
LOCAL HISTORIC DISTRICT: Fourth Ward

PROPERTY ADDRESS: 214 North Graham Street

SUMMARY OF REQUEST: Retaining Wall

APPLICANT: Roger Stacks

Details of Proposed Request

Existing Conditions

The existing site is a surface parking lot at the corner of North Graham Street and West 5th Street. The existing concrete block retaining wall is failing and needs to be replaced.

Proposal

The proposal is a new retaining wall constructed of modular concrete block. Retaining walls can be approved administratively if traditional materials are used.

Policy & Design Guidelines – Landscape and Site Features, page 60

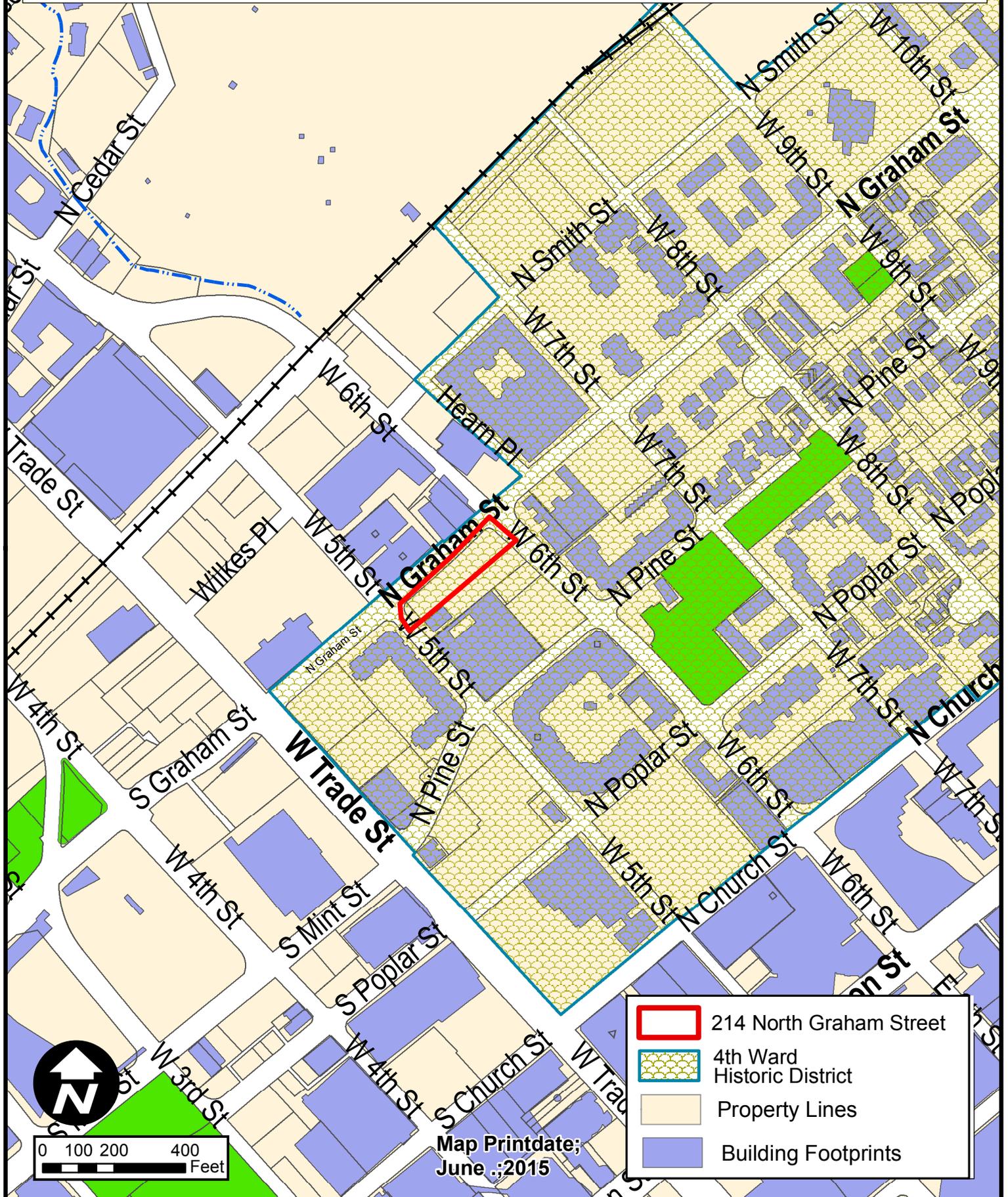
1. Inspiration for the design of these structures should be drawn from similar historic structures found in the Local Historic District.
2. Not all landscape structures are appropriate for every lot in the Local Historic District; a retaining wall is not suitable for a flat lot.
3. Historic precedents indicate appropriate materials such as stone, brick and concrete.
4. Historic site features are considered integral parts of Local Historic District properties, and cannot be removed without the review of the HDC or its Staff.
5. Walks and walkways in front and side yards or those that are substantially visible from the street should follow the historic design precedents of their environment.
6. Certain modern materials for landscape and site features are not allowed without the approval of the Historic District Commission.
 - Interlocking concrete block
 - Treated landscaping timbers
 - Railroad ties
 - Pre-fabricated lattice

