Policy CD-5: Street Infrastructure**: Continue to require that adequate public infrastructure (roads, utilities, etc.) either exist or will be made available to support all new development.
  Comment: The proposed development is providing upgrades to Huntersville-Concord Road, connections to existing roads adjacent the subdivision, realigning Glendale Drive, as well as all other TIA-required improvements. The proposed development will connect to public water and sewer and is providing an adequate greenway easement to accommodate future planning.
- **Policy PF-2: Adequate Public Facilities**: Continue use of "Adequate Public Facilities Ordinance" to ensure that demand generated by existing and future growth and development for police, fire and parks & recreation capital facilities can be met by available supply of facilities.
  Comment: see Part 4 of this report.
- **Policy DT-1: Downtown Development** Continue to use the Downtown Master Plan, Gilead Road/US-21 Transportation and Land Use Vision Small Area Plan and East Huntersville Area Development Plan to guide future development in downtown.
  Comment: The Downtown Master Plan and the East Huntersville Area Plan both slate the Anchor Mill property to be a mix of uses with an integrated road system (reference plan maps above).
- **Policy DT-6:** Continue to enhance parks and recreation opportunities in the downtown, consistent with the "Downtown Master Plan," "East Huntersville Area Development Plan," "Parks & Recreation Master Plan" and "Greenway and Bikeway Master Plan."
  Comment: The proposed plan is accommodating Greenway connections and installation of the Carolina Thread Trail (Mooresville to Charlotte Trail) as prescribed in the Town of Huntersville Greenway and Bikeway Master Plan.

Article 11 Section 11.4.7(e) of the Zoning Ordinance states that: "in considering any petition to reclassify property the Planning Board in its recommendation and the Town Board in its decision should consider:

1. **Whether the proposed reclassification is consistent with the overall character of existing development in the immediate vicinity of the subject property.**
   STAFF COMMENT:
   The proposed Conditional District Rezoning for the Anchor Mill is supported by the 2030 Comprehensive Plan, as the property is located within the area eligible for intensification and fills a gap between existing properties. The proposal is also appropriate for the area by providing adequate infrastructure (which includes appropriate new roads, existing road upgrades and other transportation enhancements as well as providing adequate open space).

2. **The adequacy of public facilities and services intended to serve the subject property, including but not limited to roadways, transit service, parks and recreational facilities, police and fire protection, hospitals and medical services, schools, storm water drainage systems, water supplies, and wastewater and refuse disposal.**
   STAFF COMMENT:
   - A Transportation Impact Analysis was required – see Part 3 of this report.
   - The APF Ordinance Determination of Adequacy was required – see Part 4 of this report.

- Storm water drainage, water supplies and wastewater and trash disposal and a Willingness-to-serve letter have been provided from Charlotte Water, as well as the applicant is working toward achieving a PCO-1 storm water approval from Mecklenburg County.

3. **Whether the proposed reclassification will adversely affect a known archeological, environmental, historical or cultural resource."**
   STAFF COMMENT:
   Planning staff has no indication that the request will adversely affect known archeological, environmental, historical or cultural resources.

PART 6: STAFF RECOMMENDATION

The Anchor Mill Property Conditional District Rezoning Plan can be supported by staff subject to the following:

- All required TIA/Town/NCDOT required improvements are provided (see Part 3);
- All outstanding Transportation comments are addressed;
- Provide bike lane along all the Huntersville-Concord Road development frontage;
- Public Street is added in front of the anchor building (storefront – approx. 50,000 sq. ft.) to aid block breaks and establish the primary entry;
- All outstanding redline comments are addressed;
- The Town Board approves the Special Use Permit to allow for a 78,000 sq. ft. storefront building within the development.

PART 7: PUBLIC HEARING COMMENTS

Public Hearing on March 06, 2017 was continued to be heard on April 3, 2017

PART 8: PLANNING BOARD RECOMMENDATION

Planning Board scheduled to review as an FYI on March 28, 2017. On April 25, 2017 a recommendation should be made to the Town Board.

PART 9: ATTACHMENTS/ENCLOSURES

Attachments
A – Rezoning Application
B – Proposed Rezoning Plan
C – Neighborhood Meeting Report
D – APF Letter of Determination

PART 10: CONSISTENCY STATEMENT - R 16-12 Anchor Mill

Planning Department	Planning Board **(April 25, 2017)**	Board of Commissioners **(May 1, 2017)**
APPROVAL: In considering the proposed rezoning application R16-12; Anchor Mill Subdivision Conditional District Rezoning, the Planning staff recommends conditional approval as it is consistent with Implementation Goals H1, H3, H9, E5, T5-8, CD3, CD5, PF2, DT1 and DT6 of the 2030 Community Plan. The property is also located within the high intensity development area and the proposed density is consistent with surrounding developments (see Part 5). Recommendation of approval is also based on all provisions outlined in Part 6 being addressed. **With those provision, it is reasonable and in the public interest to approve the Conditional District Rezoning Plan.**	APPROVAL: In considering the proposed rezoning application R16-12; Anchor Mill Subdivision Conditional District, the Planning Board recommends approval based on the Plan being consistent with **(insert applicable plan reference).** **It is reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**	APPROVAL: In considering the proposed rezoning application R16-12; Anchor Mill Subdivision Conditional District, the Town Board recommends approval based on the Plan being consistent with **(insert applicable plan reference)**. **It is reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**
DENIAL:	DENIAL: In considering the proposed rezoning application R16-12; Anchor Mill Subdivision Conditional District, the Planning Board recommends denial based on **(consistent OR inconsistent) with (insert applicable plan reference).** **It is not reasonable and not in the public interest to amend the approved Rezoning Plan because… (Explain)**	DENIAL: In considering the proposed rezoning application R16-12; Anchor Mill Subdivision Conditional District, the Town Board recommends denial based on the Plan being **(consistent OR inconsistent) with (insert applicable plan reference).** **It is not reasonable and in the public interest to approve the Rezoning Plan because… (Explain)**

Town of Huntersville NORTH CAROLINA

General Application

Incomplete submissions will not be accepted. Please check all items carefully.

1. Application Type

Please indicate the type of application you are submitting. If you are applying for two (2) actions, provide a separate application for each action. **In addition to the application, the submission process for each application type can be found at**

http://www.huntersville.org/Departments/Planning/PermitsProcess.aspx

- ☐ CHANGE OF USE
- ☐ COMMERCIAL SITE PLAN
- ☑ CONDITIONAL REZONING
- ☐ GENERAL REZONING
- ☐ MASTER SIGNAGE PROGRAM
- ☐ REVISION to _____
- ☐ SPECIAL USE PERMIT

SUBDIVISION CATEGORIES: *Per the Huntersville Subdivision Ordinance*

- ☐ SKETCH PLAN
- ☐ PRELIMINARY PLAN
- ☐ FINAL PLAT(includes minor and exempt plats)
- ☐ FINAL PLAT REVISION
- ☐ FARMHOUSE CLUSTER

2. Project Data

Date of Application 12/1/16

Name of Project ANCHOR MILL Phase # (if subdivision) _____

Location 404 N. CHURCH ST

Parcel Identification Number(s) (PIN) 01902201

Current Zoning District NR Proposed District (for rezonings only) TC (CD)

Property Size (acres) 31 Street Frontage (feet) _____

Current Land Use VACANT

Proposed Land Use(s) MIXED USE DEVELOPMENT

Is the project within Huntersville's corporate limits?
Yes ☑ No ☐ If no, does the applicant intend to voluntarily annex? _____

3. Description of Request

Briefly explain the nature of this request. If a separate sheet is necessary, please attach to this application.

REZONE 31 ACRES FROM NR TO TC (CD) WITH CONDITIONS ON THE PLAN

4. Site Plan Submittals

Consult the particular type of *Review Process* for the application type selected above. These can be found at. http://www.huntersville.org/Departments/Planning/PermitsProcess.aspx .

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5. Outside Agency Information

Other agencies may have applications and fees associated with the land development process. The *Review Process* list includes plan documents needed for most town and county reviewing agencies.

For major subdivisions, commercial site plans, and rezoning petitions please enclose a copy of the Charlotte-Mecklenburg Utility *Willingness to Serve* letter for the subject property.

6. Signatures

*Applicant's Signature _____ Printed Name Robert Bowman

Address of Applicant 13815 Cinnabar Place Huntersville, NC 28078

Email bowman31@gmail.com

Property Owner's Signature (if different than applicant) Greg Ferguson

Printed Name Town of Huntersville, Greg Ferguson

Property Owner's Address 101 Huntersville-Concord Rd. Email gferguson@huntersville.org

* Applicant hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Development Firm	Name of contact	Phone	Email
Commercial Site Solutions	Gene Hinkle	864-855-5200	ghinkle@css-eng.com
Design Firm	Name of contact	Phone	Email

If Applying for a General Rezoning:
Please provide the name and Address of owner(s) of fee simple title of **each** parcel that is included in this rezoning petition. If additional space is needed for signatures, attach an addendum to this application.

If Applying for a Conditional Rezoning:
Every owner of each parcel included in this rezoning petition, or the owner (s) duly authorized agent, must sign this petition. If signed by an agent, this petition MUST be accompanied by a statement signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in filing this petition. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID PETITION. **If additional space is needed for signatures, attach an addendum to this application.**

Signature, name, firm, address, phone number and email of Duly Authorized Agent by owner needed below:

_____

_____

If Applying for a Subdivision:
By signature below, I hereby acknowledge my understanding that the Major Subdivision Sketch Plan Process is a quasi-judicial procedure and contact with the Board of Commissioners shall **only** occur under sworn testimony at the public hearing.

_____

Contact Information

Town of Huntersville
Planning Department
PO Box 664
Huntersville, NC 28070

Phone: 704-875-7000
Fax: 704-992-5528
Physical Address: 105 Gilead Road, Third Floor
Website: http://www.huntersville.org/Departments/Planning.aspx

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REZONING AND SKETCH PLANS
FOR
ANCHOR MILL
404 NORTH CHURCH STREET
HUNTERSVILLE, NC
REZONING R16-12

LOCATION MAP

PARCEL ID NUMBER: 01902201

DRAWING LIST

DRAWING LIST	SHEET
COVER SHEET	C-1.0
EXISTING CONDITIONS	RP-1.0
CONDITIONAL DISTRICT REZONING PLAN	RP-1.1
TREE SURVEY / PRESERVATION PLAN	RP-1.2
STREET SECTION PLAN	RP-1.3
GRADING PLAN	RP-2.0

GENERAL INFORMATION:

REZONING DEVELOPMENT DATA

LOCATION / LOT INFORMATION	
PROPERTY OWNER (CURRENT):	TOWN OF HUNTERSVILLE
SITE ADDRESS:	404 NORTH CHURCH STREET
PARCEL ID NUMBER:	01902201
PARCEL SIZE:	29.13 ACRES
EXISTING ZONING:	NR (NEIGHBORHOOD RESIDENTIAL)
EXISTING USE:	VACANT
EXISTING IMPERVIOUS SURFACE:	0.80 AC (DOES NOT INCLUDE PUBLIC ROADS)
PCCO DISTRICT:	HUNTERSVILLE
WATERSHED:	CLARKE
FLOOD PLAIN:	FEMA PANEL #3710465100J - DATE 03-02-2009 (NOT IN FEMA FLOOD ZONE)
PROPOSED / REQUIRED SITE DATA	
PROPOSED USE:	MIXED USE - COMMERCIAL & RESIDENTIAL
PROPOSED ZONING:	TC (TOWN CENTER)
BUILDING USE:	
COMMERCIAL:	165,000 SF
RESIDENTAIL	400 UNITS
PROPOSED IMPERVIOUS COVERAGE:	22.80 AC
REQUIRED PARKING:	
COMMERCIAL / OFFICE:	1 SPACE / 500 SF
RESIDENTIAL:	1.5 SPACES / UNIT
URBAN OPEN SPACE:	0.87 ACRES
NATURAL OPEN SPACE:	3.75 ACRES

SITE PLAN DATA TABLE

TOTAL ACREAGE:	29.13 ACRES
TOTAL SQUARE FEET:	
PRINCIPLE USES:	COMMERCIAL AND RESIDENTIAL (MIXED USE)
BUILDING TYPE:	STOREFRONT, WORKPLACE, APARTMENT / ATTACHED HOUSE, MIXED USE
ZONING DISTRICT:	TC-CD
PERCENTAGE IMPERVIOUS ALLOWED:	N/A - NOT IN A RESTRICTIVE WATERSHED
PERCENTAGE OF IMPERVIOUS SHOWN	74% (22.80 ACRES - NOT INCLUDING PUBLIC ROADS)
LOT COUNT (SHOWN CURRENTLY)	200 PROPOSED CURRENTLY
TOTAL NUMBER OF DWELLINGS (DETACHED / ATTACHED):	400 RESIDENTIAL
MIXED USE / # LIVE/WORK UNITS:	6
TOTAL SF OF NON RESIDENTIAL:	165,000
LOT SIZE RANGE:	TBD
SETBACKS AND BUILD-TO-LINES	
FRONT BTL RANGE OR SETBACK:	0 - 20'
CORNER SETBACKS:	0 - 5'
REAR SETBACKS:	NR
RIGHT SIDE SETBACK:	NR
LEFT SIDE SETBACK:	NR
WATERSHED INFORMATION	
IS THIS PROPERTY IN A REGULATED DISTRICT?	NO
WATERSHED DISTRICT:	CLARKE
LOW DENSITY / HIGH DENSITY:	HIGH DENSITY
PERCENTAGE OF ALLOWABLE IMPERVIOUS AREA:	N/A
PERCENTAGE OF IMPERVIOUS AREA SHOWN ON PLANS:	74%
AMOUNT OF LOT AREA SET ASIDE FOR FUTURE IMPERVIOUS:	N/A

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS/SUBMITTALS:

12-01-16 Initial Rezoning Plan Submittal
01-04-17 Initial Sketch Plan Submittal
01-24-17 Rezoning & Sketch Plan Resubmittal

OWNER/DEVELOPER:

Vermillion Anchor Mill Village, LLC
13815 Cinnabar Place
Huntersville, NC 28078
Phone: 704-875-9704
Email: bowman31@gmail.com

ENGINEER:

Commercial Site Solutions, Inc.
402 East 1st Avenue
Easley, SC 29640
PH: 864-855-5200
Contact: Gene Hinkle, PE
Email: ghinkle@css-eng.com

NORTH CAROLINA PROFESSIONAL SEAL 032313 ENGINEER GENE D. HINKLE

EXISTING EASEMENT INFORMATION

DESCRIPTION	DB	PG
TOWN OF HUNTERSVILLE (CURRENTLY CHARLOTTE WATER) 15' SEWER R/W	3996	468
SOLID WASTE PERMIT	5778	130
NORFOLK SOUTHERN RAILWAY 100' R/W	N/A	N/A
CHURCH STREET APPARENT R/W VARIES	N/A	N/A
HUNTERSVILLE-CONCORD ROAD SR#2448 APPARENT 60' R/W	N/A	N/A
GLENDALE DRIVE APPARENT 45' R/W	N/A	N/A
10' EASEMENT FOR QWEST COMMUNICATIONS CORPORATION	20018	405

LOCATION MAP

HERITAGE TREES:	0
SPECIMEN TREES ON SITE:	33
NUMBER OF SPECIMEN TREES SAVED:	15
PERCENTAGE OF SPECIMEN TREES REQ. TO SAVE:	30
PERCENTAGE OF SPECIMEN TREES SAVED:	45
PERCENTAGE OF SITE COVERED BY TREE CANOPY:	51
PERCENTAGE OF TREE CANOPY PRESERVATION REQ. BY DISTRICT:	0
PERCENTAGE OF TREE CANOPY SAVED:	20

*SEE RP-1.2 FOR TREE PRESERVATION AND TREE SAVE AREA INFORMATION.

*NOTES:

1. PC BUFFERS ESTIMATED FROM MECKLENBURG COUNTY GIS MAPS.

2. WETLANDS DELINEATION PER EXISTING CONDITIONS SURVEY BY LEN RINDNER DATED 6-2-16.

LEGEND

- POWER POLE WITH LINE
- BOUNDARY AS SURVEYED
- TIE LINE
- ADJACENT LINE BY DEED OR PLAT
- TOP OF BANK (CREEK)
- LINES NOT SURVEYED
- RIGHT OF WAY
- EXISITING CONTOUR
- SET IRON PIN (#5 REBAR)
- EXISTING IRON PIN (AS DESCRIBED)
- SANITARY SEWER MANHOLE
- NO POINTS FOUND OR SET
- POWER POLES
- LIGHT POLE
- SANITARY SEWER

NOTE:

EXISTING FEATURES BASED UPON SOUTH POINT SURVEYING ALTA SURVEY DATED 7-23-16 AND MECKLENBURG COUNTY GIS INFORMATION

N

0 80 160 240

SCALE: 1" = 80'

REVISIONS

ISSUED	COMMENT

NORTH CAROLINA PROFESSIONAL SEAL 032313 ENGINEER EUGENE D. SMALL 11-17-17

NORTH CAROLINA COMMERCIAL SITE SOLUTIONS, INC. C-3123 CERTIFICATE OF AUTHORIZATION

CSS Civil Engineers
402 East First Avenue
Easley, South Carolina 29640
(864) 855-5200
www.css-eng.com

PREPARED FOR:

MPV PROPERTIES
Merrifield Patrick Vermillion

EXISTING FEATURES PLAN

ANCHOR MILL MIXED USE DEVELOPMENT

404 NORTH CHURCH STREET
HUNTERSVILLE, NC 28078

Date: 12-1-16
Drawn: BDB
Checked: GDH

RP-1.0
Sheet

REZONING DEVELOPMENT DATA

LOCATION / LOT INFORMATION

PROPERTY OWNER (CURRENT):	TOWN OF HUNTERSVILLE
SITE ADDRESS:	404 NORTH CHURCH STREET
PARCEL ID NUMBER:	01902201
PARCEL SIZE:	29.13 ACRES
EXISTING ZONING:	NR (NEIGHBORHOOD RESIDENTIAL)
EXISTING USE:	VACANT
EXISTING IMPERVIOUS SURFACE:	0.80 AC (DOES NOT INCLUDE PUBLIC ROADS)
PCCO DISTRICT:	HUNTERSVILLE
WATERSHED:	CLARKE
FLOOD PLAIN:	FEMA PANEL #37104651OOJ - DATE 03-02-2009 (NOT IN FEMA FLOOD ZONE)

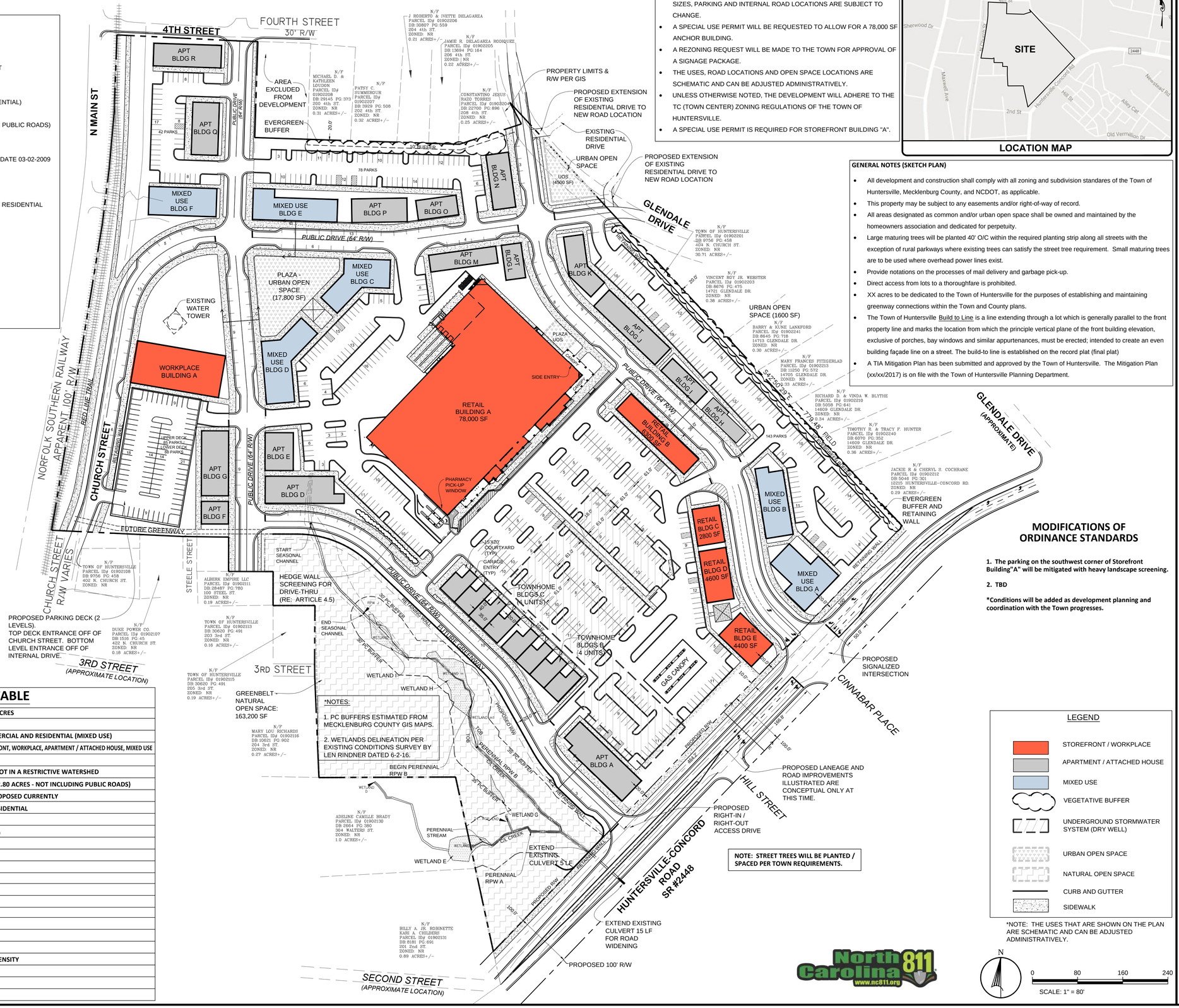
PROPOSED / REQUIRED SITE DATA

PROPOSED USE:	MIXED USE - COMMERCIAL & RESIDENTIAL
PROPOSED ZONING:	TC (TOWN CENTER)
BUILDING USE:	
COMMERCIAL:	165,000 SF
RESIDENTAIL	400 UNITS
PROPOSED IMPERVIOUS COVERAGE:	22.80 AC
REQUIRED PARKING:	
COMMERCIAL / OFFICE:	1 SPACE / 500 SF
RESIDENTIAL:	1.5 SPACES / UNIT
URBAN OPEN SPACE:	0.87 ACRES
NATURAL OPEN SPACE:	3.75 ACRES

LANDSCAPE NOTES

- All trees shall be a minimum of 2 inches in caliper and 8 feet in height at the time of planting, unless otherwise specified.
- All shrubs shall be a minimum of 3 feet in height at the time of planting with an expected minimum height of at least 6 feet at maturity unless otherwise specified.
- Once streets have been accepted by the town or the state, street trees shall be maintained and cared for by the property owner adjacent to the tree except in subdivisions where the property owners association provides maintenance and care. Prior to street acceptance, the developer shall be responsible for ensuring maintenance and care. Maintenance shall include replacement and trimming as necessary. A maintenance responsibility statement shall be provided on the Final Plat and documented within the homeowners association articles of incorporation or the restrictive covenants / deed restrictions for the development.
- All tree save areas must be specified on the recorded plat, individual recorded deeds, and all property association documents for land held in common.

- Lots less than 10,000 sf. 1 Front Yard, 1 Rear Yard Tree Required.
- Lots less than 10,000-15,000 sf. 1 Front Yard, 2 Year Yard Tree Required.
- Lots less than 15,001-20,000 sf. 2 Front Yard, 2 Rear Yard Tree Required.
- More than 20,000 sf. 3 Front Yard, 3 Rear Yard Tree Required.



ADDITIONAL SKETCH PLAN NOTES:

- THE PLAN AS SHOWN IS CONCEPTUAL IN NATURE. BUILDING TYPES, SIZES, PARKING AND INTERNAL ROAD LOCATIONS ARE SUBJECT TO CHANGE.
- A SPECIAL USE PERMIT WILL BE REQUESTED TO ALLOW FOR A 78,000 SF ANCHOR BUILDING.
- A REZONING REQUEST WILL BE MADE TO THE TOWN FOR APPROVAL OF A SIGNAGE PACKAGE.
- THE USES, ROAD LOCATIONS AND OPEN SPACE LOCATIONS ARE SCHEMATIC AND CAN BE ADJUSTED ADMINISTRATIVELY.
- UNLESS OTHERWISE NOTED, THE DEVELOPMENT WILL ADHERE TO THE TC (TOWN CENTER) ZONING REGULATIONS OF THE TOWN OF HUNTERSVILLE.
- A SPECIAL USE PERMIT IS REQUIRED FOR STOREFRONT BUILDING "A".

LOCATION MAP

GENERAL NOTES (SKETCH PLAN)

- All development and construction shall comply with all zoning and subdivision standares of the Town of Huntersville, Mecklenburg County, and NCDOT, as applicable.
- This property may be subject to any easements and/or right-of-way of record.
- All areas designated as common and/or urban open space shall be owned and maintained by the homeowners association and dedicated for perpetuity.
- Large maturing trees will be planted 40' O/C within the required planting strip along all streets with the exception of rural parkways where existing trees can satisfy the street tree requirement. Small maturing trees are to be used where overhead power lines exist.
- Provide notations on the processes of mail delivery and garbage pick-up.
- Direct access from lots to a thoroughfare is prohibited.
- XX acres to be dedicated to the Town of Huntersville for the purposes of establishing and maintaining greenway connections within the Town and County plans.
- The Town of Huntersville Build to Line is a line extending through a lot which is generally parallel to the front property line and marks the location from which the principle vertical plane of the front building elevation, exclusive of porches, bay windows and similar appurtenances, must be erected; intended to create an even building façade line on a street. The build-to line is established on the record plat (final plat)
- A TIA Mitigation Plan has been submitted and approved by the Town of Huntersville. The Mitigation Plan (xx/xx/2017) is on file with the Town of Huntersville Planning Department.

MODIFICATIONS OF ORDINANCE STANDARDS

1. The parking on the southwest corner of Storefront Building"A" will be mitigated with heavy landscape screening.

2. TBD

***Conditions will be added as development planning and coordination with the Town progresses.**

LEGEND

- STOREFRONT / WORKPLACE
- APARTMENT / ATTACHED HOUSE
- MIXED USE
- VEGETATIVE BUFFER
- UNDERGROUND STORMWATER SYSTEM (DRY WELL)
- URBAN OPEN SPACE
- NATURAL OPEN SPACE
- CURB AND GUTTER
- SIDEWALK

*NOTE: THE USES THAT ARE SHOWN ON THE PLAN ARE SCHEMATIC AND CAN BE ADJUSTED ADMINISTRATIVELY.

NOTE: STREET TREES WILL BE PLANTED / SPACED PER TOWN REQUIREMENTS.

N

0 80 160 240

SCALE: 1" = 80'

SITE PLAN DATA TABLE

TOTAL ACREAGE:	29.13 ACRES
TOTAL SQUARE FEET:	
PRINCIPLE USES:	COMMERCIAL AND RESIDENTIAL (MIXED USE)
BUILDING TYPE:	STOREFRONT, WORKPLACE, APARTMENT / ATTACHED HOUSE, MIXED USE
ZONING DISTRICT:	TC-CD
PERCENTAGE IMPERVIOUS ALLOWED:	N/A - NOT IN A RESTRICTIVE WATERSHED
PERCENTAGE OF IMPERVIOUS SHOWN	74% (22.80 ACRES - NOT INCLUDING PUBLIC ROADS)
LOT COUNT (SHOWN CURRENTLY)	200 PROPOSED CURRENTLY
TOTAL NUMBER OF DWELLINGS (DETACHED / ATTACHED):	400 RESIDENTIAL
MIXED USE / # LIVE/WORK UNITS:	6
TOTAL SF OF NON RESIDENTIAL:	165,000
LOT SIZE RANGE:	TBD
SETBACKS AND BUILD-TO-LINES	
FRONT BTL RANGE OR SETBACK:	0 - 20'
CORNER SETBACKS:	0 - 5'
REAR SETBACKS:	NR
RIGHT SIDE SETBACK:	NR
LEFT SIDE SETBACK:	NR
WATERSHED INFORMATION	
IS THIS PROPERTY IN A REGULATED DISTRICT?	NO
WATERSHED DISTRICT:	CLARKE
LOW DENSITY / HIGH DENSITY:	HIGH DENSITY
PERCENTAGE OF ALLOWABLE IMPERVIOUS AREA:	N/A
PERCENTAGE OF IMPERVIOUS AREA SHOWN ON PLANS:	74%
AMOUNT OF LOT AREA SET ASIDE FOR FUTURE IMPERVIOUS:	N/A

REVISIONS

ISSUED	COMMENT

NORTH CAROLINA PROFESSIONAL SEAL 032313 ENGINEER EUGENE B. PHILLIPS 1-17-17

NORTH CAROLINA COMMERCIAL SITE SOLUTIONS, INC. C-3123 CERTIFICATE OF AUTHORIZATION

CSS Civil Engineers
402 East First Avenue
Easley, South Carolina 29640
(864) 855-5200
www.css-eng.com

PREPARED FOR: MPV PROPERTIES Merrifield Patrick Vermillion

CONDITIONAL DISTRICT REZONING PLAN

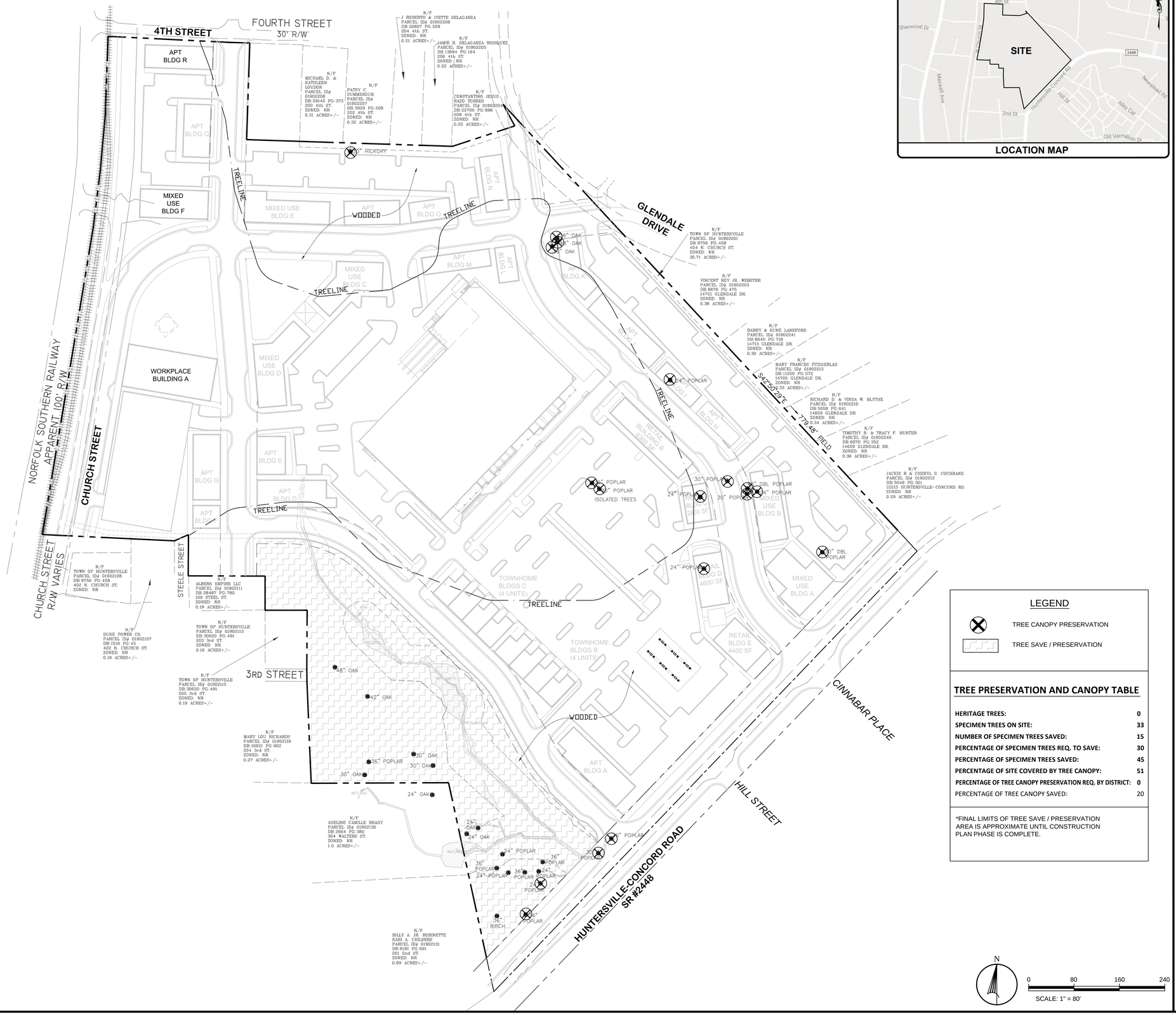
ANCHOR MILL MIXED USE DEVELOPMENT

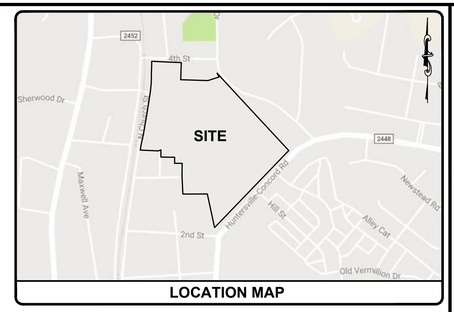
404 NORTH CHURCH STREET
HUNTERSVILLE, NC 28078

Date:	1-17-17
Drawn:	RM
Checked:	GDH

RP 1.1
Sheet

North Carolina 811 www.nc811.org





LOCATION MAP

LEGEND

TREE CANOPY PRESERVATION

TREE SAVE / PRESERVATION

TREE PRESERVATION AND CANOPY TABLE

HERITAGE TREES:	**0**
SPECIMEN TREES ON SITE:	**33**
NUMBER OF SPECIMEN TREES SAVED:	**15**
PERCENTAGE OF SPECIMEN TREES REQ. TO SAVE:	**30**
PERCENTAGE OF SPECIMEN TREES SAVED:	**45**
PERCENTAGE OF SITE COVERED BY TREE CANOPY:	**51**
PERCENTAGE OF TREE CANOPY PRESERVATION REQ. BY DISTRICT:	**0**
PERCENTAGE OF TREE CANOPY SAVED:	20

*FINAL LIMITS OF TREE SAVE / PRESERVATION AREA IS APPROXIMATE UNTIL CONSTRUCTION PLAN PHASE IS COMPLETE.

N

0 80 160 240

SCALE: 1" = 80'

REVISIONS

ISSUED	COMMENT

NORTH CAROLINA PROFESSIONAL SEAL 032313 ENGINEER EUGENE D. PATRICK 1-17-17

NORTH CAROLINA COMMERCIAL SITE SOLUTIONS, INC. C-3123 CERTIFICATE OF AUTHORIZATION

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Easley, South Carolina 29640
(864) 855-5200
www.css-eng.com

PREPARED FOR:

MPV PROPERTIES
Merrifield Patrick Vermillion

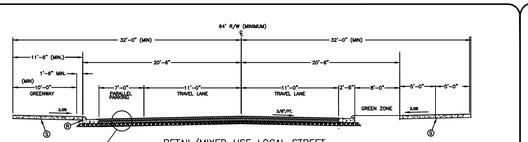
TREE SURVEY / PRESERVATION PLAN

ANCHOR MILL MIXED USE DEVELOPMENT

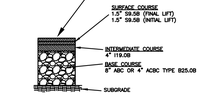
404 NORTH CHURCH STREET
HUNTERSVILLE, NC 28078

Date:	1-17-17
Drawn:	RM
Checked:	GDH

RP 1.2
Sheet



RETAIL/MIXED USE LOCAL STREET



TYPICAL PAVEMENT SECTION

KEY

Ⓒ 2'-6" STD. CURB AND GUTTER

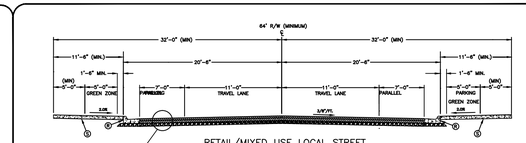
Ⓢ 4" CONCRETE SIDEWALK

NOTES:

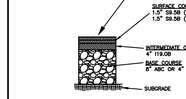
1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. SEE SECTION II. B. FOR ADDITIONAL DESIGN CRITERIA.
3. REFER TO STANDARD DRAWINGS 602.1 – 605.1 REGARDING SIDEWALK AROUND TREE GRATES. TREE GRATES SHALL BE PROVIDED WHEN TREES ARE LOCATED IN THE GREEN ZONE.
4. BASE COURSE TO EXTEND SIX INCHES BEYOND BACK OF CURB THEN TAPER OUT AT A FORTY-FIVE DEGREE ANGLE.
5. REFER TO STANDARD DRAWING 285.1 FOR PARALLEL PARKING LAYOUT.

NOT TO SCALE

SECTION A – A



RETAIL/MIXED USE LOCAL STREET



TYPICAL PAVEMENT SECTION

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Ⓒ 2'-6" STD. CURB AND GUTTER

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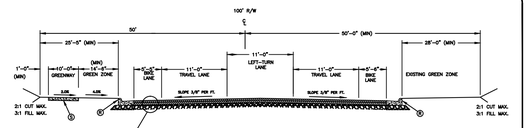
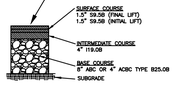
4. BASE COURSE TO EXTEND SIX INCHES BEYOND BACK OF CURB THEN TAPER OUT AT A FORTY-FIVE DEGREE ANGLE.
5. REFER TO STANDARD DRAWING 285.1 FOR PARALLEL PARKING LAYOUT.

NOT TO SCALE

SECTION B – B
SECTION C – C
SECTION D – D

REV. DATE
10/01/15
PTP. NO.
220.1





TYPICAL PAVEMENT SECTION

KEY

Ⓒ 2'-6" STANDARD CURB AND GUTTER

Ⓢ 4" CONCRETE SIDEWALK

Ⓣ 1'-6" MEDIAN CURB AND GUTTER

NOTES:

1. SIDEWALK SHALL BE PROVIDED ON BOTH SIDES OF THE STREET.
2. SEE SECTION II. B. FOR ADDITIONAL DESIGN CRITERIA.
3. FOR MEDIAN DIVIDED FACILITIES, A MINIMUM SIXTEEN (16) FOOT WIDE MEDIAN WITH ONE FOOT SIX INCH CURB AND GUTTER IS NEEDED. IF A LEFT-TURN LANE IS NOT NEEDED, THE MEDIAN SHALL BE LANDSCAPED.
4. BASE COURSE TO EXTEND SIX INCHES BEYOND BACK OF CURB THEN TAPER OUT AT A FORTY-FIVE DEGREE ANGLE.

NOT TO SCALE

SECTION E – E
WITH MEDIAN AND BIKE LANES

REFERENCE RP-1.1 FOR SECTION LOCATIONS (ADDITIONAL SECTIONS WILL BE DEVELOPED AS PLAN PROGRESSES)

PRELIMINARY
NOT FOR
CONSTRUCTION

REVISIONS

ISSUED	COMMENT

NORTH CAROLINA PROFESSIONAL SEAL 032313 ENGINEER EUGENE D. HINKLE JR. 1-17-17

NORTH CAROLINA COMMERCIAL SITE SOLUTIONS, INC. C-3123 CERTIFICATE OF AUTHORIZATION

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www.css-eng.com

PREPARED FOR: MPV PROPERTIES Merrifield Patrick Vermillion

STREET SECTION PLAN

ANCHOR MILL MIXED USE DEVELOPMENT

404 NORTH CHURCH STREET
HUNTERSVILLE, NC 28078

Date: 1-17-17
Drawn: RM
Checked: GDH

RP-1.3
Sheet

Anchor Mill Neighborhood Meeting 1-26-2017

Nate opened up with a general overview of the project and discussion of plans

- TIA Study
- Road Improvements Overview
- 165,000 square feet of retail
- 400 Residential units

Questions from property owners

1. Brad Buckingham & Greg Austin - Do you plan to use Glendale as a cut through? No, we're going to be providing more connectivity to lessen traffic.
2. Vince - What's the name of the anchor tenant? Unable to disclose at this time.

3. John Lashley - How big is the anchor tenant building? 76,000 sq. ft.

4. Alice Berringer - What's the plan with grade and the removal of trees at the main entrance? There will be a road widening and we'll install landscaping.

5. Alice Berringer - Is there going to be a buffer behind the Glendale residents? Plan to install a retaining wall & landscaping.

6. Tim Robertson - Is there going to a tunnel along the greenway? No, very expensive

7. Cathleen Lauden - Asked about a walking trail behind 4th street? No path. There will be an evergreen buffer.

8. Bill Conger - What were the number of residential units? 400 residential units

9. Bill Conger - What's happening to the Warfield entrance to Vermillion? Realigning Church Street. Will look at connecting Warfied to Church for folks heading south

10. Bill Conger - Concerns about Cinnabar and traffic on Cinnabar? Plan to add more connecting points to lessen traffic.

11. Bill Conger - Does Huntersville - Concord Road have enough right of way for future growth? Providing a 100' buffer

12. How wide will Church Street & Walter Street be in the realignment happens? It'll be a 2 lane collector street.

13. Roger Diedrich - Are the dimensions flexible with the retail buildings? Yes

14. Matt Brink - Will the Cinnabar entrance be used as the main entry for delivery trucks? More than likely it will be.

15. Matt Brink - Will there be a place to lock bikes? Absolutely

16. Matt Brink - Will there be a light at Holbrooks & 115? No

17. Matt Brink - Is this all the phases of the project? This is what the developer has submitted.

18. Greg Dawson - Would the developer consider a roundabout instead of a light at Cinnabar Place? The grocery store will likely require / need a light. A roundabout would use to much land.

19. Is there any proposed signage yet? No. Would have to go through the town approval process. Likely to be low profile signage.

20. John Lashley - Will there be any fuel pumps? Yes, the grocery's pumps

21. Are the plans & uses flexible? Yes, would love live work play concept. Would like some office uses.

22. Charles Gelsanliter - Lives in a house on 3rd Street. Concerned about having 3 streets surrounding his house. Nate suggested a private meeting.

23. Mary Richards - Has concerns regarding the Church Street realignment.

24. Concerns regarding contamination on the land? Environmental studies. Nate mentioned contact Bob Blythe regarding environmental work.

25. Why is the zoning being changed? The Town of Huntersville considers this is the best zoning.

26. What are the proposed heights of the buildings? 30'-40'

27. Are there plans for picnic tables or gazebo? Yes, planning for urban open spaces

28. Greg Dawson - Why loose connectivity to get across the railroad tracks? It's driven by the 2 way pair.

29. Roger Diedrich - Is there any room for a trail along Church Street? Yes, 12' trail

30. Todd Stise - Chairman of Greenway - Concerns about Charlotte Mooresville trail.

31. Matt Brink - Timeline of project? Depends on NCDOT. Could have everything to the Town of Huntersville in April. The project has to go to the NCDOT local division then Raleigh Congestion Management.

32. Sewer line? Plan to tie into and run into this project

33. Any development activity from 3rd Street to Huntersville - Concord? It depends on developers. What property owners want to sale and who doesn't. Nate believes the Town would like to recoup some of their investment of removing the trailers.

34. Bill Conger - Timeframe of the project? 1-2 years to start. 15-18 month construction

35. Will the project have a brewery? Would love to attract one of the bigger brewers in town. We'd show them a box and get the road improvements installed.

Anchor Mill Neighborhood Meeting

Name	Address	Email	Phone
Toribio Urquilla	303 WALTERS ST		862 452 5345
GREG DAWSON	14028 CINNABAR		704 578 1614
MARY Richards	204 Third St		704 875 1285
SEAN & SHANNON MALONE	11322 WARFIELD AVE		704-241-6153
Beth Rubb	13950 CINNABAR		60 592 1573
Pat Barber	10122 Vanguard		704-668-5722
Jose Cepeda	310 N Main St		704 743 3656
Abby Cepeda	310 N Main St		704 288-6932
Kathy Jones	104 Walters St		704.575.1414
Roger Diedrich	10128 Vanguard Pkwy		704-727-0554
Tim Robinson	10403 Drake Hill Dr.		704-464-1014
Terah Robinson	" " " "		
KATHLEEN LOUDON	200 4th St		704 948 4004
MARK GIBBONS	13818 BRAMBOROUGH RD		704 340 5544
Charles Gelsanliter	201 Third Street	cgelsanliter@yahoo.com	704-957-9257
Mishell Yates	205 N. Main St	Mishell_Y@hotmail.com	704 724 3857
MATT BRINK	13019 SERENITY St.	MATT.BRINK@VERMILLION	HOA@GMAIL.COM
[illegible] & TOMI LATTA	20009 VERLAINE	WILLIAM LATTA@[illegible]	[illegible]
DICK KUAPIK	114 GLENDALE DR.		704-728-7894
DREW CODY	11317 WARFIELD AVE	CODYAN@LIVE.COM	803.517.2115
JoAnn Miller	13900 ASBURY CHAPEL RD	JBM1943@Bellsouth.net	980-522-9815

Anchor Mill Neighborhood Meeting

Name	Address	Email	Phone
Jerry Hollenback	17916 Pass Pond Ct. Davidson	mail@jghollenback.com	
JOHN LASHLEY	14814 ROSEMARY MYRTLE HUNT	JPL1@CAROLINA.RR.COM	704-226-6431
Tracy Hunter	14609 Glendale Dr. Huntersville	trh77nc@roadrunner.com	
ALICE BARRINGER	Vermillion		
Lacey Hampton	The Herald Weekly	Champton@lakenormanpublications.com	
Charles Tilson	104 W Church St	cst22401@gmail.com	
SIMON BEZER	13015 SERENITY ST HUILLE	SBEZER@GMAIL.COM	
Bradley Buckingham	200 Glendale Rd Hville	2bucks62@gmail.com	
Bill Conger	P.O. Box 966 Huntersville	bill.conger@attonet	
SARAH R MCALLAY	P.O. Box 355 Huntersville	SRMCALLAY@AOL.COM	

Bowman Development Group, Inc.

January 16, 2017

SUBJECT: Notice of neighborhood meeting for a subdivision rezoning and sketch plan review of approximately +/- 30.43 acres located on North Church Street and Huntersville-Concord Road.

To Whom It May Concern:

Recipients of this letter meet the notification requirements of the Town of Huntersville as being either adjacent landowners or neighborhood organizations with at least a portion of their residents located within 250 ft. of the subject property.

MEETING DETAIL:

6:00 p.m.
January 26th, 2017
Town of Huntersville Town Hall
101 Huntersville-Concord Road
Huntersville, NC 28078

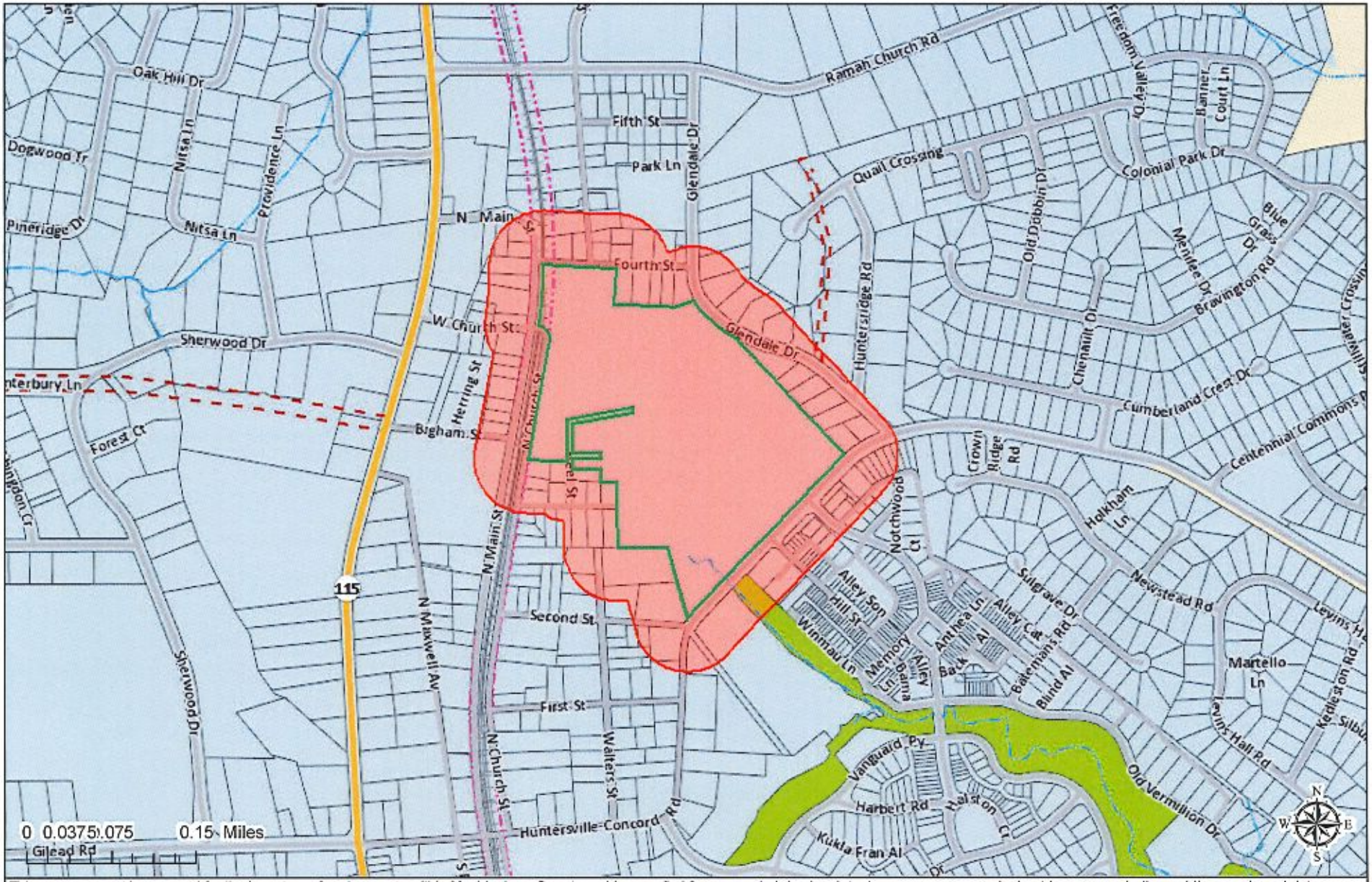
You are welcome to attend the above-mentioned neighborhood meeting. There will be an opportunity to ask questions about the proposed subdivision.

Sincerely,

Robert Bowman

Polaris 3G Map – Mecklenburg County, North Carolina

Date Printed: 1/3/2017 2:00:30 PM



This map or report is prepared for the inventory of real property within Mecklenburg County and is compiled from recorded deeds, plats, tax maps, surveys, planimetric maps, and other public records and data. Users of this map or report are hereby notified that the aforementioned public primary information sources should be consulted for verification. Mecklenburg County and its mapping contractors assume no legal responsibility for the information contained herein.

MECKLENBURG COUNTY, NC POLARIS 3G DEED REPORT

Date Printed: 01/03/2017

Buffer Distance: 250 Feet

No	Parcel ID	Owner Name	Mailing Address	Legal Description	Deed Book	Deed Page	Land Area
1	01901100	1. CAROLINA BLUE PROPERTIES,	371 CAMINO REAL RD MOORESVILLE NC 28117	L13-15 B A M7-725 100 HERRING	31297	71	1 LT (0.736 GIS Acres)
2	01901111	1. HUNTERSVILLE ARP CHURCH,	PO BOX 316 HUNTERSVILLE NC 28078	L1 BA M7-725	16534	897	0.161 AC
3	01901112	1. SWEETWATER ASSETS LLC,	PO BOX 673 HUNTERSVILLE NC 28070	L2 M7-273	30999	302	1 LT (0.151 GIS Acres)
4	01901113	1. DAVIS, MISHELL N 2.DAVIS, TRINA Y	205 N MAIN ST HUNTERSVILLE NC 28078	L3 M7-273	21622	214	1 LT (0.171 GIS Acres)
5	01901114	1. KENNERLY, TONY F	2720 OLD SPARTANBURG HWY WOODRUFF SC 29388	L4 & 5 BA M7-273	28034	694	1 LT (0.292 GIS Acres)
6	01901115	1. NORTH MECKLENBURG PROPERTIES LLC,	1347 KILLIAN RD STANLEY NC 28164	L6 BA M7-725	28023	849	1 LT (0.163 GIS Acres)
7	01901116	1. NORDENSTAM, LORI H 2.NORDENSTAM, LARS M	211 N MAIN ST DAVIDSON NC 28036	L7 BA M7-725	22099	835	1 LT (0.150 GIS Acres)
8	01901117	1. CROSS BUILDING LLC,	1050 RIVERSIDE AVE HOPEWELL VA 23860	L8 &9 BA M7-725	28945	612	1 LT (0.332 GIS Acres)
9	01901118	1. TILSON, CHARLES S	22401 TORRENCE CHAPEL RD CORNELIUS NC 28031	L10 M7-725	15675	278	1 LT (0.157 GIS Acres)
10	01901121	1. CAROLINA BLUE PROPERTIES,	371 CAMINO REAL RD MOORESVILLE NC 28117	L19 P16&18 M7-725	31297	71	1 LT (0.437 GIS Acres)
11	01901202	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L7 BG M7 649	30555	539	1 LT (0.118 GIS Acres)
12	01901203	1. COOK, CHARLES E JR 2.COOK, WANDA K	105 N CHURCH ST HUNTERSVILLE NC 28078	L6 BG M7-649	13183	308	1 LT (0.160 GIS Acres)
13	01901204	1. TORRES, ELVIRA C 2.TORRES, LEONARDO T	301 N MAIN ST HUNTERSVILLE NC 28078	L5 B G M7-649	19849	401	1 LT (0.175 GIS Acres)
14	01901205	1. GUIGNARD, CHARLES S	PO BOX 1766 HUNTERSVILLE NC 28078	NA	23945	858	0.51 AC
15	01901206	1. LEE, ERNIE J 2.LEE, ROBERTA S	PO BOX 143 HUNTERSVILLE NC 28070	L4 BG M7-649	08180	502	1 LT (0.320 GIS Acres)
16	01901207	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L3 BL G M7 649	30555	539	1 LT (0.389 GIS Acres)

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17	01901208	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L2 M24-834	30204	490	1 LT (0.180 GIS Acres)
18	01901209	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L1 M24-834	30204	490	1 LT (0.189 GIS Acres)
19	01901210	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L12 M24-594	30204	490	1 LT (0.224 GIS Acres)
20	01901211	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L11 M24-594	30204	490	1 LT (0.248 GIS Acres)
21	01901307	1. MONTOYA, GRACIELA LOPEZ 2.CEPEDA, JOSE M	310 N MAIN ST HUNTERSVILLE NC 28078	NA	25339	050	1 LT (0.418 GIS Acres)
22	01901308	1. BLACKBURN, DEBORAH KAY	PO BOX 1002 HUNTERSVILLE NC 28078	L1 BB M7-617	08029	937	1 LT (0.345 GIS Acres)
23	01901309	1. NORTH MECKLENBURG PROPERTIES LLC,	1347 KILLIAN RD STANLEY NC 28164	L2 BB M7-617	28023	849	1 LT (0.197 GIS Acres)
24	01901310	1. JHG PROPERTIES LLC,	10508 KERNS RD HUNTERSVILLE NC 28078	L3 BB M7-617	28793	846	1 LT (0.463 GIS Acres)
25	01901321	1. AUTEN, JOHN E 2.AUTEN, EHTEL L	103 SEAGLE ST HUNTERSVILLE NC 28078	L4B M27-36	02962	381	0.201 AC
26	01901510	1. GOOD, ELIZABETH A EDENS	PO BOX 653 HUNTERSVILLE NC 28070	L6 B D M7 617	04596	798	1 LT (0.302 GIS Acres)
27	01901511	1. DELAGARZA, J ROBERTO 2.DELAGARZA, IVETTE	12415 ASBURY CHAPEL RD HUNTERSVILLE NC 28078	P5 BD M7-617	17791	500	0.17 AC
28	01901513	1. DELAGARZA, JAIME ROBERTO 2.DELAGARZA, IVETTE	12415 ASBURY CHAPEL RD HUNTERSVILLE NC 28078	L3 BD M7-617	19328	674	1 LT (0.358 GIS Acres)
29	01901514	1. DELAGARZA, JAIME R 2.DELAGARZA, IVETTE	12415 ASBURY CHAPEL RD HUNTERSVILLE NC 28078	L2 BD M7-617	14721	533	1 LT (0.351 GIS Acres)
30	01901515	1. PHOENIX HOLDINGS LLC, 2.C/O REGINA BARRON,	PO BOX 36 HUNTERSVILLE NC 28070	LA M34-821	22738	905	0.131 AC
31	01901516	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L8-11 BD &P2-5 BE M11-111	02124	223	2 AC

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32	01901518	1. WILSON, DARLA 2.WILSON, BOBBY DALE	98 SEAGLE ST HUNTERSVILLE NC 28078	P5 BD M7-617	09662	418	0.13 AC
33	01901519	1. BHANDERI, HITESH S 2.BHANDERI, DIPTI H	16634 SUTTERS RUN LN HUNTERSVILLE NC 28078	L4B BD M23-571	30873	549	1 LT (0.184 GIS Acres)
34	01901520	1. BHANDERI, HITESH S 2.BHANDERI, DIPTI H	16634 SUTTERS RUN LN HUNTERSVILLE NC 28078	L4A BD M23-571	30873	549	1 LT (0.170 GIS Acres)
35	01902107	1. DUKE POWER CO, ATTN: TAX DEPT - PB05B	422 S CHURCH ST CHARLOTTE NC 28242	M1516-47	01516	245	1 LT (0.180 GIS Acres)
36	01902108	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L3 BI M7-619	09756	458	0.207 AC
37	01902110	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L4 BI M7-619	04887	228	1 LT (0.191 GIS Acres)
38	01902111	1. ALBERK EMPIRE LLC,	17825 PENINSULA CLUB DR N CORNELIUS NC 28031	L2 BH M7-619	28487	780	1 LT (0.186 GIS Acres)
39	01902112	1. GELSANLITER, CHARLES K	201 3RD ST HUNTERSVILLE NC 28078	L1 BH M7-619	14175	848	1 LT (0.172 GIS Acres)
40	01902113	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L4 BH M7-619	30620	491	1 LT (0.162 GIS Acres)
41	01902115	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L5 BH M7-619	30620	491	1 LT (0.187 GIS Acres)
42	01902116	1. RICHARDS, MARY LOU	PO BOX 32 HUNTERSVILLE NC 28070	L9 BG M7-619	10621	902	1 LT (0.274 GIS Acres)
43	01902117	1. RICHARDS, MARY LOU	PO BOX 32 HUNTERSVILLE NC 28070	L8 BG M7-619	10621	902	1 LT (0.310 GIS Acres)
44	01902118	1. RICHARDS, MARY LOU	PO BOX 32 HUNTERSVILLE NC 28070	L7 BG M7-619	10621	905	1 LT (0.310 GIS Acres)
45	01902119	1. WIRTH, JULIE	1614 TIPPAH AVE CHARLOTTE NC 28205	L6 BG M7-619	22452	872	1 LT (0.290 GIS Acres)
46	01902120	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L5 BG M7-619	30620	491	1 LT (0.218 GIS Acres)
47	01902121	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	L4 BG M7-619	30620	488	1 LT (0.115 GIS Acres)

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48	01902122	1. C/O REGINA BARRON, 2.PHOENIX HOLDINGS LLC,	PO BOX 36 HUNTERSVILLE NC 28070	L3 BG M7-619	22738	903	1 LT (0.123 GIS Acres)
49	01902125	1. WOODS, BEVERLY B	14024 SIMS RD HUNTERSVILLE NC 28078	NA	28922	339	0.579 AC
50	01902127	1. CHURCH OF GOD OF THE BIBLE THE, INCORPORATED	PO BOX 1002 HUNTERSVILLE NC 28078	L1 & 2 B4 M230-19	08093	092	1 LT (0.398 GIS Acres)
51	01902128	1. URQUILLA, ANA M 2.URQUILLA, TORIBIO	9019 DETROITER DR HUNTERSVILLE NC 28078	L3 & 4 B4 M230-19	29537	850	2 AC
52	01902129	1. URQUILLA, TORIBIO 2.URQUILLA, ANA M	9019 DETROITER DR HUNTERSVILLE NC 28078	L5&6 B4 M230- 19	29537	850	1 LT (0.396 GIS Acres)
53	01902130	1. BRADY, ADELINE CAMILLE	4348 WOODSBURY LN LINCOLNTON NC 28092	L4 & 5 ETC B5 M20-19	02664	380	1 AC
54	01902131	1. ROBINETTE, BILLY A JR 2.KARI A CHILDERS,	210 2ND ST ,UNIT A HUNTERSVILLE NC 28078	L7 & 8 P1-3 B5 M230-19	08181	691	0.89 AC
55	01902139	1. MOWRY, MARY ELIZABETH	PO BOX 422 HUNTERSVILLE NC 28070	P1-3 & P7-8 B5 M230-19	24291	308	0.57 AC
56	01902140	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28078	L1 BI M7-619	30620	491	0.18 AC
57	01902201	1. TOWN OF HUNTERSVILLE,	PO BOX 664 HUNTERSVILLE NC 28070	M7-623 &M12-1 &ETC	09756	458	3.043 AC
58	01902203	1. WEBSTER, VINCENT ROY JR	14721 GLENDALE RD HUNTERSVILLE NC 28078	L2 M23-307	08676	475	1 LT (0.380 GIS Acres)
59	01902204	1. TORRES, CONSTANTINO JESUS RAZO	208 FOURTH ST HUNTERSVILLE NC 28078	L1 BC M7-617	22700	896	1 LT (0.255 GIS Acres)
60	01902205	1. DELAGARZA-RODRIQUEZ, JAIME R	12415 ASBURYCHAPEL RD HUNTERSVILLE NC 28078	L2 BC M7-617	13594	164	1 LT (0.224 GIS Acres)
61	01902206	1. RODRIGUEZ, J ROBERTO DELAGARA 2.DELAGARZA, IVETTE	12415 ASBURY CHAPEL RD HUNTERSVILLE NC 28078	L3 BC M7-617	30807	559	1 LT (0.210 GIS Acres)
62	01902207	1. SUMMEROUR, PATSY C	PO BOX 148 HUNTERSVILLE NC 28070	L4 BC M7-617	03929	508	1 LT (0.321 GIS Acres)

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63	01902208	1. LOUDON, MICHAEL DENVER 2.LOUDON, KATHLEEN	200 FOURTH ST HUNTERSVILLE NC 28078	L5BC M7-617	29145	373	1 LT (0.306 GIS Acres)
64	01902210	1. BLYTHE, RICHARD DALE 2.BLYTHE, VONDA W	PO BOX 216 HUNTERSVILLE NC 28078	L5 M23-307	05058	641	1 LT (0.344 GIS Acres)
65	01902211	1. SPARKS, DARLENE J 2.SPARKS, JAMES R	625 HUNTERSVL-CONCORD RD HUNTERSVILLE NC 28078	L8 M23-307	07369	616	1 LT (0.257 GIS Acres)
66	01902212	1. COCHRANE, JACKIE R 2.COCHRANE, CHERYL S	PO BOX 496 HUNTERSVILLE NC 28070	L7 M23-307	05046	301	1 LT (0.290 GIS Acres)
67	01902213	1. FITZGERLAD, MARY FRANCES	14705 GLENDALE RD HUNTERSVILLE NC 28078	L4 M23-307	11250	572	1 LT (0.332 GIS Acres)
68	01902240	1. HUNTER, TRACY F 2.HUNTER, TIMOTHY R	14609 GLENDALE RD HUNTERSVILLE NC 28078	L6 M23-307	06070	352	1 LT (0.361 GIS Acres)
69	01902241	1. LANKFORD, JUNE 2.LANKFORD, BARRY	14713 GLENDALE RD HUNTERSVILLE NC 28078	L3 M23-307	08645	718	1 LT (0.293 GIS Acres)
70	01902305	1. MAGLA PRODUCTS INC **, 2.GLATT, HERBERT	700 SHUNPIKE RD CHATHAM NJ 07928	NA	07119	610	0.582 AC
71	01903202	1. HUNTERSVILLE A R P CHURCH,	PO BOX 316 HUNTERSVILLE NC 28078	NA	02045	471	4.329 AC
72	01903426	1. HUNTERSVILLE ARP CHURCH,	PO BOX 316 HUNTERSVILLE NC 28078	NA	02045	471	0.334 AC
73	01903602	1. NORRIS, STACY DENISE	PO BOX 1602 HUNTERSVILLE NC 28070	L5 B2 M230-19	11485	259	1 LT (0.221 GIS Acres)
74	01903606	1. BOWMAN DEVELOPMENT GROUP INC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L11 & 12 B2 M230-19	28154	890	2 LT (0.519 GIS Acres)
75	01903607	1. HINES REAL ESTATE GROUP LLC,	PO BOX 673 HUNTERSVILLE NC 28078	L9-10 B2 M230-19	29968	995	2 LT (0.521 GIS Acres)
76	01903612	1. HINES REAL ESTATE GROUP LLC,	PO BOX 673 HUNTERSVILLE NC 28078	L7A M31-557	28877	459	0.128 AC

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77	01903613	1. HINES REAL ESTATE GROUP LLC,	PO BOX 673 HUNTERSVILLE NC 28078	L7B M31-557	28877	459	0.122 AC
78	01905210	1. BOWMAN DEV GROUP INC, WILLIAM J BOWMAN JR &WF M	13815 CINNABAR PL HUNTERSVILLE NC 28078	L42 &43 M3-342 &STRIP	11558	258	2 LT (0.427 GIS Acres)
79	01905211	1. STINSON, W O (ET AL)	3550 DOGWOOD CT SALISBURY NC 28144	L40&41 M3- 342			2 LT (0.455 GIS Acres)
80	01905212	1. BOWMAN DEVELOPMENT GROUP INC,	13815 CINNABAR PL HUNTERSVILLE NC 28078	L24-36 U/M &P M3-342	22699	750	5.8 AC
81	01905258	1. VERMILLION COMMUNITY ASSOCIATION INC,	130 BEN CASEY DR STE 100 FORT MILL SC 29708	C/A M29-441	28550	235	0.28 AC
82	01905259	1. RAMSAY, JENNIFER R 2.MCGLOTHLIN, JONATHAN J	14040 ALLEY SON HUNTERSVILLE NC 28078	L18 M29-441	28532	685	0.11 AC
83	01905260	1. GREY, CORRIE L.	11915 MOONSHADOW LN HUNTERSVILLE NC 28078	L19 M30-693	30920	433	0.1 AC
84	01905261	1. LAFFERTY, JANINE M	6614 GLENLIVET CT CHARLOTTE NC 28278	L20 M29-441	11223	371	0.1 AC
85	01905273	1. MUNETON, NANCY	14058 ALLEY SON ST HUNTERSVILLE NC 28078	L175 M33-109	23968	48	0.03 AC
86	01905274	1. BARRINGER, LILLIAN A	14054 ALLEY SON HUNTERSVILLE NC 28078	L176 M33-109	11623	627	0.03 AC
87	01905275	1. COLORACCI, ROSEMARIE	14050 ALLEY SON HUNTERSVILLE NC 28078	L177 M33-109	11623	741	0.03 AC
88	01905276	1. HALL, JAMES F	14046 ALLEY SON HUNTERSVILLE NC 28078	L178 M33-109	11648	763	0.03 AC
89	01905281	1. MECKLENBURG COUNTY,	600 E 4TH ST CHARLOTTE NC 28202	LD M53-608 THRU 613	27002	556	5.225 AC
90	01905301	1. BOWMAN DEVELOPMENT GROUP INC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L16-23 U/M	22699	750	1.38 AC
91	01905601	1. VERMILLION COMMUNITY ASSOCIATION INC,	130 BEN CASEY DR STE 100 FORT MILL SC 29708	C/A M33-109	28550	235	0.09 AC
92	01905602	1. DAGGETT, SALLY BERNARD	14032 CINNABAR PL HUNTERSVILLE NC 28078	L17 M33-109	28140	165	0.14 AC

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93	01905603	1. BLEVINS, ANDREW L 2.BLEVINS, AMY FURCHES	14026 CINNABAR PL HUNTERSVILLE NC 28078	L16 M33-109	28934	594	0.11 AC
94	01905604	1. SKIPPER, KATRINA S 2.SKIPPER, DONALD J	16320 MCAULEY RD HUNTERSVILLE NC 28078	L72 &73 P74 M3-342	13596	875	0.334 AC
95	01905681	1. SPEANBURG, JEFFREY 2.CRAVETZ-SPEANBURG, JORGAN	12203 LOFTYWOOD CT HUNTERSVILLE NC 28078	L15 M29-441	28488	662	0.15 AC
96	01905682	1. BLACKMON, CLARA E	15018 HOLSBROOKS RD HUNTERSVILLE NC 28078	L14 M29-441	11298	269	0.11 AC
97	01905683	1. JACOBS, JAMES S	12211 LOFTYWOOD CT HUNTERSVILLE NC 28078	L13 M29-441	30994	173	0.1 AC
98	01905684	1. DENETRE, PATRICK 2.LEDWELL, REBECCA	12221 NOTCHWOOD CT HUNTERSVILLE NC 28078	L12 M29-441	21183	646	0.2 AC
99	01905687	1. VERMILLION COMMUNITY ASSOCIATION INC,	130 BEN CASEY DR STE 100 FORT MILL SC 29708	C/A M33-109	28550	248	0.05 AC
100	01905688	1. VERMILLION COMMUNITY ASSOCIATION INC,	130 BEN CASEY DR STE 100 FORT MILL SC 29708	ACCESS ESMT. M33-109	28550	235	0.02 AC
101	01905722	1. DUFFY, CAITLIN E	13844 HILL ST HUNTERSVILLE NC 28078	L171 M33-109	28653	777	0.05 AC
102	01905723	1. ELLIOTT, JOYCE CHAMPION	13846 HILL ST HUNTERSVILLE NC 28078	L172 M33-109	14017	979	0.05 AC
103	01905724	1. HANELINE, JULIE L	13848 HILL STREET HUNTERSVILLE NC 28078	L173 M33-109	29252	998	0.05 AC
104	01905725	1. NIEMIEC, NICHOLE LEIGH	13850 HILL ST HUNTERSVILLE NC 28078	L174 M33-109	29629	717	0.05 AC
105	01928107	1. BUCKINGHAM, BRADLEY J 2.BUCKINGHAM, SUSIE P	200 GLENDALE DR HUNTERSVILLE NC 28070	L16 M22-481	23616	484	1 LT (0.605 GIS Acres)
106	01928108	1. KVAPIL, ROBYN LYNN 2.KVAPIL, RICHARD T	114 GLENDALE DR HUNTERSVILLE NC 28078	L17 M22-481	30662	187	1 LT (0.600 GIS Acres)

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107	01928109	1. FRANCISCA CHAVEZ RODRIQUEZ, 2.MARTINEZ, ALEJOS RODRIGEZ	112 GLENDALE DR HUNTERSVILLE NC 28078	L18 M22-481	12023	037	1 LT (0.522 GIS Acres)
108	01928110	1. SILVEA, TROY ODELL	110 GLENDALE DR HUNTERSVILLE NC 28078	L19 M22-481	11879	743	1 LT (0.513 GIS Acres)
109	01928111	1. KELVINGTON, JONATHAN PATRICK	108 GLENDALE DR HUNTERSVILLE NC 28078	L20 M22-481	25427	374	1 LT (0.577 GIS Acres)
110	01928112	1. MCTAGGART, KERICE H 2.MCTAGGART, STEPHEN D	14710 GLENDALE DR HUNTERSVILLE NC 28031	L21 M34-609	13349	658	0.43 AC
111	01928113	1. COLEMAN, DERRICK 2.COLEMAN, TANGANYIKA	19608 FERIBA PL CORNELIUS NC 28031	L1 M22-481	29551	874	1 LT (0.756 GIS Acres)
112	01928124	1. JOHNSON, CYNTHIA VICTORIA	104 GLENDALE DR HUNTERSVILLE NC 28078	L22 M34-609	17278	935	0.428 AC
113	01928207	1. GIBSON, ANDREW STEVENSON	110 CARR RD DALLAS NC 28034	L1 M21-960 &TR M3-342	03422	315	1 LT (1.065 GIS Acres)
114	01929131	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L3 M59-367	30810	322	0.1 AC
115	01929132	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L4 M59-367	30810	322	0.1 AC
116	01929133	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L5 M59-367	29168	518	0.11 AC
117	01929134	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L6 M59-367	29168	518	0.1 AC
118	01929135	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L7 M59-367	29168	518	0.1 AC
119	01929136	1. SOUTHSIDE NEIGHBORHOOD LLC,	13815 CINNABAR PLACE HUNTERSVILLE NC 28078	L8 M59-367	29168	518	0.09 AC

This map or report is prepared for the inventory of real property within Mecklenburg County and is compiled from recorded deeds, plats, tax maps, surveys, planimetric maps, and other public records and data. Users of this map or report are hereby notified that the aforementioned public primary information sources should be consulted for verification. Mecklenburg County and its mapping contractors assume no legal responsibility for the information contained herein.

