

# CITY OF WILMINGTON NEW HANOVER COUNTY, NORTH CAROLINA INDEPENDENCE WEST APARTMENTS TRC SUBMITTAL

SEPTEMBER 17, 2014  
NOT FOR CONSTRUCTION

**OWNER / DEVELOPER:**

SYMPHONY PROPERTIES, LLC  
103 TORREY PINES DRIVE  
CARY, NORTH CAROLINA 27513

**OWNER'S DESIGNATED REPRESENTATIVE:**

BLAIR M. BOOTH, PRESIDENT  
SYMPHONY PROPERTIES, LLC  
bbooth@symphony-properties.com  
(919) 439-1040

**PROJECT ENGINEER / REPRESENTATIVE:**

TAMARA C. MURPHY, PE  
McKIM & CREED, INC.  
243 NORTH FRONT STREET  
WILMINGTON, NORTH CAROLINA 28401  
tmurphy@mckimcreed.com  
(910) 343-1048

**PROJECT ADDRESS:**

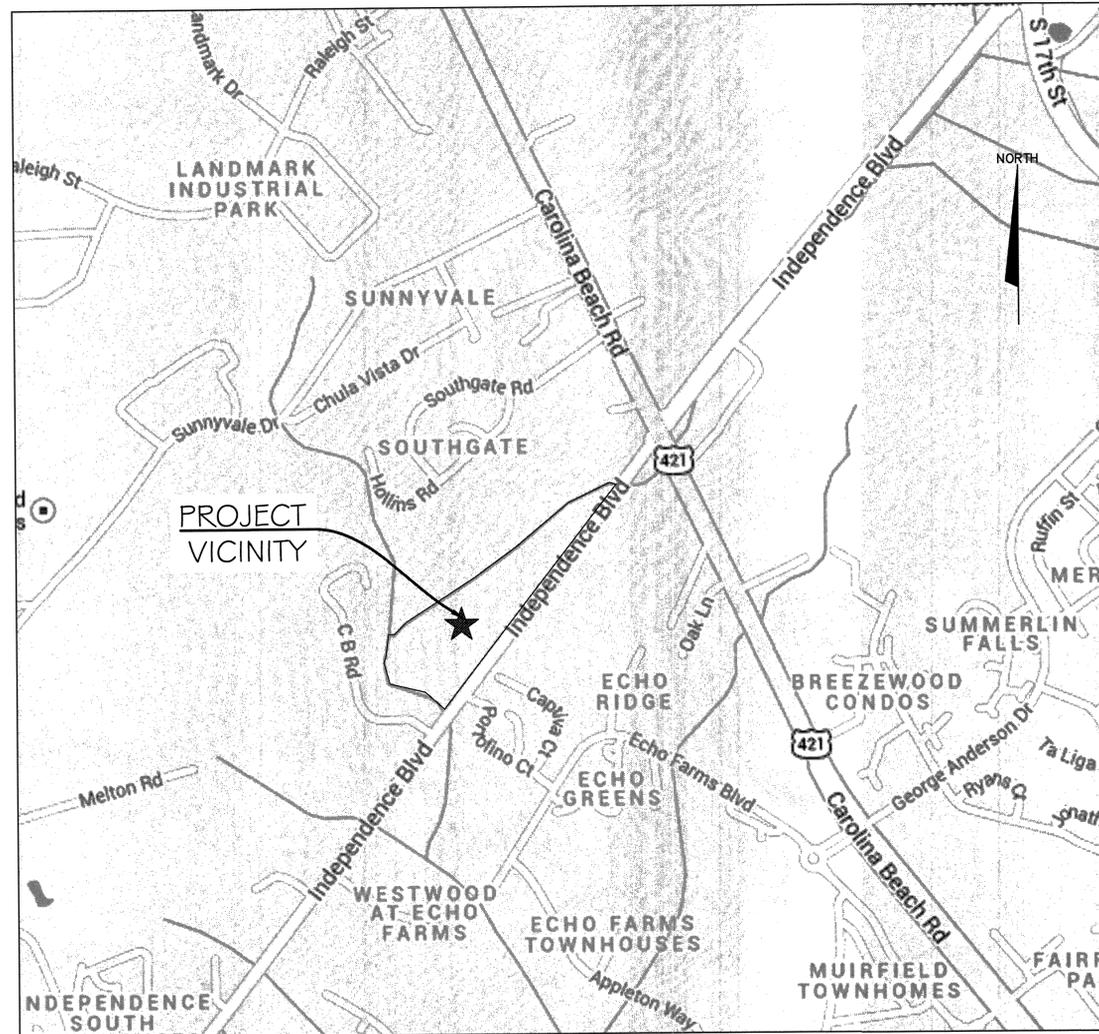
3828 & 3970 INDEPENDENCE BOULEVARD  
WILMINGTON, NC 28412

**TAX PARCEL IDENTIFICATION NUMBER:**

R06500-004-020-000; R06518-001-001-000

**PROPERTY ZONING:**

MF-M MULTIPLE-FAMILY RESIDENTIAL  
DISTRICT, MEDIUM DENSITY



VICINITY MAP  
NTS

**SHEET INDEX - INDEPENDENCE WEST**

SHEET #	FILE #	DESCRIPTION
1	G-001	COVER SHEET
2	G-002	GENERAL NOTES & LEGEND
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4	CX-102	EXISTING CONDITIONS - SITE INVENTORY MAP
5	CE-101	SEDIMENT & EROSION CONTROL PLAN - STAGE 1
6	CE-102	SEDIMENT & EROSION CONTROL PLAN - STAGE 1
7	CD-101	TREE REMOVAL PLAN
8	CD-102	TREE PRESERVATION PLAN
9	CS-101	SITE PLAN
10	CS-102	ACCESSIBLE ROUTE PLAN
11	CG-101	OVERALL GRADING PLAN
12	CG-102	FINE GRADING PLAN
13	CG-103	FINE GRADING PLAN
14	CG-104	FINE GRADING PLAN
15	CG-105	FINE GRADING PLAN
16	CG-106	STORM DRAINAGE PLAN
17	CN-501	STORMWATER MANAGEMENT DETAILS
18	CN-502	STORMWATER MANAGEMENT DETAILS
19	CN-503	STORMWATER MANAGEMENT DETAILS
20	CE-102	SEDIMENT & EROSION CONTROL PLAN - STAGE 2
21	CL-101	REQUIRED PLANTING PLAN AND CALCULATIONS
22	CU-101	UTILITY PLAN
23	CS-501	SITE DETAILS
24	CS-502	SITE DETAILS
25	CE-501	SEDIMENT & EROSION CONTROL DETAILS
26	CG-501	STORM DRAINAGE AND GRADING DETAILS
27	CL-501	LANDSCAPE DETAILS

STORMWATER MANAGEMENT PLAN  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
SIGNED \_\_\_\_\_

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

PRELIMINARY PLANS  
NOT FOR CONSTRUCTION



**McKIM & CREED**  
243 North Front Street  
Wilmington, North Carolina 28401  
Phone: (910)343-1048 , Fax: (910)251-8282  
NC LICENSE NO. F-1222  
www.mckimcreed.com



1 inch

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



NEW HANOVER COUNTY IN TRUST FOR NHC ETAL  
 3990 INDEPENDENCE BOULEVARD  
 PARCEL ID: R06500-005-002-000  
 ZONING: HM - HEAVY INDUSTRIAL  
 LAND USE: FORESTRY & RELATED

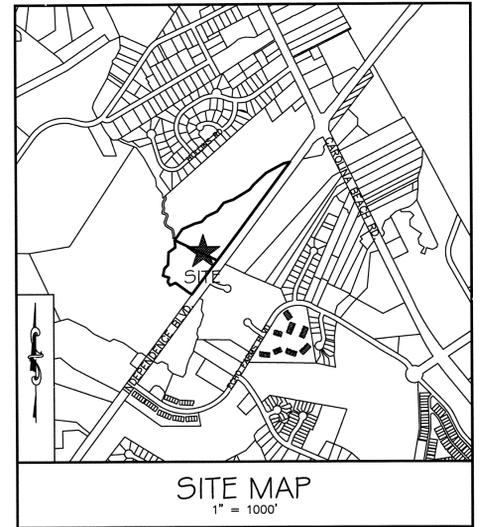
CAMERON COMPANY LLC  
 3802 CAROLINA BEACH ROAD  
 PARCEL ID: R06500-005-004-000  
 ZONING: R-15 RESIDENTIAL  
 LAND USE: UNUSED LAND

KI WILSON  
 3970 INDEPENDENCE BOULEVARD  
 PARCEL ID: R06518-001-001-000  
 ZONING: MF-MULTIFAMILY MED DENSITY  
 LAND USE: UNUSED LAND

KI WILSON  
 3828 INDEPENDENCE BOULEVARD  
 PARCEL ID: R06500-004-020-000  
 ZONING: MF-MULTIFAMILY MED DENSITY  
 LAND USE: UNUSED LAND

LEGEND

- |      |                            |  |                                |
|------|----------------------------|--|--------------------------------|
| IRS  | = IRON ROD SET             |  | = FIBER OPTIC MARKER           |
|      | = CONCRETE MONUMENT FOUND  |  | = FIRE HYDRANT                 |
| IPF  | = IRON PIPE FOUND          |  | = WATER VALVE                  |
| IRF  | = IRON ROD FOUND           |  | = SANITARY SEWER MANHOLE       |
| R/W  | = RIGHT OF WAY             |  | = CLEANOUT                     |
| DB   | = DEED BOOK                |  | = SIGN                         |
| PG   | = PAGE                     |  | = STORM DRAIN MANHOLE          |
| N/F  | = NOW/FORMERLY             |  | = CURB INLET                   |
| RCP  | = REINFORCED CONCRETE PIPE |  | = UNDERGROUND FIBER OPTIC LINE |
| INV. | = INVERT                   |  | = CHAIN LINK FENCE             |
| EL.  | = ELEVATION                |  | = WOODSLINE                    |
|      | = GROUND SHOT ELEVATION    |  | = UNDERGROUND SANITARY LINE    |
|      | = ASPHALT PAVEMENT         |  |                                |



SURVEYOR'S NOTES:

- ALL DISTANCES ARE HORIZONTAL GROUND IN U.S. SURVEY FEET UNLESS OTHERWISE SHOWN.
- BEARINGS BASED ON NC GRID NAD 83/2011.
- REFERENCES: SEE MAP.
- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP, TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- UNDERGROUND UTILITIES ARE SHOWN ONLY WHERE ABOVEGROUND SERVICES WERE VISIBLE.
- SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
- THE EXISTENCE OR NONEXISTENCE OF WETLANDS ON SUBJECT PROPERTY HAS NOT BEEN DETERMINED BY THIS SURVEY.
- SUBJECT TO ALL EASEMENTS, RIGHT OF WAYS, AND OR ENCUMBRANCES THAT MAY AFFECT THIS PROPERTY.
- LANDS SHOWN HEREON ARE LOCATED IN FEDERAL FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND FLOOD ZONE X (SHADED) (0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE), PER COMMUNITY PANEL NO. 370171 3125-J, DATED APRIL 3, 2009 BASED ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 372031250J AND ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM 1988.
- UNABLE TO DETERMINE PIPE SIZES OF SANITARY LINE DUE TO DEPTH OF MANHOLE. FURTHER INVESTIGATION NEEDED PRIOR TO CONSTRUCTION.

LEGEND

- |  |                          |
|--|--------------------------|
|  | = DOGWOOD                |
|  | = GUM                    |
|  | = OAK                    |
|  | = MAGNOLIA               |
|  | = PINE                   |
|  | = SPRUCE                 |
|  | = MISCELLANEOUS          |
|  | = MAGNOLIA (SIGNIFICANT) |
|  | = PINE (SIGNIFICANT)     |

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

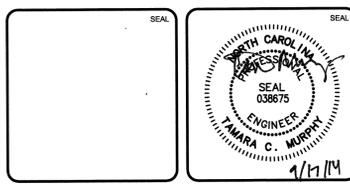
1 inch

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

STORMWATER MANAGEMENT PLAN  
**APPROVED**  
 CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
 SIGNED \_\_\_\_\_

REV. NO.	DESCRIPTIONS	DATE

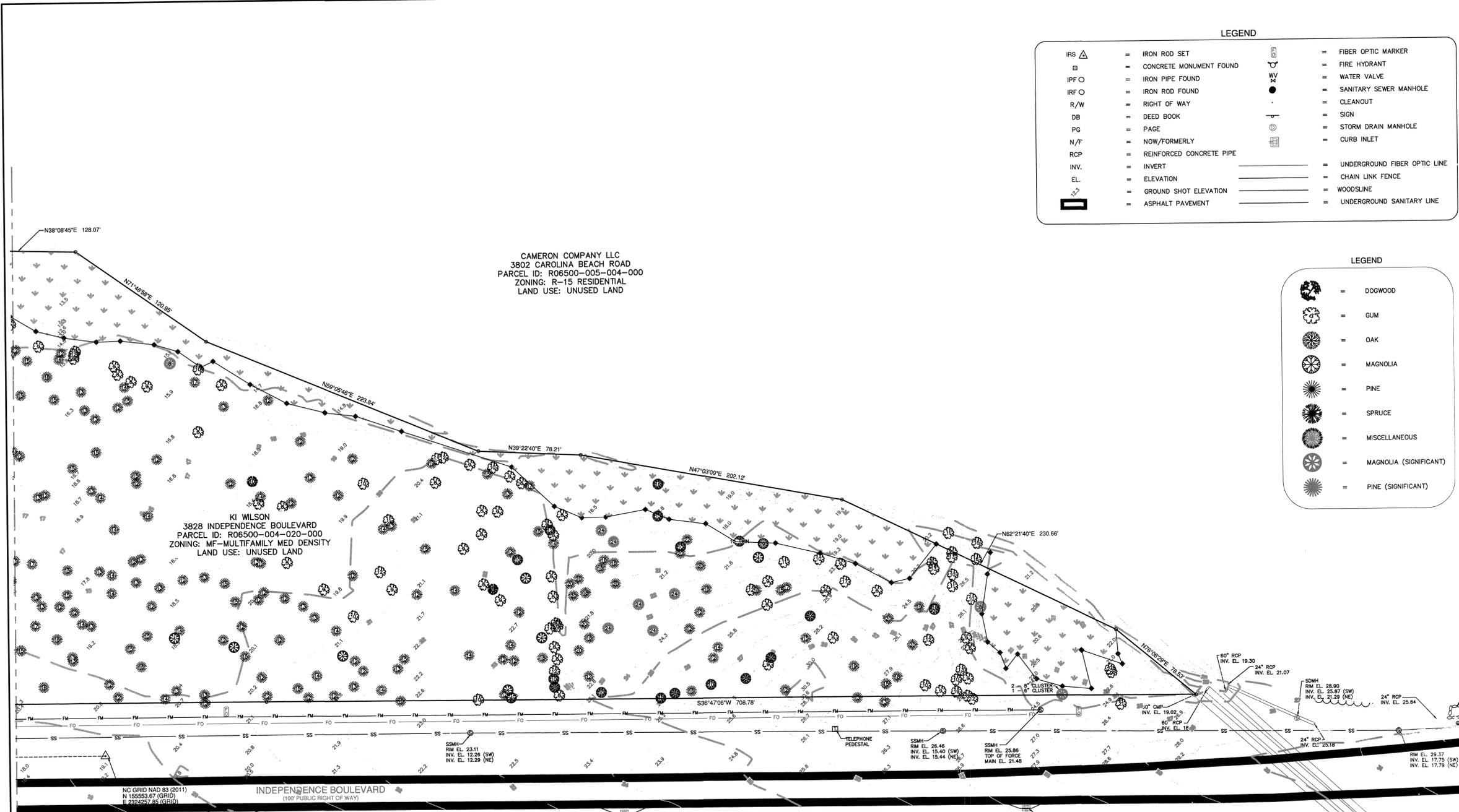


**MCKIM & CREED**  
 243 North Front Street  
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 NC LICENSE F-122  
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**SYMPHONY properties**  
 Orchestrating REAL Solutions

INDEPENDENCE WEST APARTMENTS  
 3828 & 3970 INDEPENDENCE BOULEVARD  
 WILMINGTON, NORTH CAROLINA  
**EXISTING CONDITIONS PLAN**

DATE: 17 SEP 2014	SCALE: HORIZONTAL: 1"=40'	MFC FILE NUMBER: CX101
MCE PROJ. #: 06586-0002	VERTICAL:	DRAWING NUMBER: 3
DRAWN: TCM		
DESIGNED: TCM		
CHECKED: RMC		
PROJ. MGR.: RMC		
STATUS: PRELIMINARY PLANS NOT FOR CONSTRUCTION		



CAMERON COMPANY LLC  
 3802 CAROLINA BEACH ROAD  
 PARCEL ID: R06500-005-004-000  
 ZONING: R-15 RESIDENTIAL  
 LAND USE: UNUSED LAND

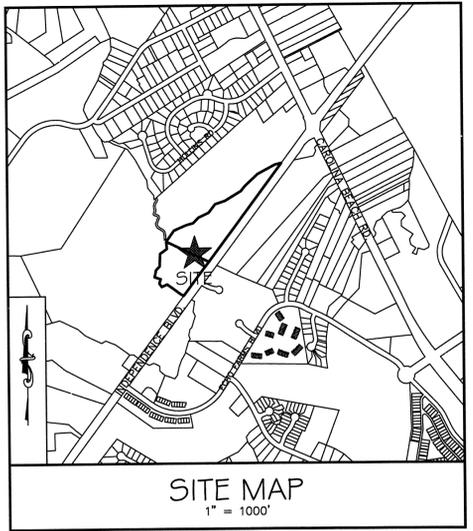
KI WILSON  
 3828 INDEPENDENCE BOULEVARD  
 PARCEL ID: R06500-004-020-000  
 ZONING: MF-MULTIFAMILY MED DENSITY  
 LAND USE: UNUSED LAND

LEGEND

IRS $\Delta$	= IRON ROD SET		= FIBER OPTIC MARKER
$\square$	= CONCRETE MONUMENT FOUND		= FIRE HYDRANT
IPF $\circ$	= IRON PIPE FOUND		= WATER VALVE
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LEGEND

	= DOGWOOD
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	= OAK
	= MAGNOLIA
	= PINE
	= SPRUCE
	= MISCELLANEOUS
	= MAGNOLIA (SIGNIFICANT)
	= PINE (SIGNIFICANT)

