

THE FLATS ON FRONT

CITY OF WILMINGTON, NC

OCTOBER 3, 2018

TECHNICAL REVIEW COMMITTEE RESUBMITTAL

COUNTY AND AGENCY CONTACTS

A. City of Wilmington
 Planning Department
 102 North Third Street
 PO BOX 1810
 Wilmington, NC 28402-1810
 (910)342-2782
 Contact: Jeff Walton
 Email: Jeff.Walton@wilmingtonnc.gov

B. City of Wilmington
 Engineering
 212 Operations Center Drive
 PO BOX 1810
 Wilmington, NC 28402-1810
 (910) 341-7807
 Contact: Richard Christensen
 Email: Richard.Christensen@wilmingtonnc.gov

C. New Hanover County
 Sediment and Erosion Control
 230 Government Center Drive, Suite 160
 Wilmington, NC 28403
 (910) 798-7432
 Contact: Beth Wetherill
 Email: BWetherill@nhcgov.com

D. Cape Fear Public Utility Authority
 235 Government Center Drive
 Wilmington, NC 28403
 (910) 332-6626
 Contact: David Dailey
 Email: David.Dailey@cfpua.org

PROJECT DATA

NAME OF PROJECT:
 THE FLATS OF FRONT
 WILMINGTON, NORTH CAROLINA
 NEW HANOVER COUNTY

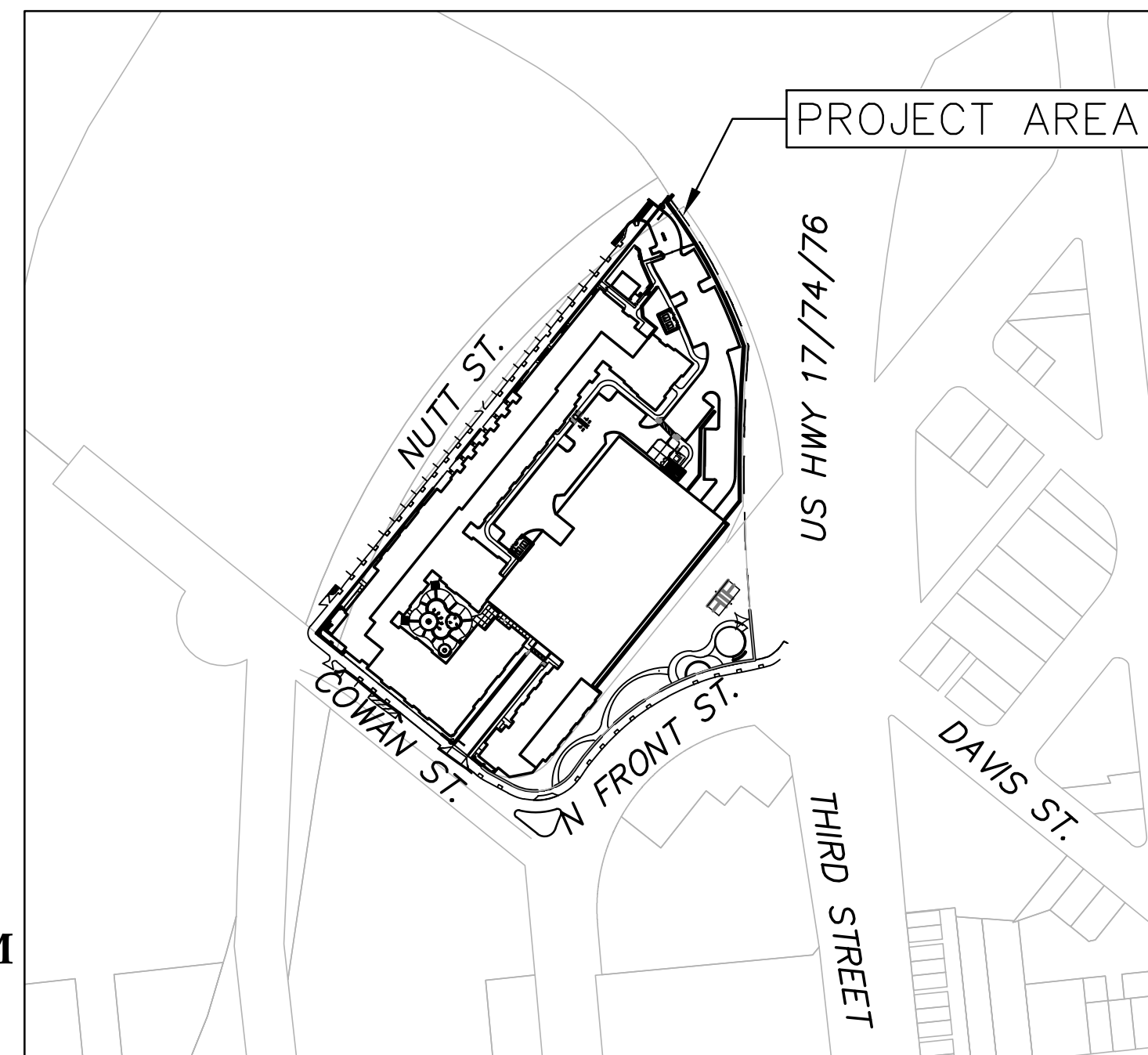
OWNER/DEVELOPER:
 FLYWAY RESIDENTIAL, LLC
 1539 TIPPAH PARK COURT
 CHARLOTTE, NC 28205
 CONTACT: PORTER JONES
 EMAIL: PJONES@DPJRESIDENTIAL.COM

ARCHITECT:
 CLINE DESIGN
 2923 SOUTH TRYON STREET
 SUITE 103
 CHARLOTTE, NC 28208
 ARCHITECT: MARK WARD
 EMAIL: MARKW@CLINEDESIGNASSOC.COM

LAND PLANNER:
 CLINE DESIGN
 125 NORTH HARRINGTON STREET
 RALEIGH, NC 27603
 CONTACT: JANET MOUNTCASTLE
 EMAIL: JANETM@CLINEDESIGNASSOC.COM

PREPARED BY:
 MCKIM & CREED, INC
 243 NORTH FRONT ST
 WILMINGTON, NC 28401
 PHONE: (910)343-1048
 FAX: (910)251-8282
 CONTACT: KATHRYN ESPINOZA, PE
 EMAIL: KESPINOZA@MCKIMCREED.COM

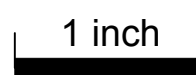
ISSUED FOR PERMITTING
 NOT FOR CONSTRUCTION



VICINITY MAP
 1"=200'

SHEET LIST TABLE		
SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
1	G-001	COVER
2	G-002	GENERAL NOTES
3	G-003	CLOSE-OUT NOTES
4	CX-100	EXISTING CONDITIONS/ SITE INVENTORY
5	CX-101	BOUNDARY SURVEY
6	CX-102	EXISTING CONDITIONS SURVEY
7	CE-101	PHASE 1 SEDIMENT AND EROSION CONTROL
8	CE-102	PHASE 2 SEDIMENT AND EROSION CONTROL
9	CD-101	DEMOLITION PLAN
10	CS-100	OVERALL SITE PLAN
11	SD1.00	OVERALL HARDSCAPE KEY PLAN
12	SD1.10	STREETSCAPE LAYOUT PLAN
13	SD1.20	STREETSCAPE LAYOUT PLAN
14	SD1.21	STREETSCAPE GRADING PLANS
15	SD1.30	PARK PLAZA LAYOUT PLAN
16	SD1.40	DOG PARK LAYOUT PLAN
17	SD2.00	SITE DETAILS
18	SD2.10	TRASH AREA LAYOUT PLAN AND DETAILS
19	CG-100	GRADING AND STORMWATER PLAN
20	CU-100	OVERALL UTILITY PLAN
21	LP1.00	OVERALL PLANTING PLAN
22	LP1.10	ENLARGED PLANTING PLAN
23	LP1.20	ENLARGED PLANTING PLAN
24	LP1.30	ENLARGED PLANTING PLAN
25	LP2.00	PLANT SCHEDULE AND DETAILS
26	CE-501	SEDIMENT AND EROSION CONTROL DETAILS
27	CS-501	SITE DETAILS
28	CS-502	SITE DETAILS
29	A-1	OVERALL BASEMENT PLAN
30	A-2	OVERALL FIRST FLOOR PLAN
31	A-3	OVERALL EXTERIOR ELEVATIONS
32	A-4	OVERALL EXTERIOR ELEVATIONS

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

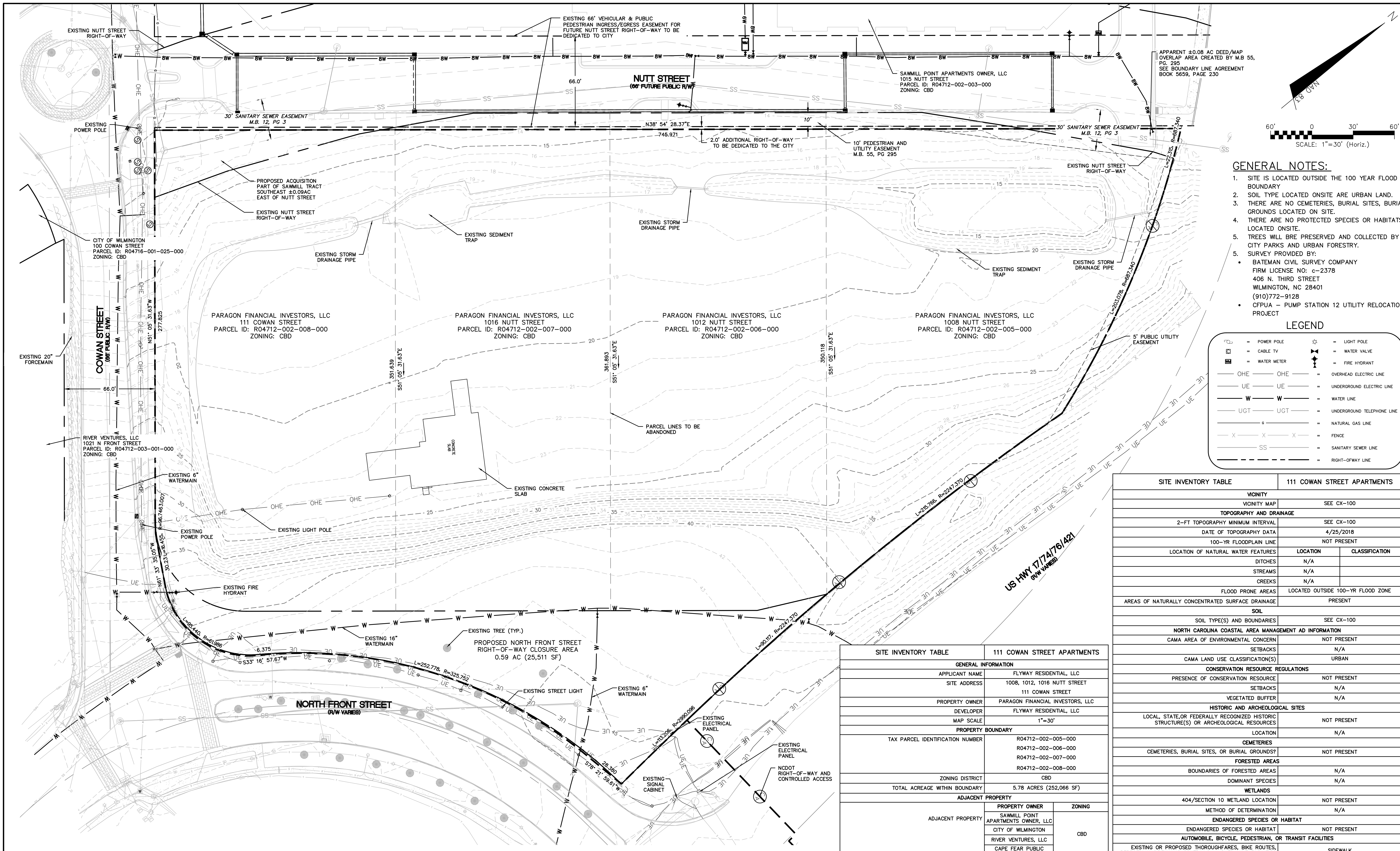
Date: _____ Permit # _____
 Signed: _____



243 North Front Street
 Wilmington, North Carolina 28401
 Phone: (910)343-1048 , Fax: (910)251-8282
 License: F-1222
 www.mckimcreed.com



Know what's below.
 Call before you dig.



- GENERAL NOTES:**
1. SITE IS LOCATED OUTSIDE THE 100 YEAR FLOOD BOUNDARY
 2. SOIL TYPE LOCATED ONSITE ARE URBAN LAND.
 3. THERE ARE NO CEMETERIES, BURIAL SITES, BURIAL GROUNDS LOCATED ON SITE.
 4. THERE ARE NO PROTECTED SPECIES OR HABITATS LOCATED ONSITE.
 5. TREES WILL BE PRESERVED AND COLLECTED BY CITY PARKS AND URBAN FORESTRY.
 5. SURVEY PROVIDED BY:
 - BATEMAN CIVIL SURVEY COMPANY
FIRM LICENSE NO: c-2378
406 N. THIRD STREET
WILMINGTON, NC 28401
(910)772-9128
 - CFPWA - PUMP STATION 12 UTILITY RELOCATION PROJECT

LEGEND

	POWER POLE		LIGHT POLE
	CABLE TV		WATER VALVE
	WATER METER		FIRE HYDRANT
	OHE		OVERHEAD ELECTRIC LINE
	UE		UNDERGROUND ELECTRIC LINE
	W		WATER LINE
	UGT		UNDERGROUND TELEPHONE LINE
	G		NATURAL GAS LINE
	X		FENCE
	SS		SANITARY SEWER LINE
	- - -		RIGHT-OF-WAY LINE

SITE INVENTORY TABLE	111 COWAN STREET APARTMENTS
VICINITY MAP	SEE CX-100
TOPOGRAPHY AND DRAINAGE	
2-FT TOPOGRAPHY MINIMUM INTERVAL	SEE CX-100
DATE OF TOPOGRAPHY DATA	4/25/2018
100-YR FLOODPLAIN LINE	NOT PRESENT
LOCATION OF NATURAL WATER FEATURES	LOCATION CLASSIFICATION
DITCHES	N/A
STREAMS	N/A
CREEKS	N/A
FLOOD PRONE AREAS	LOCATED OUTSIDE 100-YR FLOOD ZONE
AREAS OF NATURALLY CONCENTRATED SURFACE DRAINAGE	PRESENT
SOIL	
SOIL TYPE(S) AND BOUNDARIES	SEE CX-100
NORTH CAROLINA COASTAL AREA MANAGEMENT AD INFORMATION	
CAMA AREA OF ENVIRONMENTAL CONCERN	NOT PRESENT
SETBACKS	N/A
CAMA LAND USE CLASSIFICATION(S)	URBAN
CONSERVATION RESOURCE REGULATIONS	
PRESENCE OF CONSERVATION RESOURCE	NOT PRESENT
SETBACKS	N/A
VEGETATED BUFFER	N/A
HISTORIC AND ARCHEOLOGICAL SITES	
LOCAL, STATE, OR FEDERALLY RECOGNIZED HISTORIC STRUCTURE(S) OR ARCHEOLOGICAL RESOURCES	NOT PRESENT
LOCATION	N/A
CEMETERIES	
CEMETERIES, BURIAL SITES, OR BURIAL GROUNDS?	NOT PRESENT
FORESTED AREAS	
BOUNDARIES OF FORESTED AREAS	N/A
DOMINANT SPECIES	N/A
WETLANDS	
404/SECTION 10 WETLAND LOCATION	NOT PRESENT
METHOD OF DETERMINATION	N/A
ENDANGERED SPECIES OR HABITAT	
ENDANGERED SPECIES OR HABITAT	NOT PRESENT
AUTOMOBILE, BICYCLE, PEDESTRIAN, OR TRANSIT FACILITIES	
EXISTING OR PROPOSED THOROUGHFARES, BIKE ROUTES, PEDESTRIAN SIDEWALKS OR TRAILS, AND TRANSIT FACILITIES	SIDEWALK

SITE INVENTORY TABLE	111 COWAN STREET APARTMENTS
GENERAL INFORMATION	
APPLICANT NAME	FLYWAY RESIDENTIAL, LLC
SITE ADDRESS	1008, 1012, 1016 NUTT STREET 111 COWAN STREET
PROPERTY OWNER	PARAGON FINANCIAL INVESTORS, LLC
DEVELOPER	FLYWAY RESIDENTIAL, LLC
MAP SCALE	1"=30'
PROPERTY BOUNDARY	
TAX PARCEL IDENTIFICATION NUMBER	R04712-002-005-000 R04712-002-006-000 R04712-002-007-000 R04712-002-008-000
ZONING DISTRICT	CBD
TOTAL ACREAGE WITHIN BOUNDARY	5.78 ACRES (252,066 SF)
ADJACENT PROPERTY	
PROPERTY OWNER	SAMMILL POINT APARTMENTS OWNER, LLC
ADJACENT PROPERTY	CITY OF WILMINGTON RIVER VENTURES, LLC CAPE FEAR PUBLIC UTILITY AUTHORITY
ZONING	CBD

REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018

FINAL DRAWING FOR REVIEW PURPOSES ONLY

SEAL

MCKIM & CREED
 243 North Front Street
 Wilmington, North Carolina 28401
 Phone: (910)343-1048, Fax: (910)251-8282
 License: F-1222
 www.mckimcreed.com

dpj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
**EXISTING CONDITIONS/
 SITE INVENTORY**

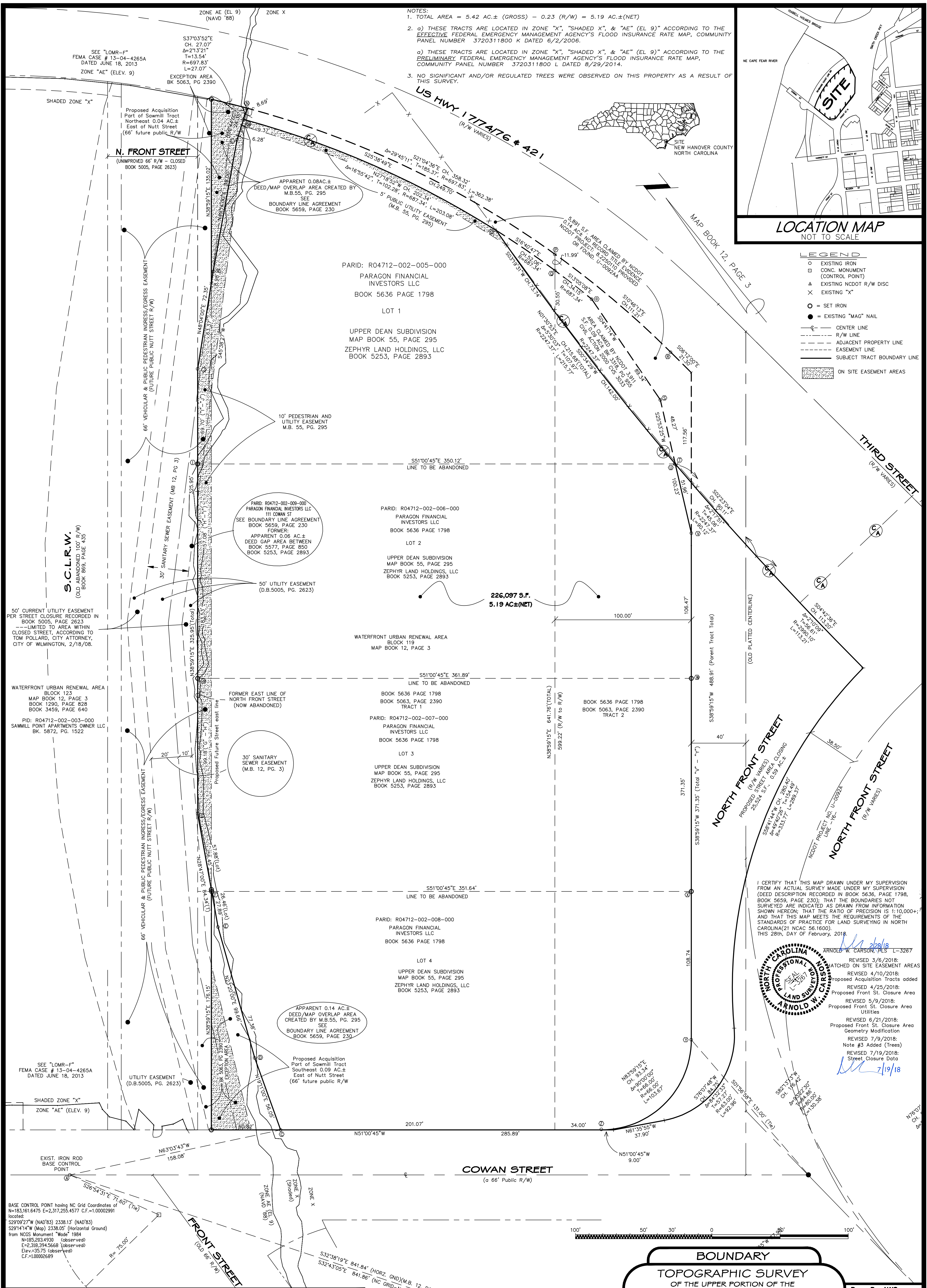
DATE: 07/11/2018
 MCE PROJ. # 7402-0001
 DRAWN: ALM/KCE
 DESIGNED: ALM
 CHECKED: RMC
 PROJ. MGR: KCE

SCALE: HORIZONTAL: 1"=30'
 VERTICAL: N/A

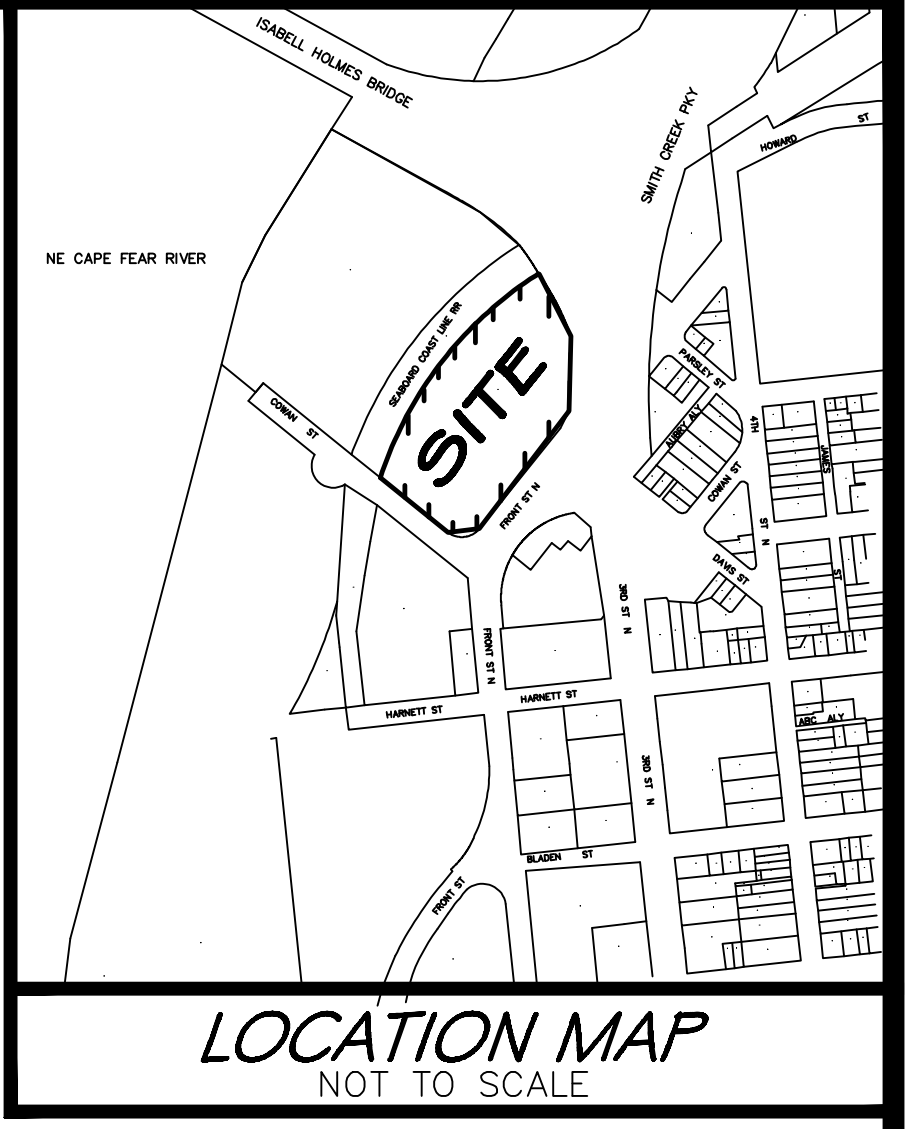
MAC FILE NUMBER: CX-100
 DRAWING NUMBER: 4

STATUS: PRELIMINARY DESIGN
 ISSUED FOR PERMITTING

REVISION: B



NOTES:
 1. TOTAL AREA = 5.42 AC.± (GROSS) - 0.23 (R/W) = 5.19 AC.± (NET)
 2. a) THESE TRACTS ARE LOCATED IN ZONE "X", "SHADED X", & "AE" (EL 9) ACCORDING TO THE EFFECTIVE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 3720311800 K DATED 6/2/2006.
 b) THESE TRACTS ARE LOCATED IN ZONE "X", "SHADED X", & "AE" (EL 9) ACCORDING TO THE PRELIMINARY FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 3720311800 L DATED 8/29/2014.
 3. NO SIGNIFICANT AND/OR REGULATED TREES WERE OBSERVED ON THIS PROPERTY AS A RESULT OF THIS SURVEY.



LEGEND

- EXISTING IRON
- CONC. MONUMENT (CONTROL POINT)
- △ EXISTING NCDOT R/W DISC
- × EXISTING "X"
- = SET IRON
- = EXISTING "MAG" NAIL
- CENTER LINE
- - - R/W LINE
- - - ADJACENT PROPERTY LINE
- - - EASEMENT LINE
- - - SUBJECT TRACT BOUNDARY LINE
- ▨ ON SITE EASEMENT AREAS

PARID: R04712-002-005-000
 PARAGON FINANCIAL INVESTORS LLC
 BOOK 5636 PAGE 1798
 LOT 1
 UPPER DEAN SUBDIVISION
 MAP BOOK 55, PAGE 295
 ZEPHYR LAND HOLDINGS, LLC
 BOOK 5253, PAGE 2893

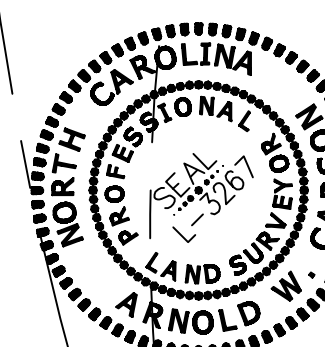
PARID: R04712-002-006-000
 PARAGON FINANCIAL INVESTORS LLC
 BOOK 5636 PAGE 1798
 LOT 2
 UPPER DEAN SUBDIVISION
 MAP BOOK 55, PAGE 295
 ZEPHYR LAND HOLDINGS, LLC
 BOOK 5253, PAGE 2893

PARID: R04712-002-007-000
 PARAGON FINANCIAL INVESTORS LLC
 BOOK 5636 PAGE 1798
 LOT 3
 UPPER DEAN SUBDIVISION
 MAP BOOK 55, PAGE 295
 ZEPHYR LAND HOLDINGS, LLC
 BOOK 5253, PAGE 2893

PARID: R04712-002-008-000
 PARAGON FINANCIAL INVESTORS LLC
 BOOK 5636 PAGE 1798
 LOT 4
 UPPER DEAN SUBDIVISION
 MAP BOOK 55, PAGE 295
 ZEPHYR LAND HOLDINGS, LLC
 BOOK 5253, PAGE 2893

I CERTIFY THAT THIS MAP DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 5636, PAGE 1798, BOOK 5659, PAGE 230); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION SHOWN HEREON; THAT THE RATIO OF PRECISION IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600).
 THIS 28th, DAY OF February, 2018.

ARNOLD W. CARSON, PLS L-3267
 REVISIONS:
 REVIS 3/6/2018: WATCHED ON SITE EASEMENT AREAS
 REVIS 4/10/2018: Proposed Acquisition Tracts added
 REVIS 4/25/2018: Proposed Front St. Closure Area
 REVIS 5/9/2018: Proposed Front St. Closure Area Utilities
 REVIS 6/21/2018: Proposed Front St. Closure Area Geometry Modification
 REVIS 7/9/2018: Note #3 Added (Trees)
 REVIS 7/19/2018: Street Closure Data
 2/19/18



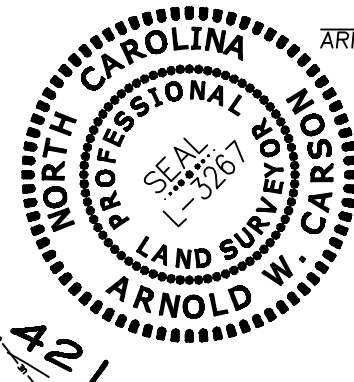
BOUNDARY TOPOGRAPHIC SURVEY OF THE UPPER PORTION OF THE DEAN PROPERTY
 AS RECORDED IN BOOK 5636, PAGE 1798, BOOK 5659, PAGE 230, AND MAP BOOK 12, PAGE 3 OF THE NEW HANOVER COUNTY REGISTRY.
 CITY OF WILMINGTON TOWNSHIP -- NEW HANOVER COUNTY -- NORTH CAROLINA
 SCALE: 1" = 50'
 FEBRUARY 27, 2018
 FOR
Flyway Residential LLC
 1539 Tippah Park Court, Charlotte, NC 28205

Drawn By: AWC
 Checked By: AWC
 Scale: 1" = 30'
 Project Number: 18W019

SH. 1 of 2

Bateman Civil Survey Company
 Engineers • Surveyors • Planners
 406 N. Third Street, Wilmington, NC 28401
 Phone: 910.772.9113 Fax: 910.772.9128
 NCBELS FIRM No. C-2378

I CERTIFY THAT THIS MAP DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 5636, PAGE 1798, BOOK 5659, PAGE 230); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION SHOWN HEREON; THAT THE RATIO OF PRECISION IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA(21 NCAC 56.1600). THIS 28th DAY OF February, 2018.



REVISED 3/6/2018:
HATCHED ON SITE EASEMENT AREAS
REVISED 4/10/2018:
Proposed Acquisition Tracts added
REVISED 4/25/2018:
Proposed Front St. Closure Area
REVISED 5/9/2018:
Proposed Front St. Closure Area Utilities
REVISED 6/21/2018:
Proposed Front St. Closure Area Geometry Modification
REVISED 7/9/2018:
Note #3 Added (Trees)
2/9/18

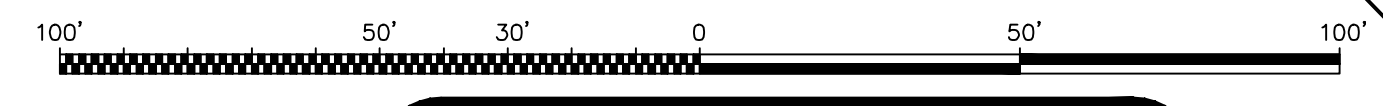
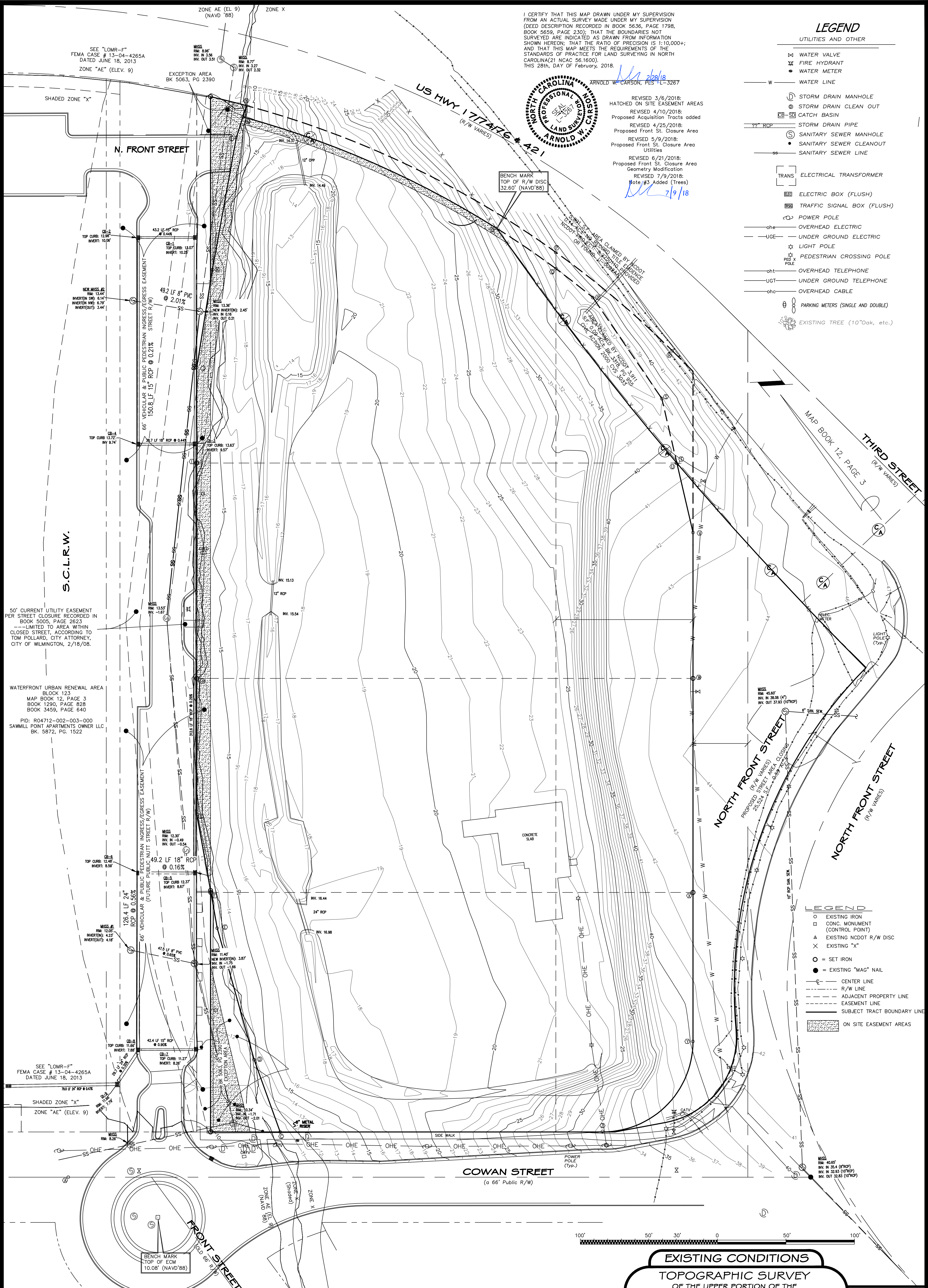
LEGEND

UTILITIES AND OTHER

- ⊗ WATER VALVE
- ⊗ FIRE HYDRANT
- WATER METER
- W — WATER LINE
- ⊕ STORM DRAIN MANHOLE
- ⊕ STORM DRAIN CLEAN OUT
- ⊕ CATCH BASIN
- SS — STORM DRAIN PIPE
- ⊕ SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SS — SANITARY SEWER LINE
- ⊕ TRANS ELECTRICAL TRANSFORMER
- ⊕ ELECTRIC BOX (FLUSH)
- ⊕ TRAFFIC SIGNAL BOX (FLUSH)
- ⊕ POWER POLE
- ohe — OVERHEAD ELECTRIC
- uge — UNDER GROUND ELECTRIC
- ⊕ LIGHT POLE
- ⊕ PEDESTRIAN CROSSING POLE
- oht — OVERHEAD TELEPHONE
- ugt — UNDER GROUND TELEPHONE
- ohc — OVERHEAD CABLE
- ⊕ PARKING METERS (SINGLE AND DOUBLE)
- ⊕ EXISTING TREE (10"Oak, etc.)