December 13, 2016

Mr. Nate Bowman
15815 Cinnabar Pl
Huntersville, Nc 28078

Re: Adequate Public Facilities (APF) Application – Anchor Mill (File #2016-17)

Dear Mr. Bowman:

The Town has completed its review of the above referenced APF Application and deemed it to be complete, per Article 13.6.3 of the Zoning Ordinance. Based upon your request for an allocation of capital facilities for the above-referenced development proposal, consisting of 165,000 sf of Commercial development and 400 Multi-Family Units. I am issuing a "Determination of Adequacy (DOA)" for the following public facilities:

- Fire Vehicles
- Fire Facilities
- Police Facilities
- Police Vehicles

Please be advised that this DOA is valid for one (1) year, or until December 13, 2017, by which date this development proposal must have achieved vesting, per Section 2.2 of the Zoning Ordinance.

Please feel free to contact me with any questions @ brichards@huntersville.org or by phone: (704) 766-2218.

Sincerely,

Brian Richards

Brian Richards
GIS Administrator

Cc: Jack Simoneau, AICP, Planning Director
Gerry Vincent, Assistant Town Manager
Robert Blythe, Town Attorney
Alison Adams, Planner

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Gerry Vincent, Interim Town Manager
Subject: Proposals - Ocular Melanoma

Consider approving proposals for investigative work/testing related to the uveal melanoma cancer cluster.

ACTION RECOMMENDED:
Approve Proposals

FINANCIAL IMPLICATIONS:

ATTACHMENTS:

	Description	Type
🗋	Proposal	Backup Material
🗋	Proposal	Backup Material

Geodesy, Inc.
615 East Reeceville Road
Downingtown, PA 19335

March 22, 2017

Town of Huntersville
101 Huntersville-Concord Rd.
Huntersville, NC

Attention: Mr. Gerry Vincent, Town Council Manager

RE: Proposal to conduct a geospatial/epidemiological investigation into the uveal melanoma cancer cluster in the Huntersville Area.

Dear Gerry:
As requested by your community, it is my pleasure to provide this letter proposal/scope of services to conduct a geospatial investigation including scientific collaboration with epidemiologists from the University of North Carolina (UNC).

Geodesy, Inc. has several years of experience compiling data from numerous databases to support human health and ecological risk assessments. Risk assessments are predictive studies about the impact of environmental exposure scenarios, however, with the guidance of expert epidemiologists from UNC, an outcome based investigation is being proposed to seek the possible cause of this cancer cluster in the Huntersville community.

It is proposed that John Cassels, Principal Scientist at Geodesy, Inc. will be the spatial analyst for this investigation in collaboration with lead epidemiologist Dr. Andy Olshan, PhD. Dr. Olshan is the Chair of the UNC Epidemiology Department, Gillings School of Public Health. A brief resume and CV are attached.

During the first phase of this investigation, we intend to gathering geospatial data at the local, county and state levels, including but not limited to planimetric/cadastral base layers, current/historic aerial photography, current/historic land use, and numerous additional environmental thematic layers. Overlays of patient behavioral patterns and histories will be analyzed for spatial and temporal patterns within the study population.

A site visit is planned for the week of April 10, 2017 to gain an understanding of local conditions and gather additional location specific data. Locations will be based on direct observations, and interviews with local officials, historians, patients, and their support network. Initial collaboration with project epidemiologists will occur prior to the site visit to develop topics of discussion for pending interviews.

The second phase will begin with a thorough map review and consultation with Dr. Olshan to formulate further investigative direction and emphasis. This may include the need for more specific data collection efforts and perhaps additional field work to gather focused information from the patients, their families, the community, or local environment.

The third phase will include final map preparation of all data collected and report presentation of environmental/health facts found. A list of all references compiled during this investigation will be included. A town hall meeting will be requested to review the mapping prepared and reported finding to the community.

Geographic Information Services
jcassels@geodesyinc.com

The following are the estimated levels of effort and cost for each Phase described above:

- Phase I – Data gathering and initial map preparation: assumes 68 technical labor hours and $1,500 in travel related expenses – cost $7,100
- Phase II – Map review and collaboration: assumes 32 technical labor hours with no expenses anticipated – cost $2,720
- Phase III – Final mapping/reporting, and on-site presentation: assumes 49 technical labor hours including prep, travel expenses, and presentation – cost $4,780.

Expenses are estimated to include travel to the Huntersville area during the initial site visit and the follow up trip to report findings. It is assumed that actual direct expenses will be reimbursed at a rate of 1.0. Billing rates proposed included:

Spatial Analyst - $80.00/technical labor hour

Epidemiologist - $100.00/technical labor hour

Total cost (Labor and Expenses) $14,600

Thank you for the opportunity to provide this proposal to the Town of Huntersville. If you have any questions, please give me a call at (610) 384-4678.

Best Regards,
GEODESY, INC.

John Cassels
President

John W. Cassels

Qualifications Summary

- Thirty-three years of experience conducting environmental investigations in aquatic, marine, and terrestrial ecosystems.
- Career began as a research assistant at the Academy of Natural Sciences of Philadelphia studying natural lakes in northeastern Pennsylvania. Later began to concentrate on water resource investigations primarily storm water management/planning and risk assessment projects where digital information management skills were acquired.
- Experienced in all aspects in aquatic ecological investigations beginning with project planning/design to field coordination, data collection, management, and presentation, technical report writing, Geographic Information Systems (GIS) development, database analysis and cartographic presentation.
- Use of geo-referenced digital photography and digital video documentation during field investigations.
- Recent Certificates received from the Emergency Management Institute upon completion of ICS-100, Introduction to the Incident Command System and ICS-200, ICS for single Resources and Initial Action Incidents.

Fields of Competence

Environmental investigations, including terrestrial, aquatic, and marine habitats, ecological surveys, hydrologic, and hydrographic surveys, Geographic Information Systems (GIS), Global Positioning Systems (GPS) Computer Aided Design (CAD) and geo-spatial modeling.

Credentials

- Graduate Certificate, GIST, Penn State University
- B.Sc., Biology, East Stroudsburg State College
- B.Sc., Marine Science, East Stroudsburg State College
- Emergency Management Institute Certificates including, ICS-100 Introduction to the Incident Command System and ICS-200, ICS for single Resources and Initial Action Incidents. IS-00700.a National Incident Management System (NIMS)
- OSHA 40-h Health and Safety Training, /8-h annual refresher.
- US Coast Guard Safe Boating Certificate
- NAUI and YMCA Certified SCUBA

Employment History

1998-Present	Geodesy, Inc.
1997-1998	Cahill Associates
1986-1997	Roy F. Weston, Inc.
1983-1985	Academy of Natural Sciences of Philadelphia

Municipal Planning History (West Brandywine Twp., PA)

2016 – Present	Township Board of Supervisors - Member
2013-2014	Municipal Authority Board Member – Secretary
2006-2014	Open Space Review Board, Chairman 2006-2010
2005	Comprehensive Plan Update Committee
2004	Act 209 Committee
2000-2014	Planning Commission Member, Chairman 2003-2004.

Key Projects

Waterway Debris Removal Project, New Jersey Department of the Treasury, Division of Purchase and Property April-August, 2013. In the wake of Superstorm Sandy, provided geo-processing support using sidescan sonar data collected by several marine survey firms to identify subsurface contacts (debris) which may pose a threat to boater safety in New Jersey coastal waterways. Reports generated daily providing contact target location information and area coverage to marine salvage firms tasked with target removal. GIS support provided for Zones 1, 2, 8, 9, and 10, covering nearly 50,000 acres of coastal waterways.

KEY PROJECTS (CONTINUED)

BP Gulf Oil Spill Response, USEPA/START-Region 6, June-October 2010. Provided GIS and Data Management support for EPA at the Incident Command Center (ICC) located in Houma, LA, and later at the Unified Area Command (UAC) in New Orleans, LA. Support included management and upload to EPA Scribe database, oceanographic data collected by NOAA and BP vessels during Subsurface Monitoring Unit (SMU) operations. Provided GIS and data assessment support to NOAA/USCG for the Special Monitoring of Applied Response Technologies (SMART) program, including dispersant test vessel data analysis and GIS summary presentations which helped document the effectiveness of vessel and aerial application of dispersants. Tracked daily operations of EPA's response operations including water, sediment, and air monitoring efforts throughout the region.

USACE New England District, PCB Contamination of the Housatonic River, OU2, Pittsfield, MA Geographic Information Manager, 1999- present. Managed GIS overseeing all aspects of project spatial data for several key EPA contractor user groups, including ecological and human health risk assessors, ecologists, hydrologist, geomorphologists, modelers, remedial design, and construction engineers. Led a team of GIS specialists to ensure all spatial data were collected, analyzed, and presented in the most efficient, accurate means available to support one of the largest environmental assessments undertaken by the USEPA. Efficiency was gained through the development of a robust map request and delivery system over a secure internet connection, cutting the time required to get maps on the table in a remote field office from days to hours and sometimes minutes. Developed an interactive application used to simulate remediation by calculating Exposure Point Concentration (EPCs) on the fly for comparison with Interim Media Protection Goals (IMPGs) specified as Human Health Risk Targets for a given Exposure Unit. The tool allows for avoidance of sensitive habitats and selective removal of contaminated soil to achieve remedial goals as well as providing estimates of removal volume.

Wind Energy Development Site Selection Tool, Confidential Client. Developed a spatial model to analyze statewide GIS data layers to reveal specific areas within a given state which have the highest wind capacity and power price potential projected over a period years, excluding sensitive areas due to the nature of land use, ownership, and protective status. Results allow the alternative energy developer to focus efforts on highest priority areas with minimal impact on sensitive areas. Separate models and analysis were conducted for the several States including Pennsylvania, New York, Massachusetts, Maine, Kansas, West Virginia, and Ohio. Results provided the top ten locations within each State with maximum potential for wind generation.

USACE Philadelphia District, Aberdeen Proving Grounds, Canal Creek Spatial Weighting Task, Aberdeen, MD. Using various interpolation methods, spatially weighted average concentrations for eight contaminates of potential concern (COPC) were calculated for all stream reaches and wetland areas within a 123-acre tidal marsh. Geo-statistics where used to understand the extent of contamination and compute volume and mass estimates as part of a site remediation Feasibility Study.

Important Mammal Areas of Pennsylvania (IMAP). Geo-Spatial data analysis used in preparation of IMAP Stewardship Plans and Conservation Assessments for several IMAP locations, including the Hopewell Big Woods, Delaware State Forest, Delaware Water Gap/ Pocono Education Center, Cherry Valley Watershed, and the Laurel Highlands of PA. Analysis of land cover type, sensitive/protected area mapping, and environmental inventories were compiled, summarized and presented for planning purposes. Field surveys were conducted with an innovative vehicle mounted GPS link and real time GIS data access which provided efficient use of field investigation efforts.

USACE, New England District, AE services for HTRW/MEC Projects. GIS support for Hazardous, Toxic and Radioactive Waste (HTRW) and Munitions and Explosives Concerns (MEC) projects for the US Army Corps of Engineers at various locations in the North Atlantic Division, including the former Raritan Arsenal, Raritan, NJ., LO-58-Former NIKE Missile Site, Caribou, ME., UST Sites 1 and 2- Former Dow AFB, Bangor, ME., and the Hingham Former Burning Grounds, Hingham, MA.

KEY PROJECTS (CONTINUED)

Pennsylvania Act 537 Plan Preparation GIS Support Services. Working as a sub-contractor to the Township Engineer in numerous municipalities including East Nottingham, East Fallowfield, New London, Upper Oxford, Brecknock, Upper Salford, Sadsbury, West Brandywine, and South Heidelberg Townships, prepared environmental resource maps and spatial analysis, as well as, service area, system infrastructure, and soil suitability mapping for the draft review and final Act 537 Plan documents.

MS4 Stormwater Support Services for Municipalities. Working as a sub-contractor to the Township Engineer in several municipalities including Honey Brook, Avondale, Penn, New London, London Grove, Earl, Hereford, Upper Salford, East Fallowfield, West Brandywine, and Upper Oxford Townships, provided Phase I and II support, including annual report preparation, TMDL analysis, outfall and other infrastructure mapping and attribution.

Comprehensive Plan Preparation GIS Support Services. Working as a sub-contractor to the Township Engineer in New London, East Nottingham, Earl, and Upper Oxford Townships, developed environmental, cultural, scenic and historic resource inventory maps, including composite and priority resources overlay map preparations and spatial analysis for draft review and final Comprehensive Plan documents.

Open Space, Recreation, and Environmental Resources Plan Development Services. Several municipalities including Lower Oxford, Birmingham, Upper Oxford, West Nottingham, and New London Townships located in Chester County, Pennsylvania. Managed staff members towards the development of an extensive GIS which included land, water, biotic, scenic, historic, and cultural resources, in addition to flooding, zoning, land use, and other administrative boundary information. Thematic layers were prioritized and overlaid to identify suitability and priorities to aid in decision-making for open space preservation and future development.

Androscogen River, NH Fish Tissue Sampling Program - USEPA. Conducted a field sampling effort to during the summer 2009 to collect fish tissue for laboratory analysis to support on-going investigations by USEPA of the Chlor-Alkali Site located in Berlin New Hampshire.

Ely Copper Mine Site Small Mammal Study- USEPA. Assisted in a small mammal and terrestrial invertebrate sampling effort to collect small mammal and insect tissue samples for laboratory analysis to support ecological risk assessments for the historic copper mine site located in eastern Vermont.

Elizabeth River Oyster and Crab Study, USEPA. Conducted a multi-year study to assess the effects on the growth rate and uptake of organic chemicals in oyster and blue crab in the lower Chesapeake Bay. The study included sampling natural oyster and crab populations to assess chemical levels found in edible tissues as well as deployment and recovery of a several sets of live oysters caged for specific periods of time to gauge contaminant uptake over time.

Kensico Reservoir Water Quality Control Program, New York City Department of Environmental Protection. Developed/managed a GIS to support a comprehensive water quality investigation to manage future water supply for the City of New York. GIS support impact analysis of various storm water BMP alternatives as well as provide SWMM modeling input for design purposes. An interactive GIS application was developed to illustrate how retrofit BMPs could reduce the impact of land use change in watersheds. The application allows "what if" scenarios following a display of base conditions. After the user selects an area and changes the land use, the SWMM model is run with results returned in terms of increased runoff and contaminant loads. The user then chooses from a list of BMPs and places them strategically in the watershed, which is followed by the SWMM model run with results to illustrate just how effective the BMP can mitigate the impact of the land use change.

CURRICULUM VITAE

ANDREW F. OLSHAN

March 10, 2017

DATE & PLACE OF BIRTH: December 14, 1955; Melrose, Massachusetts

BUSINESS ADDRESS: Department of Epidemiology
Gillings School of Global Public Health
McGavran-Greenberg Hall, CB #7400
University of North Carolina
Chapel Hill, NC 27599-7400
(919) 966-7424
andy_olshan@unc.edu

EDUCATION:

1973-78	Arizona State University Tempe, Arizona	B.A. Anthropology, August 12,1978
1981-82	University of Washington Seattle, Washington	M.S. Epidemiology, August 20,1982
1982-87	University of Washington Seattle, Washington	Ph.D. Epidemiology, December 17,1987
1987-89	University of British Columbia Vancouver, British Columbia	Postdoctoral Fellow Medical Genetics

APPOINTMENTS AND POSITIONS:

1981-88	Research Associate Division of Public Health Sciences The Fred Hutchinson Cancer Center Seattle, Washington
1989-91	Assistant Professor Department of Clinical Epidemiology and Preventive Medicine School of Medicine University of Pittsburgh
1990-91	Assistant Professor Department of Human Genetics

	Graduate School of Public Health University of Pittsburgh
1989-91	Affiliate Member Pittsburgh Cancer Institute
1991-1996	Assistant Professor Department of Epidemiology School of Public Health University of North Carolina
1996- 2001	Associate Professor Department of Epidemiology School of Public Health University of North Carolina
1992-Present	Fellow, Carolina Population Center University of North Carolina
1992-Present	Member, Lineberger Comprehensive Cancer Center University of North Carolina
1994- 1997	Research Assistant Professor Department of Surgery School of Medicine University of North Carolina
1998	Visiting Scientist Occupational Epidemiology Branch National Cancer Institute
1998- Present	Leader, Cancer Epidemiology Program Lineberger Comprehensive Cancer Center University of North Carolina
2000-Present	Member, UNC Center for Environmental Health and Susceptibility
2000-Present	Internal Advisory Committee, UNC Center for Environmental Health and Susceptibility
2001- Present	Professor Department of Epidemiology School of Public Health University of North Carolina
2001- Present	Professor Department of Otolaryngology/Head and Neck Surgery School of Medicine University of North Carolina

2006-Present	Chair Department of Epidemiology School of Public Health University of North Carolina, Chapel Hill
2009-2012	Associate Director for Population Sciences (Interim) UNC Lineberger Comprehensive Cancer Center
2012-Present	Associate Director for Population Sciences UNC Lineberger Comprehensive Cancer Center
2014-Present	Barbara Sorenson Hulka Distinguished Professor of Cancer Epidemiology

HONORS AND AWARDS:

1975	One of three finalists for Juan Comas Award for the best student paper presented at the 44th Annual Meeting of the American Association of Physical Anthropologists, Denver.
1985	Invited participant, Society for Epidemiologic Research Student Workshop, Chapel Hill, North Carolina.
1999	Delta Omega Public Health Honor Society.

ACTIVITIES:

International/ National/ Community Committees

1984-1987	Chairman, Case-Control Study of Wilms' Tumor, Childrens Cancer Study Group, Pediatric Oncology Group.
1990-1996	Chairman, Case-Control Study of Neuroblastoma, Childrens Cancer Study Group, Pediatric Oncology Group.
1989-1990	Member, NCI Working Group, Epidemiology of Multiple Myeloma and Black/White Risk Factors.
1991-1993	Chairman, Working Group, International Commission for Protection Against Environmental Mutagens and Carcinogens, Genetic Effects of Cyclosporin A.
1991-1992	Co-Chairman, International Conference on Male-Mediated Developmental Toxicity, Pittsburgh, PA, September 16-19, 1992.
1994	Member, State of North Carolina Advisory Committee on Birth Defects Surveillance.

1994	Member, Organizing Committee, Preventing Birth Defects in North Carolina: Making Folic Acid Work. A Statewide Conference and Workshop on Preventing Neural Tube Defects. May 19, 1995, Raleigh, NC.
1995- 1996	Member, Committee to Study the Feasibility of, and Need for, Epidemiologic Studies of Adverse Reproductive Outcomes in Families of Military Personnel Present at Atmospheric Tests of Nuclear Weapons. Institute of Medicine, National Academy of Sciences.
1992	Member, Committees to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. Institute of Medicine, National Academy of Sciences.
1996	Member, Committees to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. Institute of Medicine, National Academy of Sciences.
1998	Member, Committees to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. Institute of Medicine, National Academy of Sciences.
1999	Member, External Peer Review Committee, Environmental Protection Agency, Toxicological Review for Cadmium and Compounds.
1999- 2000	Member, Committee to Review the Evidence Regarding Link Between Exposure Agent Orange and Diabetes. Institute of Medicine, National Academy of Sciences.
2000-2004	Member, Epidemiology Steering Committee, Children's Oncology Group.
2000-2003	External Advisory Committee, University of Washington Superfund Basic Research Program, "Effects-Related Biomarkers of Toxic Exposures", H. Checkoway, PI, P42ES4696ZES1.
2000- 2001	Chair, Meeting Organizing Committee, Lineberger Cancer Center/NIEHSConference: Gene-Environment Interaction and Cancer Risk: The Role of DNA Repair. March 12-13, 2001.
2000- 2001	Member, Organizing Committee, Second International Conference on Male-Mediated Developmental Toxicity, June, 2001.
2001	Expert Panel On Reproductive and Developmental Toxicity of 1-Bromopropane and 2-Bromopropane. Center for the Evaluation of Risks to Human Reproduction. National Toxicology Program.
2001	Member, Gene-Environment Interaction Working Group. Longitudinal Cohort Study of Environmental Effects on Child Health and Development.

2002	Member, External Advisory Committee, Oral Cancer Center, University of Pittsburgh.
2003-2010	Member, External Advisory Board, MD Anderson Cancer Center, Head and Neck Cancer SPORE.
2004-2010	Co-Chair, Epidemiology Steering Committee, Children's Oncology Group.
2004-2009	Member, Board of Scientific Counselors, Subcommittee-1, National Cancer Institute.
2004-2008	Member, Scientific Committee, International Society of Paediatric Oncology
2005	Expert Panel Reproductive and Developmental Toxicity of Styrene. Center for the Evaluation of Risks to Human Reproduction. National Toxicology Program.
2005	Member, Informal Population Sciences Biorepository Advisory Group, National Cancer Institute.
2005-2009	Member, External Advisory Board, Duke University Brain Tumor SPORE.
2005-Present	Member, External Advisory Board, University of Pittsburgh Head and Neck Cancer SPORE.
2006-2009	Member, Committee on Contaminated Drinking Water at Camp Lejeune. National Research Council.
2009	Member, Search Committee, Associate Director, Epidemiology and Genetics Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute.
2009	Member, Search Committee, Director, Environmental Public Health Division, National Health and Environmental Effects Research Laboratory, U.S. Environmental Protection Agency.
2009-2012	Member at Large, Board, Society for Epidemiologic Research
2010	Ad-Hoc Reviewer, National Toxicology Program, Board of Scientific Counselors Meeting
2010-2011	Vice-Chair, Committee to Review the Draft IRIS Assessment of Formaldehyde, National Research Council
2010-Present	External Advisory Committee, Translational Epidemiology Research Training program, University of Minnesota.

2012	MURDOCK Study Epidemiology Advisory Board, Duke University
2013-Present	External Advisory Committee, Cancer T32 Training Grant, Columbia University
2013-Present	External Advisory Committee, Vanderbilt Training Program in Molecular and Genetic Epidemiology of Cancer
2013	Ad-Hoc Member, NIEHS Tenure Review Committee
2014	Member, Qualification Review Board, Editor-In-Chief, *Environmental Health Perspectives*.
2014-	External Advisory Committee, Ohio State University Comprehensive Cancer Center.
2015	Chair, Peer Review Panel for the Draft Report on Carcinogens Monograph on Selected Viruses. National Toxicology Program, December 17, 2015.
2017	Member, Committees to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. Eleventh Biennial Update. Institute of Medicine, National Academy of Sciences. Final Approval Pending.

University Committees

1991-1993	Doctoral Program Committee Department of Epidemiology
1993	Admissions Committee Department of Epidemiology
1993	Information Systems Committee Department of Epidemiology
1993- 1998	Advisor, Department Newsletter Department of Epidemiology
1994	Member, Task Group on Tenure and Promotion Department of Epidemiology
1994-1996	Curriculum Committee Department of Epidemiology
1996- 2006	Graduate Studies Committee Department of Epidemiology
1997-2006	Chair, Curriculum Subcommittee

	Department of Epidemiology
1998-1999	Chair, Cancer Faculty Search Committee Department of Epidemiology
1998	Member, Health Sciences Library Committee School of Public Health
1998-	Program Head, Cancer Epidemiology Department of Epidemiology
1999-2001	Chair, Cancer Faculty Search Committee Department of Epidemiology
1999,2000	Southard Award Committee School of Public Health
1999	Delta Omega Award Committee School of Public Health
2000	Greenberg Award Committee School of Public Health
2002-2006	Space Committee School of Public Health
2002-2003	Appointment, Promotion, and Tenure Committee School of Public Health
2003-2005	Chair, Appointment, Promotion, and Tenure Committee School of Public Health
2005-2006	Chair, Department of Biostatistics Chair Search Committee School of Public Health
2006-	Member, Sheps Center Policy Board
2007	Member, Center for Women's Health Research Director Search Committee
2007	Member, ad hoc committee to review Center Director (H. Shelton Earp)
2008	Chair, UNC Lineberger Comprehensive Cancer Center Associate Director Search Committee
2009-	Leader, University Cancer Research Fund Population Sciences Theme Team
2009-	Member, Research Computing Coordinating Committee, University of North Carolina

2009-2013	CTSA/NC TraCS Institute Translational Research Advisory Board
2010	CTSA/NC TraCS Institute Education Core Interdisciplinary Advisory Committee
2011	UNC Health Informatics Taskforce
2012-	UNC Health Informatics Program Steering Committee
2016-2017	Member, Search Committee, Director, Carolina Population Center

Teaching

1981-86	EPI 513 Epidemiologic Methods, University of Washington (Teaching Assistant)
1989-90	Clinical Epidemiology, School of Medicine, University of Pittsburgh (Instructor)
1994-1997	EPID268, Theory and Quantitative Methods in Epidemiology (Co-Instructor)
1992-	EPID 851 Reproductive and Perinatal Epidemiology (Lead Instructor, 1993-2005, 2014)
2006-	EPID775 Advanced Cancer Epidemiology
2007-2009	EPID690 Integrating Biomarkers in Population–based Research (Lead Instructor)

Theses and Dissertations

Masters Theses (Major Advisor)

1993 Gwenevere C. McIntosh: Paternal Age and the Risk of Birth Defects.

1993 Susan E. Carozza: Maternal Exposure to N-nitrosatable Drugs as a Risk Factor for Childhood Brain Tumors.

1994 External Examiner, McGill University, Department of Epidemiology and Biostatistics: C. Sharpe: Risk Factors for Wilms' tumor: analysis of a case-control study.

1995 Michael McMahon: The Risk of Vaginal Birth After Previous Cesarean.

1998 Qinghong Yang: Parental Smoking and Alcohol Consumption and Risk of Neuroblastoma.

1998 Michael Cook: Prenatal Medication Use and the Risk of Childhood Cancer: A Review of Epidemiologic Studies.

2000 Juliet Hatcher: Multiple Myeloma and Diagnostic Radiation Among Blacks and Whites in the United States.

2001 Tara Patton: Parental Exposure to Medical Radiation and Neuroblastoma in Offspring.

2001 Mia Gaudet: Diet, Polymorphisms of GSTM1 and GSTT1 and Incidence of Head and Neck Cancer.

2003 Katrina Trivers: Demographic and Lifestyle Predictors of Survival in Patients with Esophageal or Gastric Cancers.

2004 Elizabeth Bluhm: Maternal Use of Recreational Drugs and Neuroblastoma in Offspring.

2004 Erin McCall: Maternal Hair Dye Use and Neuroblastoma.

2004 Muge Calikoglu: Polymorphisms of Methylenetetrahydrofolate reductase (MTHFR), Preconceptional Multivitamin Use and Risk of Preterm delivery

2005 Stephanie Saddlemire: Breastfeeding and Wilms tumor.

2007 Jonathan George: XRCC1 polymorphisms, dietary folate intake, and risk of squamous cell carcinoma of the head and neck.

2008 Jennifer Slickers: Maternal body mass index and lifestyle exposures affect the risk of bilateral renal agenesis or hypoplasia.

2008 Brian Feldman: Maternal perinatal vitamin and mineral supplementation and the risk of Wilms in offspring.

2008 Ruchika Goel: Maternal exposure to medical radiation and Wilms tumor in the offspring: A report from the Children's Oncology Group.

2015 Determinants of contagious mastitis in organic and conventional dairy herds in North Carolina.

Doctoral Dissertations (Major Academic Advisor)

1994 Patricia G. Schnitzer: Paternal Occupation and the Risk of Birth Defects in Offspring.

1996 Susan Lieff: Maternal Cigarette Smoking During Pregnancy and Risk of Oral Facial Clefts in Newborns.

1998 Samuel Arbes: Factors Contributing to the Racial Differences in Survival from Oral Cancer.

1999 Jane Schroeder: Epidemiology of t(14;18) non-Hodgkin's lymphoma.

1999 Julie Daniels: Occupational and Residential Pesticide Exposure and Risk of Neuroblastoma.

1999 Anneclaire De Roos: Parental Occupational Exposures and the Incidence of Neuroblastoma in Offspring.

2001 Michael Cook: Maternal and Paternal Medication Use and Neuroblastoma in the Offspring.

2001 Garth Rauscher: Family Histories of Cancer and Joint Contribution with Exposures in the Incidence of Acute Leukemia in Adults

2001 Stacy Geisler: Survival and Squamous Cell Carcinoma of the Head and Neck.

2002 Edwin van Wijngaarden: Parental Occupational Exposures and Childhood Brain Tumors.

2003 Stephanie Mulherin Engel: Genetic Variation in Pro- and Anti-Inflammatory Cytokines and Risk of Preterm Birth and Small-for-Gestational Age.

2005 Suzanne Gilboa: Seven County Study of Air Quality and Birth Defects, Texas, 1997-2000.

2006 Martha Felini: Reproductive Factors and DNA Repair Polymorphisms XRCC1 and MGMT Associated with Adult-Onset Gliomas.

2009 Reem Hasan: Vaginal bleeding in early pregnancy: patterns, predictors, and association with miscarriage.

2009 Jessica Lazenby: Preconception and Prenatal Maternal Caffeine Consumption and Diagnosis of Wilms Tumor in Offspring: Results from a North American Case-Control Study.

2009 Shannon Laughlin: Elimination and Size Reduction of Fibroids During Pregnancy and Postpartum Uterine Remodeling.

2010 Sharon Myers: Pesticide Use and Uterine Leiomyoma Prevalence Among Farm Women: An Analysis of the Agricultural Health Study with Assessment of Outcome Misclassification.

2011 Tania Desrosiers: Maternal Occupational Exposure to Organic Solvents During Pregnancy and Selected Congenital Anomalies Among Offspring.

2011 Anne Hakenewerth: Joint Effects of Alcohol Consumption and Polymorphisms in Alcohol and Oxidative Stress Metabolism Genes on Risk and Survival from Head and Neck Cancer.

2012 Kimon Divaris: Exploring the Genetic Basis of Chronic Periodontitis: A Genome-Wide Approach.

2013 Annah Wyss: Single Nucleotide Polymorphisms in Nucleotide Excision Repair Genes and Head and Neck Cancer Risk and Outcomes.

2013 Jeannette Stingone: Maternal Exposure to Criteria Air Pollutants During Early Pregnancy and Congenital Heart Defects in Offspring.

2013 Nicholas Taylor: Common Genetic Variation in Cell Cycle Regulatory Genes and Etiology of Intrinsic Breast Cancer Subtype: A Candidate Gene Approach.

2014 Leila Family: Associations Between Genetic polymorphisms in DNA bypass polymerases and base excision repair genes with the risk of breast cancer.

2016 Saira Khan: Diabetes and Prostate Cancer Aggressiveness at Diagnosis and Progression in White Americans and Black Americans from the North Carolina-Louisiana Prostate Cancer project (PCaP).

2016 Angela Liu Mazul: Single Nucleotide Polymorphisms in Vitamin A, Folate and Choline Related Genes and Interaction with Maternal Vitamin Intake and Neuroblastoma.

External Dissertation Reader

2003 Kimberly Perez: Urogenital and Reproductive Outcomes in Men Prenatally Exposed to Diethylstilbesterol. Department of Social and Preventive Medicine. State University of New York at Buffalo.

Journal Refereeing

American Journal of Epidemiology
American Journal of Industrial Medicine
American Journal of Obstetrics and Gynecology
Annals of Oncology
Biomarkers
BMC Cancer
BMC Medical Research Methodology
British Journal of Cancer
Cancer
Cancer Causes & Control
Cancer Epidemiology, Prevention, & Biomarkers
Cancer Letters
Cancer Research
Cleft Palate-Craniofacial Journal
Clinical Cancer Research
Pharmacoepidemiology and Drug Safety
Epidemiology
The European Journal of Cancer
European Journal of Oral Sciences
FASEB
Fertility and Sterility

Genetic Epidemiology
Head & Neck
International Journal of Cancer
International Journal of Epidemiology
Journal of Andrology
Journal of the National Cancer Institute
Journal of Clinical Oncology
Journal of Pediatrics
Medical and Pediatric Oncology
Nutrition and Cancer
Oral Diseases
Paediatric & Perinatal Epidemiology
Pediatric Blood & Cancer
Pediatric Hematology and Oncology
Pharmacogenetics
Reproductive Toxicology
Teratology
Xenobiotica

Editorial

Editorial Board, Cancer Causes and Control, 2003-
Associate Editor, American Journal of Epidemiology, 2004-2014
Associate Editor, Cancer Research, 2004-2010
Associate Editor, International Journal of Molecular Epidemiology and Genetics, 2009-
Editorial Board, Cancer Medicine, 2012-
Senior Editorial Board, Epidemiology, 2013-
Editor-in Chief, Current Epidemiology Reports, 2013-

Other Reviewing

2002: Institute of Medicine, National Academy of Sciences: "Veterans and Agent Orange. Herbicide/Dioxin Exposure and Acute Myelogenous Leukemia in the Children of Vietnam Veterans. National Academy Press, 2002.

2002: Institute of Medicine, National Academy of Sciences: "A Literature Review of Pesticides and Solvents. Committee on Gulf War and Health. National Academy Press, 2003.
2010: Centers for Disease Control and Prevention: "The Health Consequences of Smoking and Involuntary Exposure to Tobacco Smoke: An Update." Chapter on "Tobacco Exposure and Congenital Defects".

2013: Chapter Reviewer, U.S. Department of Health and Human Services. The Health Consequences of Smoking —50 Years of Progress: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

Evaluation of Faculty for Promotion

Duke University
Emory University
Fred Hutchinson Cancer Research Center
Georgetown University
Harvard University
Indian Statistical Institute
John Hopkins University
MD Anderson Cancer Center
National Institute of Environmental Health Sciences
Stanford University
State University of New York, Buffalo
Tufts University
University of Alabama, Birmingham
University of British Columbia
University of California, Berkeley
University of California, Los Angeles
University of Michigan
University of Minnesota
University of Pennsylvania
University of Pittsburgh
University of Rochester
University of South Carolina
University of Utah

Grant and Program Review

1993-1996 National Cancer Institute of Canada Review Committee, Standing Member

1994-1996 National Cancer Institute, Ad-Hoc Review.

1995 National Institute of Environmental Health Sciences, Center Grant Site Visit.

1997 National Institute of Environmental Health Sciences, Chair, R03 Special Review Committee.

1999 Grant review committee, National Cancer Institute of Canada RFP, Cancer Etiologic Research, Toronto, September 13, 1999.

2000 National Institutes of Health, Epidemiology and Disease Control-2 (EDC-2), Special Emphasis Panel, ZRG1 (03), Chair, April 7, 2000.

2000 Site Visit Team Member, Division of Epidemiology, Statistics and Prevention Research, National Institute of Child Health and Human Development, December 4-6, 2000.

1997- 2001 National Institutes of Health, Epidemiology and Disease Control-2 (EDC-2) Study Section, Regular Member.

2002 Epidemiology Study Section Committee, Tobacco-Related Disease Research Program, May 18-19, 2002.

2003 National Institutes of Health, SNEM-5 Study Section.

2003 National Institutes of Health, RFA: "Long Term Cancer Survivors" Review Committee.

2004 National Cancer Institute, Program Project: "New Approaches to the Biology of MDS". MD Anderson Cancer Center, Initial Review Group.

2004 National Cancer Institute, Program Project: "Childhood Brain Tumors: Biologic and Environmental Risks". University of California, Berkeley, Initial Review Group.

2007 CDC Risk Factors for Birth Defects Special Emphasis Panel.

2008- Alex's Lemonade Stand Foundation for Childhood Cancer.

2008 Children with Leukaemia Foundation.

2008 Site Visit Team Member, NICHD, Division of Epidemiology, Statistics and Prevention Research, National Institute of Child Health and Human Development, September 24-26, 2008.

2010 Site Visit Team Member, NCI, New Mexico Cancer Center, February 25, 2010.

2011 Ad Hoc Member, NCI-F Review Subcommittee on Manpower and Training, February 22-23, 2011

2011 Ad Hoc Member, NIH, Special Emphasis Panel, ZRG1 PSE-D (03)

2012 Site Visit Team Member, NCI, City of Hope Cancer Center, May 22, 2012

2013 Site Visit Team Member, NCI, Mayo Clinic Cancer Center, December 3, 2013

PROFESSIONAL ORGANIZATIONS

1984- Present Society for Epidemiologic Research
1986- Present Teratology Society
1988- Present International Society of Pediatric Oncology
2002- Present International Society for Environmental Epidemiology
2003- Present American Association for Cancer Research
2005- Present Society for Pediatric and Perinatal Epidemiology
2009- 2014 American Epidemiological Society
2013- Present American Society of Preventive Oncology

GRANT SUPPORT:
(Total Costs Indicated)

1984-1985 Institutional Cancer Grant IN-26Y from the American Cancer Society. University of Washington, Principal Investigator (Graduate Student Research).

1984-1985 Training Grant, National Cancer Institute, Cancer Epidemiology and Biostatistics.

1984-1986 Co-Investigator: A Case-Control Study of Risk Factors for Wilms' Tumor. Research Grant from the March of Dimes Birth Defects Foundation. (N. Breslow, Principal Investigator).

1986 Predoctoral Stipend, Charles A. Dana Foundation Grant for Program in Genetics and Environmental Health (A.G. Motulsky, Director).

1986-1988 Co-Investigator: Paternal Occupation and Birth Defects in Offspring. Research Grant from the March of Dimes Birth Defects Foundation. (P.A. Baird, Principal Investigator).

1986-1988 Co-Investigator: Paternal Occupation and Birth Defects in Offspring. Research Grant from the B.C. Health Care Research Foundation. (P.A. Baird, Principal Investigator).

1991 Principal Investigator: An Ecogenetic Study of Head and Neck Cancer, Biomedical Research Support Grant, School of Medicine, University of Pittsburgh.

1991-1997 Principal Investigator: A Case-Control Study of Risk Factors for Neuroblastoma, R01 CA 57004, N.I.H.

1992-1993 Co-Principal Investigator: The Role of Diet in the Etiology of Head and Neck Cancer. Institute of Nutrition Grant, University of North Carolina.

1992 Co-Principal Investigator: International Conference on Male-Mediated Developmental Toxicity, CA 58438, N.I.H.

1993-1994 Principal Investigator: Paternal Occupation and Risk of Birth Defects in Offspring. Research Grant from the March of Dimes Birth Defects Foundation.

1993-1998 Principal Investigator: Carcinogen Metabolizing Enzymes and Head and Neck Cancer, R01 CA61188, N.I.H.

1993-1996 Co-Investigator: Study of Multiple Myeloma Among Workers Exposed to Ionizing Radiation and Other Physical and Chemical Agents. Centers for Disease Control. (S. Wing, Principal Investigator).

1994-1995 Principal Investigator: The Role of Human Papillomavirus in the Etiology of Head and Neck Cancer: A Molecular Epidemiology Study. Lineberger

Comprehensive Cancer Center, Cancer Prevention and Control and Cancer Epidemiology Research Award, University of North Carolina.

1996-1998 Principal Investigator: Epidemiology of t(14;18) in Non-Hodgkin's Lymphoma R03CA71617, N.I.H.

1992-1998 Co-Investigator: Research to Advance Environmental Epidemiology: Improving the Use of Human Data in Risk Assessment. CR820076, U.S. EPA. (D. Savitz, Principal Investigator).

1997-1998 Principal Investigator: A Case Control Study of Risk Factors for Wilms Tumor. R55 CA75385, Shannon Award, N.I.H.

1997-1998 Co-Investigator: Epidemiology of Clubfoot. R01HD28779, N.I.H. (B. Alderman, Principal Investigator).

1997-2002 Co-Investigator: Epidemiology of Down Syndrome and Down Syndrome-Leukemia. R01CA75169, N.I.H., (J. Ross, Principal Investigator).

1998-2004 Principal Investigator: A Case Control Study of Risk Factors for Wilms Tumor. R01 CA75385-01, N.I.H.

1999-2000 Co-Principal Investigator: A Multifactorial Study of Survival in Head and Neck Cancer. Oral & Maxillofacial Surgery Foundation.

1999-2015 Co-investigator. Cancer Center Core Support Grant – Program Leaders Cancer Center Core Support Grant – Rapid Case Ascertainment Core P30-CA1601866-30 (H. Earp, Principal Investigator).

2001-2011 Principal Investigator: Training Grant in Cancer Epidemiology. 2-T32-CA09330-21-26, N.I.H.

2000-2001 Principal Investigator: The Role of Folic Acid and Methylenetrahydrofolate Reductase (MTHFR) Polymorphisms in Preterm Delivery in North Carolina. Institute of Nutrition, University of North Carolina.

2001-2010 Co-Investigator (Core Director, Developmental Susceptibility Research Core): UNC-CH Center for Environmental Health and Susceptibility. National Institute of Environmental Health Science, (J. Swenberg, Principal Investigator).

.

2001-2008 Principal Investigator: Gene-Environment Interaction in Head and Neck Cancer R01CA90731-01, NIH.

2001-2002 Principal Investigator: International Conference on Male Mediated Developmental Toxicity. 1-R13-HD/ES40801-01, NIH.

2001-2006 Principal Investigator: Drinking Water Disinfection By-Products and Male Reproductive Health: Semen Quality and Sperm Biomarkers. R-82932701-0 (Cooperative Agreement), US Environmental Protection Agency, $500,000.

2003-2008 Co-Investigator (K. North, PI): Gene-by-smoking interaction and risk of atherosclerosis. NIH.

2006-2008 Co-Investigator (B. Entwisle, PI): Incorporating a Biomedical Perspective in Population-Based Research. R25 HD053765, N.I.H.

2007-2012 Principal Investigator: Quality of Life Among African-American Head and Neck Cancer Survivors. Lance Armstrong Foundation.

2007-2011 Co-Investigator (B. Entwisle, PI): Study Centers for the National Children's Study. HHSN267200700049C. NICHD.

2002- 2013 Principal Investigator: North Carolina Center for Birth Defects Research and Prevention. U50/CCU422096-01 (Cooperative Agreement) Centers for Disease Control.

2008-2013 Principal Investigator: Genetic Susceptibility Factors in the Etiology of Neuroblastoma. 1-R01-CA132887-01. NCI.

2008-2012 Co-Principal Investigator (A.M. Siega-Riz, PI): Training Program in Reproductive, Perinatal, and Pediatric Epidemiology. 5-T32-HD052468-02, NICHD.

2010-2013 Co-Investigator (R. Fry, PI): In uetro to arsenic, links to epigenetic variation and disease. R01-ES019315, NIEHS.

2011-2013 Co-Investigator (A. Herring, PI): Bayesian Methods for High-Dimensional Epidemiologic Data. R01-ES020619, NIEHS.

2013-2017 Co-Principal Investigator (C. Ambrosone, PI): Epidemiology of Breast Cancer Subtypes in African American Women: A Consortium. P01CA151135, NCI.

2013- 2018 Principal Investigator: North Carolina Birth Defects Study To Evaluate Pregnancy Exposures (NC BDSTEPS). 1U01DD001036-01. (Cooperative Agreement) Centers for Disease Control.

PUBLICATIONS:

Book

Male-Mediated Developmental Toxicity, Editors: **AF Olshan** and DR Mattison, New York Plenum Press, 406 pp, 1994.

Epidemiology, Pathogenesis, and Prevention of Head and Neck Cancer. Editor: **AF Olshan**, Springer-Verlag, 2010.

Chapters and Other Publications

Olshan AF: Familial and Genetic Associations. In: Epidemiology and Biology of Multiple Myeloma, Editors: M. Potter and G.I. Obrams, Berlin:Springer-Verlag, pp. 31-39, 1991.

Reproductive Effects, Chapter 9, In: Veterans and Agent Orange. Health Effects of Herbicides Used in Vietnam. National Academy Press, 1994.

Herrinton LJ, Weiss NS, **Olshan AF**. The Epidemiology of Multiple Myeloma. In: Myeloma, Editors: Bergsagel D, Kyle RA, Malpas JS, Oxford University Press, 1994.

Olshan AF and P. Schnitzer: Paternal Occupation and Birth Defects.
In: Male-Mediated Developmental Toxicity, Editors: **AF Olshan** and DR Mattison, Plenum Press, 1994.

Herrinton LJ, Weiss NS, Koepsell TD, **Olshan AF**. Multiple Myeloma. In: Cancer Epidemiology and Prevention, Editors: D. Schottenfeld and JF Fraumeni, Oxford University Press, pp. 946-970, 1996.

Reproductive Effects, Chapter 9, In: Veterans and Agent Orange. Health Effects of Herbicides Used in Vietnam. National Academy Press, 1996.

Reproductive Effects, Chapter 9, In: Veterans and Agent Orange. Health Effects of Herbicides Used in Vietnam. National Academy Press, 1998.

Goodman MT, Gurney JG, Smith MA, **Olshan AF**. Sympathetic nervous system tumors.
Chapter IV. In: Ries, LAG, Smith MA, Gurney JG, Linet M, Tamra T, Young JL, Bunin GR (eds). Cancer Incidence and Survival among Children and Adolescents: United States SEER Program 1975-1995, National Cancer Institute, SEER Program. NIH Pub. No. 00-4649. Bethesda, MD 1999.

Bernstein L, Linet M, Smith MA, **Olshan AF**. Renal Tumors. Chapter VI. In: Ries, LAG, Smith MA, Gurney JG, Linet M, Tamra T, Young JL, Bunin GR (eds). Cancer Incidence and Survival among Children and Adolescents: United States SEER Program 1975-1995, National Cancer Institute, SEER Program. NIH Pub. No. 00-4649. Bethesda, MD 1999.

Olshan AF, Anderson L, Roman E, Fear N, Wolff M, Whyatt R, Vu V, Diwan BA, Potischman N. Workshop to Identify Critical Windows of Exposure for Children's Health: Cancer Work Group Summary. Environ Health Perspect, 108 (Suppl 3):595-597, 2000.

Olshan AF and Bunin GR: Epidemiology of Neuroblastoma. In: Neuroblastoma. Brodeur GM, Sawada T, Tsuchida Y, Voute PA (Eds). Elsevier, Amsterdam, pp 33-39, 2000.

Olshan AF. Pesticides and Childhood Cancer: A Review and Perspective. Children's Environmental Health: What Role for the Federal Government? Congressional Research Service, 107-62, 2002.

Olshan AF and van Wijngaarden E : Paternal Occupation and Childhood Cancer.

In: Advances in Male Mediated Developmental Toxicity. Robaire B, Hales BF (Eds.) Plenum Press, 147-161, 2003.

Ward EM, Schulte, PA, Bayard S, Blair, A, Brandt-Rauf P, Butler MA, Dankovic D, Hubbs AF, Jones C, Karstadt M, Kedderis, GL, Melnick R, Redlich CA, Rothman N, Savage RE, Sprinker M, Toraason M, Weston A, (**Olshan AF**, Stewart P, Zahm SH, Contributors). Priorities for Development of Research Methods in Occupational Cancer. Environmental Health Perspectives, 111:1-12, 2003.

Boekelheide K, Darney SP, Daston GP, David RM, Luderer U, **Olshan AF**, Sanderson WT, Willhite CC, Woskie S. NTP-CERHR Expert Panel Report on the reproductive and developmental toxicity of 1-bromopropane. Reproductive Toxicology, 18:157-188, 2004.

Boekelheide K, Darney SP, Daston GP, David RM, Luderer U, **Olshan AF**, Sanderson WT, Willhite CC, Woskie S. NTP Center for the Evaluation of Risks to Human Reproduction Bromopropanes Expert Panel. NTP-CERHR Expert Panel Report on the reproductive and developmental toxicity of 2-bromopropane. Reproductive Toxicology, 18:189-217, 2004.

Olshan AF. Epidemiology. In: Neuroblastoma Cheung N-K V. and Cohn SL. (Eds.), Springer-Verlag Berlin, pp. 1-5, 2005.

Olshan AF. Laryngeal Cancer. In: Cancer Epidemiology and Prevention, 2nd Ed. D. Schottenfeld and JF Fraumeni (Eds.), Oxford University Press, 2006.

Fallon R, **Olshan A**, Saxman S. Chapter 13, Male Genital Tract Cancer. In: Bleyer A, O'Leary M, Barr R, Ries LAG (eds): Cancer Epidemiology in Older Adolescents and Young Adults 15 to 29 Years of Age, including SEER Incidence and Survival: 1975-2000. National Cancer Institute, NIH Pub. No. 06-5767. Bethesda, MD 2006.

O'Leary M, Sheaffer J, Finklestein J, **Olshan A**, Brown J. Female Genital Tract Cancer. In: Bleyer A, O'Leary M, Barr R, Ries LAG (eds): Cancer Epidemiology in Older Adolescents and Young Adults 15 to 29 Years of Age, including SEER Incidence and Survival: 1975-2000. National Cancer Institute, NIH Pub. No. 06-5767. Bethesda, MD 2006.

Luderer U, Collins TF, Daston GP, Fischer LJ, Gray RH, Mirer FE, **Olshan AF**, Setzer RW, Treinen KA, Vermeulen R. NTP-CERHR Expert Panel Report on the reproductive and developmental toxicity of styrene. Birth Defects Res B Dev Reprod Toxicol. 77:110-93, 2006.

Olshan AF. Meeting report: the use of newborn blood spots in environmental research: opportunities and challenges. Environ Health Perspect. 115:1767-79, 2007.

Book Reviews

Olshan AF. Review of "Molecular Dosimetry and Human Cancer" by J.D. Groopman and P.L. Skipper. American Journal of Epidemiology, 138:889-891, 1993.

Savitz DA, McMahon M, **Olshan AF**. Review of "Occupational and Environmental Reproductive Hazards: A Guide for Clinicians" by M. Paul. New England Journal of Medicine, 329:1588-1589, 1993.

Olshan AF. Review of "Mechanisms of Carcinogenesis: Contributions of Molecular Epidemiology" By P. Buffler, J. Rice, R. Baan, M. Bird, P. Boffetta. Cancer Causes and Control, 15:851-852, 2004.

Dissertation

A Case-Control Study of Risk Factors for Wilms' Tumor. 1987. Department of Epidemiology, University of Washington. Chairperson of Supervisory Committee: Janet R. Daling, Ph.D.

Refereed Articles (* major advisor for students)

1. Vitaliano PP, Prinz P, Vitiello MV, **Olshan AF**, Roehrs TA: On the use of repeated measures designs in psychopharmacology. Psychopharmacology 72:247-249, 1981. PMID: 6784142

2. Swindler DR, **Olshan AF**, Sirianni JE: Sex Differences in permanent mandibular tooth development in Macaca nemestrina. Human Biology 54:45-53, 1982. PMID: 7084931

3. Daniel HJ, Schmidth RT, **Olshan AF**, Swindler DR: Ontogenetic changes in the bony labyrinth of Macaca mulatta. Folia Primatologica 38:122-129, 1982. PMID: 7095657

4. **Olshan AF**, Siegel AF, Swindler DR: Robust and least squares orthogonal mapping: Methods for the study of cephalofacial form and growth. American Journal of Physical Anthropology 59: 131-137, 1982. PMID: 7149014

5. Swindler DR, **Olshan AF**: Molar size sequence in old world monkeys. Folia Primatologica 39:201-212, 1982. PMID: 7166286

6. Daling JR, Starzyk P, **Olshan AF**, Weiss NS: Birthweight and the incidence of childhood cancer. Journal of the National Cancer Institute 72:1039- 1041, 1984. PMID: 6585581

7. **Olshan AF**, Shy KK, Hickok DE, Luthy DA, Weiss NS, Daling JR: Effect of cesarean birth on neonatal mortality in very low birthweight infants. Obstetrics and Gynecology 64:267-70, 1984. PMID: 6738960

8. **Olshan AF**, Breslow NE, Daling JR, Weiss NS, Leviton A: Childhood brain tumors and paternal occupation in the aerospace industry. Journal of the National Cancer Institute, 77:17-19, 1986. PMID: 3459911

9. **Olshan AF**: Wilms' tumor, overgrowth and fetal growth factors: A hypothesis. Cancer Genetics and Cytogenetics 21:303-307, 1986. PMID: 3006909

10. Koepsell TD, Daling Jr, Weiss NS, Taylor JW, **Olshan AF**, Lyon JL, Swanson GM, Child M: Antigenic stimulation and the occurrence of multiple myeloma. American Journal of Epidemiology 126:1051-1062, 1987. PMID: 3687917

11. Shy KK, **Olshan AF**, Hickok DE, Luthy DA: Electronic fetal heart rate monitoring and the occurrence of perinatal mortality in very low birthweight infants. Birth, 15:14-18, 1988. PMID: 3348870

12. Breslow N, Norkool P, **Olshan A**, Evans A, D'Angio GJ: Second malignant neoplasms in survivors of Wilms' tumor: A report from the National Wilms' Tumor Study. Journal of the National Cancer Institute, 80:592-595, 1988. PMID: 2836600

13. Muhm JM, **Olshan AF**: A program to calculate sample size, power and least detectable relative risk using a programmable calculator. American Journal of Epidemiology 129:205-211, 1989. PMID: 2910062

14. **Olshan AF**, Baird PA, Teschke K: Paternal occupational exposures and the risk of Down syndrome. American Journal of Human Genetics 44:646-651, 1989. PMCID: PMC1715649

15. **Olshan AF**, Faustman E: Nitrosatable drug exposure during pregnancy and adverse pregnancy outcome. International Journal of Epidemiology, 18:891-899, 1989. PMID: 2621027

16. **Olshan AF**, Teschke, K, Baird PA: Birth defects among offspring of firemen. American Journal of Epidemiology 131:312-321, 1990. PMID: 2296983

17. **Olshan AF**, Breslow NE, Daling J, Falletta J, Grufferman S, Robison L, Waskerwitz M, Hammond D: Wilms' tumor and paternal occupation. Cancer Research, 50:3212-3217, 1990. PMID: 2159375

18. **Olshan AF**, Teschke K, Baird PA: Paternal occupation and congenital anomalies in offspring. American Journal of Industrial Medicine, 20:447- 475, 1991. PMID:1785611

19. Blatt J, **Olshan AF**, Gula MJ, Dickman PS, Zaranek B: Second malignancies in very long term survivors of childhood cancer. American Journal of Medicine, 93:57-60, 1992. PMID: 1320804

20. Ambinder RF, Browing PJ, Mann RB, Lorenzana I, Levanthal B, Cosenza H, MacMahon E, Medina R, Cardona V, Grufferman S, **Olshan A**, Levin A, Petersen EA, Blattner W, Levine PH. Epstein-Barr Virus and childhood Hodgkin's Disease in Honduras and the United States. Blood, 81:462-467, 1992. PMID: 8380725

21. Breslow N, **Olshan A**, Beckwith JB, Green DM. Epidemiology of Wilms tumor. Medical and Pediatric Oncology, 21:172-181, 1993. PMID: 7680412

22. **Olshan AF**, Faustman E: Male-Mediated Developmental Toxicity. Annual Review of Public Health, 14:159-181, 1993. (Reprinted in Reproductive Toxicology, 7:191-202, 1993) PMID: 7686758

23. **Olshan AF**, Breslow NE, Falletta J, Grufferman S, Pendergrass T, Robison L, Waskerwitz M, Woods W, Vietti T, Hammond D: Risk factors for Wilms' tumor: Report from the National Wilms' Tumor Study. Cancer 72:938-944, 1993. PMID: 8392906

24. Breslow N, **Olshan A**, Beckwith JB, Moksness J, Feigel P, Green D: Ethnic variation in the incidence, diagnosis, prognosis and followup of children with Wilms Tumor. Journal of the National Cancer Institute, 86:49-51, 1994. PMID: 8271283

25. Zhang J, **Olshan A**, Cai WW: Birth defects in relation to threatened abortion. Epidemiology, 5:341-344, 1994. PMID: 8038250

26. Savitz DA, Sonnenfeld N, **Olshan A**. Review of epidemiologic studies of paternal exposure and spontaneous abortion. American Journal of Industrial Medicine, 25:361-383, 1994. PMID: 8160656

27. Teschke K, Kennedy SM, **Olshan AF**: Effect of different questionnaire formats on reporting of occupational exposures. American Journal of Industrial Medicine, 26:327-337, 1994. PMID: 7977406

28. **Olshan AF**, Schnitzer P, Baird PA: Paternal age and the risk of cardiac defects. Teratology, 50:80-84, 1994. PMID: 7974258

29. **Olshan AF**, Mattison DR, Zwanenburg TSB: Cyclosporin A: Review of genotoxicity and potential for adverse human reproductive effects. Mutation Research, 317:163-173, 1994. PMID: 7511794

30. *McIntosh GC, **Olshan AF**, Baird PA: Paternal age and the risk of birth defects in offspring. Epidemiology, 6:282-288, 1995. PMID: 7619937

31. Carozza SE, **Olshan AF**, Faustman EM, Gula MJ, Kolonel LN, Austin DF, West D, Weiss NS, Swanson M, Lyon JL, Hedley-White T, Gilles FH, Aschenbrener C, Leviton A: Maternal Exposure to N-nitrosatable Drugs as a Risk Factor for Childhood Brain Tumors. International Journal of Epidemiology, 24:308-312, 1995. PMID: 7635590

32. *Schnitzer PG, **Olshan AF**, Savitz DA, Erickson JD: Validity of mother's report of father's occupation in a study of paternal occupation and congenital malformations. American Journal of Epidemiology, 141:872-877, 1995. PMID: 7717364

33. *Schnitzer PG, Teschke K, **Olshan AF**: A classification scheme for aggregating US census occupation and industry codes. American Journal of Industrial Medicine, 28:185-191, 1995. PMID: 8585516

34. *Schnitzer PG, **Olshan AF**, Savitz DA, Erickson JD: Paternal occupation and risk of birth defects in offspring. Epidemiology, 6:577-583, 1995. PMID: 8589087

35. **Olshan AF**, Ananth CV, Savitz DA: Intrauterine growth retardation as an endpoint in mutation epidemiology: an evaluation based on paternal age, Mutation Research, 344:89-94, 1995. PMID: 7565898

36. Savitz DA, **Olshan AF**: Multiple comparisons and related distractions in the interpretation of epidemiologic data, American Journal of Epidemiology, 142:904-908, 1995. PMID: 7572970

37. **Olshan AF.** Lessons learned from human studies of environmental exposure and genetic disease. Environmental and Molecular Mutagenesis, 25, Supplement 26:74-80, 1995. PMID: 7789365

38. Savitz DA, **Olshan AF**, Gallagher K: Maternal occupation and pregnancy outcome: results from the 1988 national maternal and infant health survey. Epidemiology, 7:269-274, 1996. PMID: 8728440

39. *McMahon MJ, Luther ER, Bowes WA, **Olshan AF**: Trial of labor versus elective repeat cesarean: a population-based study. New Engl J Med, 335:689-695, 1996. PMID: 8703167

40. Yarbrough WG, Aprelikova O, Pei H, **Olshan AF**, Liu ET: Familial tumor syndrome associated with a germline non-functional $p16^{INK4a}$ allele. J Natl Cancer Inst, 88:1489-1491, 1996. PMID: 8841025

41. **Olshan AF**, Weissler MC, Pei, H, Conway K, Anderson S: Alterations of the p16 gene in head and neck cancer: Frequency and association with p53, PRAD-1, and HPV. Oncogene, 14:811-818, 1997. PMID: 9047388

42. **Olshan AF**, Weissler MC, Pei H, Conway K: p53 mutations in head and neck cancer: new data and evaluation of mutational spectra. Cancer Epidemiology, Biomarkers & Prevention, 6:499-504, 1997. PMID: 9232336

43. McMahon MJ, Li R, Schenck AP, **Olshan AF,** Royce RA: Previous cesarean birth as a risk factor for placenta previa: A population-based case-control study. Journal of Reproductive Medicine, 42:409-412, 1997. PMID: 9252931

44. Blatt J, **Olshan A**, Lee PA, Ross JL: Neuroblastoma and related tumors in Turner's syndrome. Journal of Pediatrics, 131:666-670, 1997. PMID: 9403643

45. *Daniels JL, **Olshan AF,** and Savitz DA: Pesticides and childhood cancer: A review. Environmental Health Perspectives, 105:1068-1077, 1997. PMID: 9349828

46. *McKaig R, Baric R, **Olshan AF**: HPV and Head and Neck Cancer: A Review. Head & Neck, 20:250-265, 1998. PMID: 9570632

47. Shults R. Arndt V, Martin C, **Olshan A**, Royce R: Effects of short interpregnancy intervals on intrauterine growth retardation and preterm birth. Epidemiology 10:250-254, 1999. PMID: 10230833

48. *Lieff S, **Olshan AF**, Savitz DA, Werler M: Selection bias and the use of controls with malformations in case-control studies of birth defects. Epidemiology 10:238-241, 1999. PMID: 10230831

49. *Lieff S, **Olshan AF**, Strauss R, Werler M: Maternal cigarette smoking during pregnancy and risk of oral clefts in newborns. American Journal of Epidemiology, 150:683-694, 1999. PMID: 10512422

50. **Olshan AF**, Smith J, Cook MN, Grufferman S, Pollock BH, Stram DO, Seeger RC, Look AT, Cohn SL, Castleberry RP, Bondy ML: Hormone and fertility drug use and the risk of neuroblastoma: A report from the Children's Cancer Group and the Pediatric Oncology Group. American Journal of Epidemiology, 150:930-938, 1999. PMID: 10547138

51. **Olshan AF**, DeRoos AJ, Teschke K, Neglia JP, Stram DO, Pollock BH, Castleberry RP: Neuroblastoma and parental occupation. Cancer Causes and Control, 10:539-549, 1999. PMID: 10616823

52. *Arbes SJ, Jr, **Olshan AF**, Caplan DJ, Schoenbach VJ, Slade GD, Symons MJ. Factors contributing to the poorer survival of black Americans diagnosed with oral cancer. Cancer Causes and Control 10:513-523, 1999. PMID: 10616821

53. Li R, Boerwinkle E, **Olshan AF**, Chambless LE, Pankow JS, Tyroler HA, Bell DA, Heiss G. Glutathione S-transferase genotypes as susceptibility factors in smoking-related coronary heart disease. Atherosclerosis, 149:451-462,2000. PMID: 10729397

54**.** **Olshan AF**, Weissler MC, Watson MA, Bell DA: GSTM1, GSTT1, GSTP1, CYP1A1, and NAT1 polymorphisms, tobacco use and the risk of head and neck cancer. Cancer Epidemiology, Biomarkers & Prevention, 9:185-191, 2000. PMID: 10698480

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INVITED PRESENTATIONS:

Epidemiology of Childhood Cancers. National Cancer Institute Meeting: Perinatal Carcinogenesis: Current Directions, Frederick, Maryland, 1990.

