

# Atlantic Spas and Billiards

## 6315 Market Street Wilmington, North Carolina

### Planning Notes:

- Prior to any clearing, grading, or construction activity, tree protection fencing will be installed around protected trees or groves of trees. And no construction workers, tools, materials or vehicles are permitted within the tree protection fencing.

### Transportation Notes:

- All proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 30'-10'.
- All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards. [Detail SD 15-13 CofW Tech Stds]
- All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards. [Detail SD 15-13 CofW Tech Stds]
- All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- All parking stall markings and lane arrows within the parking areas shall be white.
- A utility cut permit is required for each open cut of a City street. Note this on the plan and contact 341-5888 for more details. In certain cases an entire resurfacing of the area being open cut may be required.
- Contact Traffic Engineering at 341-7888 forty-eight hours prior to any excavation in the right of way.
- Any broken or missing sidewalk panels, driveway panels and curbing will be replaced.
- Compact / small vehicle parking spaces will be clearly marked with a sign reading "This parking space for smaller vehicles only"

### Landscaping and Planting Notes:

- All proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 30' - 10'.

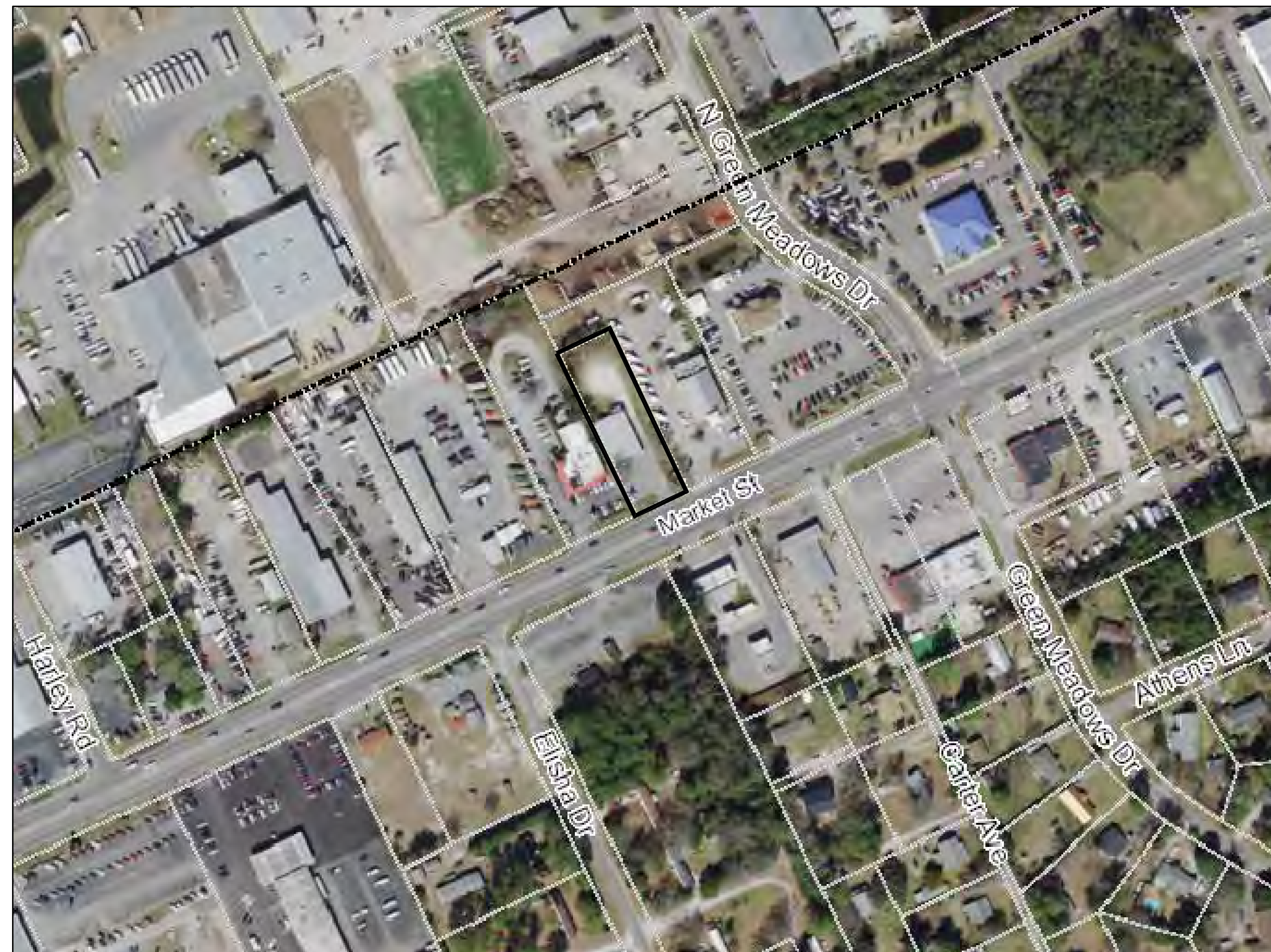
### Fire & Life Safety notes:

- Contractor shall maintain an all-weather access for emergency vehicles at all times during construction.
- Landscaping or parking cannot block or impede the FDC or fire hydrants. A 3-foot clear space shall be maintained around the circumference of the hydrant and FDC
- Construction is type II-B.

### Water and Sewer Notes:

- There is an 8" Public Sewer Main on the adjacent property owned CFPUA. Existing building has a 4" PVC sewer line connected to this main.
- The existing property gets water from a public water main in the Market Street R/W (owned by CFPUA). The service meter location is shown on this plan. The exact location and size of the public water main is unknown.
- There will be no new or additional water and sewer lines added to serve the addition. Existing bathrooms in the existing building will remain.
- There is currently a maximum of 3 employees working at this business. The addition will be expanding the showroom and warehouse areas in the existing building but no increase in the number of employees is proposed.  
Domestic Use = 25 GPD per employee. Use a factor of 2X for demand.

WATER DEMAND: 150 GPD (current use)  
SEWER DEMAND: 150 GPD (current use)  
WATER DEMAND: 150 GPD (proposed use)  
SEWER DEMAND: 150 GPD (proposed use)




### PARCEL and OWNER DATA:

Parcel ID: R05007-018-001-000  
Parcel: 6315  
Owner: William Douglas Mitchell Family Trust, etal  
8721 Glenwood Avenue, Raleigh NC 27617  
Raleigh NC 27617

Address: 6315 Market Street  
lot 4 Dutch Square  
Area: 0.689 acres  
Zoning: RB  
Class: Ind.  
CAMA land use class: URBAN  
Floodplain: NA  
Market Street R/W is not being dedicated by applicant.  
Future R/W being shown for reference only.


### SHEET INDEX

C1	Survey
C2	Site Plan
C3	Grading and Erosion Control Plan
C4	Landscape Plan
C5	Stormwater Plan
C6	NCDOT Market Street Improvements Landscape Island Area Vehicle turning radius



APPROVED CONSTRUCTION PLAN

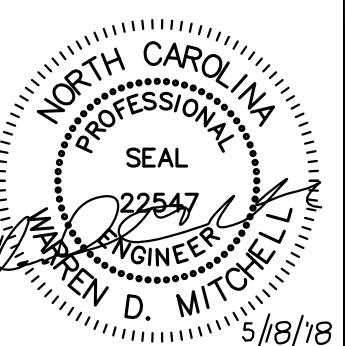
Planning : \_\_\_\_\_  
Traffic : \_\_\_\_\_  
Fire : \_\_\_\_\_



Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_



REVISIONS	CITY TRC COMMENTS
1. 4/9/18-	CITY TRC COMMENTS
2. 5/18/18-	CITY TRC COMMENTS

**Atlantic Spas and Billiards**  
 6315 Market Street  
 Wilmington, North Carolina

Apr 09, 2018

Scale: NTS

Cover

### SITE DATA

	Minimum	Proposed
Lot width:	100 feet	100 feet
Front Bldg. Setback:	25 feet	66 feet
Rear Bldg. Setback:	15 feet	35 feet
Interior Side Setback:	0 feet	9.5 feet
Maximum Height:	35 feet	25 feet

### BUILDING LOT COVERAGE

Maximum Lot Coverage: 40%  
Actual Lot Coverage: 30% (.206ac/.689ac)

### IMPERVIOUS AREA SUMMARY

Existing:	14,496 sf	(.333 acres)
New:	9,995 sf	(.229 acres)
To be removed:		
Gravel:	2,885 sf	(.066 acres)
Parking Spaces:	558 sf	(.013 acres)

Proposed Total: 14,996+9,995-2,885-558= 21,548 sf  
21,548 sf = .49 acres  
.49 / .689 = 71.1% Impervious

### PARKING SUMMARY

Existing:	9 spaces
New:	10 spaces
To Be Removed:	4 spaces
Total Proposed:	15 spaces
(including 1 h/c and 2 compact spaces)	

### BUILDING AREA SUMMARY

Existing Building:	4000 sf
Retail:	3400 sf
Warehouse:	600 sf

Addition Area: 4980 sf  
Proposed Building: 8980 sf (existing and addition)

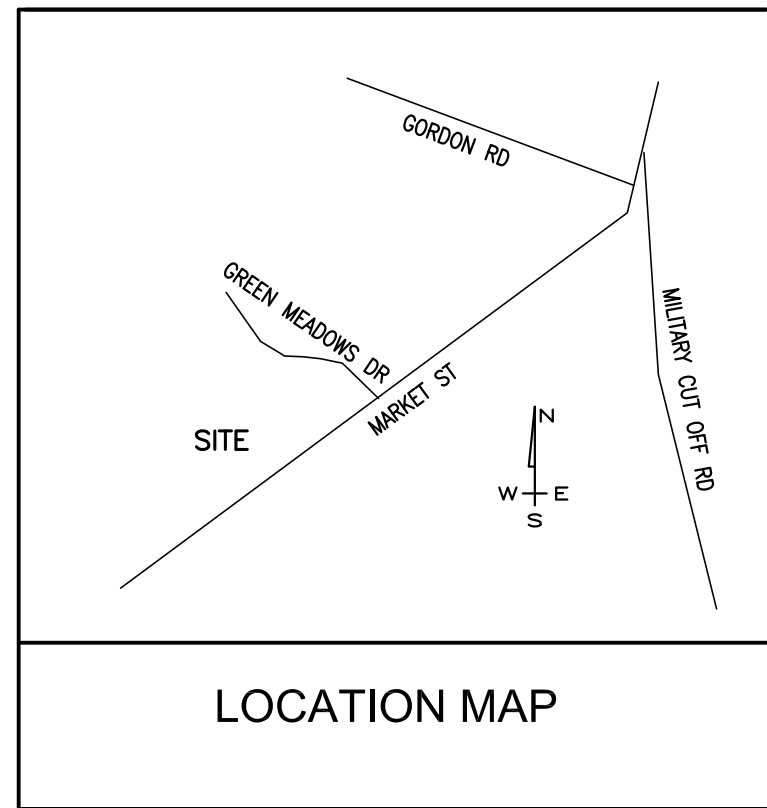
Warehouse:	4980 sf
Retail:	4000 sf

### PARKING REQUIREMENTS

Warehouse: $\frac{1}{1000}$ sf minimum	$\frac{4980}{1000} = 4.98$ spaces
Warehouse:	no maximum
Retail: $\frac{1}{400}$ sf minimum	$\frac{4000}{400} = 10$ spaces
Retail: $\frac{1}{200}$ maximum	$\frac{4000}{200} = 20$ spaces