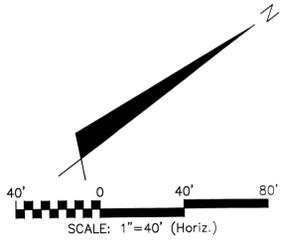


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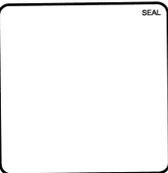
1 inch

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	



**STORMWATER MANAGEMENT PLAN APPROVED**  
 CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
 SIGNED \_\_\_\_\_

REV. NO.	DESCRIPTIONS	DATE



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 Orchestrating REAL Solutions

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 3828 & 3970 INDEPENDENCE BOULEVARD  
 WILMINGTON, NORTH CAROLINA

**EXISTING CONDITIONS PLAN**

DATE: 17 SEP 2014	SCALE: HORIZONTAL: 1"=40'	MFC FILE NUMBER: CX102
MCE PROJ. # 06586-0002	VERTICAL: 1"=40'	DRAWING NUMBER: 4
DRAWN: TCM		
DESIGNED: TCM		
CHECKED: RMC		
PROJ. MGR: RMC		
STATUS: PRELIMINARY PLANS		REVISION
NOT FOR CONSTRUCTION		

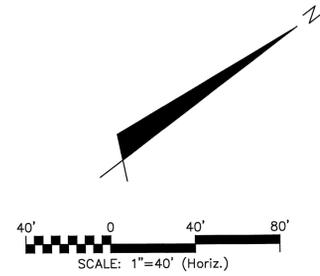
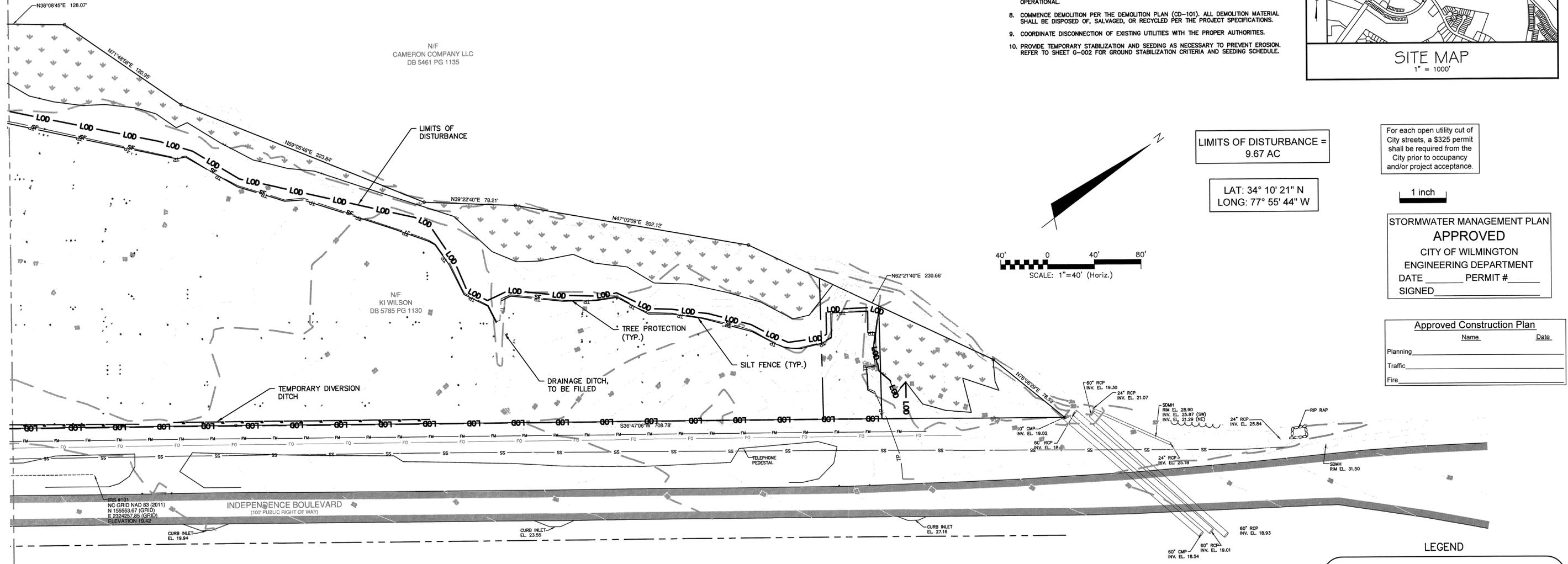
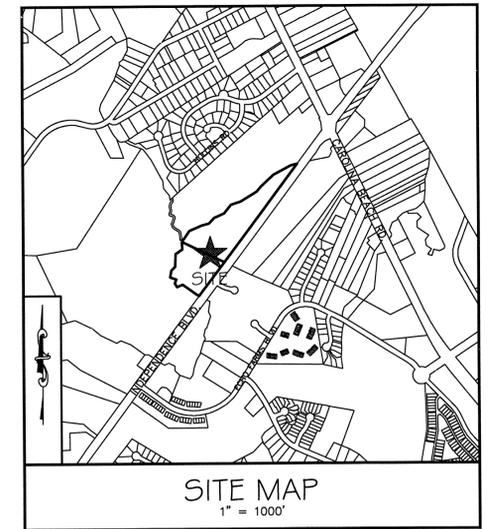
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**CONSTRUCTION SEQUENCE:**

**PHASE 1 CONSTRUCTION SEQUENCE**

1. ESTABLISH LIMITS OF DISTURBANCE AS SHOWN.
2. A PRECONSTRUCTION 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 ENTRANCE AS SHOWN. CONTRACTOR SHALL MAINTAIN A SUFFICIENT GRAVEL ENTRANCE UNTIL FINAL SUBGRADE IS ESTABLISHED. IF DIRT/MUD GETS ON THE STREET, THEN A WASH RACK WILL NEED TO BE INSTALLED.
4. INSTALL TREE PROTECTION FENCING AND SILT FENCING AS NOTED ON PLANS BEFORE COMMENCING ANY LAND DISTURBANCE ACTIVITY. ADDITIONAL TREE PROTECTION FENCING AND SILT FENCE MAY BE REQUIRED.
5. INSTALL INLET PROTECTION AS SHOWN ON PLANS. CONTRACTOR TO USE DANDY SACK® OR APPROVED EQUAL OR HARDWARE CLOTH & GRAVEL INLET PROTECTION DEPENDING ON INLET'S LOCATION. INLET PROTECTION TO REMAIN IN PLACE UNTIL INLET IS REMOVED ACCORDING TO DEMOLITION PLAN. DEMOLITION OF EXISTING STORMDRAIN SYSTEM(S) SHALL NOT COMMENCE UNTIL PROPOSED STORMDRAIN SYSTEM SHOWN ON THIS PLAN IS CONSTRUCTED.
6. COMMENCE GRUBBING AND ROUGH GRADING WITHIN THE LIMITS OF CONSTRUCTION.
7. COMMENCE CONSTRUCTION OF PROPOSED STORMWATER PONDS AND INFILTRATION TRENCH SYSTEMS AS SHOWN ON THIS PLAN (SEE ALSO CN-501, CN-502, CN-503). DEMOLITION OF REMAINING EXISTING INFILTRATION TRENCH SYSTEM(S) SHALL NOT COMMENCE UNTIL PROPOSED INFILTRATION TRENCH SYSTEM SHOWN ON THIS PLAN IS CONSTRUCTED AND OPERATIONAL.
8. COMMENCE DEMOLITION PER THE DEMOLITION PLAN (CD-101). ALL DEMOLITION MATERIAL SHALL BE DISPOSED OF, SALVAGED, OR RECYCLED PER THE PROJECT SPECIFICATIONS.
9. COORDINATE DISCONNECTION OF EXISTING UTILITIES WITH THE PROPER AUTHORITIES.
10. PROVIDE TEMPORARY STABILIZATION AND SEEDING AS NECESSARY TO PREVENT EROSION. REFER TO SHEET G-002 FOR GROUND STABILIZATION CRITERIA AND SEEDING SCHEDULE.



LIMITS OF DISTURBANCE = 9.67 AC

LAT: 34° 10' 21" N  
LONG: 77° 55' 44" W

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1 inch

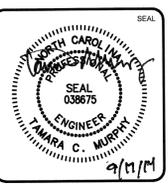
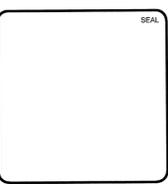
**STORMWATER MANAGEMENT PLAN**  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
SIGNED \_\_\_\_\_

**Approved Construction Plan**  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

**LEGEND**

- |  |                                |
|--|--------------------------------|
| △ RBC = REBAR & CAP                      | ● = SANITARY SEWER MANHOLE     |
| ● IPF = IRON PIPE FOUND                  | □ = POWER POLE                 |
| INV. = INVERT                            | Y/GW = GUY WIRE                |
| EL. = ELEVATION                          | □ = CABLE PEDESTAL             |
| ⊕ = WELL                                 | □ = TELEPHONE PEDESTAL         |
| ⊕ = FIRE HYDRANT                         | ⊕ = TELEPHONE MANHOLE          |
| ⊕ = WATER VALVE                          | ⊕ = GAS VALVE                  |
| ⊕ = GRATED INLET                         | ⊕ = ASPHALT PAVEMENT           |
| ⊕ = YARD INLET                           | ⊕ = TEMPORARY TREE PROTECTION  |
| ⊕ = STORM DRAIN MANHOLE                  | ⊕ = TEMPORARY INLET PROTECTION |
| — LOD — LOD = LIMITS OF DISTURBANCE LINE |                                |
| — SF — SF = SILT FENCE LINE              |                                |
| — SD — SD = UNDERGROUND STORM LINE       |                                |
| — SS — SS = UNDERGROUND SANITARY LINE    |                                |
| — W — W = UNDERGROUND WATER LINE         |                                |

REVNO.	DESCRIPTIONS	DATE



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WILMINGTON, NORTH CAROLINA

**SEDIMENT & EROSION CONTROL**  
**PHASE 1**

DATE: 17 SEP 2014	SCALE: HORIZONTAL: 1"=40'
MCE PROJ.#: 06588-0002	VERTICAL: 1"=40'
DRAWN: TCM	DESIGNED: TCM
CHECKED: RMC	PROJ. MGR.: RMC

MAC FILE NUMBER: **CE102**  
DRAWING NUMBER: **6**

STATUS: PRELIMINARY PLANS  
NOT FOR CONSTRUCTION

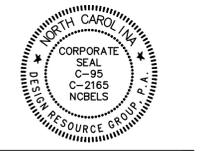
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design resource group

- landscape architecture
- civil engineering
- urban design
- land planning
- traffic engineering
- transportation planning

2459 wilkinson boulevard, suite 200  
 charlotte, nc 28208  
 p 704.343.0608 f 704.358.3093  
 www.drgrp.com



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 APARTMENTS**  
 WILMINGTON, NORTH CAROLINA  
 SYMPHONY PROPERTIES, LLC.  
 103 TORREY PINES DRIVE  
 CARY, NC 27513

CONSTRUCTION DOCUMENTS



20 0 20 40  
 SCALE: 1" = 40'

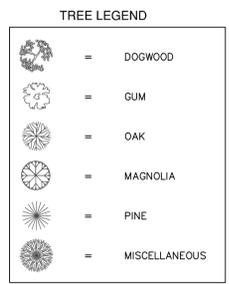
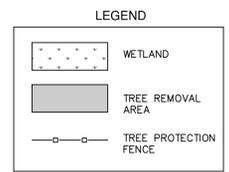
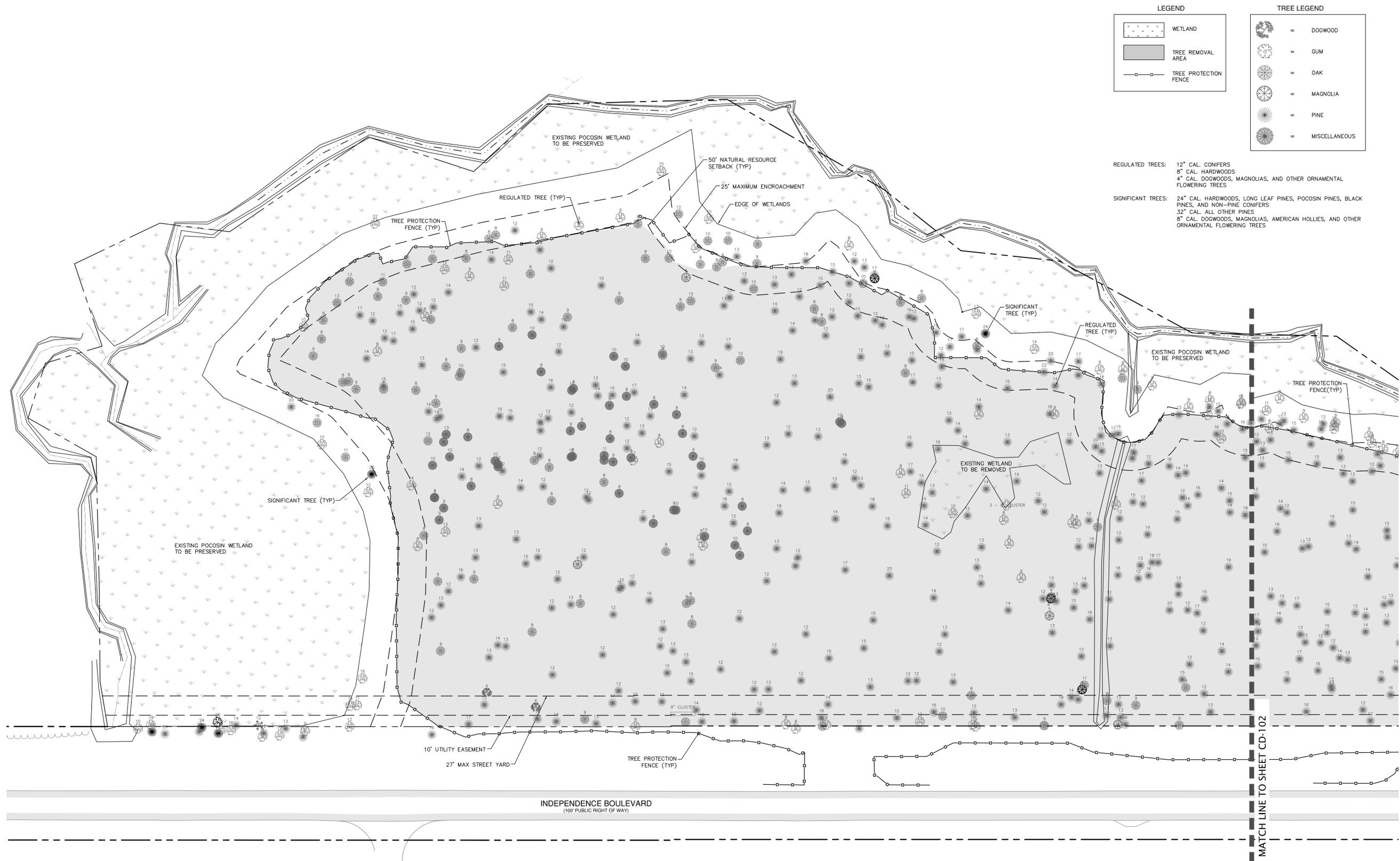
PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

**TREE PRESERVATION PLAN**

SEPTEMBER 17, 2014

REVISIONS:

CD-101



**REGULATED TREES:** 12" CAL. CONIFERS  
 8" CAL. HARDWOODS  
 4" CAL. DOGWOODS, MAGNOLIAS, AND OTHER ORNAMENTAL FLOWERING TREES

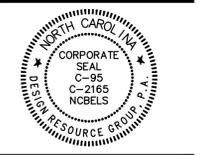
**SIGNIFICANT TREES:** 24" CAL. HARDWOODS, LONG LEAF PINES, POCOSIN PINES, BLACK PINES, AND NON-PINE CONIFERS  
 32" CAL. ALL OTHER PINES  
 8" CAL. DOGWOODS, MAGNOLIAS, AMERICAN HOLLIES, AND OTHER ORNAMENTAL FLOWERING TREES



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 103 TORREY PINES DRIVE  
 CARY, NC 27513

CONSTRUCTION DOCUMENTS



30 0 30 60  
 SCALE: 1" = 60'

PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

**TREE  
 PRESERVATION  
 PLAN**

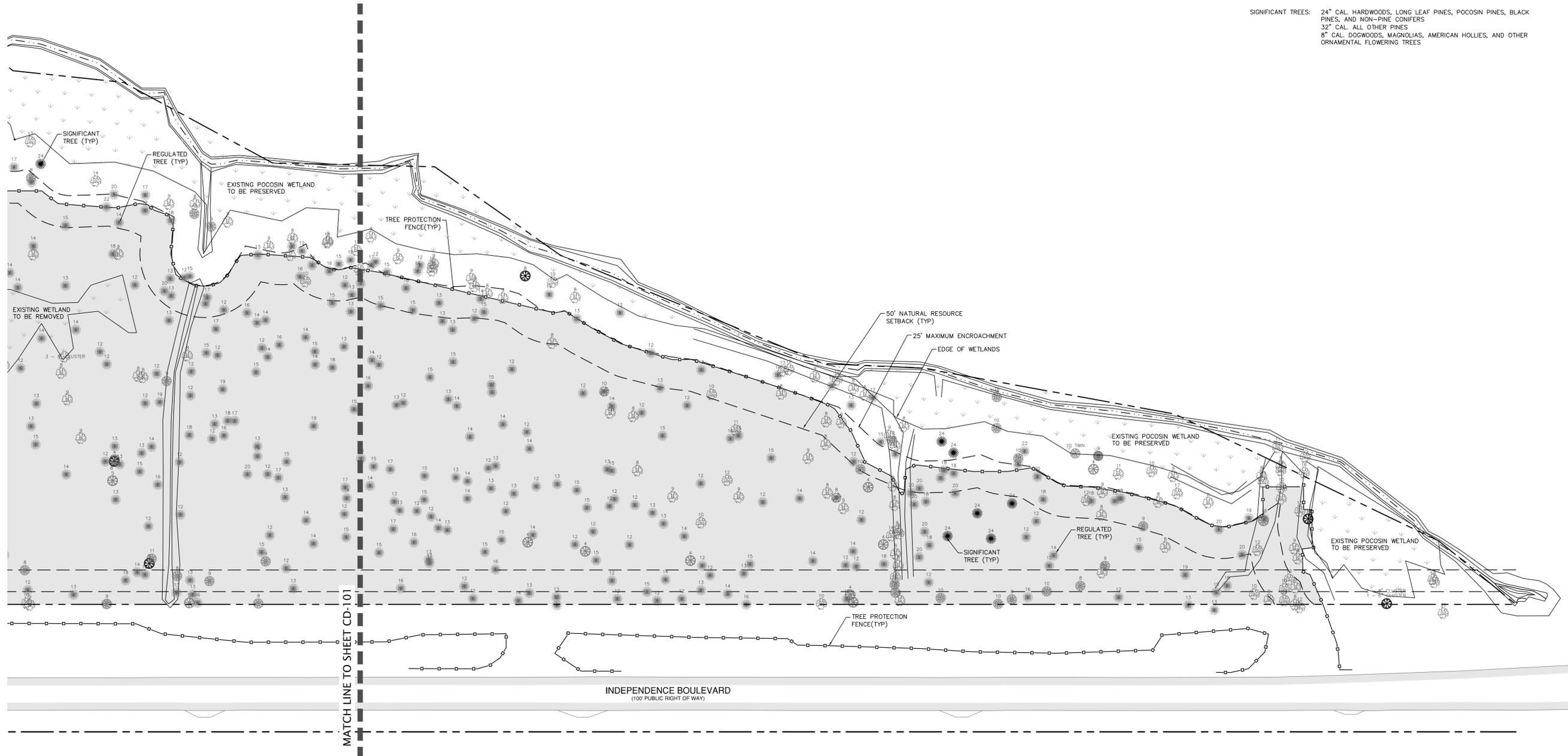
SEPTEMBER 17, 2014

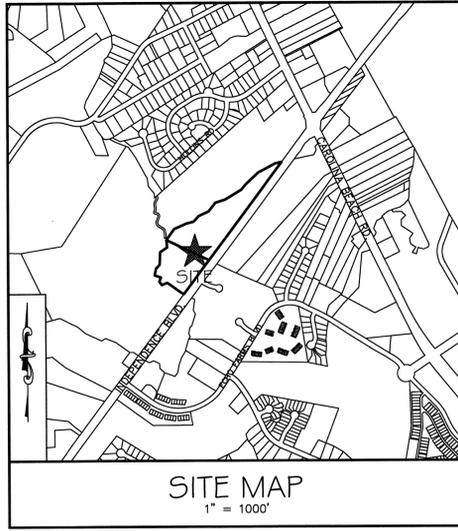
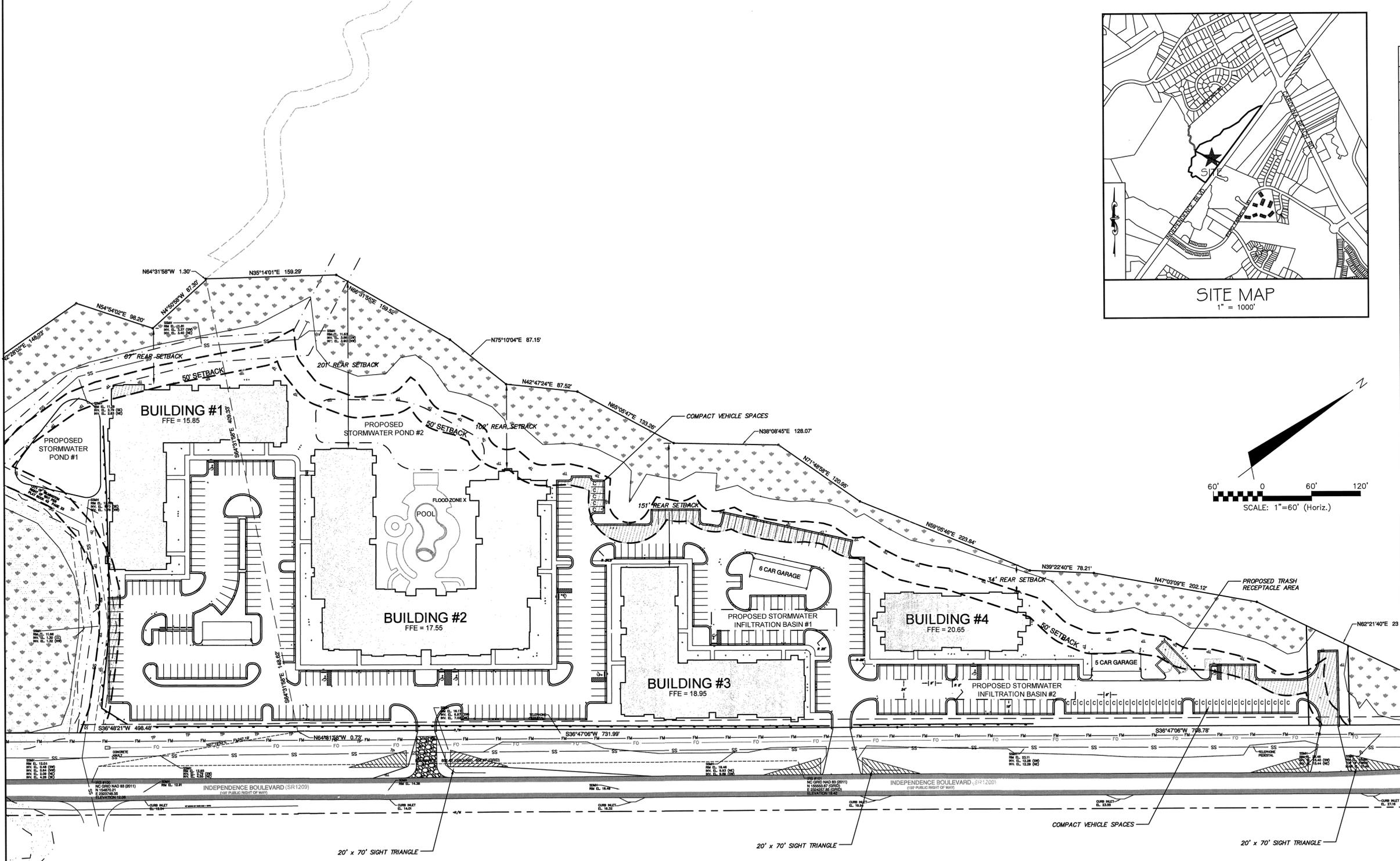
REVISIONS:

LEGEND		TREE LEGEND	
	WETLAND		= DOGWOOD
	TREE REMOVAL AREA		= GUM
	TREE PROTECTION FENCE		= OAK
			= MAGNOLIA
			= PINE
			= MISCELLANEOUS

REGULATED TREES: 12" CAL. CONIFERS  
 8" CAL. HARDWOODS  
 4" CAL. DOGWOODS, MAGNOLIAS, AND OTHER ORNAMENTAL FLOWERING TREES

SIGNIFICANT TREES: 24" CAL. HARDWOODS, LONG LEAF PINES, POCOSIN PINES, BLACK PINES, AND NON-PINE CONIFERS  
 32" CAL. ALL OTHER PINES  
 8" CAL. DOGWOODS, MAGNOLIAS, AMERICAN HOLLIES, AND OTHER ORNAMENTAL FLOWERING TREES





SITE DATA TABLE		INDEPENDENCE BLVD	
PARCEL ADDRESS	3828 & 3970 INDEPENDENCE BOULEVARD		
BUILDING SETBACKS	REQUIRED	PROPOSED	
FRONT	0'	VARIES	
REAR	25'	25'	
SIDE (INTERIOR)	20'	20'	
SIDE (CORNER)	0'	0'	
TAX PARCEL IDENTIFICATION NUMBER(S)	R06500-004-020-000 R06518-001-001-000		
CURRENT ZONING	MF-M: MULTIFAMILY, MEDIUM DENSITY		
TOTAL ACREAGE WITHIN THE PROJECT BOUNDARIES	15.1 ACRES (657,756 SF)		
BUILDING SIZE WITH SQUARE FOOTAGE (PROPOSED)	0 GROSS SF	107,160 GROSS SF	
NC BUILDING CODE CONSTRUCTION TYPE	VA		
BUILDING LOT COVERAGE	0.00%	16.00%	
NUMBER OF UNITS	256		
NUMBER OF BUILDINGS	4		
BUILDING HEIGHT	50' MAX.		
NUMBER OF STORIES & SQUARE FEET PER FLOOR	VARIES PER BUILDING - 78,940 SF/FIRST FLOOR		
TOTAL AMOUNT OF DISTURBED AREA	13.31 ACRES (579,611 SF)		
CAMA LAND USE CLASSIFICATION	URBAN		
EXISTING IMPERVIOUS AREA	0 SF (0%)		
<b>IMPERVIOUS AREA (PROPOSED)</b>			
ROOF TOPS	108,939	SF	
ROADWAYS	170,187	SF	
PARKING	15,847	SF	
SIDEWALKS	15,847	SF	
OFF-SITE IMPERVIOUS (WITHIN PROPOSED PUBLIC R/W)	0	SF	
TOTAL S.F. (ONSITE IMPERVIOUS AREA)	294,973	SF	
PERCENTAGE (ONSITE IMPERVIOUS AREA/ONSITE AREA)	44.84	%	
<b>OPEN SPACE CALCULATIONS</b>			
TRACT AREA	657,756	SF	
REQUIRED OPEN SPACE (35% OF TRACT AREA)	230,215	SF	
ACTIVE OPEN SPACE		SF	
PASSIVE OPEN SPACE		SF	
TOTAL OPEN SPACE PROVIDED	230,215	SF (35%)	
<b>PARKING CALCULATIONS</b>			
PROPOSED USE:	MULTI-FAMILY		
NUMBER OF SPACES REQUIRED	450		
	1.8 SPACES PER UNIT		
TOTAL SPACES PROVIDED	452 (1.8 SPACES PER UNIT)		
ACCESSIBLE SPACES REQUIRED	9		
ACCESSIBLE SPACES PROVIDED	9 (4 VAN)		
BICYCLE SPACES PROVIDED (5 PER 100 SPACES)	23		

SEC. 18-529, EACH PARKING SPACE LOCATED AT THE PERIMETER OF A PARKING FACILITY SHALL BE EQUIPPED WITH A CURB, WHEEL STOP, OR SIMILAR DEVICE TO PREVENT VEHICLE ENCRoACHMENT BEYOND PROPERTY LINES OF PARKING LOTS AND INTO PEDESTRIAN WAYS OR TRAFFIC AISLES.

NOTE: ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SITE LINES FROM 30' - 10'.

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 \_\_\_\_\_

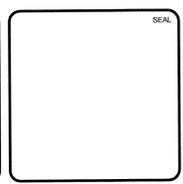
Traffic \_\_\_\_\_

Fire \_\_\_\_\_

STORMWATER MANAGEMENT PLAN  
**APPROVED**  
 CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
 SIGNED \_\_\_\_\_

1 inch

REV. NO.	DESCRIPTIONS	DATE



**MCKIM & CREED**

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

**SYMPHONY properties**  
 Orchestrating REAL Solutions

**INDEPENDENCE WEST APARTMENTS**  
 3828 & 3970 INDEPENDENCE BOULEVARD  
 WILMINGTON, NORTH CAROLINA

**SITE PLAN**

DATE: 17 SEP 2014  
 MCE PROJ #: 06588-0002  
 DRAWN: TCM  
 DESIGNED: TCM  
 CHECKED: RMC  
 PROJ. MGR.: RMC

SCALE: HORIZONTAL: 1"=60' VERTICAL: 1"=60'

MAC FILE NUMBER: CS101  
 DRAWING NUMBER: 9

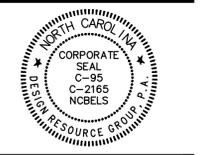
STATUS: PRELIMINARY PLANS  
 NOT FOR CONSTRUCTION



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**INDEPENDENCE WEST  
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 WILMINGTON, NORTH CAROLINA  
 SYMPHONY PROPERTIES, LLC.  
 103 TORREY PINES DRIVE  
 CARY, NC 27513

CONSTRUCTION DOCUMENTS



30 0 30 60  
 SCALE: 1" = 60'

PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

**ACCESSIBLE  
 ROUTE  
 PLAN**

SEPTEMBER 17, 2014

REVISIONS:

**SITE ACCESSIBILITY NOTES**

1. ALL BUILDINGS WITHIN THE BOUNDARY OF THIS SITE, UNLESS OTHERWISE STATED AS EXEMPT, SHALL HAVE "ACCESSIBLE ROUTES" AS REQUIRED THAT CONFORM TO THE REQUIREMENTS OF "THE AMERICANS WITH DISABILITIES ACT", "FAIR HOUSING STANDARDS", ICC ANSI A 117.1-209 AND GOVERNING STATE HANDICAP CODE STANDARDS.

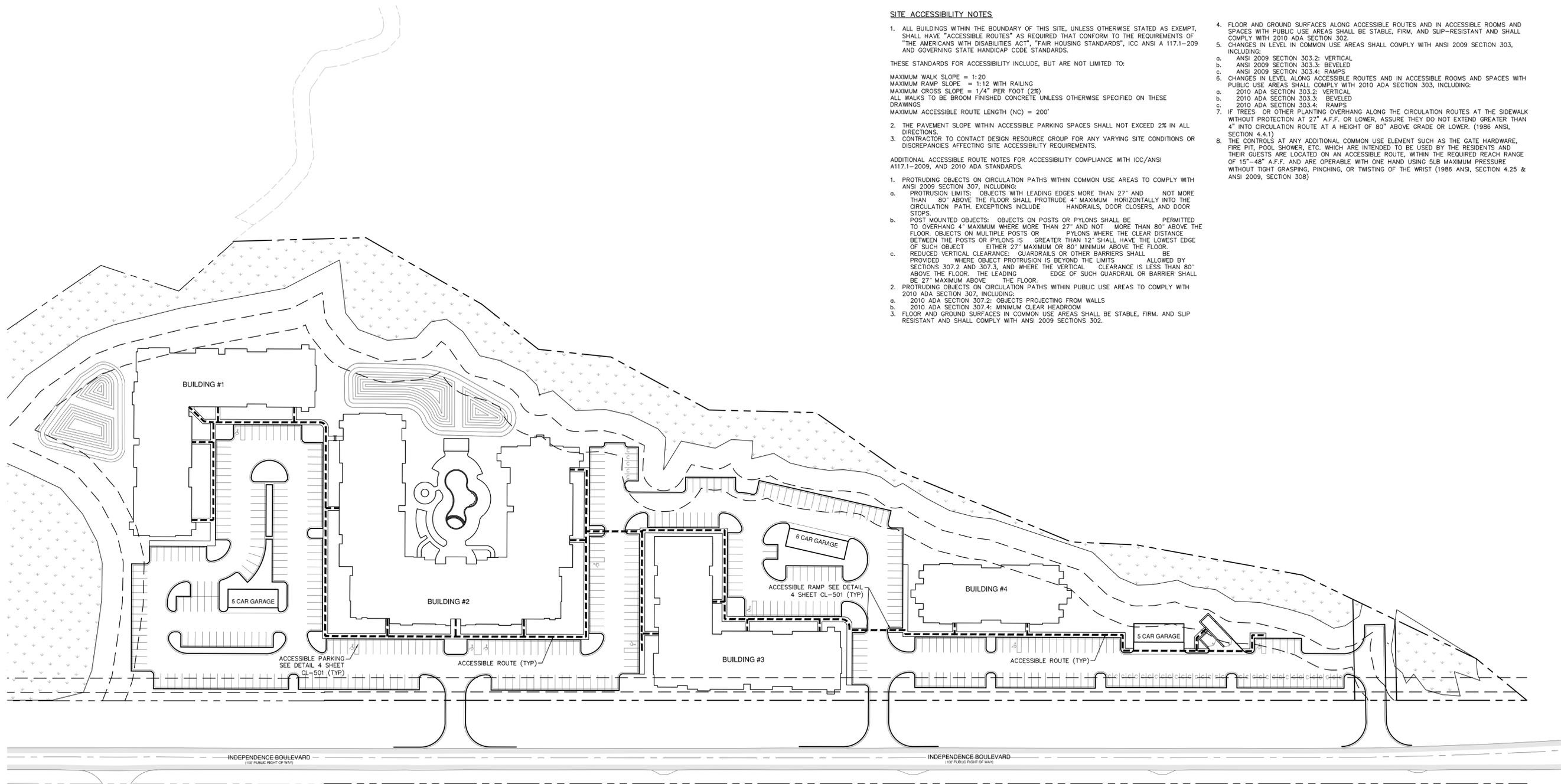
THESE STANDARDS FOR ACCESSIBILITY INCLUDE, BUT ARE NOT LIMITED TO:

- MAXIMUM WALK SLOPE = 1:20
- MAXIMUM RAMP SLOPE = 1:12 WITH RAILING
- MAXIMUM CROSS SLOPE = 1/4" PER FOOT (2%)
- ALL WALKS TO BE BROOM FINISHED CONCRETE UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS
- MAXIMUM ACCESSIBLE ROUTE LENGTH (NC) = 200'
- 2. THE PAVEMENT SLOPE WITHIN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ALL DIRECTIONS.
- 3. CONTRACTOR TO CONTACT DESIGN RESOURCE GROUP FOR ANY VARYING SITE CONDITIONS OR DISCREPANCIES AFFECTING SITE ACCESSIBILITY REQUIREMENTS.

ADDITIONAL ACCESSIBLE ROUTE NOTES FOR ACCESSIBILITY COMPLIANCE WITH ICC/ANSI A117.1-2009, AND 2010 ADA STANDARDS.