Epidemiology and Genetics of Wilms' Tumor. Department of Human Genetics, University of Pittsburgh, 1990.

Male-Mediated Developmental Toxicity: Paternal Exposures and Birth Defects. North Carolina Medical Genetics Association Meeting, 1992.

Male-Mediated Developmental Toxicity: Epidemiologic Perspectives. Department of Epidemiology, Johns Hopkins University, 1992.

Monitoring the Human Population for Genotoxic Effects: Epidemiologic Approaches to the Study of Male-Mediated Teratogenesis. Genotoxicity and Environmental Mutagen Society Annual Meeting, Raleigh, North Carolina, 1992.

Cyclosporin A: Review of genotoxicity and potential for adverse human reproductive effects. International Commission for Protection Against Environmental Mutagens and Carcinogens, 26th Annual Meeting, Compiegne, France, 1993.

Male-mediated developmental toxicity: Epidemiologic Evidence. Symposium: Male Mediated Developmental Toxicity: Fact or Fiction?, Annual Meeting of The Society of Toxicology, New Orleans, 1993.

Paternal Occupation and Neural Tube Defects. International Conference on Neural Tube Defects, Harlingen, Texas, 1993.

Molecular Epidemiology of Head and Neck Cancer. University of Michigan Cancer Center, 1997.

Molecular Epidemiology of Head and Neck Cancer. National Institute of Dental Research, 1998.

Parental Occupation and Childhood Cancer. Children's Environmental Health and Safety Task Force (CDC, ATSDR, EPA, NCI, DOE, NIEHS). Cancer Work Group Meeting. Washington, DC., 1998.

Molecular Epidemiology: Prospects and Strategies. Committee on Developmental Toxicity. National Research Council. Washington, DC, June, 1998.

Agent Orange Heath Effect Review: Methodology. Committee on Health Effects Associated with Exposures Experienced During the Gulf War. Institute of Medicine. Washington, DC, June, 1999.

Molecular Epidemiology in the Environmental Genome Project. Division of Extramural Research and Training, National Institute of Environmental Health Sciences, Planning Retreat, January 11, 2000, Pinehurst, NC.

The Human Story: Where are We Now? Symposium on Male-Mediated Developmental Toxicity, Teratology Society Meeting, Montreal, June 24, 2001.

Head and Neck Cancer as a Model for Gene-Environment Interaction. 13th Conference of the International Society for Environmental Epidemiology, Symposium on Gene-Environment Interaction, September 2-5, 2001, Garmisch-Partenkirchen, Germany.

The Human Story- Where are we now? March of Dimes Symposium, Male-Mediated Developmental Toxicity, Teratology Society Meeting, Montreal, June 24, 2001.

Head and Neck Cancer as a Model for Gene-Environment Interaction. University of Minnesota Cancer Center, Minneapolis, February 5, 2002.

NC Center for Birth Defects Research and Prevention. NC Statewide Joint Maternal-Fetal Medicine Joint Meeting. Chapel Hill, NC, April 11, 2003.

Cancer and the Environment. Cancer Issues 2003. National Press Foundation. Washington, DC, October 22, 2003.

Environment and childhood cancer: challenges and prospects. International Childhood Cohort Consortium meeting. Rockville, MD, September 28, 2005.

Birth Defects and Childhood Cancer: Epidemiologic Approaches and Opportunities. National Cancer Institute Meeting on Epidemiology of Birth Defects and Cancer, February 13, 2006.

Childhood Cancer as a Model for Developmental Disorders. Symposium on the role of environmental toxicity and human disease, Society of Toxicology Annual Meeting, Charlotte, NC, March 26, 2007.

Environment, Epidemiology, and Childhood Cancer: At a Crossroads? Hacettepe University Institute of Oncology, Ankara, June 26, 2007.

Environment, Epidemiology, and Childhood Cancer: At a Crossroads? National Institute of Environmental Health Sciences, July 16, 2007.

Formaldehyde Studies. Current Topics in Occupational and Environmental Cancer. National Cancer Institute. November 28, 2007.

Rapid Case Ascertainment. Cancer Control and Population Science Directors and Program Leaders Meeting. Sixth Annual AACR International Conference Frontiers in Cancer Prevention, December 6, 2007.

Integrating Biomarkers Into Population Research. School of Social and Family Dynamics Center for Population Dynamics, Arizona State University, Tempe, AZ. April 7, 2009.

Epidemiology as Translational Science. University of Ulm, Ulm, Germany, July 29, 2009.

The Epidemiology of Childhood Cancer: Lessons Learned and What's Next. Texas Children's Hospital, Houston, Texas, March 4, 2010.

The Epidemiology of Neuroblastoma. Children's Neuroblastoma Cancer Foundation, July 29, 2011.

The Epidemiology of Childhood Cancer: Lessons Learned and What's Next. Duke University, Cancer Control Seminar Series, Durham, NC, October 11, 2011.

Gene-Environment Interaction in Head and Neck Cancer: The Role of Alcohol Metabolism. North Carolina Central University, Durham, NC, November 30, 2011.

The Causes of Birth Defects: Opportunities and Challenges. Department of Public Health Sciences. Medical University of South Carolina. Charleston, SC, April 28, 2014.

The Causes of Birth Defects: Opportunities and Challenges. Pediatrics, Moses H. Cone Memorial Hospital. Greensboro, NC, May 7, 2014.

Approaches to Studying the Etiology of Neuroblastoma: The Neuroblastoma in North America (NENA) Study. Department of Pediatric Hematology/Oncology, Columbia University Medical Center, New York, NY, November 18, 2015.

The Evolution of Cancer Epidemiology: Promise and Pitfall. Geoffrey Howe Memorial Lecture at the Columbia University Epidemiology Grand Rounds. Department of Epidemiology, Columbia University. New York, NY, November 18, 2015.

The UNC CHANCE Study: Adventures in the Molecular Epidemiology of Head and Neck Cancer. Department of Environmental Health, University of Cincinnati, Cincinnati, Ohio, March 30, 2016.

Gene-Exposure Interaction in the Etiology of Childhood Cancer. Symposium. Germline Genetic Risk of Childhood Cancer: Where Do We Go from Here? Minneapolis, Minnesota, May 9, 2016

The Evolution of Cancer Epidemiology: Promise and Pitfall. Cancer Control Program Seminar, Ohio State University Comprehensive Cancer Center. Columbus, Ohio, NY, May 25, 2016.

INVITED, OTHER:

Invited, Meeting to Review the Status of clinical and epidemiologic research on structural birth defects, NICHD, Bethesda, MD, October 15,1997

Invited, Meeting on The Need for and Design of a Nationwide Childhood Cancer Registry, Washington DC, July 24, 1998.

Invited, Head and Neck Cancer Priority Setting Workshop, NCI, NIDCR, Bethesda, February 21, 1999

Invited, Toward New Paradigms in Genetic and Molecular Epidemiologic Research: Identifying Infrastructure Needs for Population-Based Studies. NCI, Rockville, MD, February 19,1999.

External Peer Review Panel, Environmental Protection Agency Preliminary Risk Assessment of Cadmium. Research Triangle Park, NC, August 3, 1999

Cancer Breakout Group Chair, Critical Windows of Exposure for Child's Health. Richmond, VA. Environmental Protection Agency. Richmond, VA, September 14-15, 1999

Invited, EPI-21, Epidemiology in the Twenty-First Century. National Institute of Environmental Health Sciences, Raleigh, NC, October 31- November 2, 1999.

Invited, Workshop on Environmental Contributors to Infant Mortality. National Institute of Environmental Health Sciences, Research Triangle Park, NC, May 15-16, 2001.

Invited, Session Co-Chair, Workshop, Gene-Environment Interactions in the Etiology of Childhood Cancer, National Cancer Institute, Bethesda, MD, March 25-26, 2002.

Invited, Workshop Organizer, Molecular Epidemiologic Approaches to the Evaluation of Cancer Risk, Progression, and Therapeutic Efficacy, The Sixth Research Workshop on the Biology, Prevention, and Treatment of Head and Neck Cancer, McLean, Virginia, October 9-13, 2002.

Invited, Discussant, Childhood Cancer Prevention: Opportunities Before and During Pregnancy to Reduce Risk. Division of Cancer Prevention and Control, Centers for Disease Control and Prevention, May 23, 2014.

Huntersville, NC Uveal Melanoma Scope of Work

Background: There have been 12 cases of uveal melanoma diagnosed in patients within the past 10 years who have resided or worked in Huntersville, NC. Of these 12, 9 affected women with 6 of these women diagnosed under the age of 30. Two of these women and 2 men have died from disease. In addition to the incidence of cases, the number cases affecting young female patients are unusual. Epidemiologic and clinical genetic (BAP1) analyses are ongoing. Deep molecular analyses of biospecimens available from these cases may contribute to a further understanding of this group of patients.

Plan: After obtaining regulatory and IRB approval, we will obtain all available tumor and germline biospecimens. The tumor specimens that have been identified thus far and are available are outlined in the table below and include:

1. Five enucleation specimens (primary tumor samples)
2. Four liver biopsy specimens (metastatic tumor samples; three liver biopsy sample available from patient who also underwent enucleation and one from a patient who also underwent FNA of the primary lesion)
3. Three fine needle aspirate sample of primary (primary tumor samples; one FNA available from a patient who underwent liver biopsy)

Of these, it may be possible to obtain matched normal tissue from 4 patients for purposes of whole exome sequencing analysis.

Case	Status	Enucleation Specimen	FNA of Primary	Liver Biopsy	Matched Normal
1 (KC)	Deceased	X		X	
2 (ML)	Deceased		X	X	
3 (SH)	Alive		X		X
4 (CP)	Alive	X			X
5 (GG)	Alive		X		X
6 (BM)	Alive	X			X
7 (BP)	Deceased	X		X	
8 (JK)	Deceased	X		X	

We propose the following testing:

1. We will perform next generation sequencing and transcriptome analysis for cases with sufficient material through the Columbia University Medical Center (CUMC) Genomics Technologies Core of the Herbert Irving Comprehensive Cancer Center (http://www.hiccc.columbia.edu/research/sharedresources/genomics). For cases where matched normal-frozen tumor specimens are available with sufficient quality and quantity, we will perform whole exome/transcriptome

sequencing. We will perform more targeted sequencing as need based upon biospecimen quantity and quality. We will compare results obtained from these Huntersville, NC cases from publically available results obtained from uveal melanoma samples collected as part of The Cancer Genome Atlas project (https://cancergenome.nih.gov/cancersselected/UvealMelanoma) and other available datasets in an effort to identify genetic similarities and differences.

2. Similar epigenetic analysis will be performed on all cases with sufficient DNA material. We will perform genome-wide analysis of CpG methylation using the Illumina "800k" MethylationEPIC BeadChip Assay through the CUMC Epigenetics Shared Resource of the Herbert Irving Comprehensive Cancer Center (http://www.hiccc.columbia.edu/research/sharedresources/molecularcyto-epigenetics).

3. We will assess the cellular immune infiltrate within the tumor microenvironment of the available cases using available archived tumor specimens. We determine cell phenotypes and localization as well as perform nearest neighbor analysis using the MANTRA system from Perkin Elmer and Inform software in the laboratory of Dr. Yvonne Saenger at CUMC (http://www.cumc.columbia.edu/hematology-oncology/about_us/yvonne_saenger).

DNA and RNA extraction from either fresh frozen material or paraffin embedded material will be performed by the Herbert Irving Comprehensive Cancer Center Molecular Pathology Core (http://www.hiccc.columbia.edu/research/sharedresources/molecular/using).

Budget: The estimated cost per sample for each of the proposed assays, including bioinformatics analysis costs, is below.

Assay	Estimated Cost/Sample	Testing Location
DNA and RNA Extraction	$50	Molecular Pathology Core
Whole Exome/Transcriptome	$5000	Genomics Technologies Core
CpG Methylation Analysis	$1000	Epigenetics Shared Resource
Multiplex Immunohistochemistry	$500	Saenger Laboratory

Assuming full analysis of 9 cases, including the five enucleation samples and four liver biopsy samples (with limited if any analysis possible on three FNA samples), we anticipate a maximum total cost of $58,950 (9 x $6550). The total cost may be lower

depending on sample availability, specimen quality, and assays ultimately felt to be feasible.

Timeline: We have initiated the process to obtain local IRB approval of this project and will obtain verbal consent of patients and/or family members to obtain available biospecimens once approval has been obtained. We anticipate this process being complete by May 2017. We will then request all available biospecimens to be shipped to our center and hope to have all specimens on site by July 2017. Once all specimens are obtained, we anticipate completion of all testing and analysis within 2 months. A final report will be generated by December 2017 or sooner.

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Janet Pierson, Town Clerk
Subject: Approval of Minutes

Consider approving minutes of the March 6, 2017 Regular Town Board Meeting.

ACTION RECOMMENDED:
Approve Minutes

FINANCIAL IMPLICATIONS:
N/A

ATTACHMENTS:

	Description	Type
🗋	Draft Minutes	Backup Material

TOWN OF HUNTERSVILLE
TOWN BOARD MEETING
MINUTES

March 6, 2017
6:30 p.m. – Huntersville Town Hall

PRE-MEETING

The Huntersville Board of Commissioners held a pre-meeting at the Huntersville Town Hall at 5:30 p.m. on March 6, 2017.

GOVERNING BODY MEMBERS PRESENT: Mayor John Aneralla; Commissioners Melinda Bales, Dan Boone, Charles Guignard, Rob Kidwell and Danny Phillips. Commissioner Mark Gibbons was not present.

Commissioner Guignard made a motion to go into closed session for personnel. Commissioner Bales seconded motion. Motion carried 5-0.

Upon return from closed session, the Board heard a presentation from Nate Bowman requesting the Board consider a storm water ordinance for parcels in the downtown an acre or less to eliminate water quality in lieu of a payment of mitigation and also have a program that allows for reimbursement of infrastructure for people who are willing to put in higher density developments.

There being no further business, the pre-meeting was adjourned.

REGULAR MEETING
TOWN OF HUNTERSVILLE
BOARD OF COMMISSIONERS

The Regular Meeting of the Huntersville Board of Commissioners was held at the Huntersville Town Hall at 6:30 p.m. on March 6, 2017.

GOVERNING BODY MEMBERS PRESENT: Mayor John Aneralla; Commissioners Melinda Bales, Dan Boone, Charles Guignard, Rob Kidwell and Danny Phillips. Commissioner Mark Gibbons entered meeting late.

Mayor Aneralla called the meeting to order.

Mayor Aneralla called for a moment of silence.

The Boy Scouts led the Pledge of Allegiance.

MAYOR AND COMMISSIONER REPORTS/STAFF QUESTIONS

Mayor Aneralla

- The next meeting of the North Meck Alliance is March 9.

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Commissioner Bales

- Expressed appreciation to the Parks & Recreation Department for the groundbreaking ceremony for the new Rec Center.
- The Lake Norman Education Collaborative is partnering with the Lake Norman EDC and Chamber of Commerce to host a speed networking event at Hopewell High School on April 5. This speed networking event will be for their academies of Hospitality and Tourism and their Engineering Program.
- Huntersville has 17 active economic development projects. Three are in the first contact mode, five are in follow-up, four are currently setting up visits and five projects we are the finalist for.

Commissioner Boone

- The Police Department will host Coffee with a Cop at Chick-fil-A on March 7.
- Registration for summer youth camps will start on March 27.

Commissioner Guignard

- The next meeting of the Planning Coordinating Committee is in about 6 weeks.
- The Huntersville Lions Club will have a fundraising pancake breakfast this Saturday morning to assist in the medical bills and travel expenses of the Huntersville citizens diagnosed with Ocular Melanoma.
- The 21st Annual Angels of 97 Spaghetti dinner is March 18.

Commissioner Kidwell

- Welcomed former Mayor Jill Swain who was present in the audience.
- The next meeting of the Charlotte Regional Transportation Planning Organization is March 15.
- Expressed appreciation to the Parks & Rec Department for the groundbreaking on the Rec Center. All permits have been approved for Veterans Park.

Commissioner Boone

- Announced upcoming Lake Norman Chamber events.
- Reported on Visit Lake Norman events.

Gerry Vincent, Interim Town Manager, updated Board on current projects.

PUBLIC COMMENTS, REQUESTS, OR PRESENTATIONS

Bruce Andersen, 16125 Weatherly Way, addressed the Board concerning request by CATS to study a fixed rail alternative to the current Red Line plan. Some local leaders are bringing the Red Line back up for discussion. Many of them have a good reason to do so. The Red Line would provide an alternative for those without a car. These leaders are interested in social fairness. However, given the low ridership even the Federal Government projected, the cost would be much more than other alternatives such as bus service. Other leaders have ulterior motives such as personal financial benefits. Consultants, property owners, contractors, and developers all see dollar signs when the subject comes up. The problem is the unintended consequences that are associated with a rail transit system. Rail makes sense only when it is located in heavily populated corridors. So to make it work, Huntersville and neighboring municipalities would need to increase density to much higher levels than currently exist. High density housing on the order of 20 to 40 units per acre might be necessary, surrounding the stations and perhaps all along the rail corridor. The unintended consequences come when you recognize that only a small percentage of those in the high density housing will want to commute to Charlotte or otherwise use the train. Estimates average about 5 percent. What mode of transportation

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will the other 95 percent use? Some will continue to use the bus for greater convenience. Some will be on local streets. The rest of the commuters will be on the I-77 parking lot. The false statement that rail transit will relieve congestion has even been rejected by supports of rail transit. So if you are concerned about the impact of managed lanes on I-77 and the impact on this community, be very afraid of the serious damage a future Red Line could cause.

Dianne Powers, 15324 Beatties Ford Road, said I recently learned more about the idea of building storage units behind the Old Store on Beatties Ford Road and that it would be located between the store and the fire department. I've heard that the Town's requirement that a wide planting of trees to protect the view of the neighbors is not being used on the property. Apparently this is because of the powerlines and Duke does not care about the view. I do. I live at the corner of Gilead Road and have enjoyed the view of the garden behind the Old Store for many years. I do not like the idea of seeing the back of storage buildings. Storage yards are also used for cars, trucks, sometimes they store junk that most people would not like to see outside their window. Please consider the view of the neighbors, not the power lines when you make your decision.

Charles Rapp, 15834 Pine Knoll Lane, said I'm here on behalf of the neighborhood, Town of Huntersville and the citizens within the Town of Huntersville. I have a few statements that I'm going to read to you. For the citizens in the Town of Huntersville, the approval of R16-09 will eliminate the best road option that has been completely vetted by our experts and the Town of Huntersville and could eliminate an even better option for traffic flow in the future. Approval for R16-09 takes away the experts approved current road plan and any other improved option in the future for the Town of Huntersville and its traffic issues that we currently are seeing every day and these traffic issues going into the future. Another statement from a neighbor, a friend of mine…….the citizens of Huntersville look to you to make decisions that are in the best interest of the Town, the traffic flow now and moving forward. Another statement……the ethical choice on behalf of the citizens of Huntersville is to not disregard the planned transportation routes in our town and county. To disregard any of these already approved plans does not seem ethical. Approving R16-09 that is in direct conflict with the previously approved plans for the Town of Huntersville and its citizens is not acceptable or ethical.

Titus Bartolotta, 12902 Blakemore Avenue, said thank you all for allowing me to have a voice in this meeting. It is with great honor, respect and hopefulness that I address you tonight. I address you as a father, a husband, a business profession, a community leader and a philanthropist, but more over a resident of our great town. I understand that Huntersville Family Fitness & Aquatics which is under the management and direction of Health & Sport Works Inc. may possibly be losing its contract or it may be renegotiated or canceled all together, and I just simply don't think that's right. I don't pretend to know all the interworking's and details of what may very well be a complex and extremely layered topic here but if our town would decide to without just cause change the terms of any contract that would affect the perception that folks inside of our community and even outside of our community, that would be something I strongly disagree with. In this case, a decision to cancel this already agreed upon contract would have a possible negative impact on the jobs of many individuals that not only call Huntersville their town of employment, but moreover the town they live and shop in. This provides great concerns for me. I understand that this contract doesn't necessarily and the canceling of it affect the building – the brick and the mortar, the light fixtures. I'm really just talking about the leaders that are inside that building…..the folks that have spent over 15 years developing individuals, our kids, our grandparents, our neighbors. Those are the folks that I'm talking about and representing here tonight. The idea of disconnecting this facility from its current staff and its leadership is alarming as a father because I have two sons who have taken great joy and learned a lot from that facility. And they never once came home and said that the bricks or the light fixtures really brought them joy or educated them that. It was Miss

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Cindy. It was the individuals in that building. It was the leadership of Dee Jetton, Nelson Bynum and the folks that get up and clock in everyday at that building. It's very disheartening potentially for those individuals to lose their position as a philanthropist because the community work that they do is invaluable. As the founder and the president of The Lotta Foundation, our foundation would not be able to do a lot of good. We would fall short of our mission and vision every single day if we didn't have the partnership of facilities and moreover the leadership and employees that are inside that building. It's disheartening potentially as a husband. My wife looks for a place where she can feel safe and comfortable to work-out. And although we might think there are tons of those areas, there are not and when the staff feels warm and welcomed, you want to keep going back. I think I heard a beep, so my time is over, but I just will hope that this council would respect potentially honoring that contract that's already been agreed to. *Written comments attached hereto as Exhibit No. 1.*

Ansle Hudson, 19219 Betty Stough Road, Cornelius, said I am Owner and President of Health & Sport Works, the Town's vendor for HFFA management since its first year of operation, with a contract extending until 2021. I am accompanied by our corporate counsel, John Arrowood of James, McElroy and Diehl. I am here because a conversation was raised outside our presence at the Board Retreat in January to rebid our contract despite no issue brought forth for cause of this action. On Thursday of last week, an RFP, in complete form, was included in the Board Agenda. As context, the previous two weeks we met with commissioners and on one occasion the Mayor, to work on a strategy to address the operational interests of this Board for HFFA. All present stated their opinion that these meetings were useful in moving the ball forward in understanding and coming to an agreement on the complexity of the changes that would need to take place in membership implications. As a long-term service provider to the Town we are baffled by this course of events, deflection of information and the absence of feedback and direction from the Board. We have managed HFFA since April 2, 2002, one month short of 15 years at this point. And through the tenure of seven previous boards. We have met member satisfaction expectations in the opinion of all boards, including this one. We have worked collaboratively to implement the boards' decisions on HFFA operations, merging the business practice with municipal sensitivities. We believe and have been told we coalesced these sensibilities effectively. We negotiated and contracted in 2015 in good faith and made commitments to employees and declined other opportunities to devote our primary facility attention to HFFA. We did this in part because of the strong support and community partnerships we have developed. The Health & Sport Works relationship with Novant started as Presbyterian. They selected HSW first for us to manage the fitness center inside of HFFA. Novant representatives with whom we share a medical fitness mission have stated the reason they work at HFFA is the staff, not the facilities. In fact they consider the partnership with HSW to be the model for future communities they serve. Our team is a group of dedicated year-round professionals, 96 of whom are Huntersville residents and another 48 from the greater Lake Norman area. As a North Carolina qualifying Historically Underutilized Business with female ownership and leadership, we are equally proud to employ 182 women, 71 percent of our workforce. Some employees have even asked me if the Board's direction is being taken because of this fact. We value our employees with disabilities and economic challenges as well as our team of interns that work more than 120 hours a week. They are concerned about their jobs and that's why I am here, to give them a voice. We hope that the Board will determine to honor the contract that we have in place.

Jill Swain, 105 Nitsa Lane, said in October of 2015, then candidate John Aneralla, commented on record at a Town Board meeting that he was opposed to the signing of a contract for HSW to manage HFFA. He said, as recorded in those minutes, that "I refer to the Town's Ethics Code Section 3 (f) Special Treatment – No Town official shall grant any special consideration, treatment or advantage to any citizen beyond that which is available to each and every other citizen. I believe there's a citizen here that would like to bid for that contract." He went on to say, "the worst type of crony capitalism where a

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career politician lines the pockets of friends and that has no place in Huntersville. This is what turns people off about politics." He did not stick around to hear my response that night. But what Mr. Aneralla did not say during that time was that the person who he believed was there to bid and who followed him in public comments that night was a donor to his own campaign, Mr. Brian Sheehan. Tonight Mr. Aneralla is slated to bring this contract up again……..a 5-year contract in which the Town is in year one. I'm curious about the reason this Board is interested in potentially breaking a contract and paying penalties that would unnecessarily cost our taxpayers and would also be a move that could affect the employees as you've heard, the scheduled events and the businesses that receive sales from those events and could also affect, again as you have heard, the sponsorships that HSW has worked very hard to achieve. I would encourage everyone in the audience and the citizens to watch and see if Mr. Sheehan, the campaign donor, is first in line to bid on that contract. Or second in line. Or in line at all. Additionally, you have another item on the agenda to decision on a rezoning for a sitting commissioners that both the staff and the volunteer Planning Board have suggested denying. I merely want to let this Board know that the citizens are indeed watching. They are watching tonight's decisions and conversation with interest.

John Ryan, 13839 Hastings Farm Road, said I am a part of the Hagers Ferry development and I've been asked to speak on the behalf of the homeowners in regard to the proposed rezoning for a storage facility at the corner of Beatties Ford Road and NC 73. A couple of items have been brought up by myself and neighbors which include the eyesore that would be at the western gateway to Huntersville, whether the new alignment comes in and ends up right there where the storage facility is proposed or if the widening of 73 occurs and those facilities are right there. Looking at the proposed plan there are a number of issues with it in terms of easements – over 80 percent of the proposal does not have the 20' easement that it is supposed to have and that's a problem. It looks as though the building in that location right smack in the middle of the potential proposed northwest extension of NC 73 is being put there to block that. It looks just like a road block. And that's a problem. That shouldn't be happening as we are looking at taking care of the traffic problems that we have in that part of Huntersville. Those were the items that were brought up in neighborhood conversations very quickly as we found out about this proposal this past week. I echo what some other people have said. I wanted to let you know that there are a number of people who are here who agree with me and are present to object to this rezoning.

Eric Rowell, 7847 Horseshoe Creek Drive, said I was initially going to talk about R16-09 but I think I'm going to hold off on those comments. But while I'm here I do just want to briefly address the HFFA bid item that's on the agenda. I do want to applaud the Board for putting that on tonight's agenda. I think it's long overdue. Only in government could you have a contract not be put out for bid for 15 years and it be seen as a good thing. How do we know that the taxpayers are getting their money's worth if we don't have any basis for a comparison. This is simply a bid process, nothing more nothing less. If HSW is the only person that bids, maybe they are indeed the only company that can run this facility. If other people put their name out for bid it will be a public process. But I think rushing through the contract in October 2015 before the last election could take place was a disservice to the taxpayers in Huntersville. I do encourage you to vote in favor of putting out the contract for bid tonight and we'll see who comes back with a bid to run the facility.

AGENDA CHANGES

Commissioner Guignard made a motion to adopt the agenda.

Commissioner Phillips seconded motion.

Motion carried 5-0.

PUBLIC HEARINGS

Petition #R16-12. Mayor Aneralla called to order public hearing on Petition #R16-12, Anchor Mill Rezoning, a request by Nate Bowman to rezone Parcel 01902201 from Neighborhood Residential to Town Center Conditional District.

Alison Adams, Senior Planner, entered the Staff Report into the record and reviewed request. *Staff Report attached hereto as Exhibit No. 2.*

The applicant is requesting to continue the public hearing for 30 days in order to have time to finish addressing all comments on the plans and to finalize requirements of the TIA with the Town and NCDOT.

The Anchor Mill Property Conditional District Rezoning Plan can be supported by staff subject to the following:

- All required TIA/Town/NCDOT required improvements are provided.
- All outstanding Transportation comments are addressed.
- Provide bike lane along all the Huntersville-Concord Road development frontage.
- Public Street is added in front of the anchor building (storefront – approx. 50,000 sq. ft.) to aid block breaks and establish the primary entry.
- All outstanding redline comments are addressed.
- The Town Board approves the Special Use Permit to allow for a 78,000 sq. ft. storefront building within the development.

Mayor Aneralla called for public comments.

Barbara Tessari, 200 Quail Crossing, said in 2010 our house was on a dead-end street. We have almost an acre of land. Centennial came that year and since then we have a thoroughfare. We have cars screeching and we lost our privacy. Crime went way up. We have thought about putting an addition on our house because it's still our piece of Heaven and now with this I begin to wonder if when I sit on my back deck if I'm going to see stars anymore because of all the brightness that's going to be around. I wonder about the noise, what we are going to see. Am I just going to have this little piece of property amongst all of this newness going on. I know it looks nice and all but why do we need it. We have five grocery stores in a mile. Where does it all stop. It just seems like we keep building and building. Our property values have gone down since Centennial was put into place because we have land and we are being compared to tiny pieces of property. I just feel like we are getting shoved out and I still just kind of question why. I don't know how many other people here feel the way we do. I guess maybe it's a difference of how we like to live our lives. I guess we may have to go further out in order to get a little piece of Heaven and lose what we have now. I have a lot questions on the traffic patterns, too.

Charles Gelsanliter, 201 Third Street, said I have concerns about the traffic. The Town has been wanting to put a connection all the way from Walters Street through my adjacent neighbor's property and split her property in half and would put a road right along my property thus creating three streets that I have my house on. Right now it's Steel Street and Third Street and then another connection with the inside development here. My biggest concern is all these plans that we have done, anybody who has a

property not owned by the Town or Mr. Bowman basically your property is going to be gone. They just want to buy you up and you have no say. That's my concern.

Roger Diedrich, 10128 Vanguard Parkway, said I'm an appointed member of the Town's Greenway Commission, but I'm speaking for myself and not the commission. I do support the development. I think it would be good for the Town and the neighborhood. My concern is for the greenway route that is proposed. The plan states that it will incorporate the Town's greenway plan and also connect to the Thread Trail but it seems to me it's doing that in a very poor fashion and may not satisfy the Greenway Plan. The crux of it is how are you going to cross Huntersville-Concord Road and the latest I heard was that the issue of disrupting the road and replacing the culvert west of the bridge was still under discussion. There was a route that would go east to the proposed light at Cinnabar and I just feel like that would not be a good route. If there is a decision to replace the culvert and otherwise disrupt Huntersville-Concord Road, I strongly urge that the greenway be provided with a separate underground passage. This is by far the preferred route for safety, aesthetics and service reasons. There would be incremental cost from doing that but it wouldn't be the same as building an entirely new tunnel and that would be partly offset by not building that lengthy route to the north or to the east which would require building shoulders and maybe retaining walls along the way. I think there's serious safety concerns with that route because it goes along Huntersville-Concord Road and then comes back and I think people, especially teenagers, would probably run right across the road because it would be quicker. There are other additional street crossings with that route that would not occur if you had an underpass and without that underpass the people I'm sure not too distant future we are going to have new residents in the other additional area to the south or the east between Warfield, Huntersville-Concord and Vermillion and the people there would not have good access to either Anchor Mill or the greenway. If Huntersville-Concord is ever widened in the future to four lanes which I suspect is going to happen maybe in 20 years, it would exasperate all the issues that I have raised and make it even more unlikely that we would ever have a proper crossing under the road. If conditions allow please give consideration to giving a first class greenway connection for the greenway.

Greg Dawson, 14028 Cinnabar Place, said I live four houses down from the proposed stoplight. Unlike many of the people that spoke I'm actually for this plan but I just want to go on record as saying that I'm not sure that all of the potential options there have been addressed. I really think that given the amount of land that is there that a roundabout or circle could be made to work. I wasted the better part of several Saturdays online looking at similar structures in places that are tight. There's a number of things that could be done…….offset circles, things along those lines, so I just want to be on record as saying that there's probably a better alternative. This Town seems to like roundabouts so I'd like to see one there. I've lived at this location for 15 years. I moved in thinking that it was a transit oriented development so I'm just going to throw a plug in that the red line may be resurfacing. I take the bus to work every day. The bus is packed. You can use rail and people will be on it.

Mary Richards, 204 Third Street, said I have three lots down there and I think it was in January they wanted an easement through my property and I did not sign it because I have lived there since 1962. I bought the property, I raised my children there and now I'm a widow and I don't really have any place else to go and I know that things happen and we grow and everything but I'm content and happy where I am. I don't think it's right to take people's property or do the things that's going on here. I pay taxes. I'm a Christian and our church is right in that area too where they are wanting to build the road through there across my property. Our church on Second Street was built there and my family owned the corners of all those streets, First, Second and Third, at one time, but they have all passed away.

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Commissioner Kidwell made a motion to continue the public hearing to April 3, 2017. Commissioner Phillips seconded motion. Motion carried 5-0.

Petition #ANNEX16-03. Mayor Aneralla called to order public hearing on Petition #ANNEX16-03, Valencia, a request to annex 38.24 acres (contiguous) into the Town of Huntersville.

Meredith Nesbitt, Planner I, entered the Staff Report into the record and reviewed the request. *Staff Report attached hereto as Attachment No. 3.*

There being no comments, Mayor Aneralla closed the public hearing.

OTHER BUSINESS

Petition #ANNEX16-03. Petition #ANNEX16-03, Valencia, is a request to annex 38.24 acres (contiguous) into the Town of Huntersville.

Commissioner Boone made a motion to adopt Annexation Ordinance #ANNEX16-03.

Commissioner Bales seconded motion.

Motion carried 5-0.

Annexation Ordinance attached hereto as Exhibit No. 4.

Petition #R16-09. Petition #R16-09 is a request by Daniel Phillips, Madeline Phillips, and Helga Haddix to rezone 9.25 acres (portion of Parcel #00902202, known as 14936 Brown Mill Road) from Rural to Special Purpose Conditional District to allow the construction of a 123,225 sq. ft. mini warehouse facility.

Commissioner Kidwell made a motion to recuse Commissioner Phillips.

Commissioner Guignard seconded motion.

Motion carried 5-0.

Brad Priest, Senior Planner, entered the Staff Report into the record. Staff received over the weekend a request from the applicant to defer consideration for another two weeks to address issues that came up at the February 28 Planning Board meeting.

Commissioner Kidwell made a motion to defer consideration of Petition #R16-09 to March 20, 2017.

Commissioner Guignard seconded motion.

Commissioner Boone made a substitute motion to defer consideration of Petition #R16-09 to April 3, 2017.

Commissioner Bales seconded motion.

Mayor Aneralla called for the vote on the substitute motion to defer to April 3.

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Motion was tied 2-2 (Commissioners Boone and Bales in favor; Commissioners Guignard and Kidwell opposed).

Mayor Aneralla broke the tie by voting in opposition of motion to defer to April 3.

Mayor Aneralla called for the vote on the original motion to defer to March 20.

Motion carried 3 to 1, with Commissioner Boone opposed.

Commissioner Guignard made a motion to allow Commissioner Phillips back.

Commissioner Kidwell seconded motion.

Motion carried 4-0.

Commissioner Gibbons entered meeting.

Financial Commitment – Gilead Road Widening Project. The Gilead Road widening project, detailed as widening of Gilead Road from McCoy Road to Wynfield Creek Parkway, is currently being considered as a candidate project for application to the CRTPO as part of its Spring 2017 Direct Attributable (DA) Funds Call for Projects. Submittal of all candidate project applications are due no later than March 20, 2017.

To fully complete the CRTPO application process, the Town must determine its financial commitment by designating the project cost percentage intended to serve as matching funds towards delivery of the $6,300,000 Gilead Road widening project.

Prioritization of all candidate projects are determined using various evaluation criteria, one of which assigns points for the matching funds percentage. Out of the maximum total of 80 points used to determine priority, the points assigned to the different matching fund percentages (and approximate dollar amounts) are as follows:

25% - 29%	10 Points	($6,300,000 x 0.25	=	$1,575,000)
30%-49%	15 Points	($6,300,000 x 0.30	=	$1,900,000)
>50%	25 Points	($6,300,000 x 0.50	=	$3,200,000)

Commissioner Phillips made a motion to authorize financial commitment of a minimum 51 percent/$3.2 million local share for inclusion into the CRTPO application package for the Gilead Road Widening project and authorize Interim Town Manager to issue formal correspondence representing said authorized percentage as supporting documentation to the application package.

Commissioner Kidwell seconded motion.

Jackie Huffman, Finance Director, pointed out that the action being requested tonight is whether or not you will commit to spending the money, not necessarily where you will get it from. Encouraged the Board to consider 2012 bonds as potential alternative because there would be time to issue them. If the project ends up costing more, the Board may be asked for money fund balance later.

Mayor Aneralla called for the vote to authorize financial commitment of a minimum 51 percent/$3.2 million local share for inclusion into the CRTPO application package for the Gilead Road Widening

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project and authorize Interim Town Manager to issue formal correspondence representing said authorized percentage as supporting documentation to the application package

Motion carried unanimously.

Revised CIP. Action was taken on the December 19, 2016 Town Board meeting adopting the Gilead Road West project onto the Huntersville Capital Improvement Program.

With the more recent Town Board action identifying a specific financial commitment toward the delivery of the Gilead Road West project, it is necessary to revise the details of the CIP to accurately represent the proposed funding sources.

Commissioner Kidwell made a motion to adopt revised CIP details for the Gilead Road West project. Commissioner Gibbons seconded motion.

Motion carried unanimously.

Revised CIP Worksheet attached hereto as Exhibit No. 5.

Financial Policy Update. Commissioner Phillips made a motion to approve Financial Policy update and Cash and Investment Policy.

Commissioner Guignard seconded motion.

Motion carried unanimously.

Financial Policy and Cash and Investment Policy attached hereto as Exhibit No. 6.

Filing Fees – 2017 Election. Commissioner Guignard made a motion to set the filing fees for the 2017 Election at $10 for Mayor and $5 for Town Commissioner.

Commissioner Bales seconded motion.

Motion carried unanimously.

Resolution Opposing HB 64. Commissioner Kidwell made a motion to adopt Resolution opposing House Bill 64.

Commissioner Guignard seconded motion.

Motion carried unanimously.

RESOLUTION OPPOSING HOUSE BILL 64

WHEREAS, Municipalities in North Carolina have a long standing history of being well managed - with no election improprieties or gross mismanagement of power; and

WHEREAS, we as local officials care for the health, safety and well-being of our citizens and the property encompassed within our municipalities; and

DRAFT

WHEREAS, we believe local officials, who live and work daily in the communities they represent, can best determine the specific needs of our citizens and our communities; and

WHEREAS, Municipal Elections are purposely held in odd numbered years and in the Town of Huntersville these elections are held every two years and are nonpartisan and of North Carolina's 533 cities, only eight have chosen to have partisan elections; and

WHEREAS, Municipal Elections are held in odd years with National and State Elections held in even years, in order to separate partisan national elections from local government elections; and

WHEREAS, the separation of National and State Elections from Municipal Elections allow citizens to focus on the issues and candidates that are of singular importance to their individual neighborhoods and communities.

NOW THEREFORE, BE IT RESOLVED that the Board of Commissioners of the Town of Huntersville is opposed to House Bill 64 which would move Municipal Elections to even number years due to the following reasons:

1. Elections in odd numbered years allows people to be informed regarding local issues and municipal candidates who can best serve their communities;
2. This bill is not necessary as citizens currently have the ability to move their elections to odd numbered years if they choose to do so by requesting local Legislative action;
3. There would be no cost savings as Municipal Governments pay for Municipal Elections;
4. Citizens should retain local control of their municipalities and Municipal Elections without the interference of National and State influences;
5. If moved to even number years to coordinate with National and State Elections, Municipal Elections would become partisan and driven by national issues and candidates.

BE IT FURTHER RESOLVED that a copy of this Resolution is recorded in the official minutes of the meeting of the Town of Huntersville and a copy be provided to the State and Local Government II, House Standing Committee Members: Chairman John R. Bradford, II, Representatives: Jay Adams, John Autry, Cynthia Ball, James L. Boles, Jr., Beverly G. Boswell, Charles Graham, George Graham, Joe John, Phillip A. Lehman, Stephen M. Ross, John Sauls, Mitchell S. Setzer, Bob Steinburg, Sam Watford and Linda Hunt Williams.

Adopted this 6th day of March, 2017.

HFFA RFQ/RFP Discussion. Mayor Aneralla explained that this contract was approved back in October 2015 and was not put out for bid. It was my opinion at that time that it should be like every other contract. HFFA for the fiscal year that ended June 30 lost about $240,000-250,000 on an operating basis and we are looking to improve that and also we had to pay a bonus despite the fact that the entity had lost money on an operating basis. Some of those terms have been changed going forward. And what we are simply doing here is, we are continuing to work with HFFA to improve some of the issues that have occurred over the last year or two and try and see if there's anybody else out there that might want to compete for this business. There's nothing definitive. There may be nobody coming back that would want to take on this animal because it is quite a bit of a challenge. That's where we are.

Commissioner Boone made a motion authorizing the Interim Town Manager to proceed with advertisement of Request for Qualifications as amended to reflect a due date of May 8 for the operations of the Huntersville Family Fitness & Aquatics.

Commissioner Phillips seconded motion.

Commissioner Kidwell said I was not at the meetings regarding HFFA and listening to a lot of individuals talk tonight, we heard a lot about the feel good stuff, how the staff makes our families feel, our families enjoy going to it and things like that and I appreciate that. I think Ms. Hudson said that HSW and HFFA were not alerted to the potential RFP. I'm asking the Board is that accurate. Did we bring up our reasons to HSW to make them aware of any displeasure that was going on. I was not at the meetings with them, so I don't know.

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Mayor Aneralla said we took this issue up at the Town retreat and we made a decision at the time of the retreat that we were going two roads – (1) to continue to try to work with HSW and improve HFFA's performance and (2) to come up with some type of RFP or RFQ. In addition we did discuss possibly renegotiating the current agreement.

Commissioner Kidwell said I go back to my original question, did we tell HSW at that time.

Mayor Aneralla said at the Town retreat, no.

Commissioner Kidwell said did we reach out to their representative? I just want to make sure the communication went up the ladder to them.

Gerry Vincent said Dee was here for the presentation at the retreat.

Commissioner Bales said that is correct she was here, but she was not here for this discussion, when we discussed putting it out for bid. As far as I know, no one officially contacted HSW to have that conversation.

Commissioner Kidwell said when this came up for voting in October 2015 I voted against extending the contract because an RFP was not done and I felt an RFP should be done. Anything that we do especially at that level, and granted I also believed that if we did an RFP, HSW would probably still be the leader because of the oddness of this whole aquatic center…..it's not a Planet Fitness or a neighborhood pool. I firmly believed at that point that we should have it out there for bid for people, for businesses to submit a proposal to make sure that we are doing our best for the taxpayer. That vote didn't go my way. I guess my issue now is we have not sat down with HSW and said these are our issues we need to fix them. I think it's only right that they be given that opportunity to look at why we have a $250,000 loss and are we addressing those concerns. While I think that the contract should be bid out I think it should have been bid out from the beginning. I don't think we are doing our current vendor right by not giving them the information.

Mayor Aneralla said I would say in my opinion we are working on those issues. A lot of them have to do with credit card issues, the structure of the management fees, the dues. I did have a conversation with Ms. Hudson prior to the retreat and she indicated she would absolutely bid on it again if we put it out for bid.

Commissioner Bales said one of the things that concerns me is that the contract was renewed. We went into this contract and HSW in good faith and that contract does not expire until 2021. I hear what Commissioner Kidwell is saying and I hear what everybody else is saying on this Board. There was a loss. What are the issues and how can we work together. My concern is how do you fix what isn't working while turning around and putting the contract back out for bid. It seems to me that creates a contentious working environment with your vendor and the Town. I believe in 2019 that contract can be relooked at.

Bob Blythe, Town Attorney, said there's one day in 2019 that was put in the contract because of bond issues that the contract can be canceled without penalty. Any other time it does carry a cancellation fee of six months and something like six weeks for key personnel.

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Commissioner Bales said it would just seem to me that it would be better for our town to work with our vendor to fix the concerns that we may have than to spend money on the RFP and potentially spend dollars with the cancellation fee. I just feel like we are putting the cart before the horse.

Commissioner Phillips said my point of this is let's get back to the real facts of this thing. This was renewed eight months sooner than what it was supposed to be right before the election of last year. This contract to my knowledge has not been out on a RFP since 2002 and when the Town Manager was asked at that time he said well we just wasn't going to waste time on it. I think we owe it to the taxpayers. Nothing may come out of this. It's simply an RFP. I think we owe it to the taxpayers to make sure we are getting the best deal. It's nothing more than information

Commissioner Gibbons said I am a little bit disappointed in us tonight up here in that I've been in on lots of conversation about things that we were not necessarily particularly happy about. I have not been in on the HFFA committee meetings but in my debriefs and what I've been told about those meetings a lot of issues have been discussed, credit cards just being one of them, but programming and this and that and the other thing. There's been questions asked of the Board to what we can do and I guess I do as Commissioner Kidwell stated take issue……..if there's a notification time period to put out an RFP to a sitting or present vendor I think we need to honor that. But as far as the issues and Commissioner Bales you've been on that committee, these issues aren't something we just started talking about at the retreat or this month. It's been going on and I've not seen where we are getting too far on that. I do believe also we've had the same people run the place basically since it's been here and I do believe that the size of the contract should owe itself to getting someone to take a look and see. I've heard the comment made that there's no one else that can do this kind of thing. I don't believe that's true in a town that has the talent we have around here. I believe there are people that can do something like this. I think that the issues are ongoing. I do believe they are worth looking into and I believe that getting a proposal from someone else we should do. But if there is a notification period, I think we should stick to that. So we need to look into that and if there is a period I think we could back that up from whatever date this is and that could be notification and we could follow to the letter of the law if there is such thing in the contract.

Commissioner Guignard said can we ask the attorney if there is a notification that he knows of.

Mr. Blythe said yes, there is. Not for putting out an RFP, but for terminating the contract.

Commissioner Guignard said but to do the action tonight that we are discussing is there any obligation under contract or in your opinion under law that we have misled or done something wrong or illegal by not having formal conversations.

Mr. Blythe said I don't think you've done anything illegal at this point.

Motion carried 4 to 2, with Commissioners Bales and Kidwell opposed.

Commissioner Phillips said I've asked on numerous occasions for a copy of membership contract. I'd like to make that so it does get in the minutes tonight that I would like to have one.

CATS Discussion. Mayor Aneralla presented the Board with information pertaining to the ½ cent sales tax for mass transit that was passed by voters in 1997. *Refer to information attached hereto as Exhibit No. 7.*

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Mayor Aneralla explained that CATS wants to study building an alternative line in North Mecklenburg and requested support from the Board to bring back a resolution to the next meeting rejecting the study of an alternative line and a proposal to use the money for uses outlined in the statute.

It was the general consensus of the Board to have the Mayor prepare a resolution for consideration at the next meeting rejecting the current CATS budget proposal for a Red Line alternative and instead endorse a plan to use the study money for improved bus and related transportation needs.

CONSENT AGENDA

Approval of Minutes. Commissioner Guignard made a motion to approve the minutes of the February 20, 2017 Regular Town Board Meeting. Commissioner Gibbons seconded motion. Motion carried unanimously.

LDOAB Name Change. Commissioner Guignard made a motion to approve changing the name from the Land Development Ordinances Advisory Board to the Huntersville Ordinances Advisory Board to more accurately reflect their duties. Commissioner Gibbons seconded motion. Motion carried unanimously.

Call for Public Hearing – Petition #R16-07. Commissioner Guignard made a motion to call a public hearing for Monday, April 3, 2017 at 6:30 p.m. at Huntersville Town Hall on Petition #R16-07, a request by Skybrook, LLC to revise the existing Conditional District rezoning plan for approximately 171.88 acres to remain Transitional Residential Conditional District with an increase in density and other site plan changes. Commissioner Gibbons seconded motion. Motion carried unanimously.

Audit Contract. Commissioner Guignard made a motion to approve audit contract with Martin Starnes & Associates, CPAs, P.A. Commissioner Gibbons seconded motion. Motion carried unanimously.

Contract attached hereto as Exhibit No. 8.

Budget Amendment – Police. Commissioner Guignard made a motion to approve budget amendment recognizing auto insurance revenue in the amount of $14,846.42 and appropriate to the Police Department's Vehicle Insurance account for multiple vehicle claims. Commissioner Gibbons seconded motion. Motion carried unanimously.

Budget Amendment – Police. Commissioner Guignard made a motion to approve budget amendment recognizing auto insurance revenue in the amount of $952.60 and appropriate to the Police Department's Vehicle Insurance account. Commissioner Gibbons seconded motion. Motion carried unanimously.

CLOSING COMMENTS

Commissioner Bales said as we continue to discuss transit I think there are those of us that are not necessarily opposed to the train but we need relief now and that's just what I wanted to share with everyone and I think that's what this conversation was about tonight.

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There being no further business, the meeting was adjourned.

Approved this the _____ day of _____, 2017.

DRAFT

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Max L. Buchanan, PE - Director of Engineering and Public Works
Subject: Award of Town of Huntersville 2017 Wynfield Resurfacing Contract

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On March 27, 2017 quotations were received at Engineering & Public Works for the 2017 Wynfield Resurfacing. This project is part of the on-going efforts by the Town to maintain our public roadway system.

It is my recommendation that the project be awarded to the lowest responsible quote provider, Ferebee Corporation, with a quotation of $375,109.88.

Ferebee Corporation has completed numerous paving projects for the Town of Huntersville and many surrounding municipalities, including NCDOT. This contractor has demonstrated sufficient ability and experience to perform the work specified and has demonstrated a history of successful performance and completion of similar projects in a timely manner.

Contract completion date for the resurfacing project is June 30, 2017.

ACTION RECOMMENDED:
Authorize award of Project to Ferebee Corporation.

FINANCIAL IMPLICATIONS:
Powell Bill

ATTACHMENTS:

Description	Type
Contract Cover	Backup Material
Map	Exhibit
Itemized Proposal	Backup Material
Bid Tabulation	Backup Material

Town of Huntersville
NORTH CAROLINA

CONTRACT PROPOSAL

PROJECT:	**2017 WYNFIELD RESURFACING**
PROJECT NO.:	**5700 – 17 – 001**
LOCATION:	**Milling and Resurfacing on approximately 2.4 miles of streets within the Wynfield Subdivision in the Town of Huntersville, North Carolina.**
TYPE OF WORK:	**Asphalt Milling, Patching and Asphalt Paving**
QUOTATIONS RECEIVED BY:	**Monday, March 27, 2017 by 2:00 p.m.** **Huntersville Engineering and Public Works** **Attn: M. Kevin Fox, P.E.** **105 Gilead Road, Suite 300 (3rd Floor)** **Huntersville, North Carolina 28078** **Or by email to : kfox@huntersville.org**
DATE OF AVAILIBILTY:	**Tuesday, April 4, 2017**
COMPLETION DATE:	**Friday, June 30, 2017**

NOTICE: ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS $30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

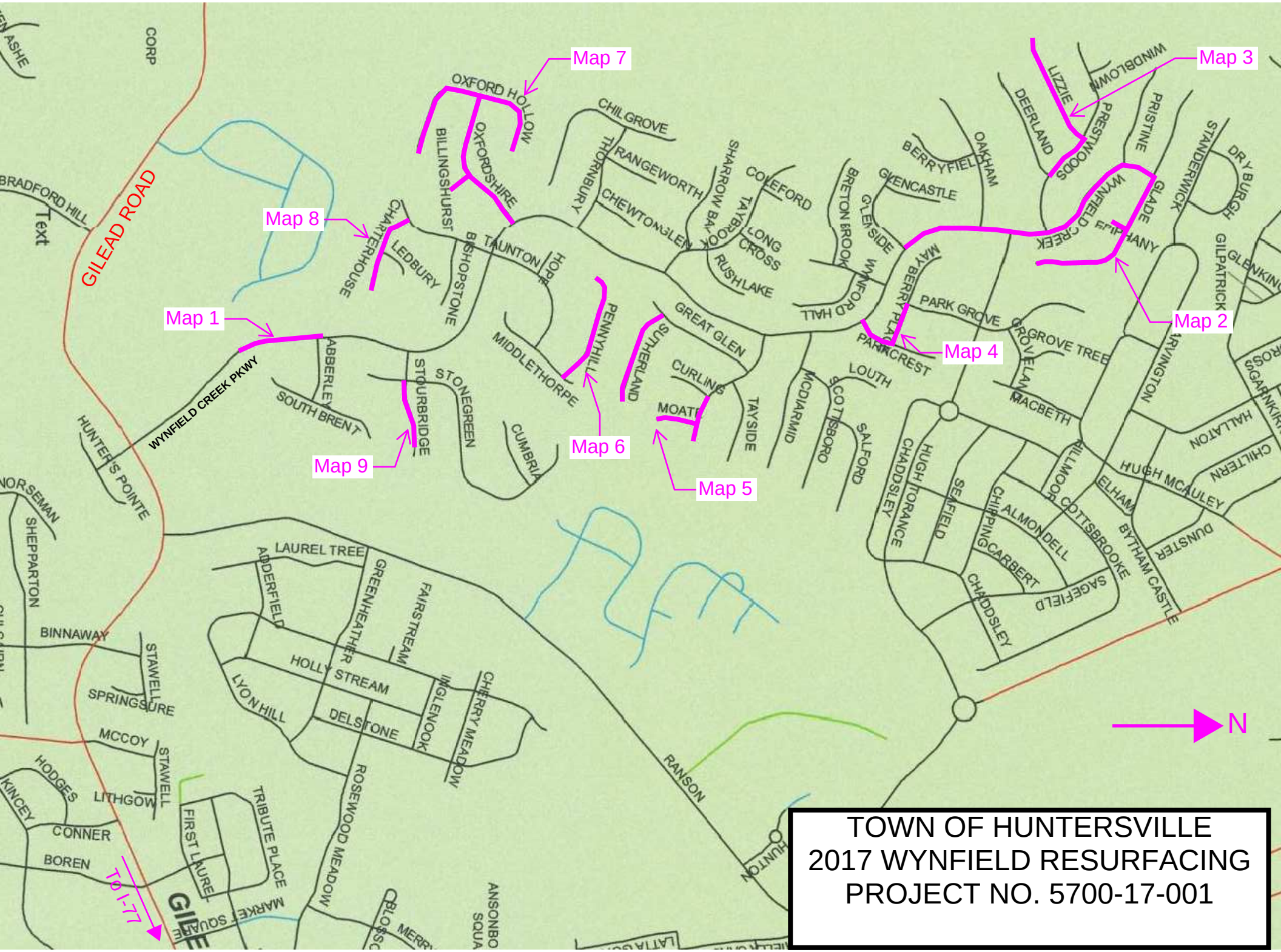
Ferebee Corporation — **NAME OF BIDDER**

18306 — **N.C. CONTRACTOR'S LICENSE NUMBER**

10045 Metromont Industrial Blvd., Charlotte, NC 28269 — **ADDRESS OF BIDDER**

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made based on the lowest responsible quotation. The contractor will be notified that his quotation has been accepted and that he has been awarded the contract. Quotations are being received by invitation only. The Town of Huntersville reserves the right to reject all quotations.



TOWN OF HUNTERSVILLE
2017 WYNFIELD RESURFACING
PROJECT NO. 5700-17-001

ITEMIZED PROPOSAL

ITEM NO.		ITEM DESCRIPTION	QUANTITY AND UNIT	UNIT BID PRICE		AMOUNT BID	
LINE NO.	SECTION NO.			DOLLARS	CENTS	DOLLARS	CENTS
1	800	MOBILIZATION	LUMP SUM LS	12,000	00	12,000	00
2	SP	INCIDENTAL STONE BASE	20 TON	40	00	800	00
3	645	ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B	3,935 TON	46	00	181,010	00
4	620	ASPHALT BINDER FOR PLANT MIX GRADE PG 64-22	220 TONS	365	00	80300	00
5	607	MILL ASPHALT TO 2 INCH DEPTH	34,425 SQ YD	1	50	51637	50
6	SP	PATCHING EXISTING PAVEMENT	300 TON	95	00	28500	00
7	SP	ADJUSTMENT OF MANHOLES	10 EA	100	00	1,000	00
8	SP	ADJUSTMENT OF CATCH BASINS	1 EA	1,000	00	1,000	00
9	SP	ADJUSTMENT OF WATER VALVES	10 EA	100	00	1,000	00
				Subtotal		357,247	50

10	SP	5% CONTINGENCY	LUMP SUM	L.S.	17,862	38

		TOTAL AMOUNT BID FOR PROJECT	375,109	88

Company Name: Ferebee Corporation Date: 3/27/17

Signature: _____ Title: Pres. Int

Town of Huntersville
NORTH CAROLINA
Engineering&PublicWorks

2017 WYNFIELD RESURFACING

DESCRIPTION	Ferebee Corporation		Blythe Construction, Inc		Granite Contracting, LLC		Blythe Brothers Asphalt		Pedulla Excavating and Paving Inc.**	
	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
Mobilization	12,000.00	12,000.00	17,000.00	17,000.00	4,500.00	4,500.00	12,000.00	12,000.00		
Incidental Stone Base	40.00	800.00	26.75	535.00	40.00	800.00	40.00	800.00		
Asph Concrete Surface Course, Type S9.5B	46.00	181,010.00	44.00	173,140.00	50.00	196,750.00	66.15	260,300.25		
Asph Binder for Plant Mix, Grade PG 64-22	365.00	80,300.00	417.30	91,806.00	382.00	84,040.00	415.00	91,300.00		
Mill Asphalt to 2 inch Depth	1.50	51,637.50	2.15	74,013.75	3.40	117,045.00	2.10	72,292.50		
Patching Existing Pavement	95.00	28,500.00	75.00	22,500.00	140.00	42,000.00	150.00	45,000.00		
Adjustment of Manholes	100.00	1,000.00	107.00	1,070.00	170.00	1,700.00	500.00	5,000.00		
Adjustment of Catch Basins	1,000.00	1,000.00	1,250.00	1,250.00	1,450.00	1,450.00	1,500.00	1,500.00		
Adjustment of Water Valves	100.00	1,000.00	80.00	800.00	65.00	650.00	225.00	2,250.00		
SUBTOTAL	357,247.50		382,114.75		448,935.00		490,442.75			
5% Contingency		17,862.38		19,105.74		22,446.75		24,522.14		
TOTAL	$375,109.88		$401,220.49		$471,381.75		$514,964.89		$0.00	

****Contractor Invited, but elected not to submit quotation.**

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Brad Priest, Senior Planner
Subject: TA17-01: Nature Preserve Parking

Request to call a public hearing for May 1, 2017 for TA17-01. TA17-01 is a request by Mecklenburg County Parks and Recreation to modify the parking standards in Article 6 of the Huntersville Zoning Ordinance. The purpose of the amendment is to allow gravel parking for publicly owned nature preserves.

ACTION RECOMMENDED:

Consider calling a public hearing for May 1, 2017.

FINANCIAL IMPLICATIONS:

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Meredith Nesbitt
Subject: TA 17-02: Electronic Message Board

TA17-02 is a request by University City Church to amend Article 10.7 of the Huntersville Zoning Ordinance to modify the amount of times a changeable copy sign message can change per 24 hour period.

ACTION RECOMMENDED:
Call for a Public Hearing to be held on May 1, 2017.

FINANCIAL IMPLICATIONS:
None

Town of Huntersville
REQUEST FOR BOARD ACTION
4/3/2017

REVIEWED:

To: The Honorable Mayor and Board of Commissioners
From: Michael Jaycocks
Subject: Norfolk Southern Agreement

This agreement with Norfolk Southern will allow the Town to install a new storm water pipe underneath the railroad between Main Street and Church Street. This storm water pipe will serve both Veterans Park and the Main Street improvements.

ACTION RECOMMENDED:
Approve Agreement with Norfolk Southern

FINANCIAL IMPLICATIONS:
$37,254 from 2017 Storm Water Funds

ATTACHMENTS:

	Description	Type
🗋	Norfolk Southern Agreement	Backup Material
🗋	Norfolk Southern FAE	Backup Material

NS File: _____

THIS AGREEMENT, dated as of the ____ day of _____, 201_ is made and entered into by and between

NORFOLK SOUTHERN RAILWAY COMPANY, a Virginia corporation, whose mailing address is Three Commercial Place, Norfolk, Virginia 23510 (hereinafter called "RAILWAY"); and

TOWN OF HUNTERSVILLE, a North Carolina municipality, whose mailing address is _____ (hereinafter called "LICENSEE").

RECITALS

WHEREAS, LICENSEE, at its own cost and expense, has found it necessary to install, by jack and bore, a new storm drainage pipe for the Veterans Park Improvements and improvements to the existing Main Street (the "Facilities"), in the vicinity of RAILWAY Milepost O-15.14, at or near Huntersville, Mecklenburg County, North Carolina (the "Premises"), located substantially as shown upon print of Drawing marked Exhibit A; and

WHEREAS, RAILWAY is willing to permit LICENSEE to enter upon RAILWAY's right of way for installation, construction, maintenance, operation and removal of the Facilities upon the terms and conditions of this Agreement; and in accordance with the plans and specifications marked Exhibit B; and

WHEREAS, RAILWAY is willing, at LICENSEE's sole expense, to make modifications to RAILWAY's right of way and/or appurtenances rendered necessary by LICENSEE's installation, construction, maintenance, operation and removal of its Facilities in accordance with the force account estimate marked Exhibit D.

NOW THEREFORE, for and in consideration of the premises and mutual covenants contained in this Agreement, the parties agree as follows:

I. LICENSEE'S FACILITIES

1. Right-of-Entry. RAILWAY, insofar as its rights and title enables it to do so and subject to its rights to operate and maintain its RAILWAY and RAILWAY appurtenances along, in, and over its right-of-way, grants LICENSEE, its agents and/or contractors, without compensation, the right to enter upon the Premises, for the purpose of installation, construction, maintenance, operation and removal of the Facilities, provided that, prior to entry upon lands of RAILWAY, any agent and/or contractor of LICENSEE must execute and deliver to RAILWAY a standard contractor right-of-entry agreement in a form approved by RAILWAY in its sole discretion, together with any certificate(s) of insurance required therein. Furthermore, any crossing of RAILWAY tracks by LICENSEE or any of its agents and/or contractors must be addressed by a standard temporary crossing agreement in a form approved by RAILWAY in its sole discretion.

2. Use and Condition of the Premises. The Premises shall be used by LICENSEE only for the installation, construction, maintenance, operation and removal of the Facilities and for no other purpose without the prior written consent of RAILWAY, which consent may be withheld by RAILWAY in its sole discretion. LICENSEE accepts the Premises in their current "as is" condition, as suited for the installation and operation of the Facilities, and without the benefit of any improvements to be constructed by RAILWAY except insofar as contemplated by Section II of this Agreement.

3. Construction and Maintenance of the Facilities. LICENSEE shall construct and maintain the Facilities, at its expense, in such a manner as will not interfere with the operations of RAILWAY or endanger persons or property of RAILWAY, and in accordance with (a) plans and specifications (if any) shown on said print(s) marked as Exhibit B and any other specifications prescribed by RAILWAY, (b) applicable governmental regulations or laws, and (c) applicable specifications adopted by the American RAILWAY Engineering and Maintenance of Way Association when not in conflict with plans, specifications or regulations mentioned in (a) and

(b) above. LICENSEE and any and all of LICENSEE contractors entering the Premises shall fully comply with applicable roadway worker protection regulations.

4. Indemnification. LICENSEE hereby agrees to indemnify and save harmless RAILWAY, its officers, agents and employees, from and against any and all liability, claims, losses, damages, expenses (including attorneys' fees) or costs for personal injuries (including death) and/or property damage to whomsoever or whatsoever occurring which arises or in any manner grows out of (a) the presence of LICENSEE, its employees, agents and/or contractors on or about the Premises, regardless of whether negligence on the part of RAILWAY, its officers, agents or employees caused or contributed to said loss of life, personal injury or property loss or damage in whole or in part; (b) any allegation that RAILWAY is an employer or joint employer of a LICENSEE or is liable for related employment benefits or tax withholdings; or (c) any decision by RAILWAY to bar or exclude LICENSEE from the Premises pursuant to the terms of this Agreement.

5. Environmental Matters. LICENSEE assumes all responsibility for any environmental obligations imposed under applicable laws, regulations or ordinances relating to the installation of the Facilities and/or to any contamination of any property, water, air or groundwater arising or resulting from LICENSEE's permitted operations or uses of RAILWAY's property pursuant to this Agreement. In addition, LICENSEE shall obtain any necessary permits to install the Facilities. LICENSEE agrees to indemnify and hold harmless RAILWAY from and against any and all liability, fines, penalties, claims, demands, costs (including attorneys' fees), losses or lawsuits brought by any person, company or governmental entity relating to contamination of any property, water, air or groundwater due to the use or presence of the Facilities. It is agreed that this indemnity provision extends to any cleanup costs related to LICENSEE's activities upon RAILWAY's property and to any costs related to cleanup of the Facilities or to other property caused by the use of the Facilities.

6. Insurance.

(a) Without limiting in any manner the liabilities and obligations assumed by LICENSEE under any other provision of this Agreement, and as additional protection to RAILWAY, LICENSEE shall, at its expense, procure and maintain with insurance companies satisfactory to RAILWAY, the following insurance policies:

(i) A Commercial General Liability Insurance Policy having a combined single limit of not less than $2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name RAILWAY as the certificate holder and as an additional insured, and shall include a severability of interests provision; and,

(ii) An original Railroad Protective Liability Insurance Policy naming RAILWAY as a named insured and having a combined single limit of not less than $2,000,000 each occurrence and $6,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of $5,000,000 each occurrence and $10,000,000 in the aggregate applying separately to each annual period.

(b) All insurance required under the preceding subsection (a) shall be underwritten by insurers and be of such form and content, as may be acceptable to RAILWAY. Prior to the commencement of installation or maintenance of the Facilities or any entry on RAILWAY's property, LICENSEE shall furnish to RAILWAY's Director Risk Management, Three Commercial Place, Norfolk, Virginia 23510-2191 (or such other representative and/or address as subsequently given by RAILWAY to LICENSEE in writing), for approval, the original policy described in subsection (a)(ii) and a certificate of insurance evidencing the existence of a policy with the coverage described in subsection (a)(i).

7. Railway Support. RAILWAY shall, at RAILWAY's option, furnish, at the sole expense of LICENSEE, labor and materials necessary, in RAILWAY's sole judgment, to support its tracks and to protect its traffic (including, without limitation, flagging) during the installation, maintenance, repair, renewal or removal of the Facilities.

8. Special Provisions for Protection of Railway Interests. In connection with the operation and maintenance of the Facilities, it is agreed that the safety of people and the safety and continuity of RAILWAY's rail operations shall be of first importance. LICENSEE shall require its employees, agents, contractors, and invitees to utilize and comply with RAILWAY's directives in this regard and shall require its contractor(s), if any, to comply with all NSR Special Provisions, attached hereto, and herein incorporated by reference, including any future amendments, as Exhibit C. As used in the NSR Special Provisions, LICENSEE is the "contractor" should LICENSEE enter onto the Premises to perform any work contemplated by this Agreement. To ensure such compliance, LICENSEE shall assign a project manager to function as a single point-of-contact for LICENSEE. Said project manager is referred to as the "Sponsor's Engineer" in Exhibit C.