LEGEND

- ⊕ EXISTING IRON
- ⊕ CONC. MONUMENT (CONTROL POINT)
- ⊕ EXISTING NCDOT R/W DISC
- ⊕ EXISTING "X"
- = SET IRON
- = EXISTING "MAG" NAIL
- CL — CENTER LINE
- R/W — R/W LINE
- ADJ — ADJACENT PROPERTY LINE
- EASE — EASEMENT LINE
- SUB — SUBJECT TRACT BOUNDARY LINE
- ⊕ ON SITE EASEMENT AREAS

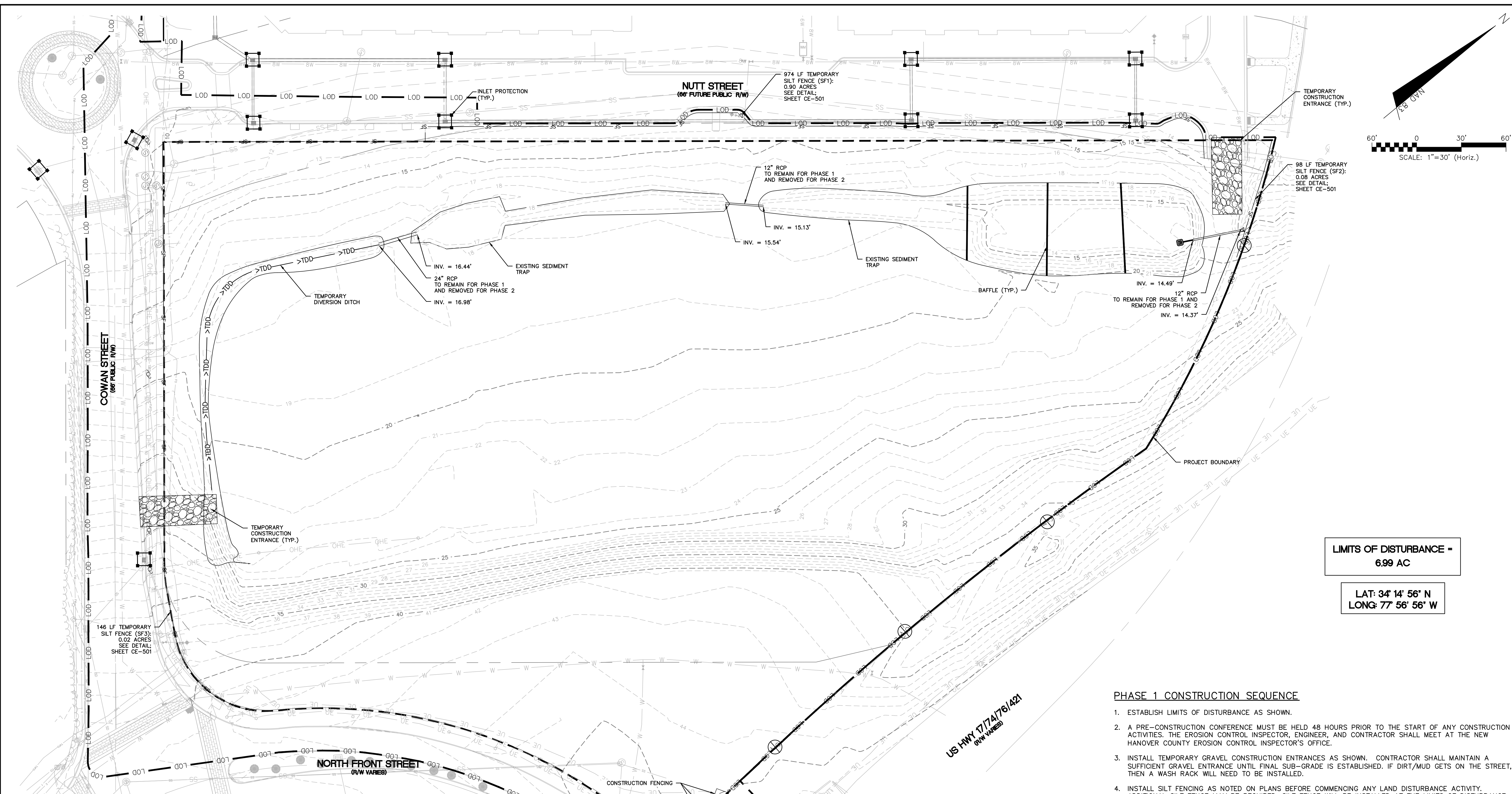


EXISTING CONDITIONS
TOPOGRAPHIC SURVEY
OF THE UPPER PORTION OF THE
DEAN PROPERTY
AS RECORDED IN BOOK 5636, PAGE 1798, BOOK 5659, PAGE 230, AND MAP BOOK 12, PAGE 3 OF THE NEW HANOVER COUNTY REGISTRY.
CITY OF WILMINGTON TOWNSHIP -- NEW HANOVER COUNTY -- NORTH CAROLINA
SCALE: 1" = 50' FEBRUARY 27, 2018

FOR
Flyway Residential LLC
1539 Tippah Park Court, Charlotte, NC 28205

Drawn By: AWC
Checked By: AWC
Scale: 1" = 30'
Project Number: 18W019
SH. 2 of 2

Bateman Civil Survey Company
Engineers • Surveyors • Planners
406 N. Third Street, Wilmington, NC 28401
Phone: 910.772.9113 Fax: 910.772.9128
NCBELS FIRM No. C-2378



LIMITS OF DISTURBANCE - 6.99 AC

**LAT: 34° 14' 56" N
LONG: 77° 56' 56" W**

PHASE 1 CONSTRUCTION SEQUENCE

1. ESTABLISH LIMITS OF DISTURBANCE AS SHOWN.
2. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. THE EROSION CONTROL INSPECTOR, ENGINEER, AND CONTRACTOR SHALL MEET AT THE NEW HANOVER COUNTY EROSION CONTROL INSPECTOR'S OFFICE.
3. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCES AS SHOWN. CONTRACTOR SHALL MAINTAIN A SUFFICIENT GRAVEL ENTRANCE UNTIL FINAL SUB-GRADE IS ESTABLISHED. IF DIRT/MUD GETS ON THE STREET, THEN A WASH RACK WILL NEED TO BE INSTALLED.
4. INSTALL SILT FENCING AS NOTED ON PLANS BEFORE COMMENCING ANY LAND DISTURBANCE ACTIVITY. ADDITIONAL SILT FENCE WILL BE INSTALLED AT THE LIMITS OF DISTURBANCE LINE. ADD IMPROVEMENTS TO THE EXISTING SEDIMENT TRAP AS SHOWN.
5. INSTALL INLET PROTECTION AS SHOWN IN THE PHASE 1 PLAN AND CONSTRUCTION DETAILS.
6. COMMENCE GRUBBING AND ROUGH GRADING WITHIN THE LIMITS OF CONSTRUCTION.
7. COMMENCE DEMOLITION OF EXISTING BUILDINGS, DRIVES, FENCES, GATES, WELLS, GARDENS AND EXISTING UTILITY SERVICES. ALL DEMOLITION MATERIAL SHALL BE DISPOSED OF, SALVAGED, OR RECYCLED PER THE PROJECT SPECIFICATIONS.
8. COORDINATE DISCONNECTION OF EXISTING UTILITIES:
 - ELECTRICAL SERVICES AND POLES WITH DUKE ENERGY PROGRESS
 - TELEPHONE SERVICES AND POLES WITH AT&T
 - CABLE WITH SPECTRUM
 - SEWER AND WATER SERVICES WITH CAPE FEAR PUBLIC UTILITY AUTHORITY
 - STORM DRAINAGE SYSTEM WITH CITY OF WILMINGTON

LEGEND

- [Symbol] - INLET PROTECTION
- LOD --- LOD --- - LIMITS OF DISTURBANCE
- SF - SILT FENCE

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

1 inch

CITY OF WILMINGTON
NORTH CAROLINA
Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018
	REVISIONS	

FINAL DRAWING FOR REVIEW PURPOSES ONLY

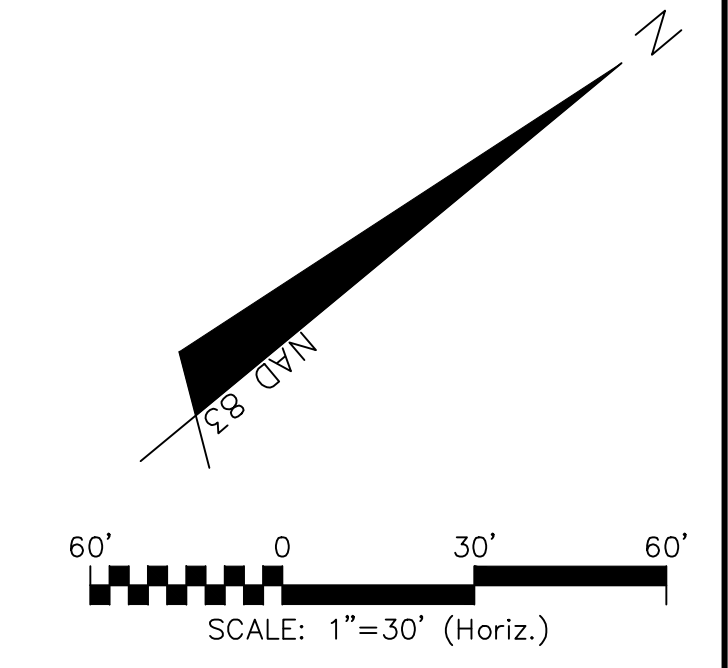
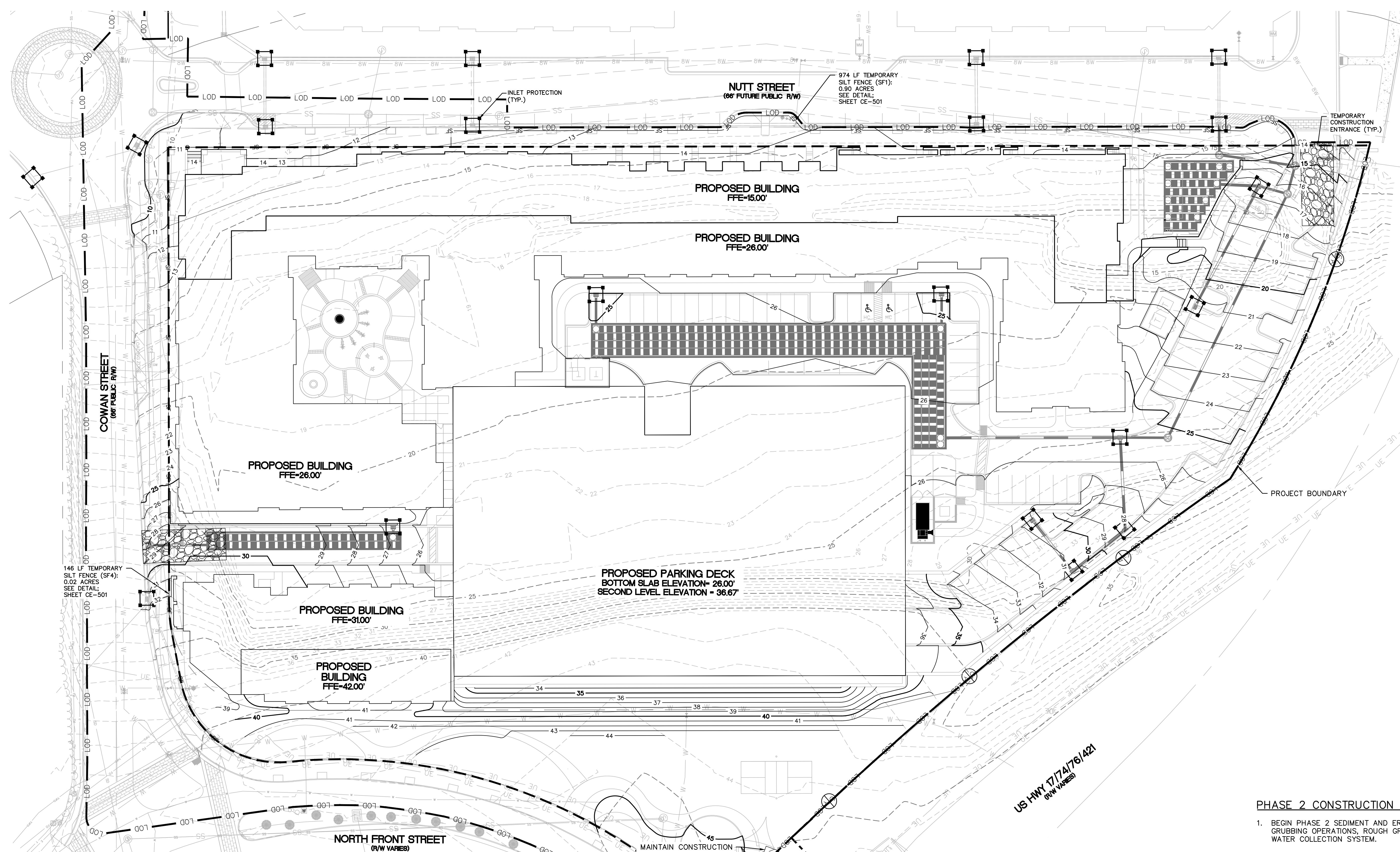
SEAL

MCKIM & CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

dpj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
PHASE 1 SEDIMENT AND EROSION CONTROL

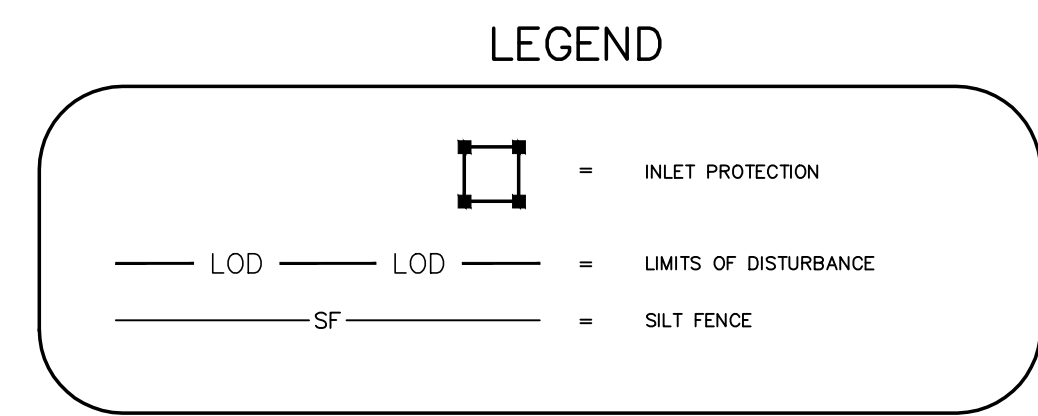
DATE: 07/11/2018	SCALE: 1"=30'	MAC FILE NUMBER: CE-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: 7
DRAWN: ALM/KCE	VERTICAL: N/A	REVISION: B
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR.: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



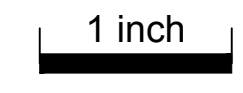
LIMITS OF DISTURBANCE - 6.99 AC

**LAT: 34° 14' 56" N
LONG: 77° 56' 56" W**

- PHASE 2 CONSTRUCTION SEQUENCE**
- BEGIN PHASE 2 SEDIMENT AND EROSION CONTROL UPON COMPLETION OF CLEARING AND GRUBBING OPERATIONS, ROUGH GRADING OF THE SITE AND INSTALLATION OF THE STORM WATER COLLECTION SYSTEM.
 - MAINTAIN MEASURES FROM PHASE 1 AS SHOWN IN THIS PHASE 2 SEDIMENT AND EROSION CONTROL DRAWING.
 - REMOVE MEASURES FROM PHASE 1 AS SHOWN. STABILIZE THESE AREAS ACCORDING TO THE STABILIZATION MEASURE REQUIRED HEREIN.
 - INSTALL INLET PROTECTION AS SHOWN IN THE PHASE 2 PLAN AND CONSTRUCTION DETAILS.
 - COMPLETE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
 - UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
 - REMOVE THE SEDIMENT AND EROSION CONTROL MEASURES.
 - REFER TO G-002 FOR EROSION AND SEDIMENT CONTROL NOTES AND MAINTENANCE PLAN.



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



CITY OF WILMINGTON
NORTH CAROLINA
Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018

FINAL DRAWING FOR REVIEW PURPOSES ONLY

SEAL

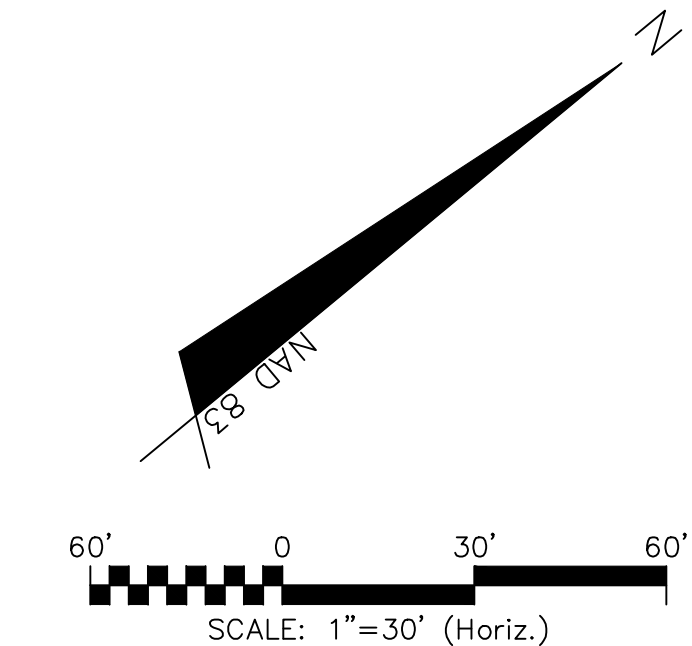
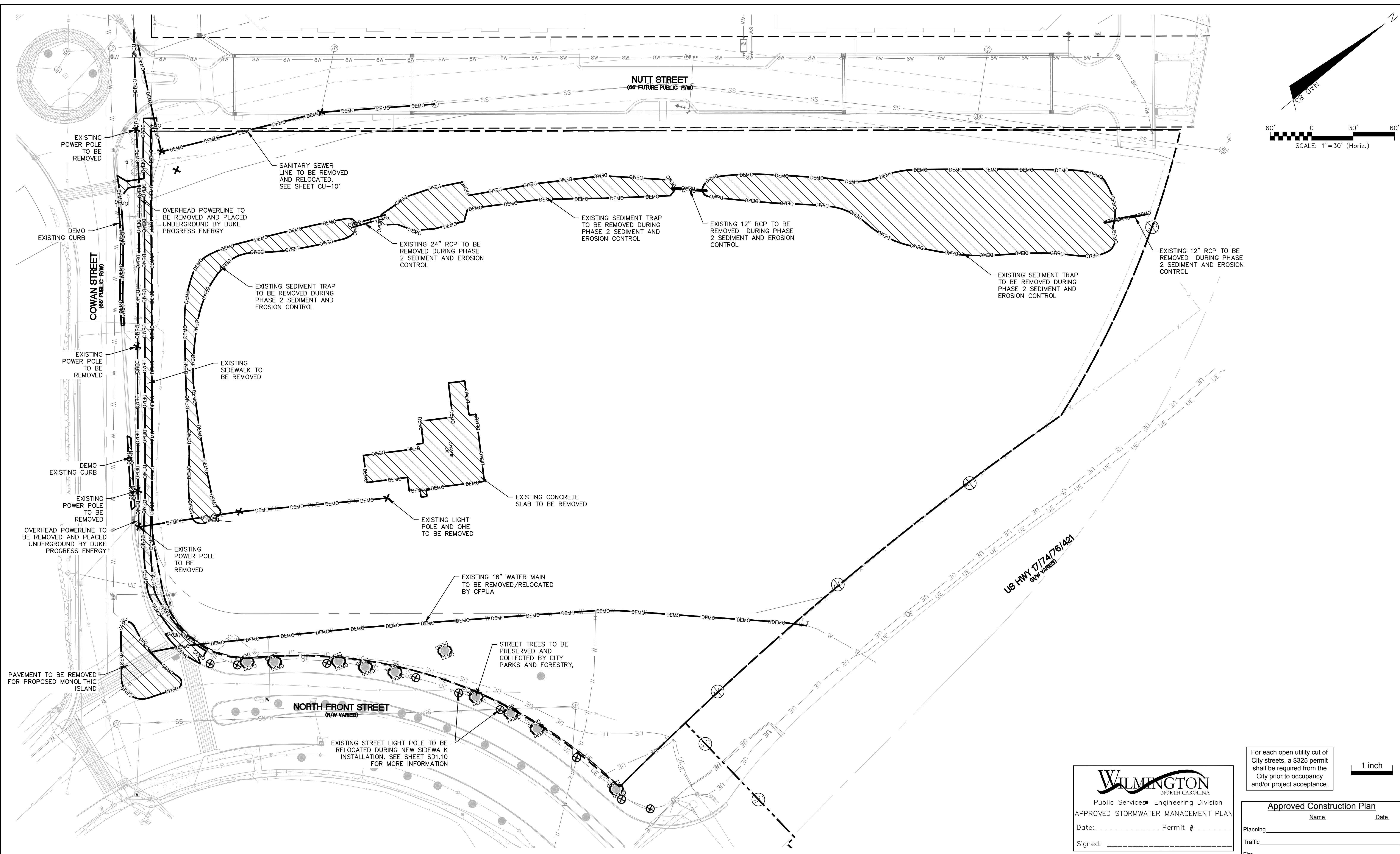
MCKIM & CREED
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Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

dj
RESIDENTIAL

CLINE DESIGN

THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
PHASE 2 SEDIMENT AND EROSION CONTROL

DATE: 07/11/2018	SCALE: 1"=30'	MAC FILE NUMBER: CE-102
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: 8
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		REVISION: B



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

1 inch

WILMINGTON
NORTH CAROLINA
Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018
REVISIONS		

FINAL DRAWING FOR REVIEW PURPOSES ONLY

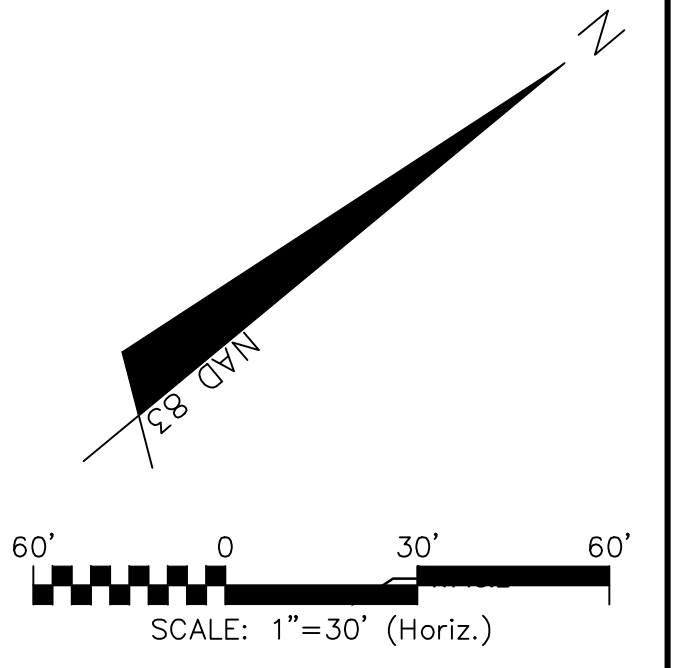
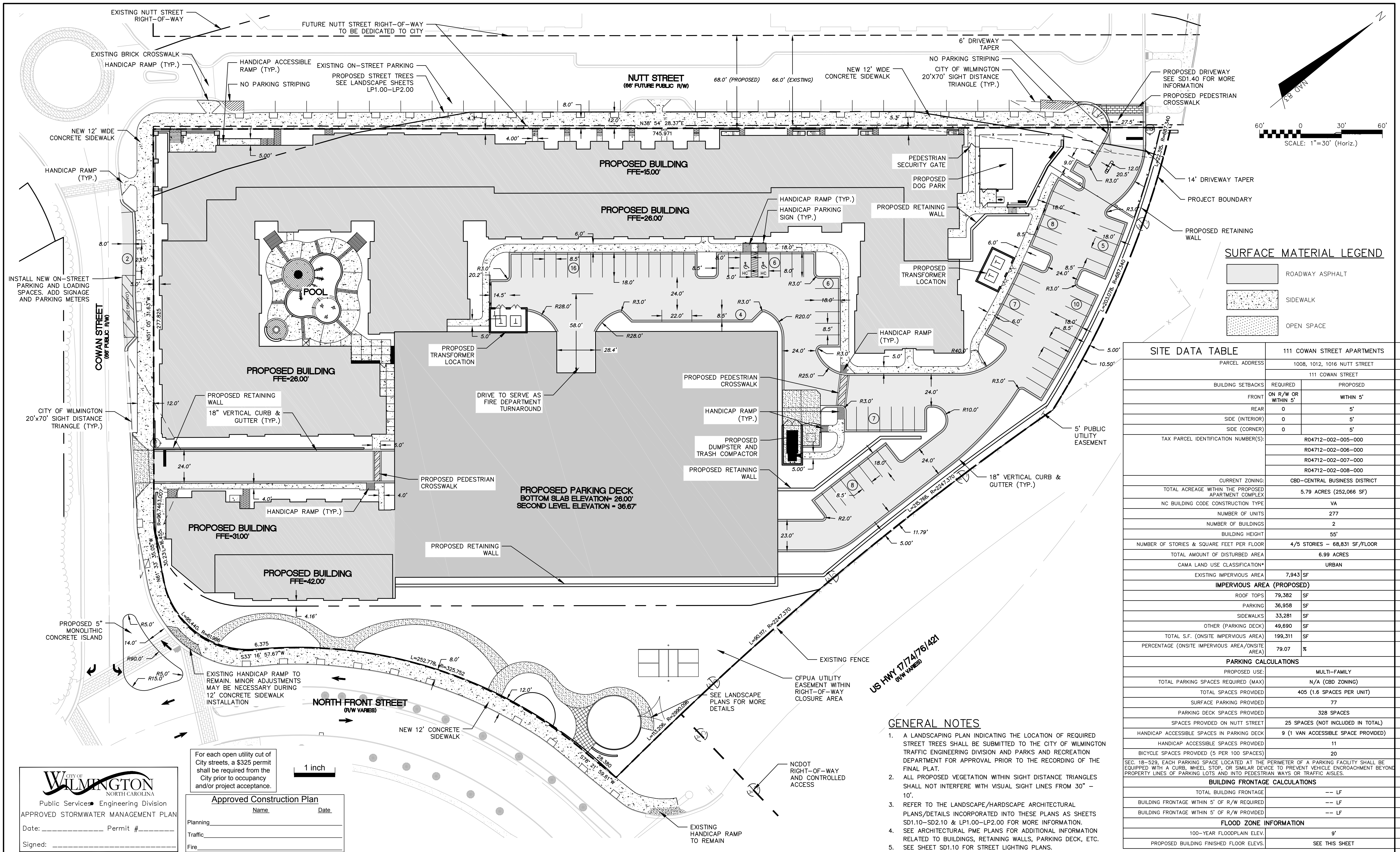
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CLINE DESIGN

THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
DEMOLITION PLAN

DATE: 07/11/2018	SCALE: 1"=30'	MAC FILE NUMBER: CD-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: 9
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR.: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		REVISION: B

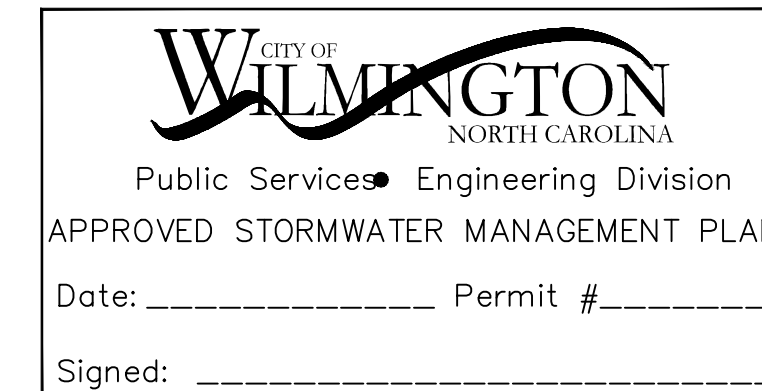


SURFACE MATERIAL LEGEND

[Pattern]	ROADWAY ASPHALT
[Pattern]	SIDEWALK
[Pattern]	OPEN SPACE

SITE DATA TABLE

111 COWAN STREET APARTMENTS	
PARCEL ADDRESS	1008, 1012, 1016 NUTT STREET
BUILDING SETBACKS	REQUIRED PROPOSED
FRONT	ON R/W OR WITHIN 5'
REAR	0 5'
SIDE (INTERIOR)	0 5'
SIDE (CORNER)	0 5'
TAX PARCEL IDENTIFICATION NUMBER(S)	RO4712-002-005-000 RO4712-002-006-000 RO4712-002-007-000 RO4712-002-008-000
CURRENT ZONING	CBD-CENTRAL BUSINESS DISTRICT
TOTAL ACREAGE WITHIN THE PROPOSED APARTMENT COMPLEX	5.79 ACRES (252,066 SF)
NC BUILDING CODE CONSTRUCTION TYPE	VA
NUMBER OF UNITS	277
NUMBER OF BUILDINGS	2
BUILDING HEIGHT	55'
NUMBER OF STORIES & SQUARE FEET PER FLOOR	4/5 STORIES - 68,831 SF/FLOOR
TOTAL AMOUNT OF DISTURBED AREA	6.99 ACRES
CAMA LAND USE CLASSIFICATION*	URBAN
EXISTING IMPERVIOUS AREA	7,943 SF
IMPERVIOUS AREA (PROPOSED)	
ROOF TOPS	79,382 SF
PARKING	36,958 SF
SIDEWALKS	33,281 SF
OTHER (PARKING DECK)	49,690 SF
TOTAL S.F. (ONSITE IMPERVIOUS AREA)	199,311 SF
PERCENTAGE (ONSITE IMPERVIOUS AREA/ONSITE AREA)	79.07 %
PARKING CALCULATIONS	
PROPOSED USE:	MULTI-FAMILY
TOTAL PARKING SPACES REQUIRED (MAX)	N/A (CBD ZONING)
TOTAL SPACES PROVIDED	405 (1.6 SPACES PER UNIT)
SURFACE PARKING PROVIDED	77
PARKING DECK SPACES PROVIDED	328 SPACES
SPACES PROVIDED ON NUTT STREET	25 SPACES (NOT INCLUDED IN TOTAL)
HANDICAP ACCESSIBLE SPACES IN PARKING DECK	9 (1 VAN ACCESSIBLE SPACE PROVIDED)
HANDICAP ACCESSIBLE SPACES PROVIDED	11
BICYCLE SPACES PROVIDED (5 PER 100 SPACES)	20
BUILDING FRONTAGE CALCULATIONS	
TOTAL BUILDING FRONTAGE	-- LF
BUILDING FRONTAGE WITHIN 5' OF R/W REQUIRED	-- LF
BUILDING FRONTAGE WITHIN 5' OF R/W PROVIDED	-- LF
FLOOD ZONE INFORMATION	
100-YEAR FLOODPLAIN ELEV.	9'
PROPOSED BUILDING FINISHED FLOOR ELEV.	SEE THIS SHEET



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018

FINAL DRAWING FOR REVIEW PURPOSES ONLY

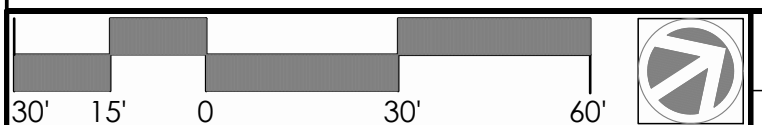
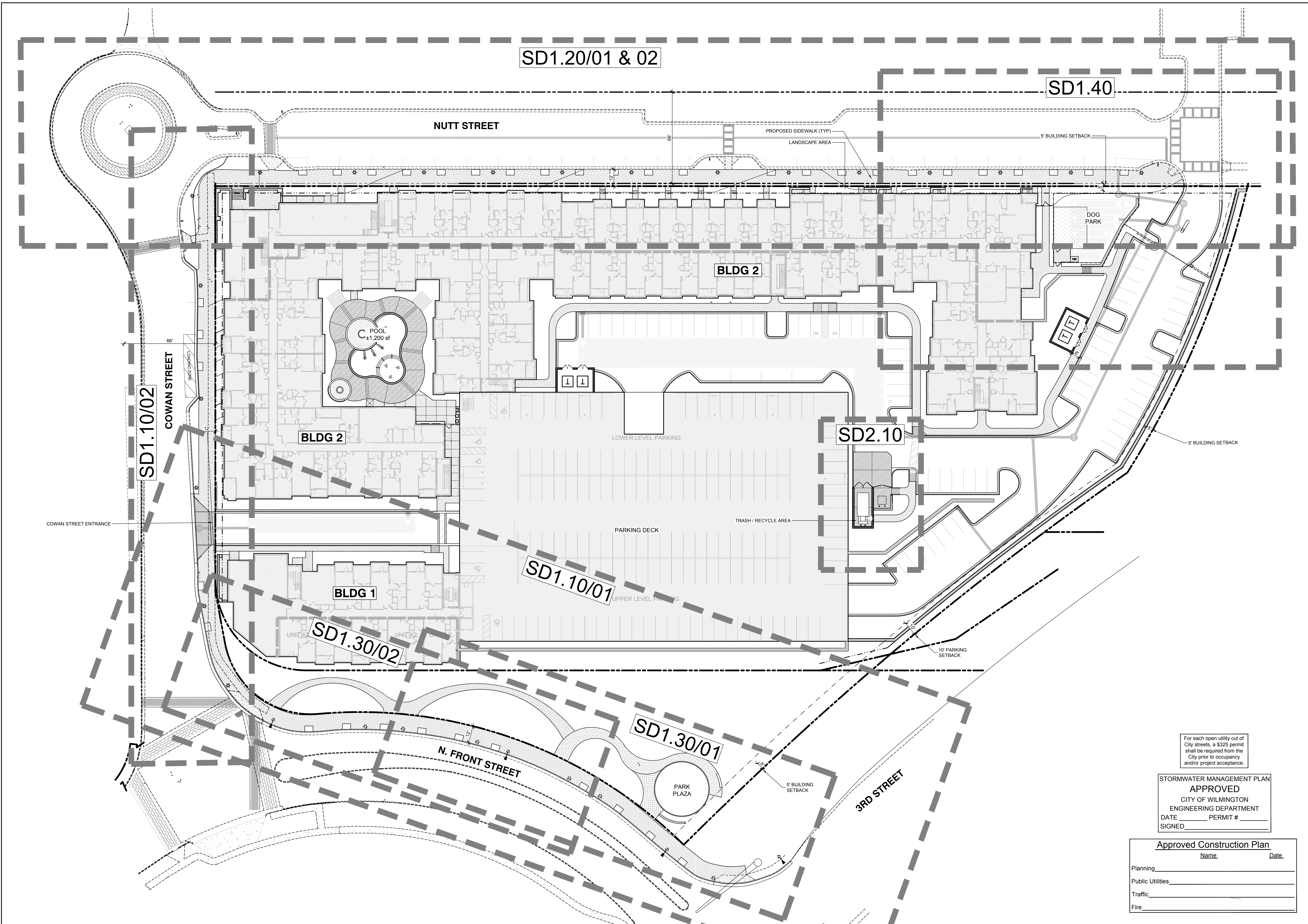
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CLINE DESIGN

THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
OVERALL SITE PLAN

DATE: 07/11/2018	SCALE: 1"=30'	MAC FILE NUMBER: CS-100
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: 10
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR. KCE		
STATUS: PRELIMINARY DESIGN		REVISION: B
ISSUED FOR PERMITTING		



Overall Hardscape Key Plan **01**
Scale: 1" = 30'

DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

For each open utility out of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

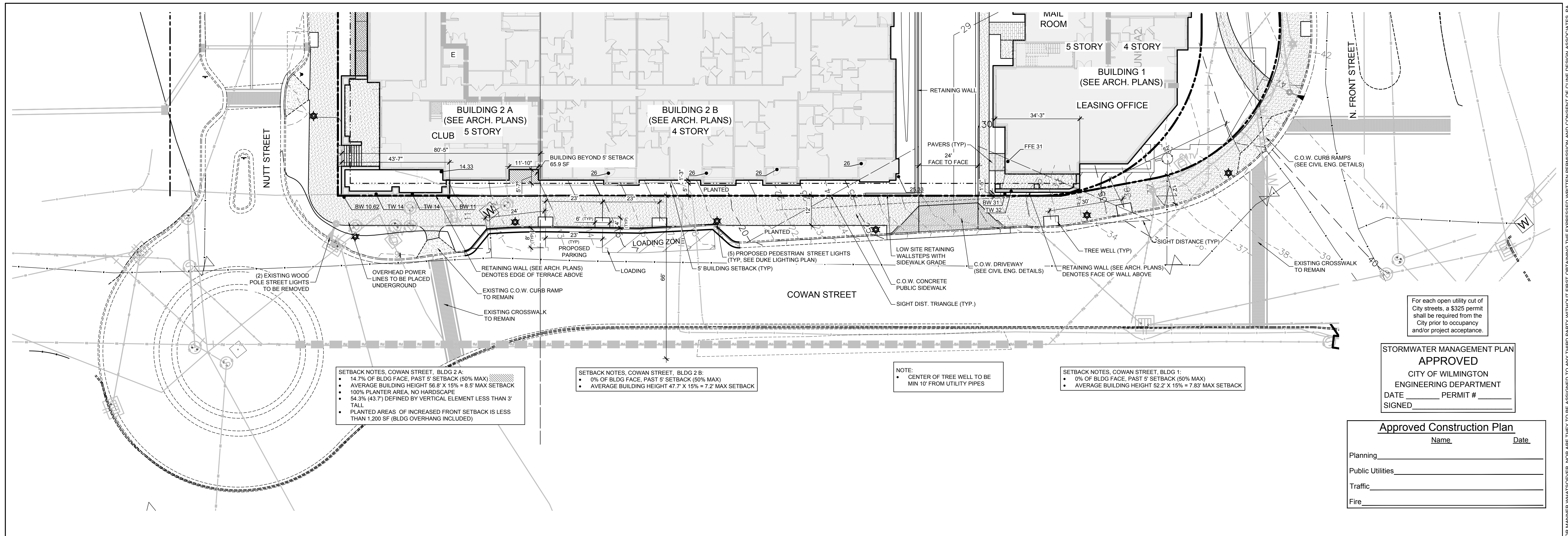
STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan	
Name	Date
Planning _____	
Public Utilities _____	
Traffic _____	
Fire _____	

PROJECT: 218022	
DATE: 07.11.2018	
REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: SP
CHECKED BY: JBM
Overall Hardscape
Key Plan

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SETBACK NOTES, COWAN STREET, BLDG 2 A:

- 14.7% OF BLDG FACE, PAST 5' SETBACK (50% MAX)
- AVERAGE BUILDING HEIGHT 56.8' X 15% = 8.5' MAX SETBACK
- 100% PLANTER AREA, NO HARDSCAPE
- 54.3% (43.7') DEFINED BY VERTICAL ELEMENT LESS THAN 3' TALL
- PLANTED AREAS OF INCREASED FRONT SETBACK IS LESS THAN 1,200 SF (BLDG OVERHANG INCLUDED)

SETBACK NOTES, COWAN STREET, BLDG 2 B:

- 0% OF BLDG FACE, PAST 5' SETBACK (50% MAX)
- AVERAGE BUILDING HEIGHT 47.7' X 15% = 7.2' MAX SETBACK

NOTE:

- CENTER OF TREE WELL TO BE MIN 10' FROM UTILITY PIPES

SETBACK NOTES, COWAN STREET, BLDG 1:

- 0% OF BLDG FACE, PAST 5' SETBACK (50% MAX)
- AVERAGE BUILDING HEIGHT 52.2' X 15% = 7.83' MAX SETBACK

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

STORMWATER MANAGEMENT PLAN APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan

Name _____ Date _____

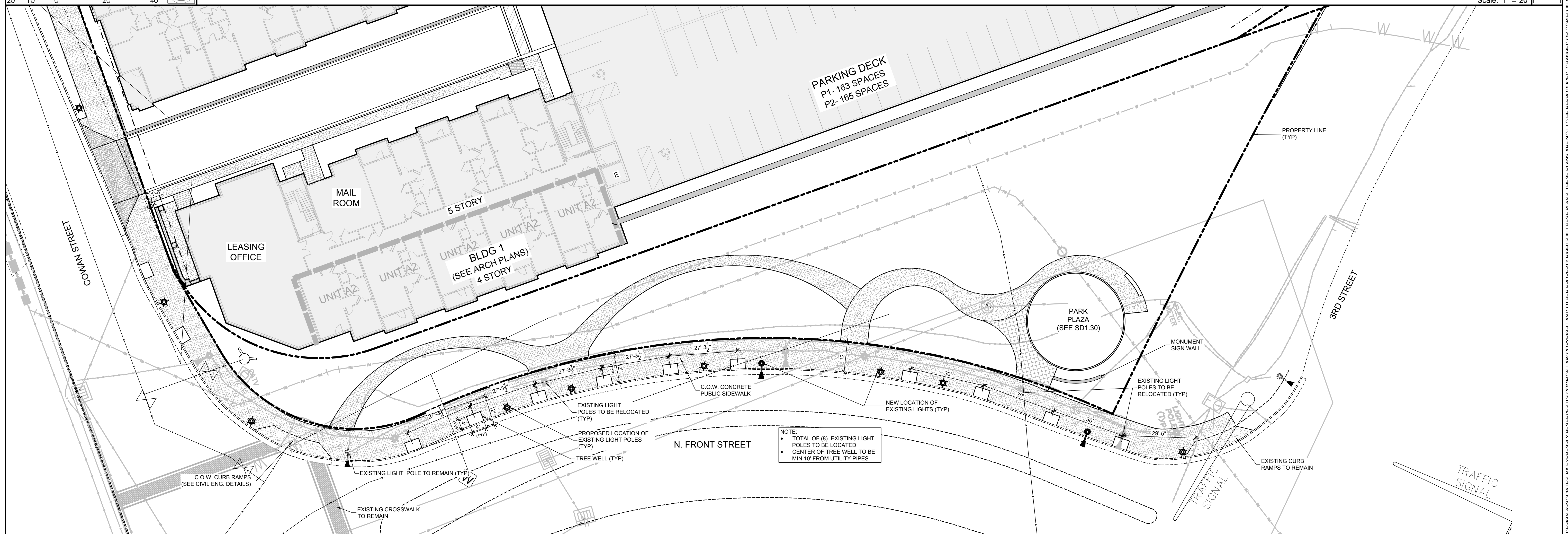
Planning _____

Public Utilities _____

Traffic _____

Fire _____

Streetscape Layout & Grading Plan - Cowan Street 02 Scale: 1" = 20'



NOTE:

- TOTAL OF (8) EXISTING LIGHT POLES TO BE RELOCATED
- CENTER OF TREE WELL TO BE MIN 10' FROM UTILITY PIPES

DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

NOT FOR CONSTRUCTION

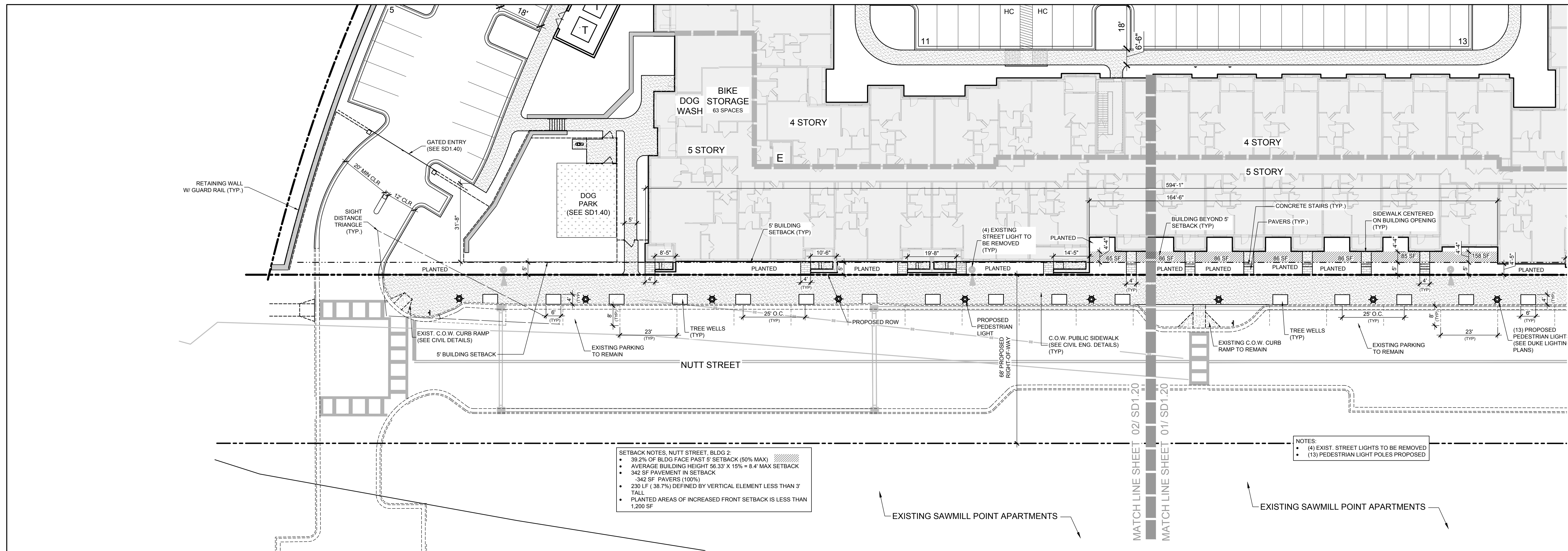
NOT FOR CONSTRUCTION

PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: CT
CHECKED BY: JBM
Streetscape Layout Plans

Streetscape Layout Plan - N. Front Street 01 Scale: 1" = 20'



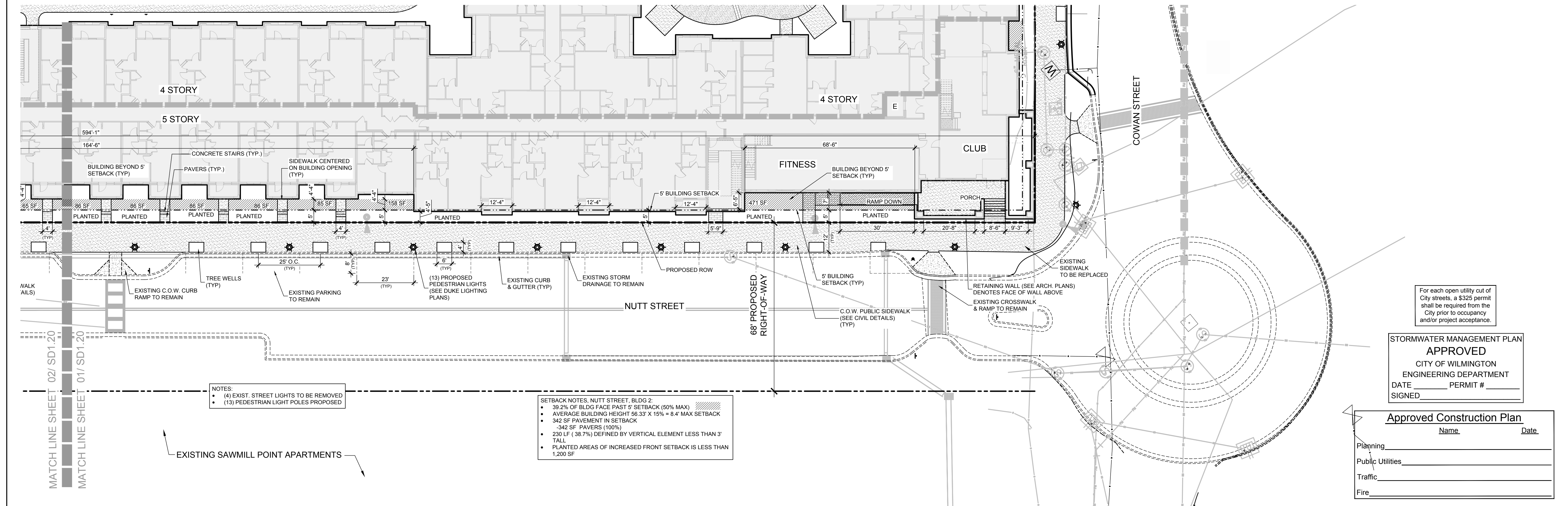
SETBACK NOTES, NUTT STREET, BLDG 2

- 39.2% OF BLDG FACE PAST 5' SETBACK (50% MAX)
- AVERAGE BUILDING HEIGHT 56.33' X 15% = 8.4' MAX SETBACK
- 342 SF PAVEMENT IN SETBACK
- 342 SF PAVERS (100%)
- 230 LF (38.7%) DEFINED BY VERTICAL ELEMENT LESS THAN 3' TALL
- PLANTED AREAS OF INCREASED FRONT SETBACK IS LESS THAN 1,200 SF

NOTES:

- (4) EXIST. STREET LIGHTS TO BE REMOVED
- (13) PEDESTRIAN LIGHT POLES PROPOSED

Streetscape Layout Plan - Nutt Street **02**
Scale: 1" = 20'



SETBACK NOTES, NUTT STREET, BLDG 2

- 39.2% OF BLDG FACE PAST 5' SETBACK (50% MAX)
- AVERAGE BUILDING HEIGHT 56.33' X 15% = 8.4' MAX SETBACK
- 342 SF PAVEMENT IN SETBACK
- 342 SF PAVERS (100%)
- 230 LF (38.7%) DEFINED BY VERTICAL ELEMENT LESS THAN 3' TALL
- PLANTED AREAS OF INCREASED FRONT SETBACK IS LESS THAN 1,200 SF

NOTES:

- (4) EXIST. STREET LIGHTS TO BE REMOVED
- (13) PEDESTRIAN LIGHT POLES PROPOSED

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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan

Name	Date
Planning _____	_____
Public Utilities _____	_____
Traffic _____	_____
Fire _____	_____

DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

NOT FOR CONSTRUCTION

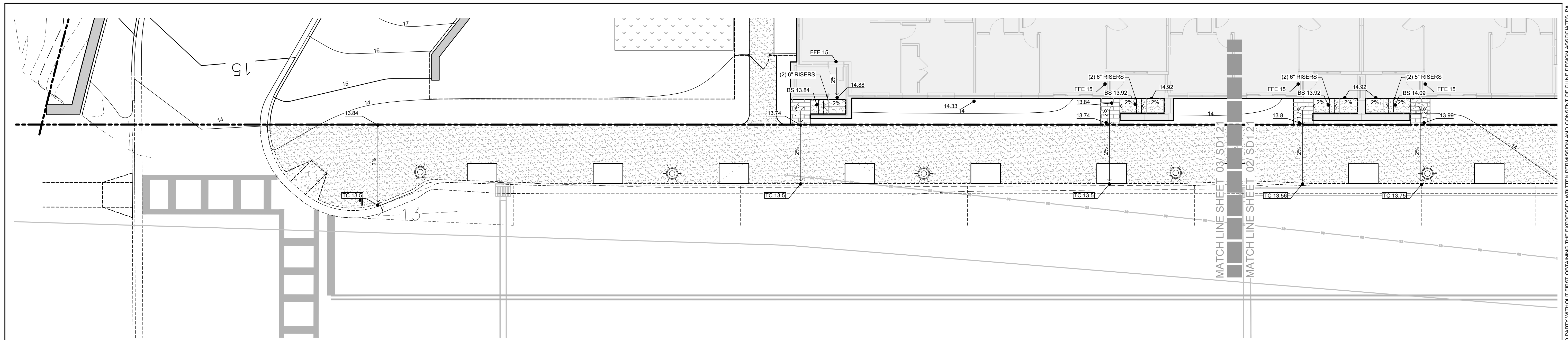
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PROJECT: 218022
DATE: 07.11.2018

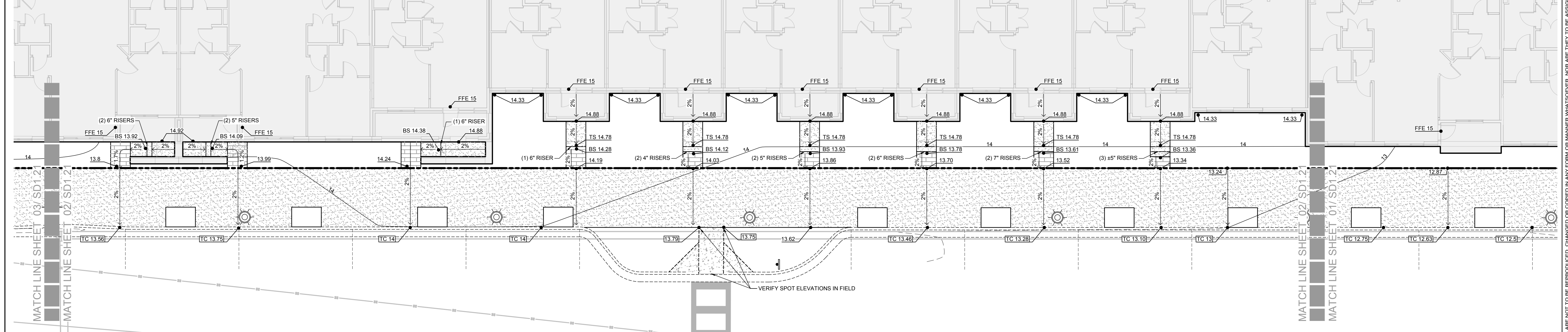
REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: SP
CHECKED BY: ML/JBM
Streetscape Layout Plans

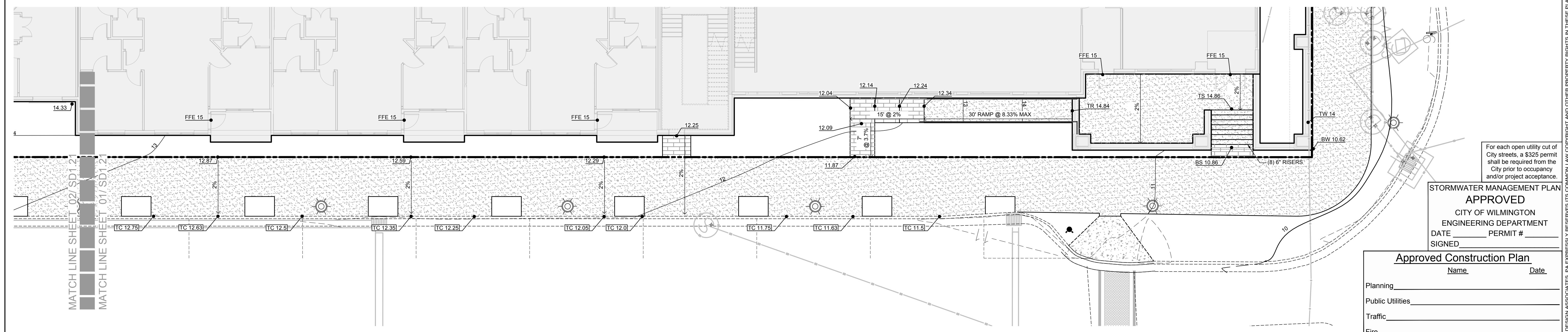
Streetscape Layout Plan - Nutt Street **01**
Scale: 1" = 20'



Streetscape Grading Plan - Nutt Street **03**
Scale: 1" = 10'



Streetscape Grading Plan - Nutt Street **02**
Scale: 1" = 10'



Streetscape Grading Plan - Nutt Street **01**
Scale: 1" = 10'

DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

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NOT FOR CONSTRUCTION

PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

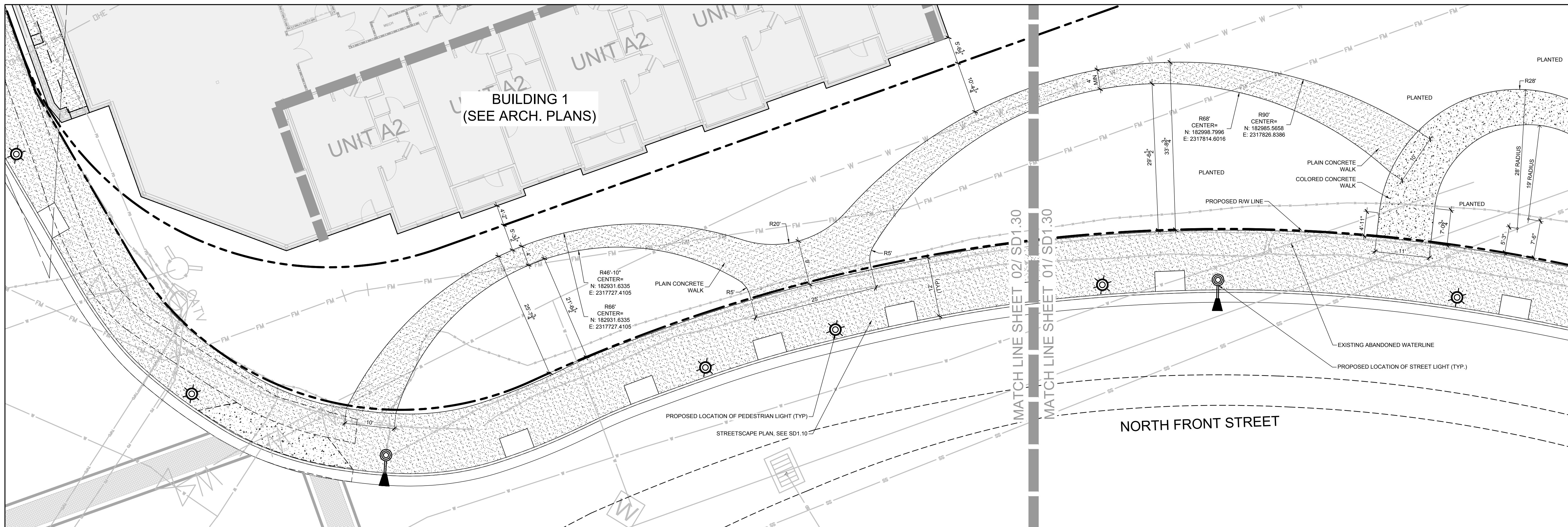
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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
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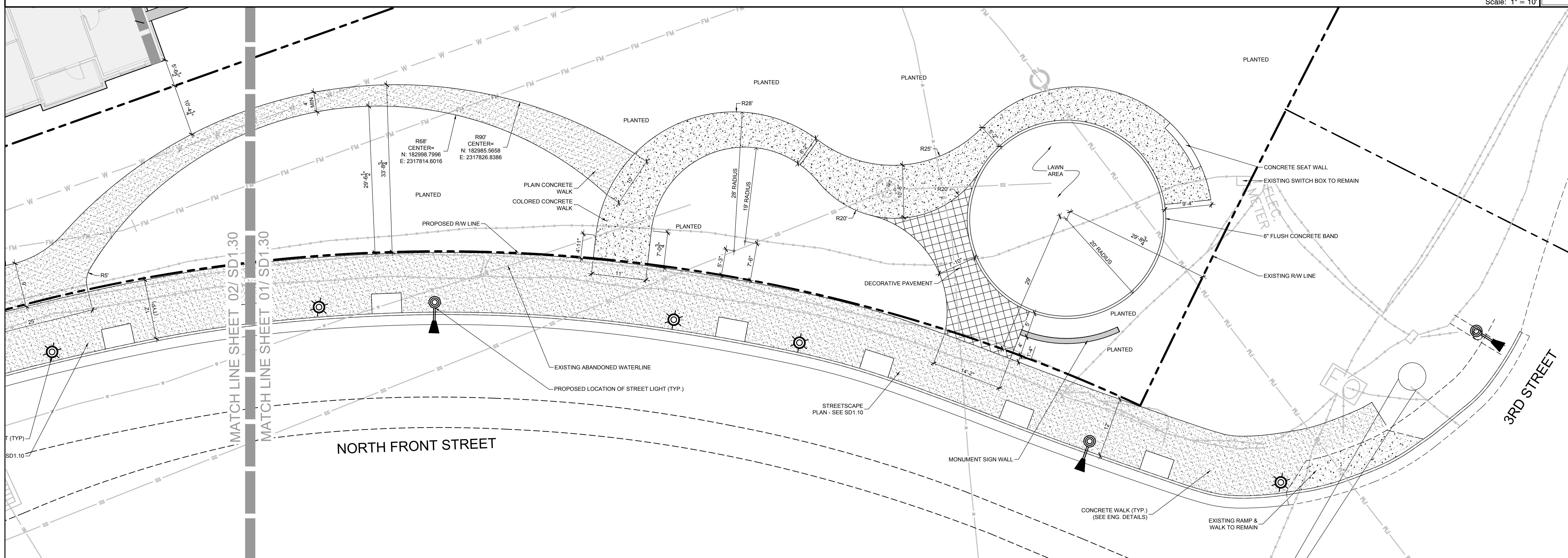
Approved Construction Plan

Name	Date
Planning	
Public Utilities	
Traffic	
Fire	

DRAWN BY: SP
CHECKED BY: ML/JBM
Streetscape Grading Plans



Park Plaza Layout Plan 02
Scale: 1" = 10'



Park Plaza Layout Plan 01
Scale: 1" = 10'

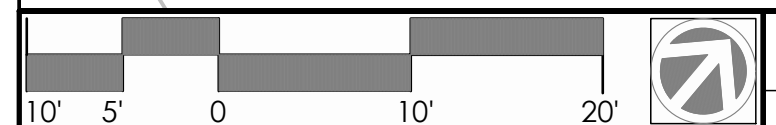
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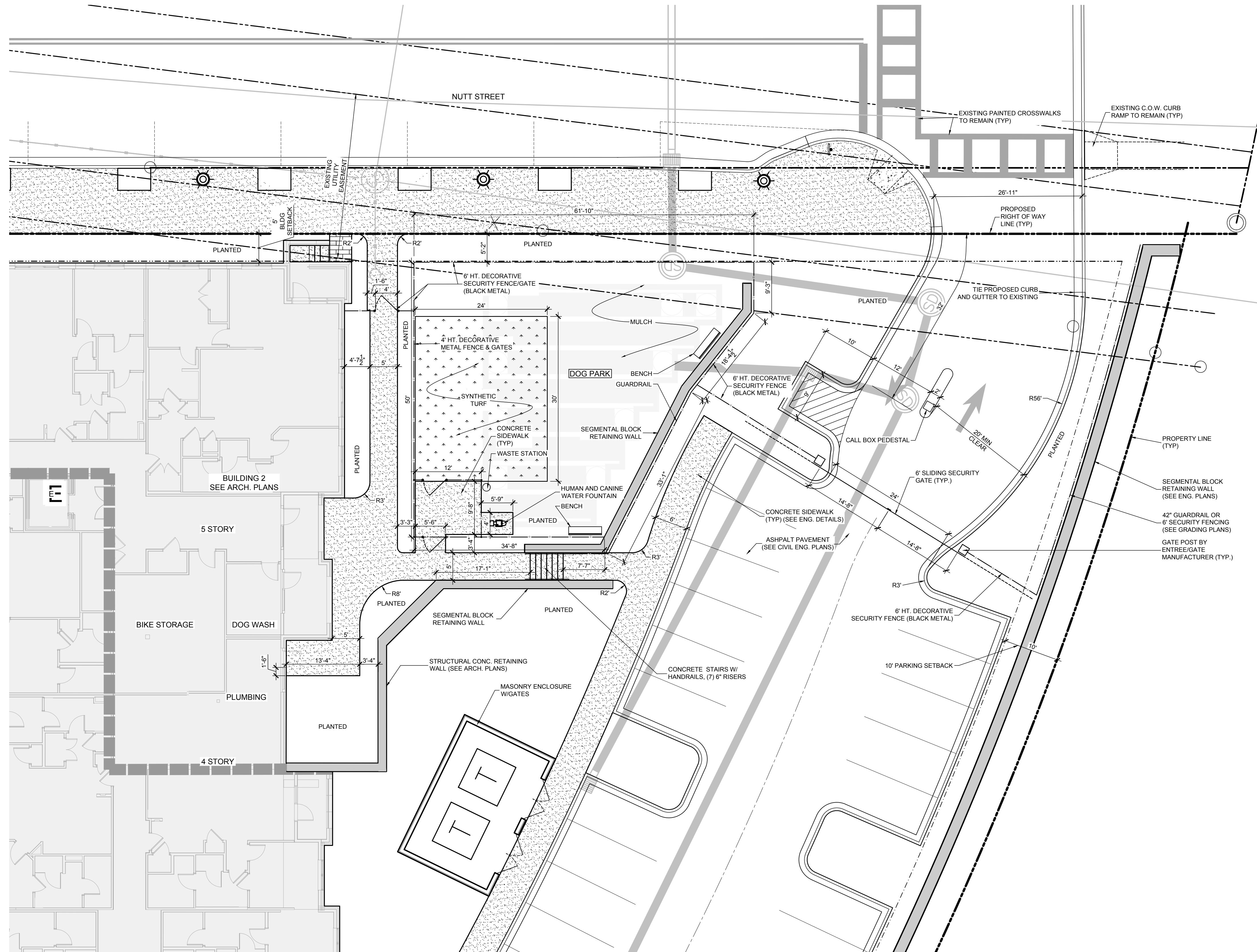
NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

PROJECT: 218022	
DATE: 07.11.2018	
REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: BA
CHECKED BY: ML/JBM
Park Plaza Layout Plan





DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

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STORMWATER MANAGEMENT PLAN
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CITY OF WILMINGTON
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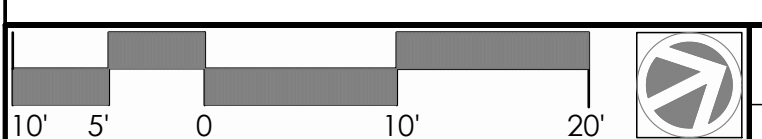
PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

Approved Construction Plan

Name	Date
Planning _____	
Public Utilities _____	
Traffic _____	
Fire _____	

DRAWN BY: BA
CHECKED BY: ML/JBM
Dog Park Layout Plan



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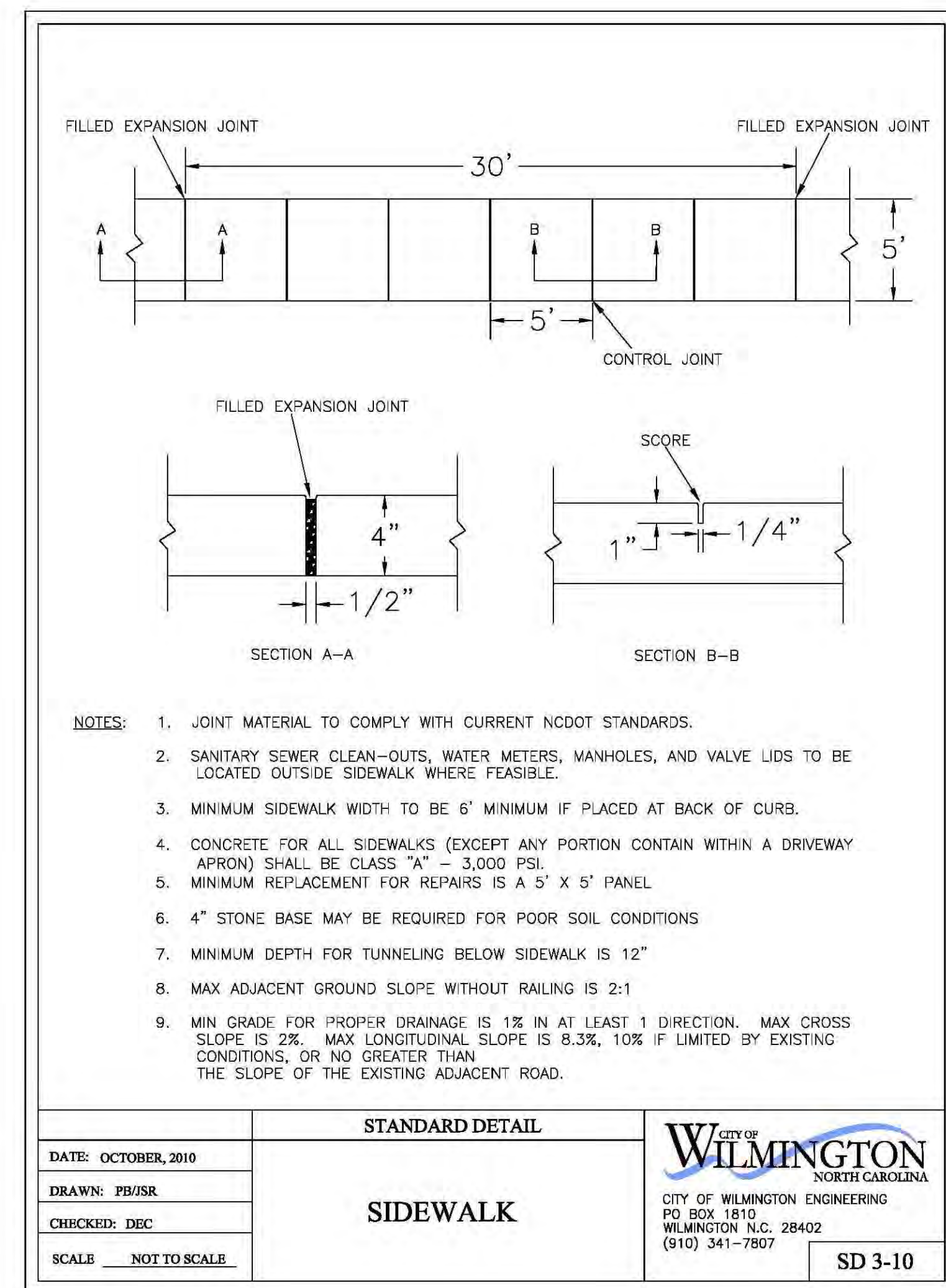
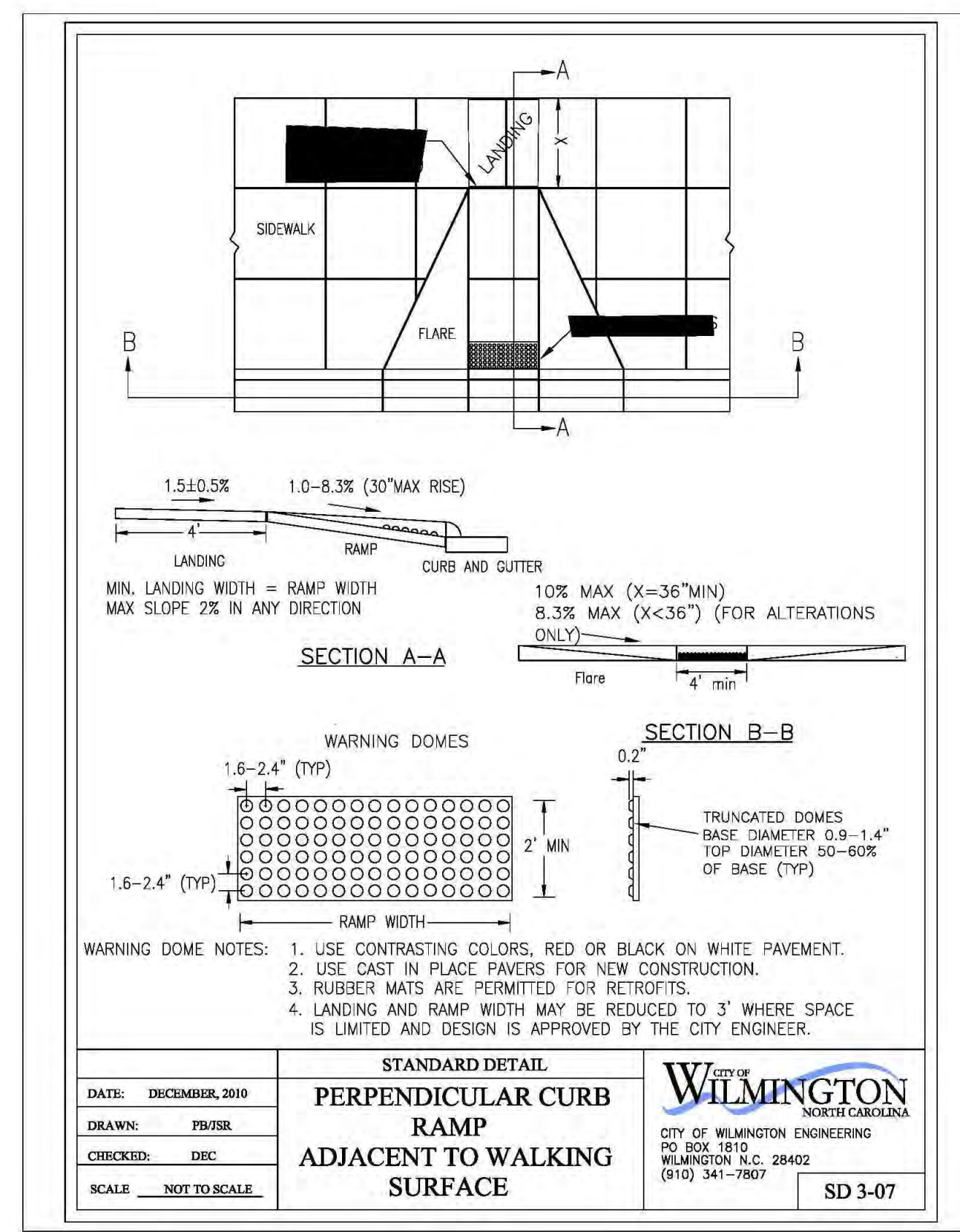
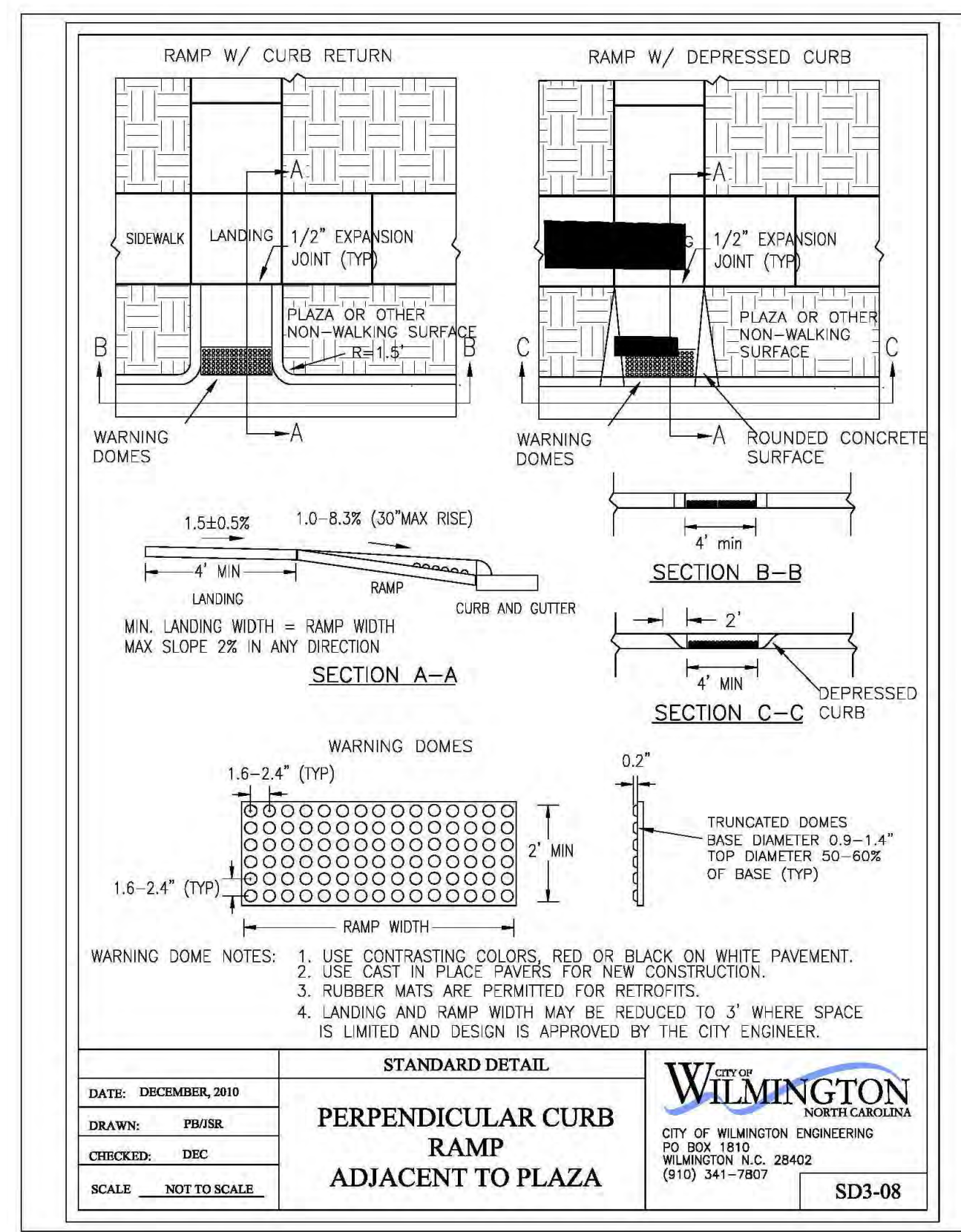
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STORMWATER MANAGEMENT PLAN
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CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
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Approved Construction Plan
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Planning _____
Public Utilities _____
Traffic _____
Fire _____