Minimum Required = 4.98 + 10 = 15 spaces  
Maximum Allowed = 4.98 + 20 = 25 spaces

Total Parking Proposed = 15 spaces



**LEGEND**

- = IRON PIPE FOUND (IIP)
- = CONC. MONUMENT FOUND (ECM)
- ⊙ = CENTERLINE (CL)
- R/W = RIGHT OF WAY
- ⊘ = NON-MONUMENTED POINT (NMP)
- GS = GROUND SHOT
- ⊕ = POWER POLE (PP)
- OHP = OVERHEAD POWER
- WM = WATER METER
- WV = WATER VALVE
- CO = CLEAN OUT
- FH = FIRE HYDRANT
- DI = DROP INLET
- ☆ = LIGHT POLE (LP)
- = DECIDUOUS TREE (SIZES/TYPES AS NOTED)
- ⊗ = FLOWERING TREE (SIZES/TYPES AS NOTED)
- EP = EDGE OF PAVEMENT
- BOC = BACK OF CURB
- SSMH = SANITARY SEWER MANHOLE
- SS = SANITARY SEWER
- SD = STORM DRAIN
- X — X = CHAIN LINK FENCE
- — — = PROPERTY LINE and R/W
- - - - - = BUILDING SETBACK
- SS-SS-SS- = SANITARY SEWER
- SD-SD-SD- = STORM DRAIN
- - - - - = TREE PROTECTION FENCE
- SF- = SILT FENCE

**NOTES**

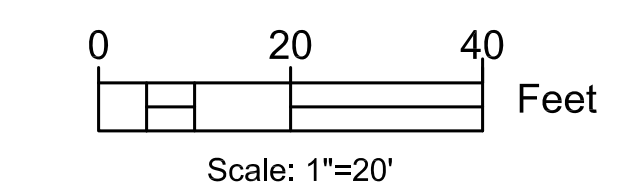
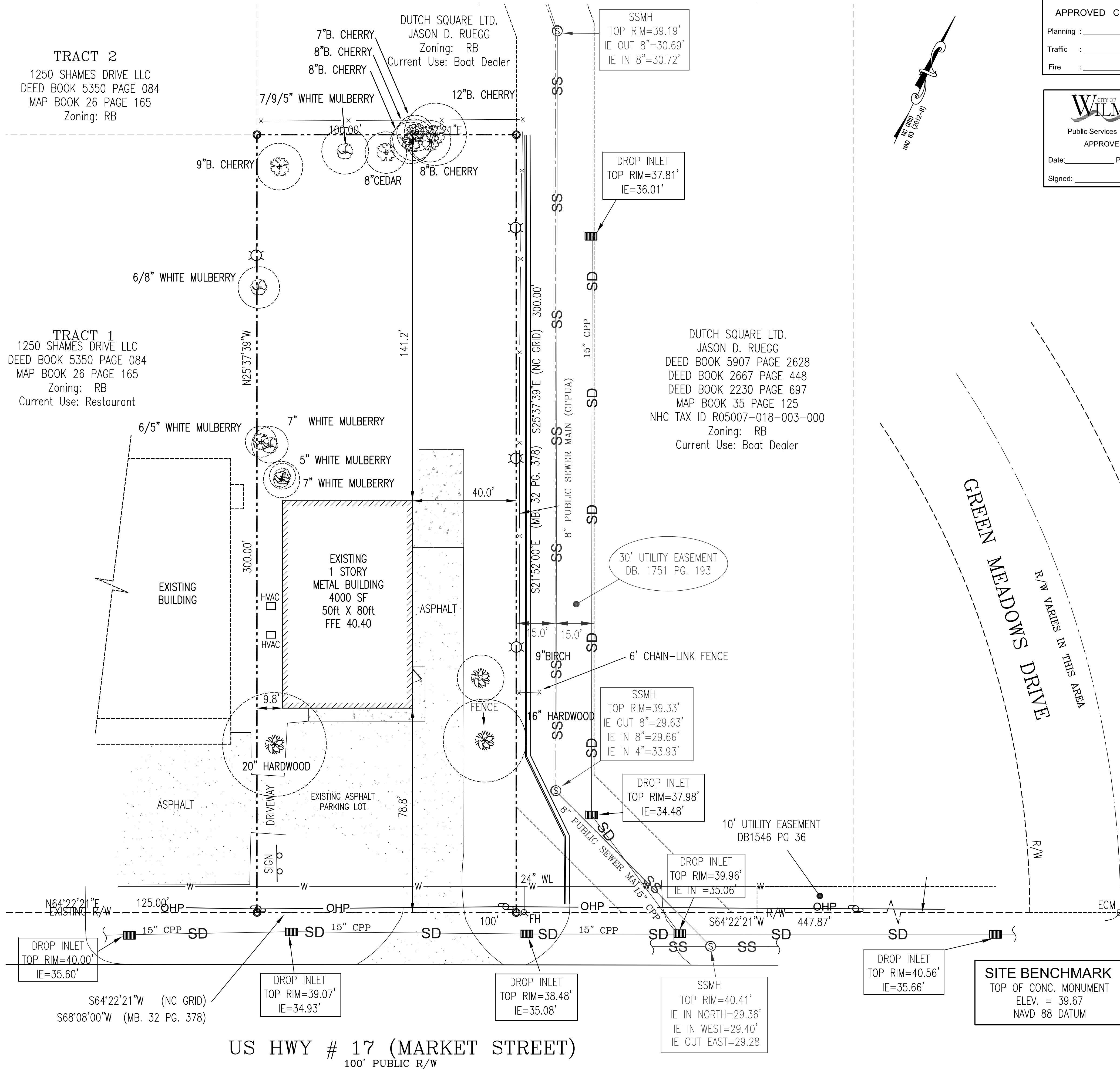
1. THIS LOT IS LOCATED IN ZONE X PER FRIS ON FIRM MAP NUMBER # 3720314800 J DATED: APRIL 3, 2006
2. THIS LOT IS SUBJECT TO ALL EASEMENTS, RESTRICTIONS, OR COVENANTS OF RECORD.
3. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT, WHICH MAY REVEAL ADDITIONAL CONVEYANCES, EASEMENTS OR RIGHT OF WAYS NOT SHOWN HEREIN.
4. ELEVATIONS BASED ON 88 DATUM.
5. BENCHMARK ELEVATIONS DETERMINED USING TOPCON HYPER XT GPS UNIT UTILIZING THE NC VRS SYSTEM.
6. NC GRID BEARINGS DERIVED USING TOPCON SR, UTILIZING NORTH CAROLINA VRS SYSTEM.

**BOUNDARY, TREE & TOPOGRAPHIC SURVEY FOR WILLIAM DOUGLAS MITCHELL FAMILY TRUST**

LOT 4 DUTCH SQUARE LTD. TRACT  
 PARCEL ID# R05007-018-001-000 DEED BOOK 5955 PAGE 2180 MAP BOOK 32 PAGE 378  
 WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA  
 AUGUST 25, 2017 0.689 ACRES 1' CONTOUR INTERVAL - NAVD 88 DATUM

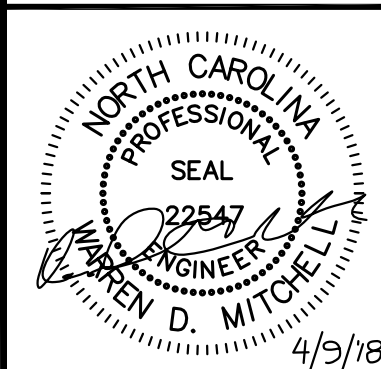


4002 1/2 OLEANDER DRIVE SUITE 203  
 WILMINGTON, NC 28403  
 email: ddanfords@danfordsurveying.com  
 PHONE (910) 799-4916  
 FIRM LIC# C-2797



**CITY OF WILMINGTON**  
 NORTH CAROLINA  
**APPROVED CONSTRUCTION PLAN**  
 Planning : \_\_\_\_\_  
 Traffic : \_\_\_\_\_  
 Fire : \_\_\_\_\_

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services • Engineering Division  
**APPROVED DRAINAGE PLAN**  
 Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
 Signed: \_\_\_\_\_