9. Safety of Railway Operations. If RAILWAY becomes aware of any safety violations committed by LICENSEE, its employees, agents and/or contractors, RAILWAY shall so notify LICENSEE, and LICENSEE shall promptly correct such violation. In the event of an emergency threatening immediate danger to persons or property, RAILWAY may take corrective actions and shall notify LICENSEE promptly thereafter. LICENSEE shall reimburse RAILWAY for actual costs incurred in taking such emergency measures. RAILWAY assumes no additional responsibility for safety on the Premises for LICENSEE, its agents/or contractors by taking these corrective actions, and LICENSEE, its agents/contractors shall retain full responsibility for such safety violations.

10. Corrective Measures. If LICENSEE fails to take any corrective measures requested by RAILWAY in a timely manner, or if an emergency situation is presented which, in RAILWAY's judgment, requires immediate repairs to the Facilities, RAILWAY, at LICENSEE's expense, may undertake such corrective measures or repairs as it deems necessary or desirable.

11. Railway Changes. If RAILWAY shall make any changes, alterations or additions to the line, grade, tracks, structures, roadbed, installations, right-of-way or works of RAILWAY, or to the character, height or alignment of the Electronic Systems, at or near the Facilities, LICENSEE shall, upon thirty (30) days prior written notice from RAILWAY and at its sole expense, make such changes in the location and character of the Facilities as, in the opinion of the chief engineering officer of RAILWAY, shall be necessary or appropriate to accommodate any construction, improvements, alterations, changes or additions of RAILWAY.

12. Assumption of Risk. Unless caused solely by the negligence of RAILWAY or caused solely by the willful misconduct of RAILWAY, LICENSEE hereby assumes all risk of damage to the Facilities and LICENSEE's other property relating to its use and occupation of the Premises or business carried on the Premises and any defects to the Premises; and LICENSEE hereby declares and states that RAILWAY, its officers, directors, agents and employees shall not be responsible for any liability for such damage.

13. Liens; Taxes. LICENSEE will not permit any mechanic's liens or other liens to be placed upon the Premises, and nothing in this Agreement shall be construed as constituting the consent or request of RAILWAY, express or implied, to any person for the performance of any labor or the furnishing of any materials to the Premises, nor as giving LICENSEE any right, power or authority to contract for or permit the rendering of any services or the furnishing of any materials that could give rise to any mechanic's liens or other liens against the Premises. In addition, LICENSEE shall be liable for all taxes levied or assessed against the Facilities and any other equipment or other property placed by LICENSEE within the Premises. In the event that any such lien shall attach to the Premises or LICENSEE shall fail to pay such taxes, then, in addition to any other right or remedy available to RAILWAY, RAILWAY may, but shall not be obligated to, discharge the same. Any amount paid by RAILWAY for any of the aforesaid purposes, together with related court costs, attorneys' fees, fines and penalties, shall be paid by LICENSEE to RAILWAY within ten (10) days after RAILWAY's demand therefor.

14. Default; Remedies.

(a) The following events shall be deemed to be events of default by LICENSEE under this Agreement:

(i) LICENSEE shall fail to pay any sum of money due hereunder and such failure shall continue for a period of ten (10) days after the due date thereof;

(ii) LICENSEE shall fail to comply with any provision of this Agreement not requiring the payment of money, all of which terms, provisions and covenants shall be deemed material, and such failure shall continue for a period of thirty (30) days after written notice of such default is delivered to LICENSEE;

(iii) LICENSEE shall become insolvent or unable to pay its debts as they become due, or LICENSEE notifies RAILWAY that it anticipates either condition;

(iv) LICENSEE takes any action to, or notifies RAILWAY that LICENSEE intends to file a petition under any section or chapter of the United States Bankruptcy Code, as amended from time to time, or under any similar law or statute of the United States or any State thereof; or a petition shall be filed against LICENSEE under any such statute; or

(v) a receiver or trustee shall be appointed for LICENSEE's license interest hereunder or for all or a substantial part of the assets of LICENSEE, and such receiver or trustee is not dismissed within sixty (60) days of the appointment.

(b) Upon the occurrence of any event or events of default by LICENSEE, whether enumerated in this paragraph 15 or not, RAILWAY shall have the option to pursue any remedies available to it at law or in equity without any additional notices to LICENSEE. RAILWAY's remedies shall include, but not be limited to, the following: (i) termination of this Agreement, in which event LICENSEE shall immediately surrender the Premises to RAILWAY; (ii) entry into or upon the Premises to do whatever LICENSEE is obligated to do under the terms of this License, in which event LICENSEE shall reimburse RAILWAY on demand for any expenses which RAILWAY may incur in effecting compliance with LICENSEE's obligations under this License, but without rendering RAILWAY liable for any damages resulting to LICENSEE or the Facilities from such action; and (iii) pursuit of all other remedies available to RAILWAY at law or in equity, including, without limitation, injunctive relief of all varieties.

15. Railway Termination Right. Notwithstanding anything to the contrary in this Agreement, RAILWAY shall have the right to terminate this Agreement and the rights granted hereunder, after delivering to LICENSEE written notice of such termination no less than sixty (60) days prior to the effective date thereof, upon the occurrence of any one or more of the following events:

(a) If LICENSEE shall discontinue the use or operations of the Facilities; or

(b) If RAILWAY shall be required by any governmental authority having jurisdiction over the Premises to remove, relocate, reconstruct or discontinue operation of its railroad on or about the Premises; or

(c) If RAILWAY, in the good faith judgment of its Superintendent, shall require a change in the location or elevation of its railroad on or about the location of the Facilities or the Premises that might effectively prohibit the use or operation of the Facilities; or

(d) If RAILWAY, in the good faith judgment of its Superintendent, determines that the maintenance or use of the Facilities unduly interferes with the operation and maintenance of the facilities of RAILWAY, or with the present or future use of such property by RAILWAY, its lessees, affiliates, successors or assigns, for their respective purposes.

16. Condemnation. If the Premises or any portion thereof shall be taken or condemned in whole or in part for public purposes, or sold in lieu of condemnation, then this Agreement and the rights granted to LICENSEE hereunder shall, at the sole option of RAILWAY, forthwith cease and terminate. All compensation awarded for any taking (or sale proceeds in lieu thereof) shall be the property of RAILWAY, and LICENSEE shall have no claim thereto, the same being hereby expressly waived by LICENSEE.

17. Removal of Facilities; Survival. The Facilities are and shall remain the personal property of LICENSEE. Upon the termination of this Agreement, LICENSEE shall remove the Facilities from the Premises within thirty (30) days after the effective date thereof. In performing such removal, unless otherwise directed by RAILWAY, LICENSEE shall restore the Premises to the same condition as existed prior to the installation or placement of Facilities, reasonable wear and tear excepted. In the event LICENSEE shall fail to so remove the Facilities or restore the Premises, the Facilities shall be deemed to have been abandoned by LICENSEE, and the same shall become the property of RAILWAY for RAILWAY to use, remove, destroy or otherwise dispose of at its discretion and without responsibility for accounting to LICENSEE therefor; provided, however, in the event RAILWAY elects to remove the Facilities, RAILWAY, in addition to any other legal remedy it may have, shall have the right to recover from LICENSEE all costs incurred in connection with such removal and the restoration of the Premises. Notwithstanding anything to the contrary contained in this Agreement, the termination of this Agreement shall not relieve LICENSEE from LICENSEE's obligations accruing prior to the termination date, and such obligations shall survive any such termination of this Agreement.

18. Interests in Real Property

LICENSEE shall acquire or settle all property, property rights and all damages to property affected by the installation, construction, maintenance, and operation of the Facilities. The cost of said property, property rights and damages to property shall be borne by LICENSEE.

RAILWAY, insofar as it has the legal right so to do, shall permit LICENSEE to enter upon lands owned or operated by RAILWAY to construct and occupy its property with sufficient width to permit construction and maintenance of the Facilities. LICENSE and RAILWAY shall enter into good faith negotiations for a price to be consistent with the property interest determined by LICENSEE to be needed for the proposed improvement.

However, the price to be paid by LICENSEE to RAILWAY for said conveyances (representing the fair market value thereof plus damages, if any, to the residue) shall be as mutually agreed upon within nine (9) months from the date of occupancy by LICENSEE, and if agreement as to price is reached, an additional period of ninety (90) days shall be allowed for settlement, it being agreed however, that if no agreement as to price is reached within the aforesaid nine (9) month period, LICENSEE will within ninety (90) days thereafter institute an eminent domain proceeding authorized by law for the determination of the value of same. The provisions of this Agreement shall survive the institution of such eminent domain proceeding.

LICENSEE shall furnish the plans and descriptions for any such conveyance. It is understood, however, that the foregoing right of entry is a permissive use only, and this Section is not intended to convey or obligate RAILWAY to convey any interest in its land.

II. SCOPE OF RAILROAD PROJECT, AND MAINTENANCE AND OWNERSHIP OF PROJECT IMPROVEMENTS

1. Scope of Work. The scope of the work by RAILWAY shall include any necessary acquisition of right-of-way, permitting, design, construction, and construction-related activities including, but not limited to,

inspection, flagging, and superintendence, within and along RAILWAY property necessary to facilitate LICENSEE's installation, construction, maintenance, operation and removal of the Facilities ("Railroad Project").

2. Construction of the Railroad Project. The RAILWAY shall construct the Railroad Project in accordance with the force account estimate, attached as Exhibit D and herein incorporated by reference, including any future amendments thereto, and all applicable state and federal laws.

(a) All work performed by the RAILWAY related to the Railroad Project and consistent with the force account estimate will be deemed reimbursable project expenses, and shall be at no cost to the RAILWAY.

(b) RAILWAY shall accomplish work on the Railroad Project by the following: (i) railroad force account; (ii) existing continuing contracts at reasonable costs; (iii) contracting with the lowest responsible bidder based on appropriate solicitation; or (iv) contract without competitive bidding for minor work at reasonable costs.

3. Maintenance and Ownership of the Railroad Project. Upon completion of the Railroad Project, the RAILWAY shall own and, at its own cost and expense, maintain the Railroad Project improvements until such time as RAILWAY deems such maintenance to no longer be necessary.

4. Construction of the Railroad Project. Execution of this Agreement constitutes LICENSEE's issuance of a notice to proceed to RAILWAY with the Railroad Project ("Notice to Proceed"). RAILWAY shall make commercially reasonable efforts to commence construction on the Railroad Project as soon as possible, in RAILWAY's sole discretion, after the date of availability for RAILWAY to commence its construction activities on the Railroad Project.

5. Reimbursement by LICENSEE.

(a) RAILWAY shall furnish, or cause to be furnished, at the expense of the LICENSEE all the labor costs, overhead and indirect construction costs, materials and supplies, contracted services, transportation, equipment, and other related costs and items required to perform and complete the Railroad Project. In addition, RAILWAY shall furnish, at the expense of LICENSEE, the protection of rail traffic occasioned by or made necessary by entry by LICENSEE and/or its contractors or any subcontractor(s) pursuant to this Agreement.

(b) Except as otherwise provided in this Agreement, LICENSEE shall reimburse the RAILWAY for the actual cost of the work performed by it, which is estimated to be **Thirty-Seven Thousand, Two Hundred Fifty-Four Dollars and Zero Cents ($37,254.00)**. It is agreed that progress payments will be made by LICENSEE to the RAILWAY for the total amount of work done as shown on monthly statements. LICENSEE shall pay each RAILWAY statement within forty-five (45) days of receipt. Upon receipt of the final bill, RAILWAY shall be reimbursed in such amounts as are proper and eligible for final payment, and the RAILWAY Project shall be submitted to LICENSEE for final audit.

(c) Incurred Costs. The reimbursement amounts for all costs billed under this Agreement shall be subject to the applicable Federal principles and based on the full actual costs plus Approved Labor Additives. Design costs incurred by RAILWAY prior to issuance of the Notice to Proceed shall be reimbursed by LICENSEE.

III. GENERAL PROVISIONS

1. Assignment and Successors. This Agreement shall be binding upon and shall inure to the benefit of, and shall be enforceable by, the parties hereto and their respective permitted successors and assigns.

2. Limitations Upon Damages. Notwithstanding any other provision of this Agreement, RAILWAY shall not be liable for breach of this Agreement or under this Agreement for any consequential, incidental, exemplary, punitive, special, business damages or lost profits, as well as any claims for death, personal injury, and property loss and damage which occurs by reason of, or arises out of, or is incidental to the interruption in or usage of the Facilities placed upon or about the Premises by LICENSEE, including without limitation any damages under such claims that might be considered consequential, incidental, exemplary, punitive, special, business damages or loss profits.

3. Miscellaneous. All exhibits, attachments, riders and addenda referred to in this Agreement are incorporated into this Agreement and made a part hereof for all intents and purposes. Time is of the essence with regard to each provision of this Agreement. This Agreement shall be construed and interpreted in accordance with and governed by the laws of the State in which the Premises are located. Each covenant of RAILWAY and LICENSEE under this Agreement is independent of each other covenant under this Agreement. No default in performance of any covenant by a party shall excuse the other party from the performance of any other covenant.

4. Notice to Parties. Whenever any notice, statement or other communication is required under this Agreement, it shall be sent to the contact below except as otherwise provided in this Agreement or unless otherwise specifically advised.

As to LICENSEE:

_____
_____
_____
_____

As to RAILWAY:
c/o Norfolk Southern Corporation
1200 Peachtree Street, N.E.
Atlanta, Georgia 30309-3504
Attention: Public Projects Engineer

Either party may, by notice in writing, direct that future notices or demands be sent to a different address. All notices hereunder shall be deemed given upon receipt (or, if rejected, upon rejection).

5. Severability. The invalidity of any section, subsection, clause or provision of this Agreement shall not affect the validity of the remaining sections, subsections, clauses or provisions of this contract.

6. No Third Party Beneficiary. This Agreement shall be for the benefit of the parties only, and no person, firm or corporation shall acquire any rights whatsoever by virtue of this Agreement, except LICENSEE and the RAILWAY and their successors and assigns.

7. Force Majeure. The parties agree to pursue the completion of the Railroad Project in accordance with the requirements of this Agreement. No party shall be held responsible to the other for delays caused by Force Majeure events, and such delays shall not be deemed a breach or default under this Agreement. In no event shall Force Majeure events excuse LICENSEE from its obligation to make payment to RAILWAY in accordance with this Agreement. Further the parties agree that the resolution or settlement of strikes or other labor disputes shall not be deemed to be within the control or reasonable control of the affected party. If any party is unable to complete work assigned to it due to a condition of Force Majeure or other conditions beyond the reasonable control of said party, then said party will diligently pursue completion of the item that is delayed once said condition or conditions are no longer in effect. For purposes of this Agreement, Force Majeure events are defined as circumstances beyond a party's reasonable control that delay performance and may include, but are not limited to, acts of God, actions or decrees of governmental bodies (beyond control of the parties), acts of the public enemy, labor disputes, fires, insurrections, and floods.

8. Amendment; Entire Agreement. This Agreement may be amended only in writing executed by authorized representatives of the parties hereto. No verbal change, modification, or amendment shall be effective unless in writing and signed by authorized representatives of the parties. The provisions hereof constitute the entire Agreement between the parties and supersede any verbal statement, representations, or warranties, stated or implied.

9. Waiver of Workers Compensation Immunity. In the event that all or a portion of the Premises is location in the State of Ohio, LICENSEE, with respect to the indemnification provisions contained in this Agreement, hereby expressly waives any defense or immunity granted or afforded LICENSEE pursuant to Section 35, Article II of the Ohio Constitution and Section 4123.74 of the Ohio Revised Code. In the event that all or a portion of the Premises is located in the Commonwealth of Pennsylvania, LICENSEE, with respect to the indemnification provisions contained in this Agreement, hereby expressly waives any defense or immunity granted or afforded LICENSEE pursuant to Pennsylvania Workers' Compensation Act, 77 P.S. 481.

10. Independent Contractors. The parties agree that LICENSEE and its agents and/or contractors, shall not be deemed either agents or independent contractors of RAILWAY. Except as otherwise provided by this Agreement, RAILWAY shall exercise no control whatsoever over the employment, discharge, compensation of, or services rendered by LICENSEE or its contractors. Notwithstanding the foregoing, this paragraph shall in no way affect the absolute authority of RAILWAY to temporarily prohibit LICENSEE, its agents and/or contractors, or persons not associated with LICENSEE from entering RAILWAY property, or to require the removal of any person from RAILWAY property, if RAILWAY determines, in its sole discretion, that such person is not acting in a safe manner or that actual or potential hazards in, on, or about the Railroad Project Work exist.

11. Meaning of "Railway". The word "RAILWAY" as used herein shall include any other company whose property at the aforesaid location may be leased or operated by RAILWAY. Said term also shall include RAILWAY's officers, directors, agents and employees, and any parent company, subsidiary or affiliate of RAILWAY and their respective officers, directors, agents and employees.

12. Approval of Plans. By its review and approval, if any, of the plans marked as Exhibit B, RAILWAY signifies only that the plans and improvements to be constructed in accordance with the plans satisfy the RAILWAY's requirements. RAILWAY expressly disclaims all other representations and warranties in connection with said plans, including, but not limited to, the integrity, suitability or fitness for the purposes of the LICENSEE or any other person(s) of the plans or improvements constructed in accordance with the plans.

IN WITNESS WHEREOF, the parties have, through duly authorized representatives, entered into this Agreement effective the day and year first written above.

TOWN OF HUNTERSVILLE, a North Carolina municipality

By: _____

Name: _____

Title: _____

Date: _____

NORFOLK SOUTHERN RAILWAY COMPANY, a Virginia corporation

By: _____

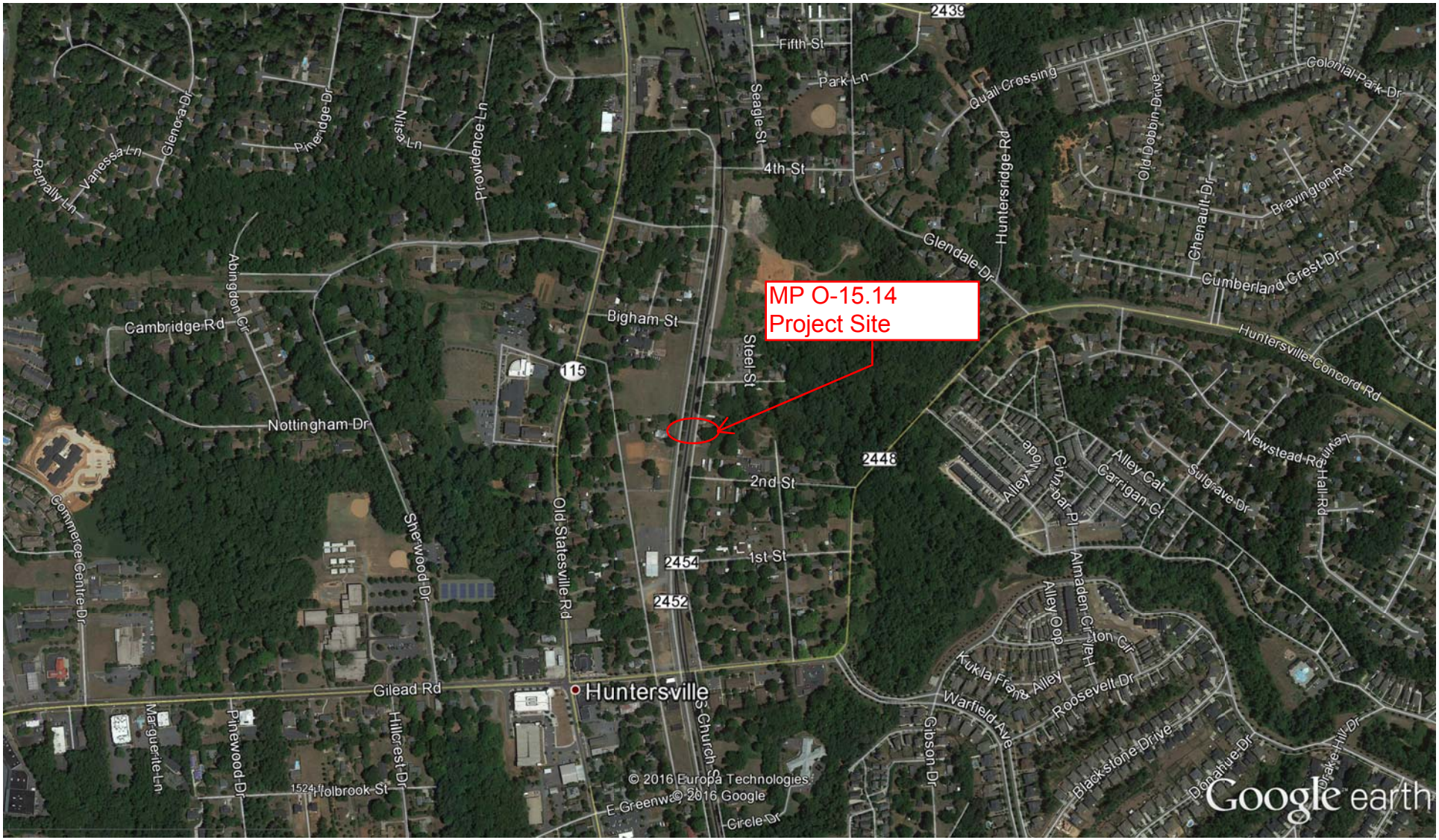
Name: _____

Title: _____

Date: _____

NS File: BR1112186

EXHIBIT A



Google Earth Pro

feet 4000

km 1

EXHIBIT A

VETERANS PARK AT MAIN AND MAXWELL

HUNTERSVILLE, NORTH CAROLINA

EPM # 367848

100% CONSTRUCTION DOCUMENTS
SEPTEMBER 21, 2016

REVISED: DECEMBER 20, 2016 LUESA COMMENTS
REVISED: FEBRUARY 03, 2017 LUESA COMMENTS

Zoning Approval Conditions:

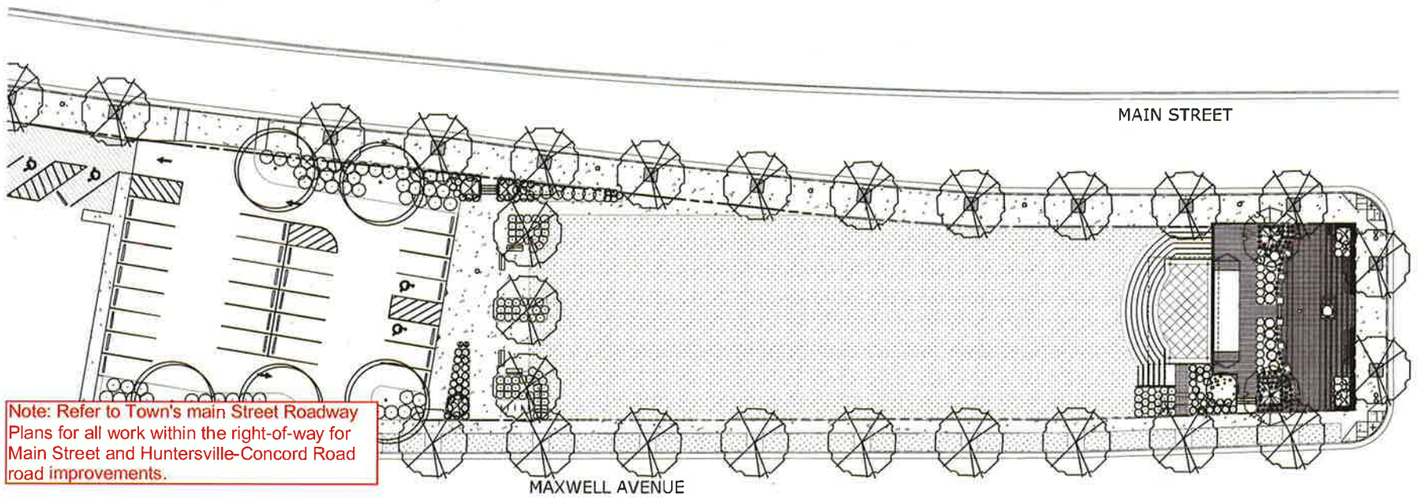
1. Photometric Plan Required showing lighting output of all on site lighting fixtures

2. 66" Oak Tree Off site required to remain for tree save conformance.

3. Final Plat required prior to final inspections.

Town of Huntersville EPM #367848
Approved
as Noted 02/24/2017
Town of Huntersville Planning Department
02/24/2017
Town of Huntersville Engineering and Public Works
02/24/2017
Mecklenburg County Land Development - Adam Kinsworth P.E.
Date 02/24/2017 Signature

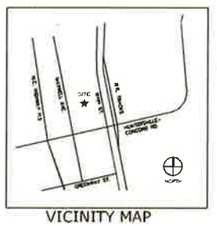
Note: This review was carried out based on the information provided by the design engineer. This review was done using the minimum acceptable standards of the town and county.



Note: Refer to Town's main Street Roadway Plans for all work within the right-of-way for Main Street and Huntersville-Concord Road road improvements.

INDEX OF DRAWINGS

	LANDSCAPE ARCHITECTURE/ CIVIL ENGINEERING	L5.50	STORM DRAINAGE PLAN & PROFILE MAIN STREET		ARCHITECTURE
L0.00	COVER	L6.00	UTILITY PLAN	G002	SYMBOLOGY, CODE SUMMARY & KEY PLAN
L0.10	GENERAL NOTES	L7.00	LANDSCAPE PLAN	A001	ARCHITECTURAL SPECIFICATIONS
L1.00	EXISTING CONDITIONS	L7.10	LANDSCAPE PLAN	A101	ICEHOUSE STAGE FLOOR PLANS AND ELEVATIONS
L1.10	EXISTING CONDITIONS	L7.20	LANDSCAPE PLAN	A301	ICEHOUSE STAGE SECTION & DETAIL
L1.20	EXISTING CONDITIONS				
L1.30	EXISTING CONDITIONS	L8.00	EROSION CONTROL DETAILS		ELECTRICAL
L2.00	DEMOLITION PLAN	L8.10	GRADING & DRAINAGE DETAILS	E001	ELECTRICAL LEGEND, NOTES, & DETAILS
L2.10	DEMOLITION PLAN	L8.11	GRADING & DRAINAGE DETAILS	E002	ELECTRICAL SPECIFICATIONS
L2.20	DEMOLITION PLAN	L8.12	GRADING & DRAINAGE DETAILS	E003	POWER RISER DIAGRAM & PANEL SCHEDULE
L2.30	TRAFFIC CONTROL PLAN	L8.20	SITE DETAILS	E101	SITE PLAN - ELECTRICAL
L2.31	ENLARGED TRAFFIC CONTROL PLAN	L8.21	SITE DETAILS		
L3.00	EROSION CONTROL PLAN	L8.22	SITE DETAILS		
L3.10	EROSION CONTROL PLAN	L8.23	SITE DETAILS		STRUCTURAL ENGINEERING
L3.20	EROSION CONTROL PLAN	L8.24	SITE DETAILS	S0.01	GENERAL NOTES
L4.00	LAYOUT PLAN	L8.25	PAVEMENT MARKING DETAILS	S2.0	FOUNDATION,ROOF FRAMING PLANS & ELEVATIONS
L4.10	LAYOUT PLAN	L8.30	UTILITY DETAILS	S3.0	TYPICAL FOUNDATION DETAILS
L4.20	LAYOUT PLAN	L8.40	LANDSCAPE DETAILS	S4.0	ICEHOUSE STRUCTURE DETAILS
L4.30	LAYOUT ENLARGEMENTS	L9.00	ROADWAY CROSS-SECTIONS		
L5.00	GRADING & DRAINAGE PLAN	L9.10	MAXWELL AVENUE CROSS-SECTIONS		
L5.10	GRADING & DRAINAGE PLAN	L9.20	MAIN STREET CROSS-SECTIONS		
L5.20	GRADING & DRAINAGE PLAN	L9.21	MAIN STREET CROSS-SECTIONS		
L5.30	GRADING & DRAINAGE ENLARGEMENTS	L9.22	MAIN STREET CROSS-SECTIONS		
L5.40	RAILROAD CROSSING DRAINAGE PLAN				



VICINITY MAP

IMPERVIOUS AREA DATA

VETERANS PARK PROPERTY:
EXISTING IMPERVIOUS: 0.16 AC
PROPOSED IMPERVIOUS: 0.17 AC

AMERICAN LEGION PROPERTY:
EXISTING IMPERVIOUS: 0.36 AC
PROPOSED IMPERVIOUS: 0.48 AC

CLIENT:
TOWN OF HUNTERSVILLE
CONTACT: MICHAEL JAYCOCKS,
PARKS & RECREATION DIRECTOR
105 GILEAD ROAD
HUNTERSVILLE, NC 28078

LANDSCAPE ARCHITECTURE:
PROJECT MANAGER/ LANDSCAPE ARCHITECT:
DAN BLACKMAN

CIVIL ENGINEERING:
CIVIL ENGINEER: JAMES BAYSINGER

STRUCTURAL ENGINEERING:
STRUCTURAL ENGINEER: LANCE WILLIAMS

SURVEYING & GEOTECHNICAL:
SURVEYOR: SCOTT TIERNEY

ARCHITECTURE:
ARCHITECT: KRISTINA HELD

ELECTRICAL ENGINEERING:
ELECTRICAL ENGINEER: BRIAN THOMPSON

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 27744 JAMES R. BAYSINGER
10/11/16

Town of Huntersville NORTH CAROLINA

STEWART
101 NORTH TRYON ST, STE 1400
CHARLOTTE, NC 28202
T 704.334.7925
FIRM LICENSE: C-1051

insight ARCHITECTS
1307 W. MOREHEAD ST, STE 138
CHARLOTTE, NC 28208
T 704.344.0445

optima engineering
1927 SOUTH TRYON ST, STE 300
CHARLOTTE, NC 28203
T 704.338.1292

SITE DATA

SITE ADDRESS: 201 HUNTERSVILLE-CONCORD RD
HUNTERSVILLE, NC 28078

PARCEL IDs:

VETERANS PARK PARCELS:	AMERICAN LEGION PARCELS:
01903215 - 0.252 AC	01903210 - 0.792 AC
01903213 - 0.560 AC	01903209 - 0.789 AC
01903212 - 0.284 AC	

PARCELS AFFECTED BY STORMWATER:

01902116 - 0.274 AC	01902117 - 0.310 AC
01902118 - 0.310 AC	01902119 - 0.290 AC
01902120 - 0.218 AC	01902125 - 0.579 AC
01902126 - 0.264 AC	01902130 - 1.000 AC
01902134 - 0.157 AC	01903210 - 0.792 AC

OWNER: TOWN OF HUNTERSVILLE & AMERICAN LEGION

CURRENT ZONING: TOWN CENTER DISTRICT (TC), NR

FIRM MAP#: 3710465001 - 03.02.09

PROPERTY TYPE: CIVIC

PARKING: NO PARKING REQUIRED
24 STANDARD SPACES PROVIDED
2 ACCESSIBLE SPACES PROVIDED

EXHIBIT B

CONSTRUCTION SEQUENCE

1. Obtain grading/erosion control plan approval.
2. Determine and mark limits of disturbance.
3. Set up an on-site pre-construction conference with erosion control Inspector to discuss erosion control measures, architect, engineer, and contractor shall be present to satisfy requirements.
4. Install construction entrance, silt fence, inlet protection, and other measures as shown on plans, disturbing only as necessary to install these devices.
5. Call for on-site inspection by inspector. When approved, Inspector issues the grading permit.
6. The contractor shall diligently and continuously maintain all erosion control devices and structures.
7. For phased erosion control plans, contractor shall meet with erosion control inspector prior to commencing with each phase of erosion control measures.
8. Stabilize site as areas are brought to finished grade.
9. Coordinate with erosion control Inspector prior to removal of erosion control measure.
10. All erosion control measures shall be constructed in accordance with the NC Erosion and Sediment Control Planning and Design Manual, U. S. Dept. of Agriculture, City of Charlotte erosion control ordinance, and the Charlotte Land Development Standards Manual.
11. All streets surrounding the project shall be kept clean at all times.
12. Place temporary seeding on all disturbed areas that will be idle 14 days or longer.
13. Clean sediment basins/traps when one-half full.
14. Permanent surface stabilization shall be installed for all areas within 14 days after final grade has been reached, as necessary, fertilize, water and reseed as required to establish and maintain a vigorous stand of grass.
15. After completion of construction and the site is stabilized, remove all accumulated sediment from sediment trapping measures and dispose by means deemed acceptable by the engineer, schedule site inspection. Upon approval by the erosion control inspector, remove temporary erosion control measures, smooth area and apply appropriate stabilization.
16. Stormwater permit inspection reports shall be performed by the contractor until notified otherwise by the erosion control inspector.

Notes:

1. Inspector refers to NCDEQ Land Quality Inspector or his/her representative. field inspections may require additional sedimentation and erosion control measures as deemed necessary by the inspector.
2. Construction and maintenance of all erosion control devices shall conform to the standards set forth in the North Carolina Department of Environmental Quality Section Erosion and Sediment Control Planning and Design Manual.
3. The general contractor is responsible for maintenance of erosion control methods during construction, and the owner is responsible for maintenance of all permanent erosion control methods after construction is complete, if any permanent methods are required.
4. Notification of Land Resources Sediment and Erosion Control Self-Inspection Program: The person responsible for land-disturbing activities is required to inspect the project after each phase of the project and continued until permanent ground cover is established in accordance with NCGS 113A-54.1 and 15A NCAC 4B.0131 to make sure that the approved erosion and sedimentation control plan is being followed. The self-inspection report form is available as an excel spreadsheet from http://www.dlr.enr.state.nc.us/pages/sedimentation_new.html

GENERAL DEMOLITION NOTES:

1. Contractor to obtain demolition permit through Mecklenburg County prior to beginning demolition.
2. All items designated to be removed shall be removed completely, including all foundations and associated subbase materials unless otherwise noted.
3. Any utility services shown to be removed or relocated shall be coordinated with the appropriate utility provider.
4. All underground utilities noted for removal should be capped at source, meter, or valve.
5. Demolition of utilities (water, sewer, etc) shall be performed in such a manner that the old pipe and structures removed do not impact, or minimize service interruption to, existing facilities to remain. Provisions shall be made to maintain service during construction.
6. Clean soils shall be utilized for backfill of any voids or depressions created during site demolition. Compaction of these soils shall be performed in accordance with the construction documents and the specifications.
7. All items designated to be removed shall be disposed of legally off-site unless otherwise noted on this plan.
8. All demolition shall be in accordance with plans and specifications and in accordance with all applicable state and local jurisdictional codes or requirements.
9. The contractor shall be responsible for repairing all damages to the existing features not to be demolished as a result of construction activity and traffic. Contractor shall maintain a pre-construction video or photo documentation to show that no damages occurred. Existing improvements damaged or destroyed by the contractor during construction shall be restored or replaced to original condition and to the satisfaction of the owner's representative at the contractor's expense.
10. All disturbed areas shall be stabilized within 14 working days following completion of land disturbing activities. If there is more stringent soil stabilization guidelines put in place by local, county, state or federal agencies, or called for based on permit requirements, then the more stringent guidelines shall control and govern on the project.
11. All trees on site to be removed. Remove tree and root structure.
12. All suitable topsoil shall be saved and stockpiled on site for re-use.
13. Contractor shall remove and dispose of all spoils material from the owner's property in compliance with federal, state, and local environmental laws and regulations at the pre-determined landfill site. Landfill fees shall be included in the contractor's project fee. This includes all surplus soil material, unsuitable topsoil, rock obstructions, demolished materials and waste materials (including trash and debris).
14. Clearing beyond the clearing limits shown in these plans is prohibited without approval of the Landscape Architect. Unnecessary construction activity/vegetative clearing not shown on plans that results in the need for additional construction work will be the responsibility of the contractor.

TREE PROTECTION NOTES

1. Tree barricades must be installed and inspected by the Landscape Architect before any demolition, grading, or construction begins and shall not be removed until final inspection.
2. Tree protection fence is to be located per plan or at a minimum of 1 foot per tree diameter inch away from the tree. All tree protection fencing to be inspected daily and replaced or repaired as needed.
3. No soil disturbance or compaction, construction materials, traffic, burial pits, trenching or other land disturbing activity is allowed in the tree protection zone.
4. No grubbing within tree protection zone. Leave soil and leaf litter undisturbed. Supplement with 1-2 inches of mulch.
5. No parking, storage, or other construction activities are to occur within tree protection areas.
6. Brush, vines, and small trees (<4" caliper) may be hand-cleared only and must be cut flush with ground surface. Existing trees may be limbed up (at least $\frac{2}{3}$ of the branches should be left) to 8 feet to improve visibility.
7. Exposed tree roots must be cleanly cut with a sharp pruning tool; Backfill immediately to minimize exposure to the air.
8. All tree protection devices shall be maintained until Landscape Architect notifies the contractor. Removal of all tree protection devices shall be included in the base bid.

GENERAL NOTES:

1. All construction materials and methods shall conform to the Town of Huntersville, Mecklenburg County, NC, NC Department of Environmental Quality, North Carolina Department of Transportation Standards and Specifications, OSHA Requirements, and Federal Requirements.
2. Prior to commencing construction, all approvals, including plan approval and all permits and encroachments, shall be obtained. The contractor shall be responsible for obtaining and coordinating permits, inspections, certifications and other requirements which must be met under this contract.
3. A preconstruction conference must be held at least fourty-eight (48) hours prior to commencing any construction. At the mandatory conference the contractor shall provide a construction schedule to the Landscape Architect and Owner. As construction progresses and the construction schedule is altered, the contractor shall provide the Landscape Architect and Owner with an updated construction schedule on a bi-weekly basis.
4. All references to a Landscape Architect or Engineer shall mean a representative of Stewart or successor.
5. Contractor shall coordinate all site activities with Landscape Architect or designated representative. Contractor shall be responsible for coordination delivery, storage and handling of all materials required for the project.
6. The Landscape Architect, Engineer, and Owner disclaim any role in the construction means and/or methods associated with the project as set forth in these plans.
7. The contractor shall have a complete set of contract documents, as well as permits and approvals, on the job site at all times.
8. All construction and demolition from back of curb and outside of the back of curb to be Alternate #1. See site dimensions, sheets: L4.00 - L4.30 for alternate separation line.
9. Existing survey information, including topographic information is provided by Stewart, unless otherwise noted. The contractor shall be responsible for field verifying existing conditions prior to commencement of any work. The contractor shall immediately notify the owner's representative of any discrepancies or conflicts.
10. The contractor shall furnish all labor, materials, tools, and equipment and shall perform all work and services for all site clearing, site excavation, undercutting, filling, and backfilling for structures, such as drainage structures, sidewalks, pavements, including borrow, hauling, wetting, rolling and other operations pertaining thereto, within the clearing limits, as shown on the contract drawings.
11. If departures from the project drawings or specifications are deemed necessary by the contractor, details of such departures and reasons there of shall be submitted in writing to the owner's representative for review. No departures from the contract documents shall be made without the express written permission of the owner's representative.
12. If at any time the contractor feels that construction work falls outside of what is included in the base bid, the contractor shall notify the Landscape Architect immediately. The Owner and or the Landscape Architect reserve the right to reject any additional payment and/or change order requests for additional work that is not authorized in writing by the Owner or the Landscape Architect.
13. All sub-surface utilities identified on the construction documents are shown in their approximate location based on survey information gathered from field inspection and/or any other applicable record drawings which may be available. The contractor shall immediately notify the owner's representative of any discrepancies or conflicts.
14. The contractor shall be responsible for contacting, coordinating, and paying for all necessary locating services including independent locating services. The contractor shall have all existing utilities located at least 48 hours prior to beginning demolition, excavation or any other form of construction. The contractor shall immediately notify the owner's representative of any discrepancies or conflicts. The contractor shall maintain "as-built" drawings to record the actual location of all piping prior to concealment. Drawings shall be provided to the owner's representative at regular intervals or as requested throughout the project for record keeping.
15. All backfill of trenches shall be compacted to a density of 95% of the theoretical maximum density (Standard Proctor). Backfill material shall be free from roots, stumps, or other foreign debris and shall be placed at or near optimum moisture content.
16. All existing above ground utility services to be relocated below ground. Relocation shall be coordinated with the appropriate utility providers.
17. The contractor will be responsible for any repair or replacement of any utilities damaged or removed during construction.
18. The contractor shall be responsible for the reconnection of disturbed utility service encountered within 8 hours of interrupted service. Contractor shall notify users within construction area 48 hours prior to possible interruptions of service, except for water service, which shall require 7 days notice.
19. All erosion control devices shall be in place prior to grading.
20. Sediment control measures shall be placed as shown and/or as directed by the Landscape Architect or Mecklenburg County Inspector.
21. Erosion control measures will be maintained at all times. Additional erosion and sediment control measures shall be installed if deemed necessary.
22. All open drainage swales to be grassed, and coir wattle check dams must be placed as required to control erosion.
23. All disturbed areas will be grassed as soon as construction measures permit, but not to exceed 14 days of completion of land disturbing activities.
24. All non-paved disturbed areas to be seeded with material suitable to season and to be maintained until stabilized.
25. All required new vegetation must be guaranteed for one year after the date of final inspection.
26. GROUND SURFACE SHALL BE SHAPED TO PROVIDE POSITIVE DRAINAGE.
27. All pipe dimensions are shown to center of structure.
28. Traffic control methods, such as barricades, sufficient lights, signs, and other methods may be necessary for the protection and safety of the public and shall be provided and maintained throughout construction adjacent to roadways.
29. The contractor shall be responsible for keeping the premises free from accumulations of waste materials and rubbish caused by the contractor. All debris shall be removed from the project site on a daily basis. No burning or bury pits are allowed on this construction site. Concrete truck washout is prohibited on-site.

GENERAL EROSION CONTROL NOTES:

1. Provisions to prevent erosion of soil from the site shall be, at minimum, in conformance with the requirements of the most current standards established by the NC Department of Environmental Quality, U.S. Department of Agriculture and the U.S. Soil Conservation Service.
2. Additional erosion control measures will be employed where determined necessary by actual site conditions as shown on the Erosion Control Plan (Sheets L3.00, L3.10, AND L3.20) and as directed by the erosion control inspector.
3. A copy of the approved land disturbance plan and permit shall be present on the site whenever land disturbance activity is in progress.
4. Removal of all erosion control measures shall be included in base bid. All temporary control devices shall be removed once construction is complete and the site is stabilized, with inspector approval.
5. Prior to any other construction, a stabilized construction entrance shall be constructed at each point of entry to or exit from the site. Construction entrances shall be maintained in a condition which will prevent tracking or flow of mud onto Public right of way. This may require periodic top dressing with stone, as conditions demand, and repair and/or clean-out of any structures used to trap sediment. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
6. Prior to commencing land disturbing activity, the limits of disturbance shall be clearly and accurately demarcated with stakes, ribbons, or other appropriate means and approved by Landscape Architect. The location and extent of all authorized land disturbance shall be demarcated for the duration of the construction activity. No disturbance shall occur outside the approved limits indicated on the approved plans.
7. Immediately after the establishment of construction entrances, all perimeter erosion control devices shall be installed prior to any other construction.
8. The construction of the site will initiate with the installation of erosion control measures sufficient to control sediment deposits and erosion. All sediment control will be maintained until all upstream ground within the construction area has been completely stabilized with permanent vegetation and all roads/driveways have been paved.
9. The location of some of the erosion control devices may have to be altered from that shown on the approved plans if drainage patterns during construction are different from the final proposed drainage patterns. It is the contractor's responsibility to accomplish erosion control for all drainage patterns created at various stages during construction. Any difficulty in controlling erosion during any phase of construction shall be reported to the Landscape Architect immediately. Temporary diversion berms and/or ditches should be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
10. All silt barriers must be placed as access is obtained during clearing. No grading shall be done until silt barrier installation is complete.
11. Contractor shall maintain all erosion control measures until permanent vegetation has been established. Contractor shall inspect erosion control measures at the end of each working day and within 24 hours of the end of a storm event of 0.5 inches or greater to insure measures are functioning properly. If site inspections identify measures that are not operating effectively, maintenance must be performed as soon as reasonably possible and before the next storm event.
12. The contractor shall remove accumulated silt when the silt is within 12" of the top of the silt fence utilized for erosion control.
13. Failure to install, operate or maintain all erosion control measures will result in all construction being stopped on the job site until such measures are corrected to NC DEQ Standards.
14. All open swales must be grassed, and coir wattle check dams must be placed as required to control erosion. Rip rap shall be placed immediately upon the installation of pipes, end sections and headwalls/endwalls.
15. The contractor is responsible for removing any building or other excavation spoil dirt, construction trash or debris, etc. from the drainage areas shown hereon in an expeditious manner as construction progresses.
16. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except: (a) Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable; (b) Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
17. Slopes shall be graded no steeper than 2:1. If necessary, slopes which exceed eight (8) vertical feet shall be stabilized with mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
18. When field conditions warrant off-site grading, permission must be obtained from the Landscape Architect and affected property owners.
19. The contractor shall maintain each stream, creek, or backwash channel in an unobstructed state and shall remove from the channel and banks of the stream all debris, logs, timber, junk and other accumulations.
20. The contractor shall restore any disturbed areas to existing grade unless shown otherwise in the plan set.
21. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove any sediments before being pumped back into any waters of the State.
22. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
23. Sediment and Erosion Control measures and practices are to be inspected daily.

STAKING AND MATERIALS NOTES:

1. All dimensions are at 90° unless otherwise noted.
2. Contractor shall establish and verify Point of Beginning (P.O.B) and stake site as indicated on construction documents prior to commencement of construction. Notify Landscape Architect immediately of any discrepancies.
3. All dimensions are to face of wall, face of building, face of curb, edge of pavement, or centerline unless otherwise noted.
4. All details shall be constructed in strict compliance with specifications and construction documents.
5. Contractor responsible for verifying plan dimensions and grades. Contractor shall notify Stewart of any discrepancies and coordinate if any adjustments are needed.

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STOP

UNDERGROUND UTILITIES MAY EXIST WITHIN THE PROJECT AREA. CALL 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY OR EXCAVATION WORK

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

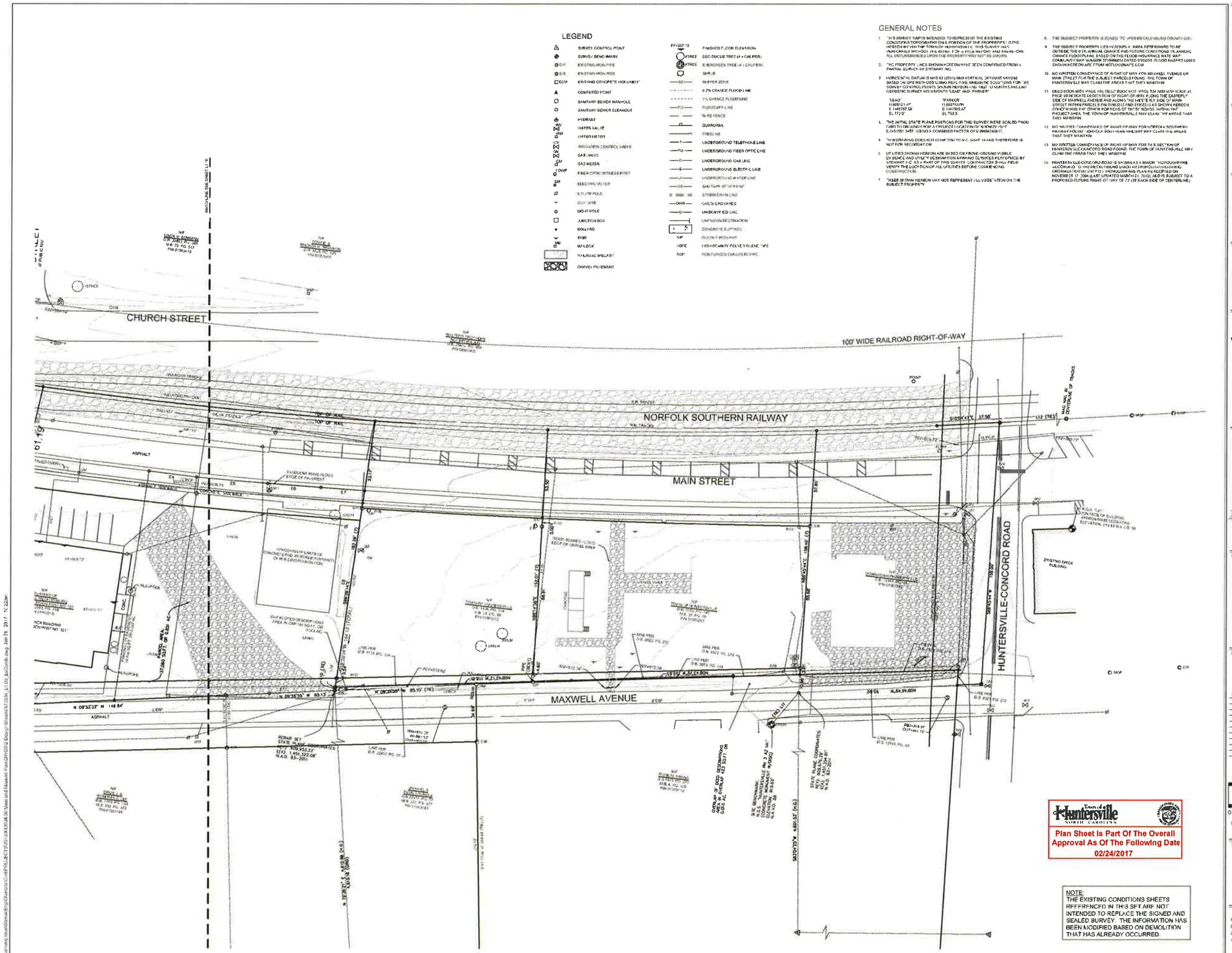
No.	Date	Description

Scale:

Title: GENERAL NOTES

Project number: X13034
Date: 09.21.2016
Drawn by: EMB/MRB
Approved by: DRB
Sheet: L0.10

EXHIBIT B



NOTE:
THE EXISTING CONDITIONS SHEETS REFERENCED IN THIS SET ARE NOT INTENDED TO REPLACE THE SIGNED AND SEALED SURVEY. THE INFORMATION HAS BEEN MODIFIED BASED ON DEMOLITION THAT HAS ALREADY OCCURRED.

STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

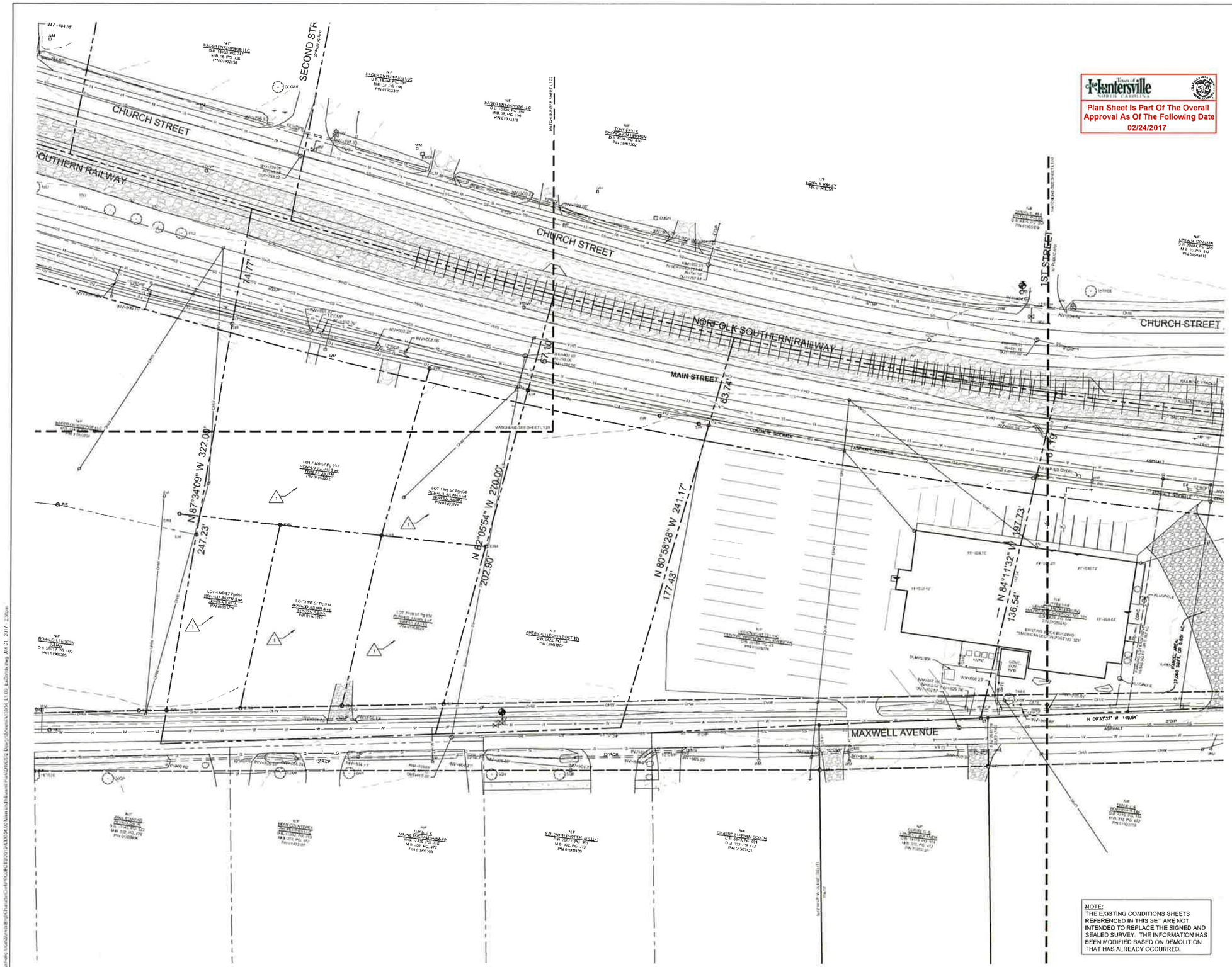
No	Date	Description

0 10 20 40 NORTH
Scale 1" = 20'

Title:
EXISTING CONDITIONS

Project number: X13034 Sheet
Date: 09 21 2016
Drawn by:
Approved by:
L1.00

EXHIBIT B



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THE EXISTING CONDITIONS SHEETS REFERENCED IN THIS SET ARE NOT INTENDED TO REPLACE THE SIGNED AND SEALED SURVEY. THE INFORMATION HAS BEEN MODIFIED BASED ON DEMOLITION THAT HAS ALREADY OCCURRED.

STEWART

Client:
Town of Huntersville
NORTH CAROLINA

Architects:
insight ARCHITECTS

Project
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

No	Date	Description
1	12/05/2016	LUCKA COMMENTS

0 10 20 40
Scale 1" = 20'
NORTH

Title:
EXISTING CONDITIONS

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by:
Approved by:
L1.10

EXHIBIT B

STEWART

Client:
Town of Huntersville
NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued For:

No	Date	Description

Title:
EXISTING CONDITIONS

Project number: N13034
Date: 09.21.2016
Drawn by:
Approved by:

L1.20

EXHIBIT B

Tree Preservation Required:

Zoning District	Existing Canopy ≥ 10% of total site area	Existing Canopy < 10% of total site area	Heritage Trees	Specimen Trees
TC	5%	5%	100%	33%

	Existing Canopy ≥ 10% of total site area	Existing Canopy < 10% of total site area	# of Heritage Trees	# of Specimen Trees
Existing Trees	0%	0%	0	1 - 28" Elm (removed)
				1 - 24" Juglans nigra/ Black Walnut (removed)
Required for preservation	0%	0%	0	8" DBH to 28" Elm
				8" DBH to 24" Black Walnut
Preservation Mitigation	0%	0%	0	(2) - 3" Ulmus parvifolia to Mitigate 28" Elm
				(4) - 2" Quercus falcata to Mitigate 24" Black Walnut

TREE PRESERVATION NOTES:

1. REFER TO LANDSCAPE PLANS (SHEETS L7.00 & L7.20) FOR LOCATIONS OF TREES TO BE PLANTED FOR MITIGATION.

DEMOLITION KEY NOTES:

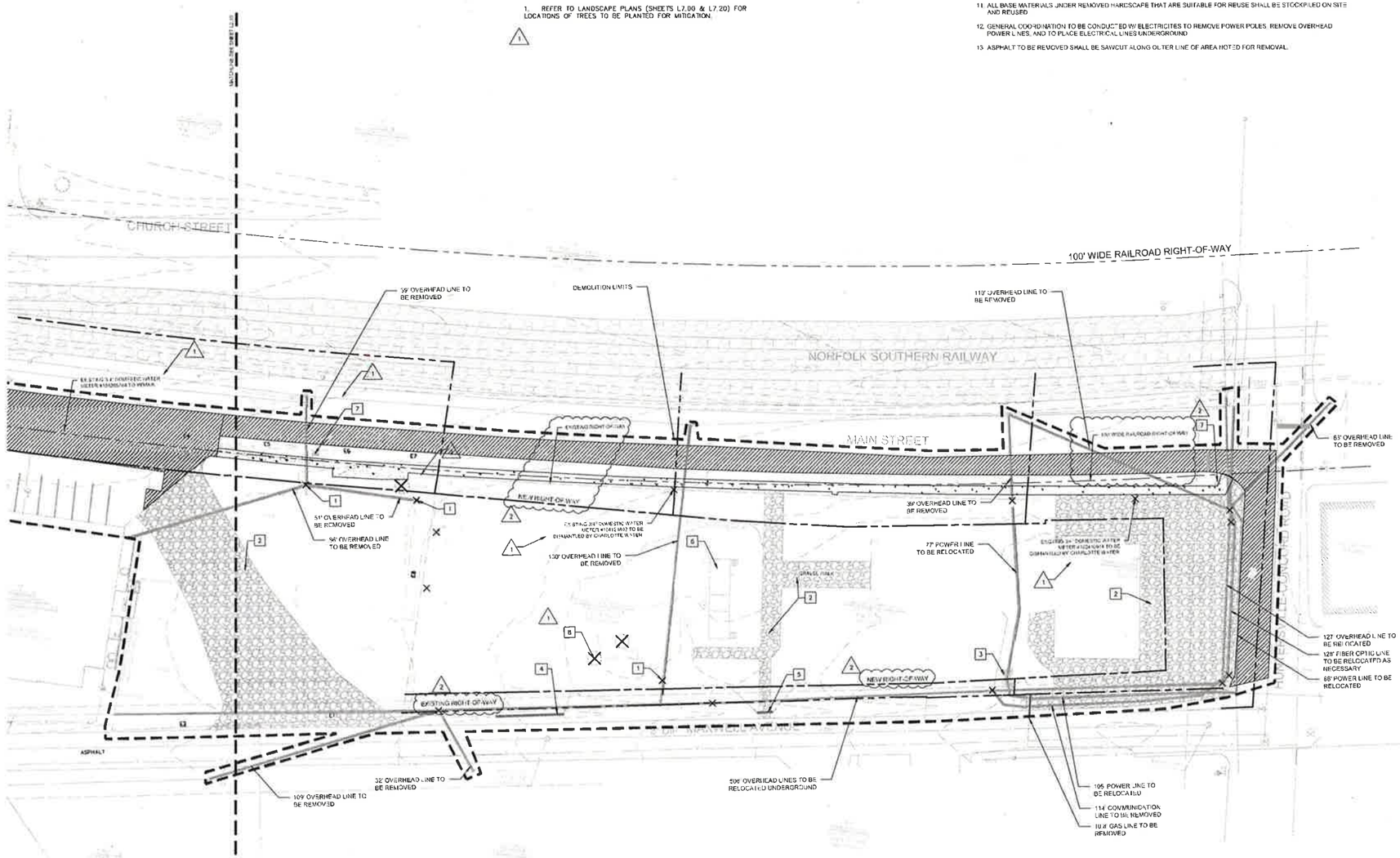
1. POWER POLE OPTION FOR "TEMPORARY POWER". COORDINATE WITH ELECTRICITIES FOR ONE POWER POLE TO REMAIN DURING CONSTRUCTION AS TEMPORARY POWER POLE TO BE REMOVED AT END OF CONSTRUCTION.
2. REMOVE GRAVEL AND ASSOCIATED EDGING MATERIAL. STOCKPILE SUITABLE BASE MATERIAL FOR REUSE.
3. TRANSFORMER AND JUNCTION BOXES (4) TO BE RELOCATED BY ELECTRICITIES. CONTRACTOR TO COORDINATE WITH ELECTRICITIES.
4. STORM DRAINAGE PIPE TO BE REMOVED
5. PVC PIPE TO BE REMOVED
6. CABOOSE TO BE RELOCATED ON SITE PER SHEET L4.00, BASE, RAILS, AND TIMBERS TO BE REMOVED.
7. FIRE HYDRANT TO BE RELOCATED. COORDINATE W/ THE FIRE DEPARTMENT.
8. 28" ELM TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE; REFER TO TREE PRESERVATION CHART.
9. 24" JUGLANS NIGRA (BLACK WALNUT) TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE, REFER TO TREE PRESERVATION CHART.

ADDITIONAL NOTES:

8. GENERAL DEMOLITION NOTES ARE LOCATED ON SHEET L0.10
9. ANY SIGNS ON SITE ARE TO BE REMOVED AND STORED FOR REUSE. REMOVE ANY FOOTINGS PRESENT. COORDINATE WITH TOWN PUBLIC WORKS DEPARTMENT FOR STORAGE LOCATION.
10. ALL VEGETATION WITHIN THE PROJECT LIMITS IS TO BE REMOVED FROM THE SITE
11. ALL BASE MATERIALS UNDER REMOVED HARDSCAPE THAT ARE SUITABLE FOR REUSE SHALL BE STOCKPILED ON SITE AND REUSED
12. GENERAL COORDINATION TO BE CONDUCTED W/ ELECTRICITES TO REMOVE POWER POLES, REMOVE OVERHEAD POWER LINES, AND TO PLACE ELECTRICAL LINES UNDERGROUND
13. ASPHALT TO BE REMOVED SHALL BE SAWCUT ALONG OUTER LINE OF AREA NOTED FOR REMOVAL.

DEMOLITION LEGEND

- OHP — REMOVE OVERHEAD POWER LINE
- E — REMOVE POWER LINE
- CATV — REMOVE COMMUNICATION LINE
- FO — REMOVE FIBER OPTIC LINE
- G — REMOVE NATURAL GAS LINE
- SD — REMOVE STORM DRAINAGE
- COORDINATE LIGHT POLE REMOVAL
- REMOVE ASPHALT
- REMOVE CONCRETE
- REMOVE GRAVEL
- REMOVE BUILDING
- KEYED NOTE
- REMOVE TREE
- TREE PROTECTION FENCE
- REMOVE LIGHT POLE
- REMOVE WATER METER



Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architect: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

No	Date	Description
1	12/05/2016	UDSA COMMENTS
2	2/03/2017	UDSA COMMENTS

0 10 20 40 NORTH

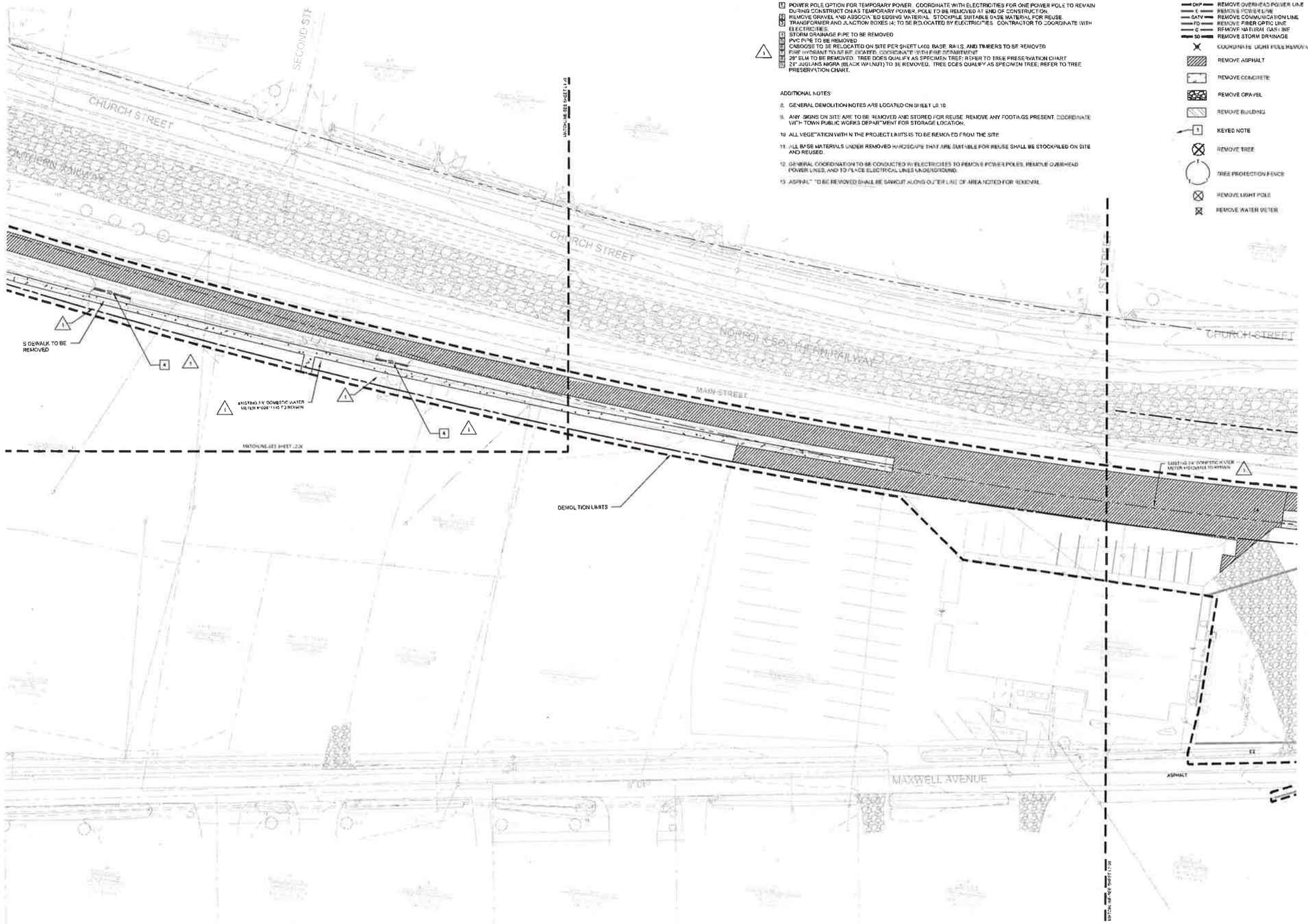
Scale: 1" = 20'

Title: **DEMOLITION PLAN**

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: EMS/MRB
Approved by: DRB

L2.00

EXHIBIT B



DEMOLITION KEY NOTES:

1. POWER POLE OPTION FOR TEMPORARY POWER. COORDINATE WITH ELECTRICITIES FOR ONE POWER POLE TO REMAIN DURING CONSTRUCTION AS TEMPORARY POWER. POLE TO BE REMOVED AT END OF CONSTRUCTION.
2. REMOVE GRAVEL AND ASSOCIATED EDGING MATERIAL. STOCKPILE SUITABLE BASE MATERIAL FOR REUSE.
3. TRANSFORMER AND JUNCTION BOXES (4) TO BE RELOCATED BY ELECTRICITIES. CONTRACTOR TO COORDINATE WITH ELECTRICITIES.
4. STORM DRAINAGE PIPE TO BE REMOVED
5. PVC PIPE TO BE REMOVED
6. CABOOSE TO BE RELOCATED ON SITE PER SHEET L400. BASE, RAILS, AND TIMBERS TO BE REMOVED
7. FIRE HYDRANT TO BE RELOCATED. COORDINATE WITH FIRE DEPARTMENT
8. 28" ELM TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE; REFER TO TREE PRESERVATION CHART
9. 24" JUGLANS NIGRA (BLACK WALNUT) TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE; REFER TO TREE PRESERVATION CHART.