Staff Analysis

The Commission will determine if an exception is appropriate for this proposal.

Charlotte Historic District Commission - Case 2015-092

Historic District; 4th Ward



-  214 North Graham Street
-  4th Ward Historic District
-  Property Lines
-  Building Footprints

Map Printdate:
June ., 2015

**2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS**



Project Information – Retaining Wall at 5th & Graham

Name of Project: Retaining Wall at 5th & Graham
 Address: 420 West 5th Street, Charlotte, NC Zip Code 28202
 Proposed Use: Provide for elevation difference between two parking lots
 Owner/Authorized Agent: Preferred Parking Phone # (704) 375-0827 E-Mail info@preferredparking.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City Charlotte County State

Project Summary
 Building description: Segmental block retaining wall. No building involved in scope of work.

Scope of work details: (If phased construction, please see [plan submittal guidelines](#) for submittal requirements.)
 Demolish and dispose of existing tops and retaining wall. Construct new segmental block retaining wall.
 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.

Renovation projects only: Not Applicable
 Alternative Means of Compliance/Engineering Judgement: Not Applicable

- Industrial equipment with declaration document attached.
 RTAP (Revisions to approved plans.)

Design Professional Information

LEAD DESIGN PROFESSIONAL: Sheats Consulting PLLC

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	None			()	
Civil	None			()	
Electrical	None			()	
Fire Alarm	None			()	
Plumbing	None			()	
Mechanical	None			()	
Sprinkler-Standpipe	None			()	
Structural	Sheats Consulting PLLC	Gary W. Sheats	NC 12361	(704) 261-6311	gary.sheats@vshoo.com
Retaining Walls > 5' High Sheats Consulting PLLC	Gary W. Sheats	Gary W. Sheats	NC 12361	(704) 261-6311	gary.sheats@vshoo.com
Other:				()	

Type of work being performed

- What type of work is being performed?
 New Construction
 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 Completion)

The applicant must provide a copy of the approved shell

- Alteration: (Previously Occupied Space) This includes Change of Use.

Code Information- NCSBC

- Building Code: 2012 North Carolina State Building Code (NCSBC)
 2012 Chapter 34 (attach summary per section b)
 1995 Existing Building Code Vol. 9

- New Building: New building Shell building
 First time interior completion (upfit)
 Addition

- Existing Building: Change of use/occupancy
 Building/tenant space interior completion (Alteration / Renovation)

Year of construction _____ Previous use _____

Alteration/Renovations projects: Not Applicable

Basic Building Data – Not Applicable

- Construction Type: (Table 601) I-A II-A III-A IV V-A
 (check all that apply) I-B II-B III-B V-B
 Sprinklers: (Chapter 9) No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: (Section 905) No Yes Class I II III Wet Dry
 Fire District: <http://charmeck.org/city/charlotte/Fire/Pages/default.aspx> No Yes (Primary)
 Flood Hazard Area: (Appendix G) No Yes
 Building Height: (feet) _____ (Table 503)
 Gross Building Area: _____

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6 th Floor			
5 th Floor			
4 th Floor			
3 rd Floor			
2 nd Floor			
Mezzanine			
1 st Floor			
Basement			
TOTAL			