REVISIONS	CITY TRC COMMENTS
1.	4/9/18-

**Atlantic Spas and Billiards**  
 6315 Market Street  
 Wilmington, North Carolina

Jan 24, 2018  
 Scale: 1"=20'  
 Existing Conditions

**C1**

**CITY OF WILMINGTON**  
NORTH CAROLINA

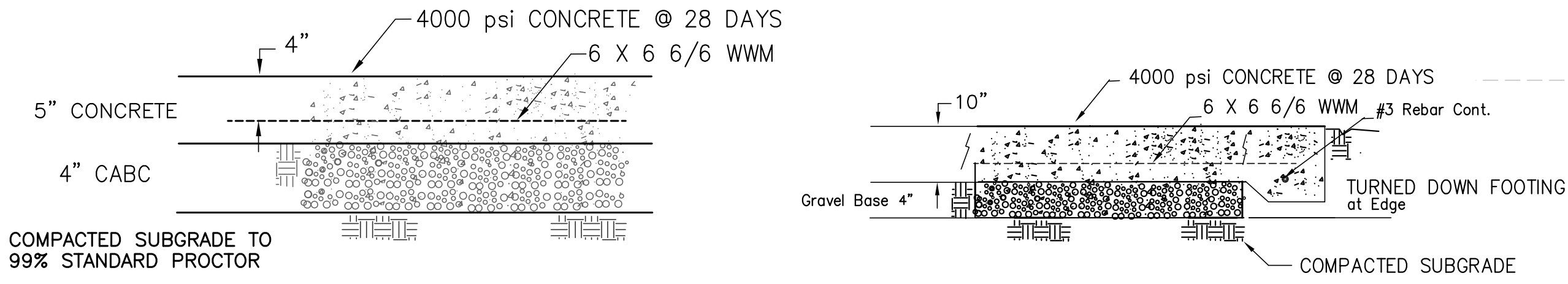
**APPROVED CONSTRUCTION PLAN**

Planning: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division

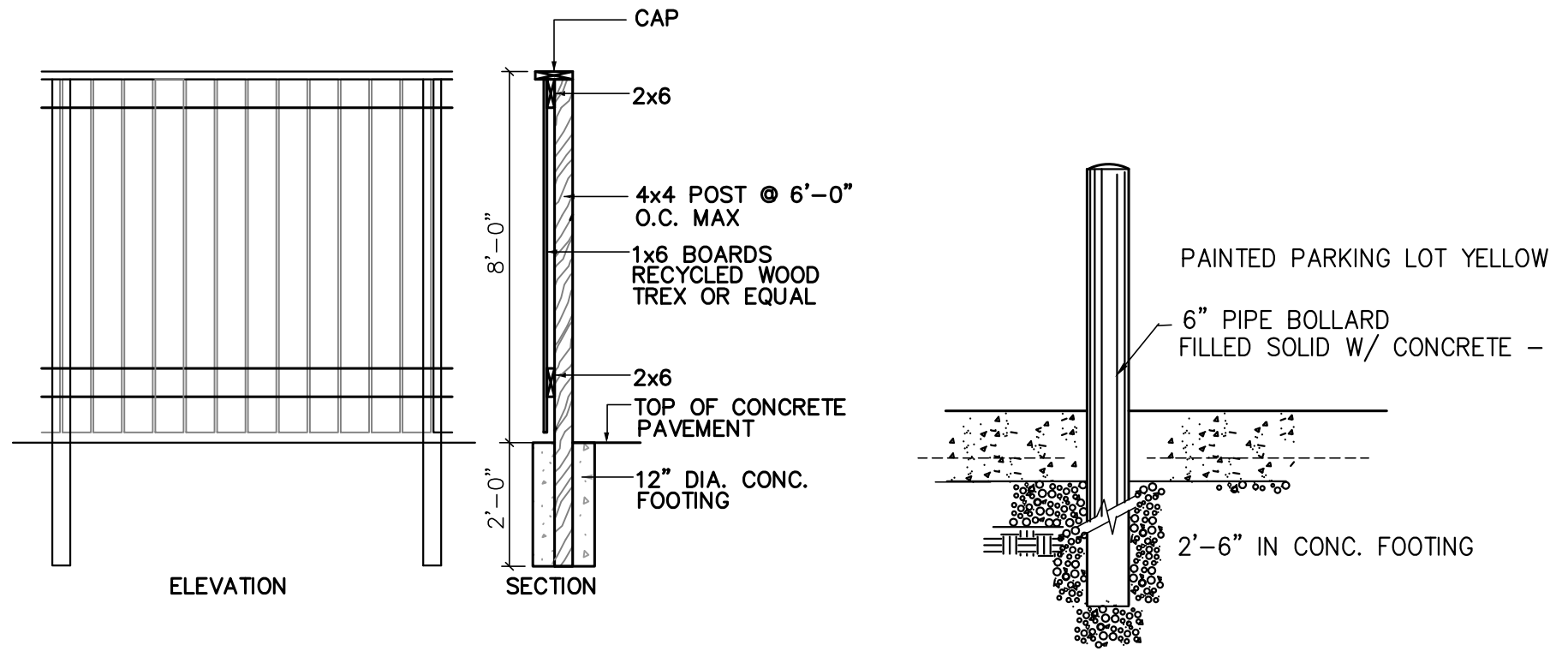
**APPROVED DRAINAGE PLAN**

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_



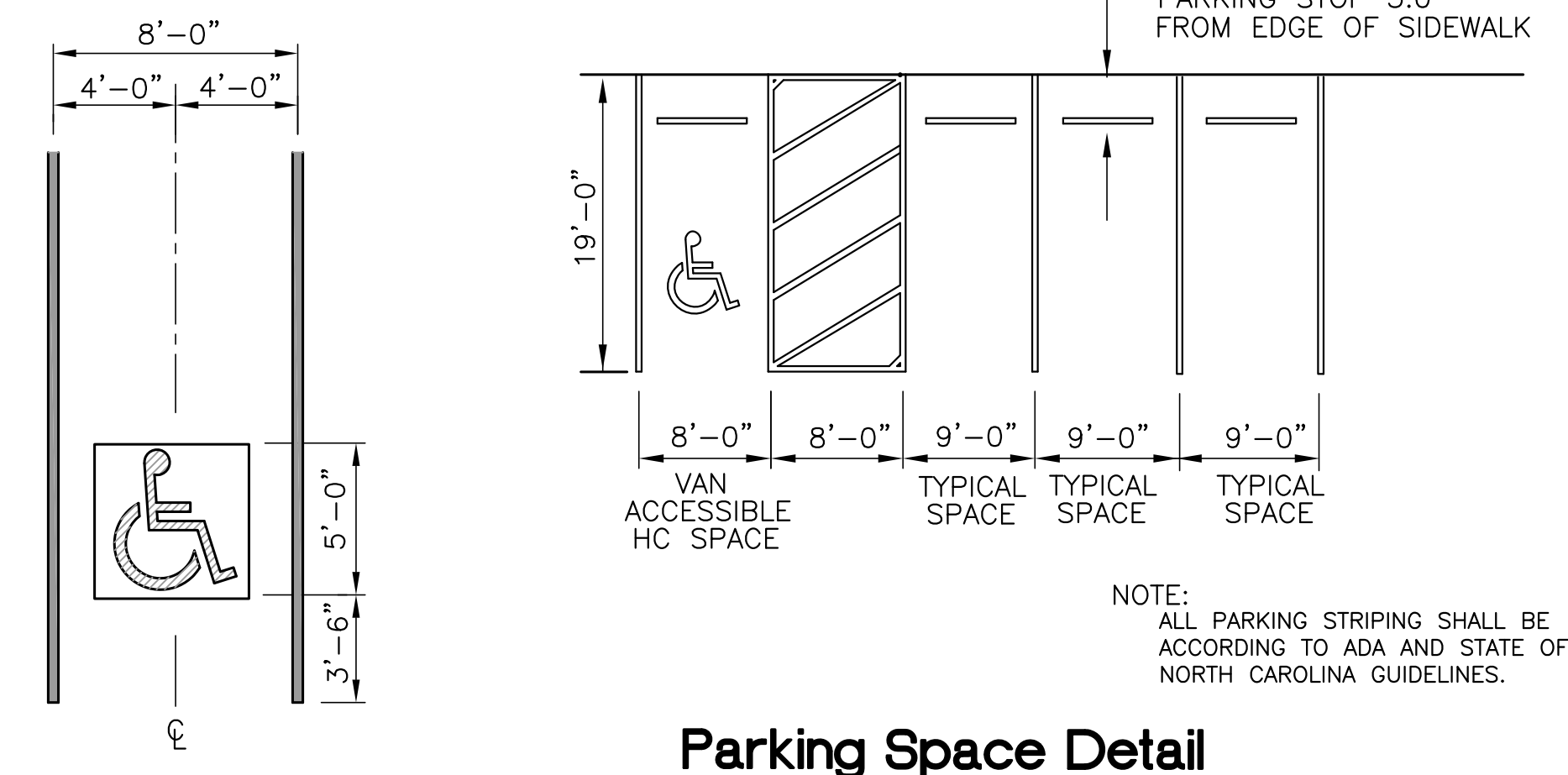
**Concrete Paving Detail**

**Dumpster Pad Detail**



**Dumpster Screen Fence Detail**

**Pipe Bollard Detail**



**Parking Space Detail**

**STANDARD DETAIL**  
DATE: OCTOBER, 2010  
DRAWN: P238  
CHECKED: DEC  
SCALE: NOT TO SCALE

**SIDEWALK**

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-10

**NOTES:**  
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.  
2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.  
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.  
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS 74" - 3,000 PSI.  
5. MINIMUM SPACING FOR REPAIRS IS A 5' X 5' PANEL.  
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOI CONDITIONS.  
7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12".  
8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1.  
9. MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

**RESERVED PARKING**  
R7-8a and R7-8d Signage Figure A1.1  
R7-8a SIGN (NO ARROW(S))  
NORTH CAROLINA R7-8a SIGN, COMBINATION OF THE R7-8a SIGN AND THE NORTH CAROLINA R7-8d PENALTY SIGN  
NORTH CAROLINA PENALTY R7-8d SIGN  
EITHER THE COMBINATION OF THE R7-8a AND R7-8d SIGNS OR THE R7-8a SIGN CAN BE USED.

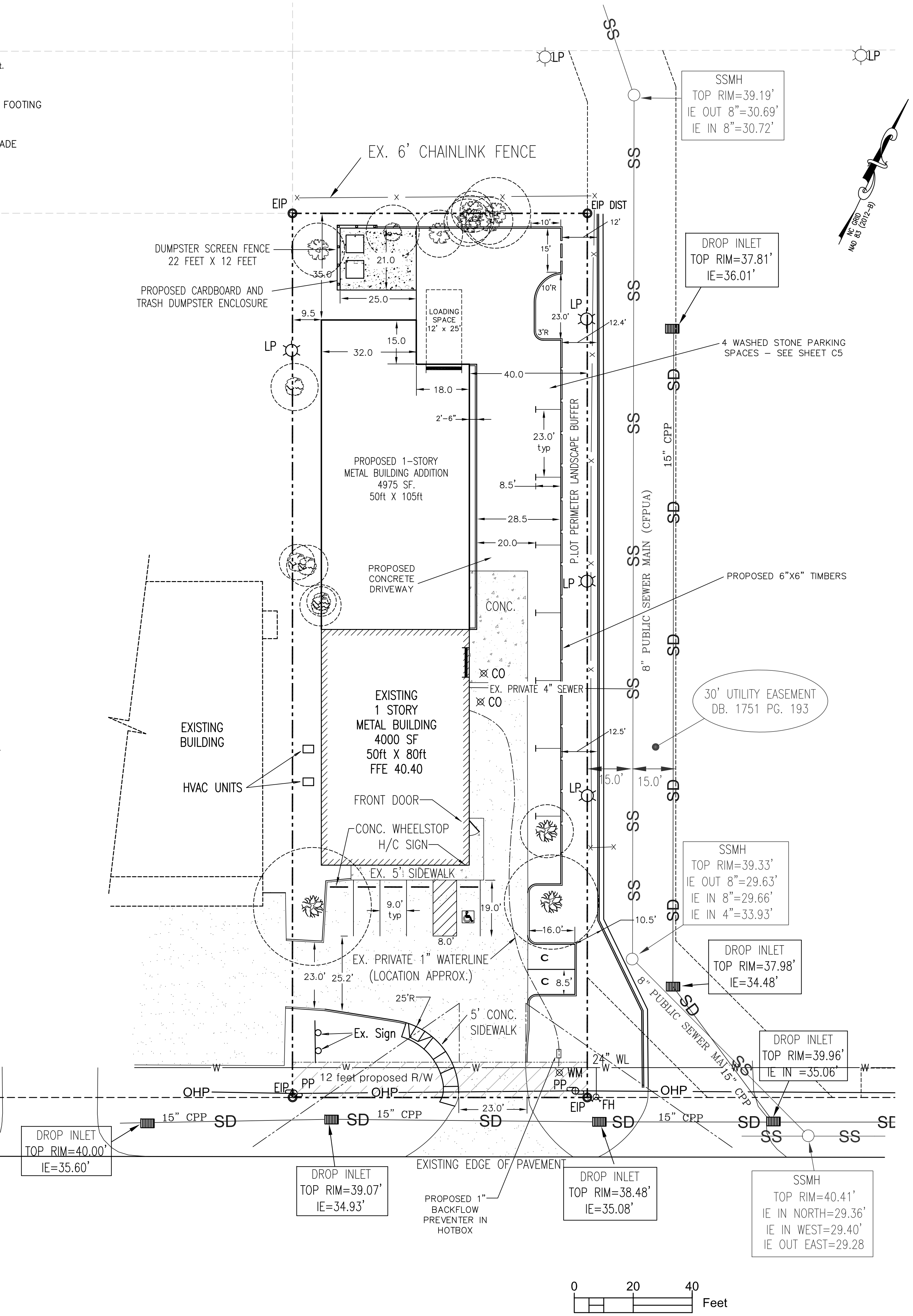
**VAN ACCESSIBLE**  
R7-8p Signage Figure A1.3  
FOR DESIGN OF ACCESSIBLE SIGNS, SEE THE FOLLOWING:  
• 2009 MUTCD OR LATEST EDITION.  
• 2004 EDITION OF THE STANDARD HIGHWAY SIGNS AND THE 2012 SUPPLEMENT OR LATEST EDITION.  
• NORTH CAROLINA 2009 SUPPLEMENT TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR LATEST EDITION.  
• NCDOT DRAWING H-1-1.S FOR SIGNS SP00075, SP00076, AND SP00077.