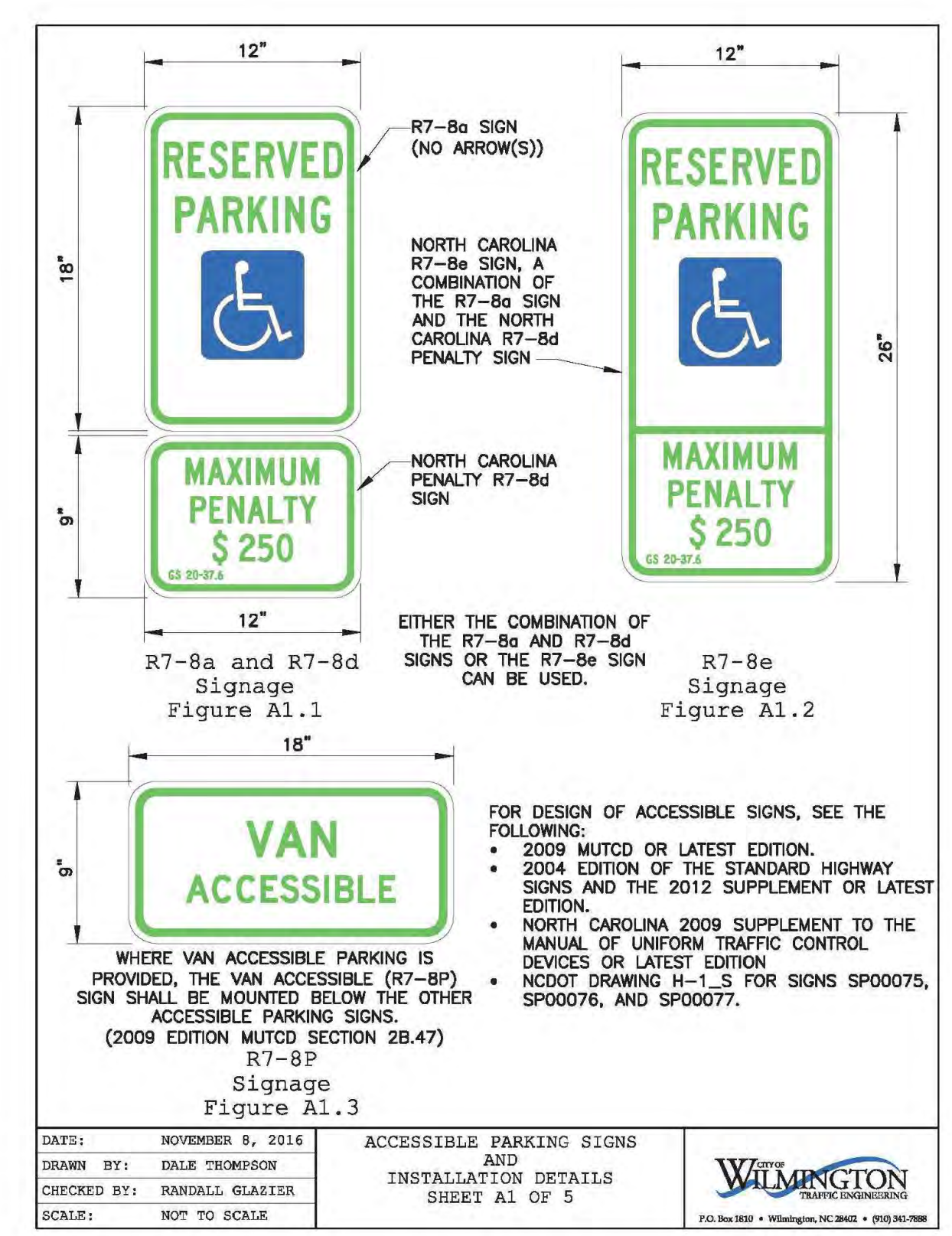
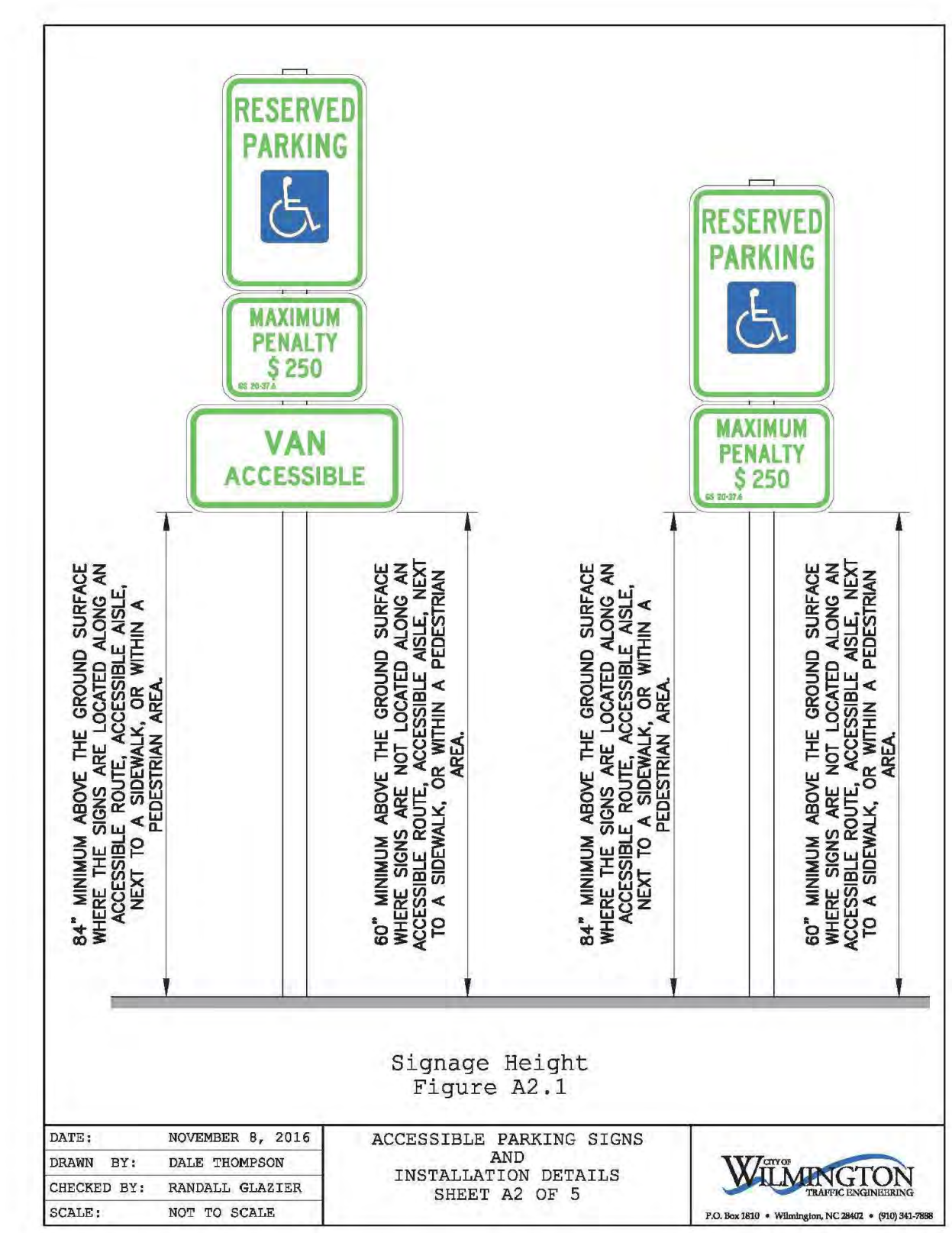
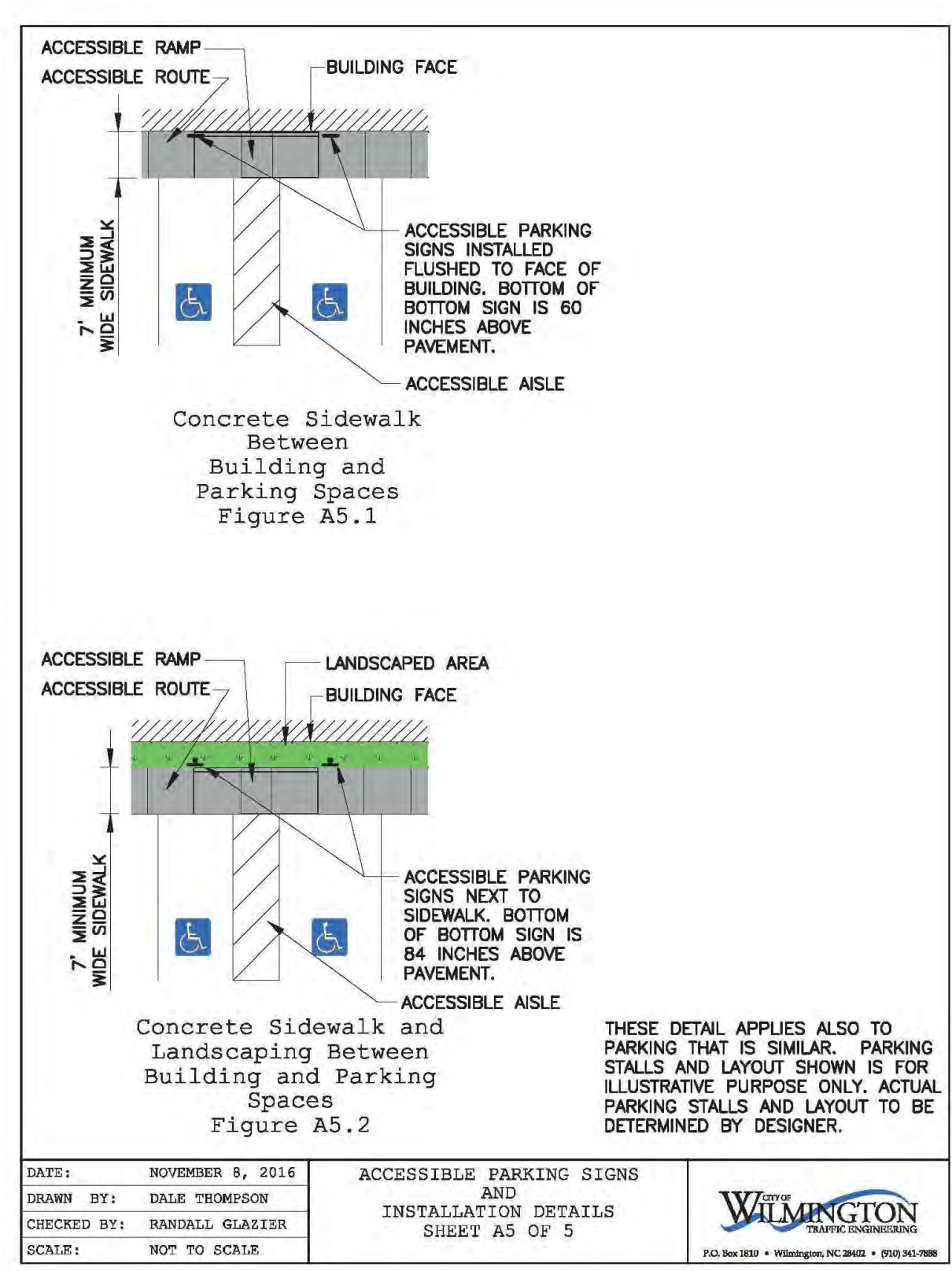
CLINE DESIGN
125 N. Harrington St.
Raleigh, NC 27603
919/833-6413
919/836-1280 FAX
ClineDesignAssoc.com

DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina



COW Accessible Ramp 03

COW Concrete Sidewalk 02



TRC Review

NOT FOR CONSTRUCTION

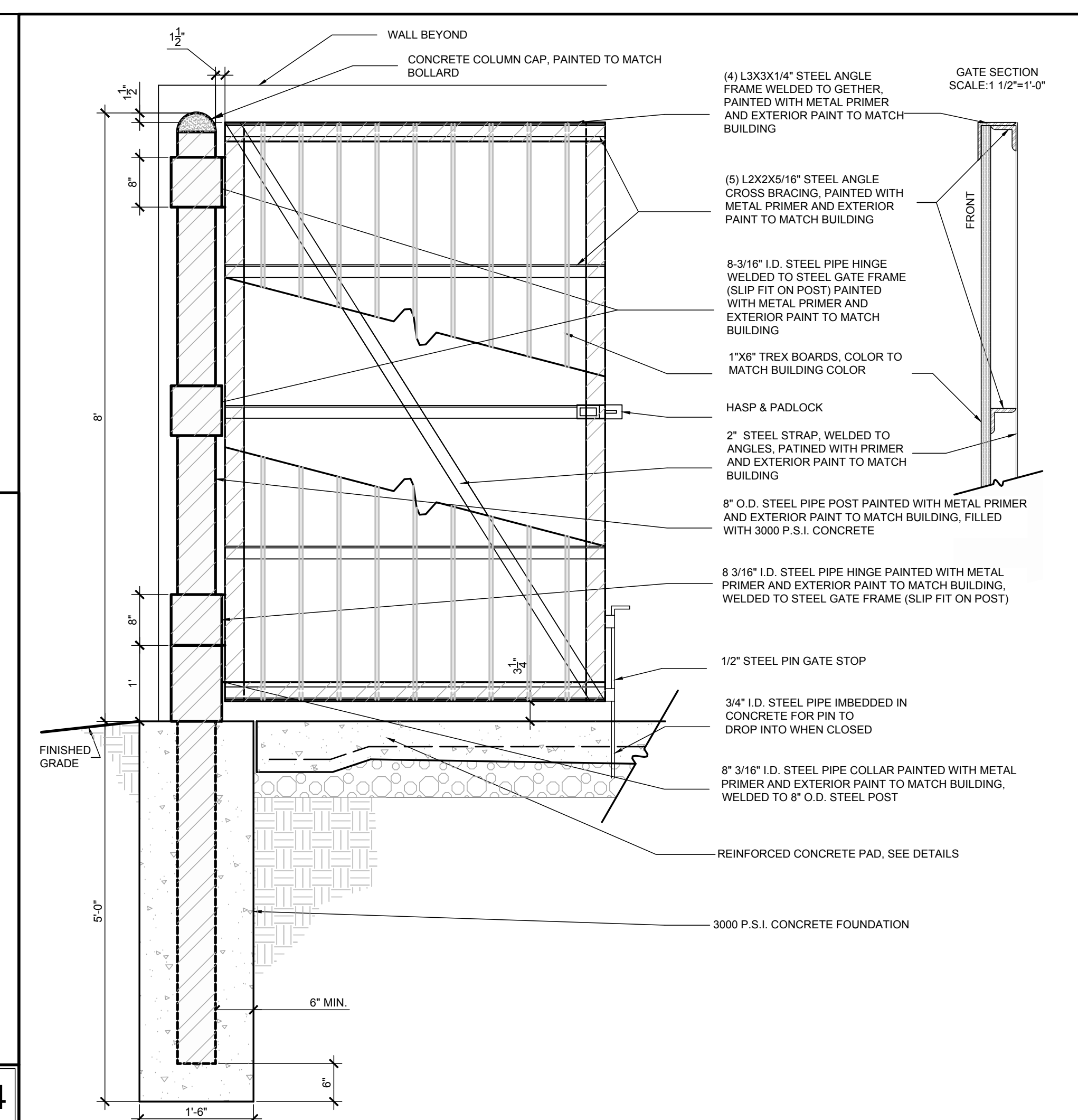
PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

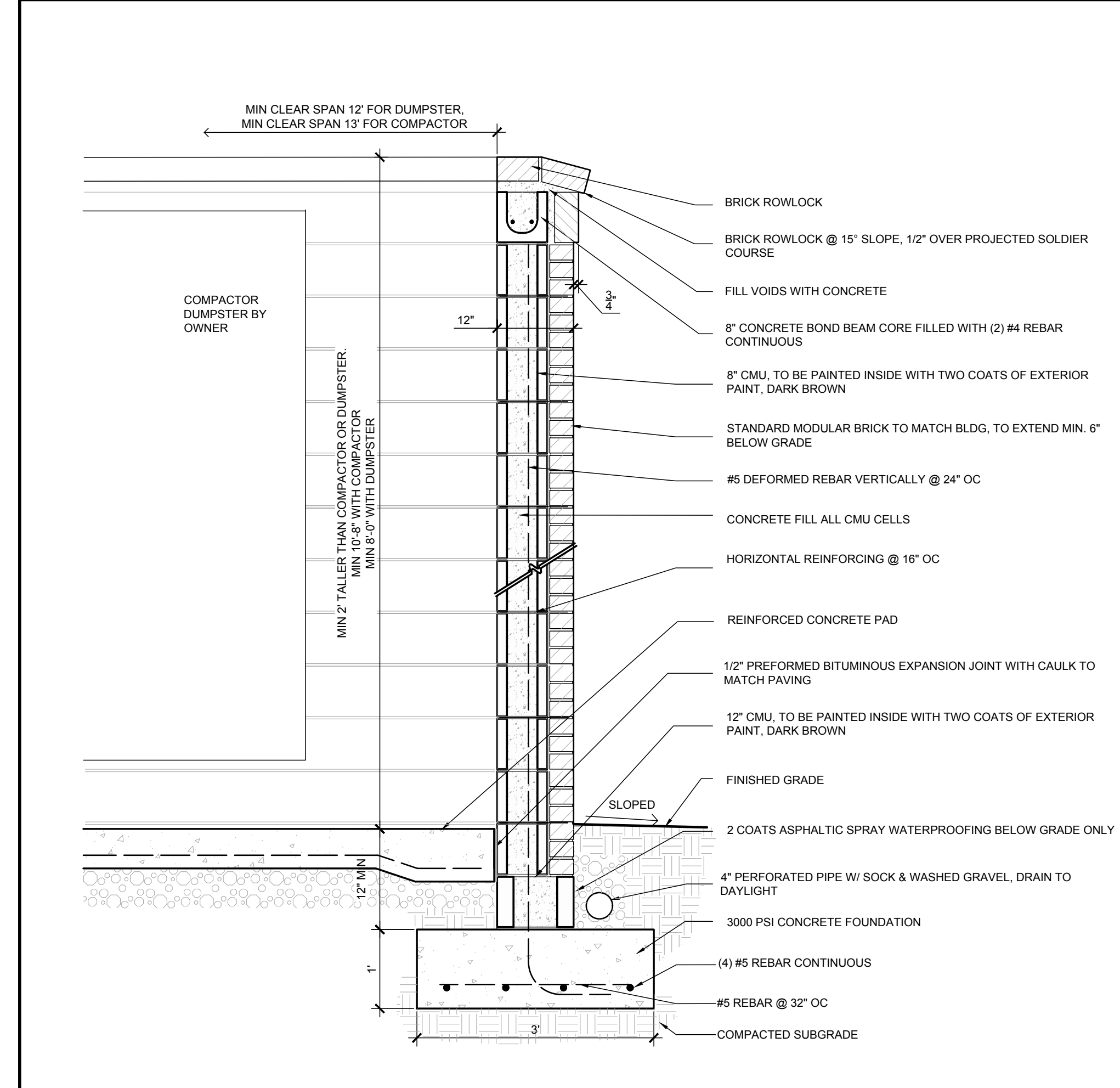
DRAWN BY: SP
CHECKED BY: MWL/JBM
Site Details

COW Handicap Parking Space Signage 01

SD2.00



Trex Enclosure Gate 02
Scale: 3/4" = 1'-0"



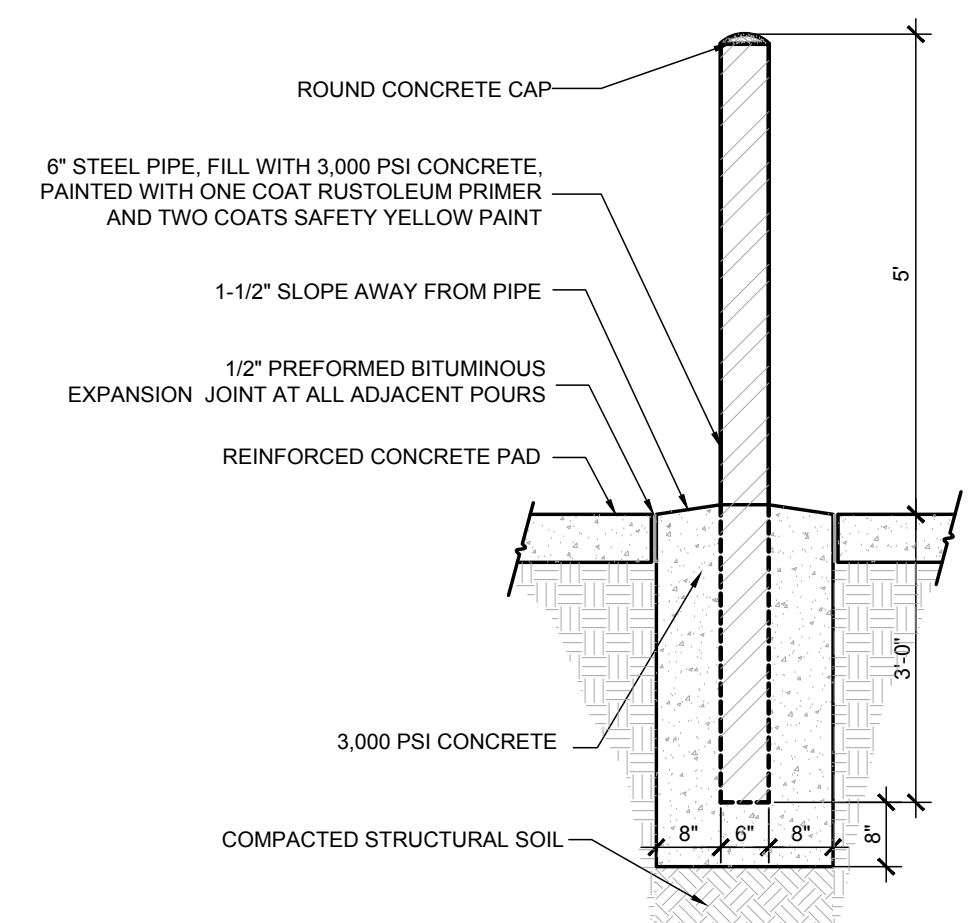
Enclosure Wall 01
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For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

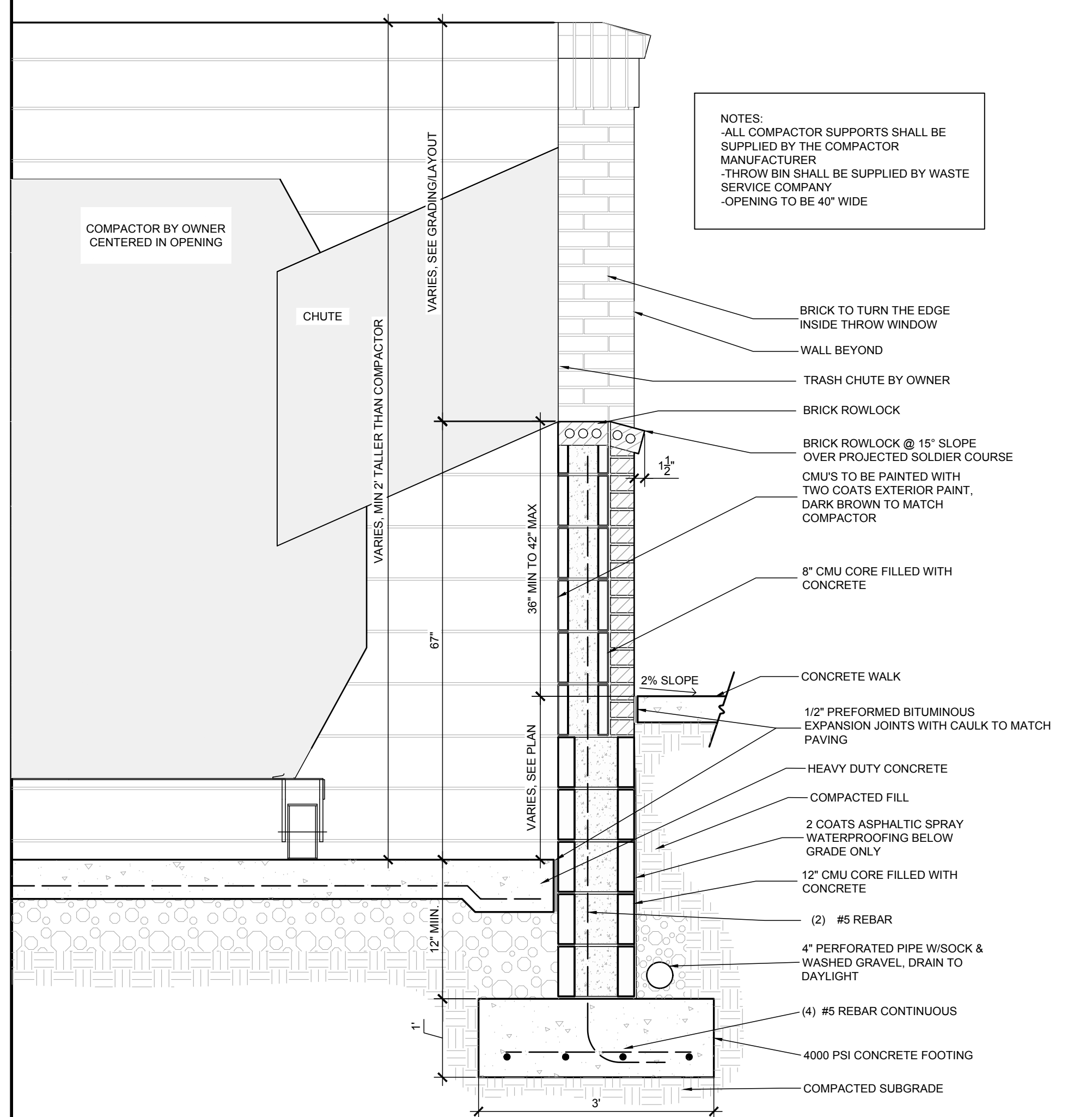
STORMWATER MANAGEMENT PLAN APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan
Name _____ Date _____

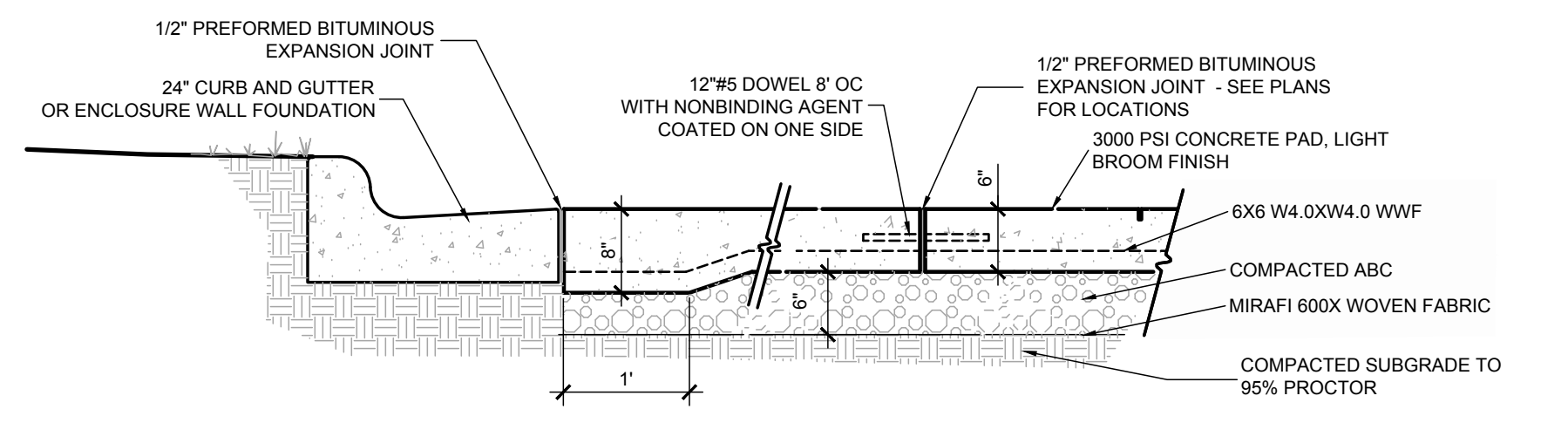
Planning _____
Public Utilities _____
Traffic _____
Fire _____



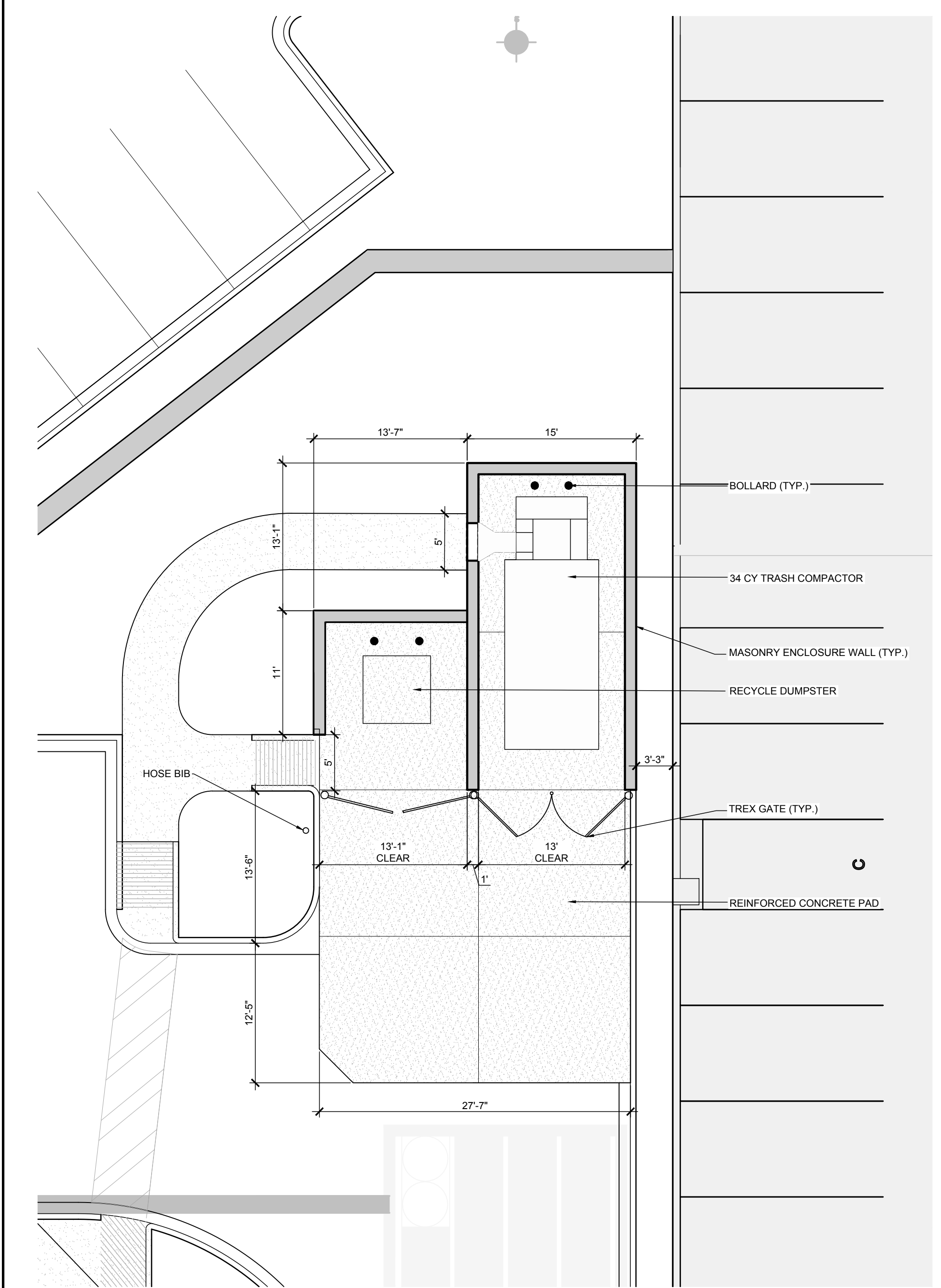
Bollard 04
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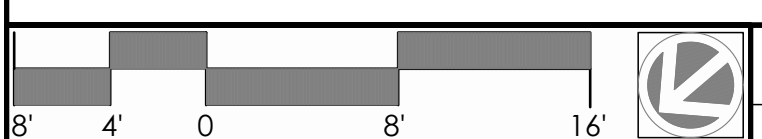
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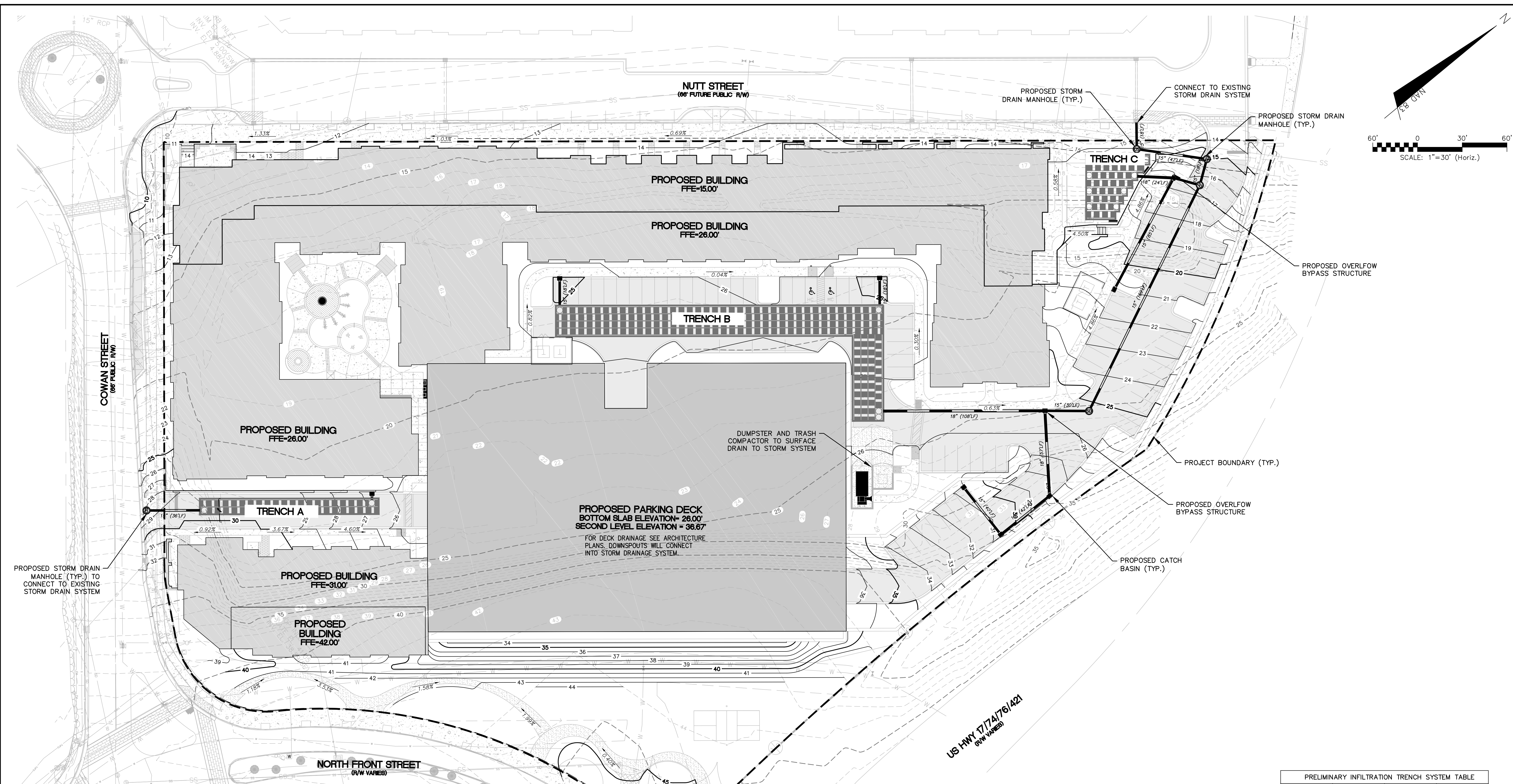


Reinforced Concrete Pad 06
Scale: 3/4" = 1'-0"



Trash Area Layout Plan 05
Scale: 1/8" = 1'-0"





CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

1 inch

REV. NO.	DESCRIPTION	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018

SEAL
FINAL DRAWING FOR REVIEW PURPOSES ONLY

SEAL

MCKIM & CREED
 243 North Front Street
 Wilmington, North Carolina 28401
 Phone: (910)343-1048, Fax: (910)251-8282
 License: F-1222
 www.mckimcreed.com

dpj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
GRADING AND STORMWATER PLAN

DATE: 07/11/2018
 MCE PROJ. # 7402-0001
 DRAWN: ALM/KCE
 DESIGNED: ALM
 CHECKED: RMC
 PROJ. MGR: KCE

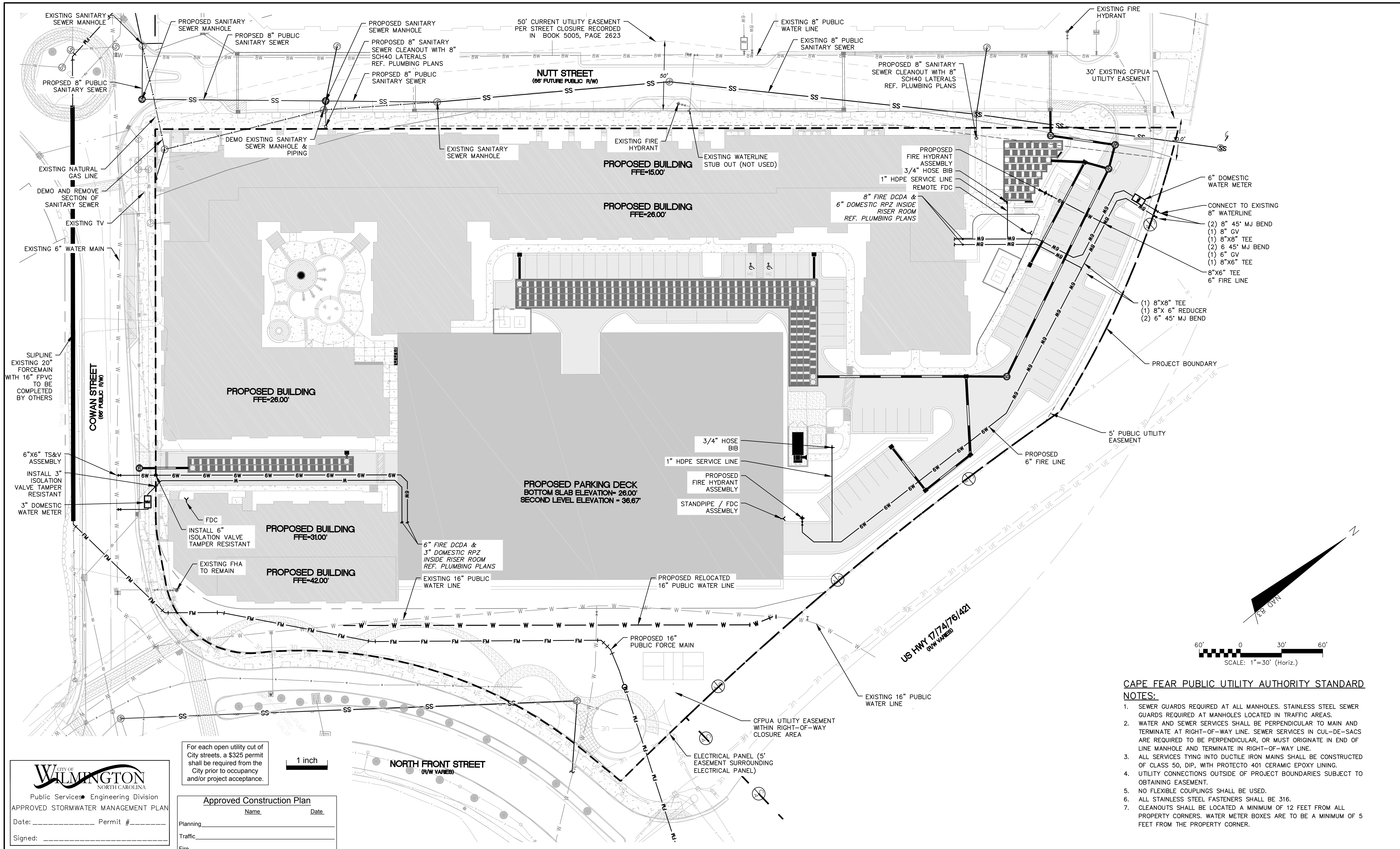
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MAC FILE NUMBER: CG-100
 DRAWING NUMBER: 19
 REVISION: B

STATUS: PRELIMINARY DESIGN
 ISSUED FOR PERMITTING

PRELIMINARY INFILTRATION TRENCH SYSTEM TABLE

DESIGN	INFILTRATION TRENCH A	INFILTRATION TRENCH B	INFILTRATION TRENCH C
# OF RUNS	3	8	8
LENGTH PER RUN	106.5'	131.5'	38.5'
PIPE DIAMETER (IN)	30"	30"	30"



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

1 inch

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE IN RIGHT-OF-WAY LINE.
- ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
- UTILITY CONNECTIONS OUTSIDE OF PROJECT BOUNDARIES SUBJECT TO OBTAINING EASEMENT.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL STAINLESS STEEL FASTENERS SHALL BE 316.
- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.