Allowable Area / Occupancy Classification – Not Applicable

- Occupancy: (Chapter 3)
 Assembly (303) A-1 A-2 A-3 A-4 A-5
 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-5
 1-3 Condition
 Mercantile (309) M
 Residential (310) R-1 R-2 R-3 R-4
 Storage (311) S-1 Moderate S-2 Low High-piled
 Utility and Miscellaneous (312) U Open Enclosed Repair Garage

Allowable Height (Chapter 5) – Not Applicable

Type of Construction	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet	Type _____		Type _____	
Building Height in Stories		Feet = H + 20' = _____		
		Stories = I = _____		

Fire Protection Requirements (Chapter 7) – Not Required

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (OR REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structure Frame, including columns, girders, trusses							
Bearing Walls (see section k. (601 - 602) if used)							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions (see section k.(601 - 602) if used)							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction including supporting beams and joists							
Roof Construction including supporting beams and joists							
Shaft Enclosures - Ext							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Separation							
Party-Fire Wall Separation							
Smoke Barrier Separation							
Tenant Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

Life Safety Systems

- Emergency Lighting: (S1006) No Yes
 Exit Signs: (S1011) No Yes
 Fire Alarm: (S907, NFPA 72-07) No Yes
 Smoke Detection Systems: (S907) No Yes Partial
 Panic Hardware: (S1008.1.10) No Yes

Structural Design

DESIGN LOADS:
 Importance Factors: (ASCE/SEI 7-05- 11.5) Wind 1.0
 Snow 1.0
 Seismic 1.0
 Live Loads: Roof: (1603.1.2, 1607.1.1, 1611) n/a psf
 Floor: (1603.1.1, 1607.10, T 1607.10) n/a psf
 Live load Reductions: (1603.1.1, 1607.9.) n/a psf
 Ground Snow Load: (1608.2) 18 psf
 Wind Load: Basic Wind Speed: (1609.3) 90 mph (ASCE-7)
 Exposure Category (1609.4) B
 Wind Base Shears (for MWFRS)(Engineer Cal's) V_x = _____ V_y = _____

SEISMIC DESIGN CATEGORY: (1613.1, 1613.5.6) A B C D
 Provide the following Seismic Design Parameters:
 Occupancy Category: (Table 1604.5) I II III IV
 Spectral Response Acceleration: (Engineer cal's) S_w _____ %g S₁ _____ %g

Site Classification (Table 1613.5.2) A B C D E F
 Data Source: Field Test Presumptive Historical Data
 Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Seismic base shear: (Engineer Cal's) V_x = _____ V_y = _____
 Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report as a reference document) _____ psf
 Presumptive Bearing capacity 2500 psf
 Pile size, type, and capacity _____

SPECIAL INSPECTIONS REQUIRED: Yes No

Special Inspections

SCHEDULE OF SPECIAL INSPECTIONS
 No special inspections required for this project Special inspections required

The following sheets comprise the required schedule of Special Inspections for this project. The construction divisions which require special inspections for this project are as follows:

- IT-1 Verification of Soils IT-10 Inspection of Structural Steel Fabricators
 IT-2 Excavation and Fill IT-11 Structural Masonry

- IT-3 Piling and Drilling Piers IT-12 Welding
 IT-4 Modular Retaining Walls IT-13 High Strength Bolts & Steel Framing Insp.
 IT-5 Reinforced Concrete IT-14 Sprayed Fire-Resistance Materials
 IT-6 Post Tension Slab IT-15 Exterior Insulation and Finish system
 IT-7 Pre-cast Concrete Erection IT-16 Seismic Resistance
 IT-8 Pre-stressed Concrete IT-17 Smoke Control
 IT-9 Inspection of Pre-Cast Fabricators IT-18 Detention Basin
 IT-19 Special Cases

Check the above boxes for the special inspection required for this project and list below specific special inspections required under Chapter 17. For questions regarding Special Inspections please see www.Meck-SI.com.

IT-1 VERIFICATION OF SOILS

CHECK IF REQUIRED	INSPECTION TASK (Standard & Code Reference)	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS	SPECIAL INSPECTIONS FIRM	NOTES & SCOPE
<input checked="" type="checkbox"/>	Verification of Soils, 1704.7 & Chapter 18 NCSBC	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Inspections not required for fills less than 12". Inspect site preparation, material compliance, lift thickness, and in-place density are in conformance with the geotech report and the contract documents.