WHERE VAN ACCESSIBLE PARKING IS PROVIDED, THE VAN ACCESSIBLE (R7-8P) SIGN SHALL BE MOUNTED BELOW THE OTHER ACCESSIBLE PARKING SIGNS.  
(2009 EDITION MUTCD SECTION 2B.47)  
R7-8P Signage Figure A1.3

**RESERVED PARKING**  
**MAXIMUM PENALTY \$250**  
**VAN ACCESSIBLE**  
**MAXIMUM PENALTY \$250**

**Signage Height**  
Figure A2.1

84" MINIMUM ABOVE THE GROUND SURFACE WHERE THE SIGNS ARE LOCATED ALONG AN ACCESSIBLE ROUTE, ACCESSIBLE ASIDE, NEXT TO PEDESTRIAN AREA.  
60" MINIMUM ABOVE THE GROUND SURFACE WHERE SIGNS ARE NOT LOCATED ALONG AN ACCESSIBLE ROUTE, ACCESSIBLE ASIDE, NEXT TO A SIDEWALK, OR WITHIN A PEDESTRIAN AREA.  
84" MINIMUM ABOVE THE GROUND SURFACE WHERE THE SIGNS ARE LOCATED ALONG AN ACCESSIBLE ROUTE, ACCESSIBLE ASIDE, NEXT TO PEDESTRIAN AREA.  
60" MINIMUM ABOVE THE GROUND SURFACE WHERE SIGNS ARE NOT LOCATED ALONG AN ACCESSIBLE ROUTE, ACCESSIBLE ASIDE, NEXT TO A SIDEWALK, OR WITHIN A PEDESTRIAN AREA.



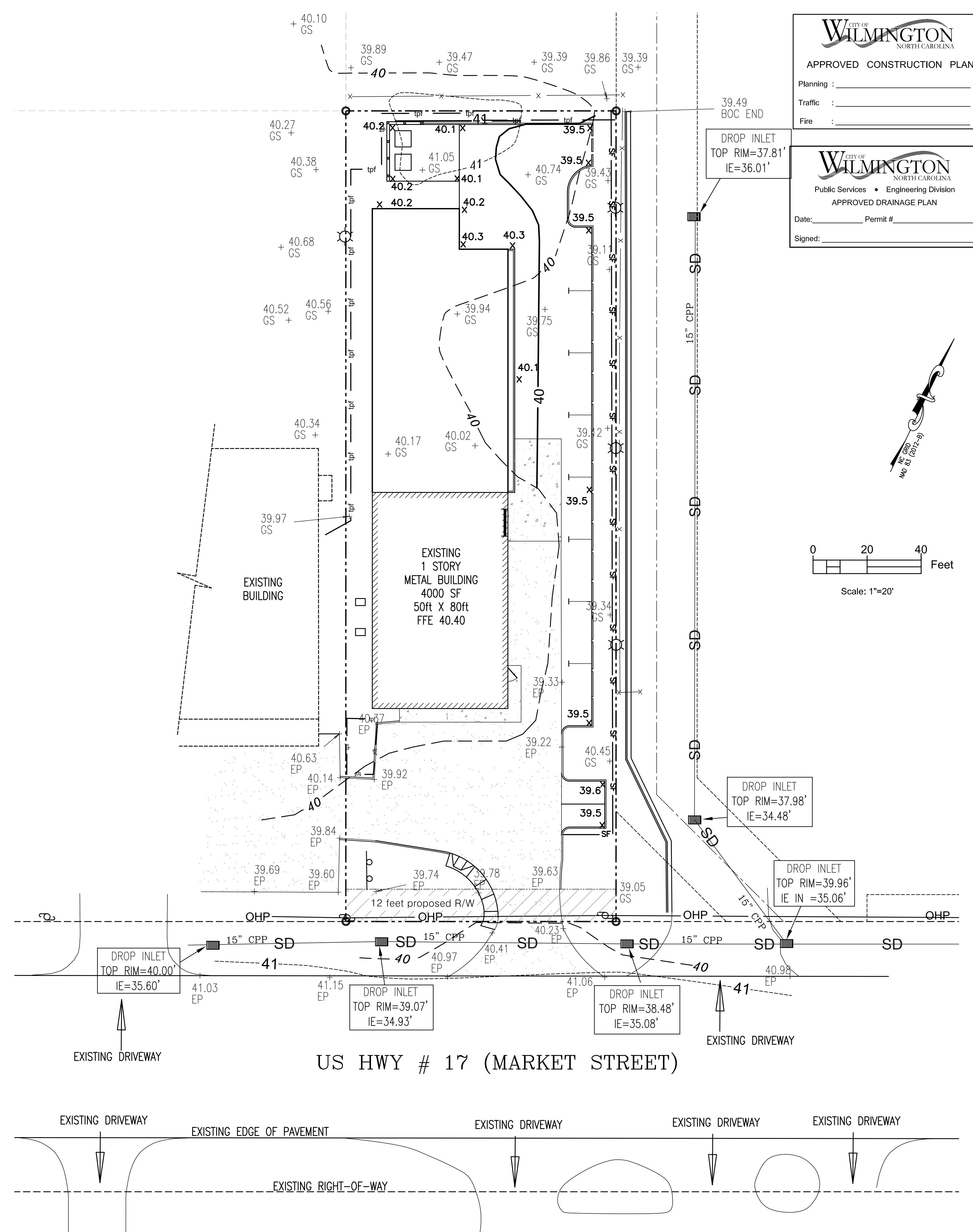
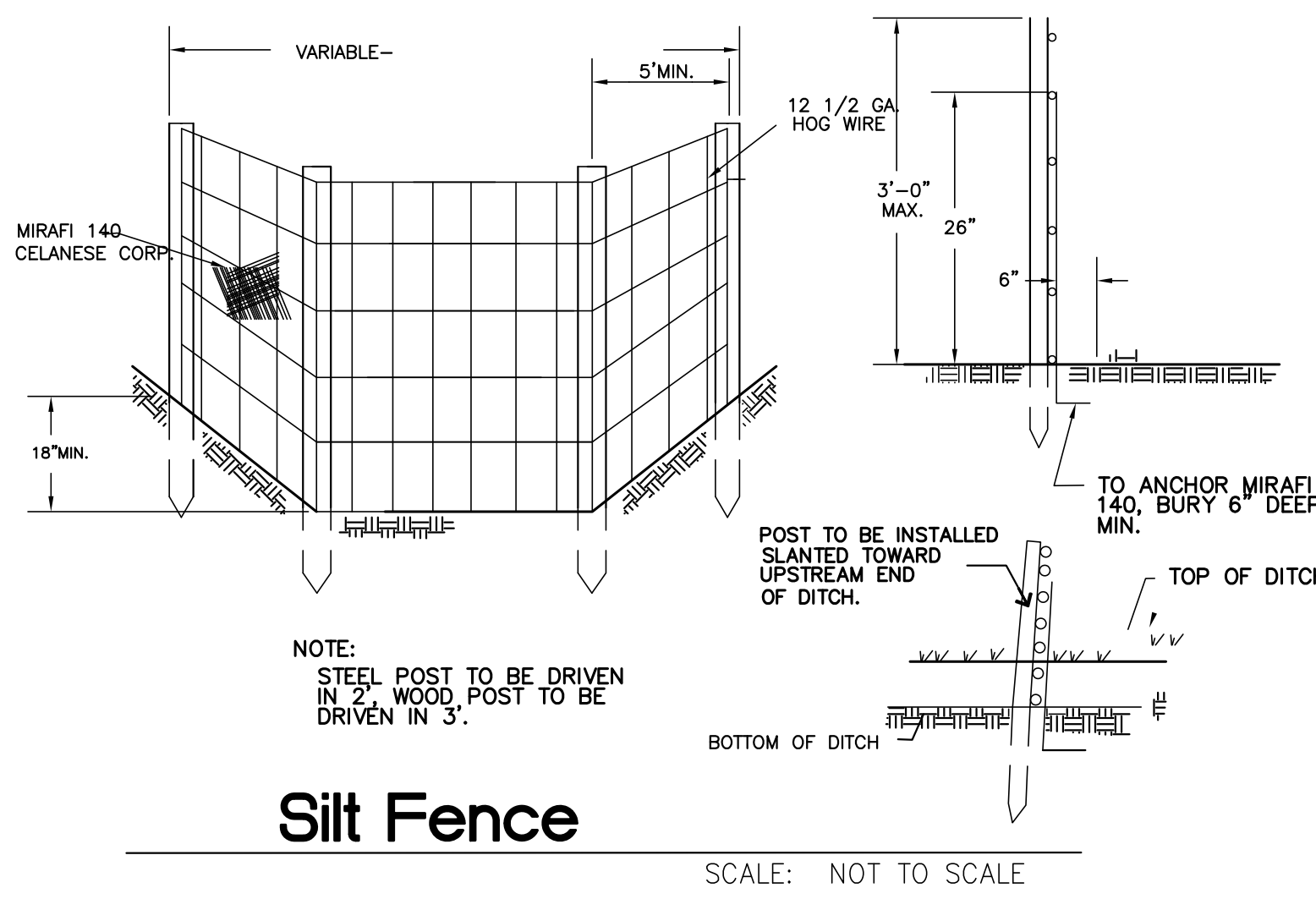
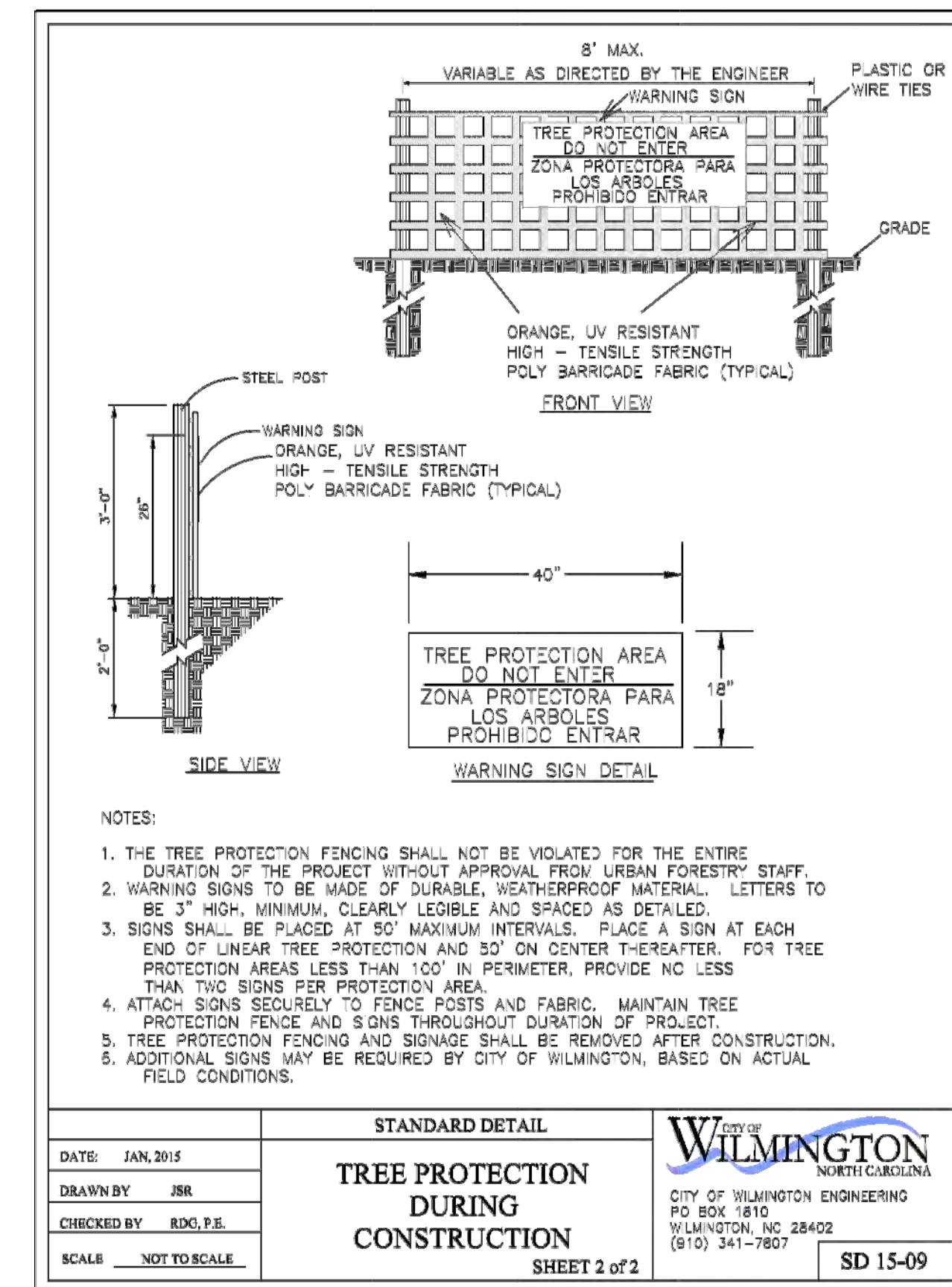
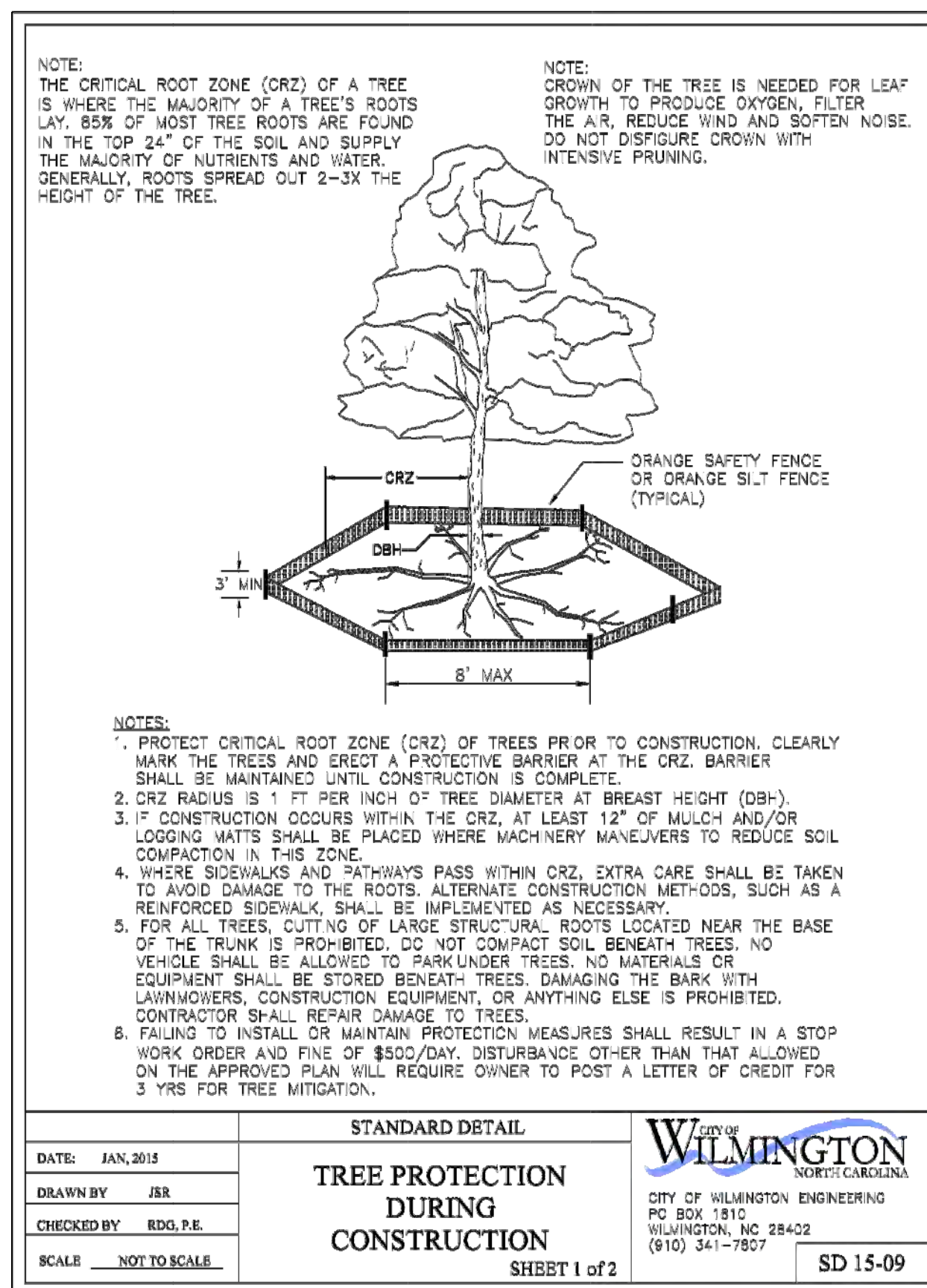
**Warren D. Mitchell, PE**  
Civil Engineering  
104 Amber Wood Run  
CHAPEL HILL, NORTH CAROLINA 27516  
warren@mitchellpe.com  
P (919) 993-1916