REVNO.	DESCRIPTIONS / REVISIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018

FINAL DRAWING - FOR REVIEW PURPOSES ONLY

SEAL

MCKIM & CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

dpj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
OVERALL UTILITY PLAN

DATE: 07/11/2018	SCALE: 1"=30'	MAC FILE NUMBER: CU-100
MCE PROJ. #: 7402-0001	HORIZONTAL: 1"=50'	DRAWING NUMBER: 20
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR.: KCE		
STATUS: PRELIMINARY DESIGN		REVISION: B
ISSUED FOR PERMITTING		

N/F SAWMILL POINT APARTMENTS OWNER, LLC
PARID: R04712-002-003-000
ZONING: CBD
MULTI FAMILY

OWNER

DPJ RESIDENTIAL, LLC
1539 TIPPAH PARK COURT
CHARLOTTE, NC 28205

LANDSCAPE CALCULATIONS

CBD, CENTRAL BUSINESS DISTRICT

SEC. 18-196(c)(3) STREET TREES:

FRONT STREET		TREES 30' OC REQUIRED
REQUIRED TREES		
PROPOSED TREES	11 TREES PROPOSED	
COWAN STREET		
REQUIRED TREES		TREES 30' OC REQUIRED
PROPOSED TREES	9 TREES PROPOSED	
NUTT STREET		
REQUIRED TREES		TREES 30' OC REQUIRED
PROPOSED TREES	23 TREES PROPOSED	

ARTICLE 8

SEC. 18-448 (d) - GENERAL:

REQUIRED MINIMUM TREES		79 TREES REQ. MIN.
-4.28 AC X 115 TREES / ACRE		
PROPOSED TREES		89 TREES PROPOSED

SEC. 18-481 - INTERIOR PARKING AREA LANDSCAPING:

- ISLANDS 12' X 18' AND 216 SF MIN PER SINGLE TREE
- ISLANDS 12' X 36' AND 432 SF MIN PER TWO TREES
- UP TO 15% OF ISLAND MAY BE DEVOTED TO PEDESTRIAN WALKWAYS
- NO PARKING SPACE SHALL BE LOCATED MORE THAN 120' FROM AN ISLAND
- MINIMUM 20% PARKING SHALL BE SHADED BY CANOPY TREES.
- ALL ISLANDS SHALL BE COVERED BY SHRUBS OR GROUNDCOVER

PARKING AREA = 41,219 SF		8,244 SF SHADE AREA REQUIRED
REQUIRED SHADE AREA		
-41,219 SF X .20		
PROPOSED SHADE AREA		15,554 SF SHADE AREA PROPOSED
-22 PARKING TREES X [707 SF / TREE]		

SEC. 18-483 PARKING AREA SCREENING:

PARKING WITHIN 50' ROW = 32 LF		
REQUIRED		3' HT X 5' WIDE SCREEN
PROPOSED		3' HT X 5' WIDE SCREEN

SEC. 18-490 - FOUNDATION PLANTING:

REQUIRED LANDSCAPE AREA		6,347 SF LANDSCAPE AREA
PROPOSED LANDSCAPE AREA		7,908 SF LANDSCAPE AREA
**SEE TABLE BELOW		

BUILDING FAÇADE LANDSCAPE AREAS				
BLDG FACE ADJACENT TO PARKING	FACE AREA	PERCENT	REQUIRED LANDSCAPE AREA	PROVIDED LANDSCAPE AREA
#1	8428	X 0.12 =	1011	1163
#2	3736	X 0.12 =	448	784
#3	4507	X 0.12 =	541	645
#4	14420	X 0.12 =	1730	1797
#5	3810	X 0.12 =	457	841
#6	10603	X 0.12 =	1272	1278
#7	7670	X 0.12 =	920	1400
			6381	7908
			TOTAL SF REQUIRED	TOTAL SF PROPOSED

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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Public Utilities _____
Traffic _____
Fire _____

TRC Review

NOT FOR CONSTRUCTION

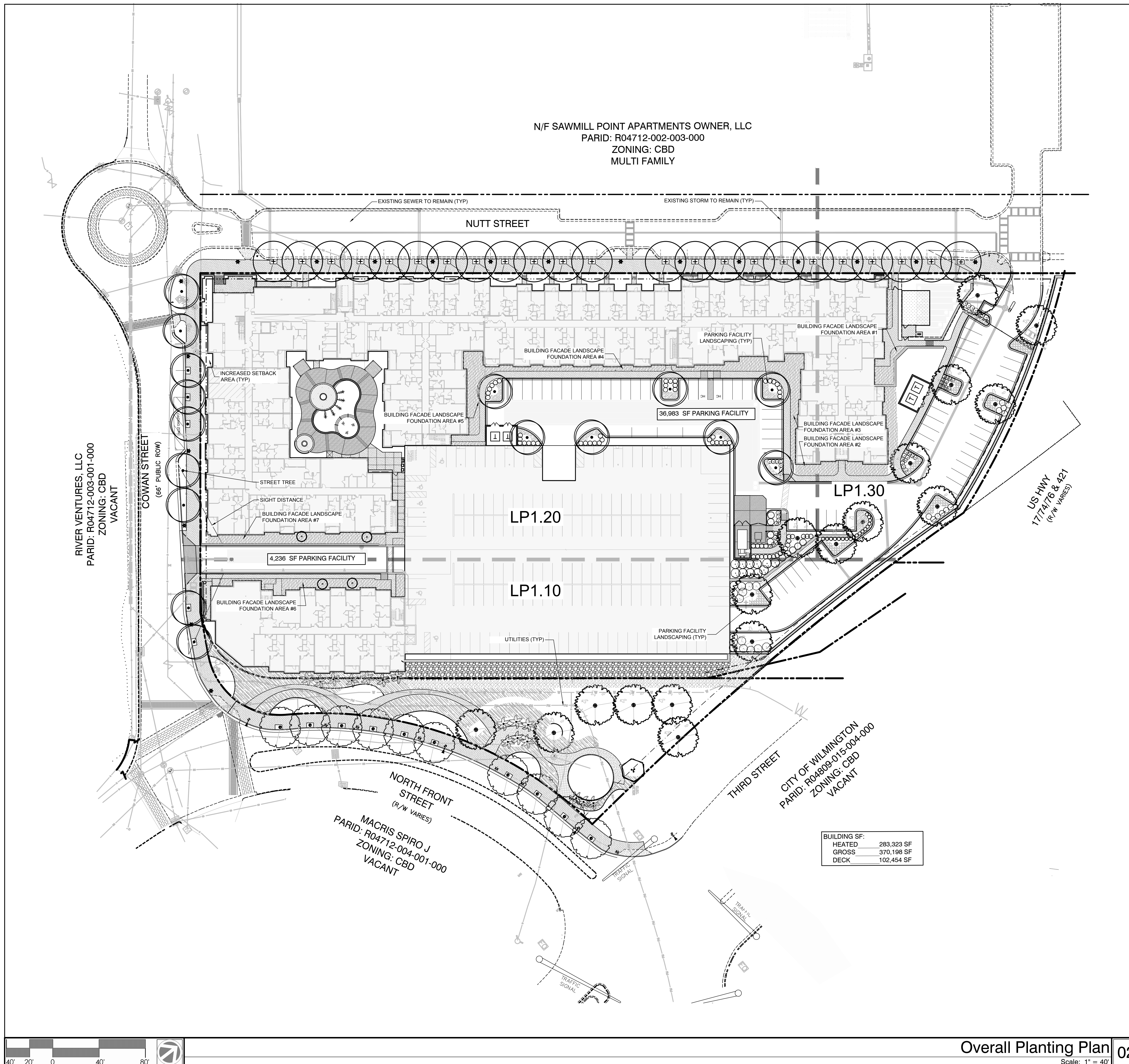
NOT FOR CONSTRUCTION

PROJECT: 218022

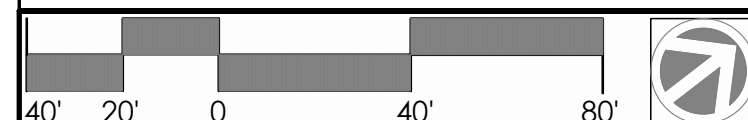
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: SP
CHECKED BY: ML/JBM
Overall Planting Plan



BUILDING SF:	
HEATED	283,323 SF
GROSS	370,198 SF
DECK	102,454 SF



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DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan

Name	Date
Planning _____	
Public Utilities _____	
Traffic _____	
Fire _____	

DRAWN BY: SP
CHECKED BY: ML/JBM
Enlarged Planting Plan

Enlarged Planting Plan
Scale: 1" = 20'

01 LP1.10



DPJ Residential, LLC
The Flats on Front
111 Cowan Street
Wilmington, North Carolina

TRC Review

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

PROJECT: 218022

DATE: 07.11.2018

REVISIONS: DATE

1st TRC Sub 07.11.18

2nd TRC Sub 09.28.18

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STORMWATER MANAGEMENT PLAN APPROVED
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DATE _____ PERMIT # _____
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Approved Construction Plan

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Planning _____
Public Utilities _____
Traffic _____
Fire _____

DRAWN BY: SP

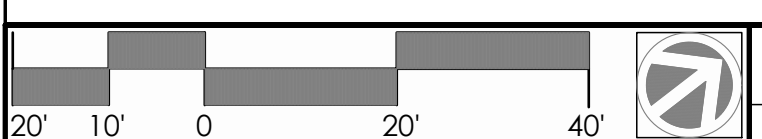
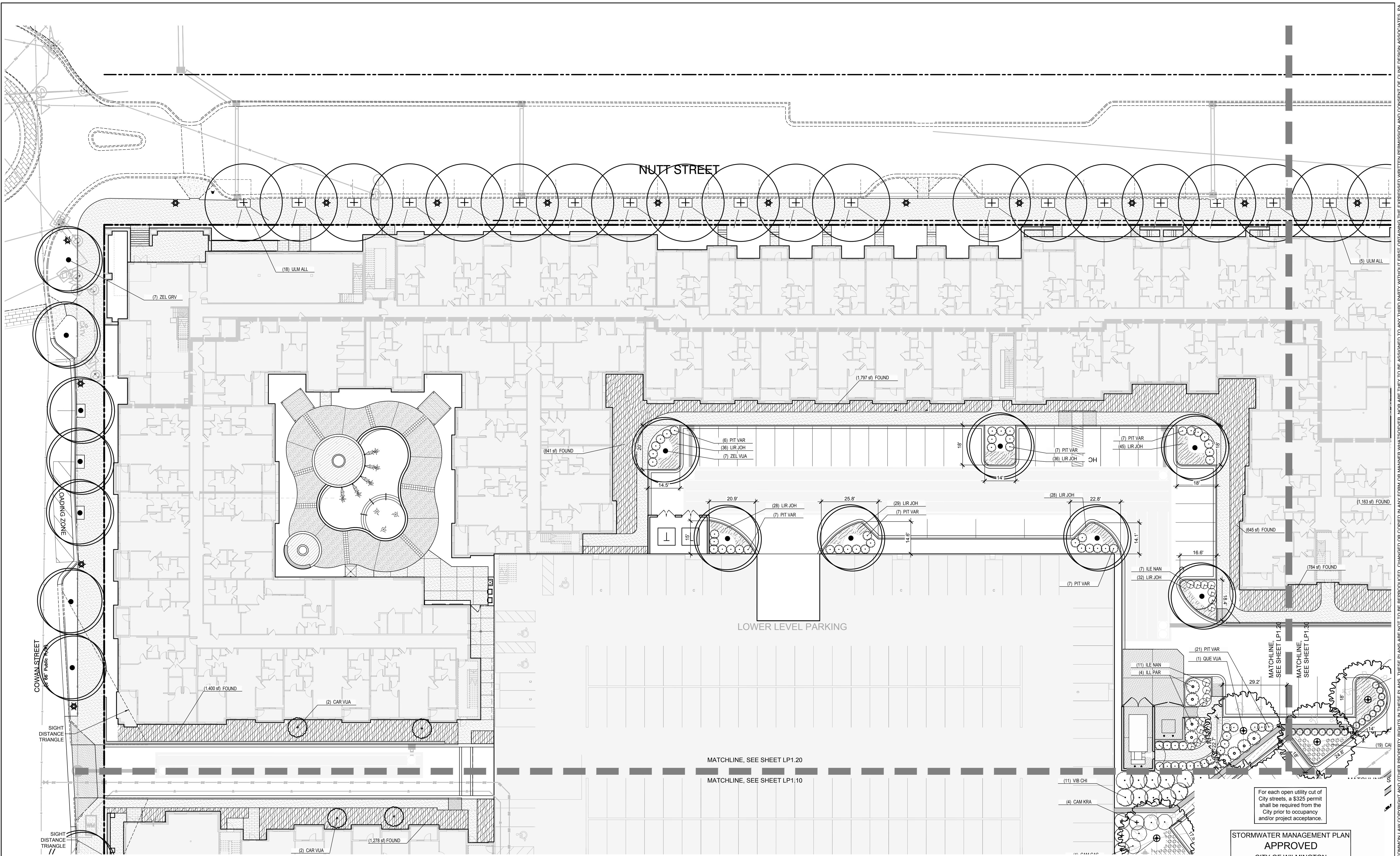
CHECKED BY: ML/JBM

Enlarged Planting Plan

Enlarged Planting Plan

Scale: 1" = 20'

01 **LP1.20**



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TRC Review

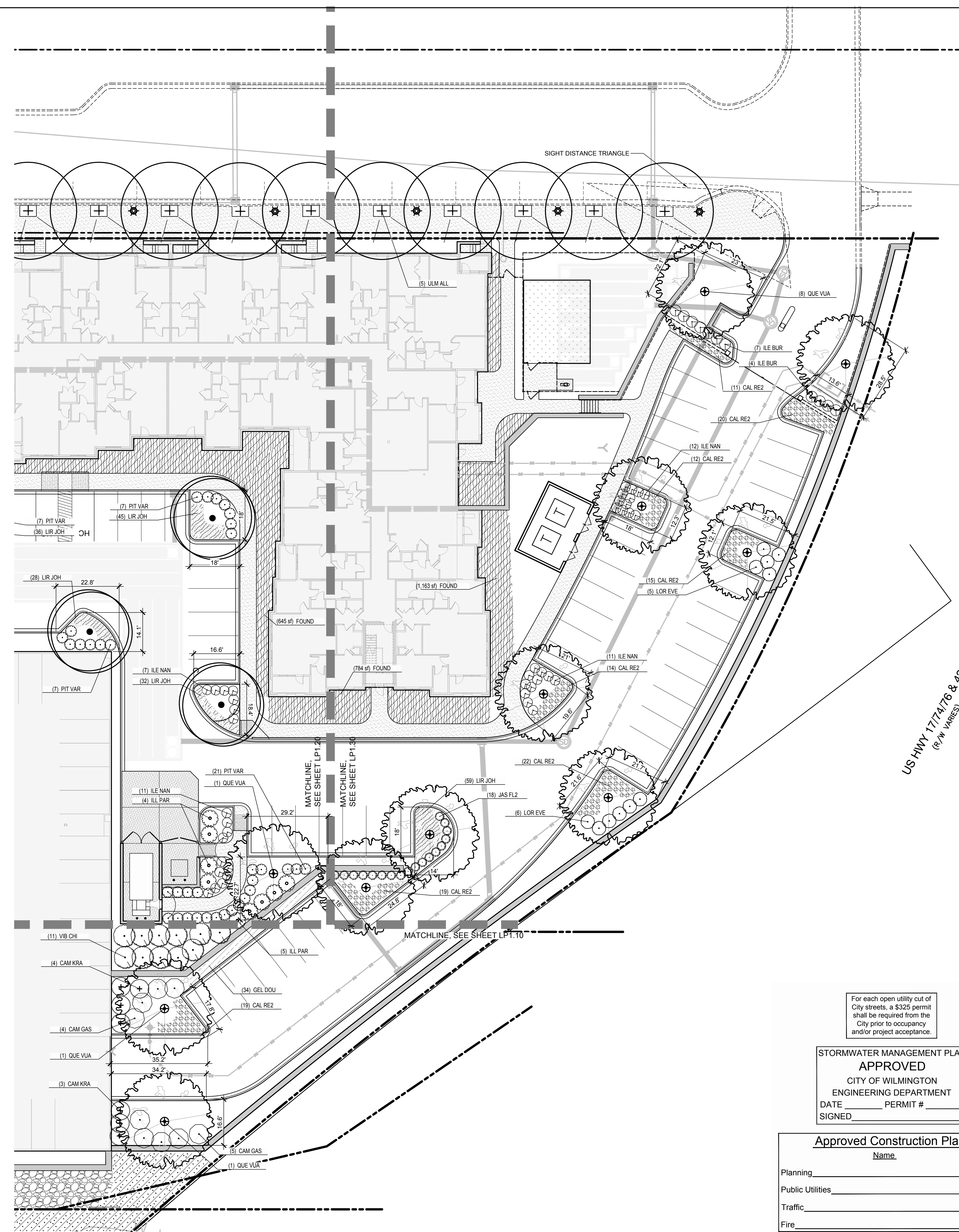
NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

PROJECT: 218022
DATE: 07.11.2018

REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY: SP
CHECKED BY: ML/JBM
Enlarged Planting Plan



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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
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DATE _____ PERMIT # _____
SIGNED _____

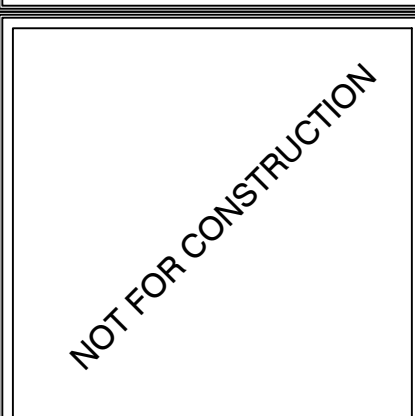
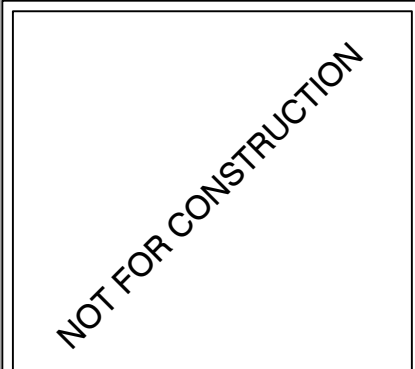
Approved Construction Plan

Name	Date
Planning _____	
Public Utilities _____	
Traffic _____	
Fire _____	

Enlarged Planting Plan 01
Scale: 1" = 20'

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PROJECT: 218022	
DATE: 07.11.2018	
REVISIONS:	DATE
1st TRC Sub	07.11.18
2nd TRC Sub	09.28.18

DRAWN BY:	SP
CHECKED BY:	MWL
Plant Schedule And Details	

Planting and Soil Notes 02

Landscaping Notes

1. Verification of total landscape material quantities as shown on the landscape plans and in the plant list shall be the responsibility of the landscape contractor. The landscape architect shall be notified of any discrepancies prior to final bidding or installation.
2. All landscape materials shall conform to the most recent American Standards for Nursery Stock established by the American Association of Nurserymen (A.A.N.).
3. Soil analysis shall be obtained by landscape contractor prior to planting. See Soil Preparation and Amendment Notes
4. Shrub bed area preparation is highly preferred to individually dug holes.
5. Trees with root flare covered by more than 1.5" of soil will be rejected prior to installation.
6. Landscape material placed in prepared holes shall be properly backfilled prior to the end of the working day.
7. All saucers shall be soaked with water and mulched immediately following installation.
8. All prepared ground cover and annual bed installations shall be properly soaked and mulched prior to the end of the day.
9. Landscape Architect shall approve any on-site plant storage area for accessibility, shade conditions, heating-in mulch material and temporary watering methods.
10. Lift and set the tree by root ball only. Do not lift using the tree trunk. Do not use tree trunk as a lever.
11. All root balls removed from containers shall be scaffolded by hand prior to placement and back filling with prepared soils. Hand tools are not to be used to scarify root balls.
12. All tops and wrapping twine shall be cut and removed from around the upper parts of the root ball. Metal basket wires and burlap shall be pulled back and tucked under the edges of the saucer rings on all trees and large shrubs. All synthetic burlap shall be removed from plant balls prior to back filling.
13. All plant beds or raised saucer rings shall be edged with smooth, continuous curbs.
14. All plant material shall be planted at heights as illustrated in plant details.
15. Tree guying shall be performed within a week of planting. The landscape contractor shall be responsible for removing all tree guying strapping and stakes after the first full growing season or one year, whichever ever comes first.
16. B & B as listed under "root" in the plant list indicates balled and burlapped.
17. Contractor shall verify locations of underground utilities prior to planting. Any exposed or uncovered lines shall be shown to general contractor prior to backfilling.
18. All plant beds and raised saucer rings shall be graded to provide adequate drainage and shall be mulched as specified.
19. All materials, planting and landscape work shall conform to the current municipal authority's standard specifications and details.
20. All landscape areas that are not planted and mulched or paved shall be seeded or sodded per owner's direction with rebel IV turf type tall fescue, unless otherwise noted.
21. Tree protection fence shall be installed, inspected and approved prior to the issuance of any grading or other permits.
22. First year pruning of tree crown shall be limited to removal of dead & damaged wood.
23. The owner shall be responsible for the maintenance of all required landscaping by keeping lawns mowed, all plants maintained as disease free, all planting beds groomed and kept weed free (except in areas of preserved existing natural vegetation i.e. thickets) and kept them free from trash, debris and other materials.
24. The owner shall be responsible for the replacement of any required planting, which is removed or dies after the date of planting. Such replacement shall occur during the next planting season.
25. Trees within Public Right-of Way to be planted from October 1st to April 30th only.

Soil Preparation and Amendment Notes

1. Soil samples shall be taken and submitted for soil analysis. 2. Per recommendation of soils report; landscape contractor to supplement soil with lime, macronutrients and micronutrients.
3. Contractor to amend soil with organic material and/or sand to yield the final soil ratio:
 - 33.3% Sand/Silt
 - 33.3% Clay
 - 33.3% Organic Material *
 * Organic material to be Compost made solely from plant-based products. Peat moss is allowed in sandy soils
4. Native soil, Lime, Nutrients and Amendments to be tilled to a minimum width of 3-5 x root ball for trees. Shrub and groundcover planting areas shall be tilled to a minimum 4" below rootball or a minimum 12" deep.

Landscape Maintenance Notes 03

Landscape Maintenance Notes

THE OWNERS OF THE PROPERTY AND THEIR AGENTS, HEIRS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTINGS AND PHYSICAL FEATURES SHOWN ON THIS PLAN. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF THE VEGETATION TO INCLUDE BUT NOT LIMITED TO:

A. Fertilization: Avoid any nitrogen fertilization of cool-season grasses, such as tall fescue, after the February application until September. Fertilize lawns three times per year September 15, October 31, and February 15 according to soil test. Fertilize warm season grasses once during growing season per soil test.

B. Pruning: Purpose of pruning is to improve health and vigor of woody plants, adjustments to the foliage and branching density for visual screens and managing competition, and improving the appearance of trees and shrubs. Pruning shall be limited to removal of dead wood or branches for trees or for sight distances/safety reasons for the first year. The ANSI A300 Tree Care Operations standards should be adhered to. The pruning of shrubs shall be limited to the pruning necessary to maintain the natural shape of the plant except for sheared hedges.

1. Shrubs in buffers allowed to remain full to ground and 6'-8" height.
2. Shrubs in streetscape buffer trimmed to continuous soft hedges below trees.
3. Shrubs in planting islands kept trimmed to 36" maximum height.

C. Pest Control: Pre-emergent weed control for lawns and shrub beds may be applied in February. Chemical treatment for insect infestation and disease may be applied and shall be specific to the problem.

D. Mulching: Mulching shall be maintained at a depth of 2"-3" in plant beds. Mulch shall be reapplied every year.

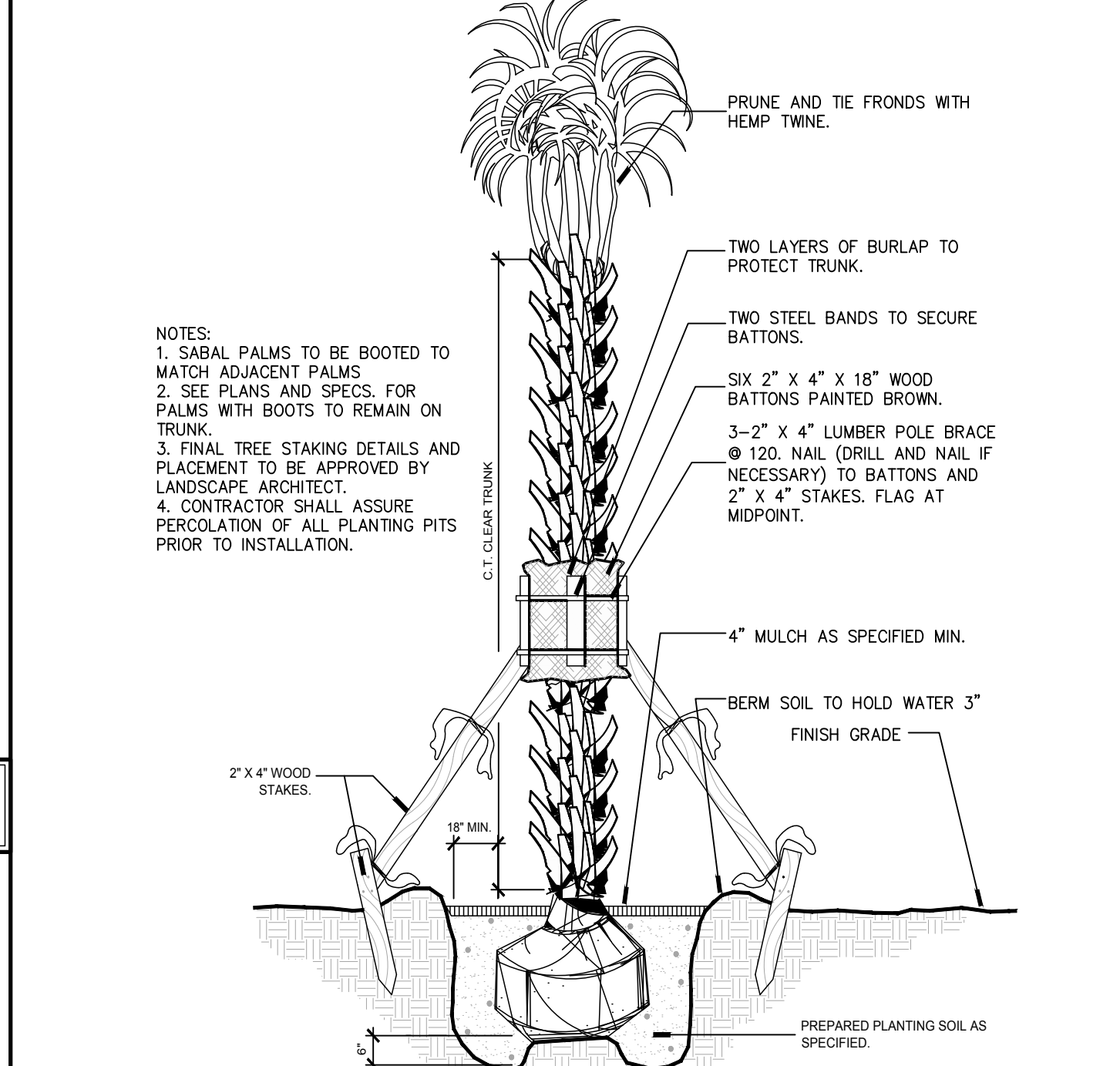
E. Mowing primary fescue lawns shall be maintained at a height of 3". Secondary turf areas may be maintained higher and less frequently. Warm season grasses shall be mowed as needed during the growing season to maintain the recommended height of the species of turf grass.

F. Plant protection: Avoid excess intrusion into the root zone area of established plantings. Install tree protection fencing as shown during construction.

G. Watering: If any irrigation system is utilized, the system shall be regulated to provide approximately 1" of rainfall per week during the growing season.

H. Maintenance notes for Bioretention Basin plant materials:

1. Visually inspect and repair erosion around bioretention areas on a monthly basis.
2. Inspect mulch cover monthly and replace any void area as needed. additional mulch shall be applied in the spring where needed.
3. Remove and replace all dead or diseased vegetation twice annually. Treat all diseased shrubs and trees as needed to insure proper growth.
4. All plant materials shall be watered by hand for two weeks after installation.
5. Replace any deficient stakes or wires whenever needed.
6. Remove all trash weekly.

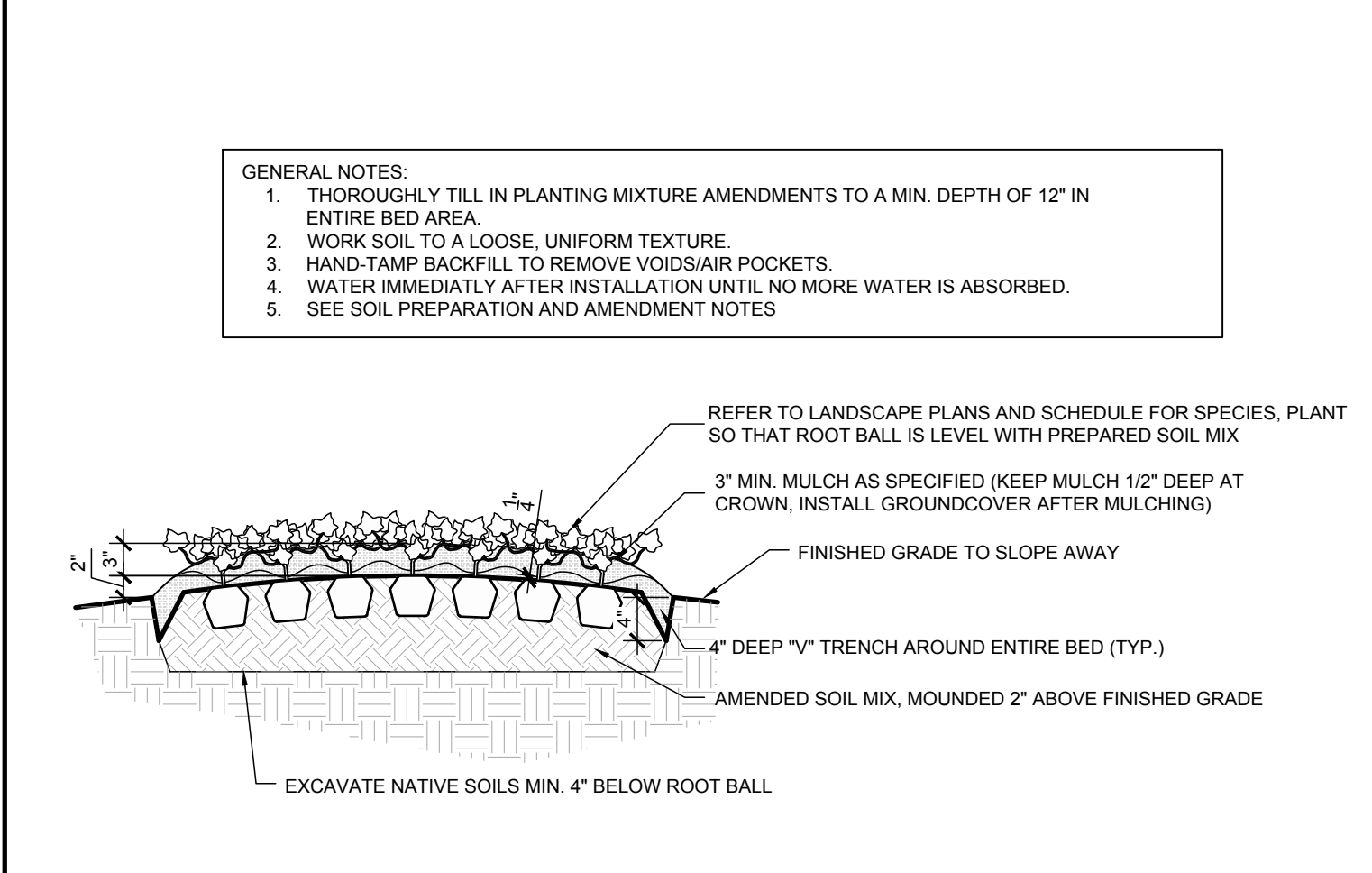


Landscape Maintenance Notes 04

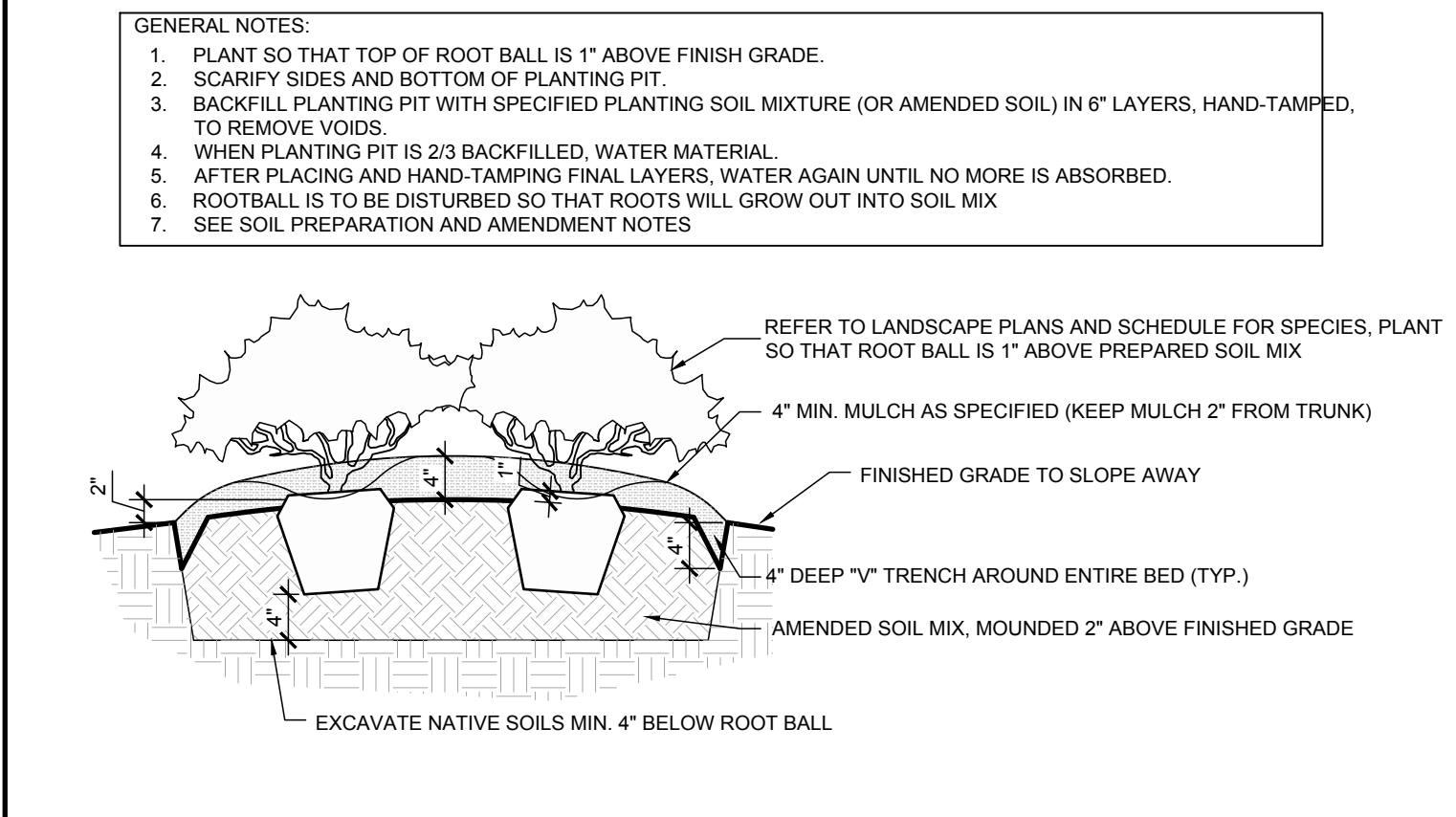
Planting and Soil Notes 02

Landscape Maintenance Notes 03

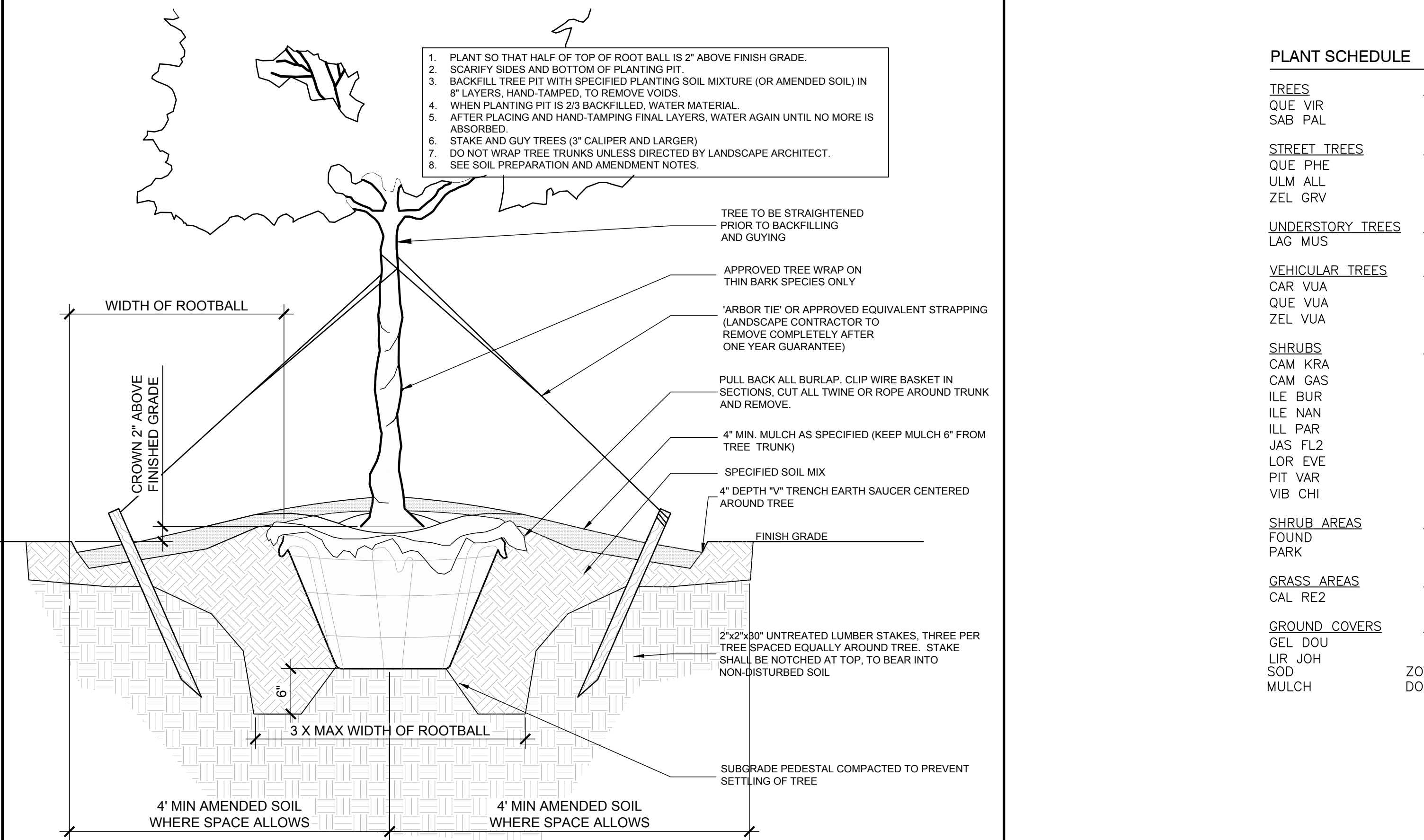
Landscape Maintenance Notes 04



Typical Groundcover Planting 07



Typical Shrub Planting 06



Typical Tree Planting (Sandy Soils) 05

PLANT SCHEDULE		BOTANICAL NAME		COMMON NAME		CALL.	HT.	SPR.	REMARKS
TREES	QTY	QUE VIR	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	2"	12-14'	6-8'	FULL HEAD, MATCHED	
	16	SAB PAL	SABAL PALMETTO	SABAL PALMETTO PALM	-	8-10'	3-5'	FULL, MATCHED	
STREET TREES	QTY	QUE PHE	QUERCUS PHELLOS	WILLOW OAK	2.5-3"	12-14'	6-7'	FULL, MATCHED	
	10	ULM ALL	ULMUS PARVIFOLIA 'UPMTF'	BOSQUE LACEBARK ELM	2.5-3"	12-14'	6-7'	FULL HEAD, MATCHED	
	23	ZEL GRV	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2.5-3"	12-14'	6-7'	FULL, MATCHED	
	9								
UNDERSTORY TREES	QTY	LAG MUS	LAGERSTROEMIA FAURIEI 'MUSKOGEE'	MUSKOGEE CRAPE MYRTLE	-	12-14'	6-8'	FULL HEAD, MATCHED, 3 TRUNK, MIN. LIMBED UP	
	1								
VEHICULAR TREES	QTY	CAR VUA	CARPINUS BETULUS 'FRANS FONTAINE'	PYRAMIDAL EUROPEAN HORNBEEAN	2"	10-12'	3-5'	FULL	
	4	QUE VUA	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	2.5-3"	12-14'	6-8'	FULL HEAD, MATCHED	
	11	ZEL VUA	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	2.5-3"	12-14'	6-7'	FULL, MATCHED	
	7								
SHRUBS	QTY	CAM KRA	CAMELLIA JAPONICA 'KRAMER'S SUPREME' TM	KRAMER'S SUPREME CAMELLIA	24-36"	15-20"		FULL	
	7	CAM GAS	CAMELLIA SASANQUA 'SHISHI GASHIRA'	SHISHI GASHIRA CAMELLIA	18-24"	24-30"		FULL	
	9	ILE BUR	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	36-42"	24-28"		FULL	
	11	ILE NAN	ILEX VOMITORIA 'NANA'	DWARF YAUPON	18" MIN.	12"		FULL	
	41	ILL PAR	ILLICIUM PARVIFLORUM	ANISE TREE	24-36"	18-24"		FULL	
	9	JAS FL2	JASMINUM FLORIDUM	SHOWY JASMINE	18"	15"		FULL	
	18	LOR EVE	LOROPETALUM CHINENSE 'EVER RED'	EVER RED LOROPETALUM	18-24"	12-18"		FULL	
	11	PIT VAR	PITOSPORUM TOBIRA 'VARIEGATA'	VARIEGATED MOCK ORANGE	18-24"	12-18"		FULL	
	62	VIB CHI	VIBURNUM AWABUKI 'CHINDO'	CHINDO VIBURNUM	36"-48"	24-30"		FULL	
	11								
SHRUB AREAS	QTY	FOUND	FOUNDATION LANDSCAPE	FOUNDATION LANDSCAPE	-			VARIETY OF SHRUBS AND GROUNDCOVERS	
	7,817 SF	PARK	PARK SHRUB AREAS	MIXED SHRUBS	VARIES			VARIETY OF SHRUBS AND GROUNDCOVERS	
	7,722 SF								
GRASS AREAS	QTY	CAL RE2	CALAMAGROSTIS BRACHYTRICHA	KOREAN FEATHER REED GRASS	1 GAL			FULL	
	132								
GROUND COVERS	QTY	GEL DOU	GELSEMIUM SEMPERVIRENS & RANKINI DOUBLE SHOT	DOUBLE SHOT JESSAMINE	1 GAL	3-5"	16-20"	30" o.c. FULL	
	34	LIR JOH	LIRIOPE MUSCARI 'JOHN BURCH'	LILY TURF	1 GAL	4-6"	18" o.c.	FULL	
	293	SOD	ZOYSIA						
	293	MULCH	DOUBLE SHREDDED HARDWOOD						

Plant Schedule 01

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTRANCE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL. (SEE BELOW*)
5. CONTINUE TILLAGE UNTIL A WELL - PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDBED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
10. APPLY:
 AGRICULTURAL LIMESTONE - 2 TONS/ACRE
 FERTILIZER - 1000 LBS/ACRE (10-10-10)
 SUPERPHOSPHATE - 500 LBS/ACRE (20%)
 MULCH - 2 TONS/ACRE (SMALL GRAIN STRAW)
 ANCHOR - ASPHALT EMULSION AT 450 GAL/ACRE

TREE PROTECTION NOTES:

1. NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS. [18-457(b)]
2. PROTECTIVE FENCING IS TO BE PROPERLY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. [18-458]
3. LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS AND METHODS. [18-457(d)]
4. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING AND GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS. [18-458]
5. NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED. [18-458]
6. REGULATED AND SIGNIFICANT TREES IN THE STREET YARD [18-456(c)] AND ANY TREES IN ANY REQUIRED BUFFERS [18-456(b)] ARE REQUIRED TO BE RETAINED.