IT-2 EXCAVATION AND FILLING

CHECK IF REQUIRED	INSPECTION TASK (Standard & Code Reference)	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS	SPECIAL INSPECTIONS FIRM	NOTES & SCOPE
<input checked="" type="checkbox"/>	Excavation and Filling, NCSBC Section 1704.7 and 3304	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Compact backfill soil to 95% Standard Proctor (ASTM D698), with the top foot of fill beneath walk slab compacted to 98% Standard Proctor. Test for compliance at first lift and at 32" intervals of depth in reinforced soil zone.

IT-4 MODULAR RETAINING WALLS

CHECK IF REQUIRED	INSPECTION TASK (Standard & Code Reference)	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS	SPECIAL INSPECTIONS FIRM	NOTES & SCOPE
<input checked="" type="checkbox"/>	Modular Retaining Walls, NCSBC Section 1610 and 1704.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Inspect joints and GEO fabric installation where wall height exceeds 5 feet.



www.meck-si.com

Statement of Special Inspections

Statement Date: October 13, 2014

Project Name: Retaining Wall for Preferred Parking
 Building Permit Number: _____
 Project Address: 420 West 5th Street, Charlotte, NC
 Registered Design Professional in Responsible Charge (RDP/IRC): Gary W. Sheats, PE

The following information is being submitted in accordance with the Special Inspection provisions of the North Carolina State Building Code. Attached is the [Schedule of Special Inspections \(SSI\)](#) required for this project. This completed form is required to be placed on the drawings for plan review. After permit issuance, a listing of the Special Inspection Firms (SIF) and the Designated Special Inspectors (DSI) for each inspection type will be attached to this form and uploaded to www.meck-si.com prior to scheduling the Pre-Construction Meeting with Mecklenburg County Code Enforcement. No work is permitted to be performed prior to the Special Inspections Pre-Construction Meeting (see the meck-si.com website for details).

This and all subsequent reports, logs, testing results, and other related SI documents shall be uploaded to the meck-si.com website within 10 business days of the event documented. Only documents that are prepared by Authorized Special Inspectors (ASI), and signed/sealed by Designated Special Inspectors (DSI) are valid and are permitted to be uploaded to the meck-si.com website. The DSI will notify the Department upon the discovery of information that would contravene the result of any information posted on meck-si.com, and update said information within 10 days.

The DSI is responsible for verifying all information on each document prior to signing/sealing and uploading it. The DSI is responsible for verifying each document that is uploaded and stored on the meck-si.com website, is the correct document and it is associated with the correct attributes for storage in the database on meck-si.com. The DSI is responsible for deleting any documents that have incorrect attributes or contain errors, and reloading the correct information or document onto meck-si.com. The DSI is responsible for verifying all ASIs maintain current certifications during the course of the project, as failure to maintain current certifications may result in a voided document. At the conclusion of each individual Special Inspection type, the DSI will complete a Final Report and upload it to the meck-si.com website. The RDP/IRC is responsible for completing the RDP/IRC Letter at the conclusion of all Special Inspections.

The Special Inspection program outlined herein, does not relieve the Contractor or any other entity of any contractual duties, including quality control, quality assurance, or safety. The Contractor is solely responsible for construction means, methods, and job site safety. Failure to adhere to the SI program as outlined herein, and on meck-si.com, may result in a stop work notice being issued by the Department.

Respectfully submitted,
 The Registered Design Professional in Responsible Charge,

Gary W. Sheats, PE
 Type: Print Name
 Signature: *Gary W. Sheats* Date: 10/13/2014



PEOPLE • PRIDE • PROGRESS • PARTNERSHIPS

INDEX OF DRAWINGS

CS01 _____ COVER SHEET AND APPENDIX B CODE SUMMARY
 S01 _____ RETAINING WALL PLAN AND DETAILS
 S02 _____ STAIR AND RAILING DETAILS