**NORTH CAROLINA**  
PROFESSIONAL  
SEAL  
22847  
ENGINEER  
WARREN D. MITCHELL, PE  
5/8/18

**REVISIONS**  
1. 4/9/18 - CITY TRC COMMENTS  
2. 5/18/18 - CITY TRC COMMENTS

**Atlantic Spas and Billiards**  
6315 Market Street  
Wilmington, North Carolina

Jan 24, 2018  
Scale: 1"=20'  
Site Plan  
**C2**



**CITY OF WILMINGTON**  
NORTH CAROLINA

APPROVED CONSTRUCTION PLAN

Planning : \_\_\_\_\_  
Traffic : \_\_\_\_\_  
Fire : \_\_\_\_\_

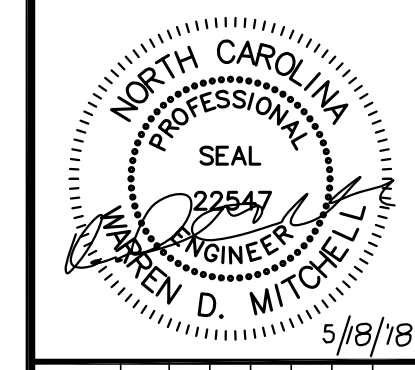
**CITY OF WILMINGTON**  
NORTH CAROLINA

Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

Warren D. Mitchell, PE  
Civil Engineering  
104 Amber Wood Run  
CHAPEL HILL, NORTH CAROLINA 27516  
warrenmitchellpe@gmail.com  
P (919) 593-1916



REVISIONS
1. 4/9/18 - CITY TRC COMMENTS
2. 5/17/18 - CITY TRC COMMENTS

**Atlantic Spas and Billiards**  
6315 Market Street  
Wilmington, North Carolina

Jan 24, 2018  
Scale: 1"=20'

Grading and Erosion Control Plan

**C3**

LANDSCAPE REQUIREMENTS:

1. Street Yard: Street Boundary–Driveway Width(100ft–23ft) x 25 = 1925 square feet  
 Sec 18–477f: Buffer reduced by one–half = 962.5 square feet  
 Buffer provided = 1011 square feet. (755sf west ; 256sf east)(see sheet C6)

plants:  
 or 1 canopy/shade tree per 600 sf  
 or 3 standard understory trees when power lines are in conflict.  
 Trees required/provided: 3 understory (proposed overhead easement conflict)  
 Shrubs required: 6 x 1.67 = 10 total at 12inches in height.  
 Shrubs provided: 19 + 16 = 35 shrubs

2. Parking Lot – Interior Areas: All islands shall have at least 1 tree.

3 Foundation Plantings: Building face (east) = 20 feet high x 90 feet x 0.12 (12%) = 216 Sq.Ft. required.  
 Provide 2.5 feet wide planting bed the length of the building. (2.5 x 90 = 225 SF)

4. Parking Area Perimeter Landscaping: East Side of Property; 270 feet of parking  
 Provide 1 canopy tree every 18 to 27 feet.  
 270 ft / 27 ft = 10 shade trees

5. Shading Requirement: Total Parking Facility Area: 12,223 square feet.  
 Provide 20% canopy coverage at maturity: 12,223 x 0.20 = 2445 square feet required.  
 From sheet C6: Shade area provided: 1256sf+471sf+2474.5sf+2121sf = 6322.5 square feet provided.

Plants:

LARGE SHADE TREES (canopy trees)

Quercus acutissima	Sawtooth Oak	10	2"–2–1/2" cal
--------------------	--------------	----	---------------

SMALL SHADE TREES (understory)

Cercis canadensis (texensis 'Oklahoma')	Oklahoma Redbud	3	8'–10' tall
-----------------------------------------	-----------------	---	-------------

SHRUBS

Ilex vomitoria	Dwarf Yaupon Holly "Nana"	16	3 gal
Abelia grandiflora	Glossy Abelia (Edward Goucher)	64	3 gal
Ilex Cornuta (Burfordi)	Burford Holly	5	3 gal
Loropetalum rubrum 'Crimson Fire' or Daruma	Chinese Fringe Flower	19	3 gal