6 GENERAL NOTES

N/A

GROUND STABILIZATION CRITERIA		
SITE AREA DESCRIPTION	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10 FT 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 FT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

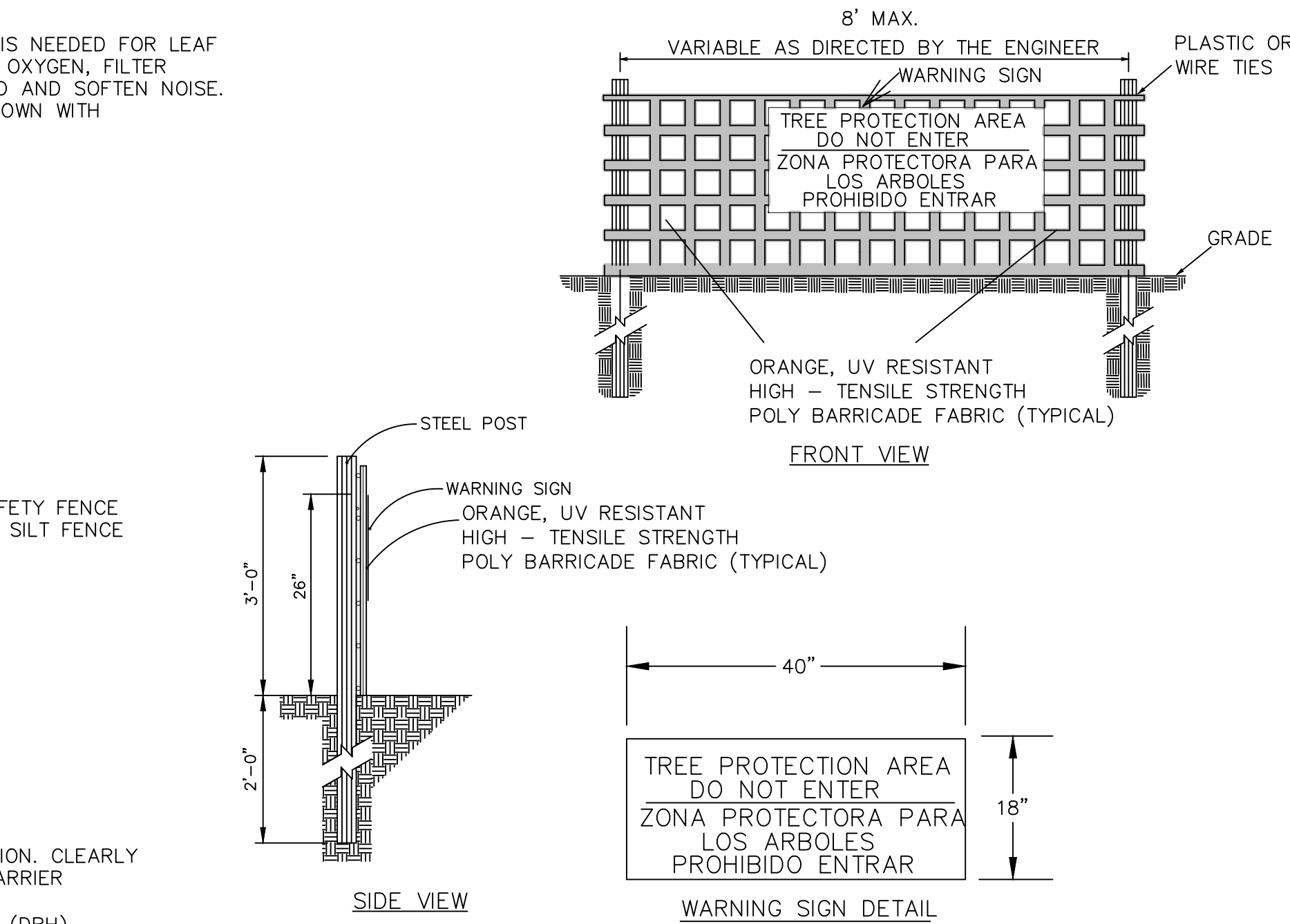
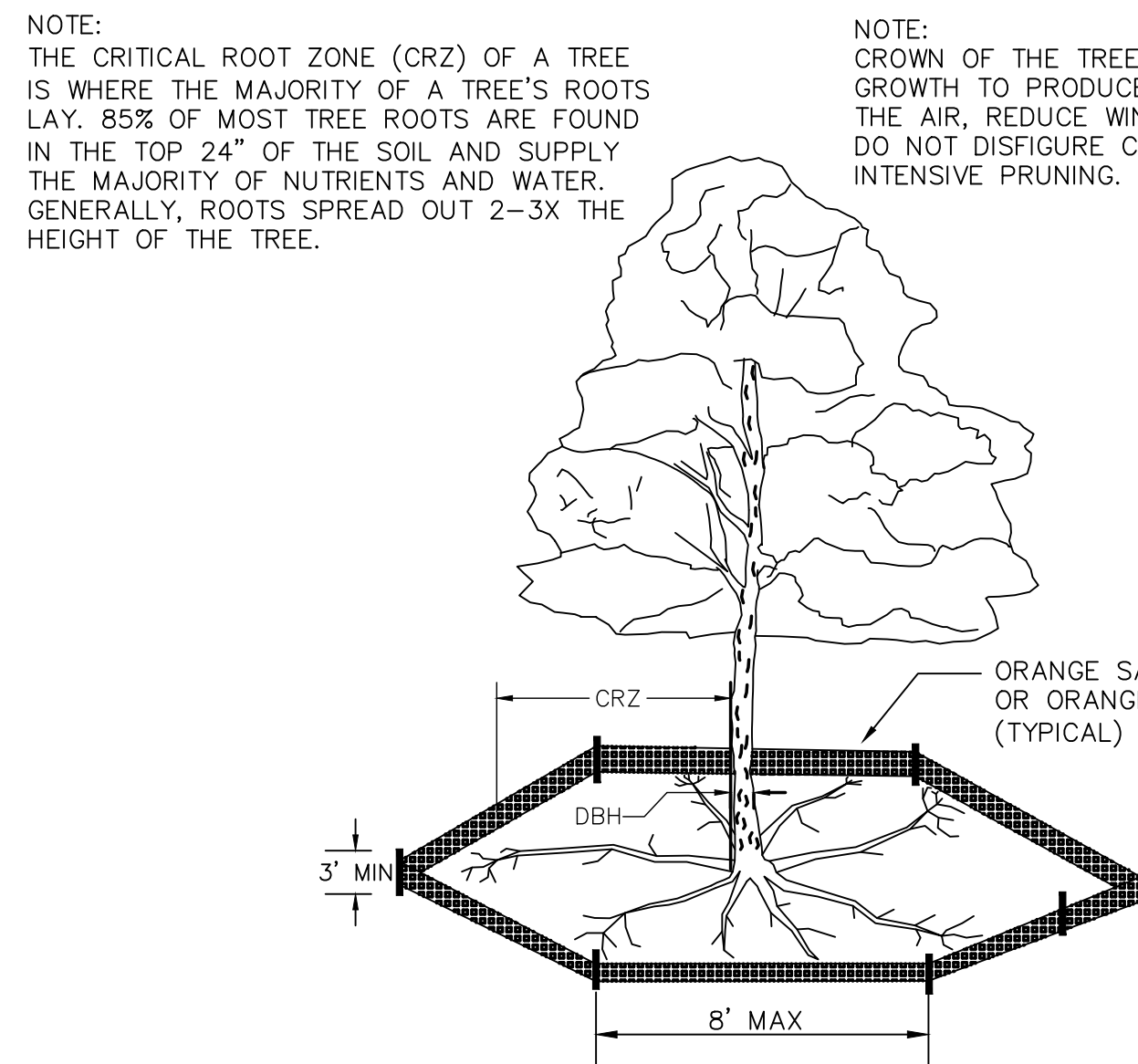
PERMANENT SEEDING			
GRASS TYPE	AMOUNT/1000 S.F.	TIME OF SEEDING	INITIAL
BERMUDA, COMMON	1-2 LBS.	APRIL - JUNE	25 LBS. 10-10-10
FESCUE, TALL (KENTUCKY 31)	5-7 LBS	JUNE - AUGUST FEB. - OCT.	25 LBS 10-10-10
SERICEA LESPEDEZA (SLOPES)	1-2 LBS	MARCH - APRIL	25 LBS 10-10-10

TEMPORARY SEEDING			
GRASS TYPE	AMOUNT/1000 S.F.	TIME OF SEEDING	INITIAL
RYE GRAIN	1-2 LBS.	APRIL - JUNE	25 LBS. 10-10-10
BROWNTOP MILLET	1-2 LBS	JUNE - AUGUST	25 LBS 10-10-10

NOTE (G.S. 113A-57 (2))
 THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 21 CALENDAR DAYS OF COMPLETION OF ANY GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

5 GENERAL NOTES

N/A



- NOTES:**
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 3. IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATTS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
 4. WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
 5. FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
 6. FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

METHOD OF TREE PROTECTION DURING CONSTRUCTION
 SD 15-09

7 TREE SAVE

N/A

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

REGULAR FLOW DANDY SACK™ (BLACK)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kn (lbs)	1.78 (400) x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 x 15
Puncture Strength	ASTM D 4633	kn (lbs)	0.67 (150)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5006 (800)
Trapezoid Tear Strength	ASTM D 4533	kn (lbs)	0.67 (150) x 0.73 (163)
UV Resistance	ASTM D 4355	hr (hrs)	26
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	2802 (70)
Permeability	ASTM D 4491	Sec	0.90

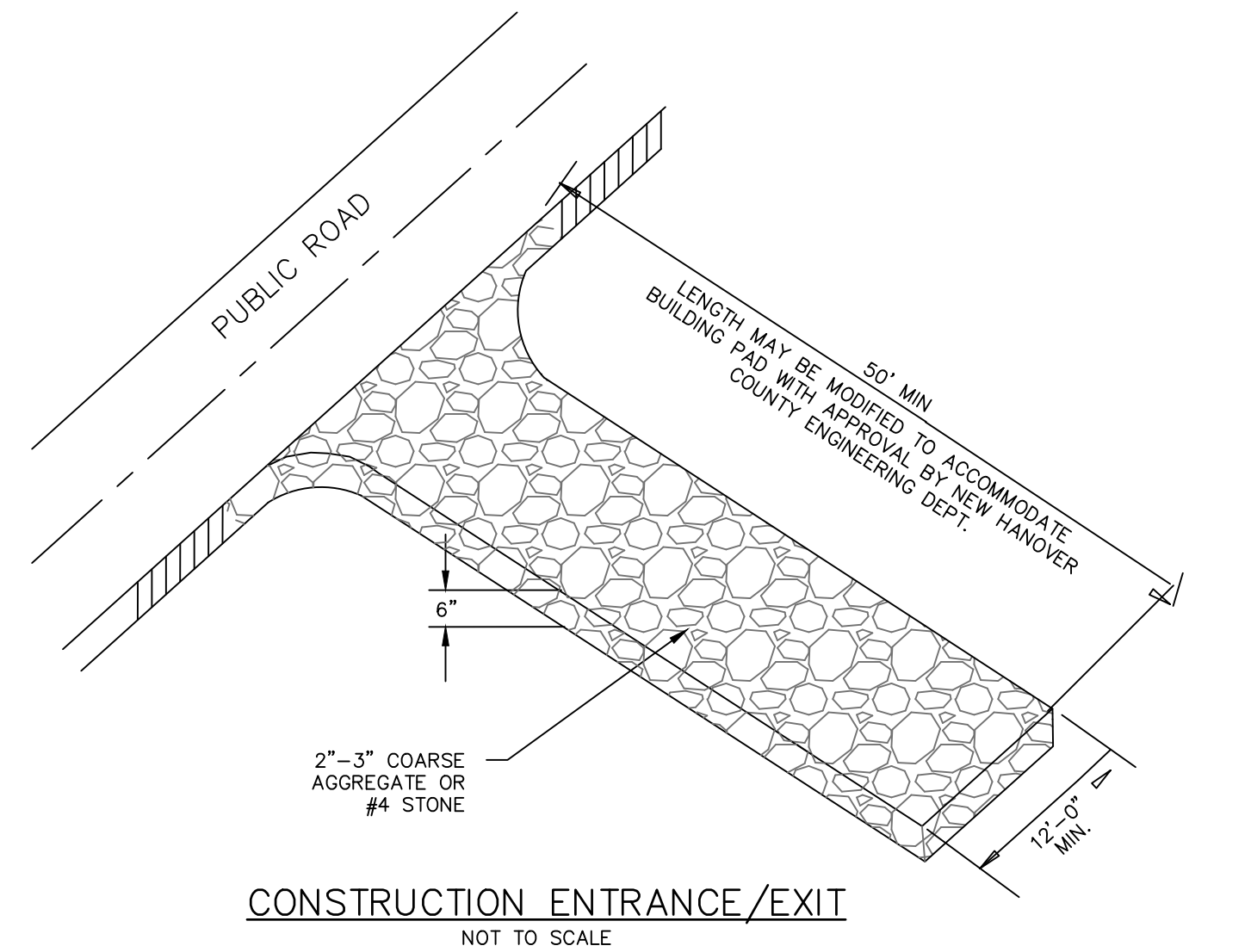
HI-FLOW DANDY SACK™ (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kn (lbs)	1.62 (365) x 0.69 (200)
Grab Tensile Elongation	ASTM D 4632	%	14 x 10
Puncture Strength	ASTM D 4633	kn (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kn (lbs)	0.51 (115) x 0.33 (75)
UV Resistance	ASTM D 4355	hr (hrs)	26
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	5907 (145)
Permeability	ASTM D 4491	Sec	2.1

TEMPORARY DANDY SACK® INLET PROTECTION
 NOT TO SCALE

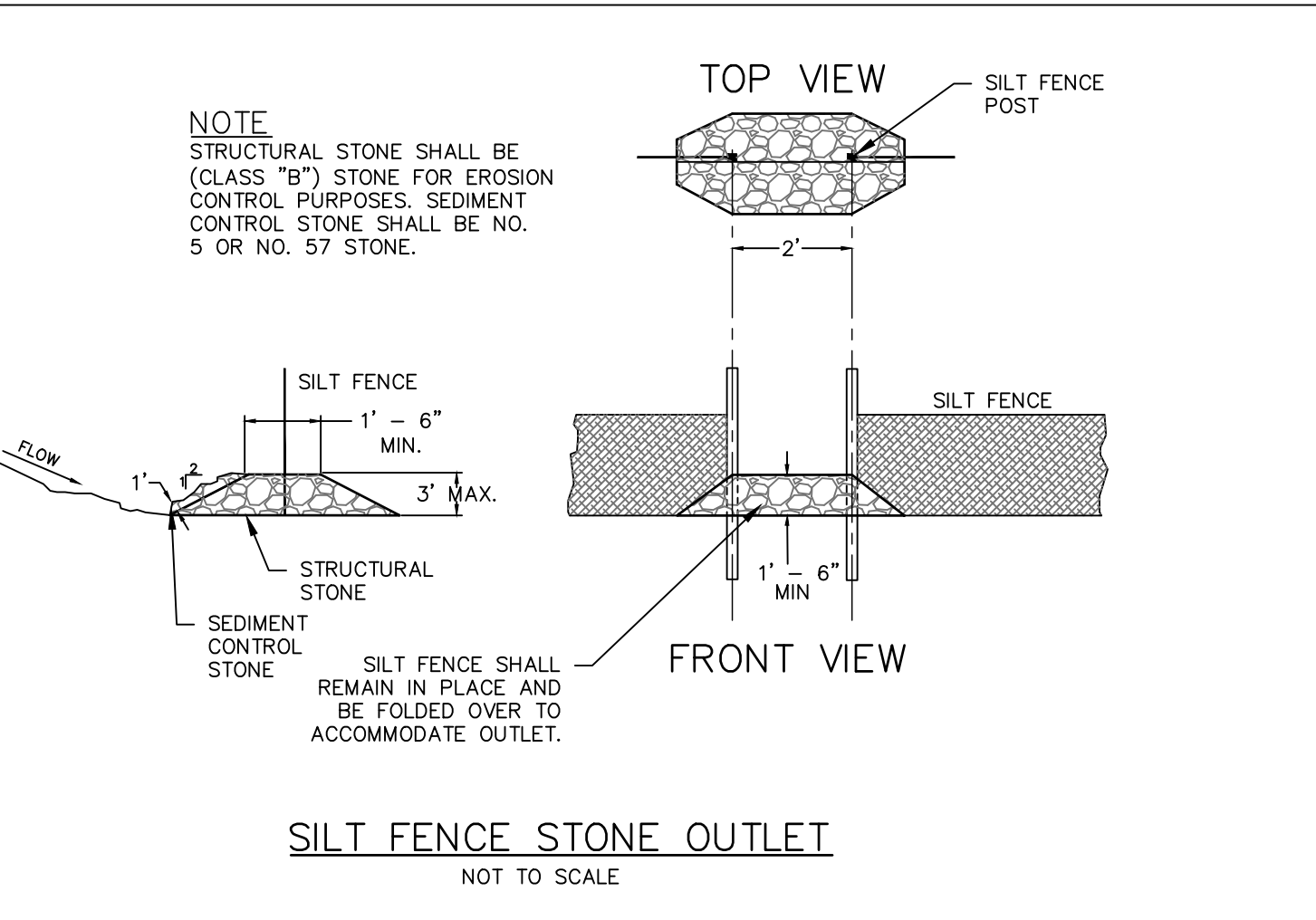
1 INLET PROTECTION

NOT TO SCALE



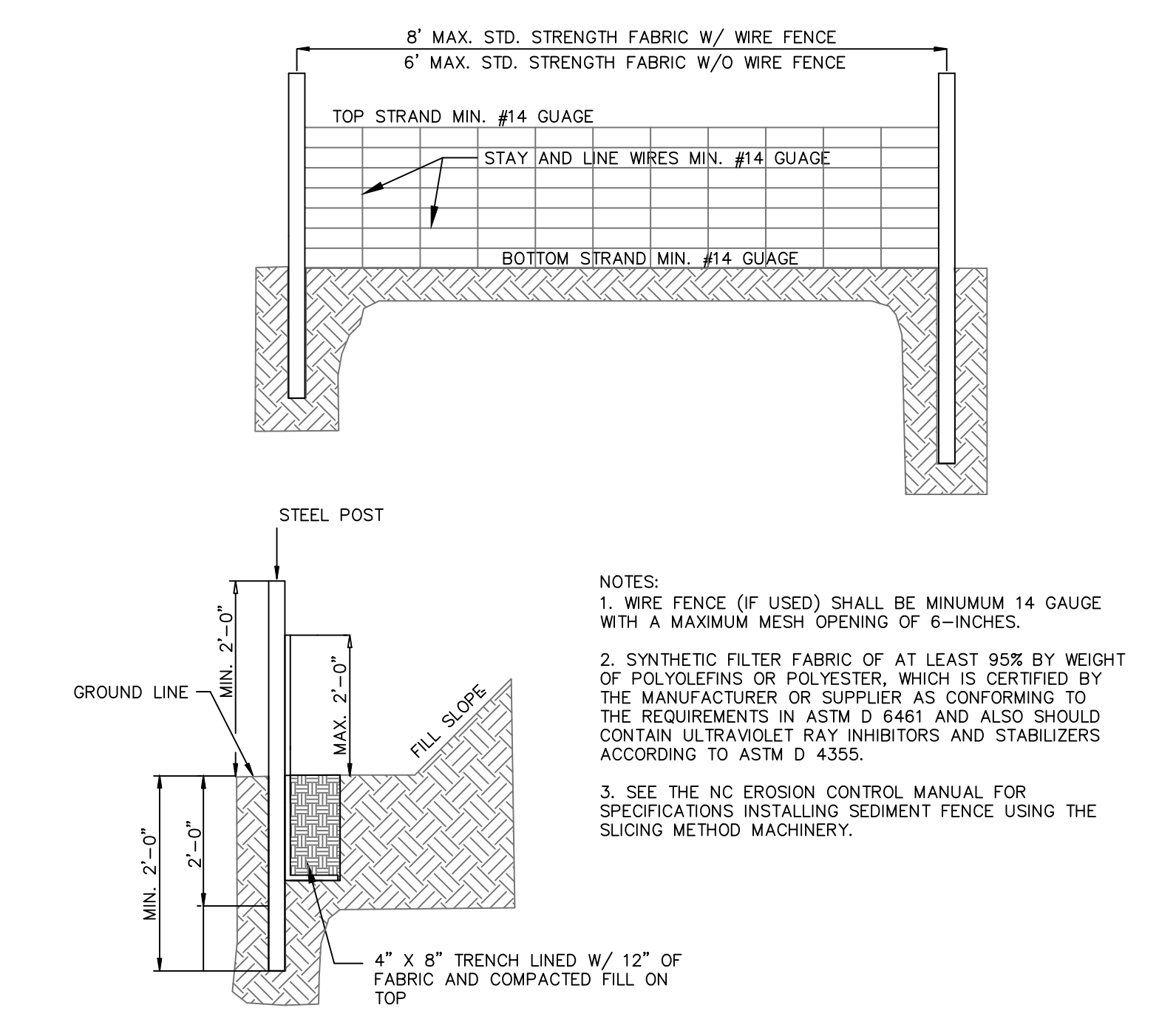
3 CONSTRUCTION ENTRANCE

NOT TO SCALE



4 SILT FENCE OUTLET

NOT TO SCALE



2 TEMPORARY SILT FENCE

NOT TO SCALE

REV. NO.	DESCRIPTIONS	DATE
8	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018

FINAL DRAWING - FOR REVIEW PURPOSES ONLY

SEAL

MCKIM & CREED
 243 North Front Street
 Wilmington, North Carolina 28401
 Phone: (910)343-1048, Fax: (910)251-8282
 License: F-1222
 www.mckimcreed.com

doj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
SEDIMENT AND EROSION CONTROL DETAILS

DATE: 07/11/2018
 MCE PROJ. #: 7402-0001
 DRAWN: ALM/KCE
 DESIGNED: ALM
 CHECKED: RMC
 PROJ. MGR.: KCE

SCALE: HORIZONTAL: N/A
 VERTICAL: N/A

MARV FILE NUMBER: **CE-501**
 DRAWING NUMBER: **26**

STATUS: **PRELIMINARY DESIGN**
 ISSUED FOR PERMITTING

REVISION: **B**

GENERAL NOTES

1. IN ACCORDANCE WITH N.C.G.S. 136-44.14, ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED ON EACH SIDE OF ANY STREET OR ROAD, WHERE CURBS AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
2. WHEELCHAIR RAMPS SHALL BE LOCATED AS INDICATED IN DETAIL DRAWINGS; HOWEVER, EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.
3. CURB RAMPS SHALL HAVE DETECTABLE WARNINGS EXTENDING THE FULL WIDTH OF THE RAMP AND A MINIMUM OF 2-FT. IN LENGTH.

CONSTRUCTION NOTES

1. CONSTRUCTION SHALL CONFORM WITH CONSTRUCTION STANDARDS OF THE GOVERNING BODY WHICH HAS JURISDICTION OF THE PARTICULAR STREET.
2. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH.
3. A 1/2-IN. EXPANSION JOINT SHALL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
4. IN NO CASE SHALL THE WIDTH OF A CURB RAMP OR CURB CUT BE LESS THAN 40-IN. (3-FT, 4-IN.), NOT INCLUDING THE FLARED SIDES.
5. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
6. THE MAXIMUM SLOPE ON THE CURB RAMP RUN IS 1:12.
7. THE MAXIMUM CROSS SLOPE OF THE CURB RAMP IS 1:50.
8. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.
9. ANY RAISED ISLANDS IN CROSSINGS SHALL BE CUT THROUGH LEVEL WITH THE STREET OR HAVE CURB RAMPS AT BOTH SIDES AND A LEVEL AREA AT LEAST 48-IN. LONG BETWEEN THE CURB RAMPS.

10. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9-IN., A HEIGHT OF NOMINAL 0.2-IN. AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35-IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

ADDITIONAL NOTES

1. STOP BARS SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT.
2. PARKING SHALL BE A MINIMUM OF 20 FEET BACK OF THE PEDESTRIAN CROSSWALK.
3. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THIS DOCUMENT IS AVAILABLE FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402.
4. INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
5. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. THE BOTTOM OF DIAGONAL (CORNER TYPE) CURB RAMPS AT MARKED CROSSINGS SHALL HAVE 48-IN. MINIMUM CLEAR SPACE WITHIN THE MARKINGS.
7. IF DIAGONAL CURB RAMPS HAVE FLARED SIDES, THEY SHALL HAVE AT LEAST A 24-IN. LONG SEGMENT OF STRAIGHT CURB LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

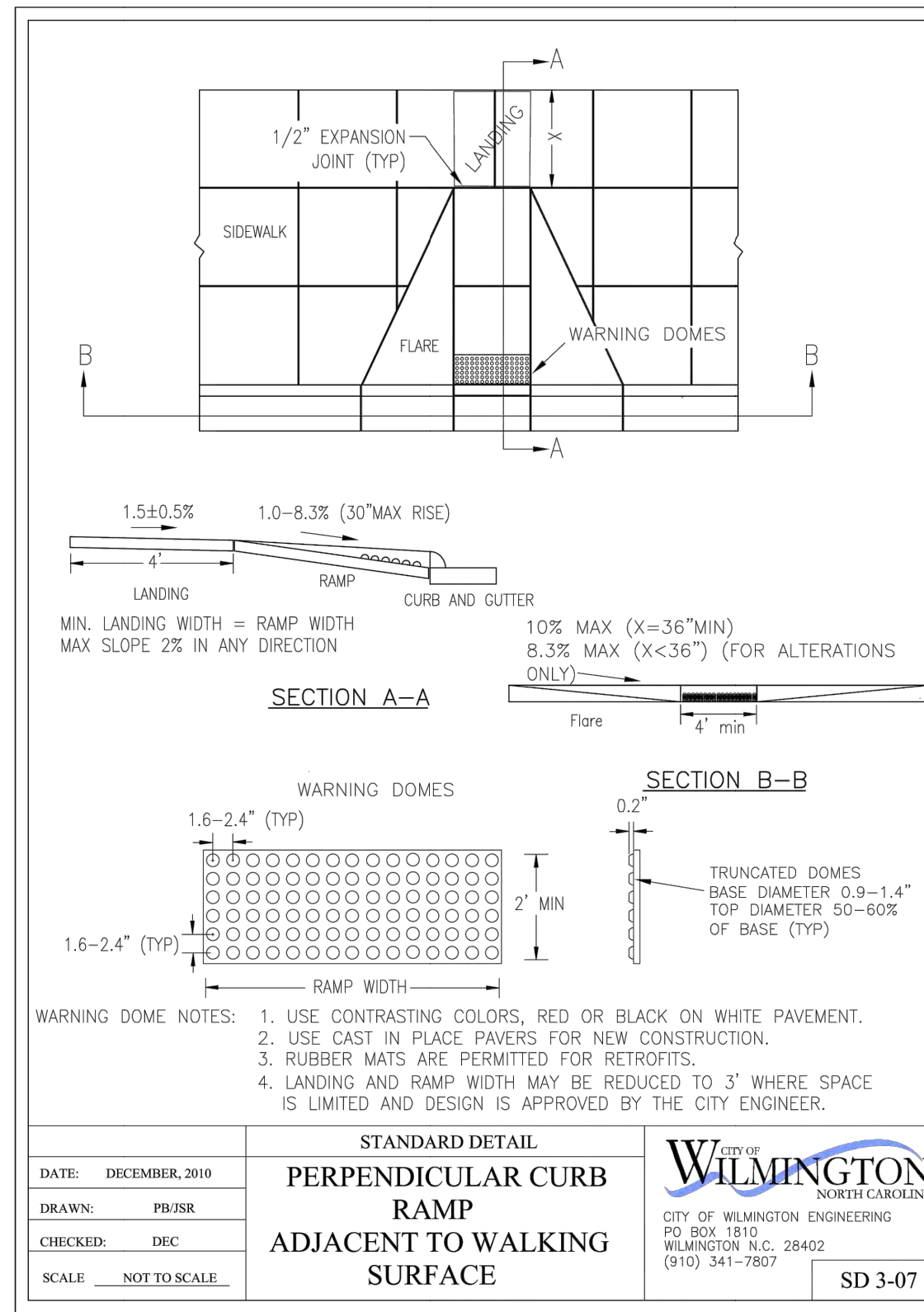
Approved Construction Plan

Name _____ Date _____

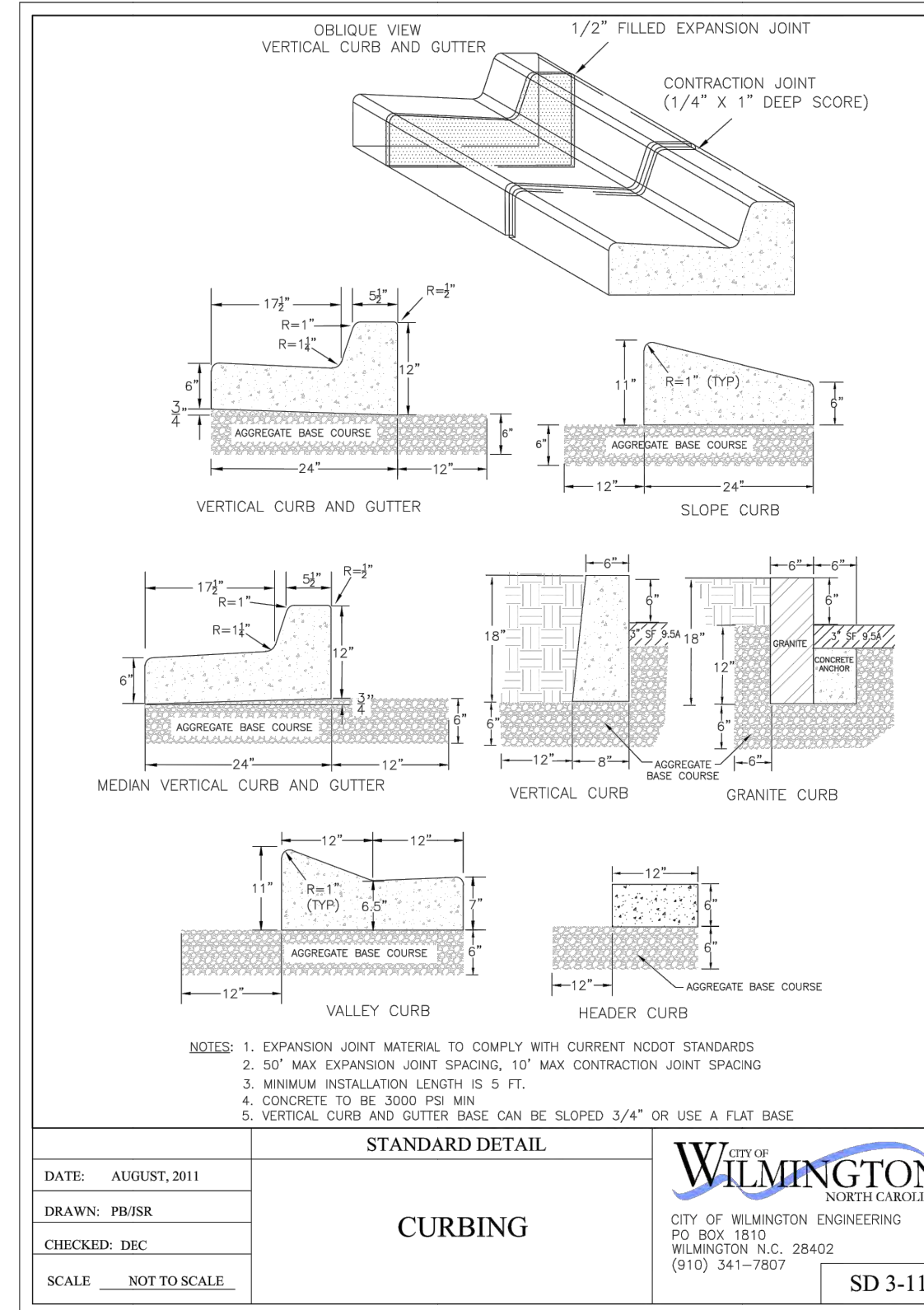
Planning _____

Traffic _____

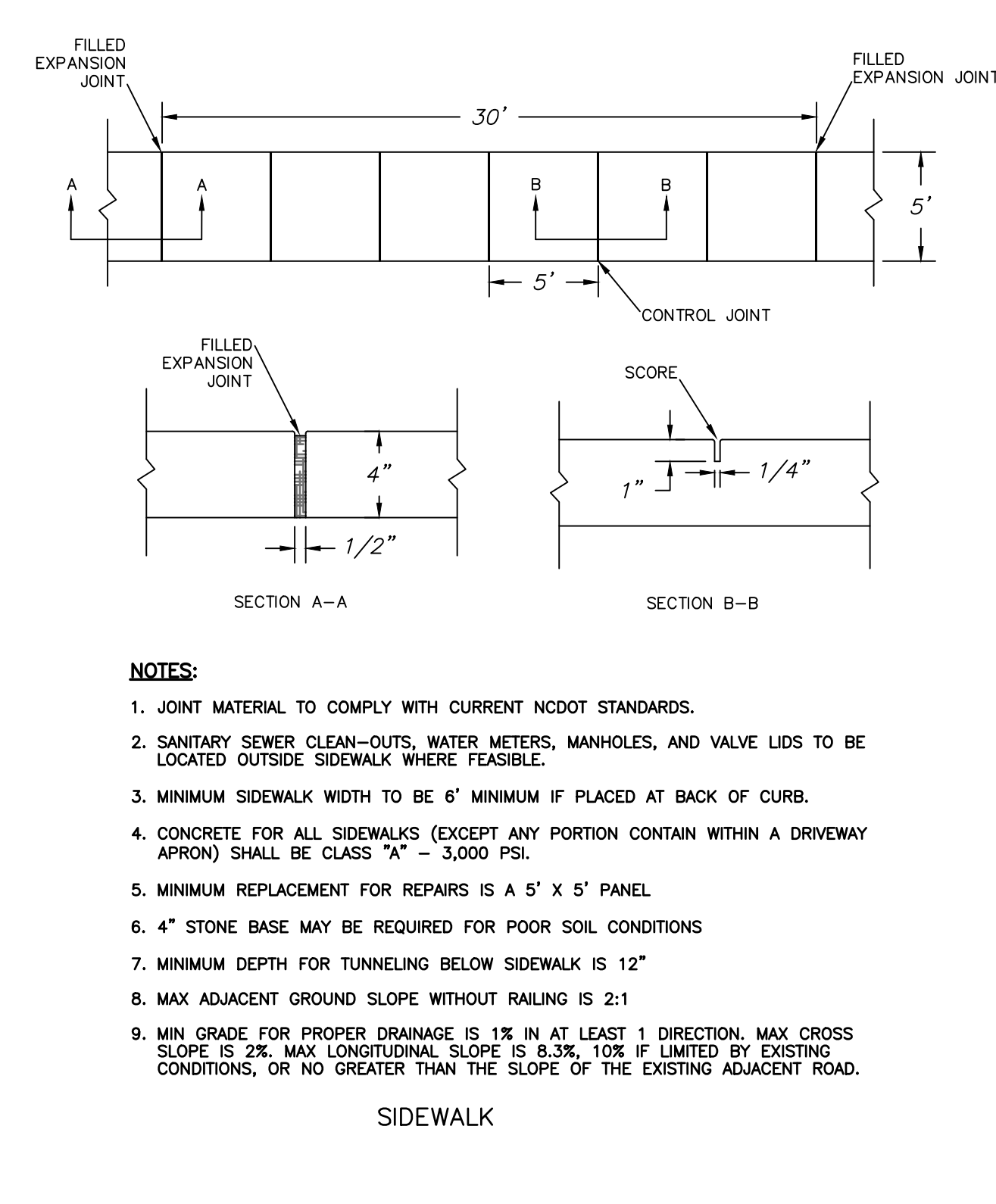
Fire _____



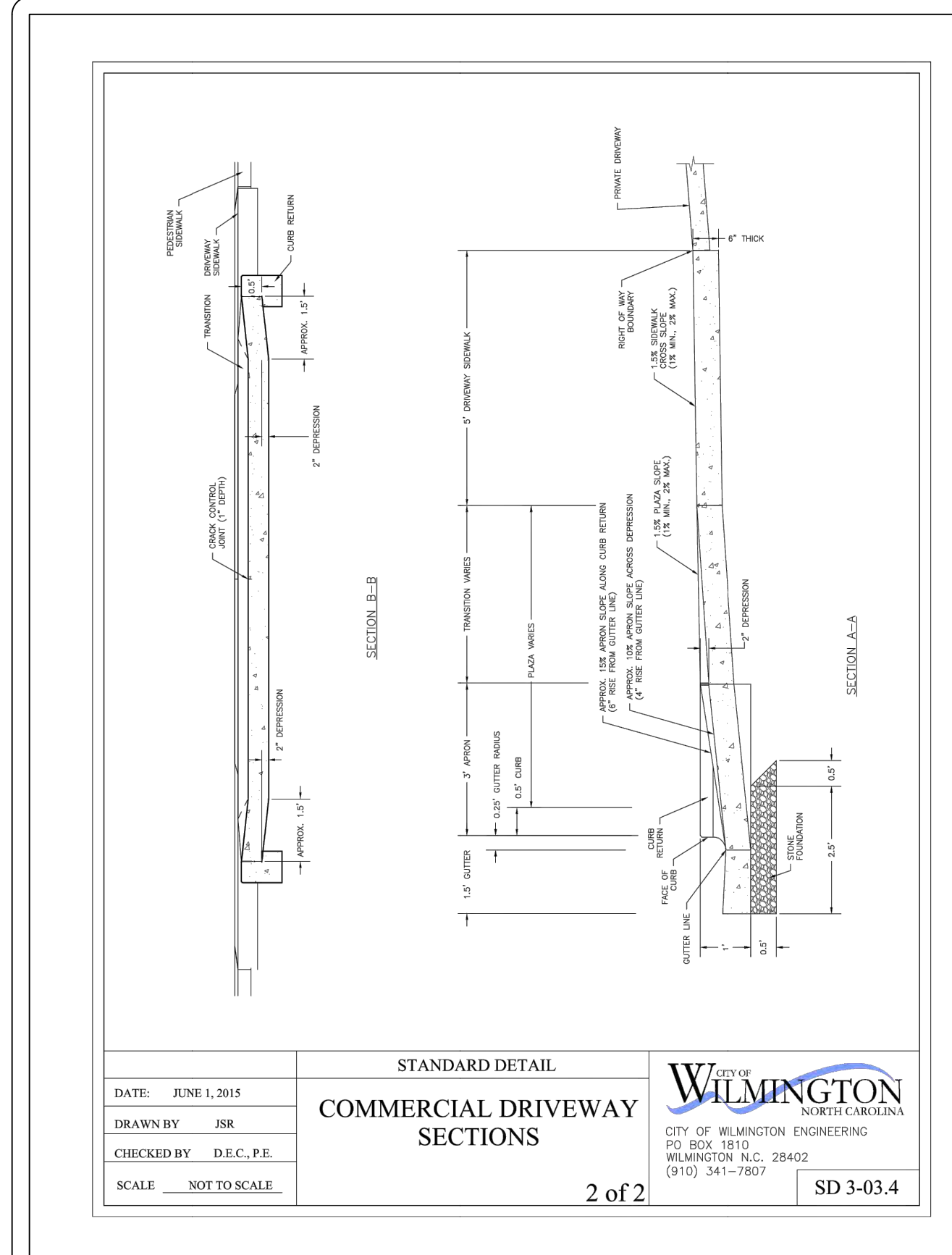
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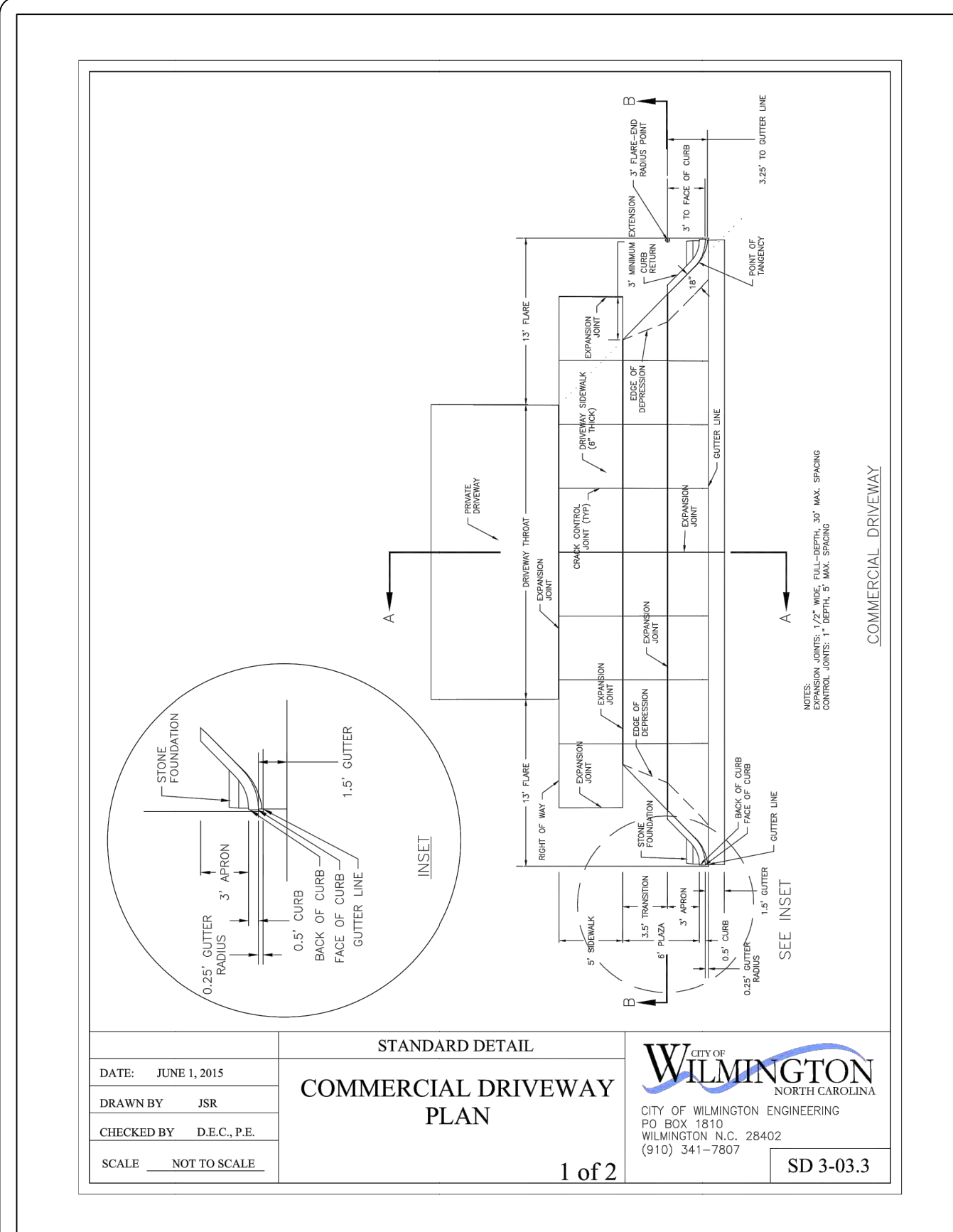
2 CURBING NOT TO SCALE