REV	DESCRIPTION	DRAWN	CHECKED	DATE
1	ADD INDEX OF DRAWINGS	DD	GWS	3-30-15
0	APPROVED FOR CONSTRUCTION	DD	GWS	10-13-14

SHEATS CONSULTING, PLLC
 PROFESSIONAL ENGINEERING SERVICES
 PO BOX 470171
 CHARLOTTE, NC 28247

CLIENT: PREFERRED PARKING
 LOCATION: 420 WEST 5th STREET/CHARLOTTE, NC

DRAWN BY: DD DATE: 10-13-14 TITLE: APPENDIX B STATEMENT OF SPECIAL INSPECTIONS

CHECKED BY: G.W.SHEATS DATE: 3-30-15

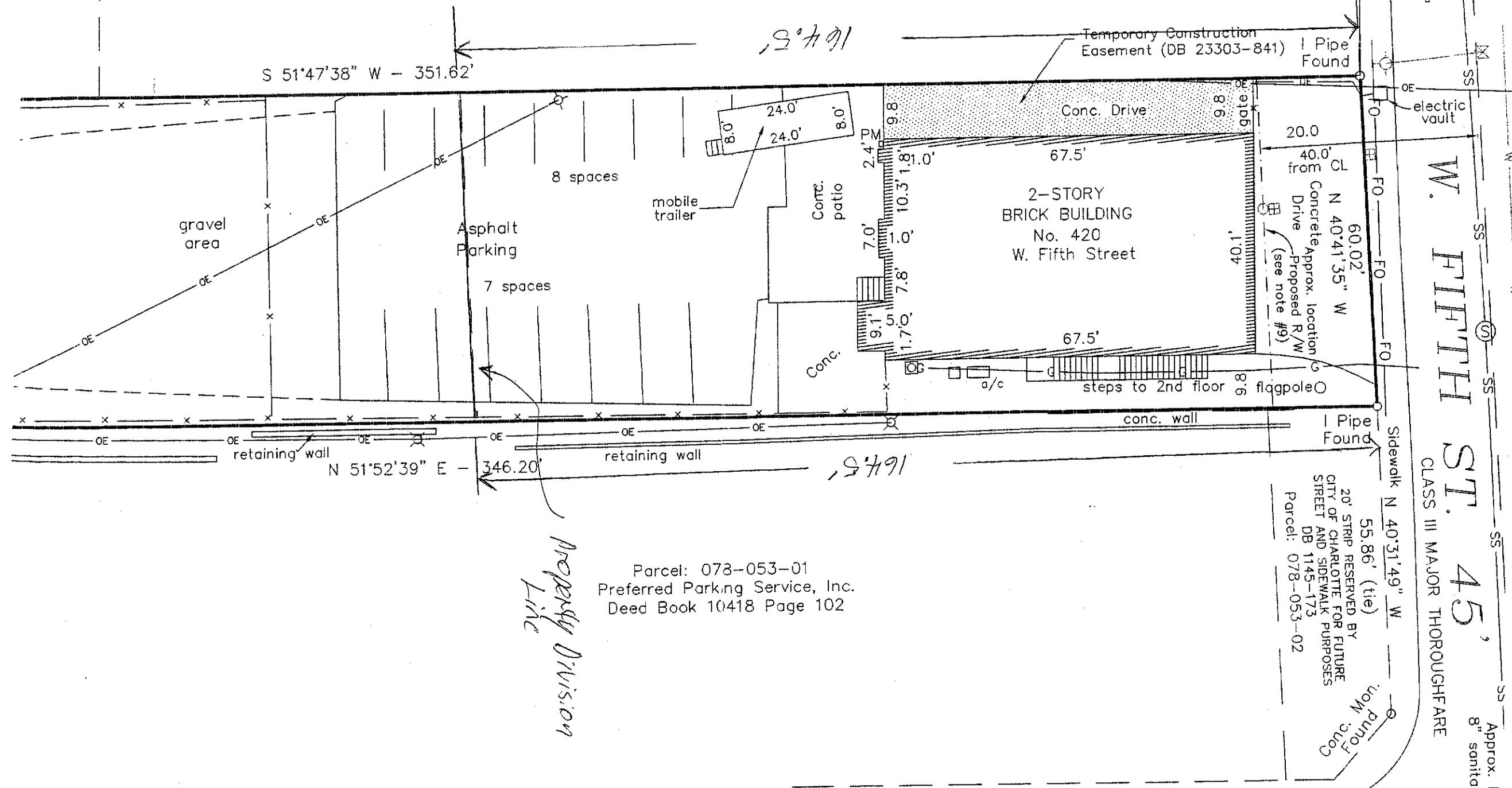
APPROVED BY: _____

SCALE: AS NOTED DRAWING NUMBER: CS01 REV: 1