- PROTRUDING OBJECTS ON CIRCULATION PATHS WITHIN COMMON USE AREAS TO COMPLY WITH ANSI 2009 SECTION 307, INCLUDING:
  - PROTRUSION LIMITS: OBJECTS WITH LEADING EDGES MORE THAN 27" AND NOT MORE THAN 80" ABOVE THE FLOOR SHALL PROTRUDE 4" MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH. EXCEPTIONS INCLUDE HANDRAILS, DOOR CLOSERS, AND DOOR STOPS.
  - POST MOUNTED OBJECTS: OBJECTS ON POSTS OR PYLONS SHALL BE PERMITTED TO OVERHANG 4" MAXIMUM WHERE MORE THAN 27" AND NOT MORE THAN 80" ABOVE THE FLOOR. OBJECTS ON MULTIPLE POSTS OR PYLONS WHERE THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12" SHALL HAVE THE LOWEST EDGE OF SUCH OBJECT EITHER 27" MAXIMUM OR 80" MINIMUM ABOVE THE FLOOR. REDUCED VERTICAL CLEARANCES: GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE OBJECT PROTRUSION IS BEYOND THE LIMITS ALLOWED BY SECTIONS 307.2 AND 307.3, AND WHERE THE VERTICAL CLEARANCE IS LESS THAN 80" ABOVE THE FLOOR. THE LEADING EDGE OF SUCH GUARDRAIL OR BARRIER SHALL BE 27" MAXIMUM ABOVE THE FLOOR.
- PROTRUDING OBJECTS ON CIRCULATION PATHS WITHIN PUBLIC USE AREAS TO COMPLY WITH 2010 ADA SECTION 307, INCLUDING:
  - 2010 ADA SECTION 307.2: OBJECTS PROJECTING FROM WALLS
  - 2010 ADA SECTION 307.4: MINIMUM CLEAR HEADROOM
- FLOOR AND GROUND SURFACES IN COMMON USE AREAS SHALL BE STABLE, FIRM, AND SLIP RESISTANT AND SHALL COMPLY WITH ANSI 2009 SECTIONS 302.

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- CHANGES IN LEVEL IN COMMON USE AREAS SHALL COMPLY WITH ANSI 2009 SECTION 303, INCLUDING:
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  - ANSI 2009 SECTION 303.3: BEVELED
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  - 2010 ADA SECTION 303.4: RAMPS
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- THE CONTROLS AT ANY ADDITIONAL COMMON USE ELEMENT SUCH AS THE GATE HARDWARE, FIRE PIT, POOL SHOWER, ETC. WHICH ARE INTENDED TO BE USED BY THE RESIDENTS AND THEIR GUESTS ARE LOCATED ON AN ACCESSIBLE ROUTE, WITHIN THE REQUIRED REACH RANGE OF 15"-48" A.F.F. AND ARE OPERABLE WITH ONE HAND USING 5LB MAXIMUM PRESSURE WITHOUT TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST (1986 ANSI, SECTION 4.25 & ANSI 2009, SECTION 306)





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**INDEPENDENCE WEST  
 APARTMENTS**  
 WILMINGTON, NORTH CAROLINA  
 SYMPHONY PROPERTIES, LLC.  
 103 TORREY PINES DRIVE  
 CARY, NC 27513

CONSTRUCTION DOCUMENTS



30 0 30 60  
 SCALE: 1" = 60'

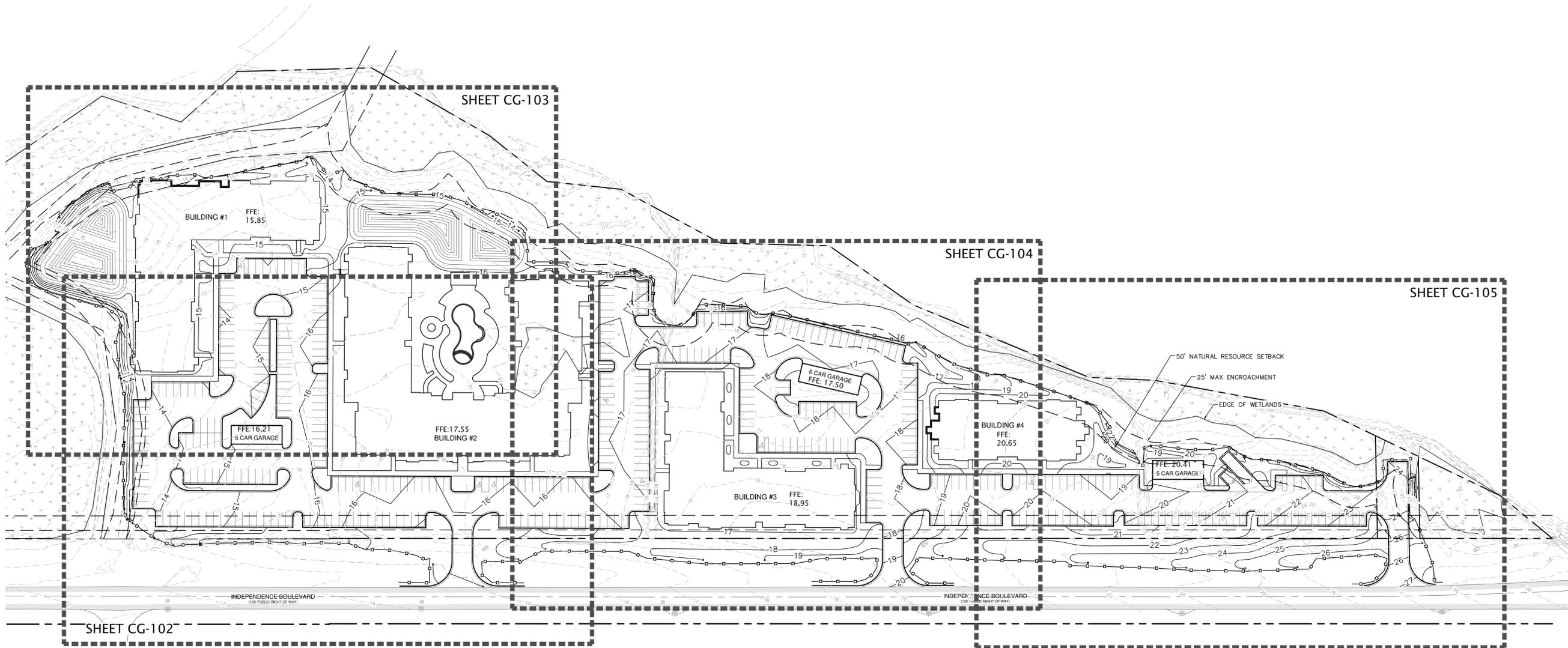
PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

OVERALL GRADING PLAN

SEPTEMBER 17, 2014

REVISIONS:

CG-101



SITE ACCESSIBILITY NOTES

1. ALL BUILDINGS WITHIN THE BOUNDARY OF THIS SITE, UNLESS OTHERWISE STATED AS EXEMPT, SHALL HAVE "ACCESSIBLE ROUTES" AS REQUIRED THAT CONFORM TO THE REQUIREMENTS OF "THE AMERICANS WITH DISABILITIES ACT," "FAIR HOUSING STANDARDS," ICC ANS A 117.1-209 AND GOVERNING STATE HANDICAP CODE STANDARDS.

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 ALL WALKS TO BE BROOM FINISHED CONCRETE UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS  
 MAXIMUM ACCESSIBLE ROUTE LENGTH (NC) = 200'

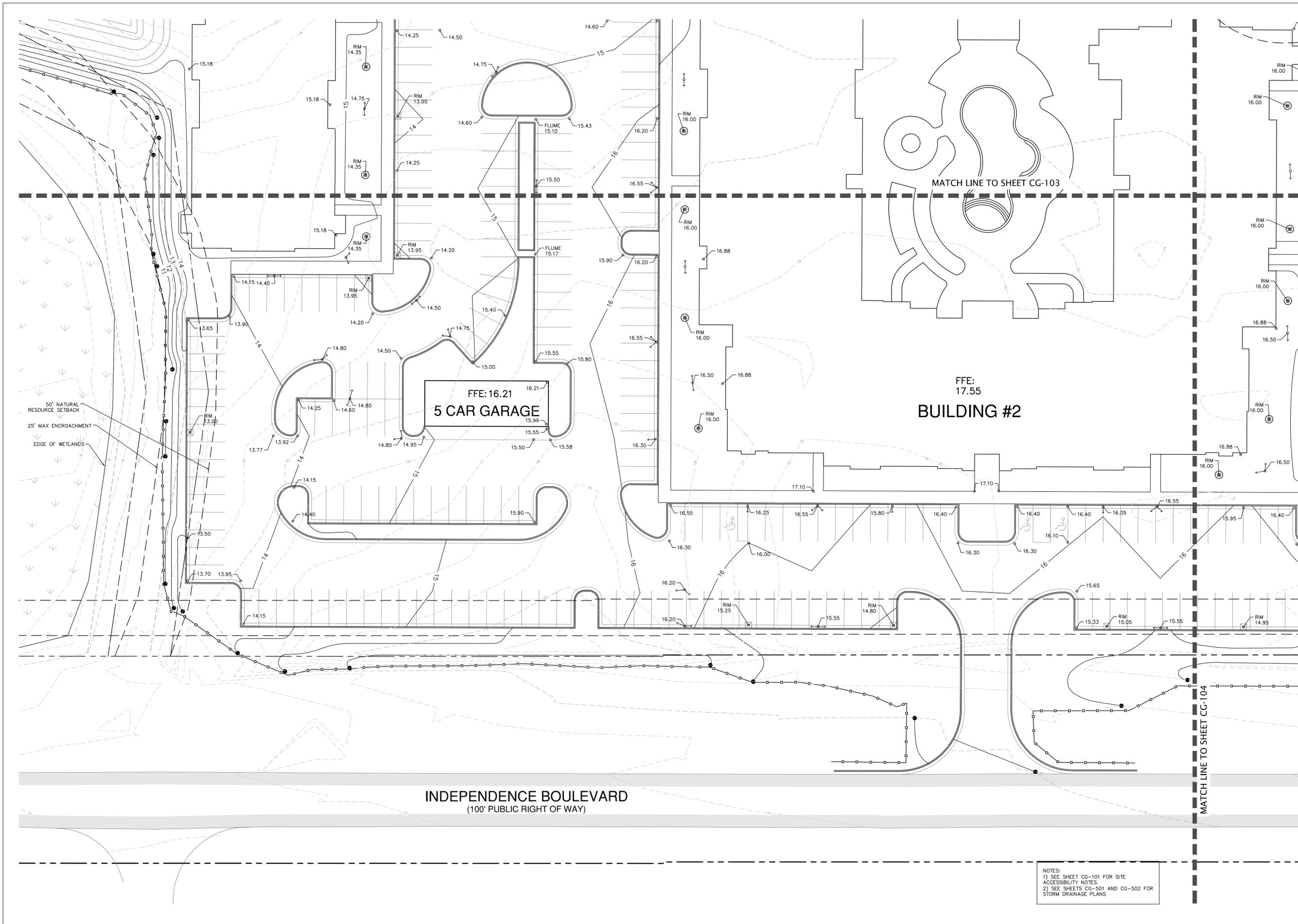
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NOTES:  
 1) SEE SHEETS CG-102 THRU CG-105 FOR FINE GRADING.  
 2) SEE SHEETS CG-501 AND CG-502 FOR STORM DRAINAGE PLANS



50' NATURAL RESOURCE SETBACK  
 25' MAX ENCROACHMENT  
 EDGE OF WETLANDS

INDEPENDENCE BOULEVARD  
 (100' PUBLIC RIGHT OF WAY)

MATCH LINE TO SHEET CG-103

FFE:  
 17.55  
**BUILDING #2**

FFE: 16.21  
**5 CAR GARAGE**

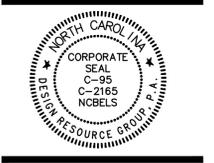
NOTES:  
 1) SEE SHEET CG-101 FOR SITE ACCESSIBILITY NOTES.  
 2) SEE SHEETS CG-501 AND CG-502 FOR STORM DRAINAGE PLANS



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- traffic engineering
- transportation planning

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**INDEPENDENCE WEST APARTMENTS**  
 WILMINGTON, NORTH CAROLINA  
 SYMPHONY PROPERTIES, LLC.  
 103 TORREY PINES DRIVE  
 CARY, NC 27513

CONSTRUCTION DOCUMENTS



SCALE: 1" = 20'

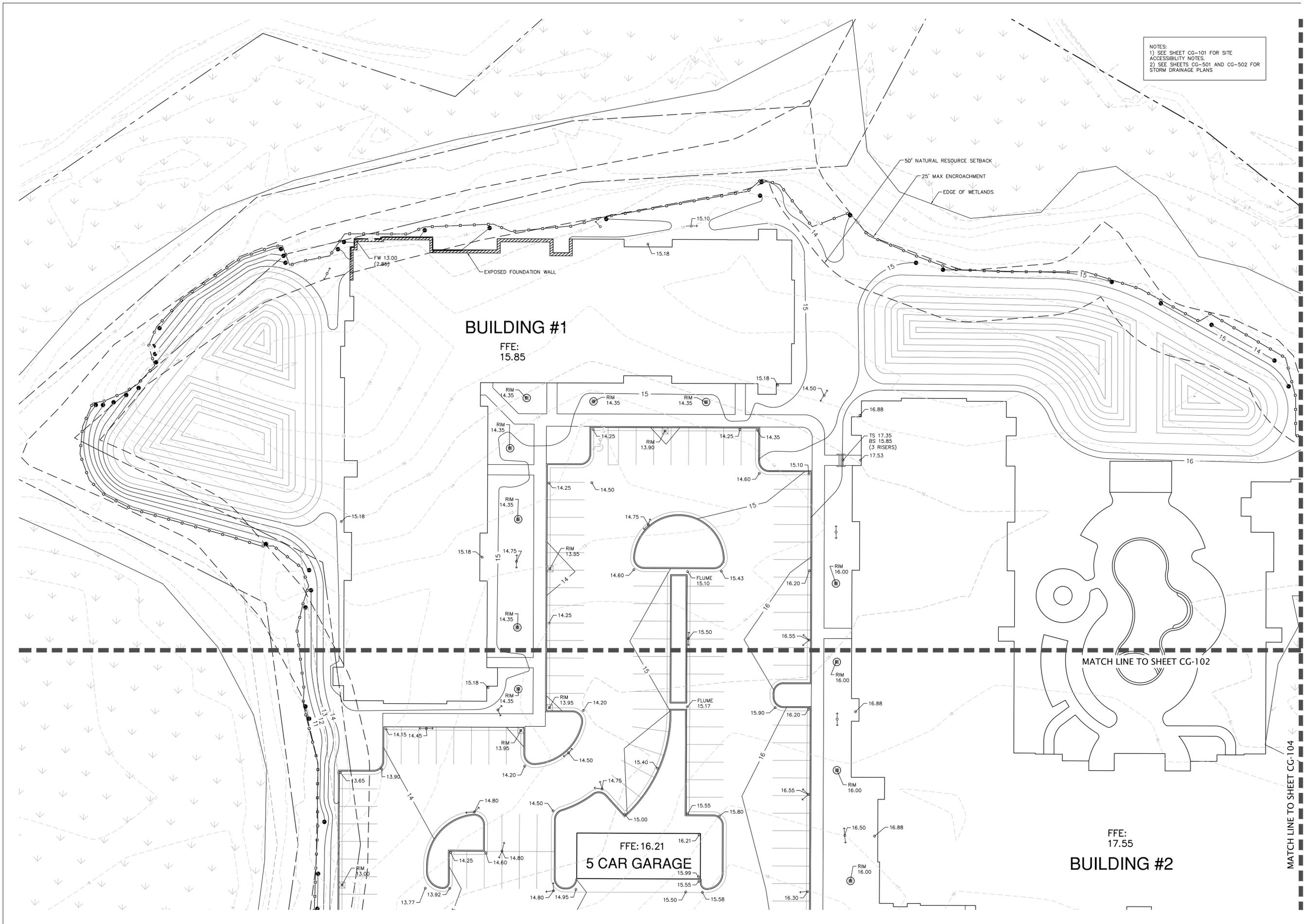
PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

**GRADING PLAN**

SEPTEMBER 17, 2014

REVISIONS:

CG-102



NOTES:  
 1) SEE SHEET CG-101 FOR SITE ACCESSIBILITY NOTES.  
 2) SEE SHEETS CG-501 AND CG-502 FOR STORM DRAINAGE PLANS

50' NATURAL RESOURCE SETBACK  
 25' MAX ENCROACHMENT  
 EDGE OF WETLANDS

**BUILDING #1**  
 FFE: 15.85

FFE: 16.21  
**5 CAR GARAGE**

FFE: 17.55  
**BUILDING #2**

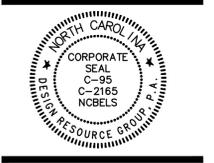
MATCH LINE TO SHEET CG-102

MATCH LINE TO SHEET CG-104



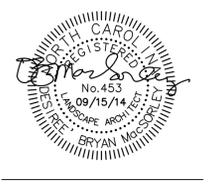
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CONSTRUCTION DOCUMENTS



SCALE: 1" = 20'

PROJECT #: 364-004  
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**GRADING PLAN**

SEPTEMBER 17, 2014

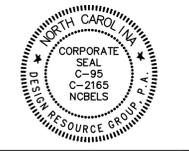
REVISIONS:



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WILMINGTON, NORTH CAROLINA

**SYMPHONY PROPERTIES, LLC.**  
 103 TORREY PINES DRIVE  
 CARY, NC 27513

**CONSTRUCTION  
 DOCUMENTS**



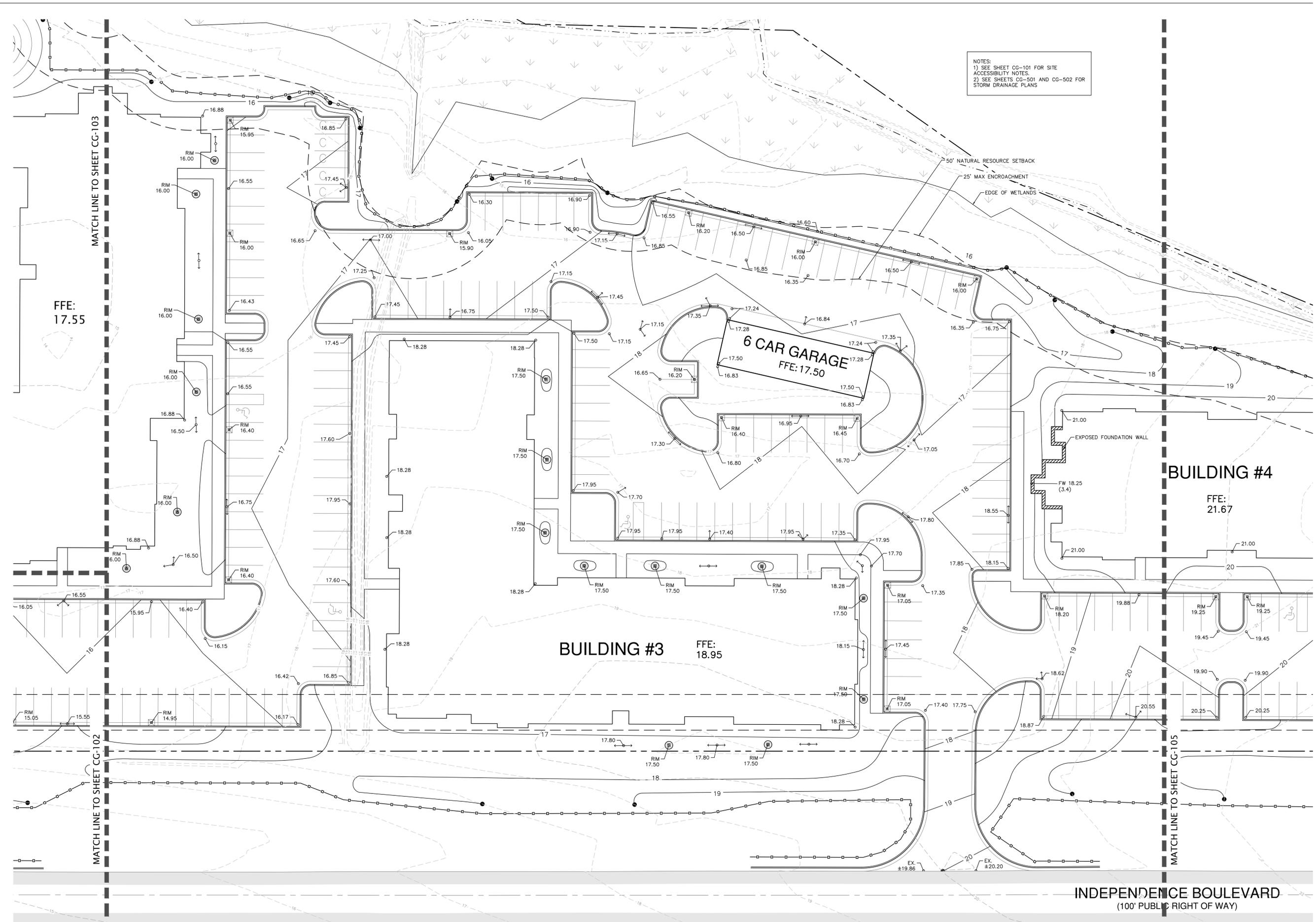
SCALE: 1" = 20'

PROJECT #: 364-004  
 DRAWN BY: MB  
 CHECKED BY: SK

**GRADING  
 PLAN**

SEPTEMBER 17, 2014

REVISIONS:



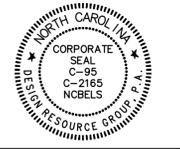
NOTES:  
 1) SEE SHEET CG-101 FOR SITE ACCESSIBILITY NOTES.  
 2) SEE SHEETS CG-501 AND CG-502 FOR STORM DRAINAGE PLANS



design resource group

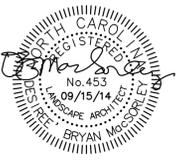
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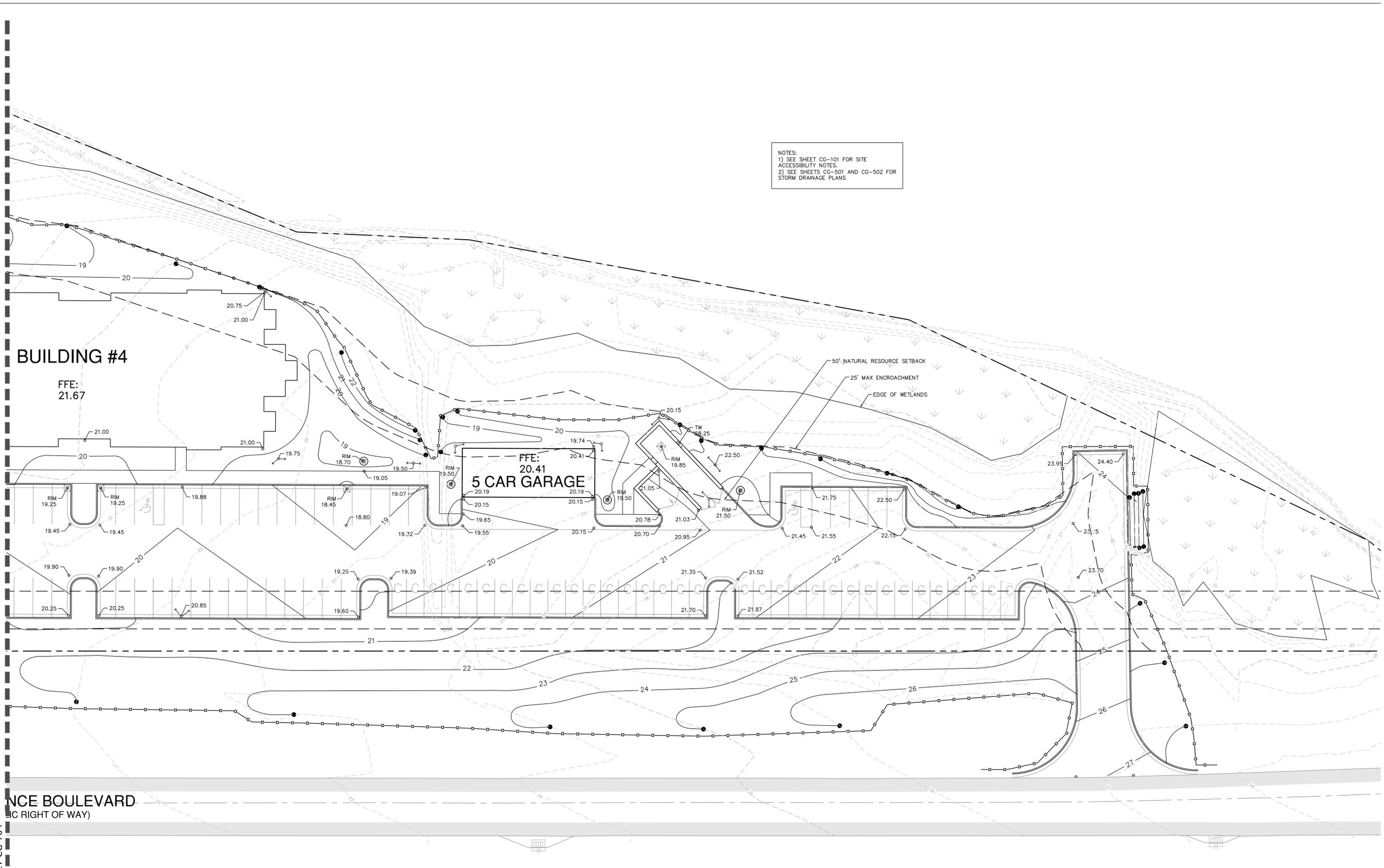
PROJECT #: 364-004  
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 CHECKED BY: SK

**GRADING PLAN**

SEPTEMBER 17, 2014

REVISIONS:

NOTES:  
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MATCH LINE TO SHEET CG-104

INDEPENDENCE BOULEVARD  
 (LIC RIGHT OF WAY)

1 inch

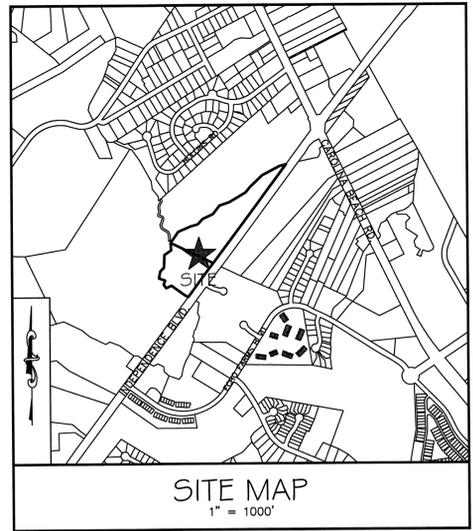
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

STORMWATER MANAGEMENT PLAN  
**APPROVED**  
 CITY OF WILMINGTON  
 ENGINEERING DEPARTMENT  
 DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
 SIGNED \_\_\_\_\_

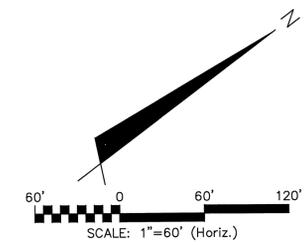
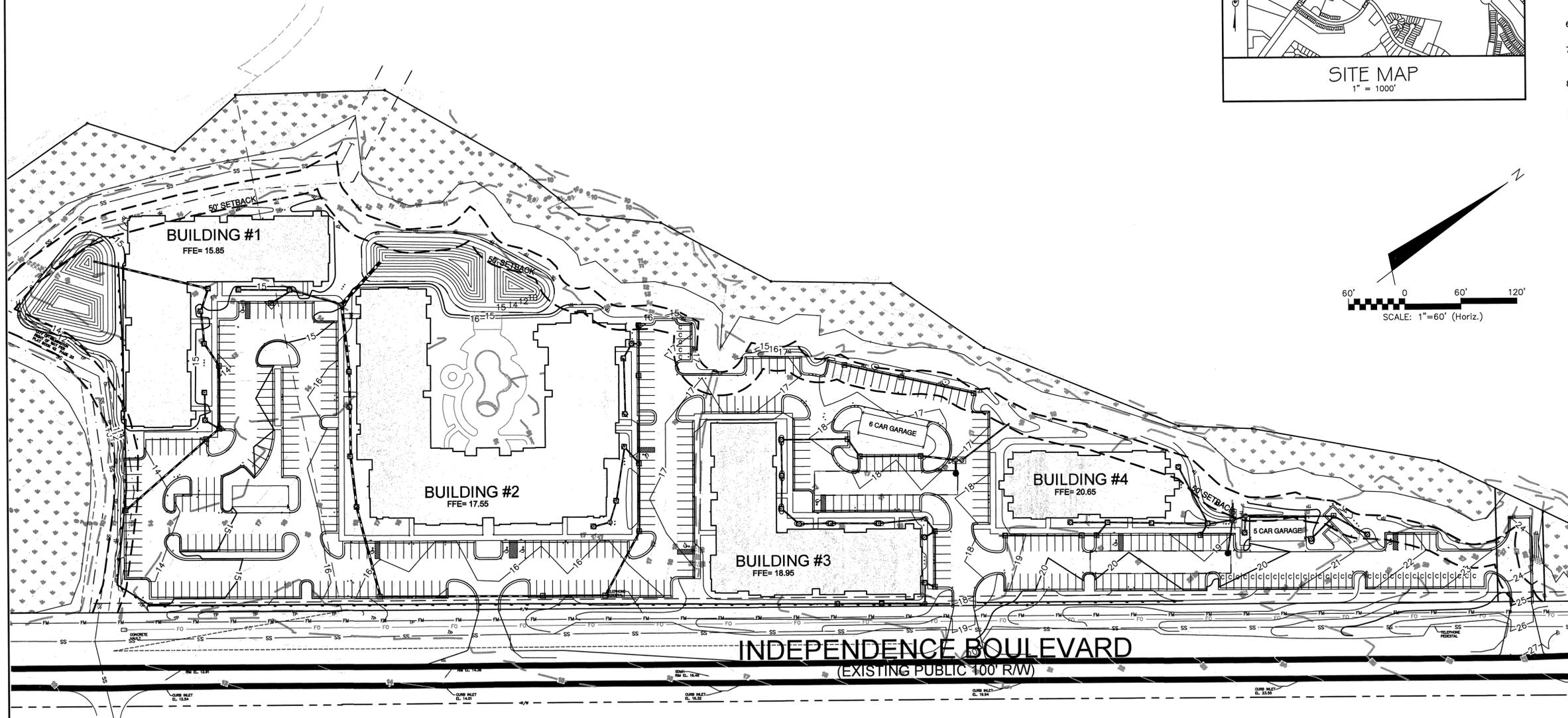
Approved Construction Plan  
 Name \_\_\_\_\_ Date \_\_\_\_\_  
 Planning \_\_\_\_\_  
 Traffic \_\_\_\_\_  
 Fire \_\_\_\_\_

- LEGEND**
- EXISTING CONTOUR
  - - - PROPOSED CONTOUR
  - STORM DRAINAGE PIPE
  - BUILDING ROOF OUTLINE
  - ⊙ STORM DRAINAGE MANHOLE
  - STORM DRAINAGE CATCH BASIN
  - 7.820 SPOT ELEVATION

State regulated water body serving the watershed:  
 Barnards Creek (C; Sw)



- STORM DRAINAGE AND GRADING NOTES:**
- IN ACCORDANCE WITH NC GENERAL STATUTES, NPDES REGULATIONS, AND NHC REQUIREMENTS, STORMWATER DISCHARGE OUTFALLS SHALL BE INSPECTED BY THE CONTRACTOR. INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR AFTER EACH STORM EVENT OF 1/2 INCH OR GREATER WITH ONE WEEKLY INSPECTION MINIMUM. NCDENR STANDARD INSPECTION REPORTS SHALL BE PREPARED AND SIGNED WITH COPIES PROVIDED TO THE OWNER, ARCHITECT, AND ENGINEER, BY THE CONTRACTOR.
  - INLET PROTECTION SHALL BE INSTALLED AROUND ALL STORM INLETS WITHIN THE LIMITS OF DISTURBANCE. STRUCTURES SHALL BE CONSTRUCTED TO FINAL PROPOSED CONDITION UPON STABILIZATION OF CONTRIBUTING GROUND SURFACES AND REMOVAL OF SEDIMENT FROM STORM PIPES.
  - SEDIMENT / EROSION DEVICES SHALL BE CHECKED BY THE CONTRACTOR DAILY. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
  - ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
  - UNLESS OTHERWISE NOTED, GRADES AND SPOT ELEVATIONS NOTED ON PLANS INDICATE FINISHED GRADE OR PAVEMENT SURFACE. ALL DIMENSIONS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE INDICATED.
  - WHEN HAND SEEDING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD AND TACKED OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.
  - DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER ON SLOPES THAT ARE 4:1 OR STEEPER, MULCH WILL BE ANCHORED.
  - NO LAND DISTURBANCE, INCLUDING TREE REMOVAL, IS TO OCCUR OUTSIDE THE LIMITS SHOWN.



- STORM DRAINAGE NOTES:**
- ALL PIPE BEDDING SHALL BE CLASS "C" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
  - ALL STORM DRAINAGE PIPES SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED ON THE PLANS.
  - DO NOT PLANT TREES WITHIN UTILITY AND DRAINAGE EASEMENTS.
  - THE ENGINEER AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION OF THE PIPES PRIOR TO CONSTRUCTION. IF DAMAGE OCCURS TO THESE PIPES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE PIPE(S).
  - THE CONTRACTOR SHALL CONTACT ONECALL BEFORE COMMENCING ANY WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES WHETHER INDICATED ON THE DRAWINGS OR NOT. THE CONTRACTOR WILL ASSURE THE PRESENCE ONSITE OF A REPRESENTATIVE OF THE GAS COMPANY WHEN WORKING IN THE VICINITY OF ANY GAS MAINS.

- CITY OF WILMINGTON STANDARD NOTES:**
- CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
  - 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.
  - ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
  - ONCE STREETS ARE OPEN TO TRAFFIC, THE DEVELOPER SHALL CONTACT TRAFFIC ENGINEERING TO REQUEST INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
  - TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
  - ANY BROKEN OR MISSING SIDEWALK PANELS AND CURBING SHALL BE REPLACED BY THE CONTRACTOR.
  - CONTACT KAREN DIXON AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
  - IF THE CONTRACTOR DESIRES WATER FOR CONSTRUCTION HE SHALL APPLY WITH THE OFPUA IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
  - THE NUMBER AND SPACING OF DRIVEWAYS FOR ALL INTERCONNECTED SITES WILL BE DETERMINED BY THE COMBINED FRONTAGE OF THE INTERCONNECTED PROPERTIES.
  - CONTACT TRAFFIC ENGINEERING TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. CALL TRAFFIC ENGINEERING FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
  - TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.

**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.

**NOTE COW(18-458)**  
 NO EQUIPMENT IS ALLOWED ONSITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED BY LANDSCAPE ARCHITECT.