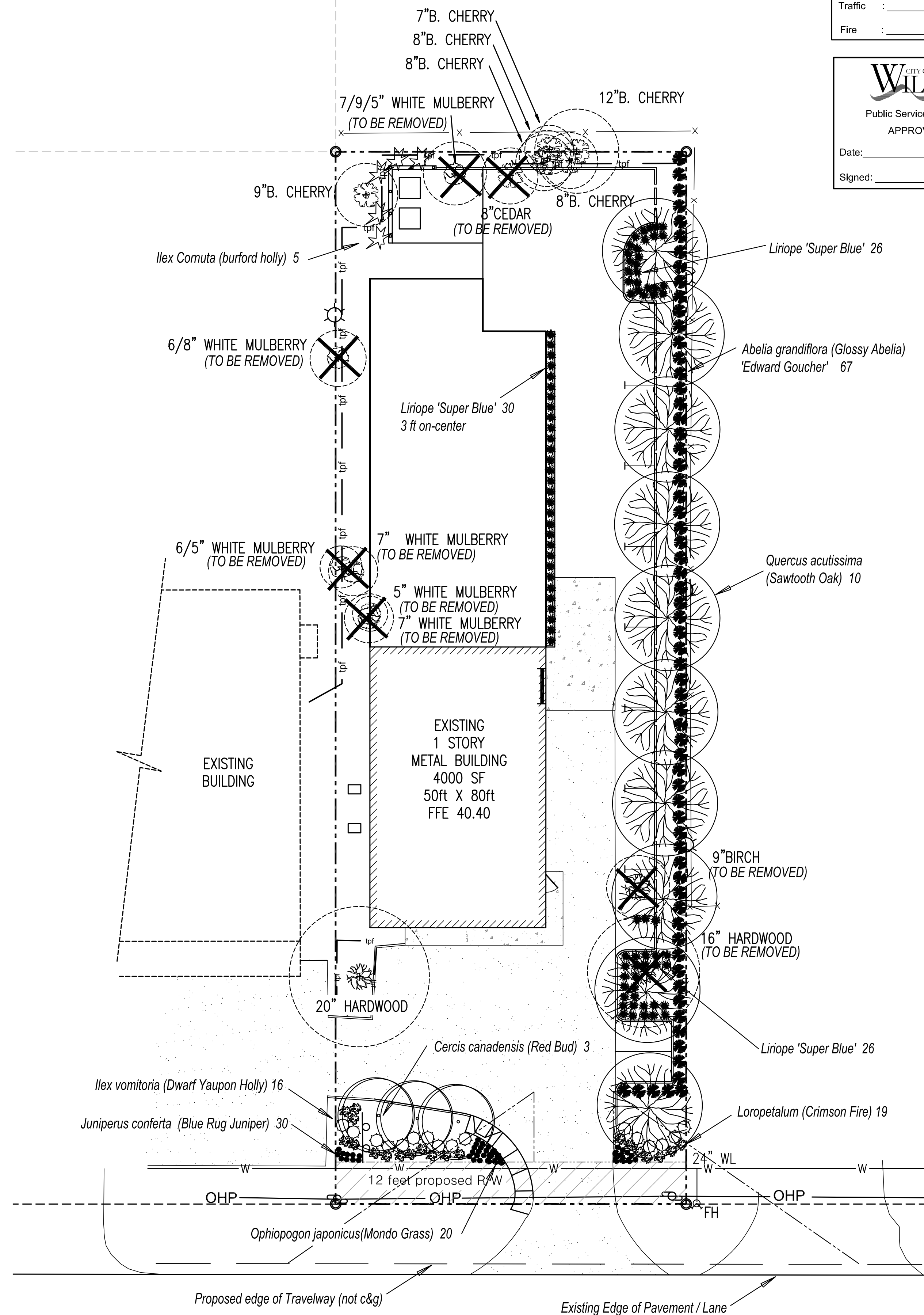
GROUND COVERS / GRASSES

Liriope muscari	Liriope 'Super blue'	82	1 gal
Ophiopogon japonicus	Mondo Grass	20	1 gal
Juniperus conferta	Juniper 'Blue Rug' or 'Blue Pacific'	30	1 gal

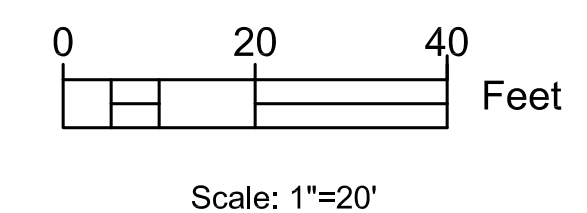
PRESERVED TREE CREDIT:

	Credit	
Northern Boundary: 3 – 8" Black Cherry	6 trees	
1 – 7" Black Cherry	2 trees	
1 – 9" Black Cherry	2 trees	
1 – 12" Black Cherry	3 trees	

TOTAL 13 tree credits



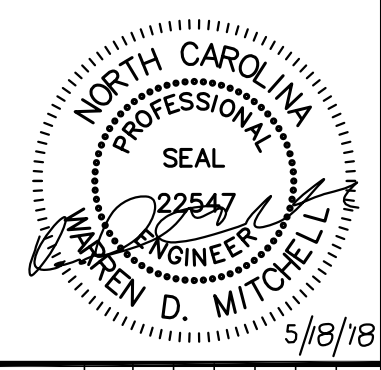
US HWY # 17 (MARKET STREET)



**CITY OF WILMINGTON**  
 NORTH CAROLINA  
**APPROVED CONSTRUCTION PLAN**  
 Planning : \_\_\_\_\_  
 Traffic : \_\_\_\_\_  
 Fire : \_\_\_\_\_

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services • Engineering Division  
**APPROVED DRAINAGE PLAN**  
 Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
 Signed: \_\_\_\_\_

Warren D. Mitchell, PE  
 Civil Engineering  
 104 Amber Wood Run  
 CHAPEL HILL, NORTH CAROLINA 27516  
 warrenmitchellpe@gmail.com  
 P (919) 593-1916



REVISIONS	CITY TRC COMMENTS
1. 4/9/18-	CITY TRC COMMENTS
2. 5/18/18-	CITY TRC COMMENTS

**Atlantic Spas and Billiards**  
 6315 Market Street  
 Wilmington, North Carolina

Jan 24, 2018

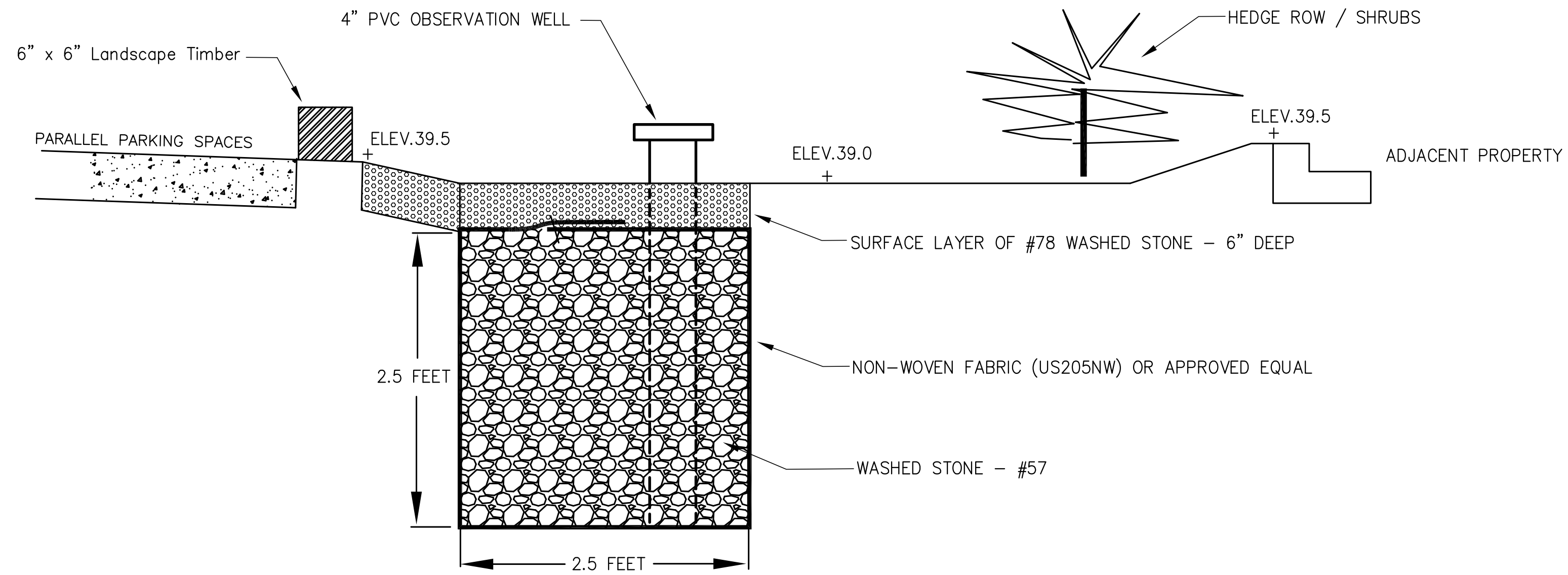
Scale: 1"=20'

Landscape Plan

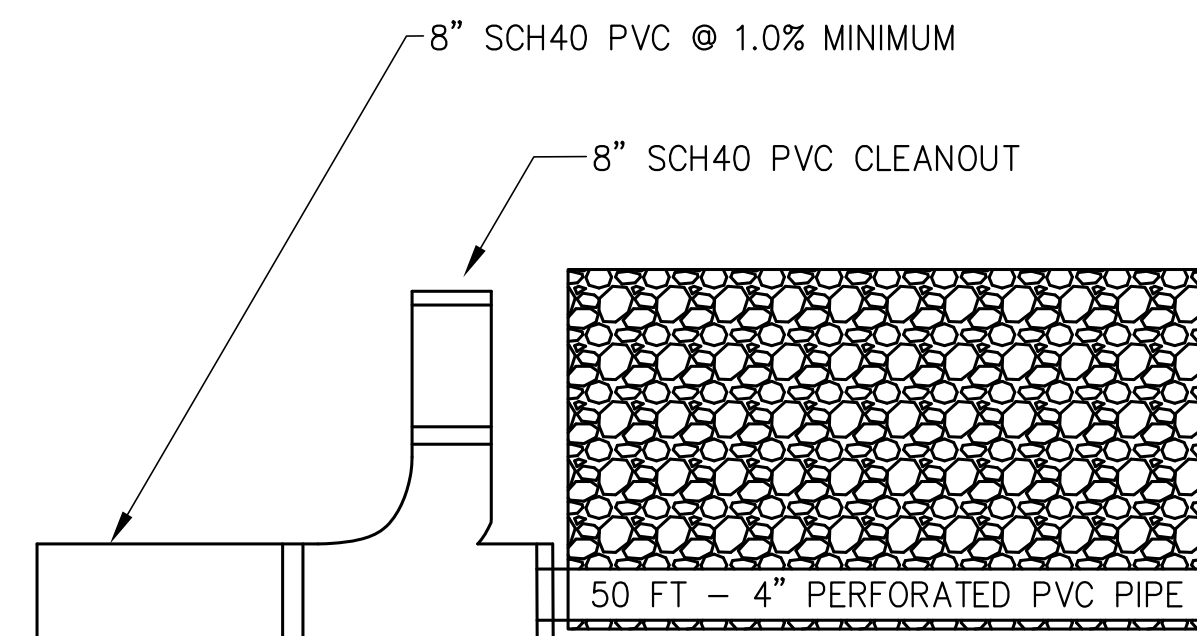
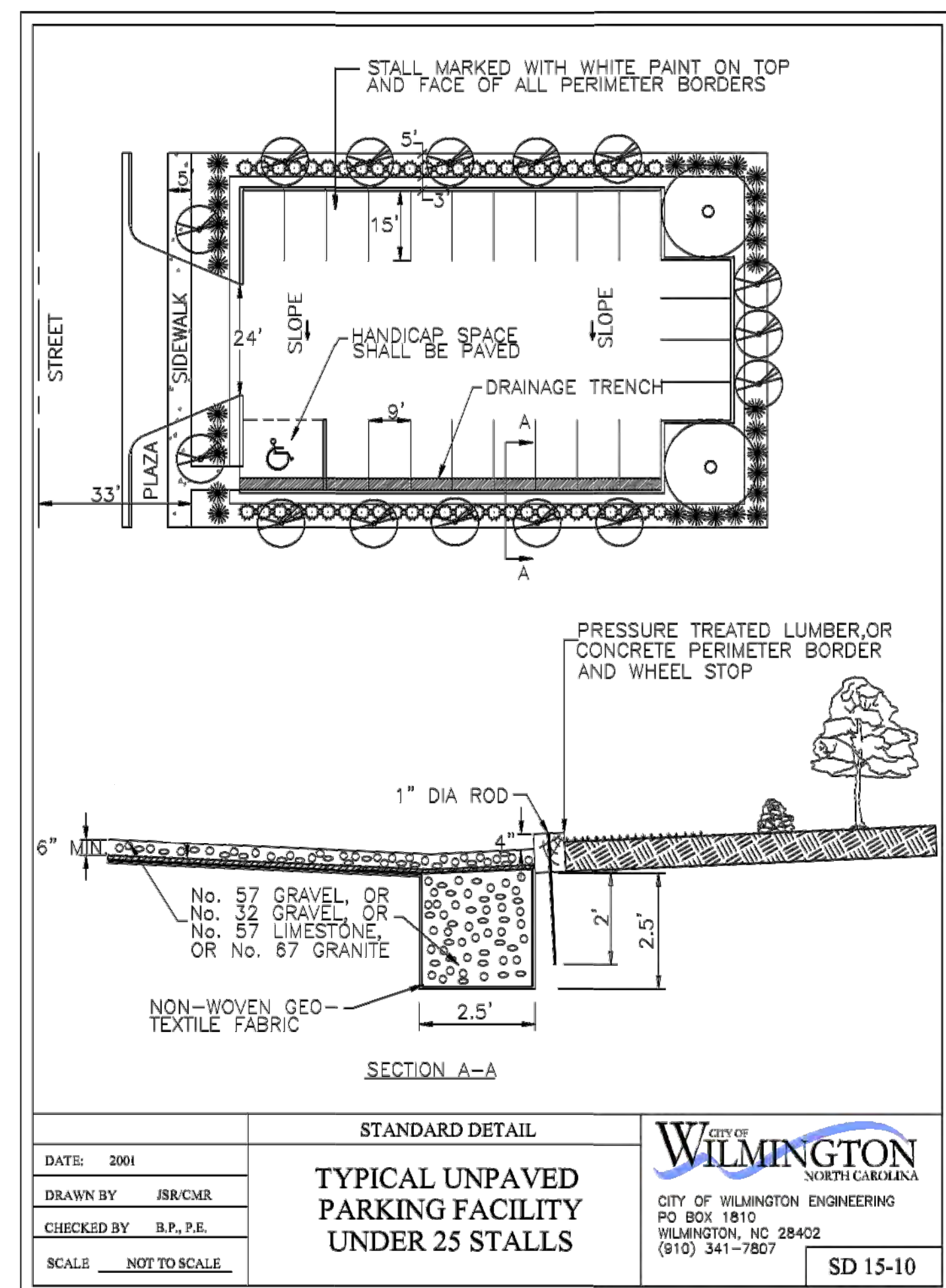
**C4**