AUTHORIZATION LICENSE NUMBER P-1348



SEAL 3-30-15



Parcel: 078-053-01
Preferred Parking Service, Inc.
Deed Book 10418 Page 102

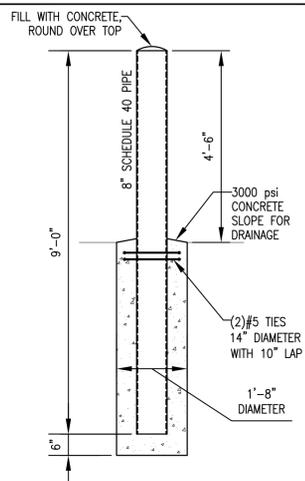
Property Division Line

W. FIFTH ST. CLASS III MAJOR THOROUGHFARE
45'

20' STRIP RESERVED BY
CITY OF CHARLOTTE FOR FUTURE
STREET AND SIDEWALK PURPOSES
DB 1145-173
Parcel: 078-053-02

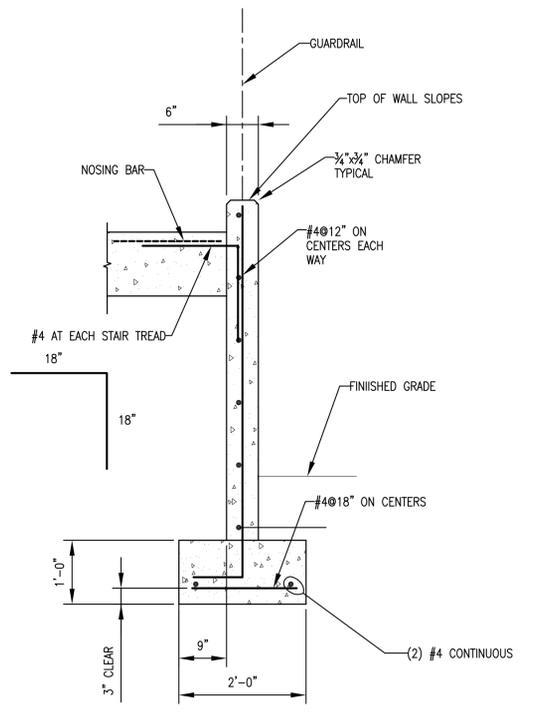
Approx. locati
8" sanitary se

FOR NOTES, SEE DRAWING S01

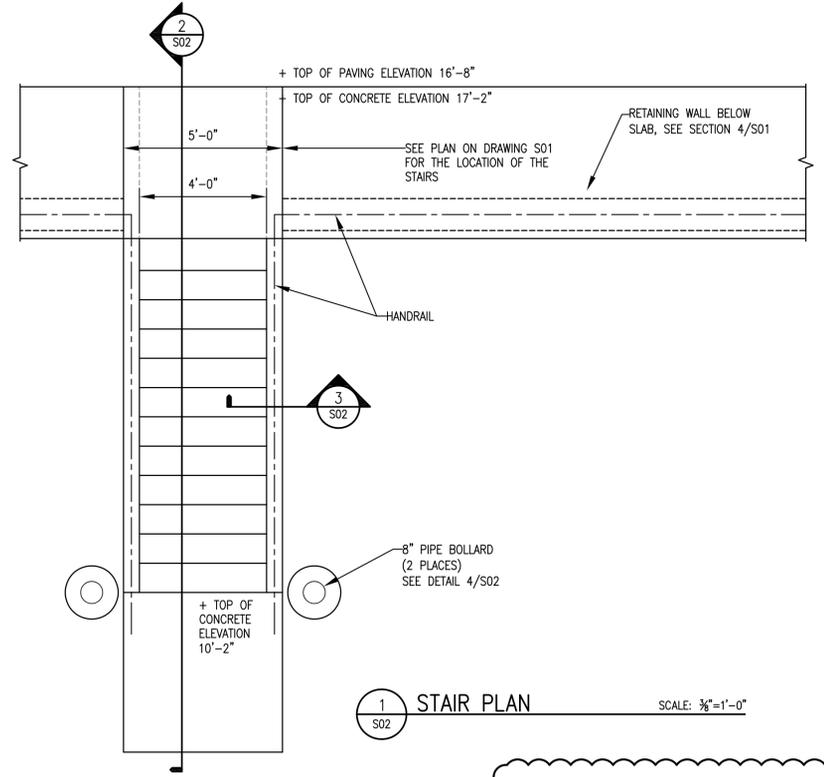


4 8" BOLLARD DETAIL SCALE: 1/2"=1'-0"