ADDITIONAL NOTES:

8. GENERAL DEMOLITION NOTES ARE LOCATED ON SHEET L0.10
9. ANY SIGNS ON SITE ARE TO BE REMOVED AND STORED FOR REUSE. REMOVE ANY FOOTINGS PRESENT. COORDINATE WITH TOWN PUBLIC WORKS DEPARTMENT FOR STORAGE LOCATION.
10. ALL VEGETATION WITHIN THE PROJECT LIMITS IS TO BE REMOVED FROM THE SITE
11. ALL BASE MATERIALS UNDER REMOVED HARDSCAPE THAT ARE SUITABLE FOR REUSE SHALL BE STOCKPILED ON SITE AND REUSED.
12. GENERAL COORDINATION TO BE CONDUCTED W/ ELECTRICITIES TO REMOVE POWER POLES, REMOVE OVERHEAD POWER LINES, AND TO PLACE ELECTRICAL LINES UNDERGROUND.
13. ASPHALT TO BE REMOVED SHALL BE SAWCUT ALONG OUTER LINE OF AREA NOTED FOR REMOVAL.

DEMOLITION LEGEND

- OHP — REMOVE OVERHEAD POWER LINE
- E — REMOVE POWER LINE
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- REMOVE TREE
- TREE PROTECTION FENCE
- REMOVE LIGHT POLE
- REMOVE WATER METER

Town of Huntersville NORTH CAROLINA
Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

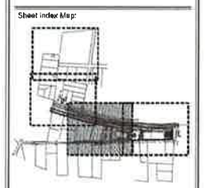
STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:



Seal:

Issued for:

No	Date	Description
1	12/20/2016	LUCSA COMMENTS

0 10 20 40 NORTH

Scale 1" = 20'

Title: DEMOLITION PLAN

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: EMB/MRB
Approved by: DRB

L2.10

EXHIBIT B

Tree Preservation Required:

Zoning District	Existing Canopy ≥ 10% of total site area	Existing Canopy < 10% of total site area	Heritage Trees	Specimen Trees
TC	0%	0%	100%	30%

	Existing Canopy ≥ 10% of total site area	Existing Canopy < 10% of total site area	# of Heritage Trees	# of Specimen Trees
Existing Trees	0%	0%	0	1 - 26" Elm (removed) 1 - 24" Juglans nigra/ Black Walnut (removed) 66" Oak
Proposed to be saved	0%	0%	0	66" Oak

TREE PRESERVATION NOTES:

1. REFER TO LANDSCAPE PLANS (SHEETS L7.00 & L7.20) FOR LOCATIONS OF TREES TO BE PLANTED FOR MITIGATION.

TREE CANOPY SAVE REQUIRED

SITE	EXISTING CANOPY	PROPOSED CANOPY
42 ACRES	10% OF TOTAL SITE	15%

≈20,255 sqft of tree canopy. 2,700 required.

Town of Huntersville Property (not hager enterprise)- Included in the project for tree save purposes. If developed in the future, 66 inch Oak must be saved for this development's tree save, as well as 10% of tree cover.

DEMOLITION KEY NOTES:

1. POWER POLE OPTION FOR TEMPORARY POWER. COORDINATE WITH ELECTRICITIES FOR ONE POWER POLE TO REMAIN DURING CONSTRUCTION AS TEMPORARY POWER POLE TO BE REMOVED AT END OF CONSTRUCTION.
2. REMOVE GRAVEL AND ASSOCIATED EDGING MATERIAL. STOCKPILE SUITABLE BASE MATERIAL FOR REUSE.
3. TRANSFORMER AND JUNCTION BOXES (4) TO BE RELOCATED BY ELECTRICITIES. CONTRACTOR TO COORDINATE WITH ELECTRICITIES.
4. STORM DRAINAGE PIPE TO BE REMOVED
   PVC PIPE TO BE REMOVED
   CABOOSE TO BE RELOCATED ON SITE PER SHEET L4.00. BASE, RAILS, AND TIMBERS TO BE REMOVED.
   FIRE HYDRANT TO BE RELOCATED. COORDINATE W/ THE FIRE DEPARTMENT
   36" ELM TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE; REFER TO TREE PRESERVATION CHART
   24" JUGLANS NIGRA (BLACK WALNUT) TO BE REMOVED. TREE DOES QUALIFY AS SPECIMEN TREE, REFER TO TREE PRESERVATION CHART.

ADDITIONAL NOTES:

8. GENERAL DEMOLITION NOTES ARE LOCATED ON SHEET L0.10.
9. ANY SIGNS ON SITE ARE TO BE REMOVED AND STORED FOR REUSE. REMOVE ANY FOOTINGS PRESENT. COORDINATE WITH TOWN PUBLIC WORKS DEPARTMENT FOR STORAGE LOCATION.
10. ALL VEGETATION WITHIN THE PROJECT LIMITS IS TO BE REMOVED FROM THE SITE
11. ALL BASE MATERIALS UNDER REMOVED HARDSCAPE THAT ARE SUITABLE FOR REUSE SHALL BE STOCKPILED ON SITE AND REUSED.
12. GENERAL COORDINATION TO BE CONDUCTED W/ ELECTRICITIES TO REMOVE POWER POLES, REMOVE OVERHEAD POWER LINES, AND TO PLACE ELECTRICAL LINES UNDERGROUND
13. ASPHALT TO BE REMOVED SHALL BE SAWCUT ALONG OUTER LINE OF AREA NOTED FOR REMOVAL.

DEMOLITION LEGEND

- OHP — REMOVE OVERHEAD POWER LINE
- E — REMOVE POWER LINE
- CATV — REMOVE COMMUNICATION LINE
- FO — REMOVE FIBER OPTIC LINE
- G — REMOVE NATURAL GAS LINE
- SD — REMOVE STORM DRAINAGE
- COORDINATE LIGHT POLE REMOVAL
- REMOVE ASPHALT
- REMOVE CONCRETE
- REMOVE GRAVEL
- REMOVE BUILDING
- KEYED NOTE
- REMOVE TREE
- TREE PROTECTION FENCE
- REMOVE LIGHT POLE
- REMOVE WATER METER

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

SEE TREE CANOPY SAVE CHART REGARDING THIS PARCEL

APPROXIMATE LOCATION OF EXISTING 3/4" DOMESTIC WATER METER #3104270504 TO BE DISMANTLED BY CHARLOTTE WATER. (LOCATION UNKNOWN)

CHURCH STREET

NORFOLK SOUTHERN RAILWAY

RAILROAD CROSSING

TREE TO REMAIN

TREE TO REMAIN

SIDEWALK TO BE REMOVED

EXISTING 1" DOMESTIC WATER METER RECENTLY REMOVED

MATCHLINE-SEE SHEET L2.10

MATCHLINE-SEE SHEET L2.10

STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

No	Date	Description
1	11.20.16	LUESA COMMENTS
2	02.03.17	LUESA COMMENTS

0 10 20 40 NORTH

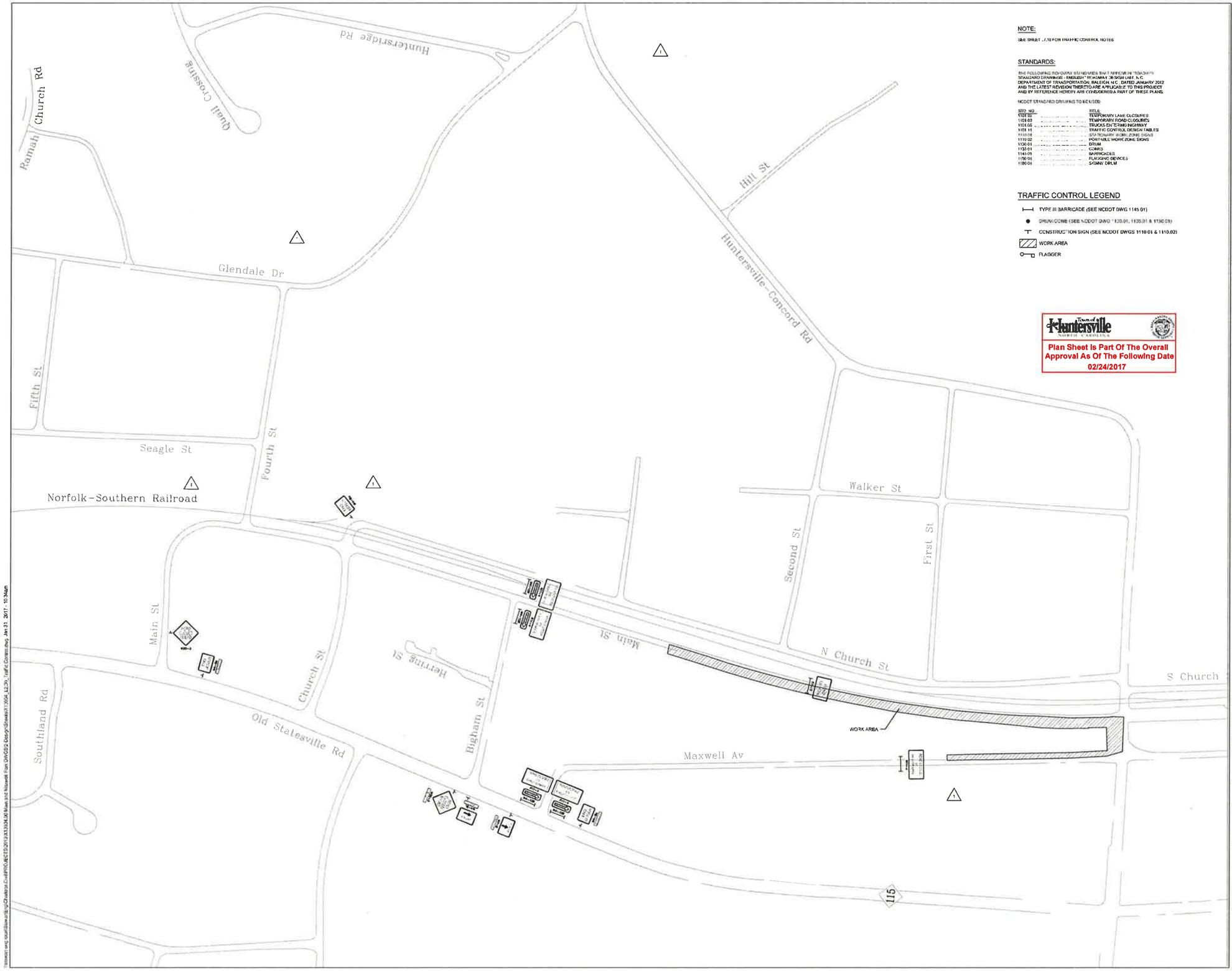
Scale 1" = 20'

Title:
DEMOLITION PLAN

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: EMB/MRB
Approved by: ORB
L2.20

C:\PROJECTS\2013\X13034_X Main and Maxwell Park\X13034_L2.00_Demo.dwg, 9/21/2016 2:44:51 PM, Emily Bell, 1:1, 2017 - 8.51sm

EXHIBIT B



NOTE:

SEE SHEET L7.10 FOR TRAFFIC CONTROL NOTES

STANDARDS:

THE FOLLOWING ROADWAY STANDARDS SHALL APPLY IN CONJUNCTION WITH STANDARD DRAWINGS - ENGLISH " ROADWAY DESIGN UNIT, N.C. DEPARTMENT OF TRANSPORTATION, RALEIGH, N.C., DATED JANUARY 2012 AND THE LATEST REVISION THERETO ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREIN ARE CONSIDERED A PART OF THESE PLANS.

NCDOT STANDARD DRAWING TO BE USED

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.05	TRUCKS ENTERING HIGHWAY
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY DRUM

TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE (SEE NCDOT DWG 1145.01)
- DRUM/CONE (SEE NCDOT DWG 1130.01, 1135.01 & 1130.03)
- CONSTRUCTION SIGN (SEE NCDOT DWGS 1110.01 & 1110.02)
- WORK AREA
- FLAGGER

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

Client:

Town of Huntersville NORTH CAROLINA

insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSINGER

Issued for:

No	Date	Description
1	12/22/2016	PLAN COMMENTS

0 50 100 200 NORTH

Scale 1" = 100'

Title:

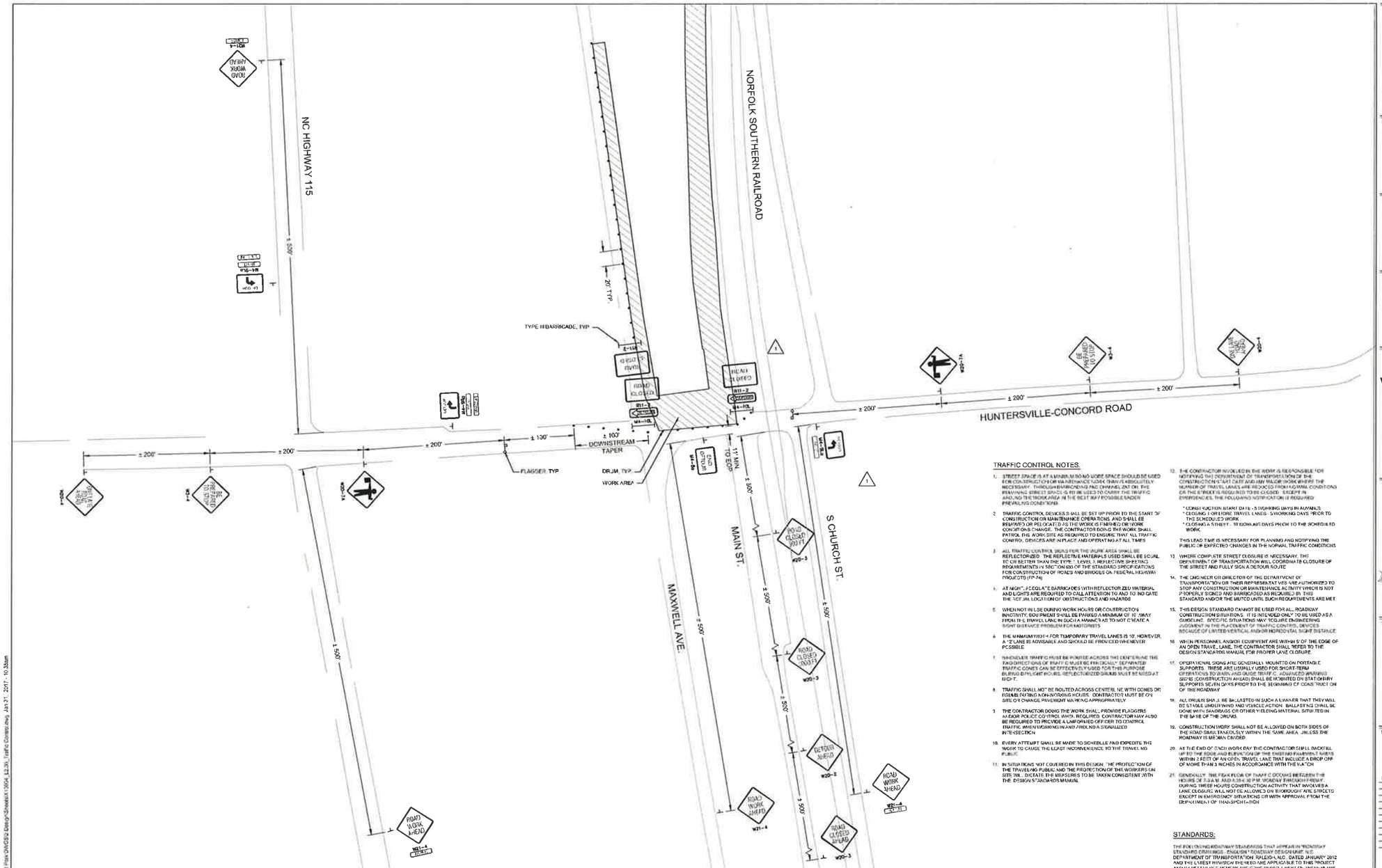
TRAFFIC CONTROL PLAN

Project number X13034 Sheet:
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L2.30

Plotted by: user.name@stewartcos.com\\Projects\Civil\PROJECTS\2013\X13034.00 Main and Maxwell Park GRADING Design\Sheets\13034_L2.30_Traffic Control.dwg, Jan 31, 2017 - 10:34am

EXHIBIT B



TRAFFIC CONTROL NOTES

1. STREET SPACE IS AT A MINIMUM SO NO MORE SPACE SHOULD BE USED FOR CONSTRUCTION OR MAINTENANCE WORK THAN IS ABSOLUTELY NECESSARY. THROUGH BARRICADED TRAFFIC CHANNELIZATION OF THE REMAINING STREET SPACE IS TO BE USED TO CARRY THE TRAFFIC AROUND THE WORK AREA IN THE BEST WAY POSSIBLE UNDER PREVAILING CONDITIONS.
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP PRIOR TO THE START OF CONSTRUCTION OR MAINTENANCE OPERATIONS AND SHALL BE REMOVED OR RELOCATED AS THE WORK IS FINISHED OR WORK CONDITIONS CHANGE. THE CONTRACTOR DOING THE WORK SHALL PATROL THE WORK SITE AS REQUIRED TO ENSURE THAT ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND OPERATING AT ALL TIMES.
3. ALL TRAFFIC CONTROL SIGNS FOR THE WORK AREA SHALL BE RETROREFLECTIVE. THE REFLECTIVE MATERIALS USED SHALL BE EQUAL TO OR BETTER THAN THE TYPE "I" LEVEL 3 REFLECTIVE SHEETING REQUIREMENTS IN SECTION 1093 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-14).
4. AT NIGHT, FLOODLIGHTED BARRICADES WITH REFLECTORIZED MATERIAL AND LIGHTS ARE REQUIRED TO CALL ATTENTION TO AND TO INDICATE THE LATERAL LOCATION OF OBSTRUCTIONS AND HAZARDS.
5. WHEN NOT IN USE DURING WORK HOURS OR CONSTRUCTION INACTIVITY, EQUIPMENT SHALL BE PARKED A MINIMUM OF 10' AWAY FROM THE TRAVEL LANE IN SUCH A MANNER AS TO NOT CREATE A SIGHT DISTANCE PROBLEM FOR MOTORISTS.
6. THE MINIMUM WIDTH FOR TEMPORARY TRAVEL LANES IS 10'. HOWEVER, A 12' LANE IS ADVISABLE AND SHOULD BE PROVIDED WHENEVER POSSIBLE.
7. WHENEVER TRAFFIC MUST BE ROUTED ACROSS THE CENTERLINE THE TWO DIRECTIONS OF TRAFFIC MUST BE PHYSICALLY SEPARATED. TRAFFIC CONES CAN BE EFFECTIVELY USED FOR THIS PURPOSE DURING DAYLIGHT HOURS. REFLECTORIZED DRUMS MUST BE USED AT NIGHT.
8. TRAFFIC SHALL NOT BE ROUTED ACROSS CENTERLINE WITH CONES OR DRUMS DURING NON-WORKING HOURS. CONTRACTOR MUST BE ON SITE OR CHANGE PAVEMENT MARKINGS APPROPRIATELY.
9. THE CONTRACTOR DOING THE WORK SHALL PROVIDE FLAGGERS AND/OR POLICE CONTROL WHEN REQUIRED. CONTRACTOR MAY ALSO BE REQUIRED TO PROVIDE A UNIFORMED OFFICER TO CONTROL TRAFFIC WHEN WORKING IN AND AROUND A SIGNALIZED INTERSECTION.
10. EVERY ATTEMPT SHALL BE MADE TO SCHEDULE AND EXPEDITE THE WORK TO CAUSE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.
11. IN SITUATIONS NOT COVERED IN THIS DESIGN, THE PROTECTION OF THE TRAVELING PUBLIC AND THE PROTECTION OF THE WORKERS ON SITE WILL DICTATE THE MEASURES TO BE TAKEN CONSISTENT WITH THE DESIGN STANDARDS MANUAL.
12. THE CONTRACTOR INVOLVED IN THE WORK IS RESPONSIBLE FOR NOTIFYING THE DEPARTMENT OF TRANSPORTATION OF THE CONSTRUCTION'S START DATE AND ANY MAJOR WORK WHERE THE NUMBER OF TRAVEL LANES ARE REDUCED FROM NORMAL CONDITIONS OR THE STREET IS REQUIRED TO BE CLOSED. EXCEPT IN EMERGENCIES, THE FOLLOWING NOTIFICATION IS REQUIRED:
    * CONSTRUCTION START DATE - 5 WORKING DAYS IN ADVANCE
    * CLOSING 1 OR MORE TRAVEL LANES - 5 WORKING DAYS PRIOR TO THE SCHEDULED WORK
    * CLOSING A STREET - 10 WORKING DAYS PRIOR TO THE SCHEDULED WORK.

    THIS LEAD TIME IS NECESSARY FOR PLANNING AND NOTIFYING THE PUBLIC OF EXPECTED CHANGES IN THE NORMAL TRAFFIC CONDITIONS.
13. WHERE COMPLETE STREET CLOSURE IS NECESSARY, THE DEPARTMENT OF TRANSPORTATION WILL COORDINATE CLOSURE OF THE STREET AND FULLY SIGN A DETOUR ROUTE.
14. THE ENGINEER OR DIRECTOR OF THE DEPARTMENT OF TRANSPORTATION OR THEIR REPRESENTATIVES ARE AUTHORIZED TO STOP ANY CONSTRUCTION OR MAINTENANCE ACTIVITY WHICH IS NOT PROPERLY SIGNED AND BARRICADED AS REQUIRED BY THIS STANDARD AND/OR THE MUTCD UNTIL SUCH REQUIREMENTS ARE MET.
15. THIS DESIGN STANDARD CANNOT BE USED FOR ALL ROADWAY CONSTRUCTION SITUATIONS. IT IS INTENDED ONLY TO BE USED AS A GUIDELINE. SPECIFIC SITUATIONS MAY REQUIRE ENGINEERING JUDGMENT IN THE PLACEMENT OF TRAFFIC CONTROL DEVICES BECAUSE OF LIMITED VERTICAL AND/OR HORIZONTAL SIGHT DISTANCE.
16. WHEN PERSONNEL AND/OR EQUIPMENT ARE WITHIN 5' OF THE EDGE OF AN OPEN TRAVEL LANE, THE CONTRACTOR SHALL REFER TO THE DESIGN STANDARDS MANUAL FOR PROPER LANE CLOSURE.
17. OPERATIONAL SIGNS ARE GENERALLY MOUNTED ON PORTABLE SUPPORTS. THESE ARE USUALLY USED FOR SHORT-TERM OPERATIONS TO WARN AND GUIDE TRAFFIC. ADVANCED WARNING SIGNS (CONSTRUCTION AHEAD) SHALL BE MOUNTED ON STATIONARY SUPPORTS SEVEN DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION OF THE ROADWAY.
18. ALL DRUMS SHALL BE BALLASTED IN SUCH A MANNER THAT THEY WILL BE STABLE UNDER WIND AND VEHICLE ACTION. BALLASTING SHALL BE DONE WITH SANDBAGS OR OTHER YIELDING MATERIAL SITUATED IN THE BASE OF THE DRUMS.
19. CONSTRUCTION WORK SHALL NOT BE ALLOWED ON BOTH SIDES OF THE ROAD SIMULTANEOUSLY WITHIN THE SAME AREA, UNLESS THE ROADWAY IS MEDIAN DIVIDED.
20. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL UP TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT SURFACE WITHIN 2 FEET OF AN OPEN TRAVEL LANE THAT INCLUDE A DROP OFF OF MORE THAN 3 INCHES IN ACCORDANCE WITH THE NCDOT.
21. GENERALLY, THE FINAL FLOW OF TRAFFIC OCCURS BETWEEN THE HOURS OF 9 A.M. AND 4:30 P.M. MONDAY THROUGH FRIDAY. DURING THESE HOURS CONSTRUCTION ACTIVITY THAT INVOLVES A LANE CLOSURE WILL NOT BE ALLOWED ON THOROUGHFARE STREETS EXCEPT IN EMERGENCY SITUATIONS OR WITH APPROVAL FROM THE DEPARTMENT OF TRANSPORTATION.

STANDARDS:

THE FOLLOWING ROADWAY STANDARDS THAT APPEAR IN "ROADWAY STANDARD DRAWINGS - ENGLISH" ROADWAY DESIGN UNIT N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C. DATED JANUARY 2012 AND THE LATEST REVISION THERETO ARE APPLICABLE TO THIS PROJECT AND ARE HEREINCE HEREBY ARE CONSIDERED A PART OF THESE PLANS.

NCDOT STANDARD DRAWINGS TO BE USED:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.05	TRUCKS ENTERING HIGHWAY
1101.11	TRAFFIC CONTROLLERS ON FLAGGING
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	SKINNY DRUM

TRAFFIC CONTROL LEGEND

- TYPE III BARRICADE (SEE NCDOT DWG 1145.01)
- DRUM/CONE (SEE NCDOT DWG 1130.01 1135.01 & 1180.01)
- CONSTRUCTION SIGN (SEE NCDOT DWGS 1110.01 & 1110.02)
- WORK AREA
- FLAGGER

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSTHER 032949 02/24/17

Issued for:

No	Date	Description
1	12/20/2016	LUESA COMMENTS

0 25 50 100 NORTH

Scale: 1" = 50'

Title:

ENLARGED TRAFFIC CONTROL PLAN

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L2.31

Document Path: C:\Users\dschaffer\Desktop\Huntersville\Veterans Park\Main and Maxwell Plan\DWG\Sheets\L2.31_Traffic Control.dwg Jan 31, 2017 - 10:36am

EXHIBIT B

	GENTLE SLOPES	STEEP SLOPES
SEEDING MIXTURE	80 lbs/acre of tall fescue	100 lbs/acre tall fescue 30 lbs/acre Sericea lespedeza (unscarified after August 15) 10 lbs/acre Kobe lespedeza
SEEDING DATES	FALL: August 25 – October Late winter: February 15 – April 15 To extend spring seeding into June, add 15 lbs/acre hulled Bermudagrass Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.	FALL: August 25 – October 15 Late winter: February 15 – April 15 To extend spring seeding into June, add 15 lbs/acre hulled Bermudagrass Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.
SEEDING AMENDMENTS	Apply lime and fertilizer per soil tests, or 4000 lbs/acre limestone and 1000 lbs/acre 10-10-10 fertilizer.	Apply lime and fertilizer per soil tests, or 4000 lbs/acre limestone and 1000 lbs/acre 10-10-10 fertilizer.

NOTE 1
Ground Cover – Protective cover must be established on all disturbed areas within 21 calendar days after land disturbing activity is completed or has temporarily ceased.

NOTE 2
Graded slopes and fills – Protective cover must be established on all graded slopes and fills within 21 calendar days after a phase of grading is completed or has temporarily ceased.

NOT TO SCALE

Town of Huntersville NORTH CAROLINA STANDARD DRAWING

SEEDING SCHEDULE

REV. DATE 10/14/09
STD. NO. 521.1

TEMPORARY SEEDING FOR WARM AND COOL SEASON

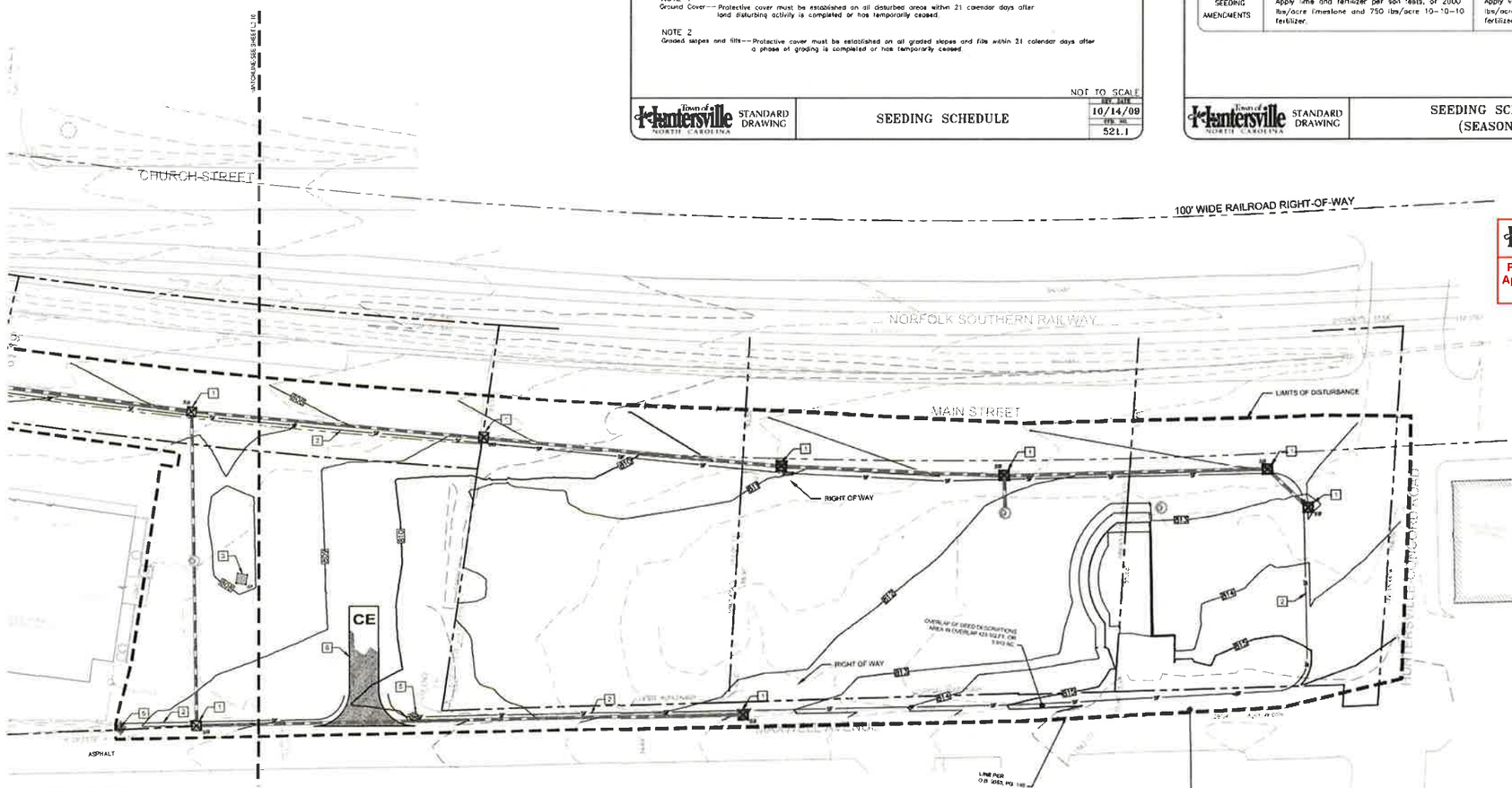
	EARLY SUMMER SEASON	STEEP SLOPES
SEEDING MIXTURE	40 lbs/acre of German millet 80 lbs/acre of tall fesue	120 lbs/acre Rye (grain) 80 lbs/acre tall fesue
SEEDING DATES	May 1 – August 15 Refertilize if growth is not fully adequate. Apply 4000 lbs/acre straw or equivalent hydroseeding.	October 25 – December 30 Between December 30 – February 15, add 50 lbs/acre of annual Kobe lespedeza. Apply 4000 lbs/acre straw or equivalent hydroseeding.
SEEDING AMENDMENTS	Apply lime and fertilizer per soil tests, or 2000 lbs/acre limestone and 750 lbs/acre 10-10-10 fertilizer.	Apply lime and fertilizer per soil tests, or 2000 lbs/acre limestone and 750 lbs/acre 10-10-10 fertilizer.

NOT TO SCALE

Town of Huntersville NORTH CAROLINA STANDARD DRAWING

SEEDING SCHEDULE (SEASONAL)

REV. DATE 10/14/09
STD. NO. 522.1



Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

PROJECT NARRATIVE

THE PROJECT INCLUDES THE CONSTRUCTION OF AN URBAN PARK WITHIN A STATE MAIN AREA, AND STREET IMPROVEMENTS ON A PREVIOUSLY DEVELOPED SITE IN DOWNTOWN HUNTERSVILLE, NORTH CAROLINA. ALL SOILS ON SITE ARE CECIL-URBAN LAND COMPLEX, 2 - 8% SLOPES. THE SITE IS LOCATED IN THE VEIRON RIVER DRAINAGE BASIN AND STORMWATER RUNOFF WILL BE PIPED TO AN UPLAND CREEK THAT FLOWS TO SOUTH PRONG CLARKE CREEK. A TOTAL AREA OF ROCKY RIVER APPROXIMATELY 2.26 ACRES WILL BE DISTURBED DURING CONSTRUCTION. SEDIMENTATION AND EROSION WILL BE CONTROLLED THROUGH A COMBINATION OF SILT FENCE AND INLET PROTECTION

ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH N C EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U S. DEPT. OF AGRICULTURE, AND THE TOWN OF HUNTERSVILLE'S ENGINEERING STANDARDS AND PROCEDURES MANUAL.

TOTAL AREA OF DISTURBANCE = 2.26 AC

SEEDBED PREPARATION:

1. RIP THE ENTIRE AREA TO 8 INCHES DEPTH AND SPREAD TOPSOIL 3 INCHES DEEP.
2. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
3. APPLY ALL AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE ADMIXTURES BELOW).
4. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM 4 TO 6 INCHES DEEP SEEDBED IS PREPARED.
5. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
6. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
7. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDING WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE OVER 50% DAMAGED, RESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES AND LANDSCAPING PLANS.
8. REFER LANDSCAPING PLANS FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDED PER THE LANDSCAPING PLANS.
9. CONSULT SAEC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

ADMIXTURES

AGRICULTURAL LIMESTONE: 2 TONS/ACRE

FERTILIZER: 1,000 LBS/ACRE - 10-10-10

SUPERPHOSPHATE: 500 LBS/ACRE - 20% ANALYSIS

MULCH: 2 TONS/ACRE - SMALL GRAIN STRAW

ANCHOR: ASPHALT EMULSION AT 300 GALS/ACRE

NPDES (Stormwater Discharge Permit for Construction Activities (NCDOT)) NCDENR/Division of Energy, Mineral and Land Resources

STABILIZATION TIMEFRAMES
(Effective Aug. 3, 2011)

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

EROSION CONTROL NOTES

1. REFER TO L0.10 FOR GENERAL NOTES
2. REFER TO L0.10 FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE

KEYED NOTES:

1. CATCH BASIN INLET PROTECTION. SEE DETAIL E ON SHEET L8.00.
2. TEMPORARY SILT FENCE. SEE DETAIL A ON SHEET L8.00.
3. HARDWARE CLOTH AND GRAVEL INLET PROTECTION. SEE DETAIL C ON SHEET L8.00
4. NOT USED
5. SILT FENCE OUTLET. SEE DETAIL B ON SHEET L8.00
6. STABILIZED CONSTRUCTION ENTRANCE. SEE DETAIL D ON SHEET L8.00
7. TREE PROTECTION FENCE. SEE DETAIL F ON SHEET L8.00

EROSION CONTROL LEGEND

- SILT FENCE
- TREE PROTECTION
- LIMITS OF DISTURBANCE
- HARDWARE CLOTH & GRAVEL INLET PROTECTION
- CATCH BASIN INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- KEYED NOTE

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYS 049114

Issued for:

No	Date	Description

0 10 20 40 NORTH
Scale: 1" = 20'

Title: EROSION CONTROL PLAN

Project number: X13004 Sheet:
Date: 09.21.2016
Drawn by: DLG
Approved by: JRB

L3.00

S:\PROJECTS\2013\X13004_X Main and Maxwell Park\01\DWG\Drawings\Sheets\L3.00 EC.dwg, Feb 08, 2017, 4:21pm

EXHIBIT B

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

KEYED NOTES:

1. CATCH BASIN INLET PROTECTION. SEE DETAIL E ON SHEET L8.00.
2. TEMPORARY SILT FENCE. SEE DETAIL A ON SHEET L8.00.
3. HARDWARE CLOTH AND GRAVEL INLET PROTECTION. SEE DETAIL C ON SHEET L8.00.
4. N/A
5. SILT FENCE OUTLET. SEE DETAIL B ON SHEET L8.00
6. N/A
7. TREE PROTECTION FENCE. SEE DETAIL F ON SHEET L8.00

EROSION CONTROL NOTES

1. REFER TO L0.10 FOR GENERAL NOTES.
2. REFER TO L0.10 FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE

EROSION CONTROL LEGEND

- SF — SILT FENCE
- TP — TREE PROTECTION
- LIMITS OF DISTURBANCE
- HARDWARE CLOTH & GRAVEL INLET PROTECTION
- CATCH BASIN INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- KEYED NOTE

ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND THE TOWN OF HUNTERSVILLE'S ENGINEERING STANDARDS AND PROCEDURES MANUAL

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSINGER

Issued for:

No	Date	Description

0 10 20 30 NORTH

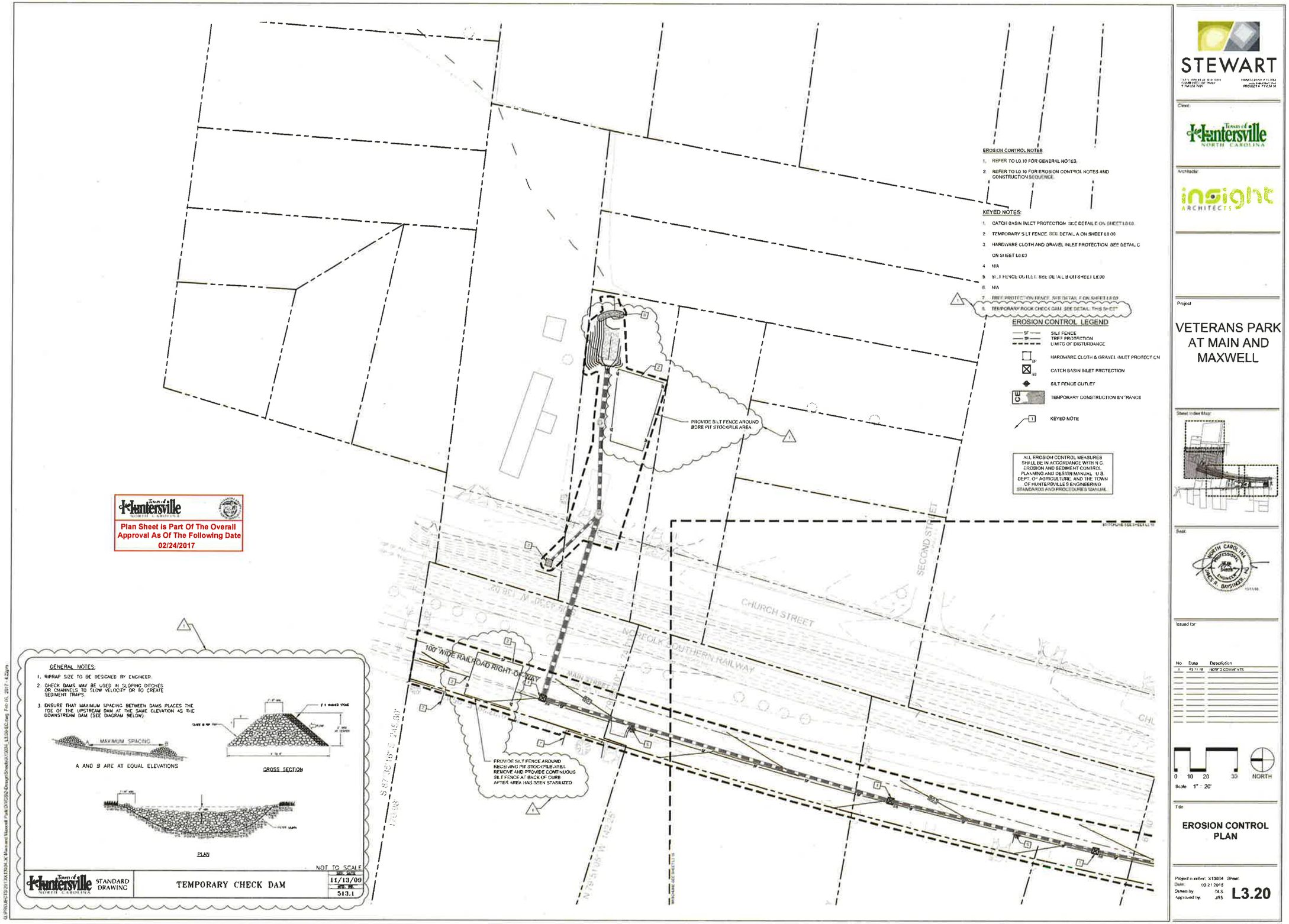
Scale 1" = 20'

Title: **EROSION CONTROL PLAN**

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L3.10

EXHIBIT B



EROSION CONTROL NOTES
1. REFER TO L0.10 FOR GENERAL NOTES.
2. REFER TO L0.10 FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE.
KEYED NOTES:
1. CATCH BASIN INLET PROTECTION. SEE DETAIL E ON SHEET L8.00.
2. TEMPORARY SILT FENCE. SEE DETAIL A ON SHEET L8.00
3. HARDWARE CLOTH AND GRAVEL INLET PROTECTION. SEE DETAIL C ON SHEET L8.00
4. N/A
5. SILT FENCE OUTLET. SEE DETAIL B ON SHEET L8.00
6. N/A
7. TREE PROTECTION FENCE. SEE DETAIL F ON SHEET L8.00
8. TEMPORARY ROCK CHECK DAM. SEE DETAIL THIS SHEET
EROSION CONTROL LEGEND
SILT FENCE
TREE PROTECTION
LIMITS OF DISTURBANCE
HARDWARE CLOTH & GRAVEL INLET PROTECTION
CATCH BASIN INLET PROTECTION
SILT FENCE OUTLET
TEMPORARY CONSTRUCTION ENTRANCE
KEYED NOTE
ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND THE TOWN OF HUNTERSVILLE'S ENGINEERING STANDARDS AND PROCEDURES MANUAL.
PROVIDE SILT FENCE AROUND BORE PIT STOCKPILE AREA
100' WIDE RAILROAD RIGHT-OF-WAY
NORFOLK SOUTHERN RAILWAY
CHURCH STREET
SECOND STREET
MAIN STREET
PROVIDE SILT FENCE AROUND RECEIVING PIT STOCKPILE AREA. REMOVE AND PROVIDE CONTINUOUS SILT FENCE AT BACK OF CURB AFTER AREA HAS BEEN STABILIZED
Town of Huntersville
Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017
GENERAL NOTES:
1. RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
2. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
3. ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).
MAXIMUM SPACING
A AND B ARE AT EQUAL ELEVATIONS
CROSS SECTION
PLAN
NOT TO SCALE
Town of Huntersville STANDARD DRAWING
TEMPORARY CHECK DAM
11/13/09
513.1
STEWART
Client:
Town of Huntersville NORTH CAROLINA
Architects:
insight ARCHITECTS
Project
VETERANS PARK AT MAIN AND MAXWELL
Sheet Index Map:
Seal:
NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSINGER
Issued for:
No Date Description
1 03.21.16 NODES COMMENTS
0 10 20 30
NORTH
Scale 1" = 20'
Title
EROSION CONTROL PLAN
Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLS
Approved by: JRS
L3.20

EXHIBIT B

MAIN STREET		
Line #	Length	Direction
L1	182.95	N2° 41' 08.90"W

MAIN STREET						
Curve #	Radius	Length	Chord Direction	Tangent	Bearing	Delta
C1	3326.51	188.45	N8° 41' 32.19"W	94.25	N8° 41' 52"W	3°14'45"
C2	2911.40	58.44	N3° 27' 36.74"W	33.22	N3° 27' 37"W	1°18'27"
C3	3777.81	821.73	N4° 41' 53.65"E	412.49	N4° 41' 54"E	12°27'46"
C4	7626.20	124.79	N10° 27' 38.78"E	62.40	N10° 27' 39"E	0°56'15"

MAXWELL AVENUE		
Line #	Length	Direction
L4	133.66	N10° 01' 09.63"W
L5	252.86	N8° 09' 12.33"W

SITE NOTES:

1. REFER TO SHEET L0.10 FOR GENERAL NOTES
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE CONSTRUCTION LAYDOWN AREA, PERIMETER FENCE, AND ASSOCIATED GATES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE REMOVAL OF THE CONSTRUCTION LAYDOWN AREA PERIMETER FENCE AND ASSOCIATED GATES AT THE COMPLETION OF THE PROJECT.
3. ALL CONSTRUCTION TRAFFIC SHALL ENTER SITE FROM THE CONSTRUCTION ENTRANCE DENOTED ON THE EROSION CONTROL PLAN, SHEET L2.00, UNLESS OTHERWISE APPROVED IN WRITING FROM THE OWNER'S REPRESENTATIVE FOR AN ALTERNATE POINT OF ACCESS.
4. REFER TO ARCHITECTURAL PLANS FOR STAGE CANOPY PLANS
5. ALL DIMENSIONS ARE IN FEET TO OUTSIDE FACE OF BUILDINGS, TO CENTERLINES, AND/OR FACE OF CURB UNLESS OTHERWISE NOTED.
6. SIDEWALK OR WALKWAYS ADJACENT TO PARKING SPACES SHALL BE A MINIMUM 6.5' WIDE AS MEASURED FROM THE FACE OF CURB, OR WHEEL STOPS SHALL BE PROVIDED WHEN APPLICABLE FOR PARKING LOTS.
7. SIGHT TRIANGLES - NOTHING OVER 30" HIGH SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLES.
8. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY. SEE LANDSCAPE PLAN, SHEET L7.00, AND SPECIFICATIONS FOR SEEDBED PREPARATION AND SEEDING INSTRUCTION.
9. CABOOSE TO BE SET IN PLACE AFTER THE COMPLETION AND APPROVAL BY LANDSCAPE ARCHITECT OF THE BASE AND TRACK INSTALLATION. REFER TO DETAILS A/L9.22 AND A/L9.23 FOR RAILROAD ASSEMBLY AND CABOOSE SETTING INFORMATION.
10. ALL CONSTRUCTION OCCURRING INSIDE THE FACE OF CURB LINE TO BE BASE BID. ALL CONSTRUCTION OCCURRING OUTSIDE THE FACE OF CURB LINE TO BE ALTERNATE 1.
11. REFER TO TOWN'S MAIN STREET ROADWAY PLANS FOR ALL WORK WITHIN THE RIGHT-OF-WAY FOR MAIN STREET AND HUNTERSVILLE-CONCORD ROAD ROAD IMPROVEMENTS

SIGNAGE, STRIPING, AND MARKING NOTES:

1. ALL INTERNAL SIGNAGE SHALL BE COORDINATED WITH OWNER FOR ACTUAL LOCATION AT TIME OF INSTALLATION. SIGNAGE LEADING ONTO PUBLIC THOROUGHFARE SHALL BE INSTALLED AT RIGHT OF WAY PER DOT STANDARDS
2. ALL LOT STRIPING (EXCEPT INDIVIDUAL PARKING BAY STRIPING) AND DIRECTIONAL ARROWS SHALL BE THERMOPLASTIC APPLIED POTHOLE PAINT. MATERIAL SHALL CONFORM TO NCDOT STANDARDS AND SPECIFICATIONS. PARKING BAY STRIPING SHALL BE WHITE, REFLECTIVE PAINT.
3. CROSSWALKS SHALL BE CONSTRUCTED OF THERMOPLASTIC MATERIALS AND CONSTRUCTED IN ACCORDANCE WITH STATE DOT SPECIFICATIONS. CONTRACTOR TO INSTALL CROSSWALKS IN SUCH A MANNER THAT CROSSWALKS ARE ALIGNED BETWEEN HANDICAP WALKWAY ACCESS POINTS OR PERPENDICULAR TO THE ROADWAY / DRIVE LANE.
4. ADA SYMBOLS SHOWN THESE DRAWINGS ARE FOR LOCATION PURPOSES ONLY AND NOT INTENDED TO BE PAINTED. CONTRACTOR RESPONSIBLE FOR INSTALLING ALL REQUIRED ADA SIGNAGE
5. REFER TO SHEET L2.25 FOR PAVEMENT STRIPING DETAILS.

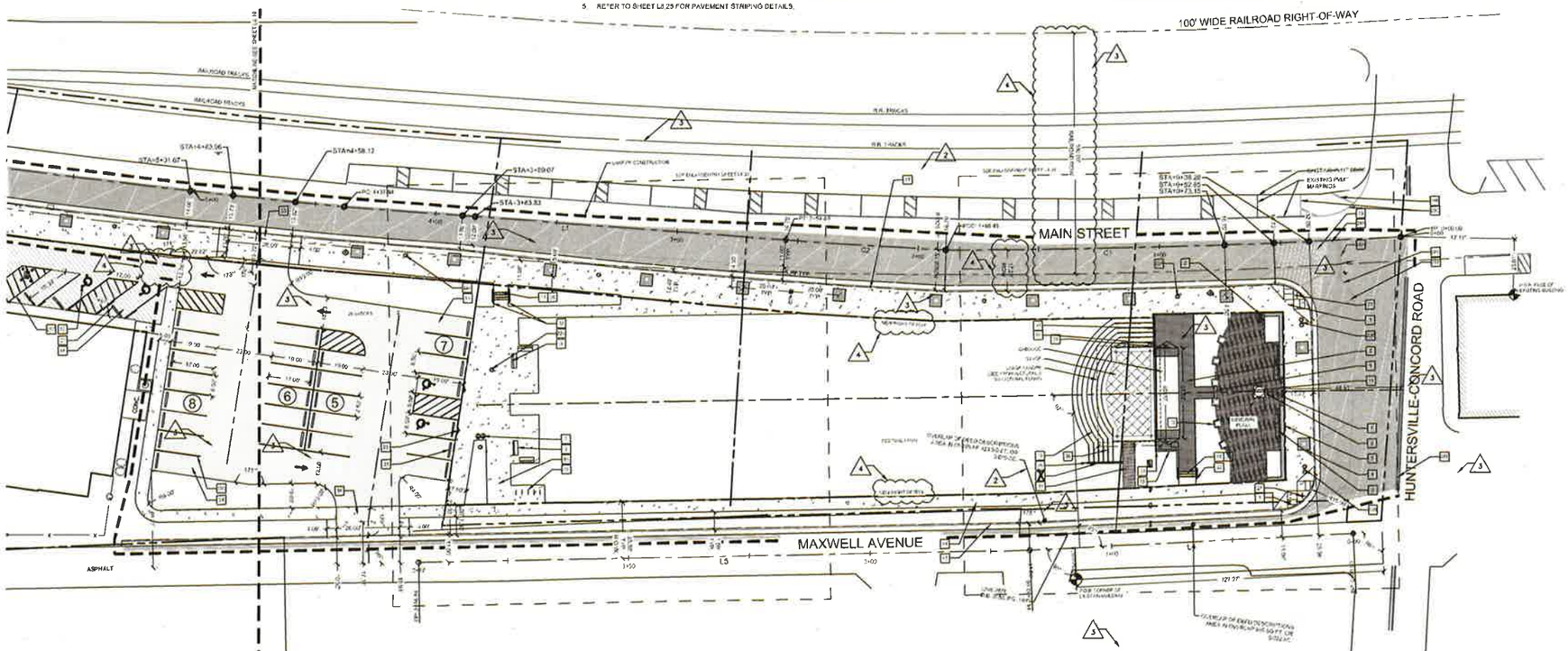
KEYED NOTES:

1. ACCESSIBLE RAMP (SEE DETAILS D O/L9.20)
2. TRASH AND RECYCLE RECEPTACLES (OWNER PROVIDED, SURFACE MOUNTED BY CONTRACTOR)
3. BENCH (OWNER PROVIDED) (SURFACE MOUNTED BY CONTRACTOR)
4. TREE GRATE IN CONCRETE (SEE DETAILS C-O/L9.40)
5. STONE SEAT WALL (SEE DETAIL C/L9.22)
6. GRANITE GLOBE FOUNTAIN (SEE DETAILS O FIL9.22)
7. PERMEABLE BRICK PAVERS (SEE DETAIL I/L9.21) 500 SF OF BRICKS TO BE SUPPLIED TO TOWN OF HUNTERSVILLE FOR NAME ENGRAVING. ENGRAVED BRICKS TO BE MIXED IN WITH WITH THE REST OF THE BRICKS IN THE MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PARALLEL TO SIDEWALK ALONG HUNTERSVILLE-CONCORD ROAD. EDGES OF PLAZA TO BE LINED WITH SOLDIER COURSE OF BRICKS
8. PERMEABLE BRICK PAVERS (SEE DETAIL H, I/L9.21). BRICKS TO MATCH MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PERPENDICULAR TO CABOOSE AND TO BRICKS IN MEMORIAL PLAZA
9. CONCRETE BAND TRANSITION (SEE DETAIL J/L9.21)
10. ICEHOUSE RECLAIMED BRICK PAVER (SEE DETAIL G/L9.21)
11. FLAG POLE (SEE DETAIL O/L9.23)
12. ASPHALT REINFORCING (REF DETAIL F/L9.21)
13. STONE PILLAR (SEE DETAIL B/L9.22)
14. CONCRETE STEPS W/ CHEEK WALLS AND HANDRAILS. 6" RISER / 12" TREAD (SEE DETAIL B/L9.23)
15. STAGE RETAINING WALL (SEE SECT ON DETAIL A/L9.22)
16. PARKING SPACE STANDARDS (SEE DETAIL H/L9.23)
17. STANDARD 2.5' CURB AND GUTTER (SEE DETAIL A/L9.20)
18. CONCRETE SIDEWALK (SEE DETAIL O/L9.20)
19. STAGE TERRACES (SEE DETAIL S/S3.0)
20. ACCESSIBLE PARKING SIGNAGE (SEE DETAIL B/L9.21)
21. CONCRETE WHEEL STOPS (SEE DETAIL F/L9.21)
22. PEDESTRIAN LIGHTING (SEE DETAIL O/L9.22)
    A. SINGLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
    B. DOUBLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
23. BIKE RACK (OWNER PROVIDED) CONTRACTOR TO INSTALL)
24. ASPHALT PARKING PAVEMENT (SEE DETAIL O/L9.21)
25. DRIVEWAY APRON (SEE DETAIL J/L9.21)
26. LOCAL TYPICAL STREET SECTION (SEE DETAIL M/L9.20)
27. STREET SIGN (OWNER PROVIDED, CONTRACTOR TO INSTALL)
28. PAVEMENT MARKING REFER TO SHEET L9.25 FOR DETAILS.
    A. STOP BAR, WHITE (24")
    B. CORE LINE, WHITE (8")
    C. EDGE LINE, WHITE (4")
    D. EDGE LINE YELLOW (4")
    E. CENTERLINE, (2) PARALLEL 4" WIDE YELLOW LINES SPACED 4" APART
29. STAGE STAIR SECTION 1 (SEE DETAIL A / L9.24)
30. STAGE STAIR SECTION 2 (SEE DETAIL B / L9.24)
31. GUARDRAIL ALIGNMENT CABOOSE AND CENTER ON RETAINING WALL BEHIND ICE HOUSE STAGE (SEE DETAIL E / L9.23)
32. HANDRAIL CENTER ON RETAINING WALL (SEE DETAIL B / L9.23)
33. COMMERCIAL TYPE I AND RESIDENTIAL TYPE I DROP CURB DRIVEWAY WITH SIDEWALK ABUTTING CURB (2'-6" CURB AND GUTTER) (SEE DETAIL K / L9.21)
34. COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER) (SEE DETAIL C / L9.23)
35. GUARDRAIL CENTER ON CHEEK WALL (SEE DETAIL E / L9.23)
36. ABRASIVE CAST ALUMINUM STAIR NOSING 2'MIN WIDTH
37. "DO NOT ENTER" SIGN TO BE INSTALLED

SITE LEGEND

- CONCRETE SIDEWALK
- 8" CONCRETE @ DELIVERY APRONS
- BRICK SIDEWALK
- LIGHT DUTY ASPHALT PAVEMENT
- LOCAL STREET ASPHALT
- ASPHALT RESURFACING
- CURB & GUTTER
- PIANO STYLE CROSSWALK
- SIGN
- ADA PARKING SPACE
- CONCRETE WALL
- WHEEL STOP
- BIKE RACK (PROVIDED BY OWNER)
- BENCH (PROVIDED BY OWNER)
- TRASH RECEPTACLE (PROVIDED BY OWNER)
- RECYCLE RECEPTACLE (PROVIDED BY OWNER)
- SINGLE FIXTURE LIGHT POLE
- DOUBLE FIXTURE LIGHT POLE
- KEY NOTE
- FIRE HYDRANT

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017



SITE DATA

SITE ADDRESS:	201 HUNTERSVILLE-CONCORD RD HUNTERSVILLE, NC 28078	
PARCEL IDs:	VETERANS PARK PARCELS:	AMERICAN LEGION PARCELS:
	01903215 - 0.252 AC	01903210 - 0.792 AC
	01903213 - 0.560 AC	01903209 - 0.789 AC
	01903212 - 0.284 AC	
OWNER:	TOWN OF HUNTERSVILLE & AMERICAN LEGION	
CURRENT ZONING:	TOWN CENTER DISTRICT (TC), NR	
FIRM MAP#:	3710465003 - 03.02.09	

PROPERTY TYPE: CIVIC
PARKING: NO PARKING REQUIRED
24 STANDARD SPACES PROVIDED
2 ACCESSIBLE SPACES PROVIDED

STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

No.	Date	Description
2	01/31/2018	MISCELLANEOUS
1	12.20.2016	CLIENT COMMENTS
A	10.05.2016	CLIENT COMMENTS

0 10 20 40 NORTH

Scale: 1" = 20'

Title:
LAYOUT PLAN

Project number: 113034 Sheet:
Date: 09.21.2016
Drawn by: MRB/EMB
Approved by: DRB
L4.00

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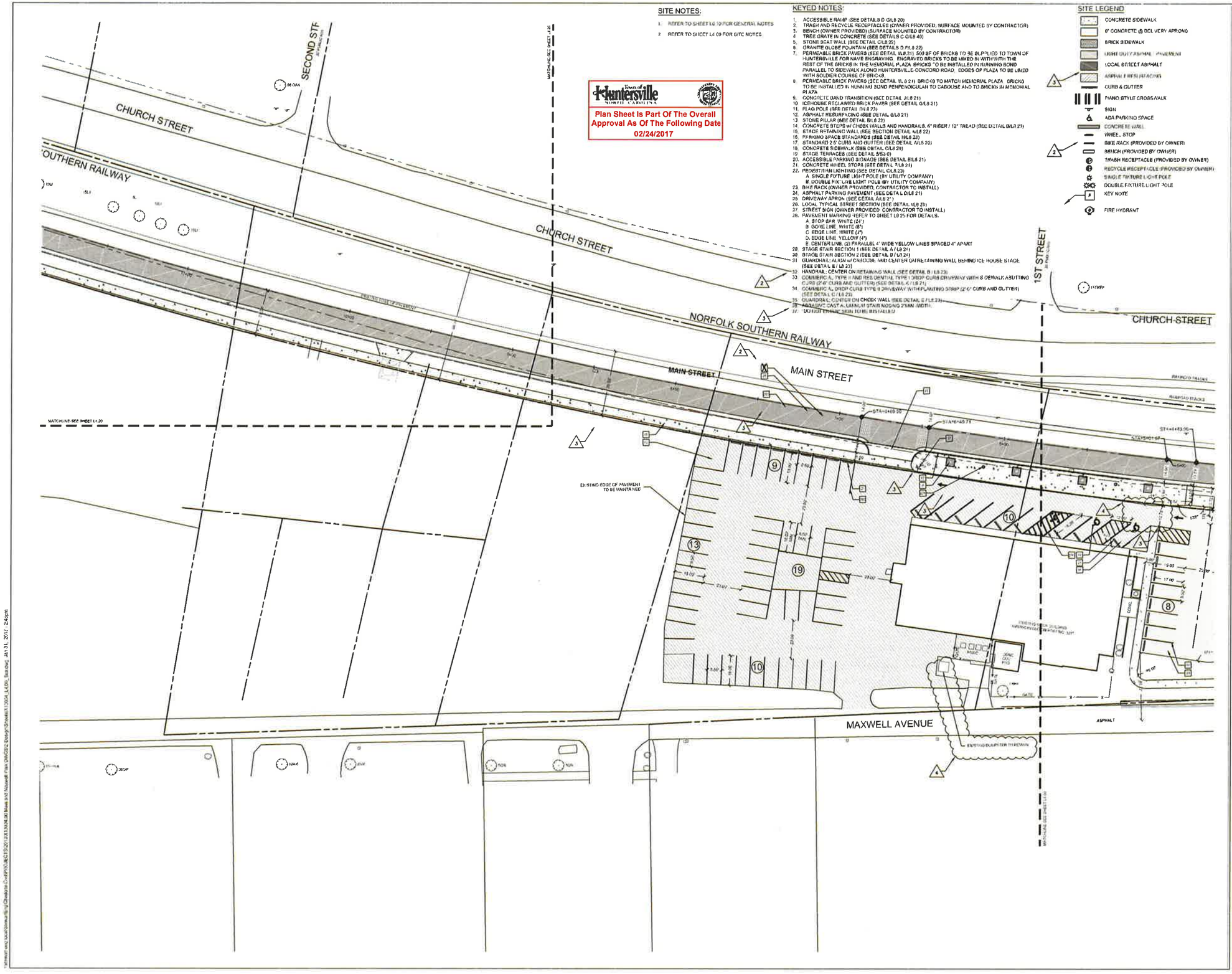
EXHIBIT B



STEWART

Client:
Town of Huntersville
NORTH CAROLINA

Architects:
insight
ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

Issued for:

No	Date	Description
2	11/30/2016	Addendum #2
3	12/30/2016	CLIENT COMMENTS
4	02/03/2017	CLIENT COMMENTS

0 10 20 40 NORTH

Scale: 1" = 20'

Title:

LAYOUT PLAN

Project number: X13056 Sheet:
Date: 09.21.2016
Drawn by: MRB/EMB
Approved by: SKB

L4.10

\\Stewart-nas\Active\X13056.01\Graphics\Civil\PROJECT\2017\X13056.01 Maps incl Maxwell Row DWGS\L4 Layout Sheets\13056_L4.DWG, Sarang, Jul 31, 2017 - 2:45pm

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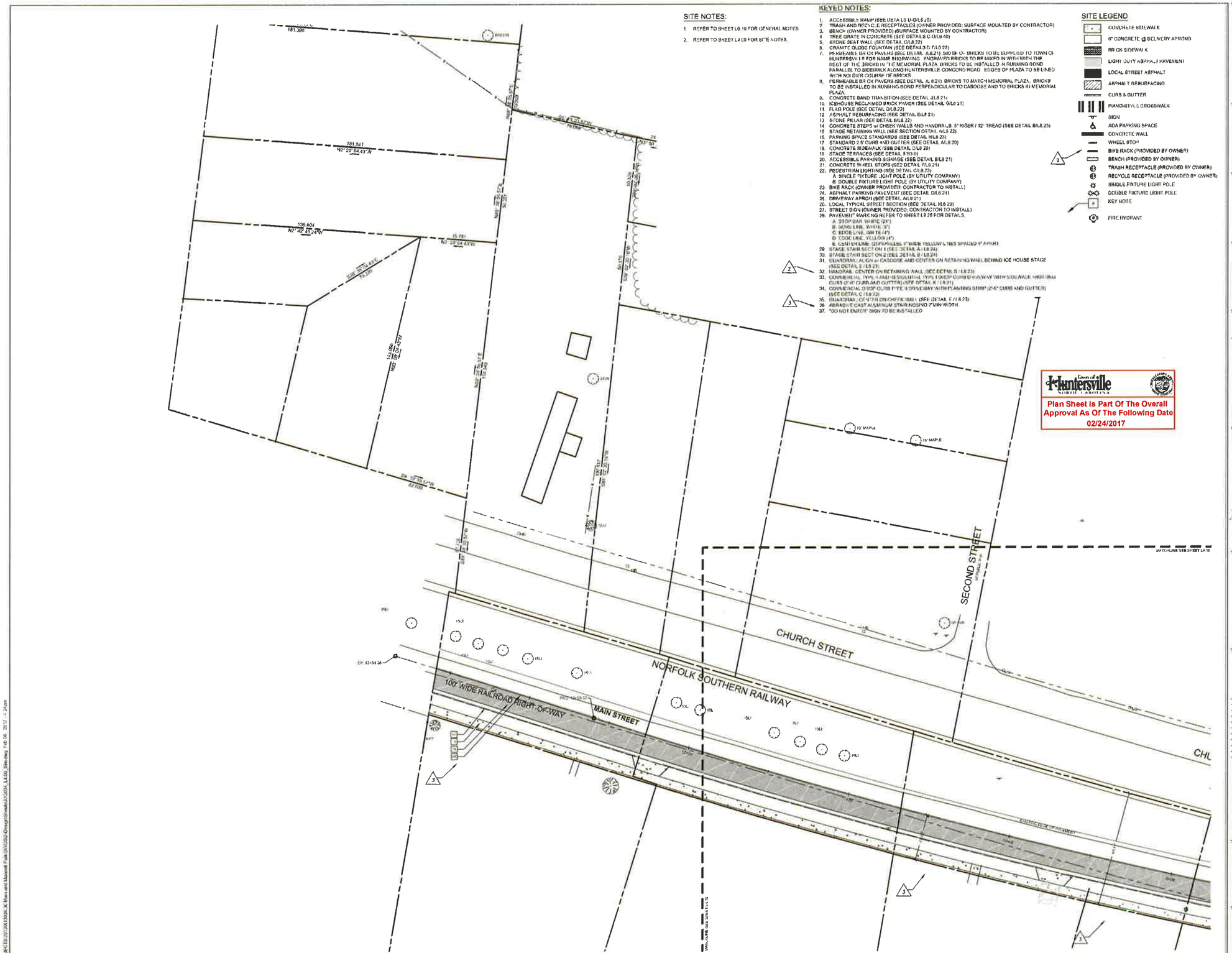


SITE NOTES:

1. REFER TO SHEET L6.10 FOR GENERAL NOTES
2. REFER TO SHEET L4.00 FOR SITE NOTES.

KEYED NOTES:

1. ACCESSIBLE RAMP (SEE DETAILS D-DI/L8.20)
2. TRASH AND RECYCLE RECEPTACLES (OWNER PROVIDED; SURFACE MOUNTED BY CONTRACTOR)
3. BENCH (OWNER PROVIDED) (SURFACE MOUNTED BY CONTRACTOR)
4. TREE GRATE IN CONCRETE (SEE DETAILS C-DI/L8.40)
5. STONE SEAT WALL (SEE DETAIL D/L8.22)
6. GRANITE GLOBE FOUNTAIN (SEE DETAILS D/L8.22)
7. PERMEABLE BRICK PAVERS (SEE DETAIL A/L8.21) 500 SF OF BRICKS TO BE SUPPLIED TO TOWN OF HUNTERSVILLE FOR NAME ENGRAVING. ENGRAVED BRICKS TO BE MIXED IN WITH THE REST OF THE BRICKS IN THE MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PARALLEL TO SIDEWALK ALONG HUNTERSVILLE CONCORD ROAD. EDGES OF PLAZA TO BE LINED WITH SOLDIER COURSE OF BRICKS
8. PERMEABLE BRICK PAVERS (SEE DETAIL A/L8.21) BRICKS TO MATCH MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PERPENDICULAR TO CABOOSE AND TO BRICKS IN MEMORIAL PLAZA
9. CONCRETE BAND TRANSITION (SEE DETAIL B/L8.21)
10. ICEHOUSE RECLAIMED BRICK PAVER (SEE DETAIL G/L8.21)
11. FLAG POLE (SEE DETAIL D/L8.20)
12. ASPHALT RESURFACING (SEE DETAIL B/L8.21)
13. STONE PILLAR (SEE DETAIL B/L8.22)
14. CONCRETE STEPS w/ CHEEK WALLS AND HANDRAILS. 5" RISER / 12" TREAD (SEE DETAIL B/L8.23)
15. STAGE RETAINING WALL (SEE SECTION DETAIL A/L8.22)
16. PARKING SPACE STANDARDS (SEE DETAIL H/L8.23)
17. STANDARD 2.5' CURB AND GUTTER (SEE DETAIL A/L8.20)
18. CONCRETE SIDEWALK (SEE DETAIL D/L8.20)
19. STAGE TERRACES (SEE DETAIL E/L8.00)
20. ACCESSIBLE PARKING SIGNAGE (SEE DETAIL B/L8.21)
21. CONCRETE WHEEL STOPS (SEE DETAIL F/L8.21)
22. PEDESTRIAN LIGHTING (SEE DETAIL C/L8.23)
    - A. SINGLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
    - B. DOUBLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
23. BIKE RACK (OWNER PROVIDED; CONTRACTOR TO INSTALL)
24. ASPHALT PARKING PAVEMENT (SEE DETAIL D/L8.21)
25. DRIVEWAY APRON (SEE DETAIL A/L8.21)
26. LOCAL TYPICAL STREET SECTION (SEE DETAIL B/L8.20)
27. STREET SIGN (OWNER PROVIDED; CONTRACTOR TO INSTALL)
28. PAVEMENT MARKING REFER TO SHEET L8.25 FOR DETAILS.
    - A. STOP BAR, WHITE (24")
    - B. GORE LINE, WHITE (8")
    - C. EDGE LINE, WHITE (4")
    - D. CODE LINE, YELLOW (4")
    - E. CENTER LINE: (2) PARALLEL 4" WIDE YELLOW LINES SPACED 4" APART
29. STAGE STAIR SECTION 1 (SEE DETAIL A/L8.24)
30. STAGE STAIR SECTION 2 (SEE DETAIL B / L8.24)
31. GUARDRAIL: ALIGN w/ CABOOSE AND CENTER ON RETAINING WALL BEHIND ICE HOUSE STAGE (SEE DETAIL E/L8.23)
32. HANDRAIL: CENTER ON RETAINING WALL (SEE DETAIL B / L8.23)
33. COMMERCIAL TYPE II AND RESIDENTIAL TYPE I DROP CURB DRIVEWAY WITH SIDEWALK (FLUSH CURB (24" CURB AND GUTTER) (SEE DETAIL K / L8.21)
34. COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER) (SEE DETAIL C / L8.32)
35. GUARDRAIL: CENTER ON CHEEK WALL (SEE DETAIL E / L8.23)
36. ABRASIVE CAST ALUMINUM STAIR NOSING 2" MIN WIDTH.
37. "DO NOT ENTER" SIGN TO BE INSTALLED

SITE LEGEND

- CONCRETE SIDEWALK
- 6" CONCRETE @ DELIVERY APRONS
- BRICK SIDEWALK
- LIGHT DUTY ASPHALT PAVEMENT
- LOCAL STREET ASPHALT
- ASPHALT RESURFACING
- CURB & GUTTER
- PIANO-STYLE CROSSWALK
- SIGN
- ADA PARKING SPACE
- CONCRETE WALL
- WHEEL STOP
- BIKE RACK (PROVIDED BY OWNER)
- BENCH (PROVIDED BY OWNER)
- TRASH RECEPTACLE (PROVIDED BY OWNER)
- RECYCLE RECEPTACLE (PROVIDED BY OWNER)
- SINGLE FIXTURE LIGHT POLE
- DOUBLE FIXTURE LIGHT POLE
- KEY NOTE
- FIRE HYDRANT

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

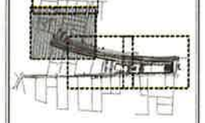
Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:



Seal:

Issued for:

No	Date	Description
2	10/07/2016	ADDENDUM #2
3	12/06/2016	CLIENT COMMENTS

0 10 20 40 NORTH

Scale: 1" = 20'

Title:

LAYOUT PLAN

Project number: 3413004 Sheet:
Date: 09.21.2015
Drawn by: MRM/EMB
Approved by: JRB

L4.20

G:\PROJECTS\2013\3413004_N Main and Maxwell Park DWG\02-Design\Sheets\L4.20b_Site.dwg, 10.06.2017 1:20pm

EXHIBIT B

SITE NOTES:

1. REFER TO SHEET L0.10 FOR GENERAL NOTES.
2. REFER TO SHEET L4.00 FOR SITE NOTES.

KEYED NOTES:

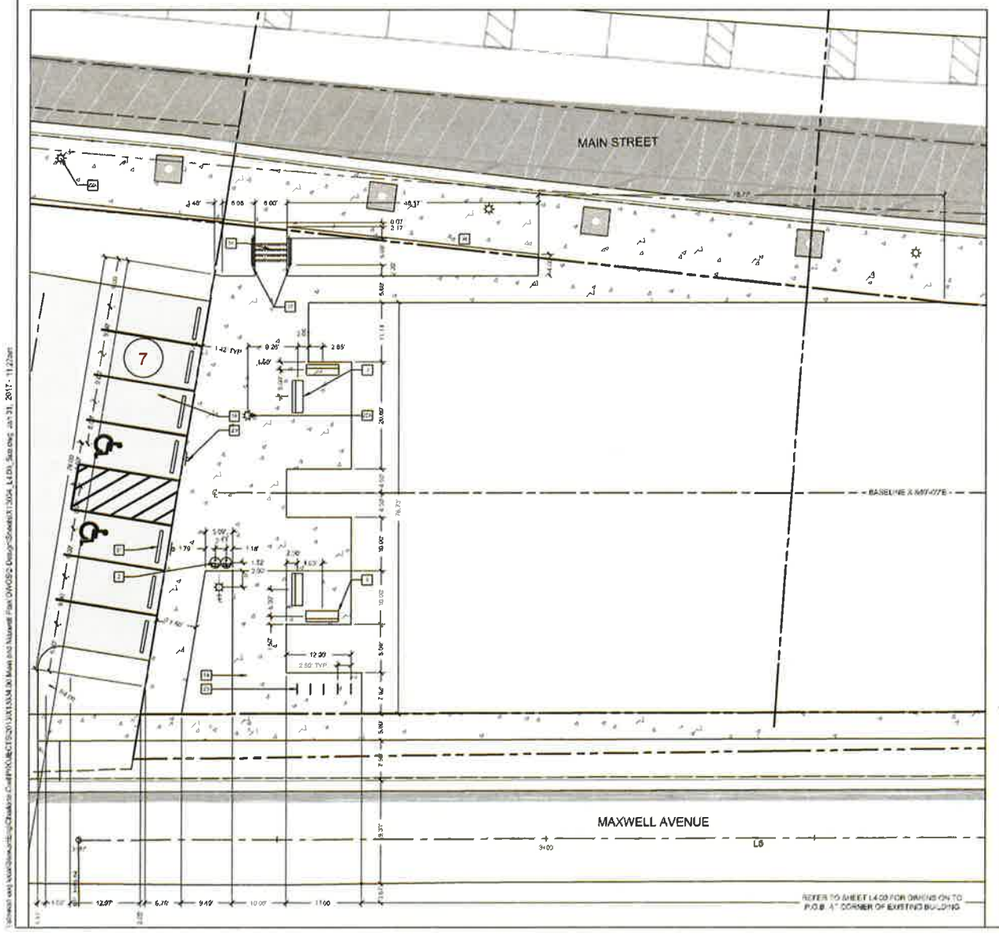
1. ACCESSIBLE RAMP (SEE DETAILS D-0/L8.20)
2. TRASH AND RECYCLE RECEPTACLES (OWNER PROVIDED. SURFACE MOUNTED BY CONTRACTOR)
3. BENCH (OWNER PROVIDED) (SURFACE MOUNTED BY CONTRACTOR)
4. TREE GRATE IN CONCRETE (SEE DETAILS C-0/L8.40)
5. STONE SEAT WALL (SEE DETAIL C/L8.22)
6. GRANITE GLOBE FOUNTAIN (SEE DETAILS D-F/L8.22)
7. PERMEABLE BRICK PAVERS (SEE DETAIL I/L8.21), 500 SF OF BRICKS TO BE SUPPLIED TO TOWN OF HUNTERSVILLE FOR NAME ENGRAVING. ENGRAVED BRICKS TO BE MIXED IN WITH THE REST OF THE BRICKS IN THE MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PARALLEL TO SIDEWALK ALONG HUNTERSVILLE-CONCORD ROAD. EDGING OF PLAZA TO BE LINED WITH SOLDIER COURSE OF BRICKS.
8. PERMEABLE BRICK PAVERS (SEE DETAIL I/L8.21) BRICKS TO MATCH MEMORIAL PLAZA. BRICKS TO BE INSTALLED IN RUNNING BOND PERPENDICULAR TO CAROUSE AND TO BRICKS IN MEMORIAL PLAZA.
9. CONCRETE BAND TRANSITION (SEE DETAIL J/L8.21)
10. 90° HERRINGBONE BRICK PAVER (SEE DETAIL G/L8.21)
11. FLAG POLE (SEE DETAIL D/L8.23)
12. ASPHALT RESURFACING (SEE DETAIL B/L8.21)
13. STONE PILLAR (SEE DETAIL B/L8.22)
14. CONCRETE STEPS w/ CHEEK WALLS AND HANDRAILS: 6" RISER / 12" TREAD (SEE DETAIL B/L8.23)
15. 3' TIGE RETAINING WALL (SEE SECTION DETAIL 4/L8.22)
16. PARKING SPACE STANDARDS (SEE DETAIL H/L8.23)
17. 3'STANDARD 2.5 CURB AND GUTTER (SEE DETAIL A/L8.20)
18. CONCRETE SIDEWALK (SEE DETAIL C/L8.20)
19. 3' TIGE TERRACES (SEE DETAIL 5/L8.2)
20. ACCESSIBLE PARKING SIGNAGE (SEE DETAIL B...8.21)
21. CONCRETE WHEEL STOPS (SEE DETAIL F/L8.21)
22. PEDESTRIAN LIGHTING (SEE DETAIL D/L8.23)
    - A. SINGLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
    - B. DOUBLE FIXTURE LIGHT POLE (BY UTILITY COMPANY)
23. BIKE RACK (OWNER PROVIDED; CONTRACTOR TO INSTALL)
24. ASPHALT PARKING PAVEMENT (SEE DETAIL D/L8.21)
25. DRIVEWAY APRON (SEE DETAIL A/L8.21)
26. LOCAL TYPICAL STREET SECTION (SEE DETAIL B/L8.20)
27. STREET SIGN (OWNER PROVIDED; CONTRACTOR TO INSTALL)
28. PAVEMENT MARKING REFER TO SHEET L8.28 FOR DETAILS
    - A. STOP BAR, WHITE (24")
    - B. GORE LINE, WHITE (8")
    - C. EDGE LINE, WHITE (4")
    - D. EDGE LINE, YELLOW (4")
    - E. CENTER LINE, (2) PARALLEL 4" WIDE YELLOW LINES SPACED 4" APART
29. STAGE STAIR SECTION 1 (SEE DETAIL A / L8.24)
30. STAGE STAIR SECTION 2 (SEE DETAIL B / L8.24)
31. GUARDRAIL, ALUMINUM CABOOSE AND CENTER ON RETAINING WALL, BEHIND ICE HOUSE STAGE (SEE DETAIL E / L8.23)
32. HANDRAIL; CENTER ON RETAINING WALL (SEE DETAIL B / L8.23)
33. COMMERCIAL TYPE I AND RESIDENTIAL TYPE I DROP CURB DRIVEWAY WITH SIDEWALK ABUTTING CURB (2'-6" CURB AND GUTTER) (SEE DETAIL K / L8.21)
34. COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER) (SEE DETAIL C / L8.23)
35. GUARDRAIL; CENTER ON CHEEK WALL (SEE DETAIL C / L8.23)
36. ADHESIVE CAST ALUMINUM STAIR NOSING 2"MIN WIDTH.
37. "DO NOT ENTER" SIGN TO BE INSTALLED

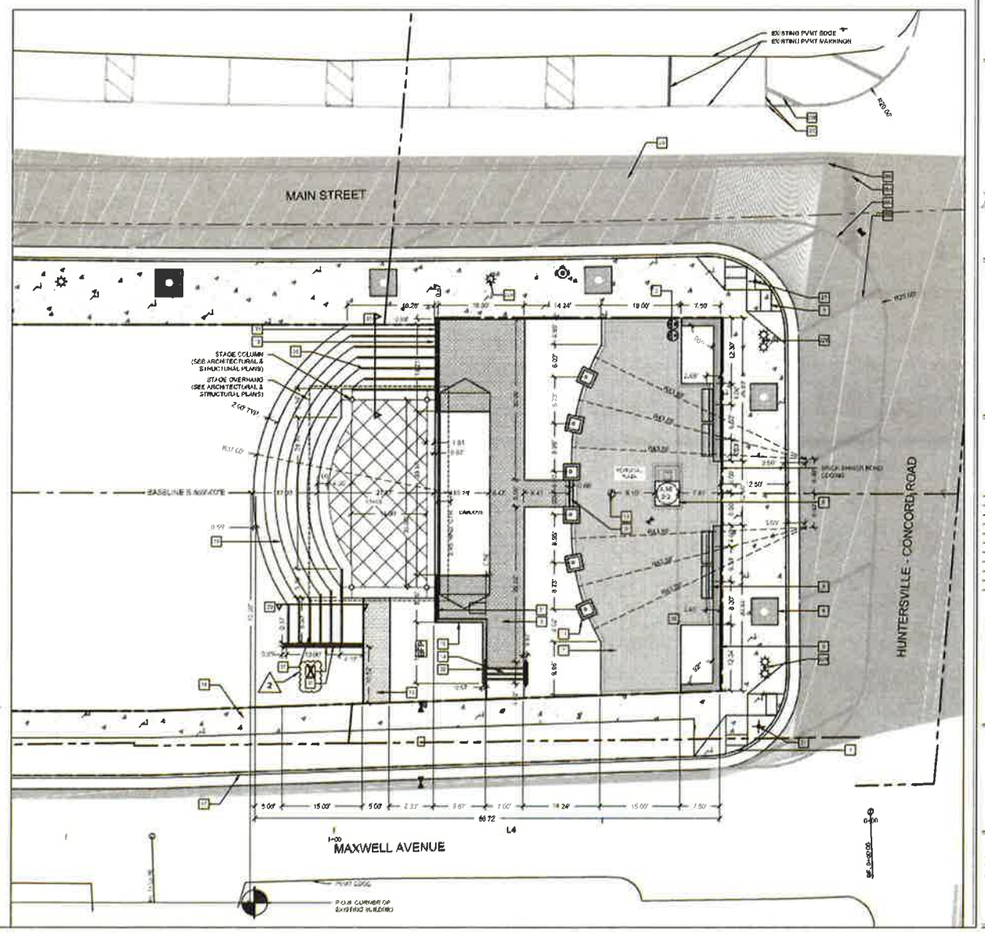
SITE LEGEND

- CONCRETE SIDEWALK
- 6" CONCRETE @ DELIVERY APRONS
- BRICK SIDEWALK
- LIGHT DUTY ASPHALT PAVEMENT
- LOCAL STREET ASPHALT
- ASPHALT RESURFACING
- CURB & GUTTER
- PIANO-STYLE CROSSWALK
- SIGN
- ADA PARKING SPACE
- CONCRETE WALL
- WHEEL STOP
- BIKE RACK (PROVIDED BY OWNER)
- BENCH (PROVIDED BY OWNER)
- TRASH RECEPTACLE (PROVIDED BY OWNER)
- RECYCLE RECEPTACLE (PROVIDED BY OWNER)
- SINGLE FIXTURE LIGHT POLE
- DOUBLE FIXTURE LIGHT POLE
- KEY NOTE
- FIRE HYDRANT

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017





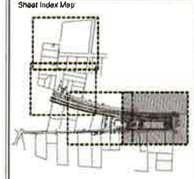
STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architect:
insight ARCHITECTS

Project
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map



Seal:
NORTH CAROLINA 11532 REGISTERED LANDSCAPE ARCHITECT
02/03/17

Issued for:

No.	Date	Description
2	10/5/2016	Addendum #2
1	12/13/2016	PLAN COMMENTS

0 5 10 20 NORTH

Scale 1" = 10'

Title
LAYOUT ENLARGEMENTS

Project number 113934 Sheet
Date 09.21.2016
Drawn by MB/DEMB
Approved by SRB

L4.30

Drawings and Models/Huntersville/Projects/Civil/PROJECT/2013/113934.00 Main and Maxwell Park/CWORD2 Design/Sheets/113934_L4.01_Site Dwg_Jan 31, 2017 - 11:21am

EXHIBIT B

BMP CONSTRUCTION SEQUENCE NOTES

1. CALL THE WATER QUALITY INSPECTOR TO SET UP A BMP PRE-CONSTRUCTION MEETING PRIOR TO STARTING ANY WORK ON BMPS. THIS MEETING SHOULD TAKE PLACE AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY BMP AND SHALL INCLUDE THE DESIGN ENGINEER TO ENSURE ENGINEER INSPECTIONS ARE PERFORMED AT KEY BMP INSTALLATION PHASES.
2. THE DESIGN ENGINEER MUST VERIFY AND CERTIFY THE DRAINAGE AREA IS PROPERLY STABILIZED, MEASURES ARE IN PLACE TO PREVENT SEDIMENTATION INTO THE BMP, THE STORM DRAINS, INLETS AND PAVEMENT HAVE BEEN PROPERLY CLEANED PRIOR TO COMMENCEMENT OF BMP CONSTRUCTION.
3. ADDITIONAL MEASURES TO ENSURE PROPER CONSTRUCTION AND OPERATION OF THE BMP MAY BE REQUIRED BY THE WATER QUALITY INSPECTOR.
4. A DOUBLE RINGED INFILTROMETER TEST (ASTM D 3385) OF THE BOTTOM OF THE DRY WELL MUST BE SUBMITTED TO THE WATER QUALITY INSPECTOR PRIOR TO THE INSTALLATION OF THE UNDERDRAIN SYSTEM.
5. THE RESULTS OF THE DOUBLE RINGED INFILTROMETER TEST MUST SHOW INFILTRATION CAPABILITIES, CONFIRMED BY THE DESIGN ENGINEER AND SUBMITTED FOR BMP AS-BUILT APPROVAL.

Dry Pond
Maintenance Tasks and Schedule

TASK	SCHEDULE
Forebay inspection and cleanout	Monthly inspection. Remove sediment every 7 years or when sediment volume exceeds 10% of storage volume
Bank mowing and inspection / stabilization of eroded areas	Monthly (maintain 1 – 6 inch grass height)
Outlet / inlet inspection and cleanout	Monthly
Unwanted vegetation and trash removal	Monthly
Inspect for structural damage, leaks, etc.	Yearly
Inspect / exercise all mechanical devices, valves, etc.	Yearly
Evaluate sediment level (remove as needed)	Yearly
Security	As needed

Infiltration Structure
Maintenance and Schedule

TASK	SCHEDULE
Maintain stone or mulch top surface	Yearly
Clean forebay if present	Yearly or at 50% full
Trash removal	Monthly
Remove unwanted vegetation	Monthly
Check observation wells following precipitation events to ensure proper infiltration	Monthly

KEYED NOTES

1. 10' WIDE STORM DRAINAGE EASEMENT
2. POST-CONSTRUCTION CONTROLS BMP MAINTENANCE EASEMENT
3. 6" PVC ROOF DRAIN LEADER TO UNDERDRAIN SYSTEM, MAINTAIN 0.5% SLOPE MINIMUM.
4. NOT USED
5. NOT USED
6. PERMEABLE BRICK PAVERS, SEE DETAIL I/L8.21
7. INSTALL 4" FOUNDATION DRAIN PIPE FOR TREE PITS WITH MINIMUM 2% SLOPE. TIE TO STORM DRAINAGE SYSTEM IN STREET. SEE DETAILS ON SHEET L9.40
8. 8" PERFORATED PVC UNDERDRAIN PIPE. INSTALL WITH ZERO SLOPE. PROVIDE CLEANOUTS AS SHOWN ON PLANS. SEE DETAIL F/L8.30
9. 12" PVC HEADER
10. CLEANOUTS. SEE DETAIL F/L8.30
11. 1" GATE VALVE
12. CONNECT 4" PVC DRAIN FROM FOUNTAIN TO STORM DRAINAGE STRUCTURE

STORM STRUCTURE TABLE

STRUCTURE	RIM	INV. IN (FROM)	INV. OUT (TO)
CB-1	812.00		806.11 (2)
~~CB-2~~	[illegible]	[illegible]	805.78 (4)
JB-3B***	812.78	810.00 (12" PVC)	
		810.00 (8" PVC)	808.50 (3)
~~JB-3~~	[illegible]	[illegible]	804.43 (4)
CB-4	811.45	804.12 (2)	
		804.12 (3)	804.12 (5)
CB-5	810.49	802.73 (4)	802.73 (6)
CB-6	808.77	800.87 (5)	800.87 (11)
CB-7	812.15		804.50 (8)
~~CB-8~~	[illegible]	[illegible]	802.24 (10)
DI-9***	807.80	805.00 (12" PVC)	
		805.00 (12" PVC)	
		805.00 (8" PVC)	
		805.00 (8" PVC)	
JB-10	806.13	799.67 (8)	
		805.00 (9)**	799.67 (11)
CB-11	807.24	799.05 (6)	
		799.05 (10)	798.80 (12)
CB-12	805.64	797.73 (11)	797.73 (13)
CB-13	804.68	795.70 (12)	795.20 (13B)
CB-13B	803.71	793.67 (13)	793.97 (14)
CB-14	802.61	792.54 (13B)	792.54 (15)
DBCB-15	800.59	790.25 (14)	790.05 (17)
DI-16	793.52		789.29 (17)
JB-17	793.95	788.41 (15)	
		788.41 (16)	784.41 (18)
JB-18	788.72	782.66 (17)	778.18 (19)
HW-19		778.00 (18)	

* SEE DETAIL B/L8.12
~~** SEE DETAIL A/L8.12~~
*** PROVIDE 2' SUMP

STORM PIPE TABLE

LOCATION		PIPE			
FROM	TO	SIZE Inches	MAT.	SLOPE %	LENGTH feet
CB-1	CB-2	15	RCP	1.50	23
CB-2	CB-4	15	RCP	1.50	109
UNDERDRAINS	JB-3B				
STAGE ROOF	JB-3B	6	PVC	0.50	87
JB-3B	JB-3	8	PVC	0.00	52
JB-3	CB-4	15	RCP	2.00	15
CB-4	CB-5	15	RCP	1.50	93
CB-5	CB-6	15	RCP	1.50	124
CB-6	CB-11	15	RCP	1.50	121
CB-7	CB-8	15	RCP	1.00	226
CB-8	JB-10	15	RCP	3.75	68
UNDERDRAINS	JB-10	8	PVC	0.00	21
JB-10	CB-11	15	RCP	1.00	62
CB-11	CB-12	18	RCP	0.75	144
CB-12	CB-13	18	RCP	1.50	135
CB-13	CB-13B	24	RCP	1.50	133
CB-13B	CB-14	24	RCP	1.00	133
CB-14	DBCB-15	24	RCP	1.50	229
DBCB-15	JB-17	30	CMP	5.00	121
DI-16	JB-17	18	RCP	2.00	44
JB-17	JB-18	30	RCP	3.00	58
JB-18	HW-19	36	RCP	0.50	36

NOTE:

ALL PAVERS NOT SHOWN AS PERMEABLE ON THIS SHEET SHALL BE INSTALLED WITHOUT THE BASE COURSE AND SUB-BASE COURSE. REFER TO DETAIL J ON SHEET L8.24.

GRADING & STORM DRAINAGE NOTES

1. REFER TO L0.10 FOR GENERAL NOTES.
2. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK. THE CONTRACTOR SHALL VERIFY THE BENCHMARK PRIOR TO GROUND BREAKING.
3. THE CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
4. THE MAXIMUM SLOPE ALONG ANY HANDICAP ACCESSIBLE PATHWAY SHALL NOT EXCEED 5.0% AND SHALL NOT EXCEED A 2.0% CROSS SLOPE. ADA RAMPS INDICATED ON PLANS SHALL BE A MAXIMUM OF 8.33% SLOPES. IF RAMP EXCEEDS 6' IN LENGTH, IT SHALL HAVE HANDRAILS AND 5' LANDINGS NOT TO EXCEED 30' SPACING.
5. MAXIMUM SLOPE ACROSS ANY HANDICAPPED PARKING SPACE AND AISLE SHALL NOT EXCEED 2% IN ANY DIRECTION.
6. TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
7. ALL PROPOSED SPOT ELEVATIONS REFLECT FINISHED ELEVATIONS. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBGRADE OR AGGREGATE BASE COURSE ELEVATIONS.
8. ALL PROPOSED ELEVATIONS SHOWN ARE EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL NEWLY CONSTRUCTED STORM DRAINAGE IMPROVEMENTS AND RECEIVING STORM DRAINAGE SYSTEMS REMAIN CLEAN OF SEDIMENT AND DEBRIS.
10. REFER TO SHEET L0.10 FOR THE SEQUENCE OF CONSTRUCTION.
11. INTERIM GRADING SHALL BE PROVIDED THAT ENSURES THE PROTECTION OF STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, AND WASHOUT.
12. INTERIM GRADING SHALL BE PROVIDED TO DIRECT WATER AWAY FROM BUILDINGS AND PREVENT PONDING.
13. THE CONTRACTOR SHALL TIE ROOF LEADERS TO UNDERGROUND STORM SYSTEM AS SHOWN ON PLANS.
14. PROPOSED CONTOURS ARE APPROXIMATE. SPOT ELEVATIONS SHALL BE USED IN CASE OF DISCREPANCY.
15. PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A VIDEO INSPECTION OF THE STORM SEWER SYSTEM (BOTH PUBLIC AND PRIVATE). THIS SUBMITTAL MAY NEED TO BE REVIEWED AND ACCEPTED BY THE LOCAL JURISDICTION PRIOR TO THE ISSUANCE OF THE BUILDING CO.
16. ALL ROOF DRAIN PIPING (RD) SHALL BE 6" NOMINAL SIZE PVC UNLESS OTHERWISE INDICATED ON PLAN. PIPE SHALL HAVE A 0.5% SLOPE MINIMUM AND A MINIMUM 2' COVER UNLESS OTHERWISE INDICATED ON PLAN.
17. ALL FOUNDATION DRAINS (FD) SHALL BE 4" NOMINAL SIZE RIGID PERFORATED HDPE PIPE. INSTALL WITH A MINIMUM 2% SLOPE.
18. DRAINAGE STRUCTURES GREATER THAN 3 FEET DEEP SHALL BE REQUIRED TO HAVE STEPS. REFER TO DETAIL A/L8.11.
19. STORM DRAIN PIPING 12" AND LARGER SHALL BE CLASS III REINFORCED CONCRETE PIPE FOR COVER GREATER THAN 2 FEET AND CLASS IV REINFORCED CONCRETE PIPE FOR COVER LESS THAN 2 FEET. STORM DRAINAGE PIPING SMALLER THAN 12" DIAMETER SHALL BE PVC UNLESS OTHERWISE INDICATED ON THE PLANS. REFER TO DETAIL E L8.11 FOR STORM DRAINAGE TRENCHING.

Huntersville NORTH CAROLINA
Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

DRY WELL BMP SUMMARY CHART 2

PEAK CONTROL STORM EVENTS	PRE-DEVELOPMENT RUNOFF	POST-DEVELOPMENT RUNOFF	POST-ROUTING RUNOFF	ELEVATION
TOP OF WELL				807.00'
50YR - 24HR	2.31 CFS	2.61 CFS	1.16 CFS	806.47'
10YR - 24HR	1.59 CFS	1.91 CFS	0.85 CFS	806.25'
2YR - 24HR	0.88 CFS	1.24 CFS	0.07 CFS	806.05'
BMP	REQUIRED	PROVIDED	ELEVATION	
CPv	2,382 CF	5,400 CF	806.02'	
WQv	963 CF	5,400 CF	805.98'	
BOTTOM OF WELL				805.00'
			DRY WELL MAX ALLOWABLE BUA	12,165 SF
			TOTAL SITE MAX ALLOWABLE BUA	24,150 SF

STORM WATER

BMP Inset Table
Extended Dry Detention

Project Name	Veteran's Park
Sequence ID	2
Surface Area (sq. ft.)	6812
Drainage Area (acres)	0.28
Land Use/Development Type	Ultra Urban
Vegetation Type	Rock/Stone (sand filters)
Percent Built-Upon Area	50.3
Maximum Depth (ft.)	2
Detention Basin Type	Underground
Forebay Present (Y/N)	N
Flow Diverter Present (Y/N)	N
Regulated By	Post Construction Ordinance
Treatment Effectiveness	Optimal
NC State Plane X (easting)	1451368.24
NC State Plane Y (northing)	610042.20

STORM WATER

BMP Inset Table
Dry Well

Project Name	Veteran's Park
Sequence ID	2
Surface Area (sq. ft.)	6812
Drainage Area (acres)	0.28
Land Use/Development Type	Ultra Urban
Percent Built-Upon Area	50.3
Well Length (ft.)	90
Well Height (ft.)	2
Well Width (ft.)	75
Flow Diverter Present (Y/N)	N
Regulated By	Post Construction Ordinance
Treatment Effectiveness	Optimal
NC State Plane X (easting)	1451368.24
NC State Plane Y (northing)	610042.20

STORM WATER

BMP Inset Table
Extended Dry Detention

Project Name	Veteran's Park
Sequence ID	1
Surface Area (sq. ft.)	2459
Drainage Area (acres)	0.09
Land Use/Development Type	Ultra Urban
Vegetation Type	Rock/Stone (sand filters)
Percent Built-Upon Area	27.7
Maximum Depth (ft.)	2
Detention Basin Type	Underground
Forebay Present (Y/N)	N
Flow Diverter Present (Y/N)	N
Regulated By	Post Construction Ordinance
Treatment Effectiveness	Optimal
NC State Plane X (easting)	1451444.01
NC State Plane Y (northing)	609867.21

STORM WATER

BMP Inset Table
Dry Well

Project Name	Veteran's Park
Sequence ID	1
Surface Area (sq. ft.)	2459
Drainage Area (acres)	0.09
Land Use/Development Type	Ultra Urban
Percent Built-Upon Area	27.7
Well Length (ft.)	50
Well Height (ft.)	2
Well Width (ft.)	50
Flow Diverter Present (Y/N)	N
Regulated By	Post Construction Ordinance
Treatment Effectiveness	Optimal
NC State Plane X (easting)	1451444.01
NC State Plane Y (northing)	609867.21

DRY WELL BMP SUMMARY CHART 1

PEAK CONTROL STORM EVENTS	PRE-DEVELOPMENT RUNOFF	POST-DEVELOPMENT RUNOFF	POST-ROUTING RUNOFF	ELEVATION
TOP OF WELL				810.50'
50YR - 24HR	0.76 CFS	0.78 CFS	0.29 CFS	809.62'
10YR - 24HR	0.54 CFS	0.56 CFS	0.02 CFS	809.52'
2YR - 24HR	0.32 CFS	0.34 CFS	0.00 CFS	809.35'
BMP	REQUIRED	PROVIDED	ELEVATION	
CPv	557 CF	2,000 CF	809.19'	
WQv	239 CF	2,000 CF	808.75'	
BOTTOM OF WELL				808.50'
			DRY WELL MAX ALLOWABLE BUA	1,782 SF
			TOTAL SITE MAX ALLOWABLE BUA	18,176 SF

STORM DRAINAGE NETWORK

TYPE CODE:
DI = DROP INLET (SEE SHEET L8.10)
HW = HEADWALL (SEE SHEET L8.11)
JB = JUNCTION BOX (SEE SHEET L8.11)
CB = CATCH BASIN (SEE SHEET L8.10)
CO = CLEANOUT (SEE SHEET L8.31)
TD = TRENCH DRAIN (SEE SHEET L8.12)

UPSTREAM STRC · UPSTREAM GRD. ELEV. (FLOWLINE) · FLOW · UPSTREAM INVERT · DOWNSTREAM INVERT · DOWNSTREAM STRC · DOWNSTREAM GRD. ELEV. (FLOWLINE)

NOTES:
1. STRUCTURES WITHIN NCDOT RIGHT-OF-WAY SHALL BE TO NCDOT STANDARDS.
2. STRUCTURES NOT WITHIN RIGHT OF WAY SHALL EITHER ALL BE TO NCDOT STANDARDS OR SHALL ALL BE TO LOCAL JURISDICTIONAL STANDARDS.
3. ALL STORM PIPES TO BE CLASS III RCP UNLESS OTHERWISE NOTED.

GRADING LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE PIPE
- LIMITS OF DISTURBANCE
- ROOF DRAIN PIPE
- FOUNDATION DRAIN PIPE
- PROPOSED CATCH BASIN
- PROPOSED JUNCTION BOX
- PROPOSED DROP INLET
- PROPOSED SPOT ELEVATION
- KEYED NOTE
- UNDERDRAIN SYSTEM - ASPHALT PARKING LOT SEE DETAIL E/L8.12
- UNDERDRAIN SYSTEM - PERMEABLE PAVERS SEE DETAIL F/L8.12

STEWART
[illegible] TRYON ST, STE 1400 CHARLOTTE, NC 28202
FIRM LICENSE # C-1051

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal:
NORTH CAROLINA PROFESSIONAL ENGINEER 34620 JAMES R. BAYSINGER, III
02/03/17

Issued for:

No	Date	Description
1	02/01/17	LUESA COMMENTS

0 10 20 40 NORTH
Scale: 1" = 20'

Title:
GRADING & DRAINAGE PLAN

Project number: X13034
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB
Sheet: L5.00

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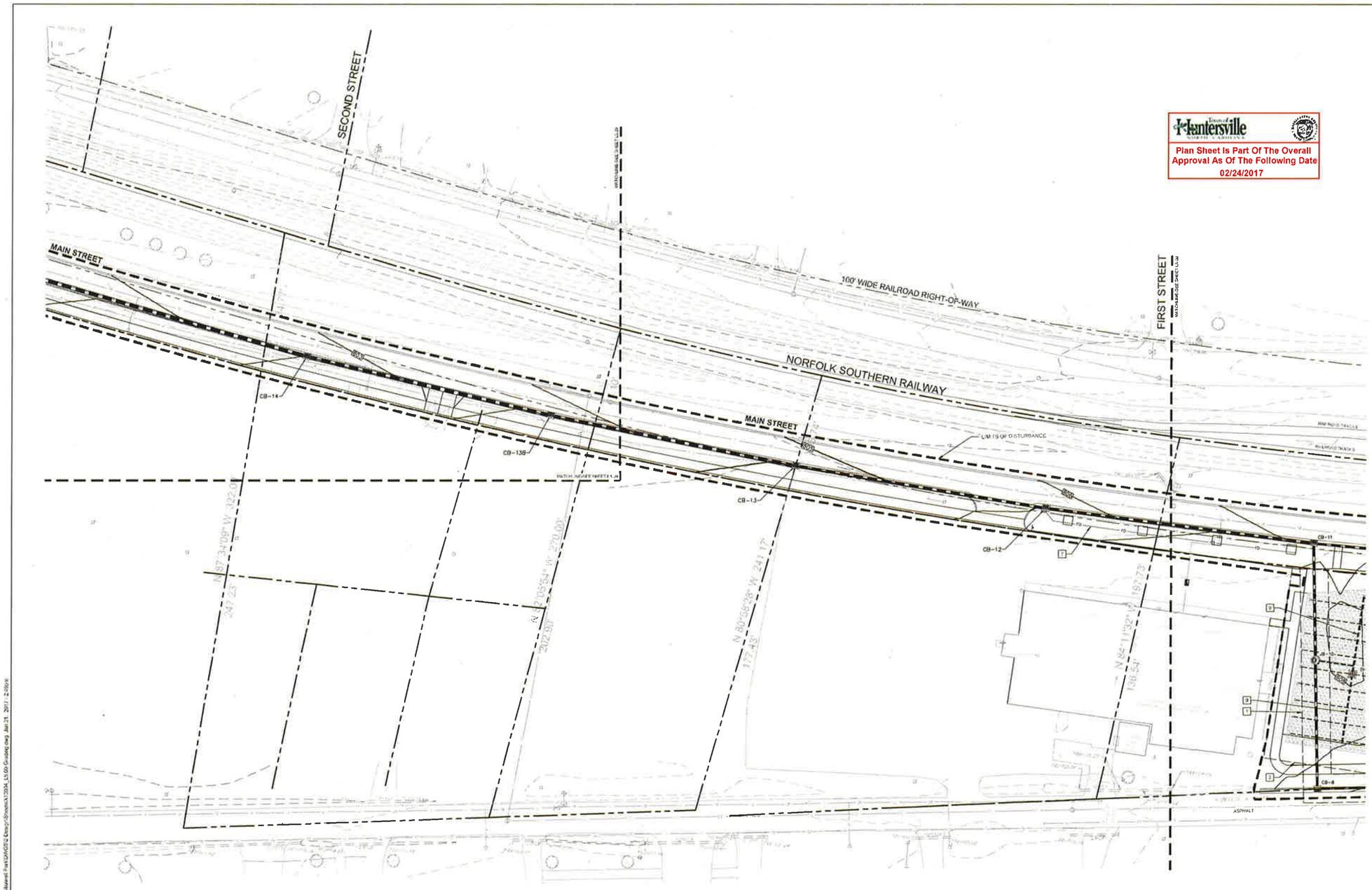
EXHIBIT B



Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

GRADING & STORM DRAINAGE NOTES

1. REFER TO L0.10 FOR GENERAL NOTES.
2. REFER TO L5.00 FOR GRADING & STORM DRAINAGE NOTES
3. REFER TO L5.00 FOR STORM PIPE AND STRUCTURE TABLES, AS WELL AS ADDITIONAL GRADING AND STORM DRAINAGE NOTES

KEYED NOTES

1. NOT USED
2. NOT USED
3. NOT USED
4. NOT USED
5. NOT USED
6. NOT USED
7. INSTALL 4" FOUNDATION DRAIN PIPE FOR TREE PITS WITH MINIMUM 2% SLOPE. TIE TO STORM DRAINAGE SYSTEM IN STREET. SEE DETAILS ON SHEET L4.40

GRADING LEGEND

- 800 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 800 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE
- LIMITS OF DISTURBANCE
- PROPOSED CATCH BASIN
- PROPOSED JUNCTION BOX
- PROPOSED DROP INLET

STEWART

Client: Town of Huntersville, North Carolina

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal: North Carolina Professional Engineer, James R. Baysinger

Issued for:

No	Date	Description

0 10 20 40 NORTH

Scale: 1" = 20'

Title: **GRADING & DRAINAGE PLAN**

Project number: XXXXX Sheet
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L5.10

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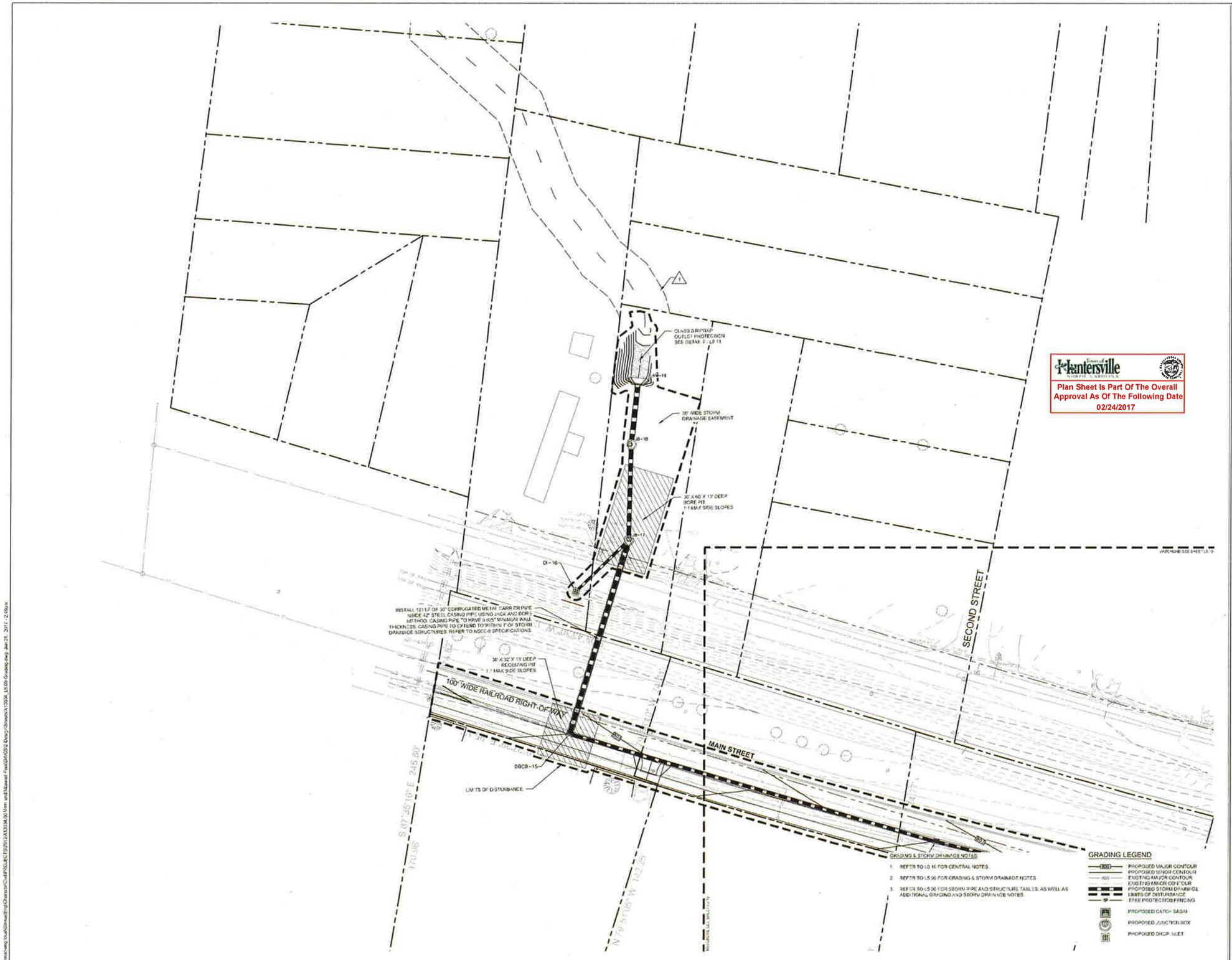
EXHIBIT B



STEWART

Client

Town of Huntersville NORTH CAROLINA

Architects

insight ARCHITECTS

Project

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

NORTH CAROLINA PROFESSIONAL ENGINEER 34029 JAMES R. BAYSINGER, JR. 02/03/17

Issued for:

No	Date	Description
1	12/02/2016	LUESA COMMENTS

0 10 20 40 NORTH

Scale 1" = 20'

Title

GRADING & DRAINAGE PLAN

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L5.20

EXHIBIT B

KEYED NOTES

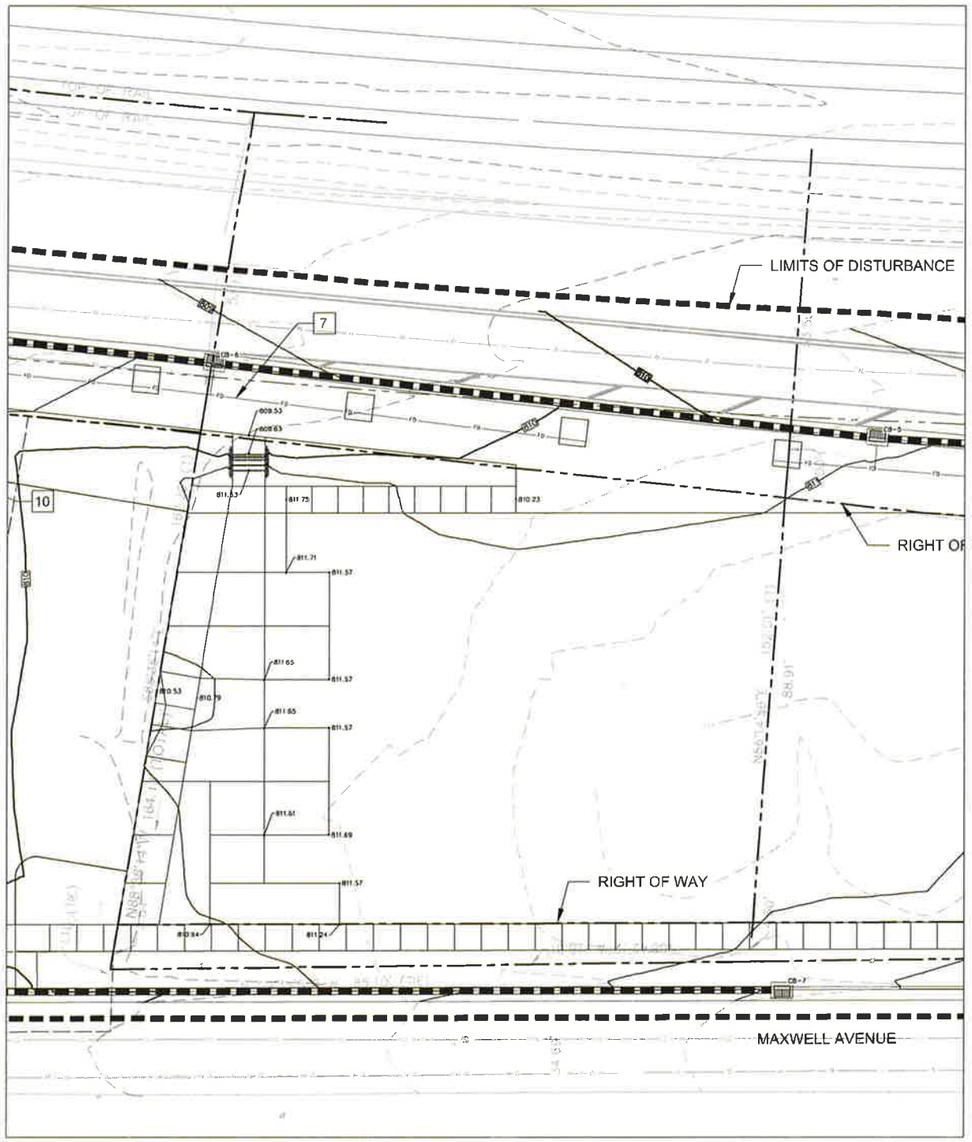
1. 20' WIDE STORM DRAINAGE EASEMENT.
2. POST-CONSTRUCTION CONTROLS BMP MAINTENANCE EASEMENT.
3. TREE PVC ROOF DRAIN LEADER TO UNDERDRAIN SYSTEM. MAINTAIN 5% SLOPE DOWNHILL.
4. NOT USED.
5. NOT USED.
6. PERMEABLE BRICK PAVERS. SEE DETAIL F / LS 21
7. INSTALL 6" FOUNDATION DRAIN PIPE FOR TREE PITS WITH MINIMUM 2% SLOPE. TIE TO STORM DRAINAGE SYSTEM IN STREET. SEE DETAIL ON SHEET L6.40
8. 6" PERFORATED HDPE UNDERDRAIN PIPE. INSTALL WITH ZERO SLOPE. PROVIDE CLEANOUTS AS SHOWN ON PLANS. SEE DETAIL F / LS 30
9. 3" HDPE HEADER
10. CLEANOUTS. SEE DETAIL F / LS 30
11. 4" GATE VALVE
12. CONNECT 4" PVC DRAIN FROM FOUNTAIN TO STORM DRAINAGE STRUCTURE.

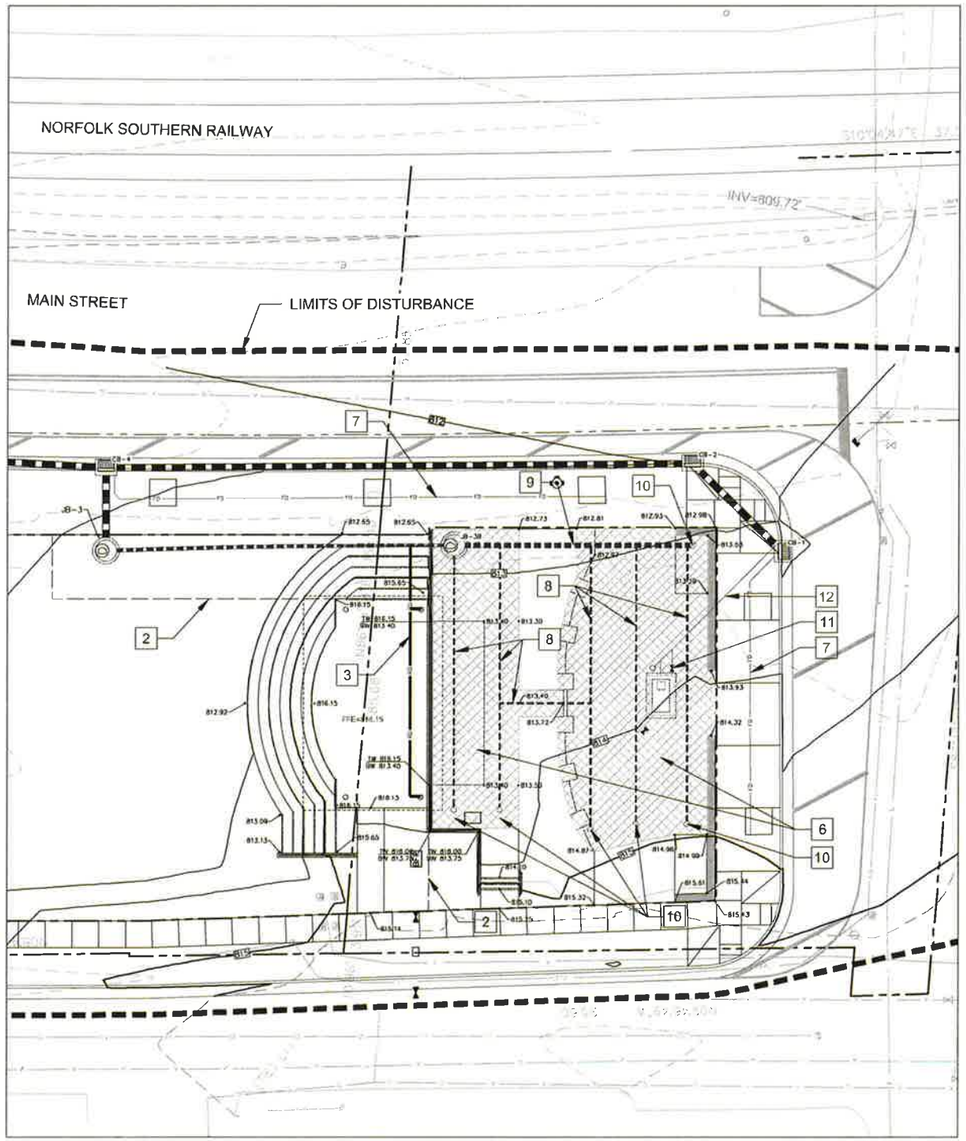
GRADING LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE PIPE
- LIMITS OF DISTURBANCE
- RD — ROOF DRAIN PIPE
- FD — FOUNDATION DRAIN PIPE
- PROPOSED CATCH BASIN
- PROPOSED JUNCTION BOX
- PROPOSED DROP INLET
- 44.50 — PROPOSED SPOT ELEVATION
- TW 44.50 / BW 44.00 — TOP BOTTOM OF WALL ELEVATIONS

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017





STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSTRICK

Issued for:

No	Date	Description

0 5 10 20 NORTH

Scale: 1" = 10'

Title: **GRADING & DRAINAGE ENLARGEMENTS**

Project number: X13094 Sheet
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L5.30

EXHIBIT B

GENERAL NOTES:

1. CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF NORFOLK SOUTHERN'S NSCE-8 SPECIFICATIONS
2. PIPELINE AND CROSSING TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LAST APPROVED AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION SPECIFICATIONS FOR PIPELINES CONVEYING FLAMMABLE AND NON-FLAMMABLE SUBSTANCES.
3. BLASTING NOT PERMITTED.
4. ALL DISTURBED AREAS SHOULD BE RETURNED TO EXISTING GRADE UPON COMPLETION OF CONSTRUCTION.
5. ALL CONSTRUCTION WORK PERFORMED ON, UNDER, OVER OR ADJACENT TO NORFOLK SOUTHERN PROPERTY MUST BE IN ACCORDANCE WITH THE NORFOLK SOUTHERN SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS.
6. THE CONTRACTOR SHALL NOT, FOR ANY REASON, STORE CONSTRUCTION EQUIPMENT UPON NOR STORE OR DUMP WASTE CONSTRUCTION MATERIALS UPON THE RAILROAD'S RIGHT-OF-WAY.
7. THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS TO PROTECT THE RAILROADS TRACK FACILITIES AND PROPERTY FROM DAMAGE. THE CONTRACTOR SHALL NOTIFY THE RAILROAD OF ANY WORK BY THE CONTRACTOR WITHIN 25 FEET OF THE RAILROAD'S RIGHT-OF-WAY FOR THE RAILROAD TO DETERMINE FLAGGING NEEDS.
8. THE CONTRACTOR SHALL COORDINATE HIS WORK ON OR ADJACENT TO RAILROAD RIGHT-OF-WAY WITH THE FOLLOWING REPRESENTATIVES OF THE RAILROAD:

   MR. JUSTIN K. BROOKS
   DIVISION ENGINEER
   NORFOLK SOUTHERN RAILWAY
   1120 W. WASHINGTON STREET
   GREENVILLE, SC 29601
   PHONE: (864) 255-4251
   EMAIL: JUSTIN.BROOKS@NSCORP.COM

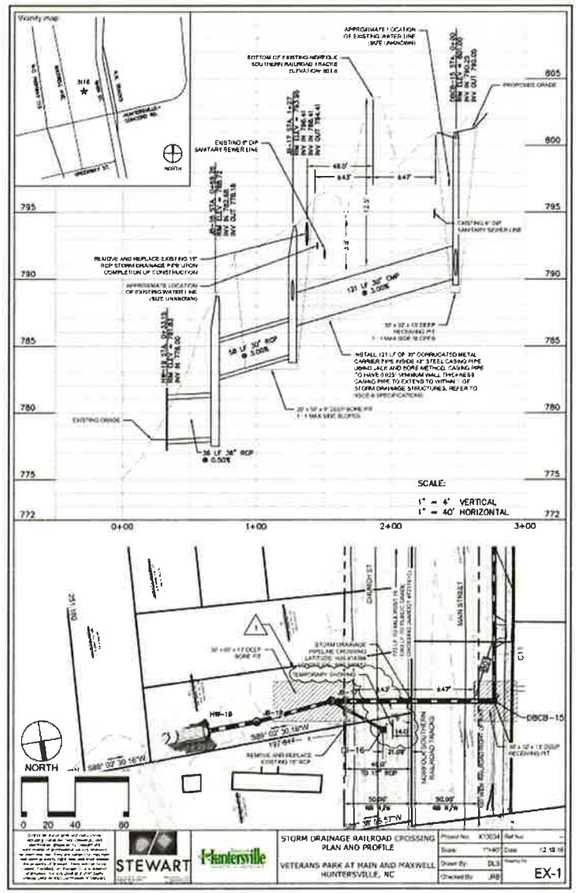
   MR. SCOTT OVERBEY
   ENGINEER - PUBLIC IMPROVEMENTS
   NORFOLK SOUTHERN RAILWAY
   1200 PEACHTREE STREET, NE
   ATLANTA, GA 30309
   PHONE: (404) 582-5588
   EMAIL: SCOTT.OVERBEY@NSCORP.COM

9. ONCE THE BORING REACHES THE NORFOLK SOUTHERN RIGHT-OF-WAY, THE BORING OPERATION SHALL BE PROGRESSED ON A 24-HOUR BASIS WITHOUT STOPPAGE (EXCEPT FOR ADDING LENGTHS OF PIPE) UNTIL THE LEADING EDGE OF THE PIPE HAS REACHED THE RECEIVING PIT.
10. THE FRONT OF THE PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEADING THE PIPE SO THAT NO UNSUPPORTED EXCAVATION IS AHEAD OF THE PIPE.
11. CONTRACTOR TO PROVIDE TRACK MONITORING IN ACCORDANCE WITH NORFOLK SOUTHERN'S SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, SECTION 5.
12. THE FOLLOWING UTILITIES HAVE FIBER OPTIC CABLES RUNNING ALONG THE RAILWAY CORRIDOR. THE CONTRACTOR SHALL CONTACT THE UTILITIES PRIOR TO BEGINNING WORK TO CONFIRM ANY INVOLVEMENT. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK.

   SPRINT
   MR. STEVE THOMPSON
   PHONE: 678-852-2726
   EMAIL: STEVE.R.THOMPSON@SPRINT.COM

   CENTURYLINK
   MR. RICHARD BROWNING
   PHONE: 336-210-4404
   EMAIL: DENNIS.BROWING@CENTURYLINK.COM

STORM DRAINAGE RAILROAD CROSSING GENERAL NOTES
VETERANS PARK AT MAIN AND MAXWELL
HUNTERSVILLE, NC
Project No: X13034 Ref No:
Scale: Date: 09.25.18
Drawn By: DLS
Checked By: JRB
EX-2



STORM DRAINAGE RAILROAD CROSSING PLAN AND PROFILE
VETERANS PARK AT MAIN AND MAXWELL
HUNTERSVILLE, NC
Project No: X13034 Ref No:
Scale: 1"=40' Date: 12.19.16
Drawn By: DLS
Checked By: JRB
EX-1

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

STEWART

Client
Town of Huntersville NORTH CAROLINA

Architects
insight ARCHITECTS

Project
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042172 JAMES R. BAYSINGER
11/03/17

Issued for

No	Date	Description
1	10.19.2018	Submittal

Scale AS SHOWN

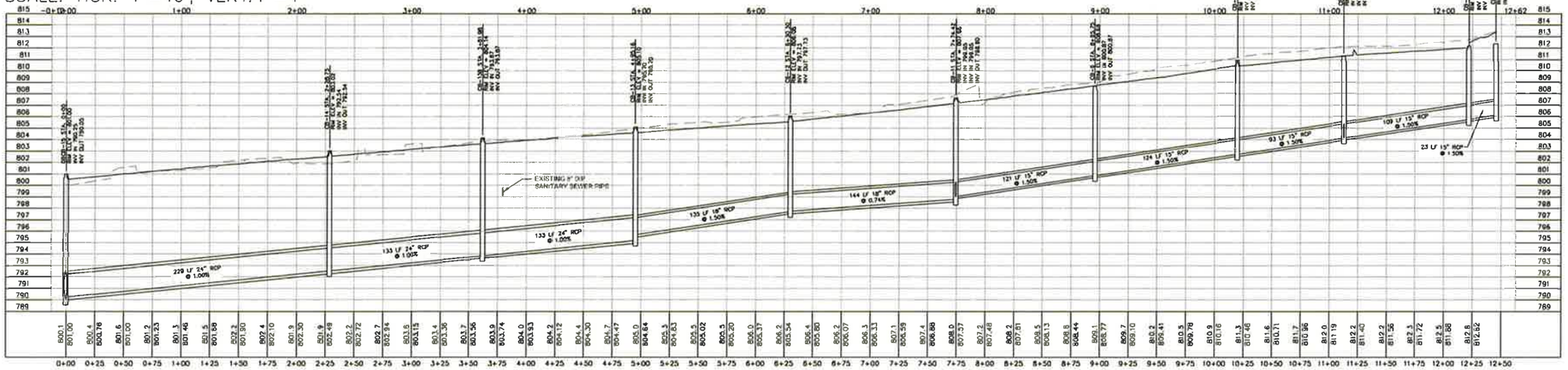
Title
RAILROAD CROSSING DRAINAGE PLAN

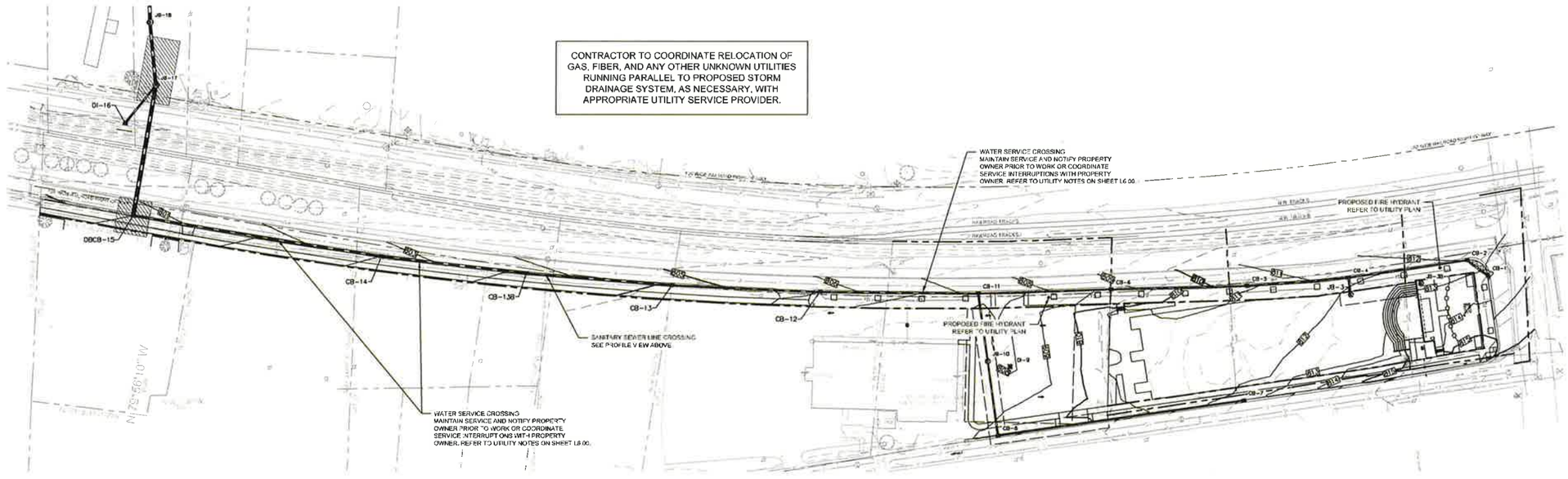
Project number X13034 Sheet
Date: 09.21.2018
Drawn by: DLS
Approved by: JRB
L5.40

G:\PROJECTS\2013\X13034_N Main and Maxwell Park\DWG\Set Design\Sheets\X13034_L5.00-Railroad.dwg Feb 07, 2017 - 9:56am

EXHIBIT B

MAIN STREET STORM PROFILE
SCALE: HOR: 1"=40', VERT: 1"=4'





Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032772 JAMES R. BAYSINGER 01/20/17

Issued for:

No.	Date	Description

0 20 40 80 NORTH

Scale: 1" = 40'

Title:
STORM DRAINAGE PLAN & PROFILE MAIN STREET

Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLB
Approved by: JRB
L5.50

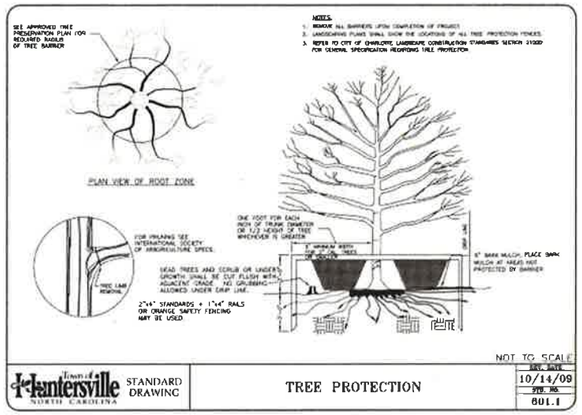
EXHIBIT B

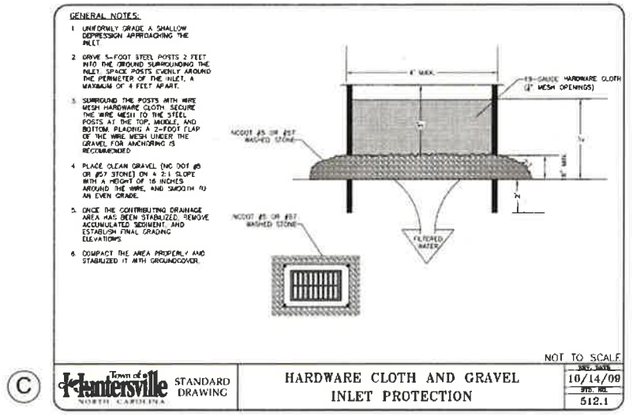
Zoning Approval Conditions:

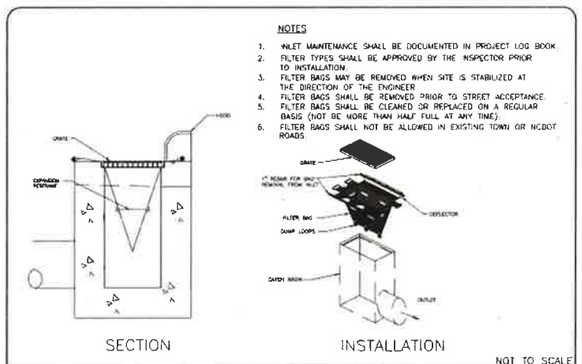
1. Photometric Plan Required showing lighting output of all on site lighting fixtures

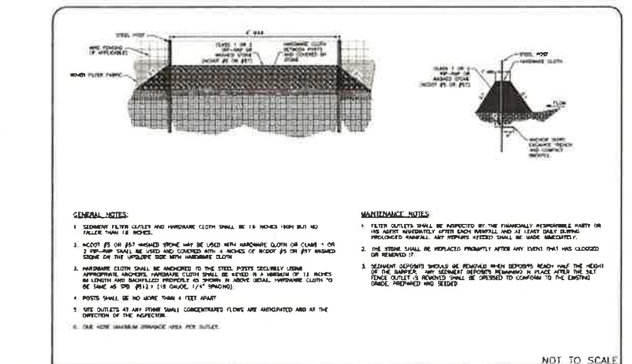
2. 66" Oak Tree Off site required to remain for tree save conformance.

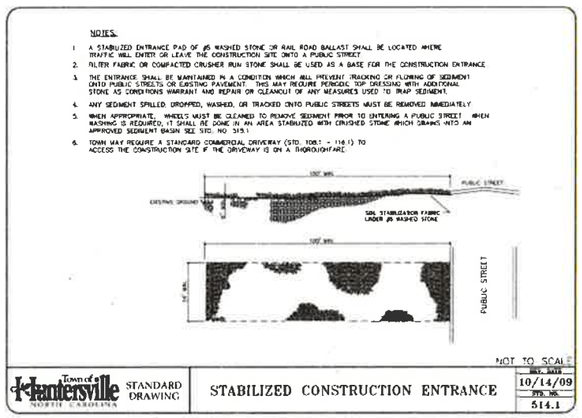
3. Final Plat required prior to final inspections.