**STORMWATER NOTES:**

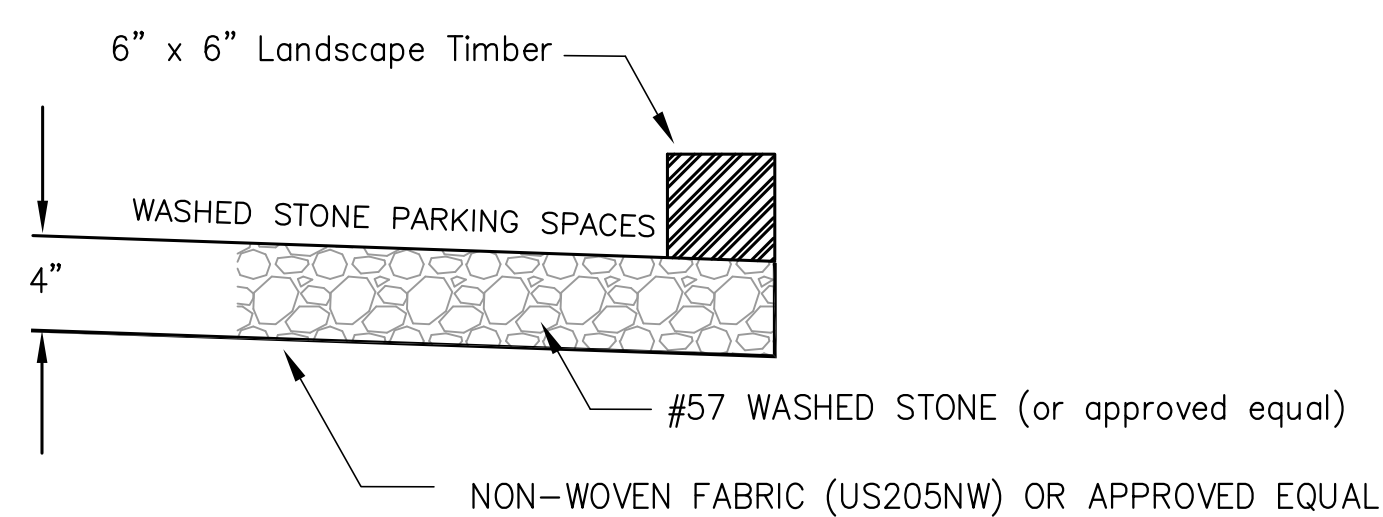
1. PROVIDE A NEARLY LEVEL SUBGRADE FOR INFILTRATION TRENCH
2. INSTALL INFILTRATION TRENCH AFTER THE MAJORITY OF SITEWORK IS COMPLETED AND THE DRAINAGE AREA STABILIZED.



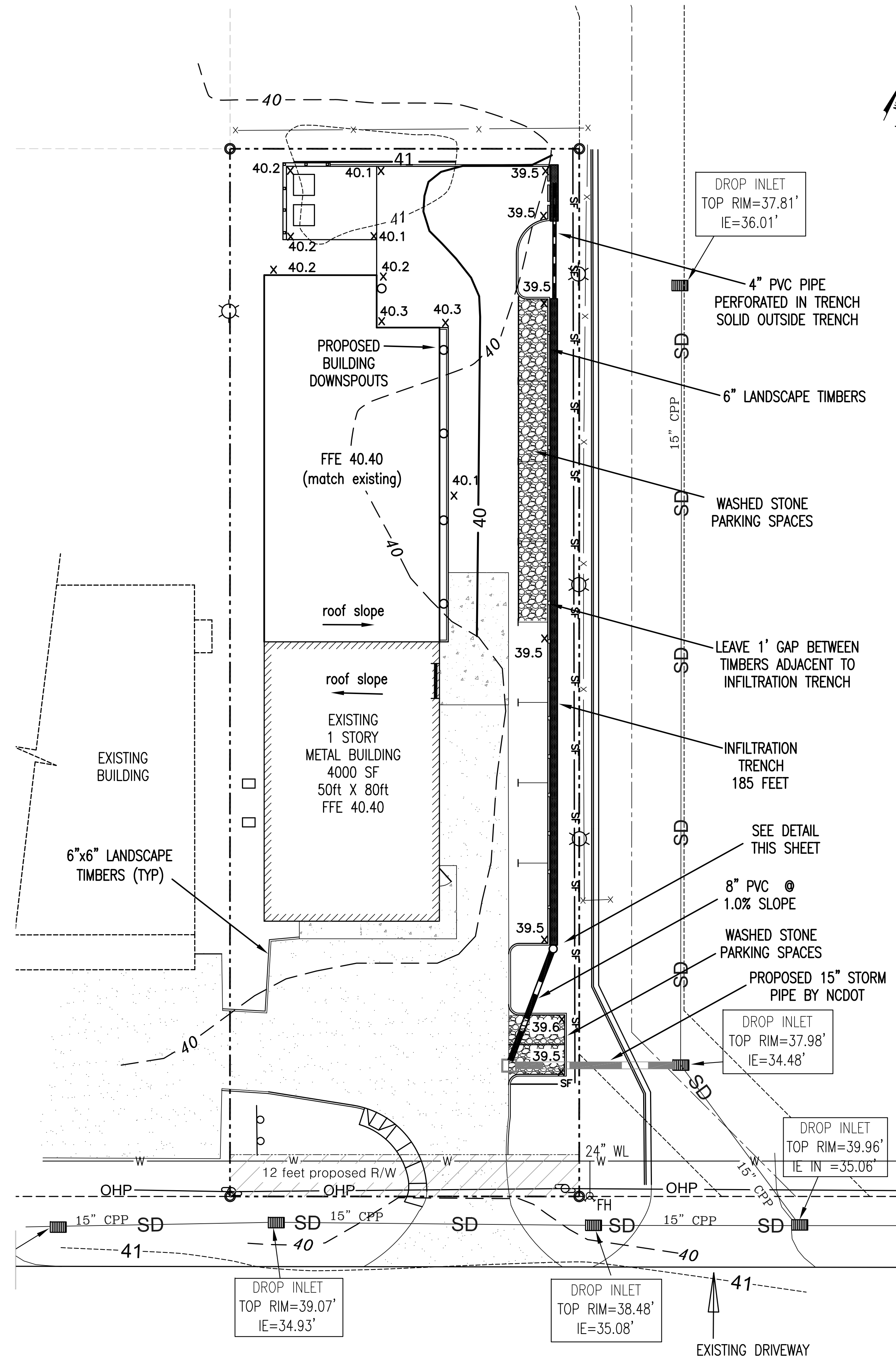
**Infiltration Trench Detail**



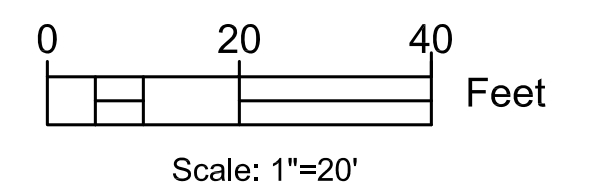
**Infiltration Trench Detail**



**Washed Stone Parking Detail**



**US HWY # 17 (MARKET STREET)**



Warren D. Mitchell, PE  
Civil Engineering  
104 Amber Wood Run  
CHAPEL HILL, NORTH CAROLINA 27516  
warrenmitchellpe@gmail.com  
P (919) 593-1916



REVISIONS	
1.	4/9/18 - CITY TRC COMMENTS
2.	5/18/18 - CITY TRC COMMENTS

**Atlantic Spas and Billiards**  
6315 Market Street  
Wilmington, North Carolina

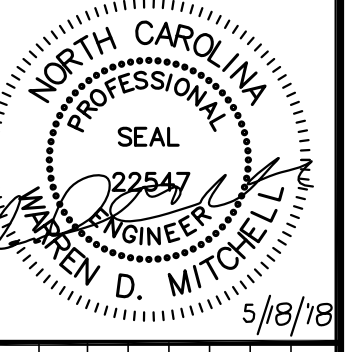
Jan 24, 2018

Scale: 1"=20'