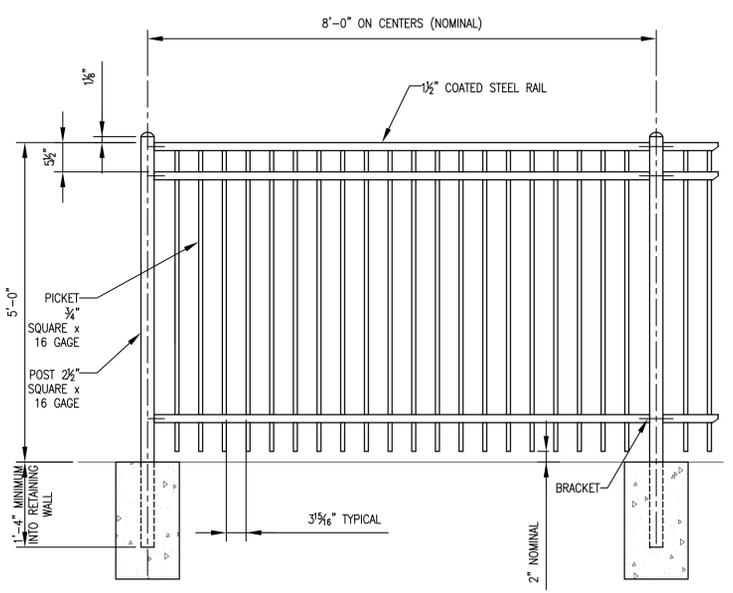
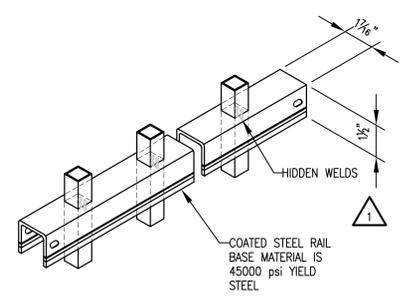
- NOTES
- CLEAN SURFACE PER SSPC-SP3 TO REMOVE RUST AND SCALE. PRIMER SHALL BE RUST-OLEUM INDUSTRIAL CHOICE 340 VOC ALKYD ENAMEL PRIMER (OR APPROVED EQUAL).
 - FINISHED COAT SHALL BE RUST-OLEUM INDUSTRIAL CHOICE 340 VOC ALKYD ENAMEL (OR APPROVED EQUAL) SAFETY YELLOW.