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REVNO	DESCRIPTIONS	DATE

SEAL



**MCKIM & CREED**

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 Wilmington, NC 28401  
 Phone: (910)343-1048, Fax: (910)251-8282  
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 www.mckimcreed.com

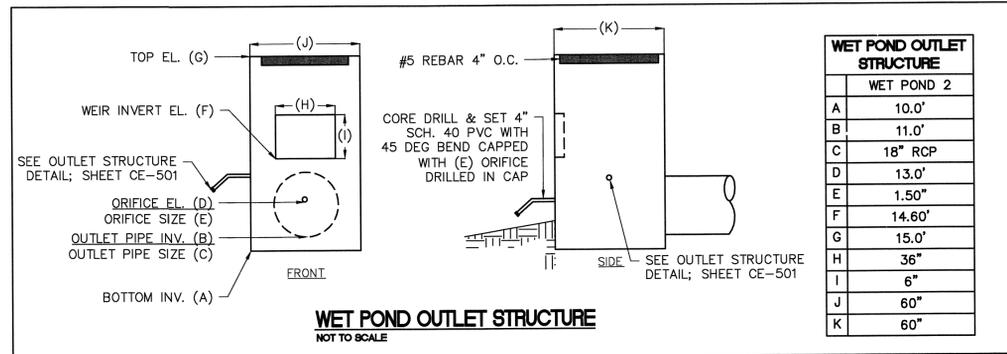
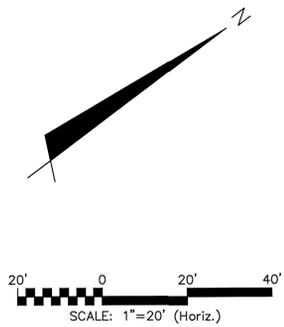
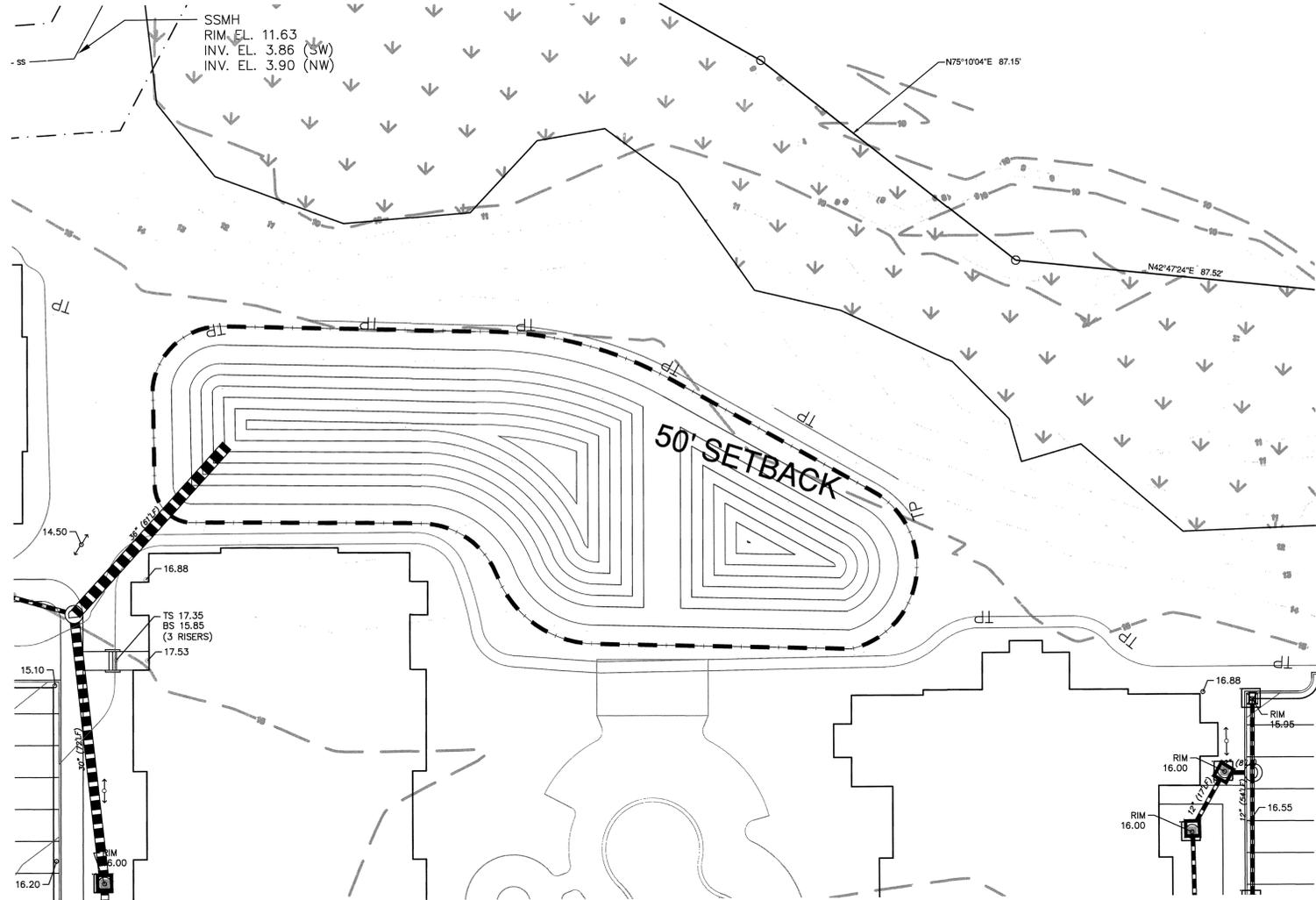
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**INDEPENDENCE WEST APARTMENTS**  
 3828 & 3970 INDEPENDENCE BOULEVARD  
 WILMINGTON, NORTH CAROLINA

**STORM DRAINAGE PLAN**

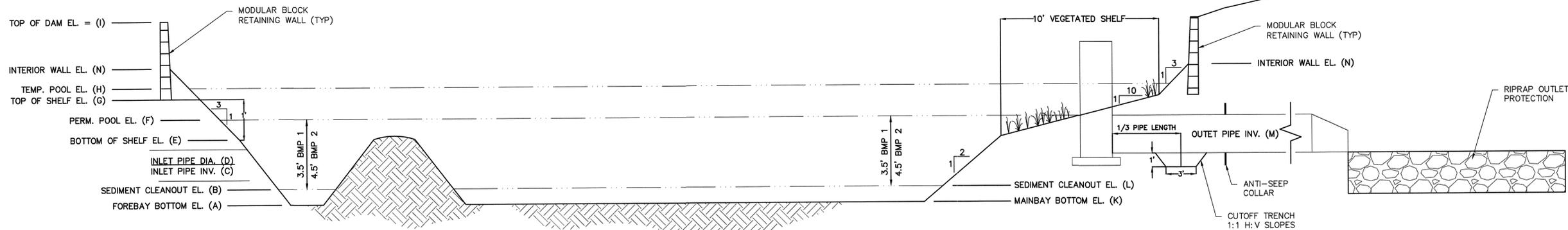
DATE: 17 SEP 2014	SCALE: HORIZONTAL: 1"=60'	MISC FILE NUMBER: CG106
MCE PROJ #: 06586-002	VERTICAL: 1"=60'	DRAWING NUMBER: 16
DRAWN: TCM		
DESIGNED: TCM		
CHECKED: RMC		
PROJ. MGR: RMC		
STATUS: PRELIMINARY PLANS NOT FOR CONSTRUCTION		



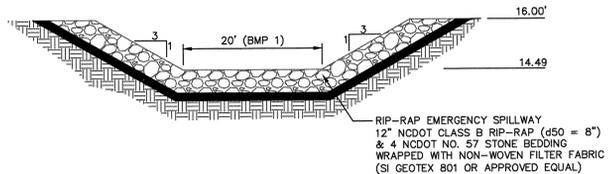


WET POND OUTLET STRUCTURE	
WET POND 2	
A	10.0'
B	11.0'
C	18" RCP
D	13.0'
E	1.50"
F	14.60'
G	15.0'
H	36"
I	6"
J	60"
K	60"

STORM ELEVATIONS	
WET POND #2	
1.5" PROPOSED DEPTH = 14.60'	
1-YEAR = 14.86'	
10-YEAR = 15.10'	
25-YEAR = 15.15'	
100-YEAR = 15.23'	



WET POND DIMENSIONS	
WET POND 2	
A	7.0'
B	8.0'
C	8.0'
D	36"
E	13.0'
F	13.5'
G	14.0'
H	14.60'
I	15.0'
J	13.0'
K	7.0'
L	8.0'
M	11.0'
N	14.0'



WET POND OUTFALL PROTECTION	
WET POND 2	
OUTLET PIPE DIA.	36"
OUTLET FLOW RATE	16.41 CFS
OUTLET VELOCITY	9.3 FT/S
MATERIAL	CLASS B
LENGTH	18'
WIDTH	9'
STONE DIA.	6"
THICKNESS	22"

**EMERGENCY SPILLWAY SECTION**  
NOT TO SCALE

**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_

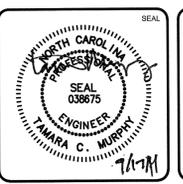
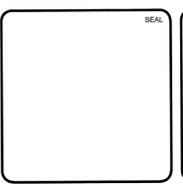
**STORMWATER MANAGEMENT PLAN**  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
SIGNED \_\_\_\_\_

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

1 inch

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REV. NO.	DESCRIPTIONS	DATE



**MCKIM & CREED**

243 North Front Street  
Wilmington, NC 28401  
Phone: (910)343-1048, Fax: (910)251-8282  
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3828 & 3970 INDEPENDENCE BOULEVARD  
WILMINGTON, NORTH CAROLINA

**STORMWATER MANAGEMENT DETAILS**

DATE: 17 SEP 2014  
MCE PROJ #: 06866-0002  
DRAWN: TCM  
DESIGNED: TCM  
CHECKED: RMC  
PROJ. MGR: RMC

SCALE: HORIZONTAL: 1"=20' VERTICAL: 1"=20'

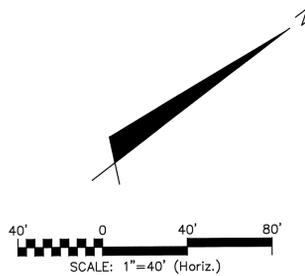
MAC FILE NUMBER: CN502  
DRAWING NUMBER: 18

STATUS: PRELIMINARY PLANS  
NOT FOR CONSTRUCTION



**STAGE 2 CONSTRUCTION SEQUENCE**

1. INSTALL SEWER AND WATER AND STORMWATER MANAGEMENT FACILITIES TO INCLUDE PIPING, CATCH BASINS, DROP INLETS AND INFILTRATION TRENCH SYSTEMS INCLUDING INSTALLATION OF STAGE TWO INLET PROTECTION.
2. REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT CONTROL MEASURES AS REQUIRED ON THE PLANS AND PERMIT.
3. COMPLETE PARKING AREAS AND ENTRANCE CONSTRUCTION TO SUBGRADE. COMPACT ALL FILL AREAS TO 95% STD. PROCTOR MAXIMUM DRY DENSITY.
4. INSTALL GRAVEL BASE IN PARKING AREAS.
5. INSTALL CONCRETE CURB AND GUTTER.
6. INSTALL FIRST LIFT OF ASPHALT BASE COURSE, AND THEN HOLD OFF ON THE FINAL ASPHALT COURSE UNTIL END OF CONSTRUCTION SEQUENCE.
7. CONTRACTOR SHALL CONTINUOUSLY MAINTAIN EROSION CONTROL MEASURES AND CLEAN AND REPAIR TEMPORARY SEDIMENT MEASURES TO MEET NEW HANOVER COUNTY APPROVAL.
8. UPON COMPLETION OF CONSTRUCTION, PRIOR TO FINAL ASPHALT LIFT INSTALLATION, CONTRACTOR TO REQUEST FINAL INSPECTION FROM NEW HANOVER COUNTY EROSION CONTROL INSPECTOR TO ALLOW REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES.
9. INSTALL LANDSCAPING AND ESTABLISH FINAL GRADES AS SHOWN ON CG-101.
10. INSTALL PERMANENT SEEDING. REFER TO GROUND STABILIZATION CRITERIA TABLE FOR AREAS THAT REQUIRE 7-DAY STABILIZATION. ALL OTHER AREAS NOT REQUIRING 7-DAY STABILIZATION SHALL BE STABILIZED WITHIN 14-DAYS.
11. REMOVE ALL SEDIMENT FROM ALL STORM DRAIN PIPES.
12. SILT FENCE MUST REMAIN INSTALLED AND FUNCTIONING PROPERLY UNTIL THE LIMITS OF CONSTRUCTION HAVE BEEN PERMANENTLY STABILIZED.



LIMITS OF DISTURBANCE = 9.67 AC

LAT: 34° 10' 21" N  
LONG: 77° 55' 44" W

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

Approved Construction Plan

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

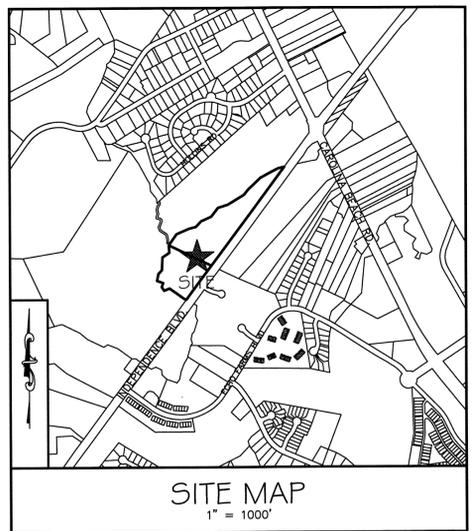
Fire \_\_\_\_\_

STORMWATER MANAGEMENT PLAN  
**APPROVED**  
CITY OF WILMINGTON  
ENGINEERING DEPARTMENT  
DATE \_\_\_\_\_ PERMIT # \_\_\_\_\_  
SIGNED \_\_\_\_\_

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)

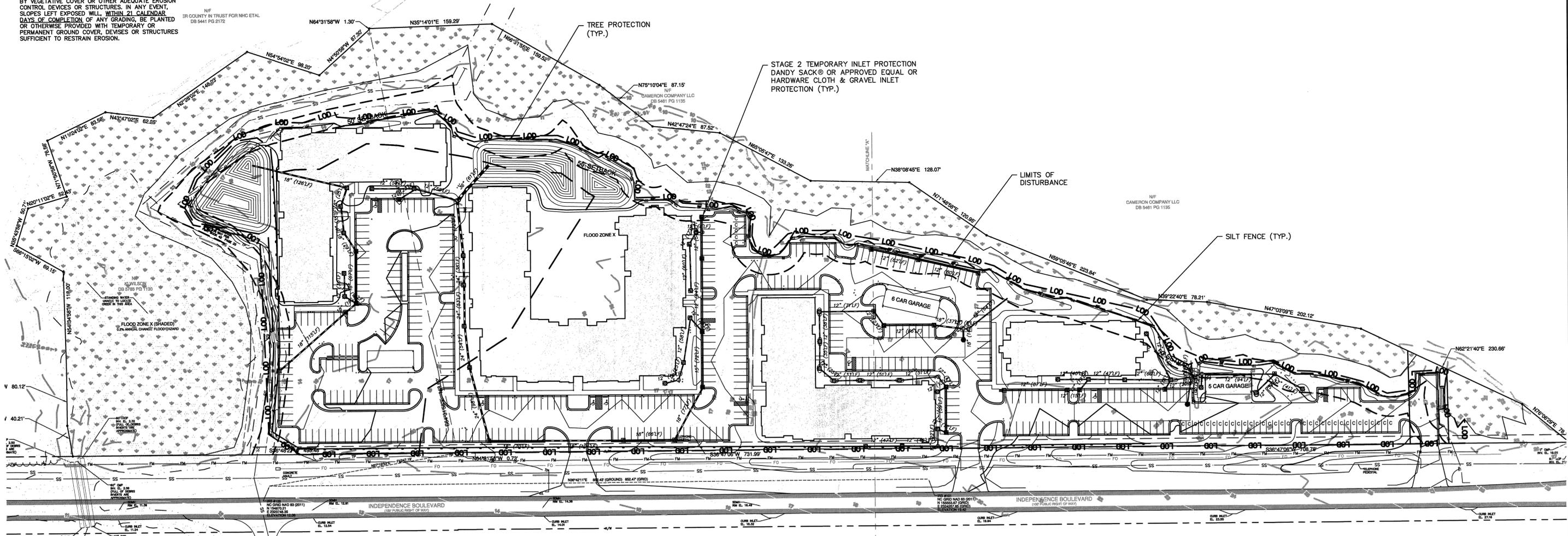
**LEGEND**

- RBC = REBAR & CAP
- IPF = IRON PIPE FOUND
- INV. = INVERT
- EL. = ELEVATION
- W = WELL
- FH = FIRE HYDRANT
- WV = WATER VALVE
- GI = GRATED INLET
- YI = YARD INLET
- SDM = STORM DRAIN MANHOLE
- SSM = SANITARY SEWER MANHOLE
- PP = POWER POLE
- GW = GUY WIRE
- CP = CABLE PEDESTAL
- TP = TELEPHONE PEDESTAL
- TM = TELEPHONE MANHOLE
- GV = GAS VALVE
- AP = ASPHALT PAVEMENT
- TT = TEMPORARY TREE PROTECTION
- TI = TEMPORARY INLET PROTECTION
- LOD = LIMITS OF DISTURBANCE LINE
- SF = SILT FENCE LINE
- USL = UNDERGROUND STORM LINE
- USL = UNDERGROUND SANITARY LINE
- W = UNDERGROUND WATER LINE

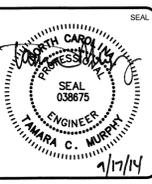


**NOTE (G.S. 113A-57 (2))**

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.



REV. NO.	DESCRIPTIONS	DATE



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**SYMPHONY properties**  
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**INDEPENDENCE WEST APARTMENTS**  
3828 & 3970 INDEPENDENCE BOULEVARD  
WILMINGTON, NORTH CAROLINA

**SEDIMENT & EROSION CONTROL  
PHASE 2**

DATE: 17 SEP 2014  
MCE PROJ. #: 06588-0002  
DRAWN: TCM  
DESIGNED: TCM  
CHECKED: RMC  
PROJ. MGR: RMC

SCALE: HORIZONTAL: 1"=60'  
VERTICAL: 1"=60'

MCE FILE NUMBER: **CE103**  
DRAWING NUMBER: **20**

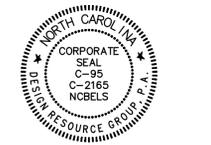
STATUS: PRELIMINARY PLANS  
NOT FOR CONSTRUCTION



design resource group

- landscape architecture
- civil engineering
- urban design
- land planning
- traffic engineering
- transportation planning

2459 wilkinson boulevard, suite 200  
charlotte, nc 28208  
p 704.343.0608 f 704.358.3093  
www.drgpr.com



**INDEPENDENCE WEST APARTMENTS**  
WILMINGTON, NORTH CAROLINA  
SYMPHONY PROPERTIES, LLC.  
103 TORREY PINES DRIVE  
CARY, NC 27513

CONSTRUCTION DOCUMENTS



SCALE: 1" = 60'

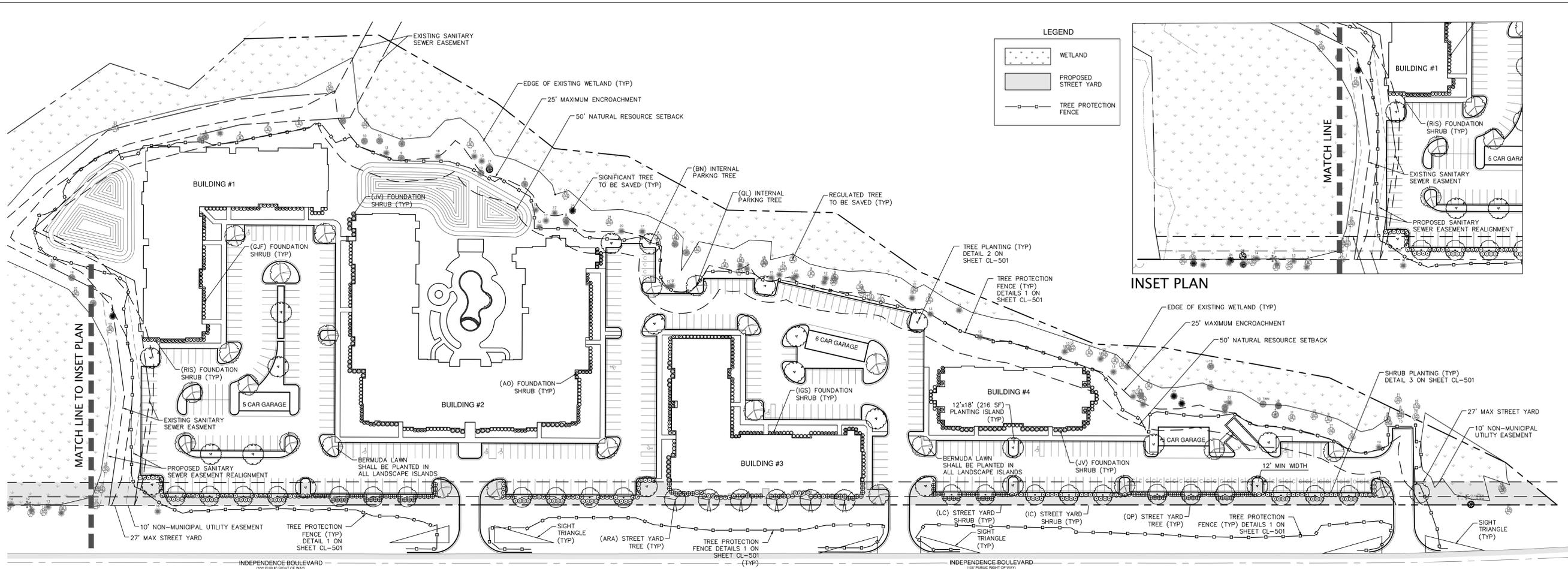
PROJECT #: 364-004  
DRAWN BY: MB  
CHECKED BY: SK