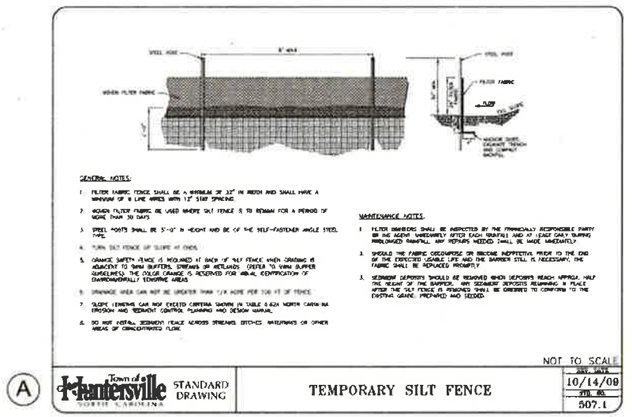












Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal:

Issued for:

No	Date	Description

Scale: N/A

File:
EROSION CONTROL DETAILS

Project number: X13034 Sheet
Date: 09.21.2016
Drawn by: MRB
Approved by: DRB

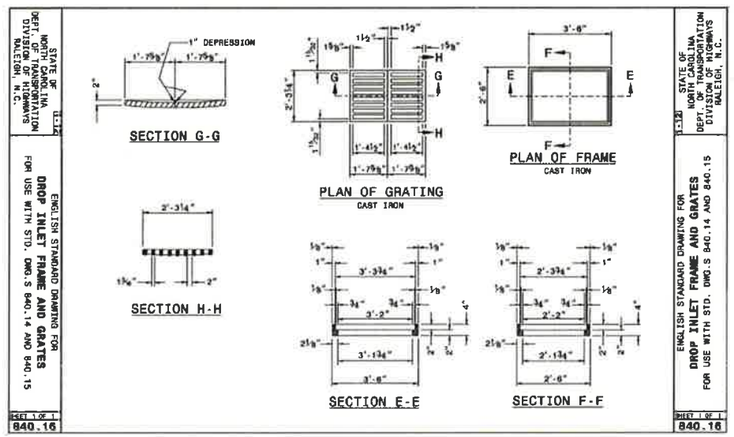
L8.00

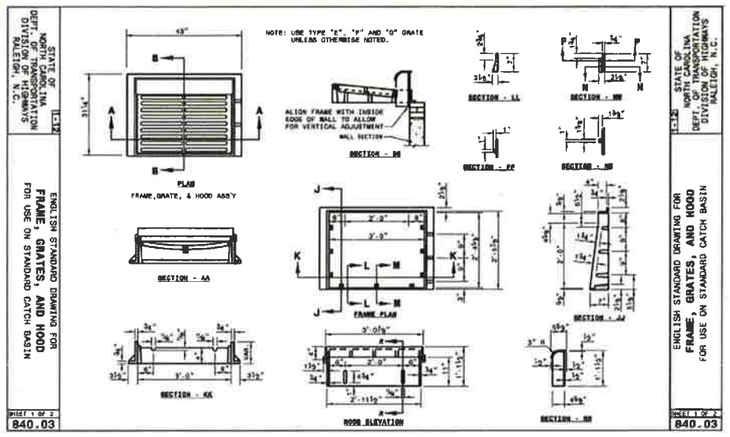
G:\PROJECTS\X13034_X Main and Maxwell Park\SYSTEM\Drawings\sheets\L8.00_Details.dwg, Feb 05, 2017 - 4:26pm

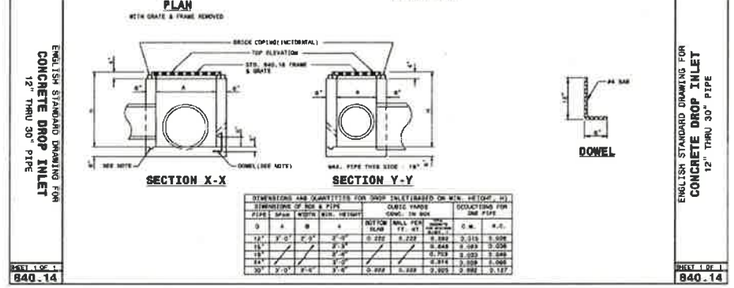
EXHIBIT B

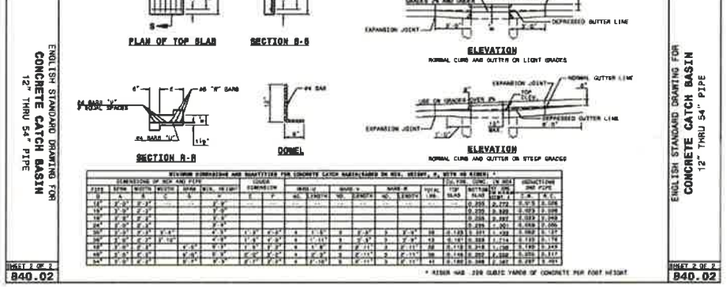
Town of Huntersville NORTH CAROLINA

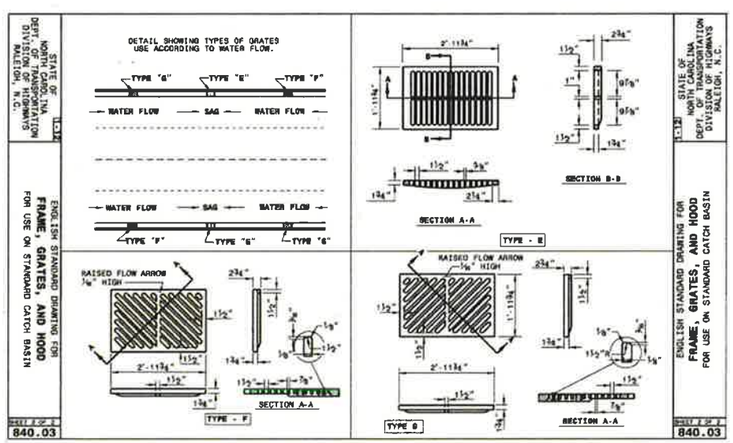
Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

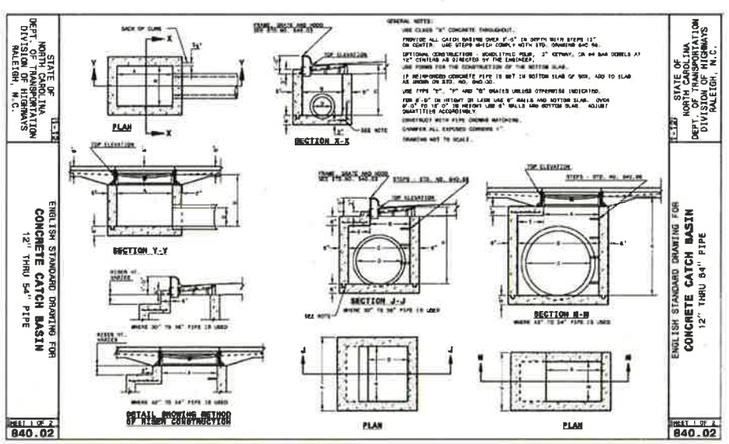












STEWART

Client
Town of Huntersville NORTH CAROLINA

Architects
insight ARCHITECTS

Project

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 037577 JAMES M. BAYSHER
02/03/17

Issued for:

No	Date	Description

Scale: N/A

Title:

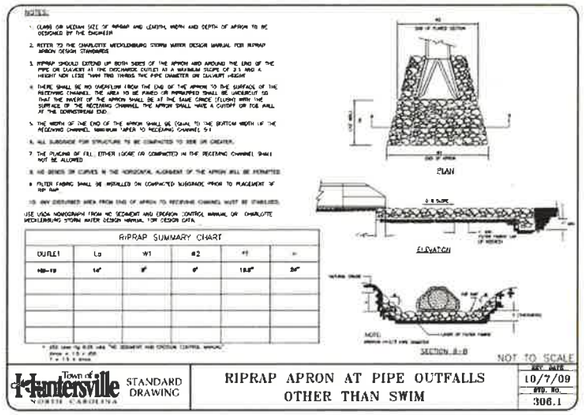
GRADING & DRAINAGE DETAILS

Project number: 16334 Sheet
Date: 1/31/2017
Drawn by: MRB
Approved by: DRE

L8.10

Y:\Stewart\Huntersville\Checked\Civil\PLOTS\20151634 XX Veterans Park\DWG\Sheets\151634_L8.09-Detailing - Jan 27, 2017 - 11:41am

EXHIBIT B



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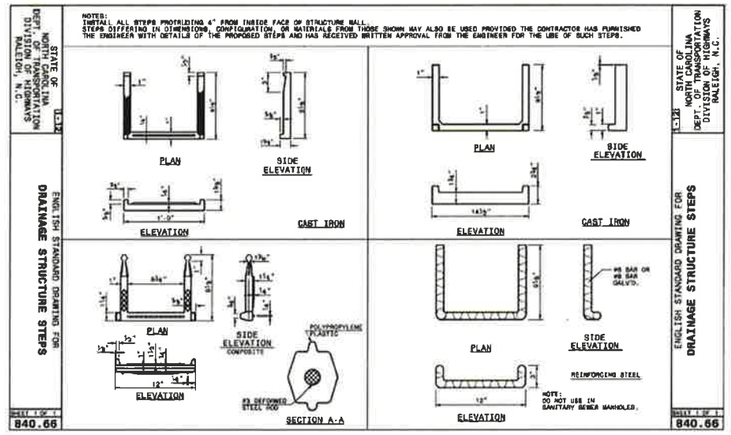

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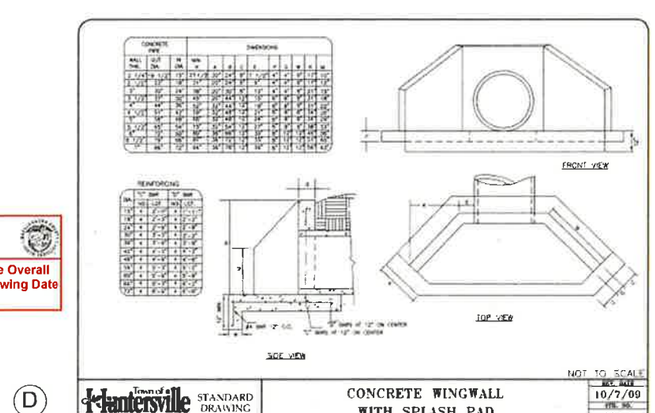

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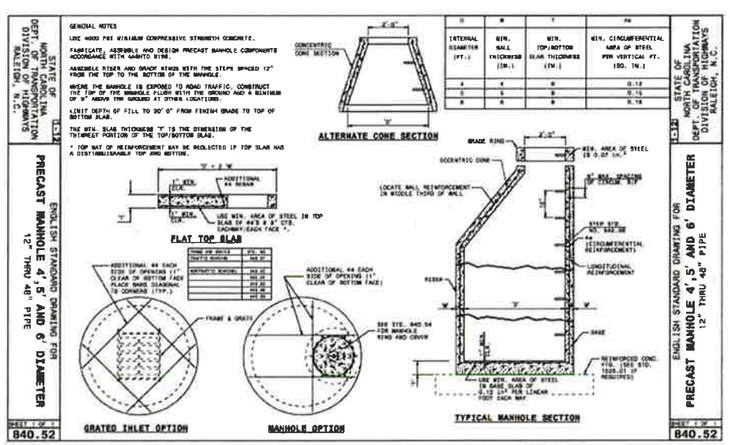


A

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal:
NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BRYSON 02/23/17

Issued for:

No	Date	Description

Scale: N/A

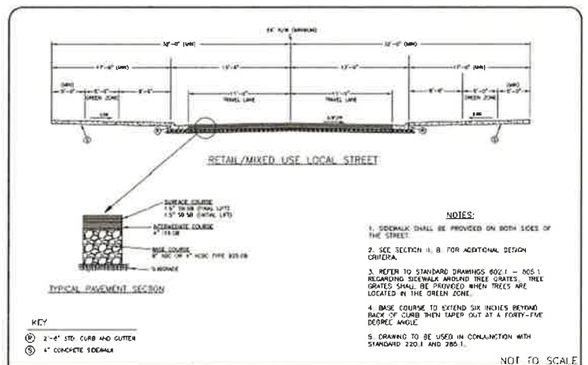
Title:
GRADING & DRAINAGE DETAILS

Project number: 13034 Sheet
Date: 09.21.2016
Drawn by: MRB
Approved by: JRB

L8.11

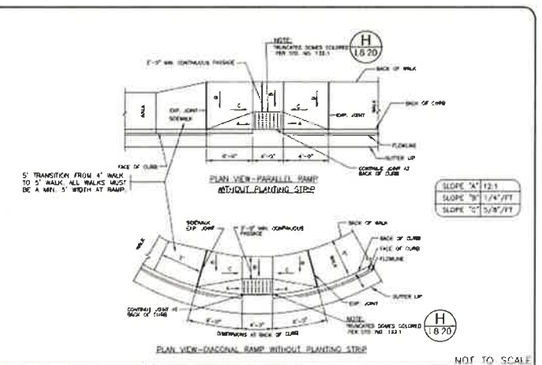
Y:\drawings\Civil\Sheets\Dwg\Details.dwt HP DesignJet T1300 (A1 ISO) (A1330 (M.00) Mean and Maxwell Park\DWGS\2 Design Sheets\13034_L8.00 Details.dwg Jan 31, 2017 - 11:48am

EXHIBIT B



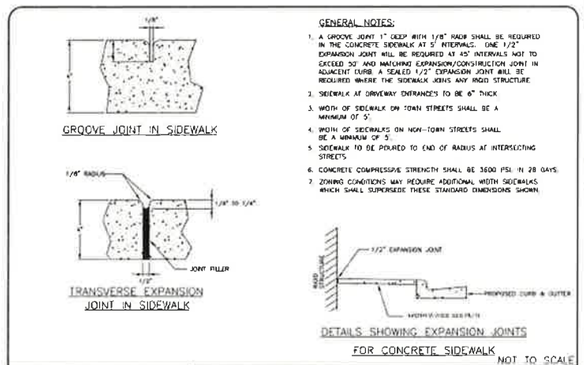
NOT TO SCALE

(I) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — RETAIL/MIXED USE LOCAL STREET NO PARKING TYPICAL SECTION — REV. DATE 10/01/15 — STD. NO. 220.2



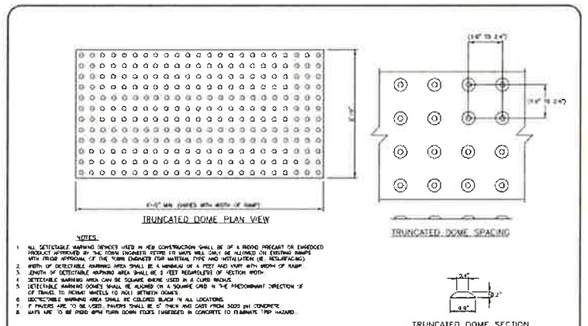
NOT TO SCALE

(F) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — ACCESSIBLE RAMP STANDARD WITHOUT PLANTING STRIP AND 2'-6" CURB AND GUTTER — REV. DATE 10/14/09 — STD. NO. 125.1



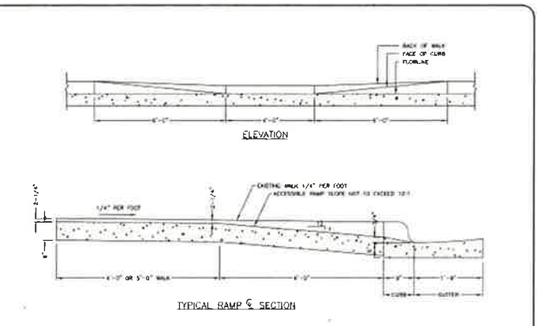
NOT TO SCALE

(C) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — CONCRETE SIDEWALKS DETAILS AND NOTES — REV. DATE 10/15/09 — STD. NO. 108.1



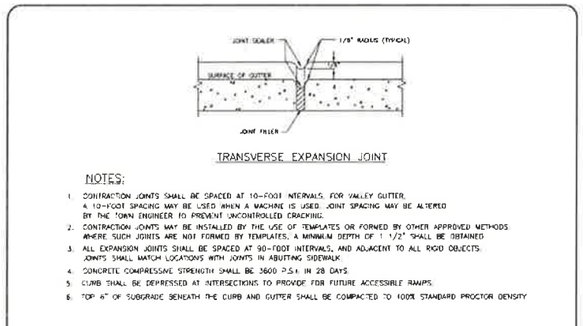
NOT TO SCALE

(H) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — TRUNCATED DOMES PLAN AND CROSS SECTION — REV. DATE 10/14/09 — STD. NO. 132.1



NOT TO SCALE

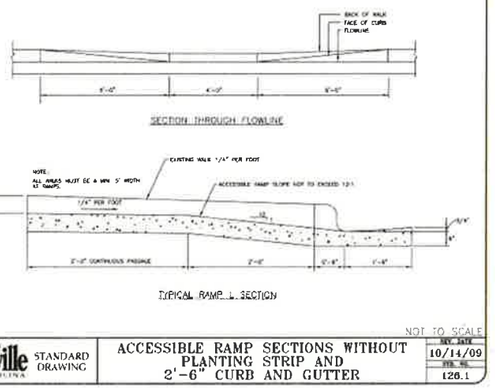
(E) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — ACCESSIBLE RAMP SECTIONS WITH PLANTING STRIP AND 2'-6" CURB AND GUTTER — REV. DATE 10/14/09 — STD. NO. 124.1



NOT TO SCALE

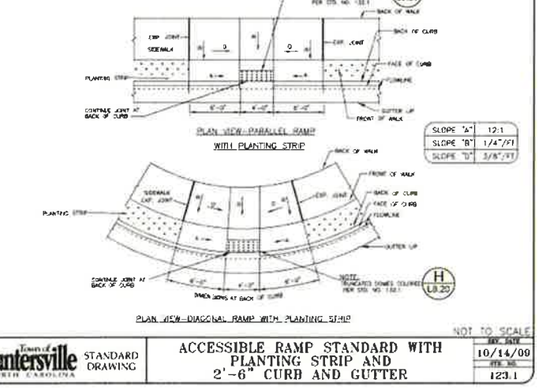
(B) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — CONCRETE CONTRACTION JOINT — REV. DATE 10/15/09 — STD. NO. 102.1

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017



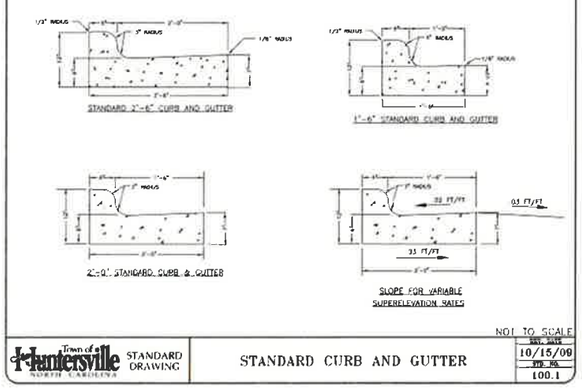
NOT TO SCALE

(G) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — ACCESSIBLE RAMP SECTIONS WITHOUT PLANTING STRIP AND 2'-6" CURB AND GUTTER — REV. DATE 10/14/09 — STD. NO. 126.1



NOT TO SCALE

(D) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — ACCESSIBLE RAMP STANDARD WITH PLANTING STRIP AND 2'-6" CURB AND GUTTER — REV. DATE 10/14/09 — STD. NO. 123.1



NOT TO SCALE

(A) Town of Huntersville NORTH CAROLINA STANDARD DRAWING — STANDARD CURB AND GUTTER — REV. DATE 10/15/09 — STD. NO. 100.1

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map:

Seal: NORTH CAROLINA 1932 REGISTERED LANDSCAPE ARCHITECT — 02/24/17

Issued for:

No	Date	Description
1	12.20.2016	TOWN COMMENTS

Scale: N/A

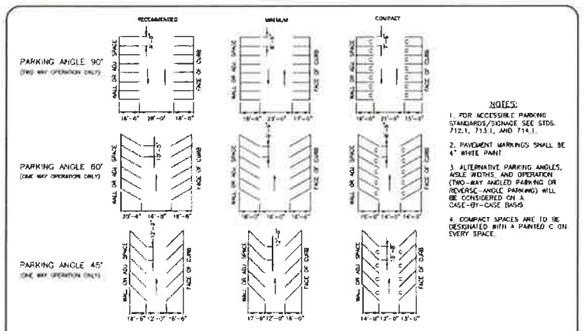
Title: SITE DETAILS

Project number: X13054 Sheet
Date: 09.21.2016
Drawn by: ERB
Approved by: DRB

L8.20

O:\PROJECTS\2013\X13054_X Main and Maxwell Park\07\CAD\Design\Details\13054_L8.20-Details.dwg, Feb 07, 2017 - 3:55pm

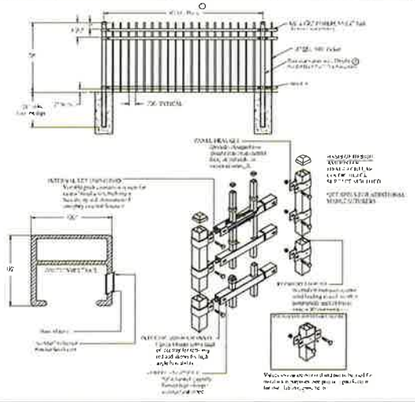
EXHIBIT B



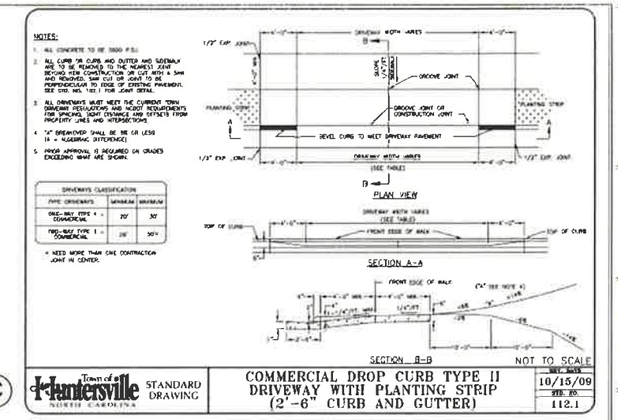
NOT TO SCALE

Town of Huntersville NORTH CAROLINA STANDARD DRAWING | PARKING STANDARDS | EFF. DATE 11/1/10 | STD. NO. 710.1

H



E GUARDRAIL
SCALE: 3/8" = 1'-00"



Town of Huntersville NORTH CAROLINA STANDARD DRAWING | COMMERCIAL DROP CURB TYPE II DRIVEWAY WITH PLANTING STRIP (2'-6" CURB AND GUTTER) | EFF. DATE 10/15/09 | STD. NO. 112.1

C

LTV815S

ORDERING INFORMATION (Example)

LTV815S/SP

FIXTURE (With Flat Frame Less Ring)	
LTV815S/SP	Spot[1,2]
LTV815S/NF	Narrow Flood[1,2]
LTV815S/WW	Wall Wash[1,2]
LTV825S/SP	Spot[1,2]
LTV825S/NF	Narrow Flood[1,2]
LTV825S/WW	Wall Wash[1,2]
LTV835S/SP	Spot[1,2]
LTV835S/NF	Narrow Flood[1,2]
LTV835S/WW	Wall Wash[1,2]

[1] All lens options are integral parts of component module and must be installed at factory.
[2] Opening of Component Module on site will void warranty.

NOTE:
REFER TO SHEET S6H FOR FIXTURE SPECIFICATION

FEATURES

- Composite pour boxes ship ahead to simplify installation
- Sealed light engine prevents ingress of moisture and/or debris
- Bluetooth enabled field-aiming allows for wireless adjustment and dimming
- Available in spot, wall-wash, and narrow flood distributions
- 3000K, 4200K, and 5000K CCT
- Optional Slip Resistant Lens, Hex Cell Louver, Prismatic Lens

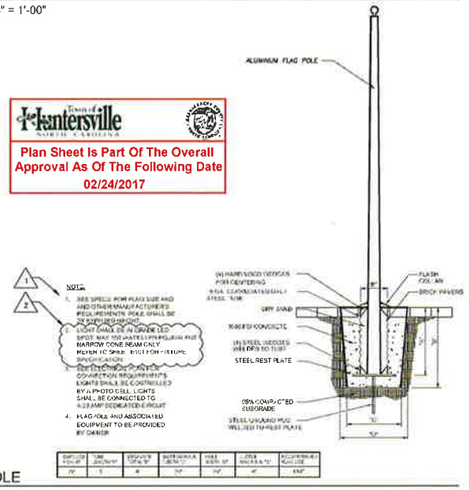
Pour Box comes in housing ships separately and as a quick ship if requested.

LTV815S

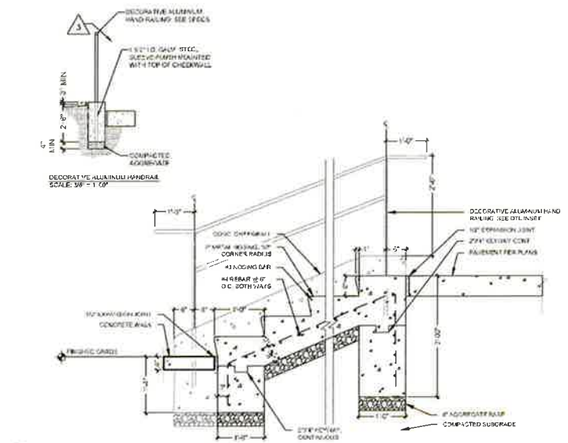
G FLAG POLE LIGHT FIXTURE

Town of Huntersville

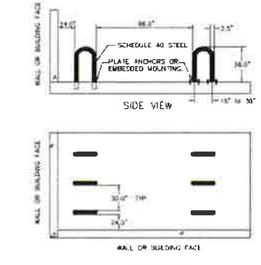
Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017



D FLAGPOLE



B CONCRETE STEPS w/ CHEEKWALLS AND HANDRAILS
SCALE: 3/4" = 1'-00"

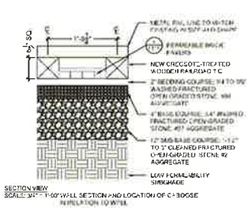


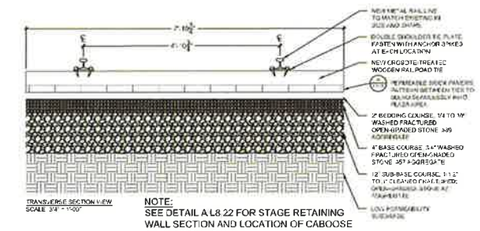
NOTES:
1. BIKE RACKS SHOULD BE INSTALLED AS PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
2. ALTERNATIVE BIKE RACKS OR LOCKERS MAY BE USED BUT ARE SUBJECT TO APPROVAL BY THE TOWN ENGINEER.
3. ALL DIMENSIONS SHOWN ARE MINIMUM.

NOT TO SCALE

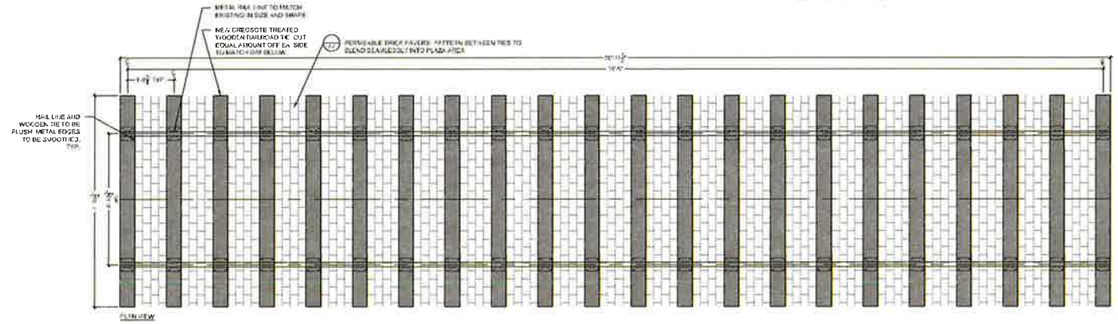
Town of Huntersville NORTH CAROLINA STANDARD DRAWING | INVERTED "U" RACK FOR BICYCLE PARKING | EFF. DATE 11/1/10 | STD. NO. 717.1

F BIKE RACK





NOTE:
SEE DETAIL A L8.22 FOR STAGE RETAINING WALL SECTION AND LOCATION OF CABOOSE IN RELATION TO WALL



A RAILROAD ASSEMBLY
SCALE: 1/2" = 1'-00"

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Steel Tracer Map

Seal: NORTH CAROLINA 11532 REGISTERED LANDSCAPE ARCHITECT

Issued for:

No.	Date	Description
1	12/20/2016	UDEA COMMENTS
2	02/03/2017	UDEA COMMENTS

Scale: N/A

Title:

SITE DETAILS

Project Number: X13034 Sheet:
Date: 09.21.2016
Drawn by: MRB
Approved by: DRB

L8.23

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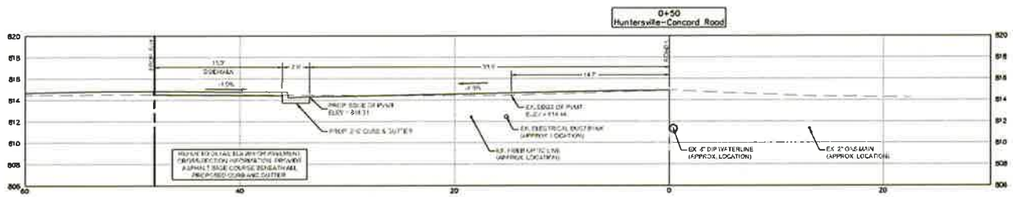
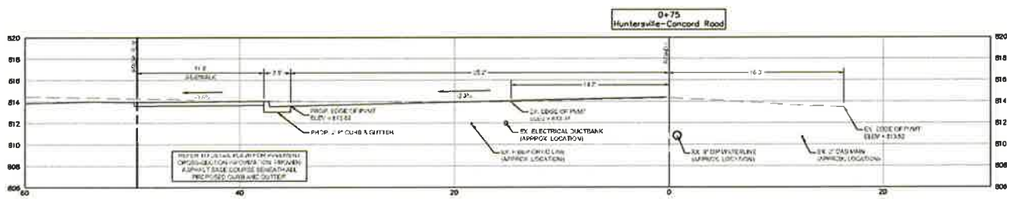
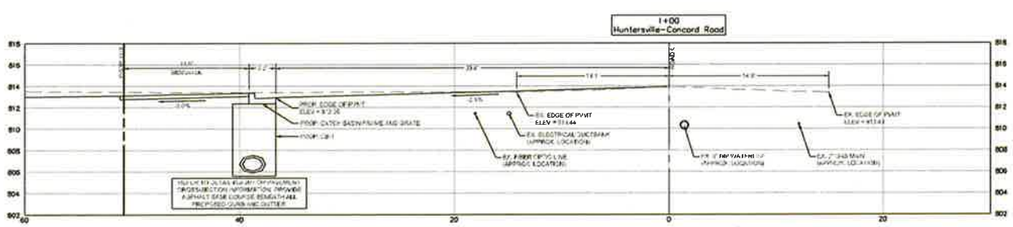
EXHIBIT B







Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project: VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal: NORTH CAROLINA PROFESSIONAL SEAL 34828 ENGINEER JAMES R. BAYSINGER 02/02/17

Issued for:

No	Date	Description

0 2.5 5 10

Scale: 1" = 5'

Title: ROADWAY CROSS-SECTIONS

Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L9.00

EXHIBIT B

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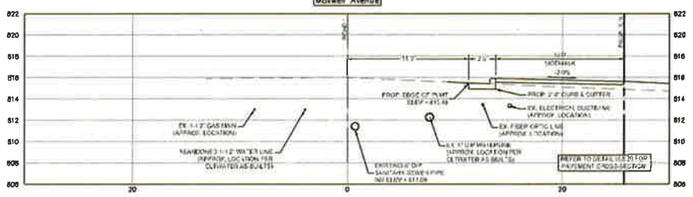

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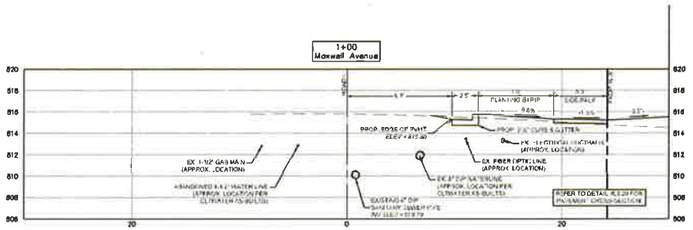

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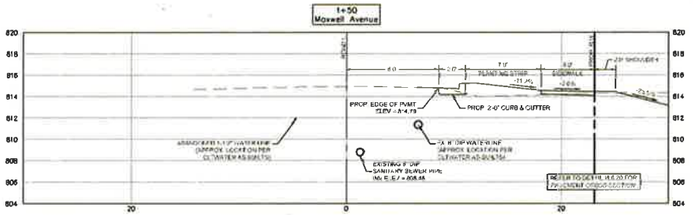

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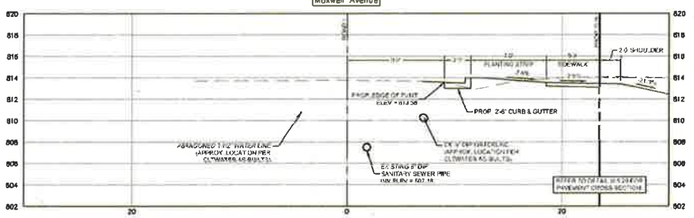

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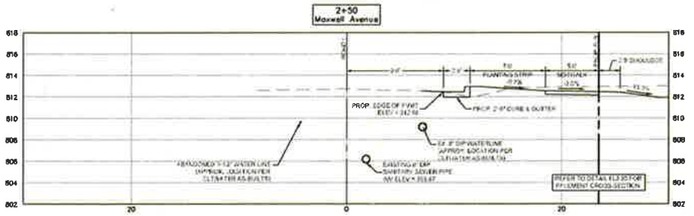

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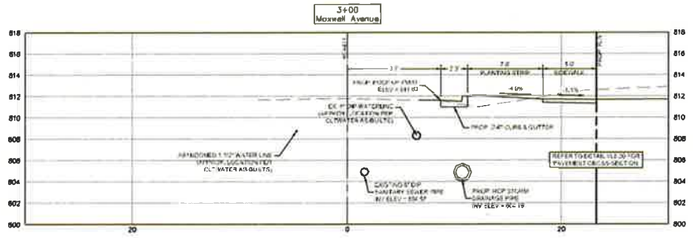

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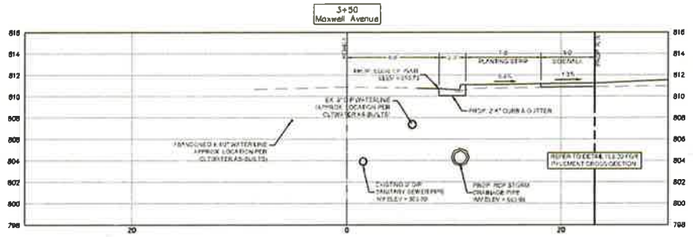

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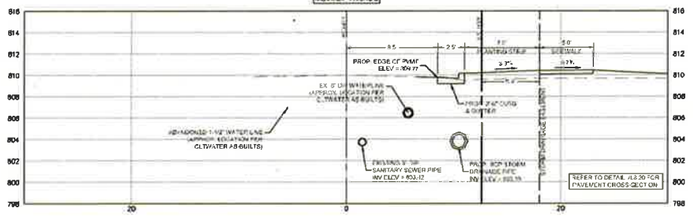

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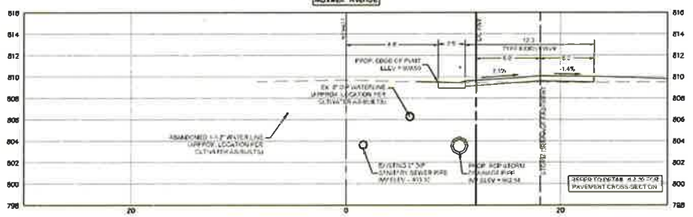

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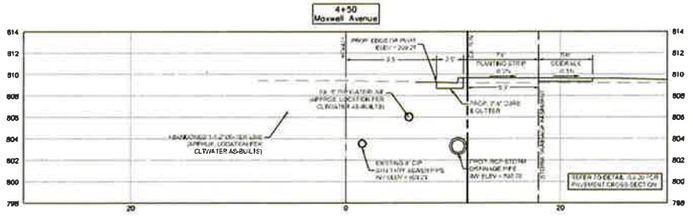

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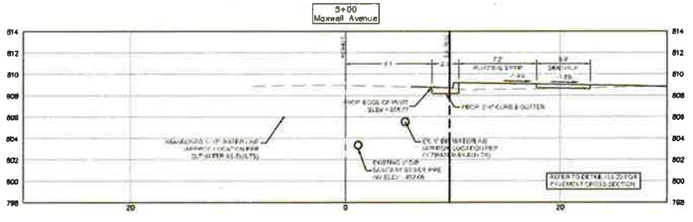

Town of Huntersville
NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

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STEWART

Client
Town of Huntersville
NORTH CAROLINA

Architects
insight ARCHITECTS

Project
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal
NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BATSIMES 02/03/17

Issued for:

No.	Date	Description

0 2.5 5 10

Scale 1" = 5'

Title
MAXWELL AVENUE CROSS-SECTIONS

Project number X13034 Sheet
Date 09.21.2016
Drawn by DLE
Approved by JRB **L9.10**

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EXHIBIT B

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

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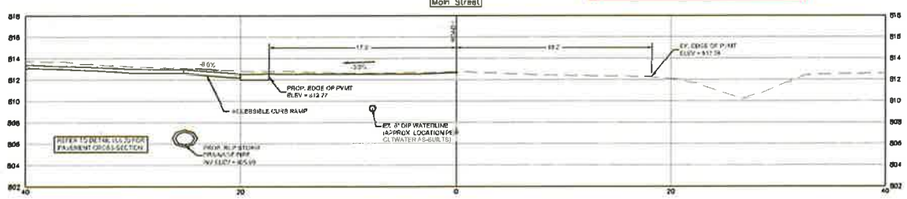

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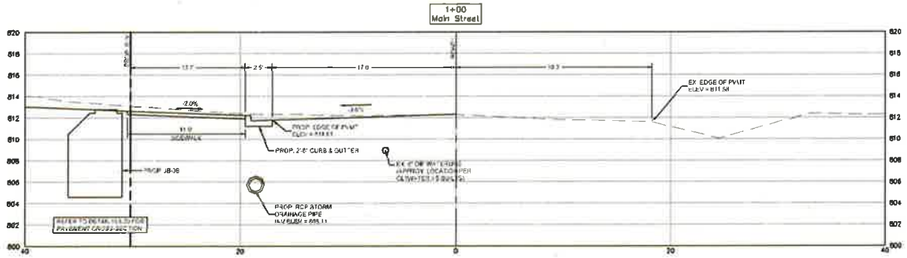

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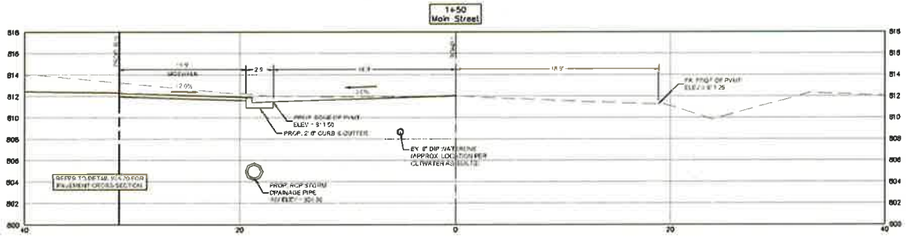

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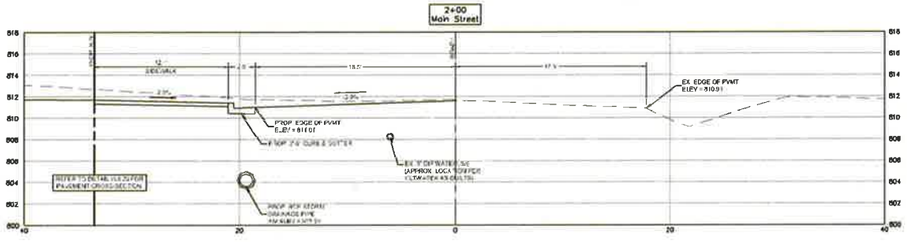

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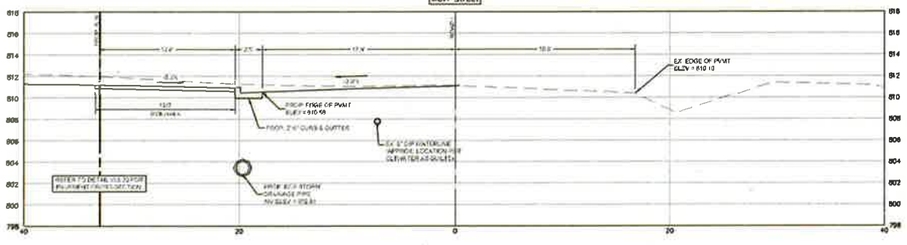

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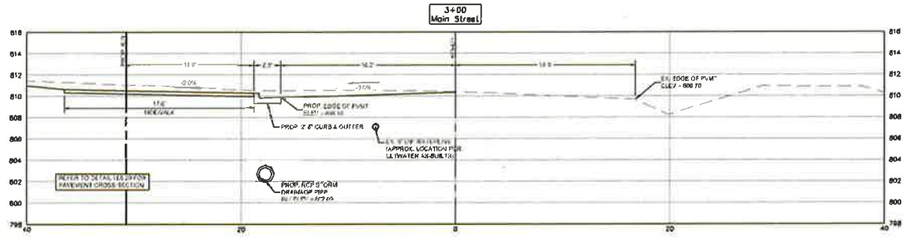

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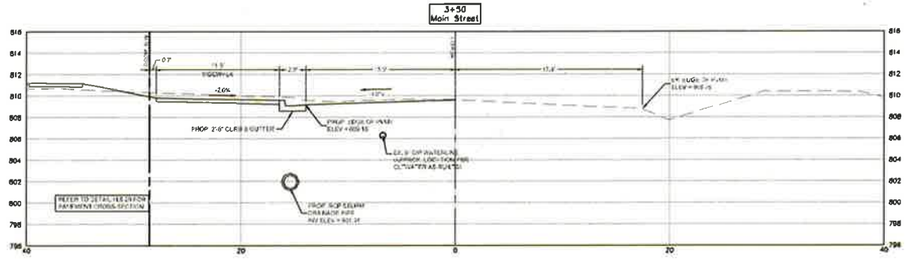

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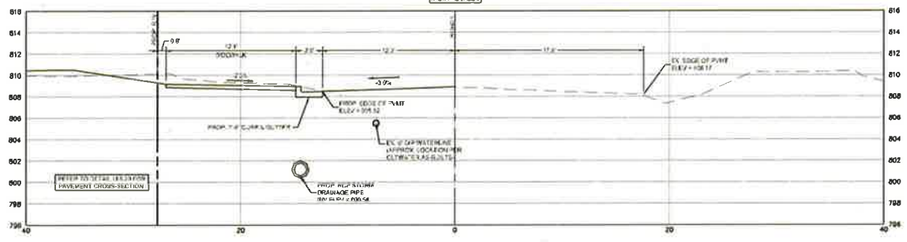

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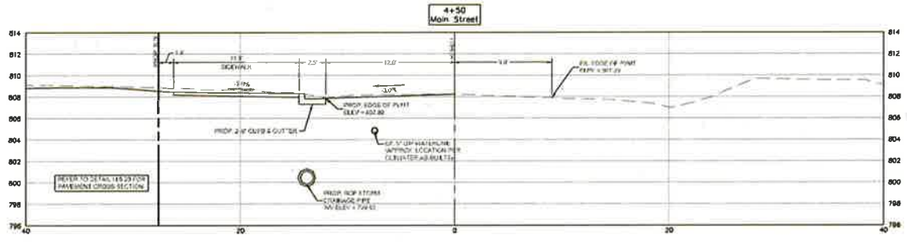

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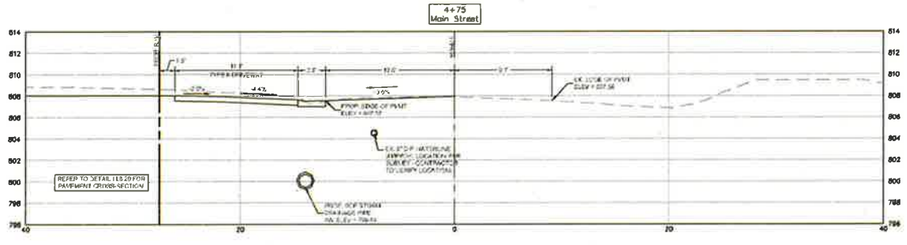

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal:

NORTH CAROLINA PROFESSIONAL ENGINEER JAMES R. BAYSHER 02/24/17

Issued for:

No.	Date	Description

0 2.5 5 10

Scale: 1" = 5'

Title:

MAIN STREET CROSS-SECTIONS

Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L9.20

C:\CAD\Drawings\X-13034.dwg Jan 31, 2017 - 12:45pm

EXHIBIT B

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

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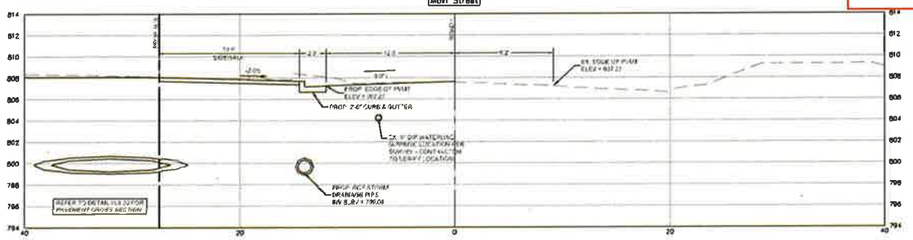

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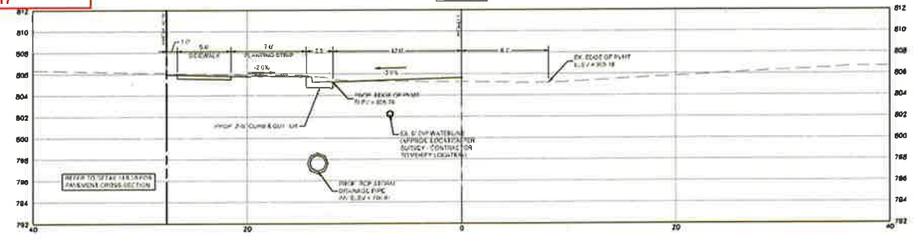

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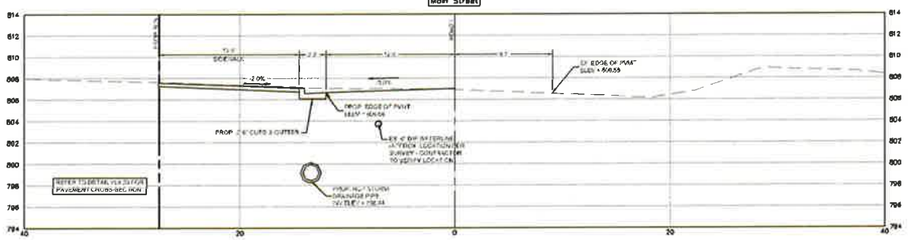

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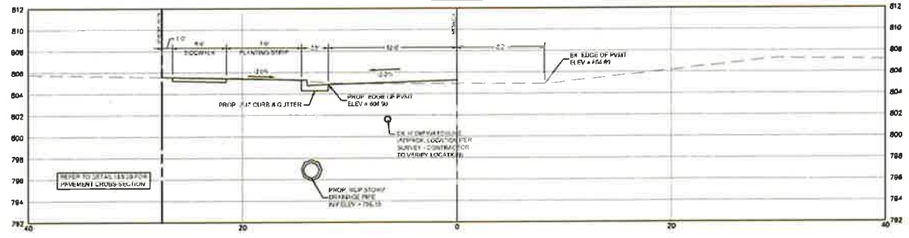

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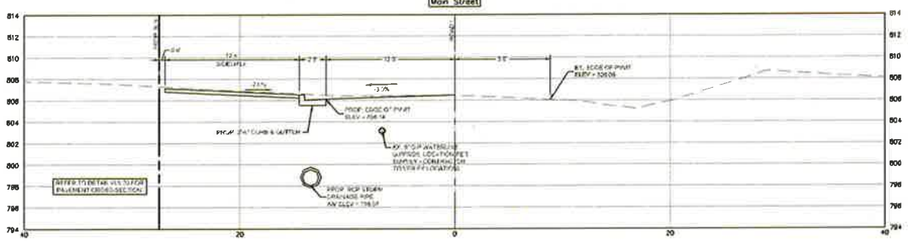

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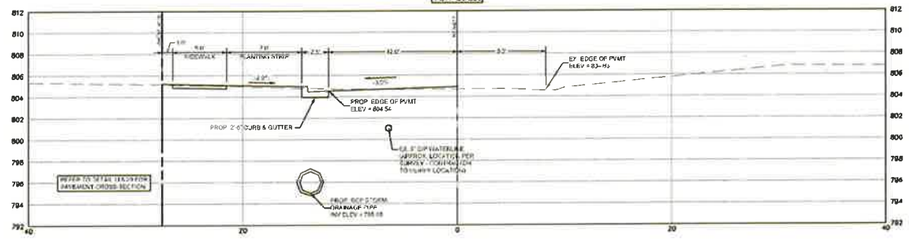

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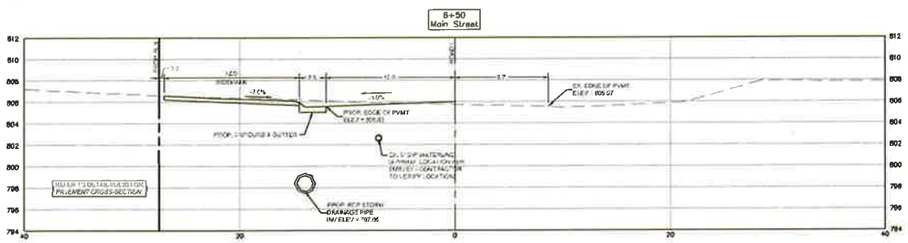

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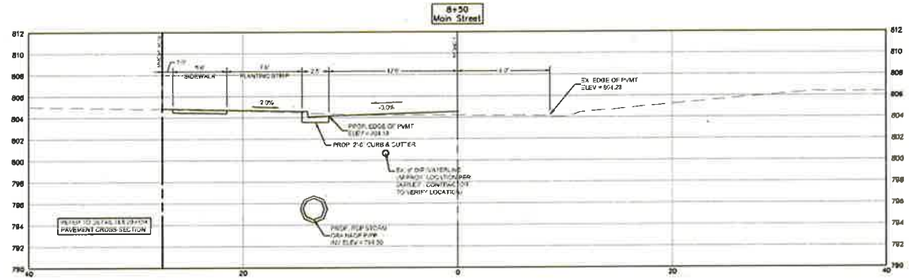

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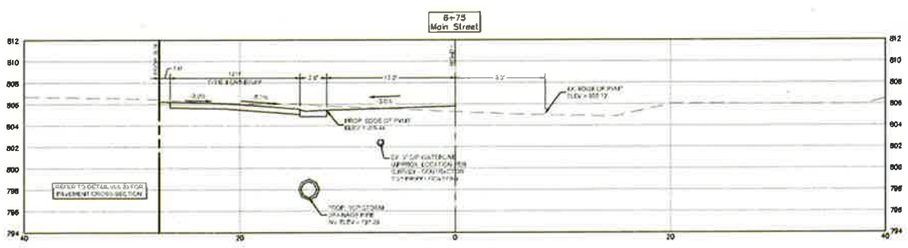

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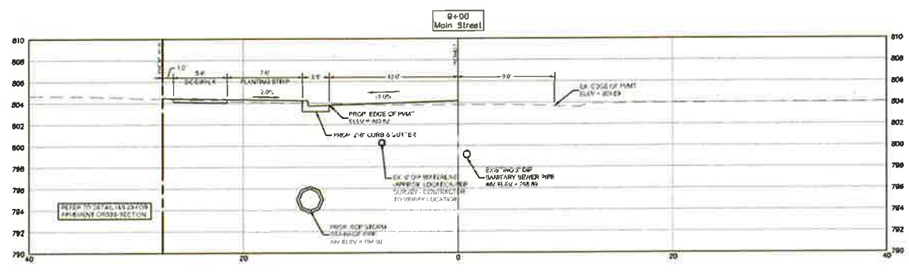

STEWART

Client: Town of Huntersville NORTH CAROLINA

Architects: insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 034911 JAMES R. BAYSINGER 02/24/17

Issued for:

No.	Date	Description

0 2.5 5 10

Scale: 1" = 5'

Title:

MAIN STREET CROSS-SECTIONS

Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLS
Approved by: JRB

L9.21

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EXHIBIT B

Huntersville

Plan Sheet Is Part Of The Overall Approval As Of The Following Date
02/24/2017

9+50
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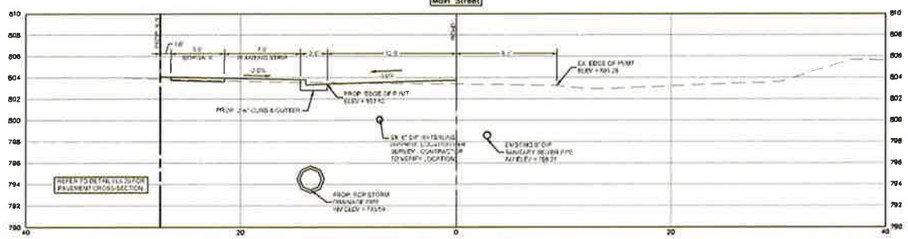

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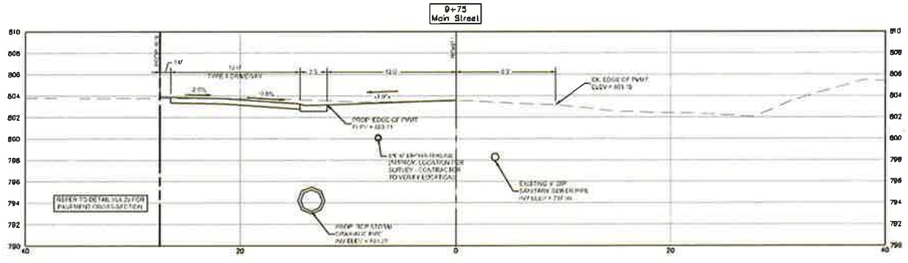

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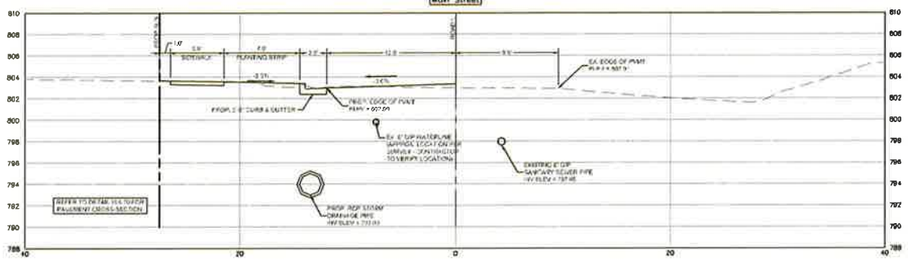

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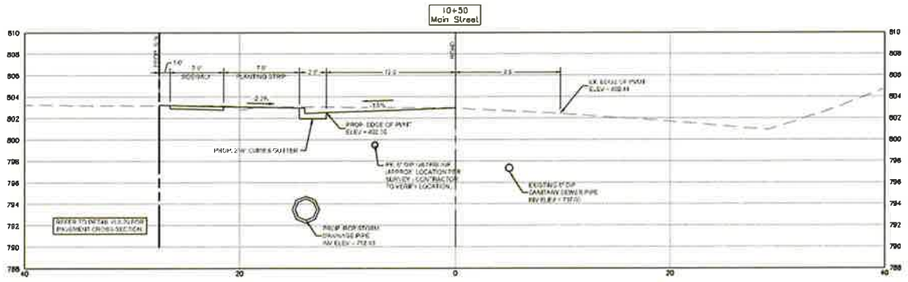

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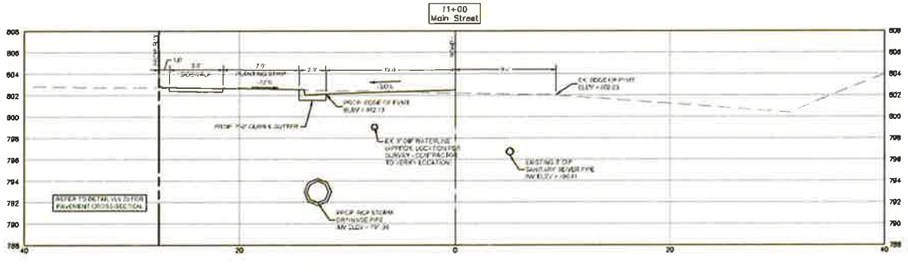

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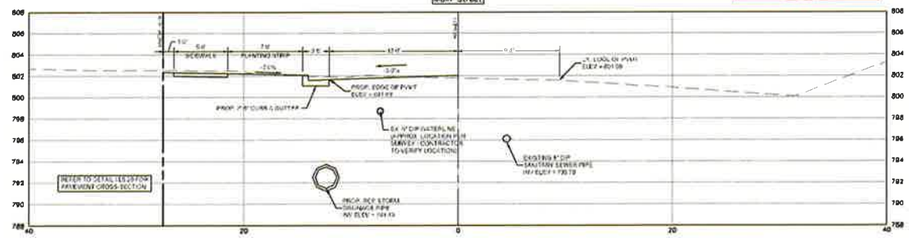

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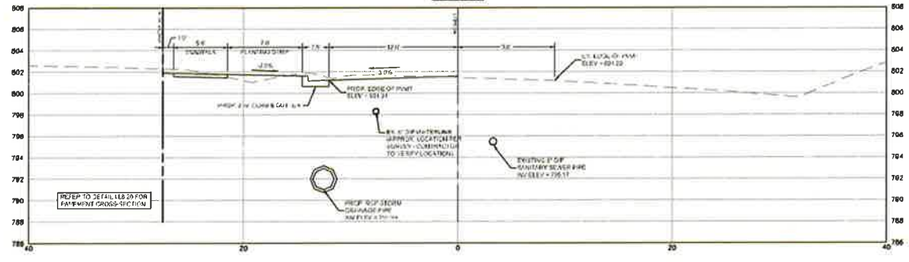

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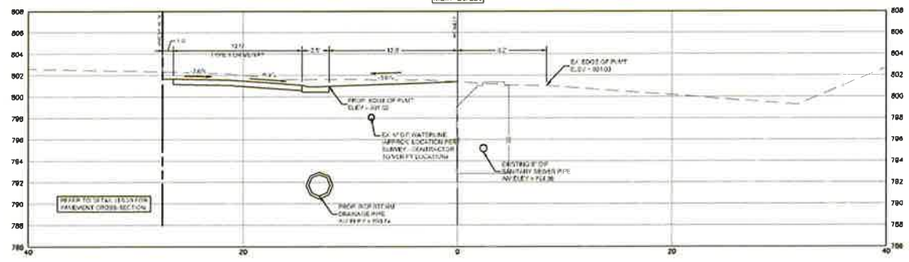

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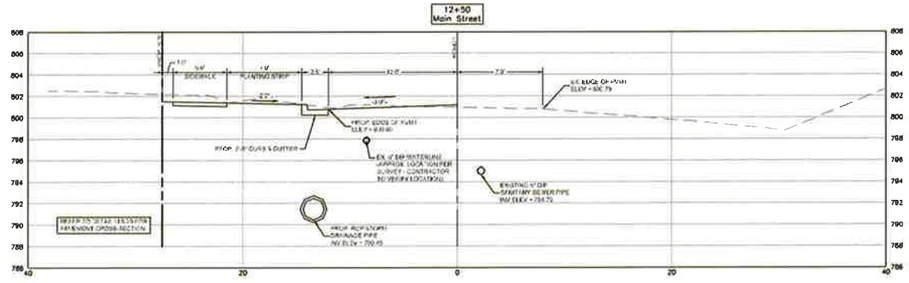

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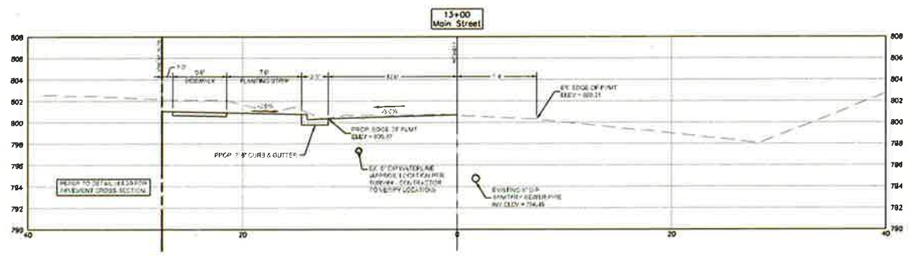

STEWART

Client:
Town of Huntersville
NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Sheet Index Map

Seal:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043193 JAMES R. BAYSINGER
02/03/17

Issued for:

No.	Date	Description

0 2.5 5 10
Scale: 1" = 5'

Title:
MAIN STREET CROSS-SECTIONS

Project number: X13034 Sheet:
Date: 09.21.2016
Drawn by: DLE
Approved by: JRB
L9.22

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EXHIBIT B

CODE DATA

2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS

a. Project Information

Name of Project: **Huntersville – "Icehouse" Outdoor Platform**
Address: **101 N Main Street, Huntersville** Zip Code: **28078**
Proposed Use: **A-5 (Covered outdoor platform, open on all sides)**
Owner/Authorized Agent: **Michael Jaycocks** Phone # **(704) 766-2210** E-Mail: **mjaycocks@huntersville.org**
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☒ City Huntersville ☒ County Mecklenburg ☐ State

b. Project Summary/ Alternative Means of Compliance

Building description: **New steel & heavy timber, framed canopy over elevated slab-on-grade platform for outdoor performances. The canopy covers approximately 1,000 square feet and is open on all sides.**

Does this project have air rights, easements, an assumed or deeded property line, no build easements or other circumstances similar to the aforementioned? Yes ____ No ☒ If yes, please provide a copy of the official documents.

c. Design Professional Information

LEAD DESIGN PROFESSIONAL: **Kristina Held – Insight Architects**

DESIGNER	FIRM	NAME	LIC #	TELEPHONE #	E-MAIL
Architectural	Insight Architects, PC	Kristina Held	10764	(704) 344-0415	kheld@insightarch.com
Civil	Stewart Engineering	James Baysinger	34638	(704) 334-7925	jbaysinger@stewartinc.com
Electrical	Optima Engineering	Brian Thompson	23494	(704) 338-1292	bthompson@optimaep.com
Fire Alarm	N/A				
Plumbing	N/A				
Mechanical	N/A				
Sprinkler	N/A				
Structural	Stewart Engineering	Lance Williams	26861	(704) 969-3520	lwilliams@stewartinc.com

d. Type of work being performed

What type of work is being performed?

☒ New Construction (A project from the site work through the completion of work required for tenant occupancy. This includes Shell Buildings)
☐ Addition (An Existing Building that is adding heated or unheated space. This could be an addition to the footprint or a vertical expansion)
☐ Upfit (First Time Interior Completions) (Upfit is the first time interior completion of a Single (never occupied) shell space in a newly constructed building. The applicant must provide a copy of the approved shell)
☐ Alteration/Renovation (Previously Occupied Space) This includes Change of Use

e. Code Data – NCSBC

Building Code: ☒ 2012 North Carolina State Building Code (NCSBC)
Check all that apply: ☒ New building ☐ Shell building ☐ First time interior completion (upfit) ☐ Addition

f. 2012 REHAB Code – N/A

g. Basic Building Data (Required information for all projects)

Construction Type(s) (Table 601) (check all that apply): ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV-HT ☐ V-A ☒ V-B
Sprinklers (Section 903): ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 07 ☐ NFPA 13R 07 ☐ NFPA 13D 07
Standpipes (Section 905): ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry NFPA 14 07
Fire Districts: ☒ No ☐ Yes (Primary) (Appendix D)
Flood Hazard Area (Appendix G): ☒ No ☐ Yes
Building Height (feet) 19'-6" (Table 503) Stories 1
Gross Building Area (Square Feet):

Floors	Existing	New	Sub-Total	Sub-Total
1st Floor	0	1,000	0	0
TOTAL	0	1,000	0	0

h. Allowable Area / Occupancy Classification

Occupancy(s): (Chapter 3)
Assembly (303) ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☒ A-5 (Covered outdoor platform, open on all sides)
Business (304) ☐ B
Educational (305) ☐ E
Factory (306) ☐ F-1 Moderate ☐ F-2 Low
Hazardous (307) ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional (308) ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile (309) ☐ M
Residential (310) ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage (311) ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous (312) ☐ U

Accessory Occupancies (≤ 10%): N/A

Incidental Uses: If applicable, areas with additional requirements (Table 508.2.5):
☐ Furnace room where any piece of equipment is over 400,000 Btu per hour input
☐ Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
☐ Refrigerant machine room
☐ Hydrogen cutoff rooms, not classified as Group H
☐ Incinerator rooms
☐ Paint shops, not classified as Group H, located in occupancies other than Group F
☐ Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
☐ Laundry rooms over 100 square feet
☐ Group I-3 cells equipped with padded surfaces
☐ Group I-2 waste and linen collection rooms
☐ Waste and linen collection rooms over 100 square feet
☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
☐ Rooms containing fire pumps ☐ Rooms containing Life Safety generator ☐ Rooms containing primary transformers
☐ Group I-2 storage rooms over 100 square feet
☐ Group I-2 commercial kitchens
☐ Group I-2 laundries equal to or less than 100 square feet
☐ Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: If Applicable ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☒ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421 ☐ 422 ☐ 423 ☐ 424 ☐ 425 ☐ 426 ☐ 427

Special Provisions: If Applicable ☐ 509.2 ☐ 509.3 ☐ 509.4 ☐ 509.5 ☐ 509.6 ☐ 509.7 ☐ 509.8 ☐ 509.9

Mixed Occupancy Use: (508.3) If Applicable ☒ No ☐ Yes Separation ____ Hr Exception ______
☐ Incidental Use Separation (508.2.5)
This separation is not exempt as a Non-Separated Use (see exceptions).
☐ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separated Use (508.4) – See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. If applicable to the project show details of each story and all occupancies classified with various footage.