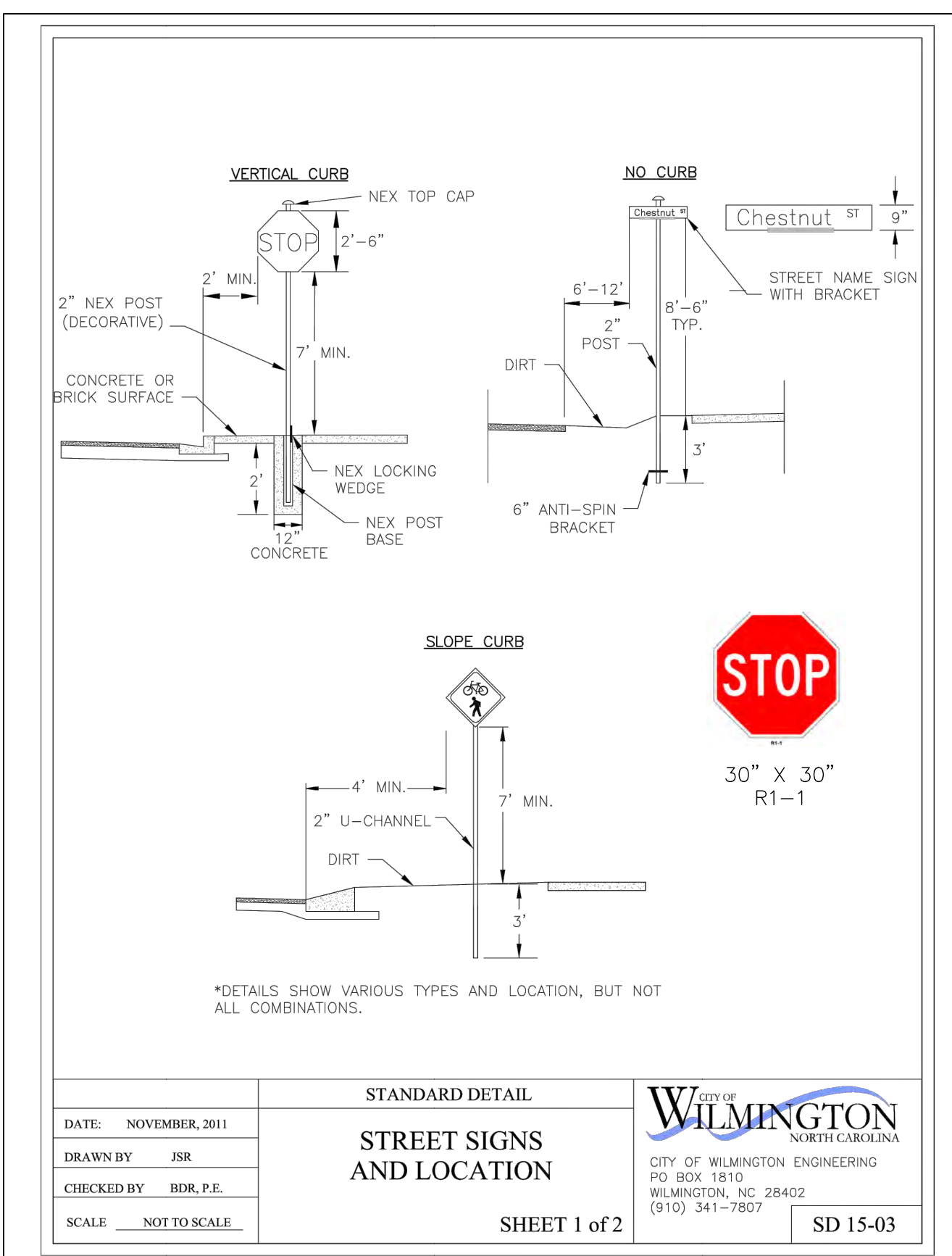
1 SIDEWALK DETAIL N/A



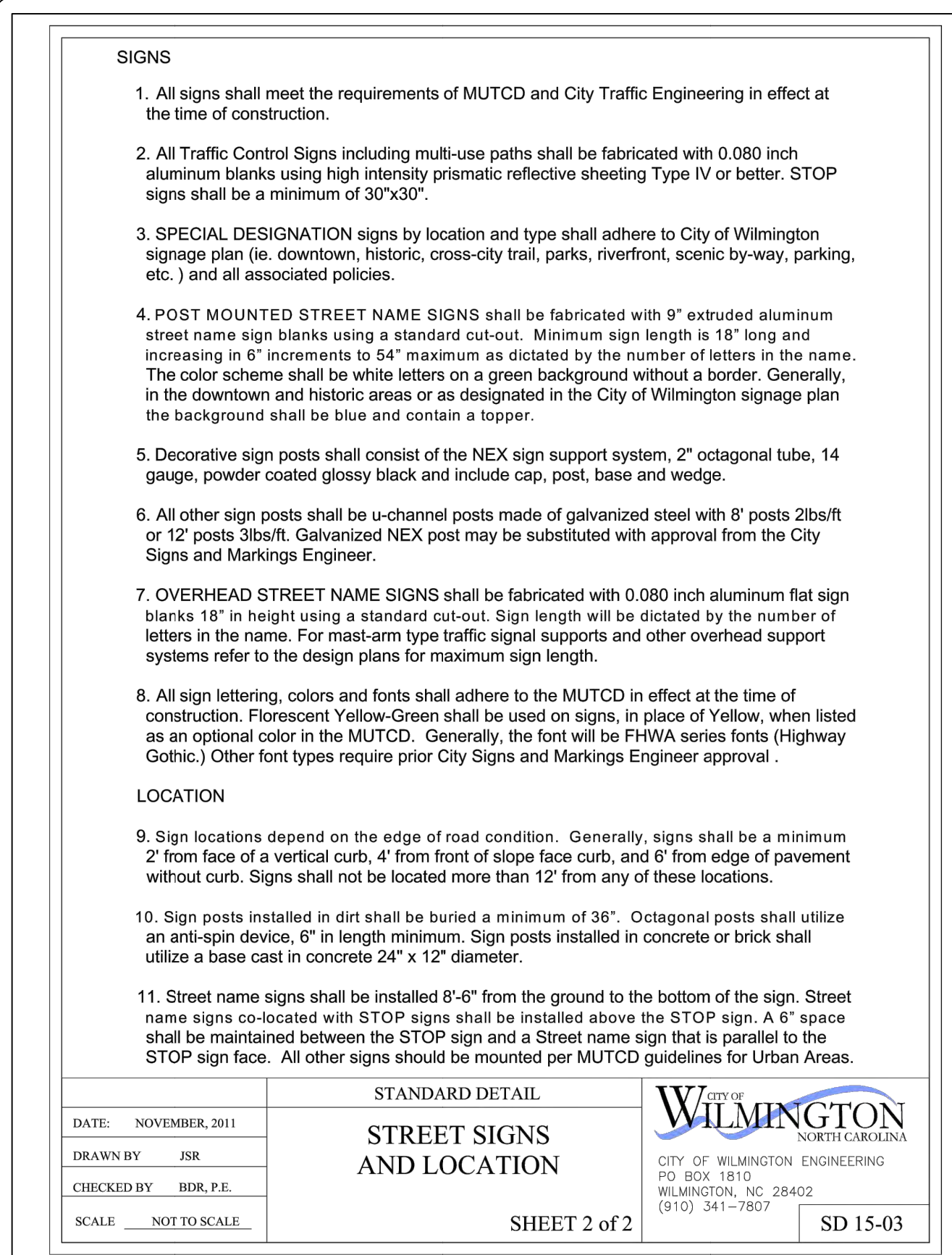
7 COMMERCIAL DRIVEWAY DETAIL N/A



6 COMMERCIAL DRIVEWAY DETAIL N/A



5 STREET SIGN LOCATIONS NOT TO SCALE



4 STREET SIGN LOCATIONS NOT TO SCALE

REVNO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2016
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/21/2016

FINAL DRAWING FOR REVIEW PURPOSES ONLY

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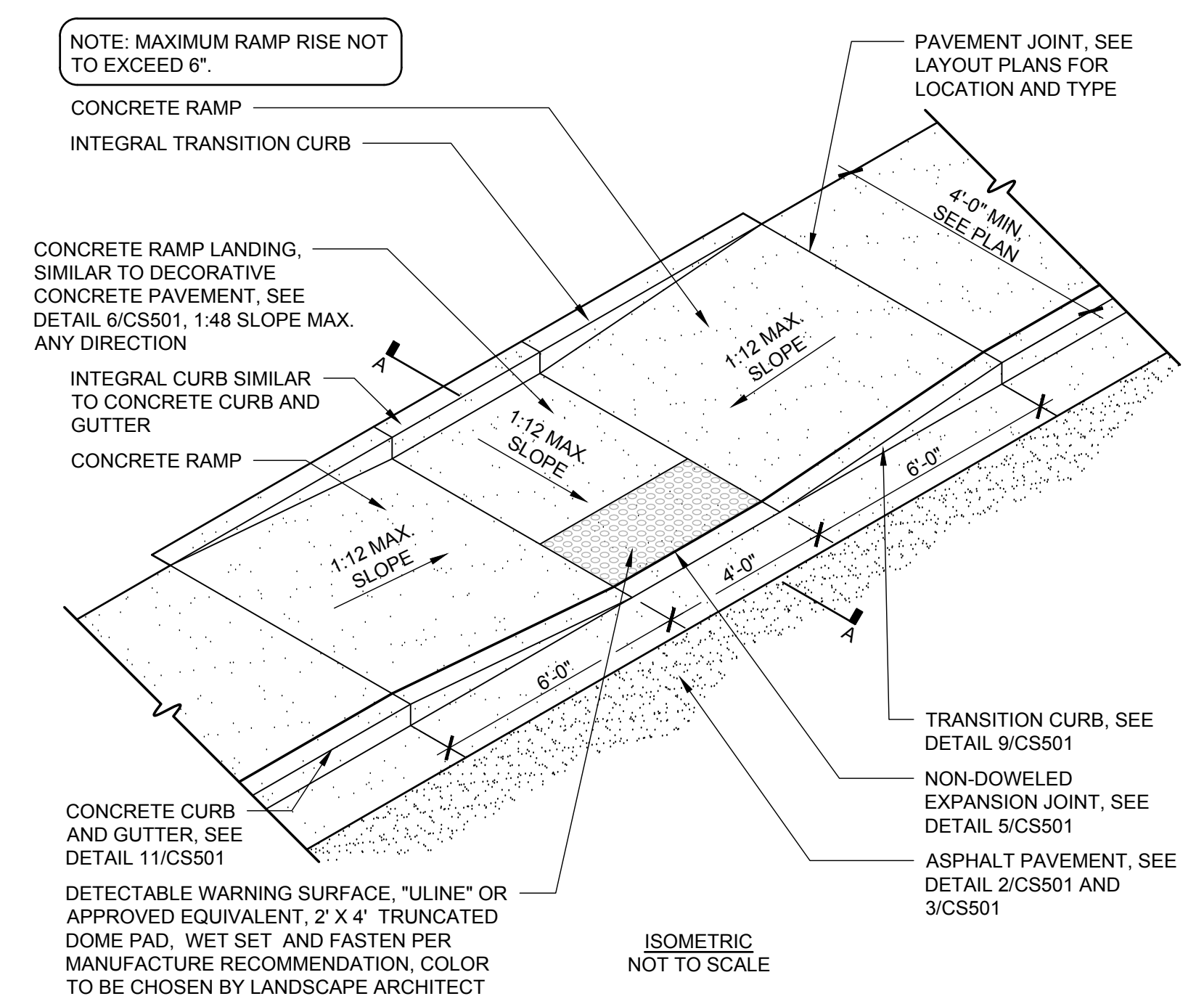
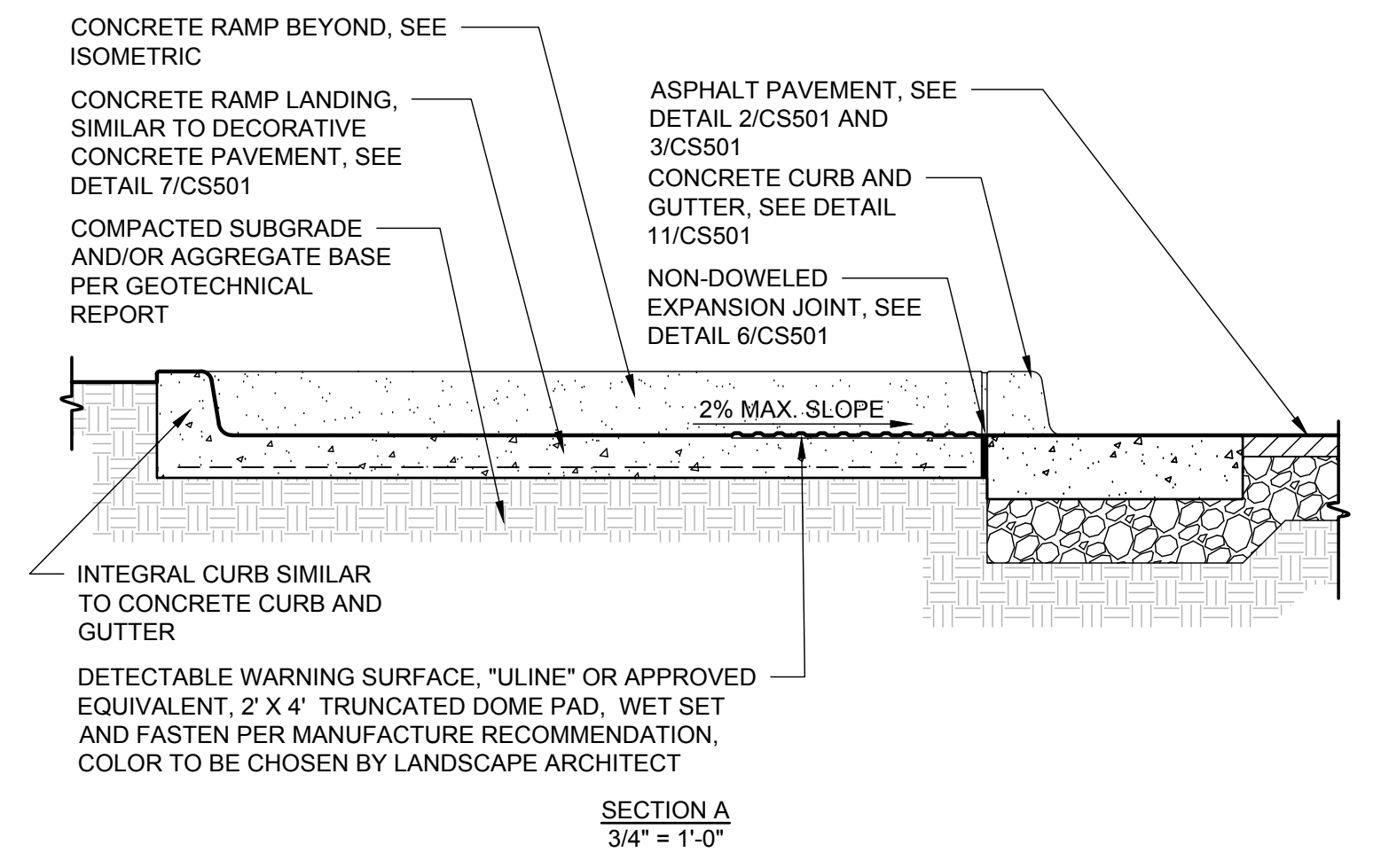
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License: F-1222
www.mckimcreed.com

dpj RESIDENTIAL
CLINE DESIGN

THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
SITE DETAILS

DATE: 07/11/2018	SCALE: N/A	MAC FILE NUMBER: CS-501
MCE PROJ. # 7402-0001	DRAWN: ALM/KCE	DRAWING NUMBER: 27
DESIGNED: ALM	CHECKED: RMC	REVISION: B
PROJ. MGR.: KCE		

STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING



4 CURBED HANDICAP ACCESSIBLE RAMP NOT TO SCALE

REVNO.	DESCRIPTIONS	DATE
8	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
4	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018
REVISIONS		

FINAL DRAWING - FOR REVIEW PURPOSES ONLY

SEAL

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THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

SITE DETAILS

DATE: 07/11/2018	SCALE: CS-502	MAC FILE NUMBER: CS-502
MCE PROJ. # 7402-0001	HORIZONTAL: N/A	DRAWING NUMBER: 28
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR.: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		REVISION B

DPJ RESIDENTIAL
FLATS ON FRONT
111 COWAN STREET
WILMINGTON, NORTH CAROLINA

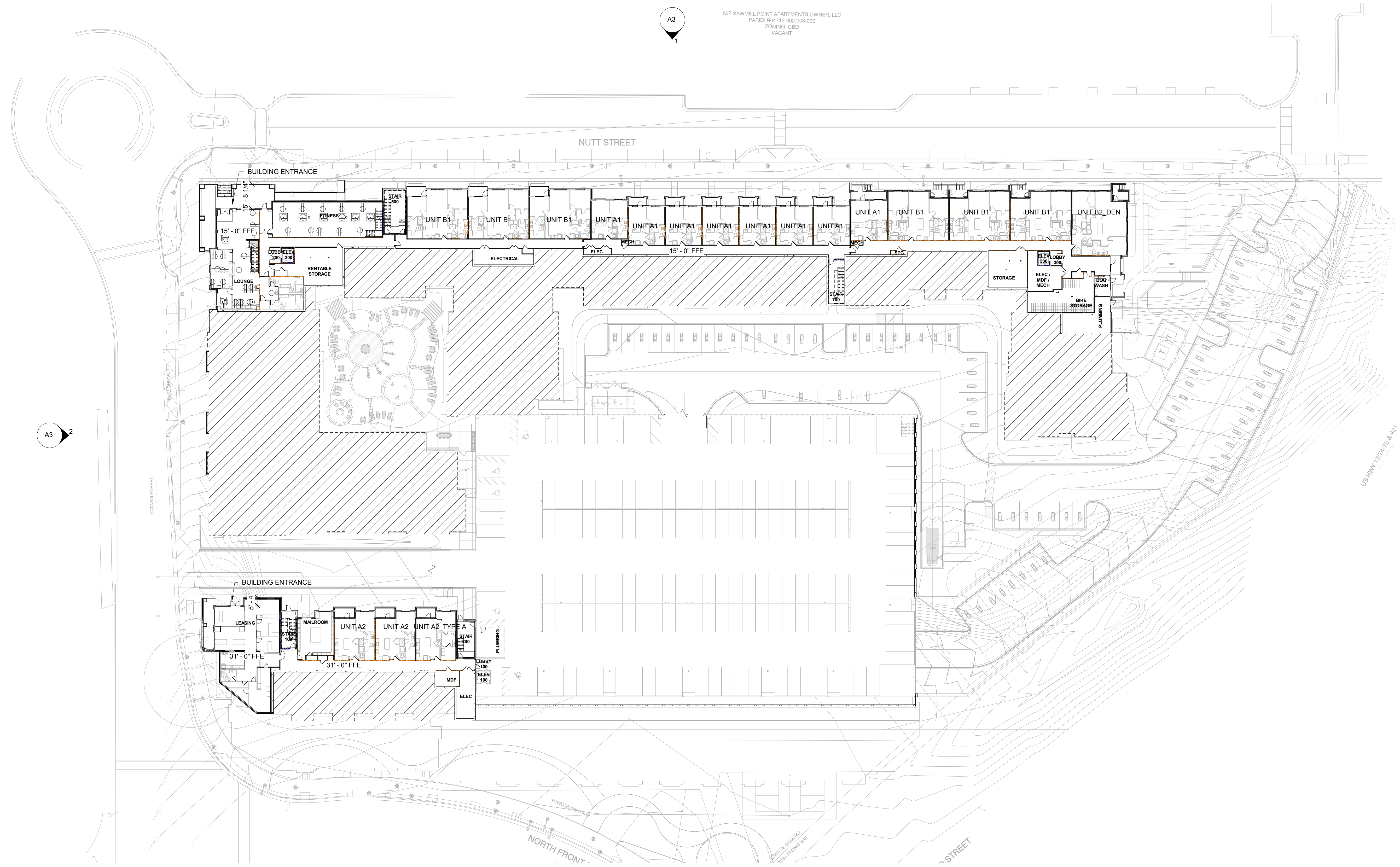
DESIGN
DEVELOPMENT

PROJECT:	218022
DATE:	08.22.18
REVISIONS:	DATE

DRAWN BY: Author
CHECKED BY: Checker

**OVERALL BASEMENT
PLAN (TRC)**

NF SAWMILL POINT APARTMENTS OWNER, LLC
PARID: R04712-002-005-000
ZONING: CBD
VACANT



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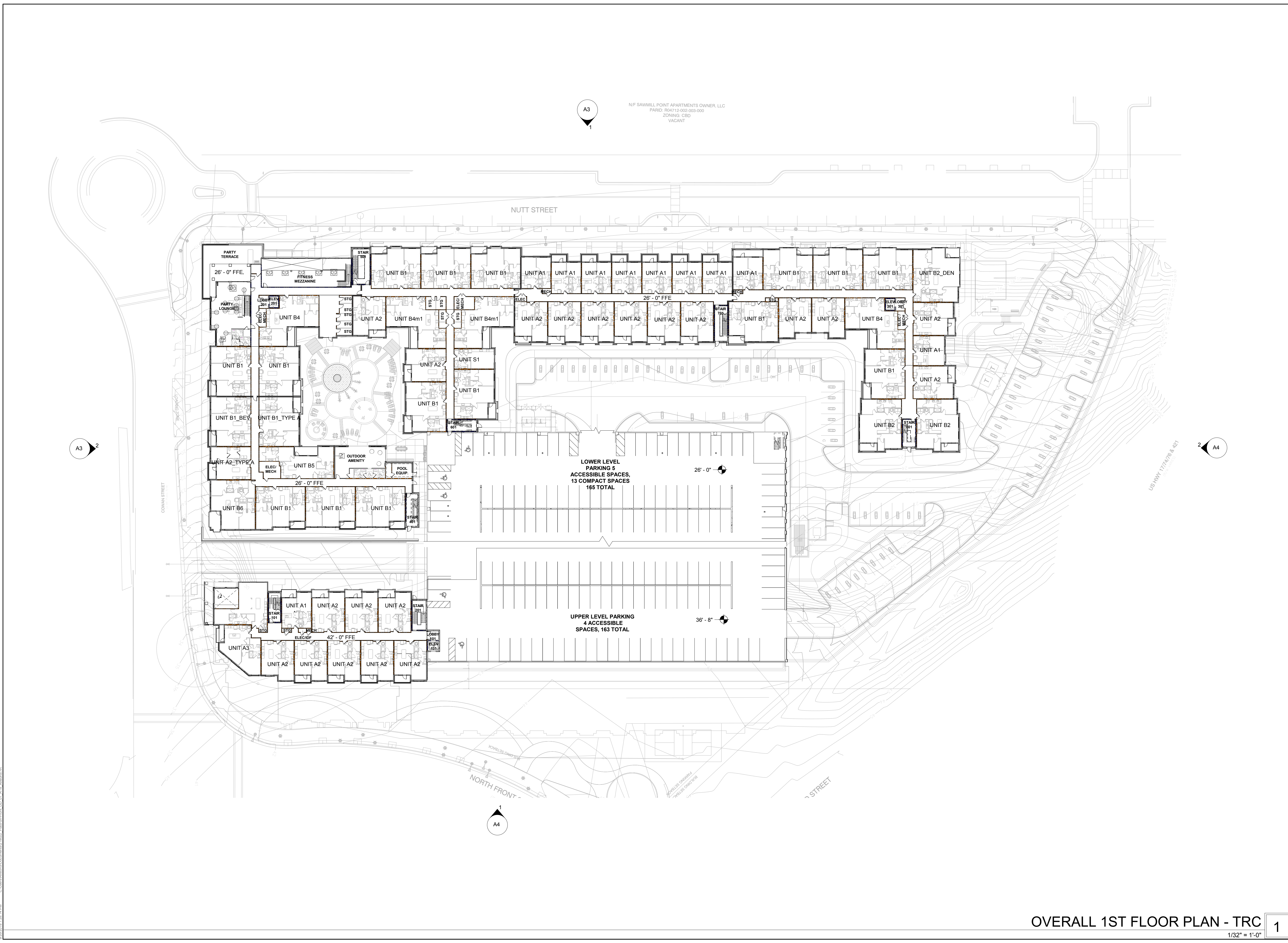
DPJ RESIDENTIAL
FLATS ON FRONT
111 COWAN STREET
WILMINGTON, NORTH CAROLINA

DESIGN
DEVELOPMENT

PROJECT:	218022
DATE:	08.22.18
REVISIONS:	DATE

DRAWN BY:	Author
CHECKED BY:	Checker

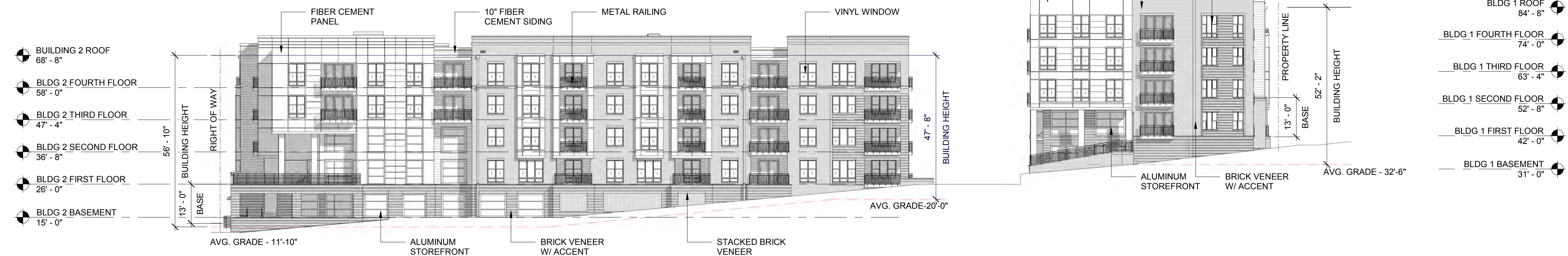
**OVERALL FIRST
FLOOR PLAN (TRC)**



OVERALL 1ST FLOOR PLAN - TRC
1/32" = 1'-0"

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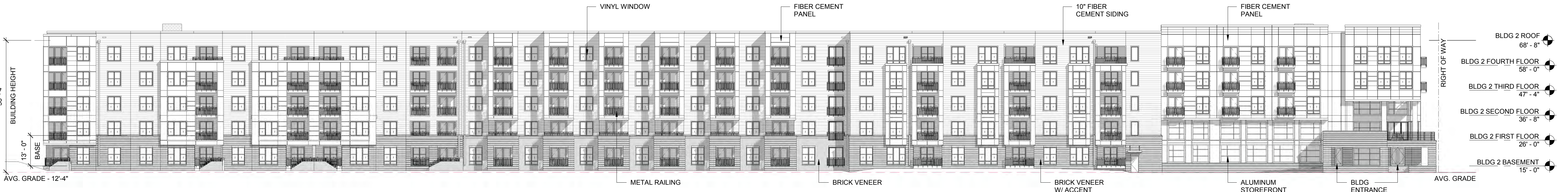
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BLDG 1 OPEN AREA CALCULATIONS:
TOTAL AREA OF WALL = 1,046.75 S.F.
TOTAL AREA OF OPENINGS = 555.14 S.F.
MINIMUM ALLOWABLE AREA = >50%
ACTUAL OPENING PERCENTAGE = 555.14 S.F. / 1,046.75 S.F. = 53.03%

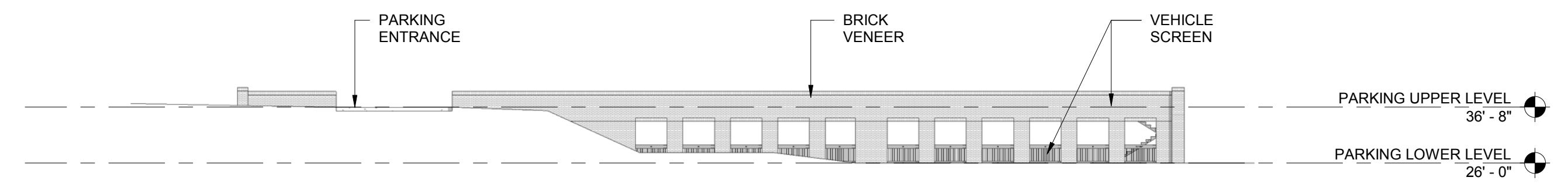
BLDG 2 OPEN AREA CALCULATIONS:
TOTAL AREA OF WALL = 2,431.71 S.F.
TOTAL AREA OF OPENINGS = 1,259.98 S.F.
MINIMUM ALLOWABLE AREA = >50%
ACTUAL OPENING PERCENTAGE = 1,259.98 S.F. / 2,431.71 S.F. = 51.81%

BUILDING 1 + 2 - OVERALL COWAN ST. ELEVATION 2
3/64" = 1'-0"

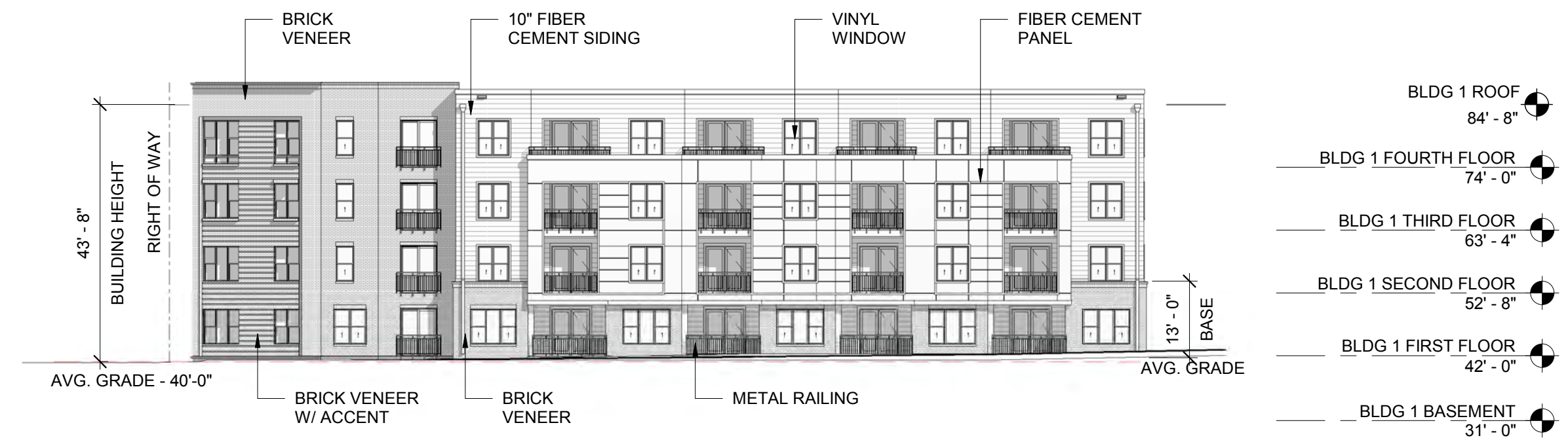


OPEN AREA CALCULATIONS:
TOTAL AREA OF WALL = 5,989.75 S.F.
TOTAL AREA OF OPENINGS = 3,000.40 S.F.
MINIMUM ALLOWABLE AREA = >50%
ACTUAL OPENING PERCENTAGE = 3,000.40 S.F. / 5,989.75 S.F. = 50.09%

BUILDING 2 - OVERALL NUTT ST. ELEVATION 1
3/64" = 1'-0"

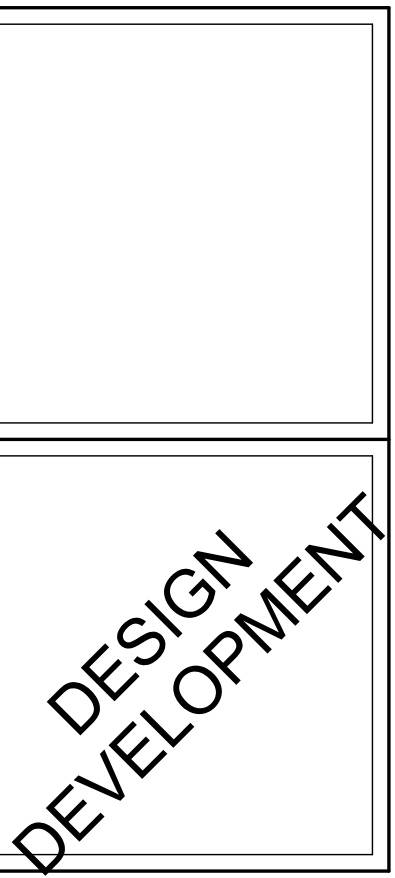


PARKING GARAGE 3RD ST. ELEVATION 2
3/64" = 1'-0"



OPEN AREA CALCULATIONS:
TOTAL AREA OF WALL = 1,421.38 S.F.
TOTAL AREA OF OPENINGS = 716.37 S.F.
MINIMUM ALLOWABLE AREA = >50%
ACTUAL OPENING PERCENTAGE = 716.37 S.F. / 1,421.38 S.F. = 50.40%