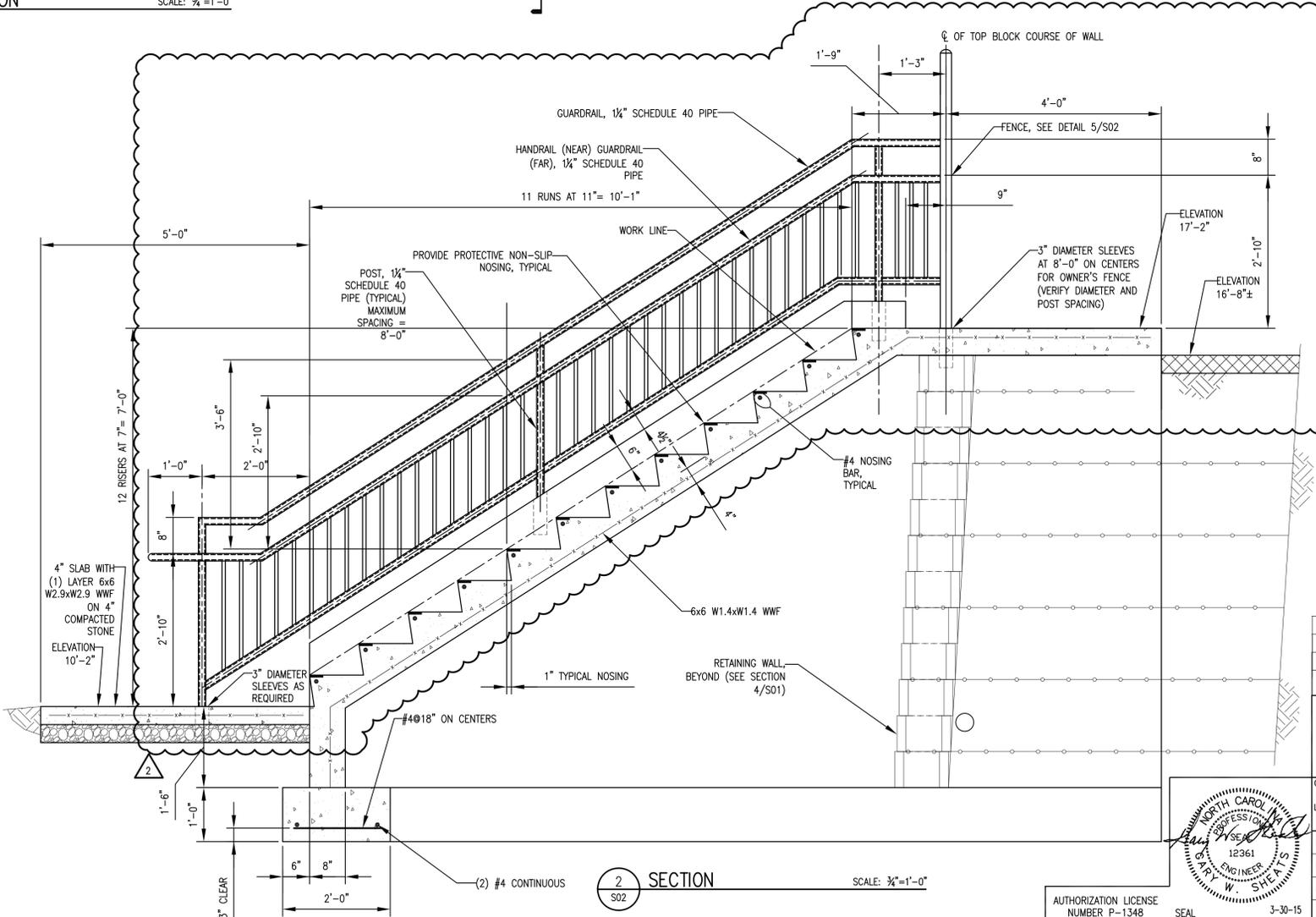
3 SECTION SCALE: 3/8"=1'-0"



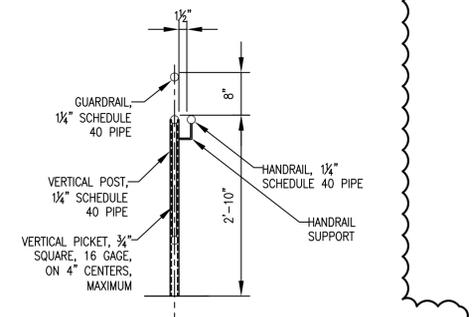
1 STAIR PLAN SCALE: 3/8"=1'-0"



5 FENCE DETAILS SCALE: 3/8"=1'-0"



2 SECTION SCALE: 3/8"=1'-0"

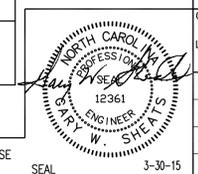


6 HANDRAIL/GUARDRAIL DETAIL SCALE: 3/8"=1'-0"

2	REVISE SECTION 2 ADDING GUARDRAIL/HANDRAIL DETAILS, ADD DETAIL 6	DD	GWS	3-30-15
1	ADD FENCE DETAILS	DD	GWS	3-19-15
0	APPROVED FOR CONSTRUCTION	DD	GWS	9-22-14
REV	DESCRIPTION	DRAWN	CHECKED	DATE

SHEATS CONSULTING, PLLC
 PROFESSIONAL ENGINEERING SERVICES
 PO BOX 470171
 CHARLOTTE, NC 28247

CLIENT	PREFERRED PARKING			
LOCATION	420 WEST 5th STREET/CHARLOTTE, NC			
DRAWN BY	DD	9-16-14	TITLE	STAIR PLAN AND DETAILS
CHECKED BY	G.W.SHEATS	3-30-15	SCALE	AS NOTED
APPROVED BY			DRAWING NUMBER	S02
			REV	2



AUTHORIZATION LICENSE NUMBER P-1348