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA	(C) AREA FOR FRONTAGE INCREASE	(D) AREA FOR SPRINKLER INCREASE	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA
1	A-5	1,000	UL	Not req'd	N/A	UL	UL

Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = ______ (F)
b. Total Building Perimeter = ______ (P)
c. Ratio (F/P) = ______ (F/P)
d. W = Minimum width of public way = ______ (W)
e. Percent of frontage increase I_f = [F/P − 0.25] × W/30 = ______ (%)
The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single story building I_s = 300 percent
Unlimited area applicable under conditions of Section 507.
Maximum Building Area = total number of stories in the building × E (506.4). Maximum of 3.
The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.1.5.

i. Allowable Height (Chapter 5)

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type V-B			
Building Height in Feet	40	N/A	19'-6"	
Building Height in Stories	1	N/A	1	

j. Fire Protection Requirements (Chapter 7)

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural frame, including columns, girders, trusses		0	0				
Bearing walls							
Exterior							
North	130'	N/A					
East	430'	N/A					
West	150'	N/A					
South	275'	N/A					
Interior		N/A					
Nonbearing walls and partitions							
Exterior walls							
North	130'	N/A					
East	130'	N/A					
West	450'	N/A					
South	150'	N/A					
Interior walls and partitions		N/A					
Floor construction including supporting beams and joists		0	0				
Roof construction including supporting beams and joists		0	0				
Shaft enclosures – Exit		N/A					
Shaft enclosures – Other		N/A					
Corridor Separation		N/A					
Occupancy Separation		N/A					
Party/Fire Wall Separation		N/A					
Smoke Barrier Separation		N/A					
Tenant Separation		N/A					
Incidental Use Separation		N/A					

* Indicate section number permitting reduction

k. Percentage of Wall Opening Calculations – N/A

l. Wall Legends

☐ Fire Walls 706 ☐ Fire Barriers 707 ☐ Shaft Enclosures 708 ☐ Fire Partitions 709 ☐ Smoke Barriers 710
☐ Smoke Partitions 711 ☒ No rated walls are present

m. Life Safety Systems (Existing or new systems)

Emergency Lighting (1006): ☐ No ☒ Yes
Exit Signs (1011): ☒ No ☐ Yes
Fire Alarm (907, NFPA 72-07): ☒ No ☐ Yes
Smoke Detection Systems (907): ☒ No ☐ Yes ☐ Partial ____
Panic Hardware (1008.1.10): ☒ No ☐ Yes
Life safety systems generator (2702.2): ☒ No ☐ Yes

n. Life Safety Plan check list for compliance

☐ Fire and/or smoke rated wall locations (Chapter 7)
☒ Assumed and real property line locations
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☒ Existing structures within 30' of the proposed building
☒ Occupancy types for each area as it relates to occupant load calculations (Table 1004.1.1)
☒ Occupant loads for each area
☒ Exit access travel distances (1016)
☐ Common path of travel distances (1014.3 & 1028.8)
☐ Dead end lengths (1018.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
☐ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor ceiling and or roof structure is provided for purposes of occupancy separation
☐ Location of doors with panic hardware (1008.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
☐ Location of doors with electromagnetic egress locks (1008.1.9.8)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1029)
☐ The square footage of each fire area (902)
☐ The square footage of each smoke compartment (407.4)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

o. Exit Requirements

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS REQUIRED (TABLE 1021.1)	SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (TABLE 1016.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS: REQUIRED DISTANCE BETWEEN EXITS	ACTUAL DISTANCE SHOWN ON PLANS
PLATFORM	2	2	200'	18'	23'	41'

OCCUPANT LOAD AND EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA SQ. FT.	(b) AREA PER OCCUPANT	(a)/(b) CALCULATED OCCUPANT LOAD	EGRESS WIDTH PER OCCUPANT: STAIR	LEVEL	EACH DOOR WIDTH (SECTION 1005.1): STAIR	LEVEL	ACTUAL WIDTH SHOWN ON PLANS: STAIR	LEVEL
Platform	766	15 NET	51	0.3	0.2	15.3"	10.2"	10'	10'

See Table 1004.1.1 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002).
Buildings with single exits in 1021.2; for exceptions (Table 1021.2).
Minimum stairway width (Section 1009.1); minimum corridor width (Section 1018.2); minimum door width (Section 1008.1.1).
See Section 1004.5 for converging exits.
The sum of the widths of egress shall not exceed the available capacity by less than 50 percent of the total required (Section 1005.1).
Assembly occupancies (Section 1025).
Spaces within occupancies or groups shall be calculated independently (i.e. Lobbies, lounges, break rooms, conference rooms).

p. Accessible Dwelling Units and sleeping units – N/A

q. Accessible Parking – Refer to Civil Drawings

r. Structural Design – Refer to Structural Drawings

s. Special Inspections – N/A

t. Plumbing Fixtures Requirements

Performance area will be utilized for special events only. In such events portable outdoor toilets will be utilized.

u. Special Approvals (if applicable to your project)

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)
Town of Huntersville zoning.

v. Energy Summary (New Construction, Addition, Change of use and upfits)

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Climate Zone: (North Carolina Energy Conservation Code NCECC 301.1) ☒ 3 ☐ 4 ☐ 5

THERMAL ENVELOPE: (NCECC Chapter 4 and/or 5) – N/A

MECHANICAL SUMMARY (NCECC 503) – N/A

ELECTRICAL SUMMARY (NCECC 505) – SEE ELECTRICAL DRAWINGS

ABBREVIATIONS

A	ACT	ACOUSTICAL CEILING TILE
	ADD	ADDENDUM
	ADH	ADHESIVE
	ADJ	ADJACENT
	A/C	AIR CONDITIONING
	ALT	ALTERNATE
	ALUM	ALUMINUM
	ANOD	ANODIZED
	APPROX	APPROXIMATE
	ARCH	ARCHITECTURAL
	ASPH	ASPHALT
	AUTO	AUTOMATIC
B	BD	BOARD
	BIT	BITUMINOUS
	BLDG	BUILDING
	BLK	BLOCK
	BLKG	BLOCKING
	BM	BENCH MARK
	BOT	BOTTOM
	BPL	BEARING PLATE
	BRG	BEARING
	BRK	BRICK
	BS	BOTH SIDES
	BSMT	BASEMENT
	BUR	BUILT-UP ROOF
	BVL	BEVELED
	BW	BOTH WAYS
C	CAB	CABINET
	CB	CATCH BASIN
	CEM	CEMENT
	CG	CORNER GUARD
	CHAM	CHAMFER
	CI	CAST IRON
	CIPC	CAST IN PLACE CONCRETE
	CJ	CONTROL JOINT
	CK	CAULK
	CL	CENTER LINE
	CLG	CEILING
	CLR	CLEAR
	CMB	CEMENTITIOUS BOARD
	CMU	CONCRETE MASONRY UNIT
	COL	COLUMN
	COMB	COMBINATION
	COMPO	COMPOSITION (COMPOSITE)
	COMPR	COMPRESS(ED), (ION), (IBLE)
	CONC	CONCRETE
	CONT	CONTINUOUS
	CORR	CORRUGATED
	CPT	CARPET(ED)
	CSMT	CASEMENT
	CST	CAST STONE
	CT	CERAMIC TILE
	CTB	CERAMIC TILE BASE
	CUFT	CUBIC FOOT
	CUYD	CUBIC YARD
D	DA	DOUBLE ACTING
	DEM	DEMOLISH, DEMOLITION
	DEP	DEPRESSED
	DET	DETAIL
	DF	DRINKING FOUNTAIN
	DH	DOUBLE HUNG
	DIA	DIAMETER
	DIAG	DIAGONAL
	DIM	DIMENSION
	DISP	DISPENSER
	DIV	DIVISION
	DR	DOOR
	DRB	DRAIN BOARD
	DRWG	DRAWING
	DS	DOWNSPOUT
	DT	DRAIN TILE
	DW	DUMBWAITER
	DWR	DRAWER
E	E	EAST
	EA	EACH
	EF	EACH FACE
	ELEC	ELECTRIC(AL)
	ELEV	ELEVATION
	EMER	EMERGENCY
	ENCL	ENCLOSE, ENCLOSURE
	EP	ELECTRICAL PANEL
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EST	ESTIMATE(D)
	EWC	ELECTRIC WATER COOLER
	EXH	EXHAUST
	EXIST	EXISTING
	EXP	EXPOSED
	EXT	EXTERIOR
F	FA	FIRE ALARM
	FBD	FIBERBOARD
	FD	FLOOR DRAIN
	FE	FIRE EXTINGUISHER
	FEC	FIRE EXTINGUISHER CABINET
	FFE	FINISHED FLOOR ELEVATION
	FGL	FIBERGLASS
	FHS	FIRE HOSE STATION
	FIN	FINISH(ED)
	FLCO	FLOOR CLEAN OUT
	FLR	FLOOR
	FLUOR	FLUORESCENT
	FLX	FLEXIBLE
	FN	FENCE
	FND	FOUNDATION
	FOC	FACE OF CONCRETE
	FOM	FACE OF MASONRY
	FOS	FACE OF STUD
	FPL	FLOOR PLATE
	FR	FRAME(D), (ING)
	FRT	FIRE RETARDANT TREATED
	FS	FLOOR SINK
	FTG	FOOTING
	FUR	FURRING, FURRED
	FV	FIELD VERIFY
G	GA	GAGE, GAUGE
	GB	GRAB BAR
	GALV	GALVANIZED
	GC	GENERAL CONTRACTOR
	GCMU	GLAZED CONCRETE MASONRY UNIT
	GD	GRADE, GRADING
	GI	GALVANIZED IRON
	GKT	GASKET(ED)
	GL	GLASS
	GLB	GLASS BLOCK
	GLF	GLASS FIBER
	GP	GALVANIZED PIPE
	GPL	GYPSUM LATH
	GPPL	GYPSUM PLASTER
	GPT	GYPSUM TILE
	GRAN	GRANITE
	GSS	GALVANIZED STEEL SHEET
	GST	GLAZED STRUCTURAL TILE
	GVL	GRAVEL
	GWB	GYPSUM WALL BOARD
H	HB	HOSE BIB
	HBD	HARDBOARD
	HC	HOLLOW CORE
	HDW	HARDWARE
	HEX	HEXAGONAL
	HM	HOLLOW METAL
	HOR	HORIZONTAL
	HT	HEIGHT
	HTG	HEATING
	HVAC	HEATING/VENTILATION/AIR CONDITIONING
	HWD	HARDWOOD
	HWH	HOT WATER HEATER
I	ID	INSIDE DIAMETER
	INCIN	INCINERATOR
	INCL	INCLUDE(D)(ING)
	IPS	IRON PIPE SIZE
	INSC	INSULATING CONCRETE
	INSF	INSULATING FILL
	INSUL	INSULATE(D), INSULATION
	INT	INTERIOR
	INV	INVERT
J	J	JOIST
	JC	JANITOR'S CLOSET
	JF	JOINT FILLER
	JT	JOINT
K	KIT	KITCHEN
	KO	KNOCK OUT
	KPL	KICK PLATE
L	L	LENGTH
	LAB	LABORATORY
	LAD	LADDER
	LB	LAG BOLT
	LBL	LABEL
	LAM	LAMINATE(D)
	LAV	LAVATORY
	LH	LEFT HAND
	LMS	LIMESTONE
	LS	LIGHT SWITCH
	LT	LIGHT
	LTL	LINTEL
	LVL	LEVEL
	LVR	LOUVER
	LW	LIGHTWEIGHT
	LWC	LIGHTWEIGHT CONCRETE
M	MAS	MASONRY
	MATL	MATERIAL(S)
	MAX	MAXIMUM
	MB	MARKER BOARD
	MBR	MEMBER
	MC	MECHANICAL CONTRACTOR
	MECH	MECHANICAL
	MED	MEDIUM
	MFD	METAL FLOOR DECK
	MFR	MANUFACTURER
	MH	MANHOLE
	MI	MALLEABLE IRON
	MIN	MINIMUM
	MISC	MISCELLANEOUS
	MO	MASONRY OPENING
	MOD	MODULAR
	MOV	MOVEABLE
	MRD	METAL ROOF DECK
	MRGWB	MOISTURE RESISTANT GYPSUM WALL BOARD
	MT	METAL THRESHOLD
	MTL	METAL
	MULL	MULLION
	MWK	MILLWORK
N	N	NORTH
	NA	NOT APPLICABLE
	NAT	NATURAL
	NC	NON COMBUSTIBLE
	NI	NICKEL
	NIC	NOT IN CONTRACT
	NL	NO LIMIT
	NOM	NOMINAL
	NR	NOISE REDUCTION
	NRC	NOISE REDUCTION COEFFICIENT
	NTS	NOT TO SCALE
O	OC	ON CENTER
	OD	OUTSIDE DIAMETER
	OH	OVERHEAD
	OJ	OPEN WEB JOIST
	OPG	OPENING
	OPH	OPPOSITE HAND
	OPP	OPPOSITE
R	RA	RETURN AIR
	RAD	RADIUS
	RB	RUBBER BASE
	RBT	RUBBER TILE
	RCP	REFLECTED CEILING PLAN
	RCT	REINFORCED CONCRETE
	RD	ROOF DRAIN
	REC	RECEPTACLE
	RE	REFER (TO)
	REF	REFRIGERATOR
	REG	REGISTER
	REINF	REINFORCED
	REM	REMOVE
	RES	RESILIENT
	REV	REVERSE (SIDE)
	RFG	ROOFING
	RFL	REFLECT ED, IVE
	RH	RIGHT HAND
	RO	ROUGH OPENING
	RM	ROOM
	ROW	RIGHT OF WAY
	RST	RUBBER STAIR TREAD
S	S	SOUTH
	SAN	SANITARY (SEWER)
	SC	SOLID CORE
	SCHED	SCHEDULE
	SECT	SECTION
	SERV	SERVING
	SHTHG	SHEATHING
	SHT	SHEET
	SIM	SIMILAR
	SPECS	SPECIFICATIONS
	SQ	SQUARE
	SQ FT	SQUARE FOOT
	SQ IN	SQUARE INCH
	SS	STAINLESS STEEL
	ST	STORM SEWER
	STA	STATION
	STCNC	STAINED CONCRETE
	STD	STANDARD
	STL	STEEL
	STOR	STORAGE
	STRUCT	STRUCTURE, STRUCTURAL
	SYM	SYMMETRIC
	SYN	SYNTHETIC
	SYS	SYSTEM
T	T	TREAD
	TB	TACKBOARD
	TBP	THROUGH BODY PORCELAIN
	THRES	THRESHOLD
	TOC	TOP OF CURB
	TOM	TOP OF MASONRY
	TOS	TOP OF STEEL
	TOW	TOP OF WALL
	TYP	TYPICAL
U	UC	UNDERCUT
	UNF	UNFINISHED
	UR	URINAL
V	VAR	VARNISH
	VERM	VERMICULITE
	VERT	VERTICAL
	VIN	VINYL
	VB	VINYL BASE
	VWC	VINYL WALL COVERING
	VCT	VINYL COMPOSITION TILE
	VT	VINYL TILE
W	W	WEST
	WB	WOOD BASE
	WC	WATER CLOSET
	WD	WOOD
	WF	WALL FABRIC
	WG	WIRE GLASS
	WH	WALL HUNG
	WHS	WHEEL STOP
	WI	WROUGHT IRON
	WIN	WINDOW
	W/O	WITHOUT
	WSCT	WAINSCOT
	WWF	WELDED WIRE FABRIC

DRAWING SYMBOLOGY

Symbol	Description
Drawing / Sheet	BUILDING SECTION INDICATOR
Drawing / Sheet	PLAN DETAIL INDICATOR
Drawing / Sheet / Drawing	INTERIOR ELEVATION INDICATOR
Drawing / Sheet	ELEVATION INDICATOR
	DOOR NUMBER RE: DOOR SCHEDULE
	PARTITION TYPE INDICATOR RE: PARTITION SCHEDULE
	REVISION
ROOM NAME / NUM	ROOM / SPACE INDICATOR: ROOM OR SPACE; ROOM NUMBER
	WINDOW TYPE RE: WINDOW SCHEDULE
	KEYNOTE RE: KEYNOTES ON SAME PAGE
A	SIGN TYPE RE: SIGN SCHEDULE
	EQUIPMENT BY OWNER RE: EQUIPMENT SCHEDULE
FEC	FIRE EXTINGUISHER CABINET LOCATION COORDINATE FINAL LOCATION W/ FIRE MARSHALL
	OCCUPANT LOAD OF ROOM/SPACE
	MAXIMUM LOAD OF EGRESS COMPONENT; EGRESS CAPACITY OF COMPONENT (WIDTH / 0.2 OR 0.3)
PH	PANIC HARDWARE
	1 HR FIRE BARRIER
	2 HR FIRE BARRIER
	3 HR FIRE BARRIER
	4 HR FIRE BARRIER

A1 KEY PLAN

Town of Huntersville NORTH CAROLINA
Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART
2305 S COLLEGE ST, STE 710
CHARLOTTE, NC 28212
T 704 334 7925
FIRM LICENSE # C-1051
www.stewartinc.com
PROJECT # X13034.00

Client:
Town of Huntersville NORTH CAROLINA

Architects:
insight ARCHITECTS

Project:
VETERANS PARK AT MAIN AND MAXWELL

Vicinity map:

Seal:
KRISTINA HELD CHARLOTTE, N.C. 09-21-16
INSIGHT ARCHITECTS, PC CHARLOTTE, N.C.

Issued for:

No	Date	Description

Scale: NTS

Title:
SYMBOLOGY, CODE SUMMARY & KEY PLAN

Project number: X13034
Date: 09.21.2016
Drawn by: KKH
Approved by: KKH
Sheet: **G002**

EXHIBIT B

SPECIFICATIONS

GENERAL REQUIREMENTS

1. The Contractor shall complete the Improvements in accordance with the working drawings and specifications. It is intended that the Contractor shall construct a complete and usable facility including all work mentioned in the plans and specifications and also all work which may be reasonably inferable from the contract documents as being necessary to produce the intended results. The intent of the contract documents is to include all labor, materials, equipment and any other items necessary for the proper execution and completion of the work.
2. All Contractors are responsible for inspecting the job site in detail to become familiar with existing and anticipated conditions that might affect the progress of construction.
3. The General Contractor is responsible for coordination of all work performed by others in connection with this contract including all utility companies and government authorities.
4. Parking must be confined to an area designated by the Owner. Coordinate parking and staging locations with the landlord and tenant prior to the start of activities.
5. The Contractor shall be responsible for any temporary facilities and temporary utilities required to construct this project. At no time should a contractor tap into an existing service. Temporary facilities must be removed from the site before the job is complete.
6. The tenant's General Contractor shall be responsible for each subcontractor removing and disposing of all tools, equipment, surplus material and rubbish.
7. Any damage to existing construction caused by the Contractor or his subcontractors shall be repaired to its original condition.
8. The Contractor shall furnish the tenant and the landlord maintenance and operating manuals and equipment guarantees for all water heaters, unit heaters, exhaust fans, HVAC equipment, electrical equipment, and any other equipment for which the manufacturer normally supplies operating manuals and/or equipment guarantees.

WOOD AND PLASTICS

1. All lumber shall be grade marked by the Southern Pine Inspection Bureau, the West Coast Lumbermen's Association or the American Plywood Association.
2. Any wood members exposed to external elements (e.g. wood members for roof curbs) or directly in contact with concrete slab on-grade are to be pressure treated wood.
3. Wood Preservative-Treated Materials:
   a. Preservative Treatment by Pressure Process: AWPA C2 (lumber) and AWPA C9 (plywood), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).
   b. Kiln-dry material after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
   c. Mark each treated item with the treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
   d. Application: Treat items indicated on Drawings, and the following:
      1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
      2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
4. Fasteners:
   a. General: Where carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
   b. Power Driven Fasteners: CABO NER-272.

STANDING SEAM METAL ROOFING

1. Submittals:
   a. Product Data: For each type of product.
   b. Shop Drawings: Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.
   c. Samples: Two 12" x 12" samples for each type of metal panel indicated.
2. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
3. Warranty: Provide five-year manufacturer warranty for water tightness of metal roofing. Warranty shall include 20-year warranty for degradation of metal finish.
4. Wind Uplift Resistance: Provide custom-fabricated sheet metal roofing capable of resisting design negative uplift pressure indicated on Drawings. Provide clips, fasteners, and clip spacing of type indicated and with capability to sustain, without failure, a load equal to 3 times the design negative uplift pressure.
5. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. AEP Span.
   b. Atas International.
   c. Berridge Manufacturing Co.
   d. MBCI; Div. of NCI Building Systems.
   e. McElroy Metal, Inc.
   f. Petersen Aluminum.
6. Standing Seam Roof Panels:
   a. Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1514.
   b. Metallic Coated Steel Sheet: Zinc-coated (galvanized) steel sheet complying with ASTM A 653/A 653M, G90 coating designation, or aluminum-zinc alloy-coated steel sheet complying with ASTM A 792/A 792M, Class AZ50 coating designation; structural quality. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
   c. Thickness: 24 gauge color steel.
   d. Exterior Finish: Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat.
   e. Color: selected by Architect from manufacturer's full range.
7. Underlayment Materials:
   a. Self-Adhering, High-Temperature Underlayment: Provide self-adhering, cold-applied, sheet underlayment, a minimum of 40 mils thick, consisting of slip resistant, polyethylene-film top surface laminated to a layer of butyl or SBS-modified asphalt adhesive, with release-paper backing. Provide primer when recommended by underlayment manufacturer.
      1. Thermal Stability: Stable after testing at 240 deg F (116 deg C); ASTM D 1970.
      2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F (29 deg C); ASTM D 1970.
   b. Slip Sheet: Manufacturer's recommended slip sheet, of type required for application.
8. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fascias, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.
   a. Gutters and Downspouts: Formed from same material as roof panels according to SMACNA's "Architectural Sheet Metal Manual." Finish color as selected by architect from manufacturer's full range.
   b. Joint Sealant: ASTM C 920; as recommended in writing by metal panel manufacturer.

MOISTURE PROTECTION

1. Joint Sealants:
   a. Elastomeric Sealant: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
      1. Multicomponent Nonsag Urethane Sealant:
      2. Pecora Corporation; Dynatrol II.
      3. Type and Grade: M (multicomponent) and NS (nonsag)
      4. Class: 50.
      5. Use Related to Exposure: NT (nontraffic).
      6. Uses Related to Joint Substrates: M,A, and, as applicable to joint substrates indicated, O.
   b. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

PAINTING

1. Extra Materials: Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
   a. Quantity: 5 percent, but not less than 1 gal. or 1 case, as appropriate, of each material and color applied.
2. Paint all exposed surfaces, except where these specifications or the Drawings indicate that the surface or material is not to be painted, the natural finish of the material is obviously intended or where the item is installed pre-finished. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces.
3. Labels: Do not paint over UL, FMG, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
4. All surface preparation, priming, and finish coats specified in this section are in addition to shop priming and any surface treatment specified elsewhere.
5. Products: Exterior Full Gloss Alkyd Enamel:
   a. Benjamin Moore; Impervo Enamel No. 133.
   b. ICI Dulux Paints; 4108-XXXX Devguard Alkyd Industrial Gloss Enamel.
   c. Pittsburgh Paints; 7-814 Pittsburgh Paints Industrial Gloss-Oil Exterior/Exterior Enamel.
   d. Sherwin-Williams; Industrial Enamel B54 Series.
6. Exterior Paint Schedule:
   a. Steel and Iron Substrates: Alkyd-Enamel Finish: 2 finish coats over a rust-inhibitive primer.
      1. Primer: Exterior ferrous-metal primer (not required on shop-primed items).
      2. Finish Coats: Exterior full-gloss alkyd enamel.
   b. Galvanized Metal Substrates: Alkyd Enamel Finish: 2 finish coats over a galvanized metal primer.
      1. Primer: Exterior galvanized metal primer.
      2. Finish Coats: Exterior full-gloss alkyd enamel.
   c. Aluminum: Alkyd Enamel Finish: Two finish coats over a primer.
      1. Primer: Exterior aluminum primer under alkyd finishes.
      2. Finish Coats: Exterior full-gloss alkyd enamel.

SIGNAGE

1. Submittals:
   a. Shop Drawings:
      1. Include fabrication and installation details and attachments to other work.
      2. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
      3. Show message list, typestyles, graphic elements, and layout for each sign.
      4. Show locations of electrical service connections.
      5. Include diagrams for power, signal, and control wiring.
   b. Samples: For each exposed product and for each color and texture specified.
2. Cast Characters: Characters with uniform faces, sharp corners, and precisely formed lines and profiles, and as follows:
   a. Character Material: Cast aluminum.
   b. Character Height: As indicated on the drawings.
   c. Integral Aluminum Finish: Anodized color as selected by Architect from full range of industry colors and color densities.
   d. Mounting: Concealed studs.
3. Panel Sign: Raised characters and graphics on a smooth background with uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:
   a. Material: Cast, etched or routed aluminum.
   b. Mounting: Concealed anchors.

Town of Huntersville NORTH CAROLINA

Plan Sheet Is Part Of The Overall Approval As Of The Following Date 02/24/2017

STEWART

Client:

Town of Huntersville NORTH CAROLINA

Architects:

insight ARCHITECTS

Project:

VETERANS PARK AT MAIN AND MAXWELL

Vicinity map

Seal:

Issued for:

No	Date	Description

Scale: N/A

Title:

ARCHITECTURAL SPECIFICATIONS

Project number: X1JC34 Sheet:
Date: 09.21.2016
Drawn by: VDC
Approved by: VDC

A001

EXHIBIT C

Special Provisions for Protection of Railway Interests

1. AUTHORITY OF RAILROAD ENGINEER AND SPONSOR ENGINEER:

   Norfolk Southern Railway Company, hereinafter referred to as "Railroad", and their authorized representative shall have final authority in all matters affecting the safe maintenance of railroad traffic including the adequacy of the foundations and structures supporting the railroad tracks. For Public Projects impacting the Railroad, the Railroad's Public Projects Engineer, hereinafter referred to as "Railroad Engineer", will serve as the authorized representative of the Railroad.

   The authorized representative of the Project Sponsor ("Sponsor"), hereinafter referred to as the "Sponsor's Engineer", shall have authority over all other matters as prescribed herein and in the Project Specifications.

   The Sponsor's Prime Contractor, hereinafter referred to as "Contractor" shall be responsible for completing any and all work in accordance with the terms prescribed herein and in the Project Specifications. These terms and conditions are subject to change without notice, from time to time in the sole discretion of the Railroad. Contractor must request from Railroad and follow the latest version of these provisions prior to commencing work.

2. NOTICE OF STARTING WORK:

   A. The Contractor shall not commence any work on railroad rights-of-way until he has complied with the following conditions:

      1. Signed and received a fully executed copy of the required Norfolk Southern Contractor Right of Entry Agreement.

      2. Given the Railroad written notice in electronic format to the Railroad Engineer, with copy to the Sponsor's Engineer who has been designated to be in charge of the work, at least ten days in advance of the date he proposes to begin work on Railroad rights-of-way.

      3. Obtained written approval from the Railroad of Railroad Protective Liability Insurance coverage as required by paragraph 14 herein. It should be noted that the Railroad does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for the Railroad to review.

      4. Obtained Railroad's Flagging Services as required by paragraph 7 herein.

      5. Obtained written authorization from the Railroad to begin work on Railroad's rights-of-way, such authorization to include an outline of specific conditions with which he must comply.

      6. Furnished a schedule for all work within the Railroad's rights-of-way as required by paragraph 7.B.1.

   B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be

notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

3. INTERFERENCE WITH RAILROAD OPERATIONS:

   A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad's operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service shall be deferred by the Contractor until the flagging service or inspection service required by the Railroad is available at the job site.

   B. Whenever work within Railroad's rights-of-way is of such a nature that impediment to Railroad's operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.

   C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Railroad's Division Engineer, such provisions is insufficient, either may require or provide such provisions as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Sponsor.

   D. "One Call" Services do not locate buried Railroad utilities. The contractor shall contact the Railroad's representative 2 days in advance of work at those places where excavation, pile driving, or heavy loads may damage the Railroad's underground facilities. Upon request from the Contractor or Sponsor, Railroad forces will locate and paint mark or flag the Railroad's underground facilities. The Contractor shall avoid excavation or other disturbances of these facilities. If disturbance or excavation is required near a buried Railroad facility, the contractor shall coordinate with the Railroad to have the facility potholed manually with careful hand excavation. The facility shall be protected by the Contractor during the course of the disturbance under the supervision and direction of the Railroad's representative.

4. TRACK CLEARANCES:

   A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. If temporary clearances are not shown on the project plans, the following criteria shall govern the use of falsework and formwork above or adjacent to operated tracks.

      1. A minimum vertical clearance of 22'-0" above top of highest rail shall be maintained at all times.

      2. A minimum horizontal clearance of 13'-0" from centerline of tangent track or 14'-0" from centerline of curved track shall be maintained at all times. Additional horizontal clearance may be required in special cases to be safe for operating conditions. This additional clearance will be as determined by the Railroad Engineer.

3. All proposed temporary clearances which are less than those listed above must be submitted to Railroad Engineer for approval prior to construction and must also be authorized by the regulatory body of the State if less than the legally prescribed clearances.

4. The temporary clearance requirements noted above shall also apply to all other physical obstructions including, but not limited to: stockpiled materials, parked equipment, placement or driving of piles, and bracing or other construction supports.

B. Before undertaking any work within Railroad right-of-way, and before placing any obstruction over any track, the Contractor shall:

1. Notify the Railroad's representative at least 72 hours in advance of the work.

2. Receive assurance from the Railroad's representative that arrangements have been made for flagging service as may be necessary.

3. Receive permission from the Railroad's representative to proceed with the work.

4. Ascertain that the Sponsor's Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

5. CONSTRUCTION PROCEDURES:

A. General:

1. Construction work and operations by the Contractor on Railroad property shall be:

a. Subject to the inspection and approval of the Railroad Engineer or their designated Construction Engineering Representative.

b. In accordance with the Railroad's written outline of specific conditions.

c. In accordance with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.

d. In accordance with these Special Provisions.

2. Submittal Requirements

a. The Contractor shall submit all construction related correspondence and submittals electronically to the Railroad Engineer.

b. The Contractor shall allow for 30 days for the Railroad's review and response.

c. All work in the vicinity of the Railroad's property that has the potential to affect the Railroad's train operations or disturb the Railroad's Property must be submitted and approved by the Railroad prior to work being performed.

d. All submittals and calculations must be signed and sealed by a registered engineer licensed in the state of the project work.

e. All submittals shall first be approved by the Sponsor's Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.

f. For all construction projects, the following submittals, but not limited to those listed below, shall be provided for review and approval when applicable:

(1) General Means and Methods
(2) Ballast Protection
(3) Construction Excavation & Shoring
(4) Pipe, Culvert, & Tunnel Installations
(5) Demolition Procedure
(6) Erection & Hoisting Procedure
(7) Debris Shielding or Containment
(8) Blasting
(9) Formwork for the bridge deck, diaphragms, overhang brackets, and protective platforms
(10) Bent Cap Falsework. A lift plan will be required if the contractor want to move the falsework over the tracks.

g. For Undergrade Bridges (Bridges carrying the Railroad) the following submittals in addition to those listed above shall be provided for review and approval:

(1) Shop Drawings
(2) Bearing Shop Drawings and Material Certifications
(3) Concrete Mix Design
(4) Structural Steel, Rebar, and/or Strand Certifications
(5) 28 day Cylinder Test for Concrete Strength
(6) Waterproofing Material Certification
(7) Test Reports for Fracture Critical Members
(8) Foundation Construction Reports

Fabrication may not begin until the Railroad has approved the required shop drawings.

h. The Contractor shall include in all submissions a detailed narrative indicating the progression of work with the anticipated timeframe to complete each task. Work will not be permitted to commence until the Contractor has provided the Railroad with a satisfactory plan that the project will be undertaken without scheduling, performance or safety related issues. Submission shall also provide a listing of the anticipated equipment to be used, the location of all equipment to be used and insure a contingency plan of action is in place should a primary piece of equipment malfunction.

B. Ballast Protection

1. The Contractor shall submit the proposed ballast protection system detailing the specific filter fabric and anchorage system to be used during all construction activities.

2. The ballast protection is to extend 25' beyond the proposed limit of work, be installed at the start of the project and be continuously maintained to prevent all contaminants from entering the ballast section of all tracks for the entire duration of the project.

C. Excavation:

1. The subgrade of an operated track shall be maintained with edge of berm at least 10'-0" from centerline of track and not more than 24-inches below top of rail. Contractor will not be required to make existing section meet this specification if substandard, in which case existing section will be maintained.

2. Additionally, the Railroad will require the installation of an OSHA approved handrail and orange construction safety fencing for all excavations of the Railroad right-of-way.

D. Excavation for Structures and Shoring Protection:

1. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material.

2. All plans and calculations for shoring shall be prepared, signed, and sealed by a Registered Professional Engineer licensed in the state of the proposed project, in accordance with Norfolk Southern's Overhead Grade Separation Design Criteria, subsection H.1.6.E-Construction Excavation (Refer to Norfolk Southern Public Projects Manual Appendix H). The Registered Professional Engineer will be responsible for the accuracy for all controlling dimensions as well as the selection of soil design values which will accurately reflect the actual field conditions.

3. The Contractor shall provide a detailed installation and removal plan of the shoring components. Any component that will be installed via the use of a crane or any other lifting device shall be subject to the guidelines outlined in section 5.G of these provisions.

4. The Contractor shall be required to survey the track(s) and Railroad embankment and provide a cross section of the proposed excavation in relation to the tracks.

5. Calculations for the proposed shoring should include deflection calculations. The maximum deflection for excavations within 18'-0" of the centerline of the nearest track shall be 3/8". For all other cases, the max deflection shall not exceed ½".

6. Additionally, the Railroad will require the installation of an OSHA approved handrail and orange construction safety fencing for all excavations of the Railroad right-of-way.

7. The front face of shoring located to the closest NS track for all shoring set-ups located in Zone 2 as shown on NS Typical Drawing No. 4 – Shoring Requirements (Appendix I) shall remain in place and be cut off 2'-0" below the final ground elevation. The remaining shoring in Zone 2 and all shoring in Zone 1 may be removed and all voids must be backfilled with flowable fill.

E. Pipe, Culvert, & Tunnel Installations

1. Pipe, Culvert, & Tunnel Installations shall be in accordance with the appropriate Norfolk Southern Design Specification as noted below:

    a. For Open Cut Method refer to Norfolk Southern Public Projects Manual Appendix H.4.6.
    b. For Jack and Bore Method refer to Norfolk Southern Public Projects Manual Appendix H.4.7.
    c. For Tunneling Method refer to Norfolk Southern Public Projects Manual Appendix H.4.8.

2. The installation methods provided are for pipes carrying storm water or open flow run-off. All other closed pipeline systems shall be installed in accordance Norfolk Southern's Pipe and Wire Program and the NSCE-8

F. Demolition Procedures

1. General

    a. Demolition plans are required for all spans over the track(s), for all spans adjacent to the track(s), if located on (or partially on) Railroad right-of-way; and in all situations where cranes will be situated on, over, or adjacent to Railroad right-of-way and within a distance of the boom length plus 15'-0" from the centerline of track.

    b. Railroad tracks and other Railroad property must be protected from damage during the procedure.

    c. A pre-demolition meeting shall be conducted with the Sponsor, the Railroad Engineer or their representative, and the key Contractor's personnel prior to the start of the demolition procedure.

    d. The Railroad Engineer or his designated representative must be present at the site during the entire demolition procedure period.

    e. Existing, obsolete, bridge piers shall be removed to a sufficient depth below grade to enable restoration of the existing/proposed track ditch, but in no case less than 2'-0" below final grade.

2. Submittal Requirements

    a. In addition to the submittal requirements outlined in Section 5.A.2 of these provisions, the Contractor shall submit the following for approval by the Railroad Engineer:

        (1) A plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other Railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.

(2) Rating sheets showing cranes or lifting devices to be adequate for 150% of the actual weight of the pick, including all rigging components. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted. Safety factors that may have been "built-in" to the crane charts are not to be considered when determining the 150% factor of safety.

(3) Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing structure showing complete and sufficient details with supporting data for the demolition the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and calculations.

(4) The Contractor shall provide a sketch of all rigging components from the crane's hook block to the beam. Catalog cuts or information sheets of all rigging components with their lifting capacities shall be provided. All rigging must be adequate for 150% of the actual weight of the pick. Safety factors that may have been "built-in" to the rating charts are not to be considered when determining the 150% factor of safety. All rigging components shall be clearly identified and tagged with their rated lifting capacities. The position of the rigging in the field shall not differ from what is shown on the final plan without prior review from the Sponsor and the Railroad.

(5) A complete demolition procedure, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.

(6) Design and supporting calculations for the temporary support of components, including but not limited to the stability of the superstructure during the temporary condition, temporary girder tie-downs and falsework.

3. Overhead Demolition Debris Shield

a. The demolition debris shield shall be installed prior to the demolition of the bridge deck or other relevant portions of the superstructure over the track area to catch all falling debris.

b. The demolition debris shield shall provide a minimum vertical clearance as specified in Section 4.A.1 of these provisions or maintain the existing vertical clearance if the existing clearance is less than that specified in Section 4.A.1.

c. The Contractor shall include the demolition debris shield installation/removal means and methods as part of the proposed Demolition procedure submission.

d. The Contractor shall submit the demolition debris shield design and supporting calculations for approval by the Railroad Engineer.

e. The demolition debris shield shall have a minimum design load of 50 pounds per square foot plus the weight of the equipment, debris, personnel, and other loads to be carried.

f. The Contractor shall include the proposed bridge deck removal procedure in its demolition means and methods and shall verify that the size and quantity of the demolition debris generated by the procedure does not exceed the shield design loads.

g. The Contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Railroad Engineer.

4. Vertical Demolition Debris Shield

a. A vertical demolition debris shield may be required for substructure removals in close proximity to the Railroad's track and other facilities, as determined by the Railroad Engineer.

G. Erection & Hoisting Procedures

1. General

a. Erection plans are required for all spans over the track(s), for all spans adjacent to the track(s), if located on (or partially on) Railroad right-of-way; and in all situations where cranes will be situated on, over, or adjacent to Railroad right-of-way and within a distance of the boom length plus 15'-0" from the centerline of track.

b. Railroad tracks and other Railroad property must be protected from damage during the erection procedure.

c. A pre-erection meeting shall be conducted with the Sponsor, the Railroad Engineer or their representative, and the key Contractor's personnel prior to the start of the erection procedure.

d. The Railroad Engineer or his designated representative must be present at the site during the entire erection procedure period.

e. For field splices located over Railroad property, a minimum of 50% of the holes for each connection shall be filled with bolts or pins prior to releasing the crane. A minimum of 50% of the holes filled shall be filled with bolts. All bolts must be appropriately tightened. Any changes to previously approved field splice locations must be submitted to the Railroad for review and approval. Refer to Norfolk Southern's Overhead Grade Separation Design Criteria for additional splice details (Norfolk Southern Public Projects Manual Appendix H.1, Section 4.A.3.).

2. Submittal Requirements

   a. In addition the submittal requirements outlined in Section 5.A.2 of these provisions, the Contractor shall submit the following for approval by the Railroad Engineer:

      (1) As-built beam seat elevations - All as-built bridge seats and top of rail elevations shall be furnished to the Railroad Engineer for review and verification at least 30 days in advance of the erection, to ensure that minimum vertical clearances as approved in the plans will be achieved.

      (2) A plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or staging locations shown. The location of all tracks and other Railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.

      (3) Rating sheets showing cranes or lifting devices to be adequate for 150% of the actual weight of the pick, including all rigging components. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted. Safety factors that may have been "built-in" to the crane charts are not to be considered when determining the 150% factor of safety.

      (4) Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the proposed structure showing complete and sufficient details with supporting data for the erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and calculations.

      (5) The Contractor shall provide a sketch of all rigging components from the crane's hook block to the beam. Catalog cuts or information sheets of all rigging components with their lifting capacities shall be provided. All rigging must be adequate for 150% of the actual weight of the pick. Safety factors that may have been "built-in" to the rating charts are not to be considered when determining the 150% factor of safety. All rigging components shall be clearly identified and tagged with their rated lifting capacities. The position of the rigging in the field shall not differ from what is shown on the final plan without prior review from the Sponsor and the Railroad.

      (6) A complete erection procedure, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.

      (7) Design and supporting calculations for the temporary support of components, including but not limited to temporary girder tie-downs and falsework.

H. Blasting:

1. The Contractor shall obtain advance approval of the Railroad Engineer and the Sponsor Engineer for use of explosives on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:

    a. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.

    b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way radios.

    c. No blasting shall be done without the presence of the Railroad Engineer or his authorized representative. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2.B) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.

    d. Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.

    e. The blasting Contractor shall have a copy of the approved blasting plan on hand while on the site.

    f. Explosive materials or loaded holes shall not be left unattended at the blast site.

    g. A seismograph shall be placed on the track shoulder adjacent to each blast which will govern the peak particle velocity of <u>two inches per second</u>. Measurement shall also be taken on the ground adjacent to structures as designated by a qualified and independent blasting consultant. The Railroad reserves the option to direct the placement of additional seismographs at structures or other locations of concern, without regard to scaled distance.

    h. After each blast, the blasting Contractor shall provide a copy of their drill log and blast report, which includes number of holes, depth of holes, number of decks, type and pounds of explosives used per deck.

    i. The Railroad may require top of rail elevations and track centers taken before, during and after the blasting and excavation operation to check for any track misalignment resulting from the Contractor's activities.

2. The Railroad representative will:

    a. Determine approximate location of trains and advise the Contractor the appropriate amount of time available for the blasting operation and clean up.

    b. Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these special provisions.

3. The Contractor must hire, at no expense to the Railroad, a qualified and independent blasting consultant to oversee the use of explosives. The blasting consultant will:

    a. Review the Contractor's proposed drilling and loading patterns, and with the blasting consultant's personnel and instruments, monitor the blasting operations.

    b. Confirm that the minimum amounts of explosives are used to remove the rock.

    c. Be empowered to intercede if he concludes that the Contractor's blasting operations are endangering the Railway.

    d. Submit a letter acknowledging that he has been engaged to oversee the entire blasting operation and that he approves of the blasting plan.

    e. Furnish copies of all vibration readings to the Railroad representative immediately after each blast. The representative will sign and date the seismograph tapes after each shot to verify the readings are for that specific shot.

    f. Advise the Railroad representative as to the safety of the operation and notify him of any modifications to the blasting operation as the work progresses.

4. The request for permission to use explosives on the Railroad's Right-of-Way shall include a blasting proposal providing the following details:

    a. A drawing which shows the proposed blasting area, location of nearest hole and distance to Railway structures, all with reference to the centerline of track.

    b. Hole diameter.

    c. Hole spacing and pattern.

    d. Maximum depth of hole.

    e. Maximum number of decks per hole.

    f. Maximum pounds of explosives per hole.

    g. Maximum pounds of explosives per delay.

    h. Maximum number of holes per detonation.

i. Type of detonator and explosives to be used. (Electronic detonating devices will not be permitted). Diameter of explosives if different from hole diameter.

j. Approximate dates and time of day when the explosives are to be detonated.

k. Type of flyrock protection.

l. Type and patterns of audible warning and all clear signals to be used before and after each blast.

m. A copy of the blasting license and qualifications of the person directly in charge of the blasting operation, including their name, address and telephone number.

n. A copy of the Authority's permit granting permission to blast on the site.

o. A letter from the blasting consultant acknowledging that he has been engaged to oversee the entire blasting operation and that he approves of the blasting plan.

p. In addition to the insurance requirements outlined in Paragraph 14 of these Provisions, A certificate of insurance from the Contractor's insurer stating the amount of coverage for XCU (Explosive Collapse and Underground Hazard) insurance and that XCU Insurance is in force for this project.

q. A copy of the borings and Geotechnical information or report.

I. Track Monitoring

1. At the direction of the Railroad Engineer, any activity that has the potential to disturb the Railroad track structure may require the Contractor to submit a detailed track monitoring program for approval by the Railroad Engineer.

2. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.

3. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Railroad Engineer for analysis.

4. If any movement has occurred as determined by the Railroad Engineer, the Railroad will be immediately notified. Railroad, at its sole discretion, shall have the right to immediately require all Contractor operations to be ceased and determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including the monitoring of corrective action of the Contractor will be at project expense.

J. Maintenance of Railroad Facilities:

1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor will promptly

repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.

2. If, in the course of construction, it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches or other drainage facilities shall be installed to maintain adequate drainage, as approved by the Railroad Engineer. Upon completion of the work, the temporary facilities shall be removed and the permanent facilities restored.

3. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

K. Storage of Materials and Equipment:

1. Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.

2. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

L. Cleanup:

1. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights-of-way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights-of-way in a neat condition satisfactory to the Railroad Engineer or his authorized representative.

6. DAMAGES:

A. The Contractor shall assume all liability for any and all damages to his work, employees, servants, equipment and materials caused by Railroad traffic.

B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

7. FLAGGING SERVICES:

A. Requirements:

1. Flagging services will not be provided until the Contractor's insurance has been reviewed & approved by the Railroad.

2. Under the terms of the agreement between the Sponsor and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are or are likely to be, working on the Railroad's right-of-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a Railroad structure or the Railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging.

3. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed.

4. For Projects exceeding 30 days of construction, Contractor shall provide the flagmen a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman's home terminal. The work area should provide access to two (2) electrical outlets for recharging radio(s), and a laptop computer; and have the ability to print off needed documentation and orders as needed at the field/site trailer. This should aid in maximizing the flagman's time and efficiency on the Project.

B. Scheduling and Notification:

1. The Contractor's work requiring Railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of 50 hours per week. The Contractor shall receive Railroad approval of work schedules requiring a flagman's presence in excess of 40 hours per week.

2. Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the Sponsor a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the Sponsor, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

3. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen are present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer

needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.

4. If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Sponsor or Railroad.

C. Payment:

1. The Sponsor will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction.

2. The estimated cost of flagging is the current rate per day based on a 10-hour work day. This cost includes the base pay for the flagman, overhead, and includes a per diem charge for travel expenses, meals and lodging. The charge to the Sponsor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.

3. Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 and 1/2 times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 and 1/2 times the normal rate.

4. Railroad work involved in preparing and handling bills will also be charged to the Sponsor. Charges to the Sponsor by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change. The above estimates of flagging costs are provided for information only and are not binding in any way.

D. Verification:

1. Railroad's flagman will electronically enter flagging time via Railroad's electronic billing system. Any complaints concerning flagging must be resolved in a timely manner. If the need for flagging is questioned, please contact the Railroad Engineer. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Sponsor's Engineer. Address all written correspondence electronically to Railroad Engineer.

2. The Railroad flagman assigned to the project will be responsible for notifying the Sponsor Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Sponsor's Engineer will document such notification in the project records. When requested, the Sponsor's Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

8. HAUL ACROSS RAILROAD TRACK:

    A. Where the plans show or imply that materials of any nature must be hauled across Railroad's track, unless the plans clearly show that the Sponsor has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad's track. The Contractor or Sponsor will be required to bear all costs incidental to such crossings whether services are performed by his own forces or by Railroad personnel.

    B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad unless specific authority for its installation, maintenance, necessary watching and flagging thereof and removal, until a temporary private crossing agreement has been executed between the Contractor and Railroad. The approval process for an agreement normally takes 90 days.

9. WORK FOR THE BENEFIT OF THE CONTRACTOR:

    A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the Sponsor and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Sponsor and/or the Railroad.

    B. Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

10. COOPERATION AND DELAYS:

    A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.

    B. No charge or claim of the Contractor against either the Sponsor or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of railroad traffic or for any delays due to compliance with these special provisions.

11. TRAINMAN'S WALKWAYS:

    A. Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each work day. If there is any excavation near the walkway, a handrail, with 10'-0" minimum clearance from centerline of track, shall be placed and must conform to AREMA and/or FRA standards.

12. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHT-OF-WAY:

    A. The Contractor and/or the Sponsor's personnel authorized to perform work on Railroad's property as specified in Section 2 above are not required to complete Norfolk Southern Roadway

Worker Protection Training; However the Contractor and the Sponsor's personnel must be familiar with Norfolk Southern's standard operating rules and guidelines, should conduct themselves accordingly, and may be removed from the property for failure to follow these guidelines.

B. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Wearing of safety boots is strongly recommended. In the vicinity of at-grade crossings, it is strongly recommended that reflective vests be worn.

C. No one is allowed within 25' of the centerline of track without specific authorization from the flagman.

D. All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.

E. No one is allowed to cross tracks without specific authorization from the flagman.

F. All welders and cutting torches working within 25' of track must stop when train is passing.

G. No steel tape or chain will be allowed to cross or touch rails without permission from the Railroad.

13. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHT-OF-WAY:

A. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from Railroad official and flagman.

B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

C. All employees will stay with their machines when crane or boom equipment is pointed toward track.

D. All cranes and boom equipment under load will stop work while train is passing (including pile driving).

E. Swinging loads must be secured to prevent movement while train is passing.

F. No loads will be suspended above a moving train.

G. No equipment will be allowed within 25' of centerline of track without specific authorization of the flagman.

H. Trucks, tractors or any equipment will not touch ballast line without specific permission from Railroad official and flagman. Orange construction fencing may be required as directed.

I. No equipment or load movement within 25' or above a standing train or Railroad equipment without specific authorization of the flagman.

J. All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.

K. All equipment, loads and cables are prohibited from touching rails.

L. While clearing and grubbing, no vegetation will be removed from Railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.

M. No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.

N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.

O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

P. Prior to performing any crane operations, the Contractor shall establish a single point of contact for the Railroad flagman to remain in communication with at all times. Person must also be in direct contact with the individual(s) directing the crane operation(s).

14. INSURANCE:

A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:

1. a. Commercial General Liability Insurance having a combined single limit of not less than $2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.

b. Automobile Liability Insurance with a combined single limit of not less than $1,000,000 each occurrence for injury to or death of persons and damage to or loss or destruction of property. Said policy or policies shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured and shall include a severability of interests provision.

2. Railroad Protective Liability Insurance having a combined single limit of not less than $2,000,000 each occurrence and $6,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of $5,000,000 each occurrence and $10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

The standards for the Railroad Protective Liability Insurance are as follows:

a. The insurer must be rated A- or better by A.M. Best Company, Inc.
NOTE: NS does not accept from insurers Chartis (AIG or Affiliated Company including Lexington Insurance Company), Hudson Group or Liberty or Affiliated Company, American Contractors Insurance Company and Erie Insurance Company including Erie Insurance Exchange and Erie Indemnity Company.

b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:
   (1) CG 00 35 01 96 and CG 28 31 10 93; or
   (2) CG 00 35 07 98 and CG 28 31 07 98; or
   (3) CG 00 35 10 01; or
   (4) CG 00 35 12 04; or
   (5) CG 00 35 12 07; or
   (6) CG 00 35 04 13.

c. The named insured shall read:

   Norfolk Southern Corporation and its subsidiaries
   Three Commercial Place
   Norfolk, Virginia 23510-2191
   Attn: S. W. Dickerson Risk Management

   (NOTE: Railroad does not share coverage on RRPL with any other entity on this policy)

d. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Sponsor project and contract identification numbers.

e. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. **NOTE: Do not include any references to milepost, valuation station, or mile marker on the insurance policy.**

f. The name and address of the prime Contractor must appear on the Declarations.

g. The name and address of the Sponsor must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."

h. Endorsements/forms that rea **required** are:

   (1) Physical Damage to Property Amendment
   (2) Terrorism Risk Insurance Act (TRIA) coverage must be included

i. Other endorsements/forms that will be accepted are:

(1) Broad Form Nuclear Exclusion – Form IL 00 21
(2) 30-day Advance Notice of Non-renewal or cancellation
(3) Required State Cancellation Endorsement
(4) Quick Reference or Index Form CL/IL 240

j. Endorsements/forms that are NOT acceptable are:
(1) Any Pollution Exclusion Endorsement except CG 28 31
(2) Any Punitive or Exemplary Damages Exclusion
(3) Known injury or Damage Exclusion form CG 00 59
(4) Any Common Policy Conditions form
(5) An Endorsement that limits or excludes Professional Liability coverage
(6) A Non-Cumulation of Liability or Pyramiding of Limits Endorsement
(7) An Endorsement that excludes TRIA coverage
(8) A Sole Agent Endorsement
(9) Any type of deductible endorsement or amendment
(10) Any other endorsement/form not specifically authorized in item no. 2.h above.

B. If any part of the work is sublet, similar insurance, and evidence thereof as specified in A.1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.

C. All insurance required under the preceding subsection A shall be underwritten by insurers and be of such form and content, as may be acceptable to the Company. Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Department at the address below for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Department at the addresses below, and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Department. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.

SPONSOR:

RAILROAD:
Risk Management
Norfolk Southern Railway Company
Three Commercial Place
Norfolk, Virginia 23510-2191

D. The insurance required herein shall in no way serve to limit the liability of Sponsor or its Contractors under the terms of this agreement.

E. Insurance Submission Procedures

1. Railroad will only accept initial insurance submissions via US Mail or Overnight carrier to the address noted in C above. Railroad will NOT accept initial insurance submissions via email or faxes. **Please provide point of contact information with the submission including a phone number and email address.**

2. Railroad requires the following two (2) forms of insurance in the initial insurance submission to be submitted under a cover letter providing details of the project and contact information:

    a. The full original or certified true countersigned copy of the railroad protective liability insurance policy in its entirely inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements.

    b. The Contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of $2M per occurrence of general and $1M per occurrence of automobile liability insurance naming Norfolk Southern Railway Company, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.

3. It should be noted that the Railroad does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for the Railroad to review.

15. FAILURE TO COMPLY:

    A. In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:

        1. The Railroad Engineer may require that the Contractor vacate Railroad property.

        2. The Sponsor's Engineer may withhold all monies due the Contractor on monthly statements.

    B. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Sponsor's Engineer.

16. PAYMENT FOR COST OF COMPLIANCE:

    A. No separate payment will be made for any extra cost incurred on account of compliance with these special provisions. All such costs shall be included in prices bid for other items of the work as specified in the payment items.

17. PROJECT INFORMATION

    A. Date: **March 7, 2017**
    B. NS File No.: **BR1112186**
    C. NS Milepost: **O-15.14**
    D. Sponsor's Project No.: _____

CONTRACTOR WORKING ON BEHALF OF PROJECT SPONSOR
COSTS REIMBURSED BY PROJECT SPONSOR
NS FILE: BR1112186

NORFOLK SOUTHERN
CONTRACTOR RIGHT OF ENTRY AGREEMENT

WHEREAS, _____ ("Principal") has requested that Norfolk Southern Railway Company ("Company") permit Principal to be on or about Company's premises and/or facilities at or in the vicinity of Company Milepost O-15.14 at or near Huntersville, Mecklenburg County North Carolina (the "Premises") for the sole purpose of installing , by jack and bore, a storm drainage pipe for the Veterans Park Improvements and improvements to the existing Main Street, on behalf of the Town of Huntersville (the "Project Sponsor") during the period _____, 20____, to _____, 20____ (the "Right of Entry").

WHEREAS, Company is willing to grant the Right of Entry subject to the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the parties hereby agree as follows.

Company hereby grants Principal the Right of Entry. The Right of Entry shall extend to Principal and to subcontractors and other entities affiliated with Principal who are specifically approved for entry by authorized representatives of Company in writing, as well as to the officers and employees of the foregoing (collectively "Licensees"). The Right of Entry shall apply to those portions of the Premises, and to such equipment, machinery, rolling stock and other personal property and fixtures belonging to Company or otherwise located on the Premises, only to the extent specifically designated and approved in writing by authorized representatives of Company (collectively, "Designated Property").

Principal agrees:

(i) that Licensees' access to the Premises shall be limited to the Designated Property and that Principal shall be liable and fully responsible for all actions of Licensees while on the Premises pursuant to the Right of Entry;

(ii) that Licensees shall (a) be subject to Company's direction when upon the Premises, and (b) be subject to Company's removal from the Premises, in Company's sole discretion, due to negligence, misconduct, unsafe actions, breach of this agreement or the failure to act respectfully, responsibly, professionally, and/or in a manner consistent with Company's desire to minimize risk and maintain its property with maximum security and minimum distractions or disruptions or for any other lawful reason;

(iii) that Licensees shall perform all work with such care, diligence and cooperation with Company personnel as to reasonably avoid accidents, damage or harm to persons or property and delays or interference with the operations of any Company's facilities and in accordance with Company's "Special Provisions for Protection of Railway Interest", attached and incorporated herein.

(iv) to give Company's officer signing this agreement, or his or her authorized representative, advance notification of the presence of Licensees on Designated Property in accordance with Company's "Special Provisions for Protection of Railway Interest";

(v) to indemnify and save harmless Company, its officers, agents and employees from and against any and all claims, demands, losses, suits, judgments, costs, expenses (including without limitation reasonable attorney's fees) and liability resulting from (a) injury to or death of any person, including without limitation the Licensees, and damage to or loss of any property, including without limitation that belonging to or in the custody of Licensees

(the "Licensee Property"), arising or in any manner growing out of the presence of either the Licensees or the Licensee Property, or both, on or about the Premises, regardless of whether negligence on the part of Company, its officers, agents or employees caused or contributed to said loss of life, personal injury or property loss or damage in whole or in part; (b) any alleged violation of any law, statute, code, ordinance or regulation of the United States or of any state, county or municipal government (including, without limitation, those relating to air, water, noise, solid waste and other forms of environmental protection, contamination or pollution or to discrimination on any basis) that results in whole or in part, directly or indirectly, from the activities of Licensees related in any way to their presence on the Premises or from any other act or omission of Licensees contributing to such violation, regardless of whether such activities, acts or omissions are intentional or negligent, and regardless of any specification by Company without actual knowledge that it might violate any such law, statute, code, ordinance or regulation; (c) any allegation that Company is an employer or joint employer of a Licensee or is liable for related employment benefits or tax withholdings; or (d) any decision by Company to bar or exclude a Licensee from the Premises pursuant to subsection (ii)(b) above;

(vi) to have and keep in effect the appropriate kinds of insurance as listed in the Company's "Special Provisions for Protection of Railway Interest, with insurance companies satisfactory to Company, during the entire time Licensees or Licensee Property, or both, is on the Premises: and to provide certificates of insurance showing the foregoing coverage, as well as any endorsements or other proper documentation showing and any change or cancellations in the coverage to the Company officer signing this agreement or to his or her authorized representative;

(vii) to reimburse Company for any costs not covered under the existing project agreement between the Company and the Project Sponsor, including any material, labor, supervisory and protective costs (including flagging) and related taxes and overhead expenses required or deemed necessary by Company because of the presence of either Licensees or Licensee Property on the Premises;

(viii) to exercise special care and precautions to protect the Premises and equipment, machinery, rolling stock and other personal property and fixtures belonging to Company or otherwise located on the Premises (whether or not constituting Designated Property) and to avoid interference with Company's operations;

(ix) to not create and not allow drainage conditions which would be adverse to the Premises or any surrounding areas;

(x) to refrain from the disposal or release of any trash, waste, and hazardous, dangerous or toxic waste, materials or substances on or adjacent to the Premises and to clean up or to pay Company for the cleanup of any such released trash, waste, materials or substances; and

(xi) to restore the Premises and surrounding areas to its original condition or to a condition satisfactory to the Company officer signing this agreement or to his or her authorized representative (ordinary wear and tear to rolling stock and equipment excepted) upon termination of Licensees' presence on the Premises.

As a part of the consideration hereof, Principal further hereby agrees that Company shall mean not only Norfolk Southern Railway Company but also Norfolk Southern Corporation and any and all subsidiaries and affiliates of Norfolk Southern Railway Company or Norfolk Southern Corporation, and that all of Principal's indemnity commitments in this agreement in favor of Company also shall extend to and indemnify Norfolk Southern Corporation and any subsidiaries and affiliated companies of Norfolk Southern Railway Company or Norfolk Southern Corporation and its and/or their directors, officers, agents and employees.

It is expressly understood that the indemnification obligations set forth herein cover claims by Principal's employees, agents, independent contractors and other representatives, and Principal expressly waives any defense to or immunity from such indemnification obligations and/or any subrogation rights available under any applicable state constitutional provision, laws, rules or regulations, including, without limitation, the workers' compensation laws of any state. Specifically, (i) in the event that all or a portion of the Premises is located in the State of Ohio, the following provision shall be applicable: "Principal, with respect to the indemnification provisions contained herein, hereby expressly waives any defense or immunity granted or afforded it pursuant to Section 35, Article II of the Ohio Constitution and Section 4123.74 of the Ohio Revised Code"; and (ii) in the event that all or a portion of the Premises is located in the Commonwealth of Pennsylvania, the following provision shall be applicable: "Principal, with respect to the indemnification provisions contained herein, hereby expressly waives any defense or immunity granted or afforded it pursuant to the Pennsylvania Workers' Compensation Act, 77 P.S. 481".

This agreement shall be governed by the internal laws of the Commonwealth of Virginia, without regard to otherwise applicable principles of conflicts of laws. If any of the foregoing provisions is held for any reason to be unlawful or unenforceable, the parties intend that only the specific words found to be unlawful or unenforceable be severed and deleted from this agreement and that the balance of this agreement remain a binding enforceable agreement to the fullest extent permitted by law.

This agreement may be amended only in a writing signed by authorized representatives of the parties.

_____ Name of Principal	NORFOLK SOUTHERN RAILWAY COMPANY
By_____	By_____
Title _____	Title _____
Date _____, 20____	Date _____, 20_____

EXHIBIT D

FORCE ACCOUNT ESTIMATE

Work to be Performed By:	Norfolk Southern Railway Company
For the Account of:	Town of Huntersville, NC
Project Description:	Verterans Park Stormdrain Jack and Bore
Location:	Huntersville, Mecklenburg County, North Carolina
Project No.:	X13034
Milepost:	O-15.14
File:	BR1112186
Date:	March 7, 2107

SUMMARY

ITEM A - Preliminary Engineering		0
ITEM B - Construction Engineering		20,115
ITEM C - Accounting		2,348
ITEM D - Flagging Services		14,791
ITEM E - Communications Changes		0
ITEM F - Signal & Electrical Changes		0
ITEM G - Track Work		0
ITEM H - T-Cubed		0
GRAND TOTAL	**$**	**37,254**

ITEM A - Preliminary Engineering

(Review plans and special provisions,
prepare estimates, etc.)

Labor:	0 Hours @ $60 / hour=	0
Labor Additives:		0
Travel Expenses:		0
Services by Contract Engineer:		0
NET TOTAL - ITEM A		$ -

EXHIBIT D

ITEM B - Construction Engineering

(Coordinate Railway construction activities,
review contractor submittals, etc.)

Labor:	30 Hours @ $60 / hour=		1,800
Labor Additives:			1,415
Travel Expenses:			1,000
Services by Contract Engineer:			15,900
	NET TOTAL - ITEM B	$	20,115

ITEM C - Administration

Agreement Construction, Review and/or Handling:			1,250
Accounting Hours (Labor):	20 Hours @ $30 / hour=		600
Accounting Additives:			498
	NET TOTAL - ITEM C	$	2,348

ITEM D - Flagging Services

(During construction on, over,
under, or adjacent to the track.)

Labor:	Flagging Foreman		
	15 days @ 310.00 per day=		4,650
	(based on working 1 shifts 10 hours/day)		
Labor Additive:			8,641
Travel Expenses, Meals & Lodging:			
	15 1 shifts a day @ $100/day=		1,500
Rental Vehicle	0 months @ $950/month=		0
	NET TOTAL - ITEM D	$	14,791

ITEM E - Communications Changes

Material:			0
Labor:			0
Purchase Services:			0
Subsistence:			0
Additive:			0
	NET TOTAL - ITEM E	$	-

EXHIBIT D

ITEM F - Signal & Electrical Changes

Material:		0
Labor:		0
Purchase Services:		0
Other:		0
	NET TOTAL - ITEM F	$ -

ITEM G - Track Work

Material:	(see attached summary)	0
Labor:	(see attached summary)	0
Additive:	(see attached summary)	0
Purchase Services:	(see attached summary)	0
	NET TOTAL - ITEM G	$ -

ITEM H - T-CUBED

Lump Sum $ -

NOTES

1. For all groups of CONTRACT employees, the composite labor surcharge rate used in this estimate (including insurance) is **185.82%**. Self Insurance - Public Liability Property Damage is estimated at 16.00%. Work will be billed at actual current audited rate in effect at the time the services are performed.

2. For all groups of NON-CONTRACT employees, the composite labor surcharge rate used in this estimate (including insurance is **78.59**%. Self Insurance - Public Liability Property Damage is estimated at 16.00%. Work will be billed at actual current audited rate in effect at the time the services are performed.

3. All applicable salvage items due the Department will be made available to it at the jobsite for its disposal.

4. The Force Account Estimate is valid for one (1) year after the date of the estimate (03/07/2107). If the work is not performed within this time frame the Railway may revise the estimate to (1) include work not previously indicated as necessary and (2) reflect changes in cost to perform the force account work.

FORCE ACCOUNT ESTIMATE

Work to be Performed By:	Norfolk Southern Railway Company
For the Account of:	Town of Huntersville, NC
Project Description:	Verterans Park Stormdrain Jack and Bore
Location:	Huntersville, Mecklenburg County, North Carolina
Project No.:	X13034
Milepost:	O-15.14
File:	BR1112186
Date:	March 7, 2107

SUMMARY

ITEM A - Preliminary Engineering		0
ITEM B - Construction Engineering		20,115
ITEM C - Accounting		2,348
ITEM D - Flagging Services		14,791
ITEM E - Communications Changes		0
ITEM F - Signal & Electrical Changes		0
ITEM G - Track Work		0
ITEM H - T-Cubed		0
GRAND TOTAL	**$**	**37,254**

ITEM A - Preliminary Engineering

(Review plans and special provisions,
prepare estimates, etc.)

Labor:	0 Hours @ $60 / hour=	0
Labor Additives:		0
Travel Expenses:		0
Services by Contract Engineer:		0
NET TOTAL - ITEM A		$ -

ITEM B - Construction Engineering

(Coordinate Railway construction activities,
review contractor submittals, etc.)

Labor:	30 Hours @ $60 / hour=		1,800
Labor Additives:			1,415
Travel Expenses:			1,000
Services by Contract Engineer:			15,900
	NET TOTAL - ITEM B	$	20,115

ITEM C - Administration

Agreement Construction, Review and/or Handling:			1,250
Accounting Hours (Labor):	20 Hours @ $30 / hour=		600
Accounting Additives:			498
	NET TOTAL - ITEM C	$	2,348

ITEM D - Flagging Services

(During construction on, over,
under, or adjacent to the track.)

Labor:	Flagging Foreman		
	15 days @ 310.00 per day=		4,650
	(based on working 1 shifts 10 hours/day)		
Labor Additive:			8,641
Travel Expenses, Meals & Lodging:			
	15 1 shifts a day @ $100/day=		1,500
Rental Vehicle	0 months @ $950/month=		0
	NET TOTAL - ITEM D	$	14,791

ITEM E - Communications Changes

Material:			0
Labor:			0
Purchase Services:			0
Subsistence:			0
Additive:			0
	NET TOTAL - ITEM E	$	-

ITEM F - Signal & Electrical Changes

Material:		0
Labor:		0
Purchase Services:		0
Other:		0
	NET TOTAL - ITEM F	$ -

ITEM G - Track Work

Material:	(see attached summary)	0
Labor:	(see attached summary)	0
Additive:	(see attached summary)	0
Purchase Services:	(see attached summary)	0
	NET TOTAL - ITEM G	$ -

ITEM H - T-CUBED

Lump Sum $ -

NOTES

1. For all groups of CONTRACT employees, the composite labor surcharge rate used in this estimate (including insurance) is **185.82%**. Self Insurance - Public Liability Property Damage is estimated at 16.00%. Work will be billed at actual current audited rate in effect at the time the services are performed.

2. For all groups of NON-CONTRACT employees, the composite labor surcharge rate used in this estimate (including insurance is **78.59**%. Self Insurance - Public Liability Property Damage is estimated at 16.00%. Work will be billed at actual current audited rate in effect at the time the services are performed.

3. All applicable salvage items due the Department will be made available to it at the jobsite for its disposal.

4. The Force Account Estimate is valid for one (1) year after the date of the estimate (03/07/2107). If the work is not performed within this time frame the Railway may revise the estimate to (1) include work not previously indicated as necessary and (2) reflect changes in cost to perform the force account work.