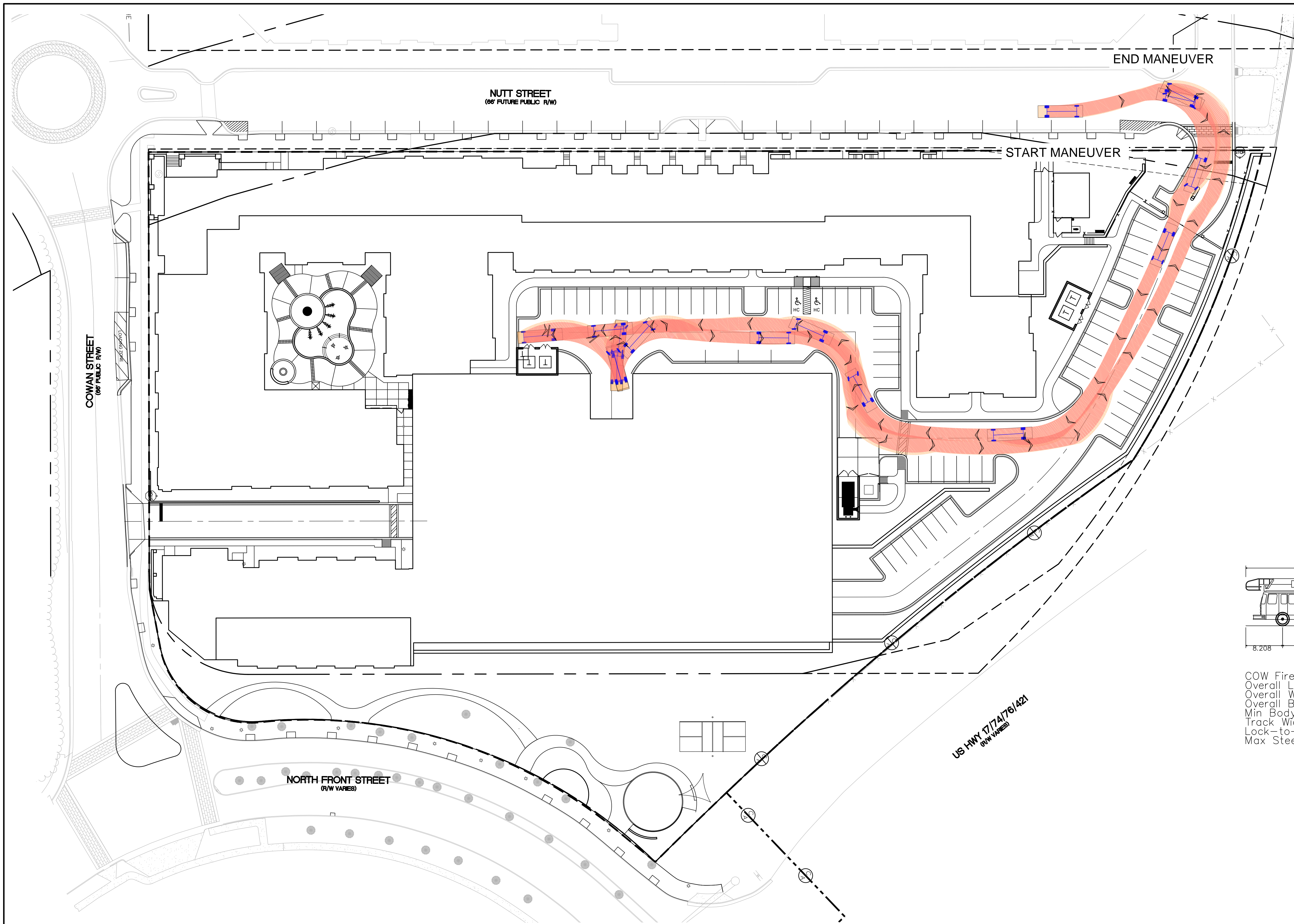
BUILDING 1 - OVERALL NORTH FRONT ST. ELEVATION 1
3/64" = 1'-0"



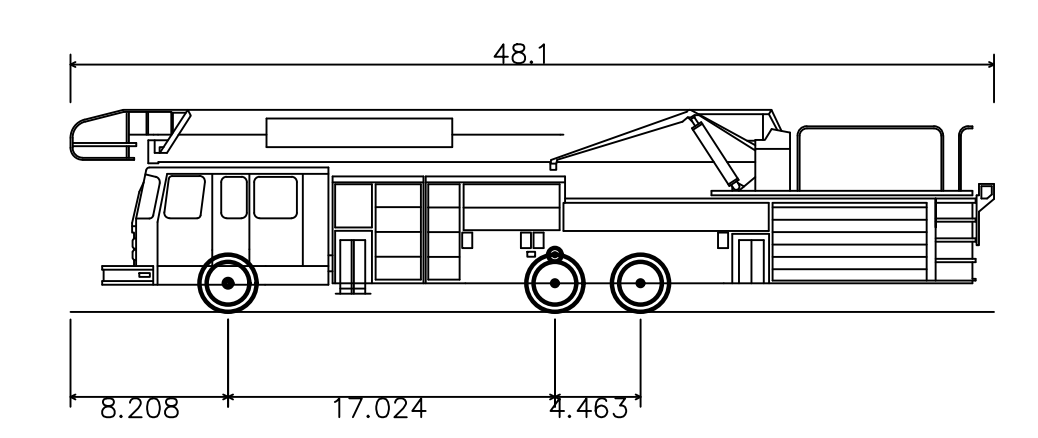
PROJECT:	218022
DATE:	08.22.18
REVISIONS:	DATE

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CHECKED BY: Checker

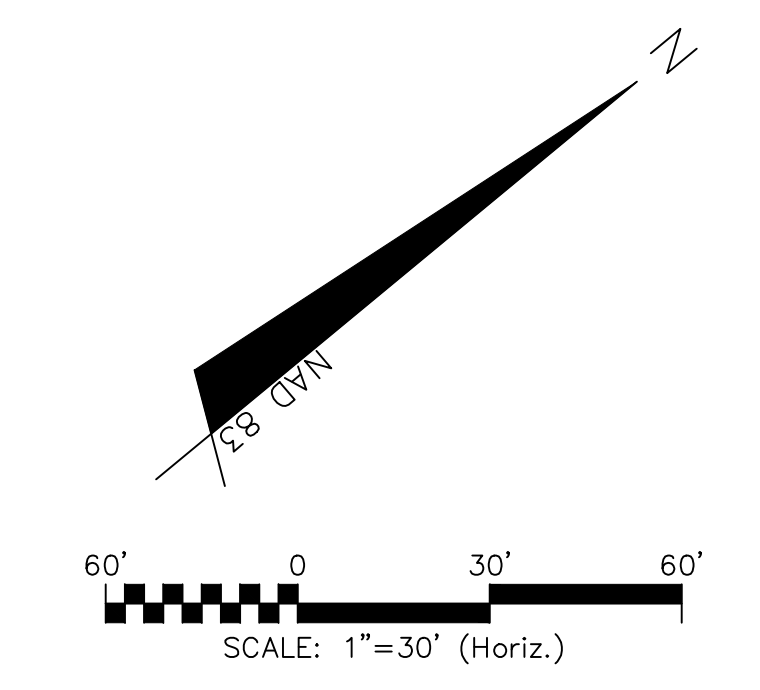
OVERALL EXTERIOR ELEVATIONS (TRC)



- LEGEND**
- VEHICLE PATH FORWARD
 - VEHICLE PATH REVERSE
 - MAX. VEHICLE OVERHANG
 - WHEEL PATH



COW FireTruck
 Overall Length 48.100ft
 Overall Width 8.500ft
 Overall Body Height 10.519ft
 Min Body Ground Clearance 0.950ft
 Track Width 8.500ft
 Lock-to-lock time 6.00s
 Max Steering Angle (Virtual) 44.30°



REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018
REVISIONS		

FINAL DRAWING -
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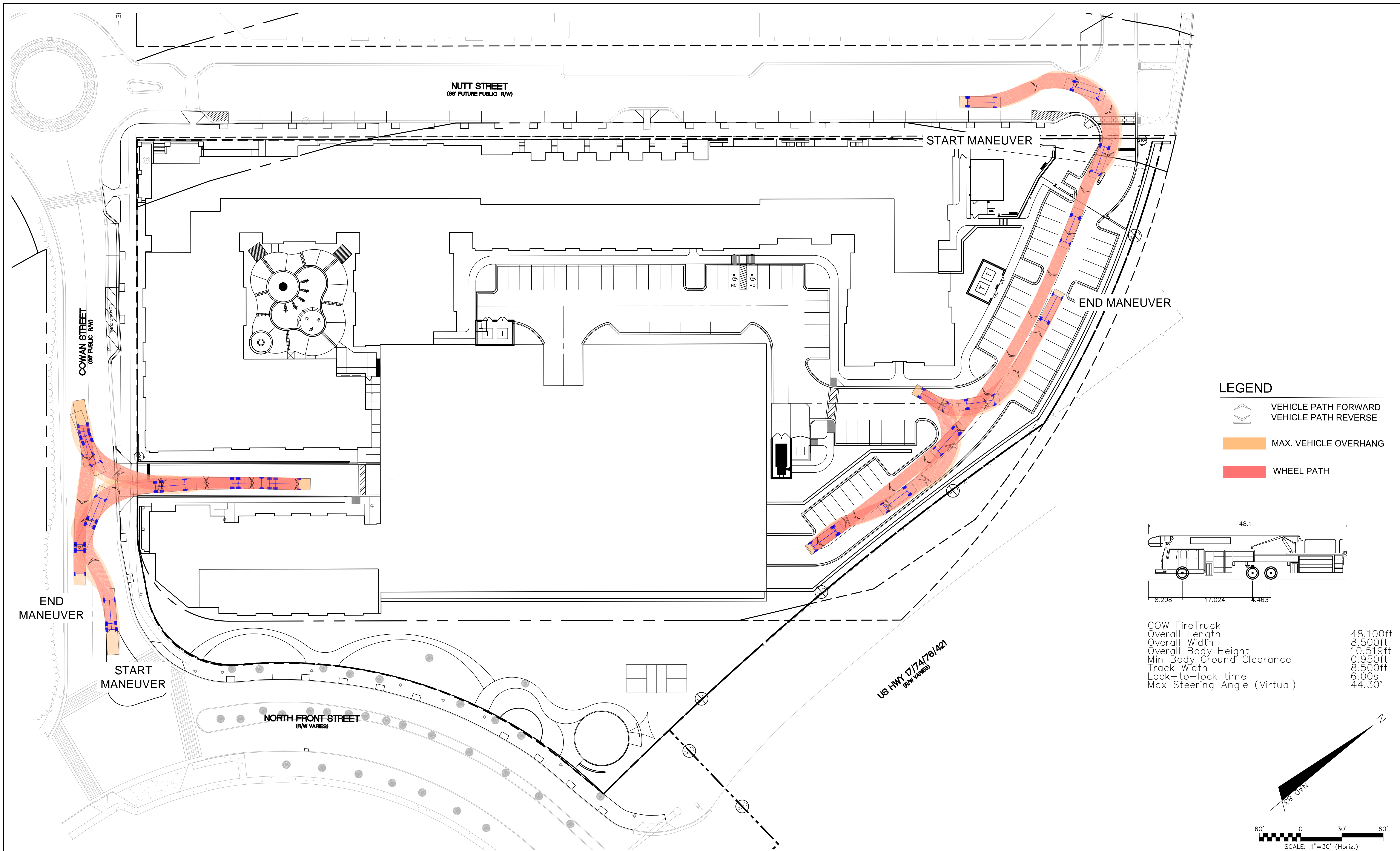
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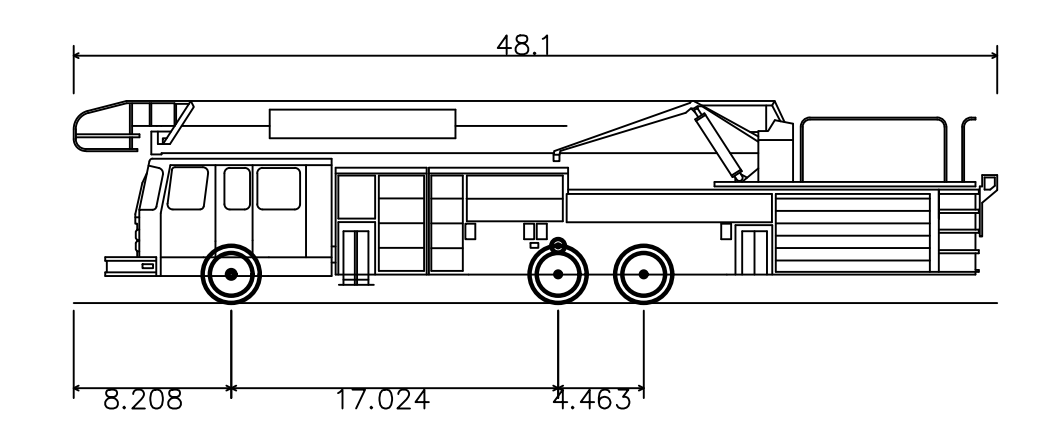
111 COWAN STREET APARTMENTS
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

AUTOTURN EXHIBIT – FIRE TRUCK

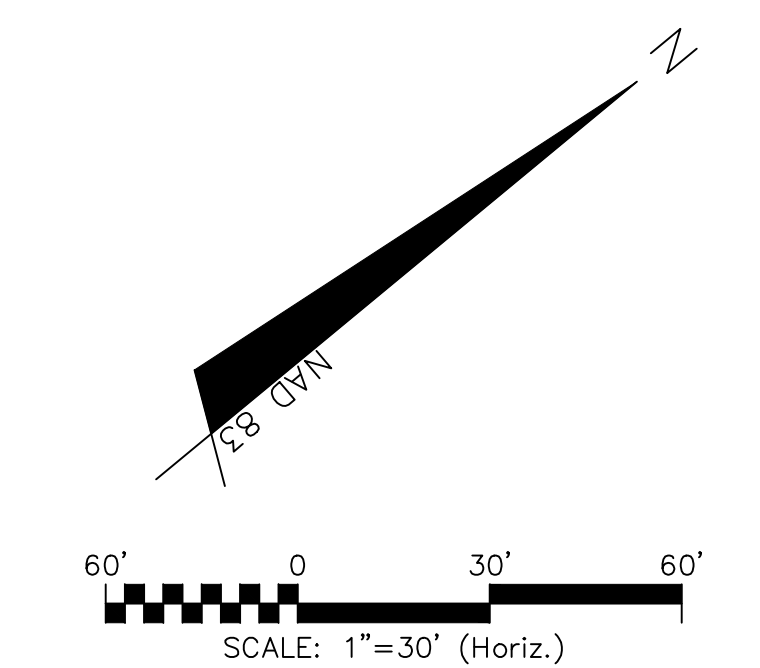
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DRAWN: ALM	VERTICAL: N/A	REVISION: -
DESIGNED: ALM/KCE		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



- LEGEND**
- VEHICLE PATH FORWARD
 - VEHICLE PATH REVERSE
 - MAX. VEHICLE OVERHANG
 - WHEEL PATH



COW FireTruck	48.100ft
Overall Length	48.100ft
Overall Width	8.500ft
Overall Body Height	10.519ft
Min Body Ground Clearance	0.950ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	44.30°



REV. NO.	DESCRIPTIONS	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITTAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITTAL	07/11/2018
REVISIONS		

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 243 North Front Street
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 Phone: (910)343-1048, Fax: (910)251-8282
 License: F-1222
 www.mckimcreed.com

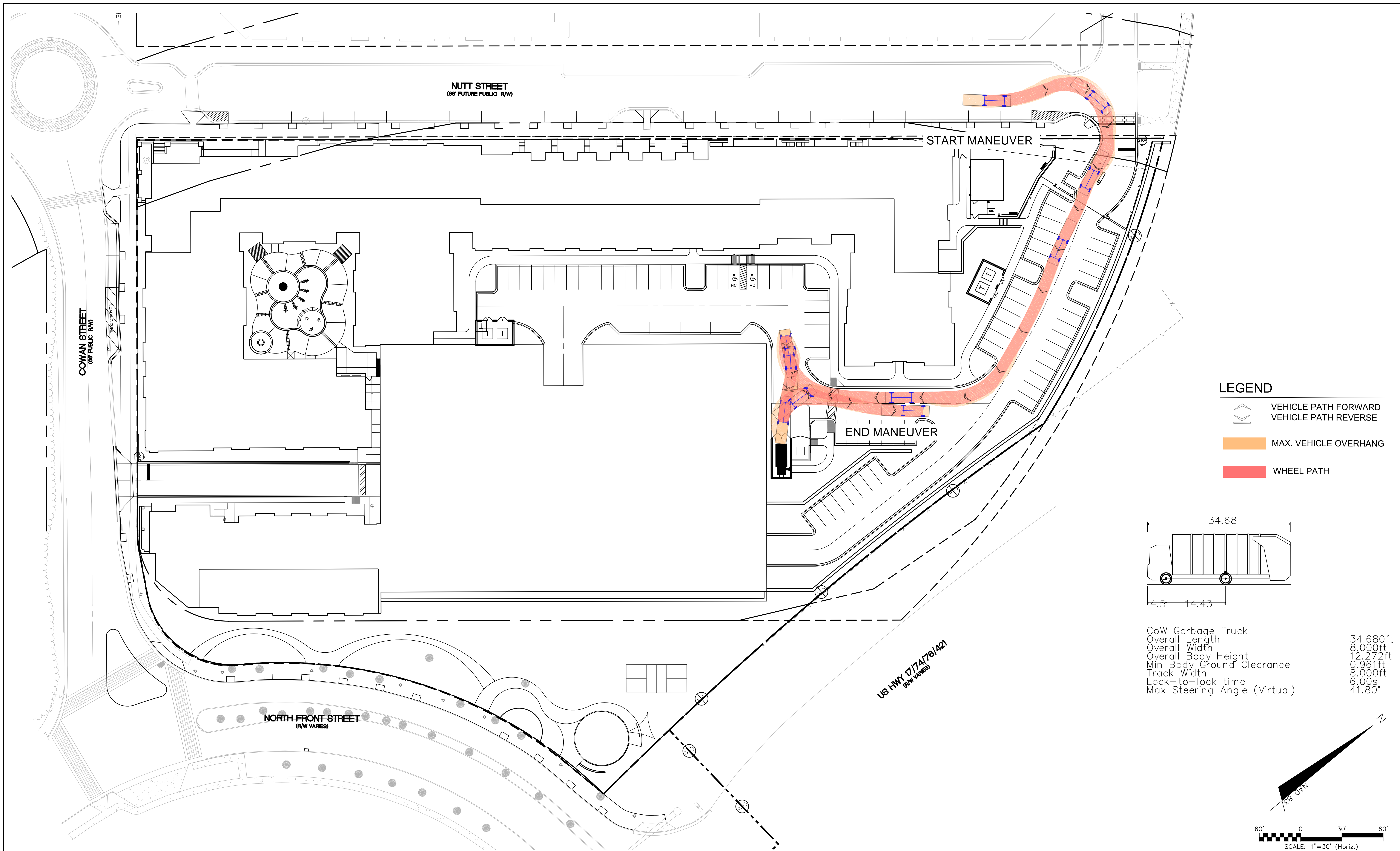
dpj
RESIDENTIAL

CLINE
DESIGN

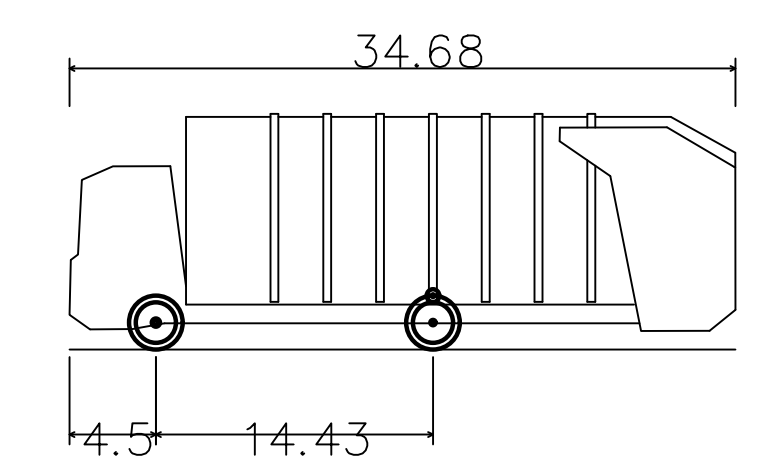
111 COWAN STREET APARTMENTS
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

AUTOTURN EXHIBIT – FIRE TRUCK

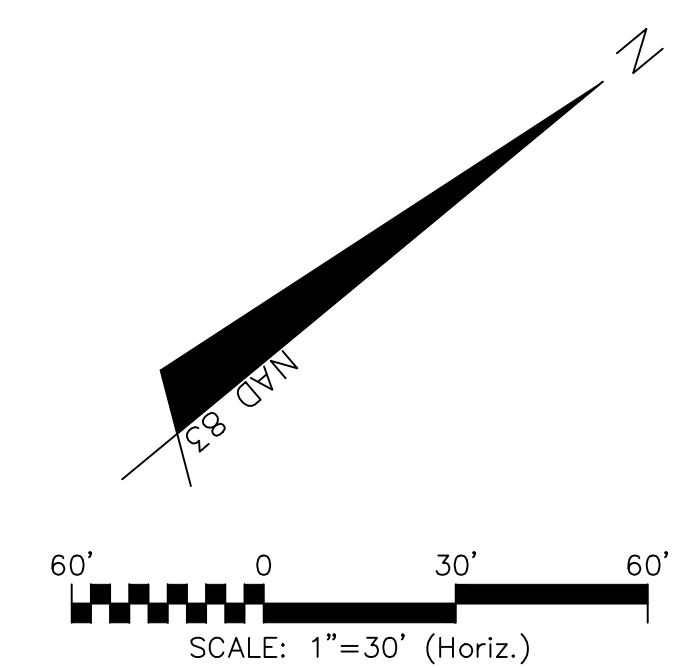
DATE: 08/10/2018	SCALE: 1"=30'	MAC FILE NUMBER: CS-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=60'	DRAWING NUMBER: EX2
DRAWN: ALM	VERTICAL: N/A	REVISION: -
DESIGNED: ALM/KCE		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



- LEGEND**
- VEHICLE PATH FORWARD
 - VEHICLE PATH REVERSE
 - MAX. VEHICLE OVERHANG
 - WHEEL PATH



CoW Garbage Truck	
Overall Length	34.680ft
Overall Width	8.000ft
Overall Body Height	12.272ft
Min Body Ground Clearance	0.961ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	41.80°



REV. NO.	DESCRIPTION	DATE
B	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE RESUBMITAL	10/03/2018
A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018
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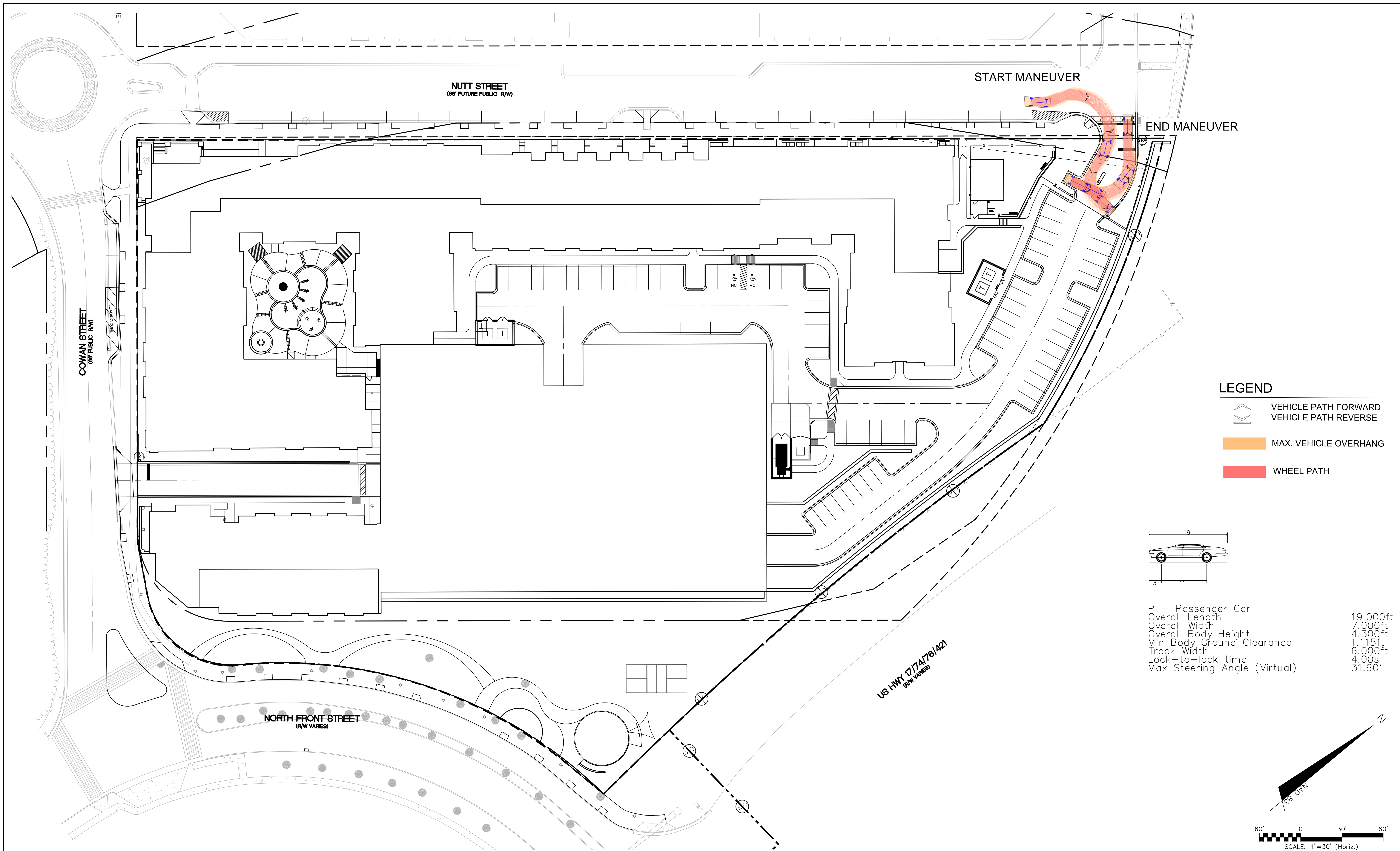
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 DESIGN

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 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

AUTOTURN EXHIBIT -- GARBAGE TRUCK

DATE: 08/10/2018	SCALE: 1"=60'	MAC FILE NUMBER: CS-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=60'	DRAWING NUMBER: EX3
DRAWN: ALM	VERTICAL: N/A	REVISION: -
DESIGNED: ALM/KCE		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



REV. NO.	DESCRIPTIONS	DATE
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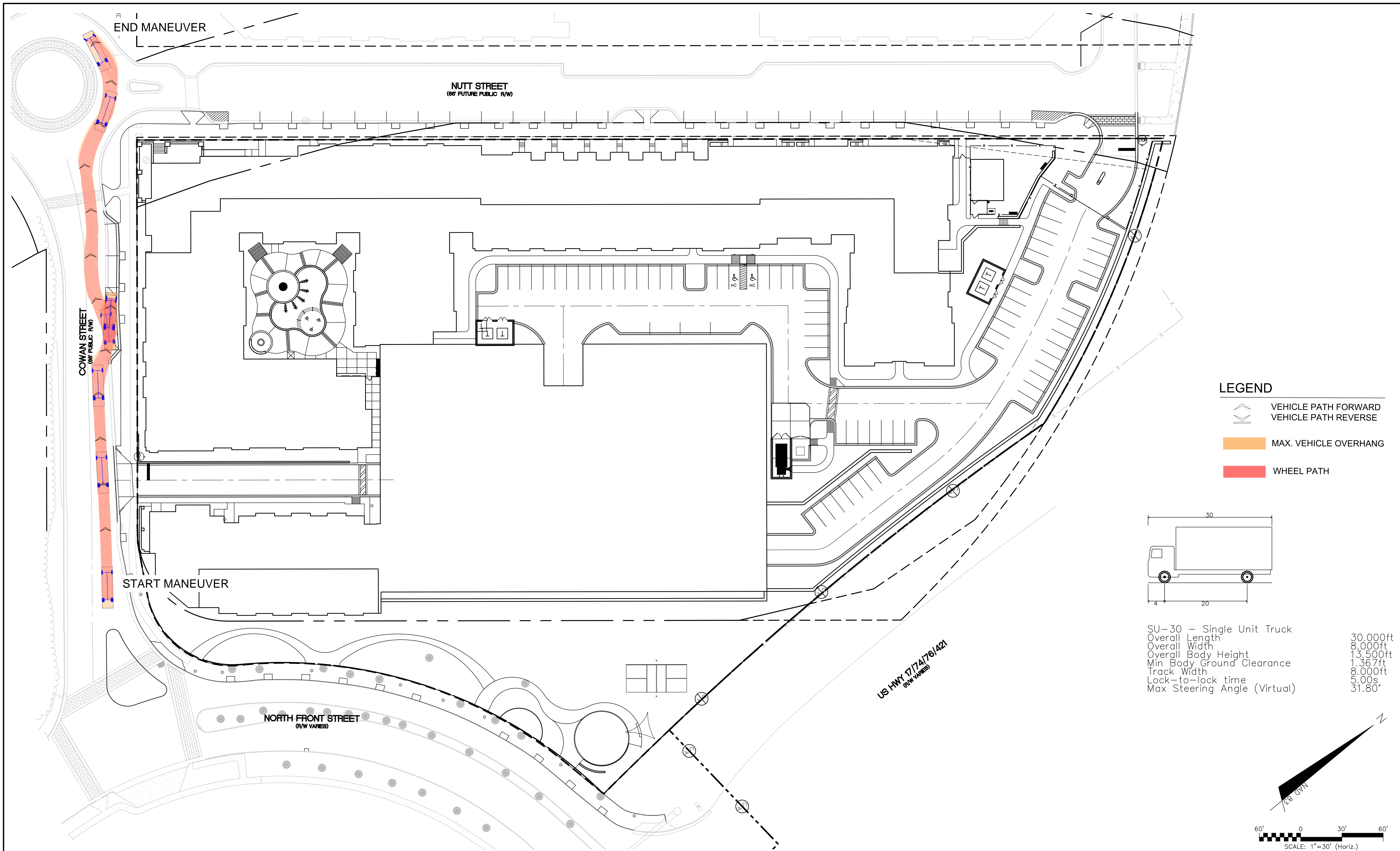
dpj
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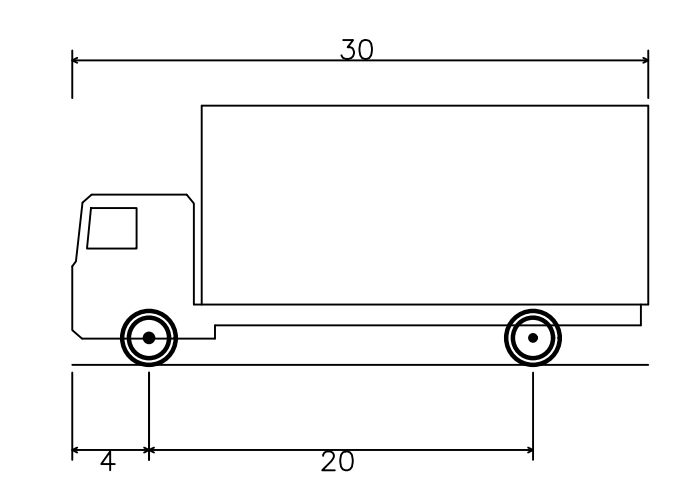
111 COWAN STREET APARTMENTS
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

AUTOTURN EXHIBIT - PASSENGER CAR

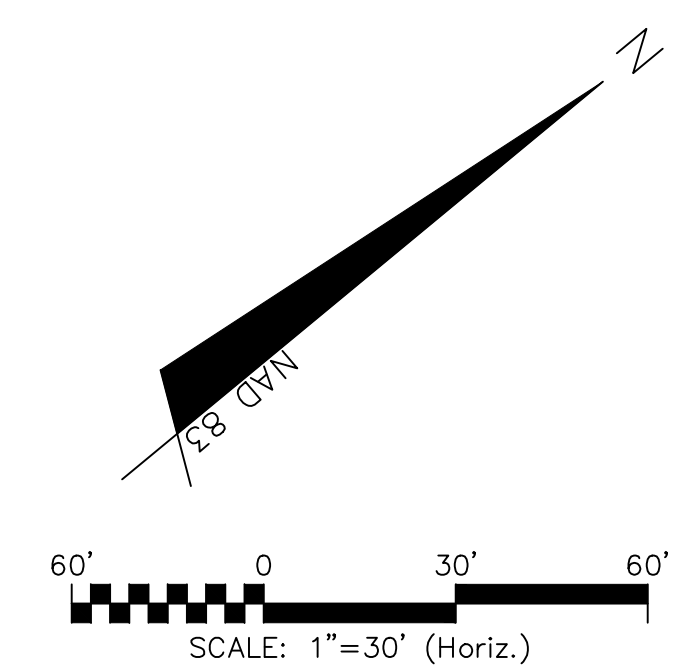
DATE: 08/10/2018	SCALE: 1"=60'	MAC FILE NUMBER: CS-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=60'	DRAWING NUMBER: EX4
DRAWN: ALM	VERTICAL: N/A	REVISION: -
DESIGNED: ALM/KCE		
CHECKED: RMC		
PROJ. MGR.: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



- LEGEND**
- VEHICLE PATH FORWARD
 - VEHICLE PATH REVERSE
 - MAX. VEHICLE OVERHANG
 - WHEEL PATH



SU-30 – Single Unit Truck
 Overall Length 30.000ft
 Overall Width 8.000ft
 Overall Body Height 13.500ft
 Min Body Ground Clearance 1.367ft
 Track Width 8.000ft
 Lock-to-lock time 5.00s
 Max Steering Angle (Virtual) 31.80°



REV. NO.	DESCRIPTIONS	DATE
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A	CITY OF WILMINGTON TECHNICAL REVIEW COMMITTEE SUBMITAL	07/11/2018
	REVISIONS	

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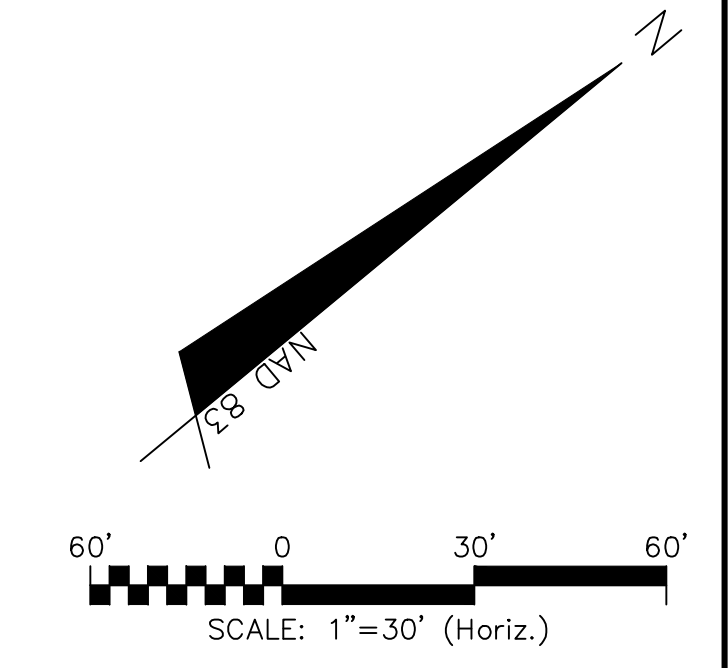
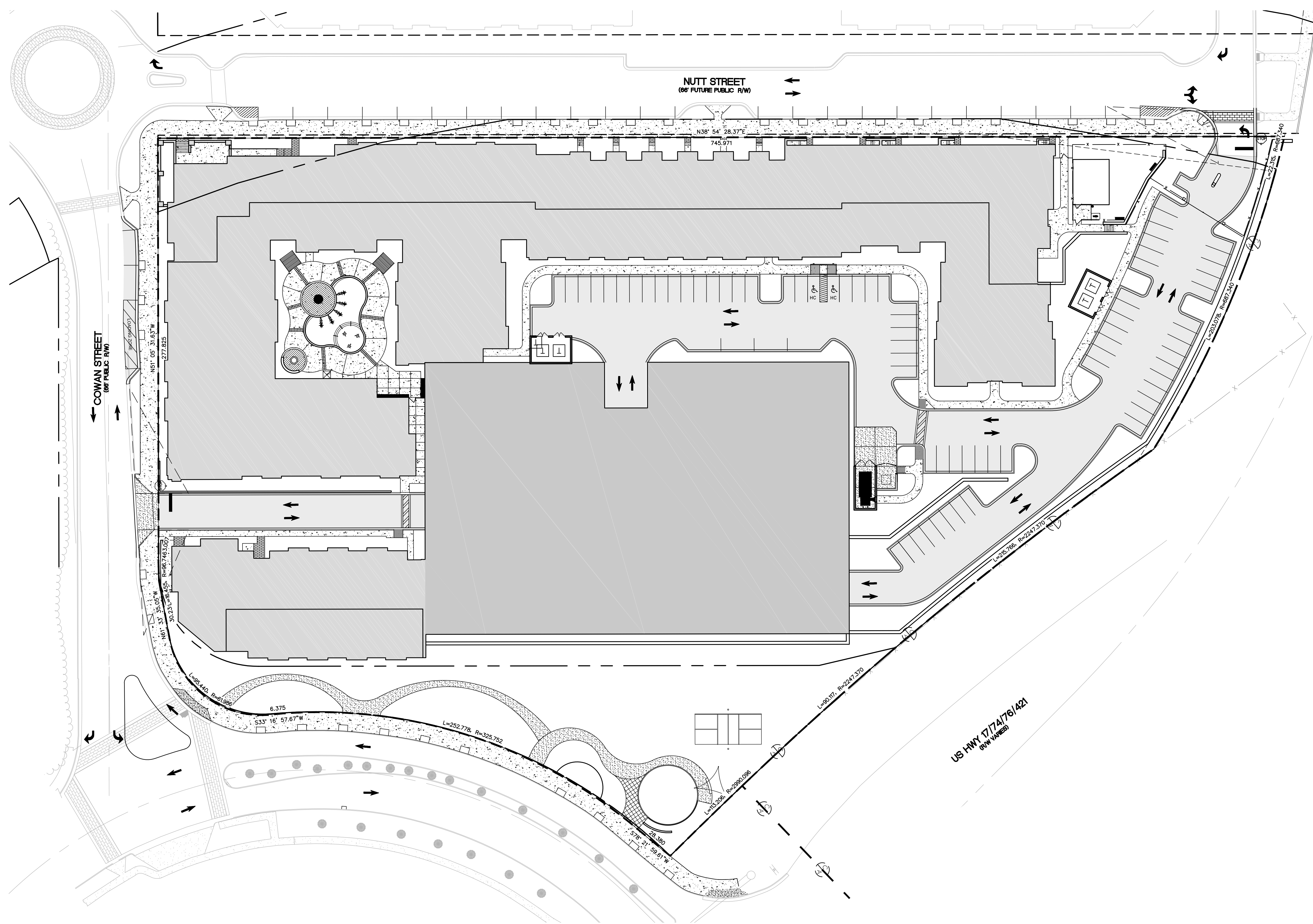
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 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
AUTOTURN EXHIBIT – DELIVERY VEHICLE

DATE: 08/14/2018	SCALE: 1"=60'	MAC FILE NUMBER: CS-101
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=60'	DRAWING NUMBER: EX5
DRAWN: ALM	VERTICAL: N/A	REVISION: -
DESIGNED: ALM/KCE		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING		



REV. NO.	DESCRIPTIONS	DATE
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THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
TRAFFIC FLOW EXHIBIT

DATE:	10/3/2018
MCE PROJ. #	7402-0001
DRAWN	ALM/KCE
DESIGNED	ALM
CHECKED	RMC
PROJ. MGR.	KCE

SCALE	MAC FILE NUMBER
HORIZONTAL: 1"=30'	CT-100
VERTICAL: N/A	DRAWING NUMBER
	EX-1

STATUS: PRELIMINARY DESIGN ISSUED FOR PERMITTING	REVISION B
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