Stormwater Plan

**C5**

**Warren D. Mitchell, PE**
  
 Civil Engineering
   
 104 Amber Wood Run
   
 CHAPEL HILL, NORTH CAROLINA 27516
   
 warrenmitchellpe@gmail.com
   
 P (919) 952-1916

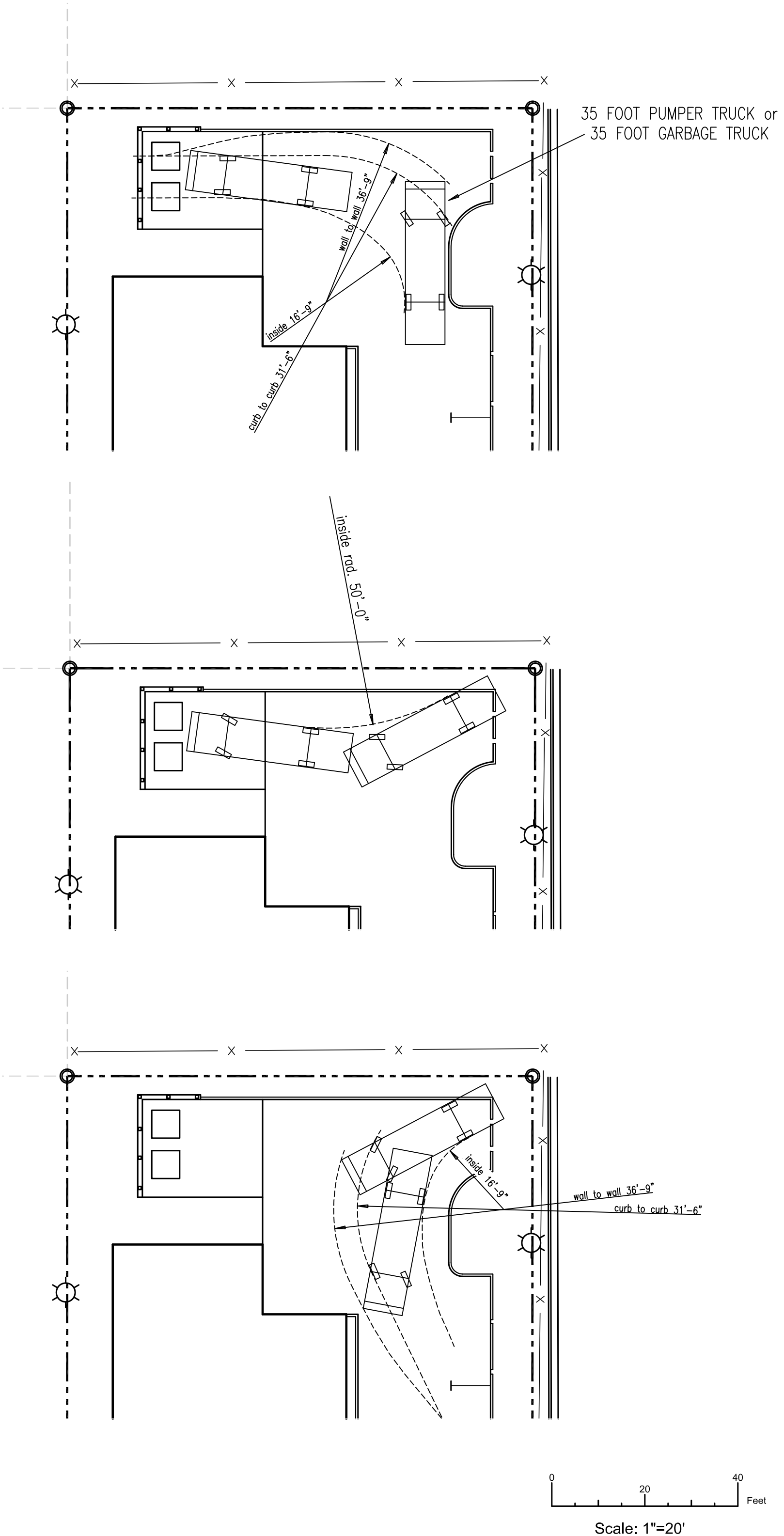


REVISIONS	CITY TRC COMMENTS
1.	4/9/18- CITY TRC COMMENTS
2.	5/18/18- CITY TRC COMMENTS

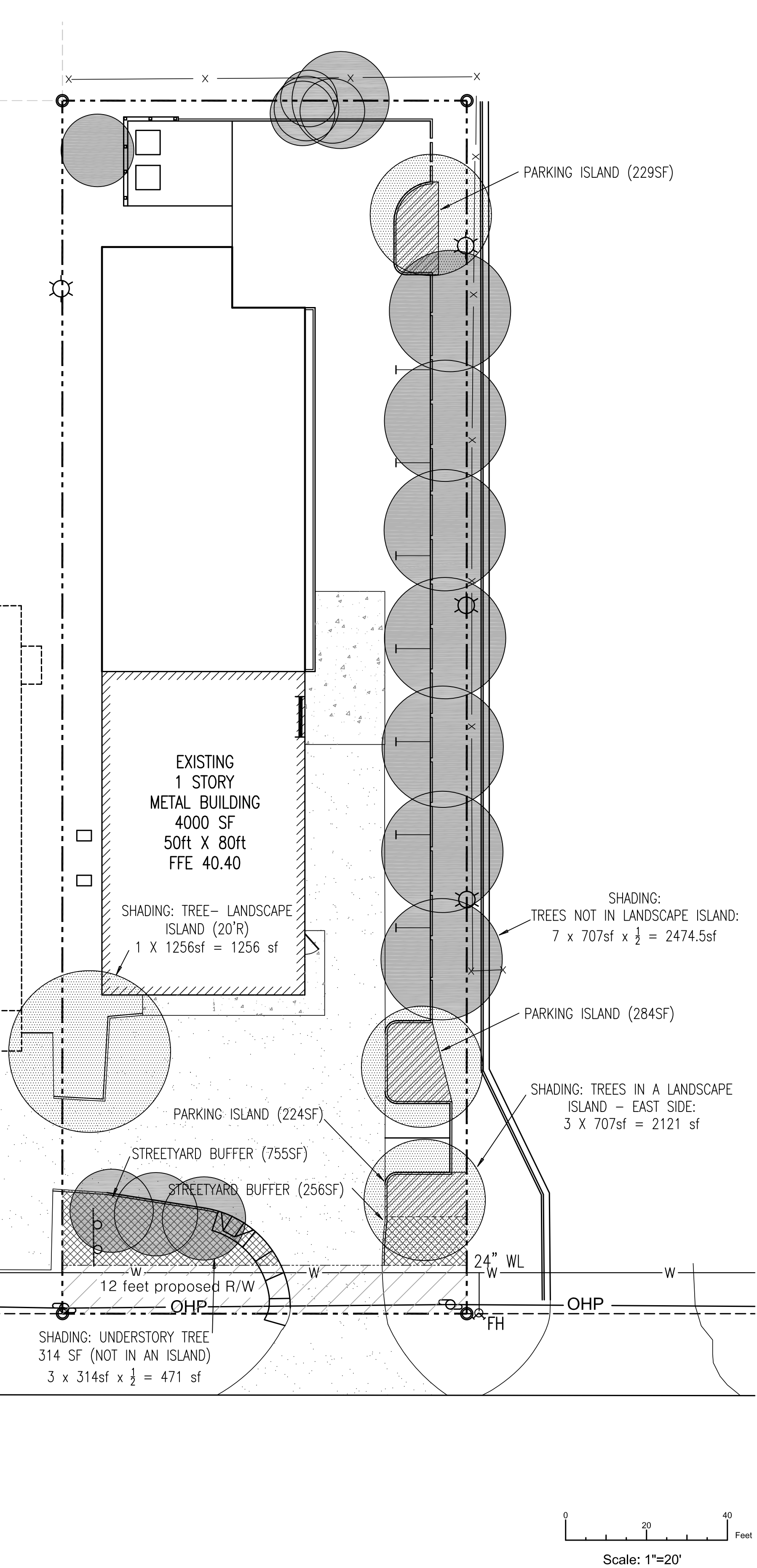
**Atlantic Spas and Billiards**
  
 6315 Market Street
   
 Wilmington, North Carolina

Jan 24, 2018
   
 Scale: 1"=20'
   
**Market St.**
  
 Future
   
 Improvements

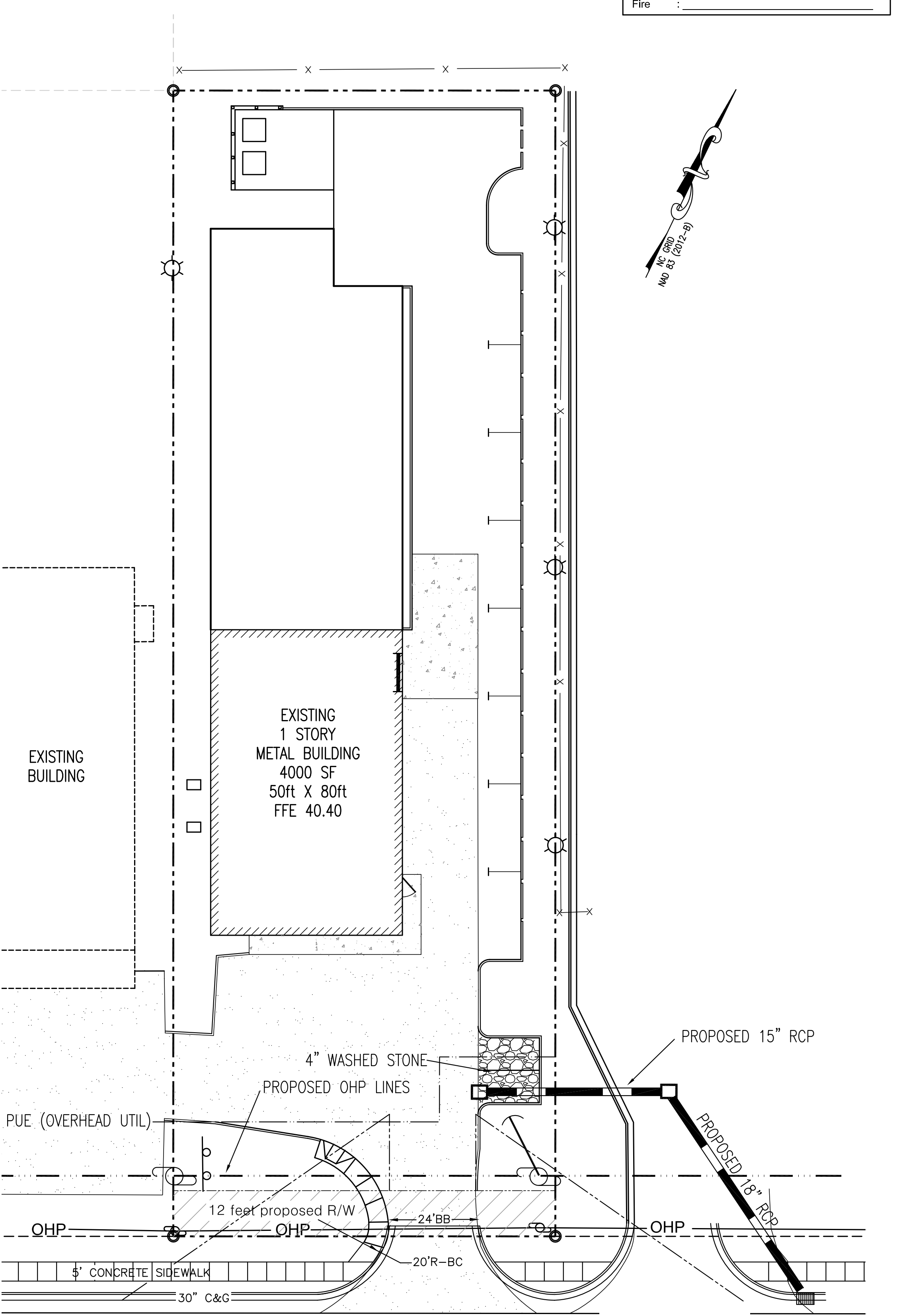
**C6**



**FIRE AND TRASH TRUCK TURNING RADII**



**LANDSCAPE ISLAND AREAS + SHADING**



**US HWY # 17 (MARKET STREET)**

**FUTURE NCDOT IMPROVEMENTS**