**REQUIRED PLANTING PLAN**

SEPTEMBER 17, 2014

REVISIONS:

CL-101



**STREET YARD LANDSCAPING REQUIREMENTS (SEC. 18-477)**

REQUIRED:  
1939 LF STREET FRONTAGE (INDEPENDENCE BLVD)  
- 72 LF DRIVEWAYS (3 DRIVEWAYS @ 24' WIDTH)  
1867 LF  
x .18 (MULTIPLIER FOR MF ZONING)  
33,606 SF REQUIRED STREET YARD BUFFER

PROVIDED:  
10,856 SF TREE SAVE  
23,151 SF PLANTED STREET YARD  
34,007 SF TOTAL STREET YARD

REQUIRED: 1 SHADE TREE PER 600 SF = 38 CANOPY/SHADE TREES  
6 SHRUBS PER 600 SF = 228 SHRUBS

PROVIDED: 40 CANOPY/SHADE TREES  
284 SHRUBS

**INTERIOR PARKING LOT REQUIREMENTS (SEC. 18-481)**

THE INTERIOR AREA OF A PARKING FACILITY SHALL BE SHADED BY CANOPY TREES EITHER PLANTED OR RETAINED TO PROVIDE TWENTY (20) PERCENT OR GREATER COVERAGE AT MATURITY. NO PARKING SPACE SHALL BE MORE THAN 120 FEET FROM A PLANTING ISLAND OR PENINSULA. ALL ISLANDS SHALL BE 216 SF MINIMUM.

REQUIRED:  
149,726 SF IMPERVIOUS AREA  
x .20% REQUIRED SHADING  
29,945 SF REQUIRED PARKING LOT SHADING

1 INTERIOR CANOPY/SHADE TREE = 707 SF SHADE

PROVIDED:  
12 SHADE TREES (@ 100% SHADING) = 8,484 SF  
21 SHADE TREES (@ 75% SHADING) = 11,135 SF  
36 SHADE TREES (@ 50% SHADING) = 12,726 SF  
TOTAL SHADING = 32,345 SF

ALL LANDSCAPE ISLANDS SHALL BE PLANTED WITH BERMUDA GRASS.

**PERIMETER PARKING LOT REQUIREMENTS (SEC. 18-482)**

REQUIRED:  
A LANDSCAPE YARD OF TEN (10) FEET IN WIDTH SHALL BE REQUIRED ALONG ANY SIDE OF A PARKING LOT ABUTTING A SEPARATE PARKING LOT, DRIVEWAY, OR RESIDENTIALLY ZONED PROPERTY.

PROVIDED:  
PRESERVED WETLAND AND TREE SAVE AREAS TO MEET REQUIRED PERIMETER LANDSCAPE REQUIREMENTS

**FOUNDATION PLANTING REQUIREMENTS (SEC. 18-490)**

**BUILDING #1**

REQUIRED:  
380 LF BUILDING FRONTAGE FACING PARKING LOT  
x .30 LF BUILDING HEIGHT  
11,400 SF BUILDING FRONTAGE FACING PARKING LOT  
x .12% MULTIPLIER  
1,368 SF REQUIRED FOUNDATION PLANTING

PROVIDED: 1,550 SF

**BUILDING #2**

REQUIRED:  
701 LF BUILDING FRONTAGE FACING PARKING LOT  
x .40 LF BUILDING HEIGHT  
28,040 SF BUILDING FRONTAGE FACING PARKING LOT  
x .12% MULTIPLIER  
3,365 SF REQUIRED FOUNDATION PLANTING

PROVIDED: 3,483 SF

**BUILDING #3**

REQUIRED:  
589 LF BUILDING FRONTAGE FACING PARKING LOT  
x .30 LF BUILDING HEIGHT  
17,670 SF BUILDING FRONTAGE FACING PARKING LOT  
x .12% MULTIPLIER  
2,120 SF REQUIRED FOUNDATION PLANTING

PROVIDED: 2,778 SF

**BUILDING #4**

REQUIRED:  
311 LF BUILDING FRONTAGE FACING PARKING LOT  
x .30 LF BUILDING HEIGHT  
9,330 SF BUILDING FRONTAGE FACING PARKING LOT  
x .12% MULTIPLIER  
1,120 SF REQUIRED FOUNDATION PLANTING

PROVIDED: 1,854 SF

**BUFFER YARD REQUIREMENTS (SEC. 18-496)**

BUFFER YARD SHALL BE EQUAL TO 50% OF BUILDING SETBACK OR 20', WHICHEVER IS GREATER.

BUILDING SETBACK = 0, BUFFER YARD = 20'

REQUIRED: 1 SHADE/ CANOPY TREE PER 30 LF OF SCREEN.  
SHRUBS SHALL BE PLANTED TO ACHIEVE 100% OPACITY TO A HEIGHT OF 6 FEET.

PROVIDED: PRESERVED WETLANDS AND TREE SAVE TO SATISFY BUFFER REQUIREMENTS

**GENERAL PLANTING REQUIREMENT (SEC. 18-448)**

15 TREES PER DISTURBED ACRE

TOTAL DISTURBED AREA: 9.34 ACRES

REQUIRED:  
9.34 X (15 TREES PER ACRE) = 141 TREES (MIN 2" CAL.)

PROVIDED:  
75 PROPOSED CANOPY/SHADE TREES (2 1/2" CAL.)  
114 EXISTING REGULATED TREES  
11 EXISTING SIGNIFICANT TREES  
200 TOTAL TREES

**GENERAL NOTES:**

- MINIMUM TREE SIZE AT PLANTING IS 2 1/2-INCH CALIPER (FOR SINGLE STEM TREES). TREES MUST MEET ANSI STANDARDS AND HAVE SINGLE LEADER ALL THE WAY TO THE TOP. ALL MULTI-STEM PLANTS MUST BE TREE FORM, MINIMUM 8 FEET, AND HAVE A MAXIMUM OF 3 TO 5 TRUNKS.
- ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
- FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 24" NEW TOPSOIL, OR TILL AND AMEND THE TOP 24" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES (WITHIN ENTIRE MINIMUM AREA OF 200 SQUARE FEET PER TREE FOR RENOVATED SITES).
- LARGE MATURING TREES MUST BE A MINIMUM 25 TO 30 FEET FROM THE OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL URBAN FORESTER TO RESOLVE BEFORE PLANTING.
- SITE LIGHTING MUST BE A MINIMUM THIRTY (30) FEET AWAY FROM A TREE. IF PEDESTRIAN SCALE LIGHTING IS BEING USED, THEN LIGHTING MUST BE A MINIMUM OF FIFTEEN (15) FEET AWAY FROM A TREE, UNLESS APPROVED OTHERWISE BY THE CITY. SHOW SITE LIGHTING PLAN. NO LIGHT POLES IN TREE ISLANDS.
- ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 15' FROM ALL UNDERGROUND UTILITIES (GAS, WATER, PHONE, AND ELECTRICAL LINES).
- ALL PARKING SHALL BE LOCATED WITHIN 120 FEET OF A TREE.
- UNLESS APPROVED BY URBAN FORESTRY STAFF, ALL REQUIRED TREES MUST HAVE SINGLE STEM TRUNKS WITH NO CO-DOMINANT TRUNKS OR BRANCHES. TREE TRUNKS SHALL BE STRAIGHT IN FORM AND FREE OF DAMAGE OR CRACKS. PRUNING SHALL BE CALLED OVER. BRANCH LENGTH SHALL BE TYPICAL FOR THE TREES AGE AND NOT BE BROKEN, DISEASED, OR INJURED. ROOT FLARE SHALL BE LOCATED AT GRADE AND BE FREE OF ADVENTITIOUS ROOT GROWTH.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES, HEIGHT AND WIDTH SIZES SHALL BE MET REGARDLESS OF CONTAINER OR CONDITION SHOWN.
- ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM STANDARDS SET BY THE U.S.D.A. STANDARD FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERMEN, INC., WASHINGTON, D.C.
- CONTRACTOR TO REVIEW PLANT SELECTION WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION AND DURING PROPOSAL PREPARATION FOR QUALITY CONTROL AND VALUE ENGINEERING.
- LANDSCAPE CONTRACTOR SHALL VERIFY UTILITY AND STORM DRAINAGE LOCATION IN THE FIELD, PRIOR TO BEGINNING CONSTRUCTION.
- ANY CONFLICT BETWEEN TREES AND UTILITIES SHALL BE RESOLVED IN THE FIELD WITH FINAL TREE LOCATIONS APPROVED BY THE LANDSCAPE ARCHITECT AND THE PLANNING DEPARTMENT.
- PLEASE CALL THE CITY OF WILMINGTON URBAN FORESTER FOR AN INSPECTION OF TREE PROTECTION AND/ OR TREE PLANTING AREAS, 7 TO 10 DAYS BEFORE THE TEMPORARY OR FINAL CERTIFICATE OF OCCUPANCY IS NEEDED.
- ATTENTION CONTRACTOR/LANDSCAPER: IT IS THE RESPONSIBILITY OF THE CONTRACTOR/LANDSCAPER TO NOTIFY THE URBAN FORESTER OF ANY SITE CONFLICTS THAT AFFECT TREE SPECIES OR LOCATIONS PRIOR TO PLANTING TREES. CALL THE URBAN FORESTER NAMED ON THE APPROVED PLAN FOR ANY CONFLICTS REGARDING SIGN, SIGNS, OVERHEAD POWERLINES OR OTHER UTILITIES.
- VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES AND/ OR IMMEDIATE CORRECTIVE ACTION/ MITIGATION.
- MULCH ALL PLANTING BEDS WITH 4" OF DOUBLE HAMMERED HARDWOOD MULCH.
- APPLY PRE-EMERGENT HERBICIDE TO PLANTING BEDS PRIOR TO MULCHING.
- SEED ALL DISTURBED AREAS EXCEPT PLANTING BEDS AS NOTED.
- ALL PLANT BEDS AND LAWN AREAS SHALL HAVE 2" - 4" TRENCH EDGE.

**TOPSOIL / PLANTING MIX REQUIREMENTS**

- EXISTING COMPACTED SOIL MUST BE REMOVED AND REPLACED WITH 24" OF TOPSOIL / PLANTING MIX - OR - EXISTING SOIL MAY BE UNCOMPACTED TO A DEPTH OF 24" AND AMENDED TO MEET TOPSOIL STANDARDS FOR THE ENTIRE PLANTING AREA.
- SOIL IN ALL PLANTING STRIPS OR ISLANDS, WHETHER EXISTING OR NEW (ON NEW OR RENOVATED SITES), MUST MEET THE MINIMUM TOPSOIL/PLANTING MIX SPECIFICATIONS. SOIL AMENDMENTS OR FRESH TOPSOIL / PLANTING MIX AREA OFTEN NEEDED FOR PLANTING AREAS AT SITES WHERE ORIGINAL TOPSOIL IS OF POOR QUALITY, HEAVILY COMPACTED OR WHERE TOPSOIL HAS BEEN COMPLETELY REMOVED DURING GRADING.
- TOPSOIL / PLANTING MIX SHOULD BE NATURAL, FERTILE, AGRICULTURAL SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHOULD BE UNIFORM COMPOSITION THROUGHOUT, WITH ADMIXTURE OF SUBSOIL. IT SHOULD BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS AND OTHER EXTRANEOUS MATTER. TOPSOIL SHOULD NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION.
- TOPSOIL / PLANTING MIX SHALL HAVE AN ACIDITY RANGE OF PH 5.5-7.0 AND THE FOLLOWING COMPOSITION:  
CLAY (RED CLAY, WELL PULVERIZED) MINIMUM 10%; MAXIMUM 35%  
COMPOST\* / ORGANIC MINIMUM 5%; MAXIMUM 10%  
SILT MINIMUM 30%; MAXIMUM 50%  
COARSE SAND (FREE OF ROCKS, 0.5 TO 1.0 MM F) MINIMUM 30%; MAXIMUM 45%  
\*ORGANIC MATERIAL SUCH AS SAWDUST OR LEAF MOLD THAT HAS COMPLETED THE DECOMPOSITION PROCESS

**REQUIRED TREE SCHEDULE**

KEY	Count	SCIENTIFIC NAME	COMMON NAME	CAL.	NOTE
ARA	6	ACER RUBRUM 'ARMSTRONG'	'ARMSTRONG' RED MAPLE	2.5" MIN	STREET TREE - INDEPENDENCE BOULEVARD
BN	22	BETULA NIGRA 'DURA HEAT'	DURA HEAT RIVER BIRCH	2.5" MIN	INTERNAL PARKING LOT TREE - MULTI-STEMMED
OL	24	QUERCUS LAURIFOLIA	LAUREL OAK	2.5" MIN	INTERNAL PARKING LOT TREE
OP	23	QUERCUS PHellos	WILLOW OAK	2.5" MIN	STREET TREE - INDEPENDENCE BOULEVARD

**REQUIRED SHRUB SCHEDULE**

KEY	Count	SCIENTIFIC NAME	COMMON NAME	HT.	SPD.	NOTE
AO	78	AZALEA OBTUSUM	KURUME AZALEA	24" MIN	24" MIN	FOUNDATION SHRUB
GJF	153	GARDENIA JASMINOIDES 'FROSTPROOF'	FROSTPROOF GARDENIA	24" MIN	24" MIN	FOUNDATION SHRUB
IC	164	ILEX CORNUTA 'BURFORDI NANA'	DWARF BURFORD HOLLY	24" MIN	24" MIN	STREET YARD SHRUB
IGS	121	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	24" MIN	24" MIN	FOUNDATION SHRUB
JV	72	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	24" MIN	24" MIN	FOUNDATION SHRUB
LC	119	LOROPETALUM CHINENSIS 'PURPLE DIAMOND'	PURPLE DIAMOND LAUROPETALUM	24" MIN	24" MIN	STREET YARD SHRUB
RIS	44	RAPHOLEPIS INDICA 'SNOW WHITE'	SNOW WHITE INDIAN HAWTHORNE	24" MIN	24" MIN	FOUNDATION SHRUB

**REQUIRED PLANTING NOTES:**

- PRIOR TO DEMOLITION, CLEARING, CONSTRUCTION ACTIVITY, OR GRADING, TREE PROTECTIVE FENCING MUST BE INSTALLED AROUND ALL TREE SAVE AREAS BY THE CONTRACTOR AND APPROVED BY THE CITY. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN TREE PROTECTION FENCING.
- THE TREE PROTECTION FENCE SHALL BE LOCATED ALONG THE PERIMETER OF THE TREE SAVE AREA (DRIP LINE PLUS 5 FEET). TREE PROTECTION FENCING FOR A FOREST CANOPY STANDS AREA IS TO BE LOCATED ALONG THE PERIMETER OF THE TREE SAVE AREA AROUND THE FOREST EDGE. TREE PROTECTION FENCING SHALL CONSIST OF ORANGE SAFETY FENCING OR A COMBINATION OF ORANGE SAFETY FENCING WITH SILT FENCING AT A MINIMUM OF 4 FEET IN HEIGHT ON METAL OR WOOD POSTS.
- ALL TREE PROTECTION AREAS MUST BE DESIGNATED AS SUCH WITH "TREE SAVE AREA SIGNS" POSTED IN ADDITION TO THE REQUIRED PROTECTIVE FENCING. SIGNS REQUESTING SUBCONTRACTOR COOPERATION AND COMPLIANCE WITH TREE PROTECTION STANDARDS ARE RECOMMENDED FOR SITE ENTRANCES.
- NO SOIL DISTURBANCE OR COMPACTION, STOCK PILING OF SOIL OR OTHER CONSTRUCTION MATERIAL, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT AND MATERIALS ARE ALLOWED WITHIN TREE SAVE AREAS.
- NO ROPES, SIGNS, WIRES, UNPROTECTED ELECTRICAL INSTALLATION OR OTHER DEVICE OR MATERIAL, SHALL BE SECURED OR FASTENED AROUND OR THROUGH A TREE OR SHRUB.
- ALL PROTECTIVE MEASURES SHALL BE MAINTAINED THROUGHOUT THE LAND DISTURBING AND CONSTRUCTION PROCESS, AND SHALL NOT BE REMOVED UNTIL FINAL LANDSCAPING IS INSTALLED.

**PLANTING NOTE:**

- SEE DETAILS ON SHEET CL-501 FOR TREE AND SHRUB PLANTING AND TREE PROTECTION FENCE.
- ALL GROUND LEVEL MECHANICAL EQUIPMENT SUCH AS ELECTRICAL PANELS, BACKFLOW PREVENTERS, HVAC PADS, ETC. SHALL BE SCREENED FROM OFF SITE WITH EVERGREEN SHRUBS.

**GENERAL NOTE:**

TREES SHALL NOT BE PLANTED IN PERMANENT DRAINAGE EASEMENTS, WITHIN 10 FEET OF A MASONRY DRAINAGE STRUCTURE, OR WITHIN 10 FEET OF A DRAINAGE PIPE. (THIS DOES NOT APPLY TO STORMWATER BMP'S.)

**CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD SEWER NOTES**

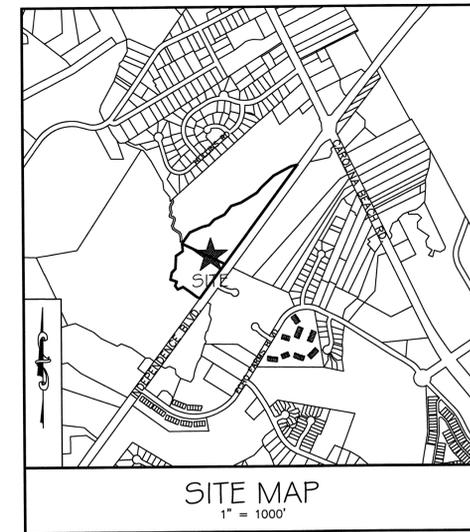
- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT RIGHT-OF-WAY LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
- ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
- MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL STAINLESS STEEL FASTENERS SHALL BE 316.

**FIRE PROTECTION NOTES:**

- HYDRANT MUST BE WITHIN 150' OF THE FDC.
- THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- 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.
- HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
- COMBUSTIBLE MATERIALS MAY NOT BE STORED OR ERECTED ONSITE WITHOUT CITY FIRE INSPECTOR APPROVAL.
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
- UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM UNDERGROUND UTILITIES.
- CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.

ESTIMATED WATER & SANITARY DEMAND			
PROPOSED USE	PROPOSED FLOW (GPD)	REQUIREMENT	FLOW (GAL)
RESIDENTIAL	240 (1-BEDROOM)	240 GALLONS/DAY/UNIT	28,560
RESIDENTIAL	360 (2-BEDROOM)	360 GALLONS/DAY/UNIT	46,080
RESIDENTIAL	360 (3-BEDROOM)	360 GALLONS/DAY/UNIT	3,600
<b>TOTAL =</b>			<b>78,240</b>

EXISTING WATER & SANITARY DEMAND			
EXISTING USE	EXISTING FLOW (GPD)	REQUIREMENT	FLOW (GAL)
VACANT	0	0	0
<b>TOTAL =</b>			<b>0</b>



**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_

**STORMWATER MANAGEMENT PLAN APPROVED**

CITY OF WILMINGTON  
ENGINEERING DEPARTMENT

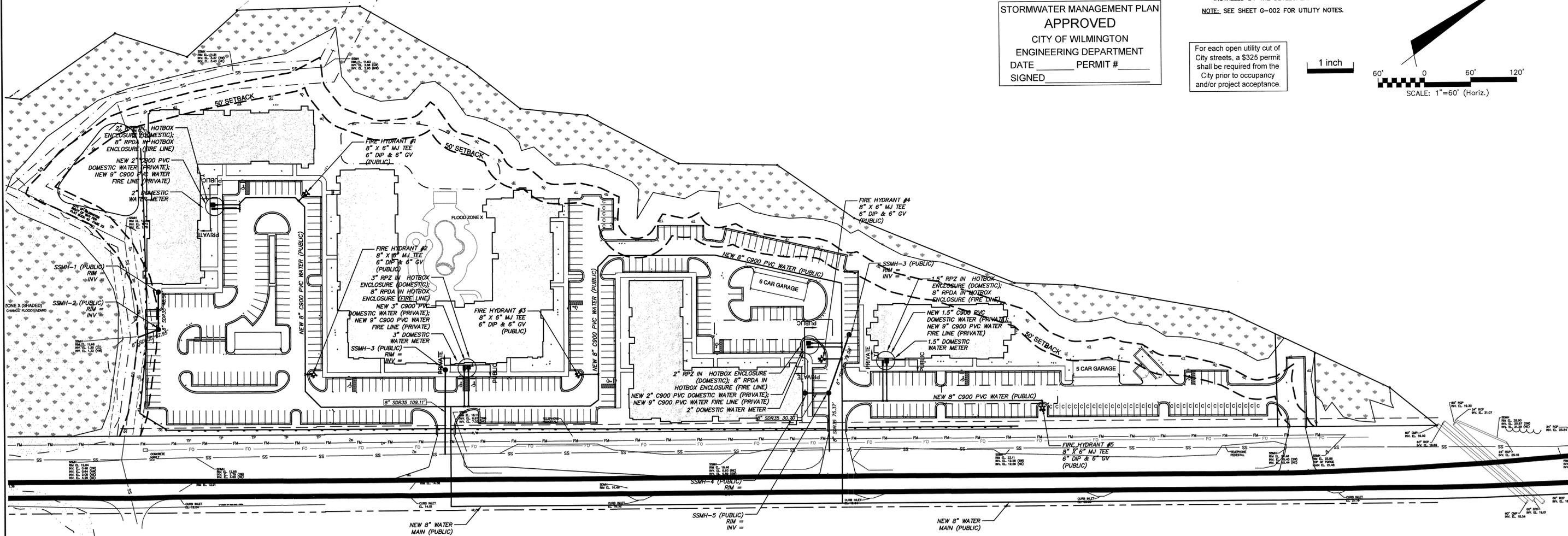
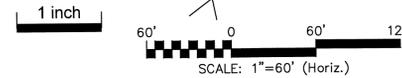
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SIGNED \_\_\_\_\_

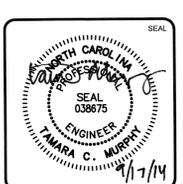
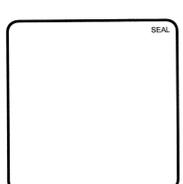
NOTE: ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE SUCH PLACEMENT IS PROHIBITED OR DEEMED IMPRACTICAL BY THE UTILITY PROVIDER. UNDERGROUND TERMINAL FACILITIES FOR STREET LIGHTING ALONG ALL PUBLIC STREETS ABUTTING THE SUBJECT SITE SHALL BE INSTALLED BY THE DEVELOPER.

NOTE: SEE SHEET G-002 FOR UTILITY NOTES.

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



REVNO	DESCRIPTIONS	DATE



**MCKIM & CREED**

243 North Front Street  
Wilmington, NC 28401  
Phone: (910)343-1048, Fax: (910)251-8282  
NC LICENSE # 1222  
www.mckimcreed.com

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Orchestrating REAL Solutions

**INDEPENDENCE WEST APARTMENTS**  
3828 & 3970 INDEPENDENCE BOULEVARD  
WILMINGTON, NORTH CAROLINA

**UTILITY PLAN**

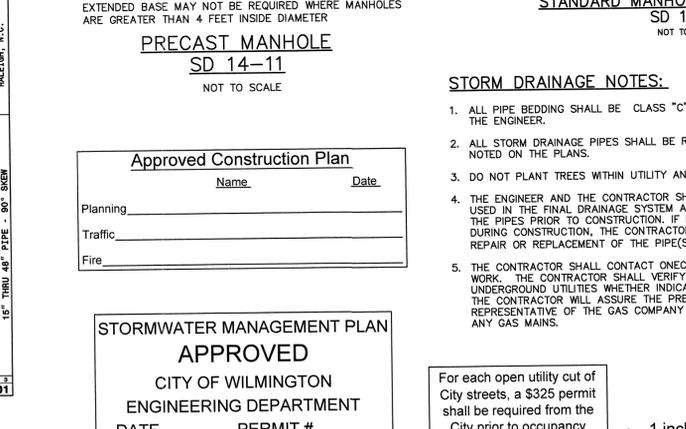
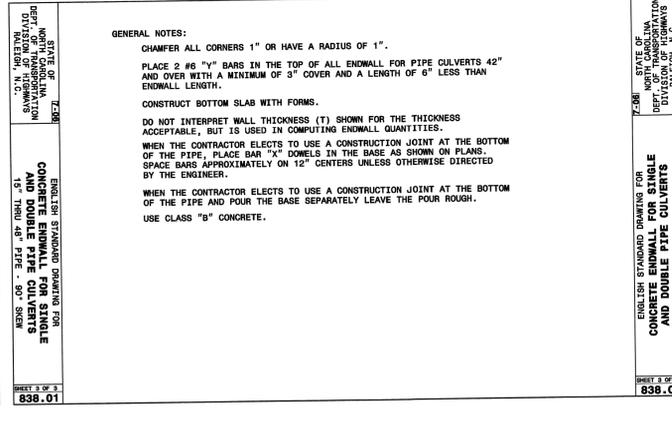
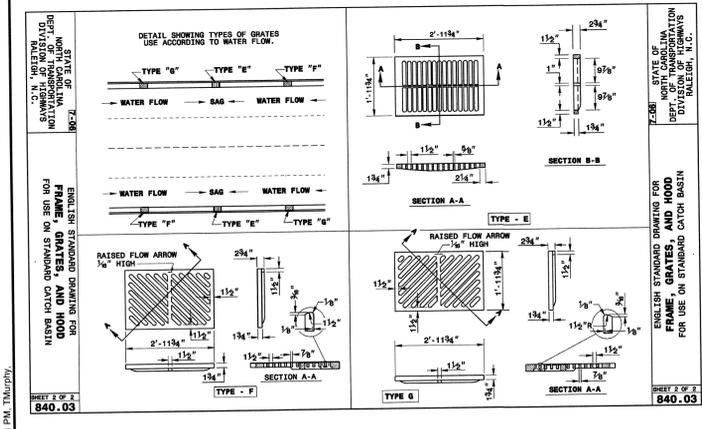
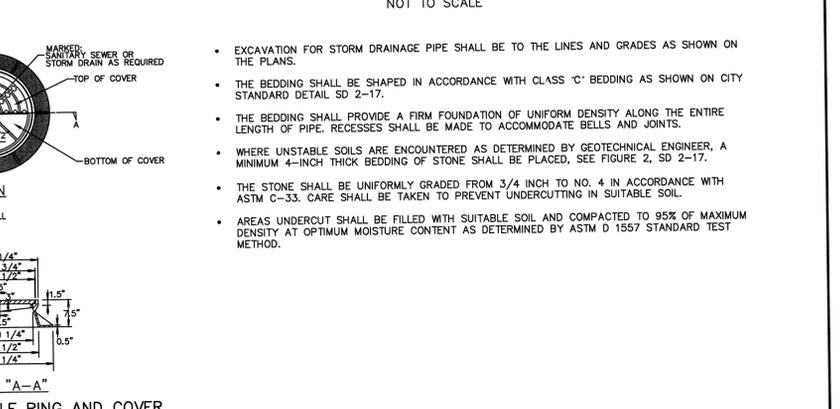
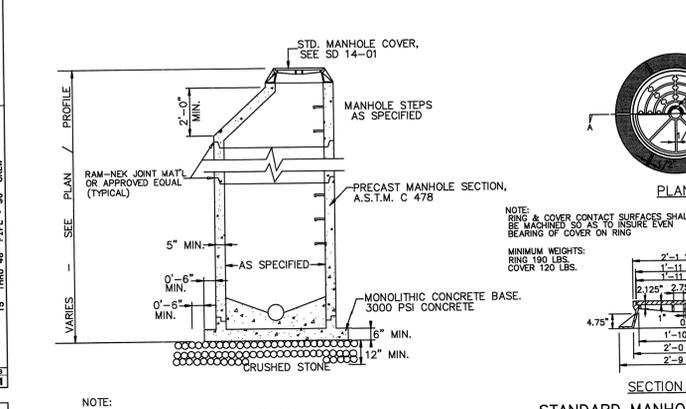
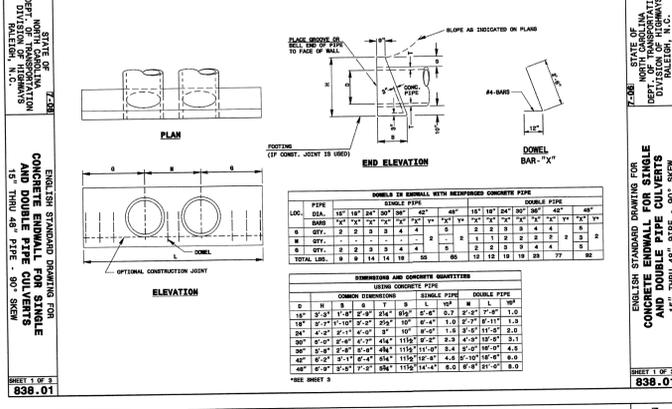
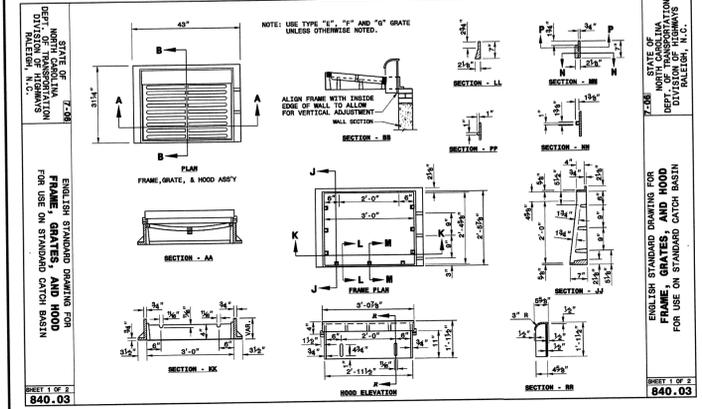
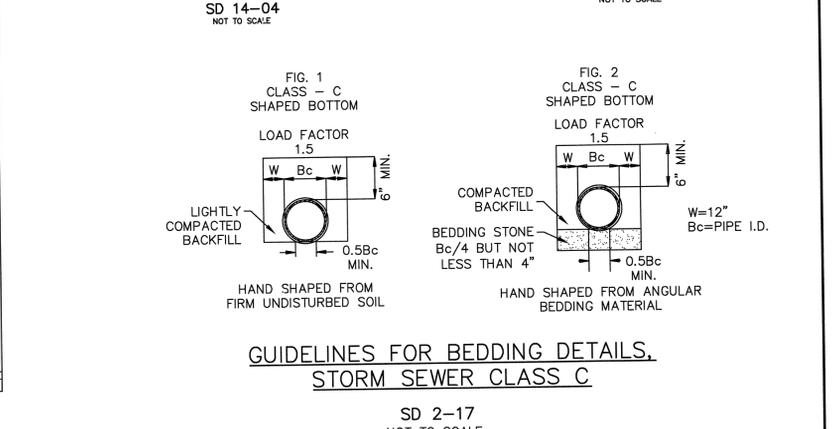
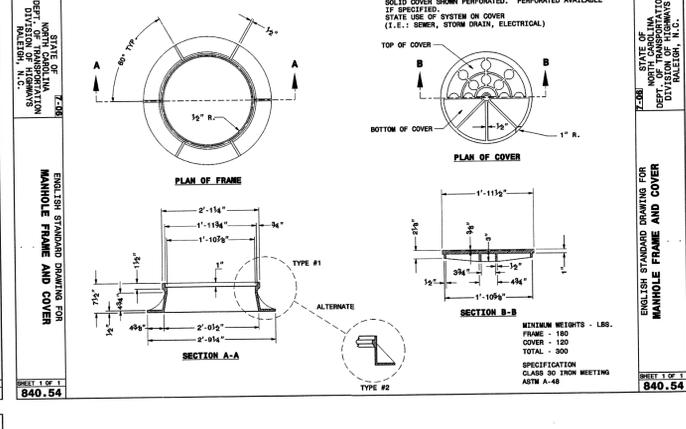
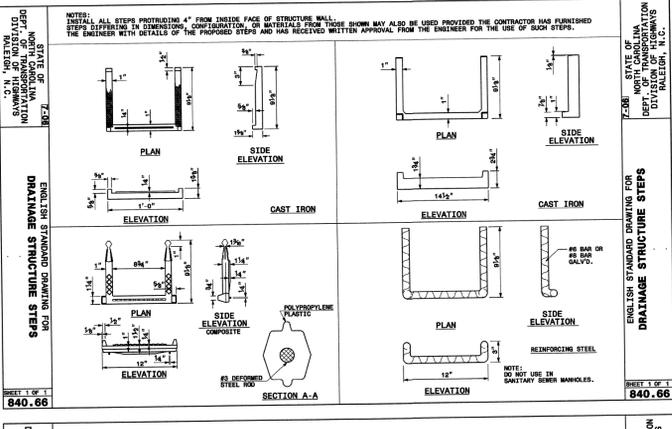
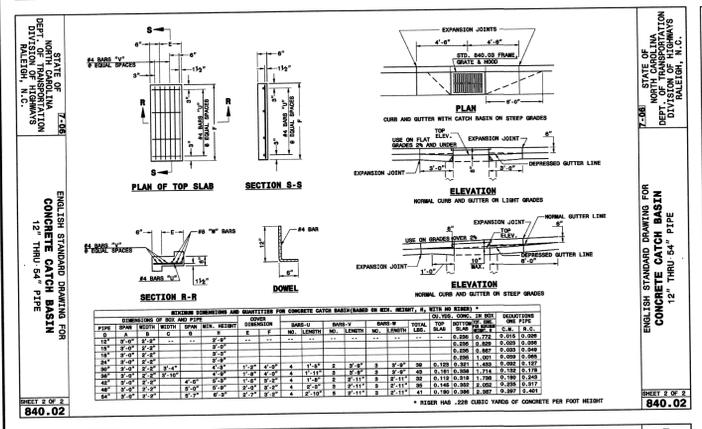
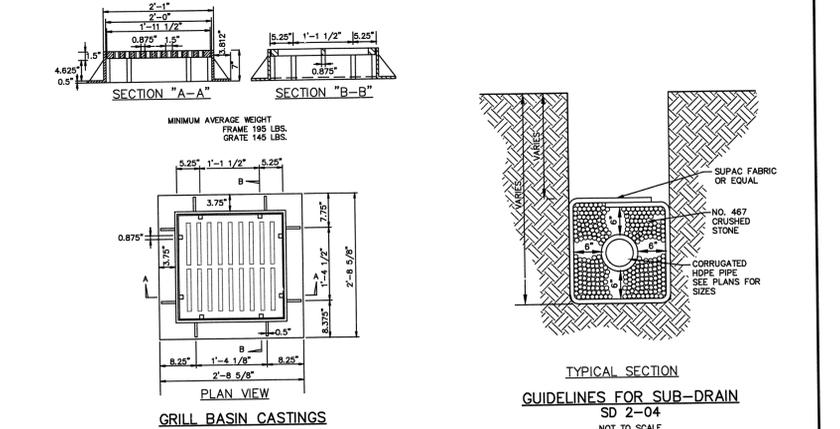
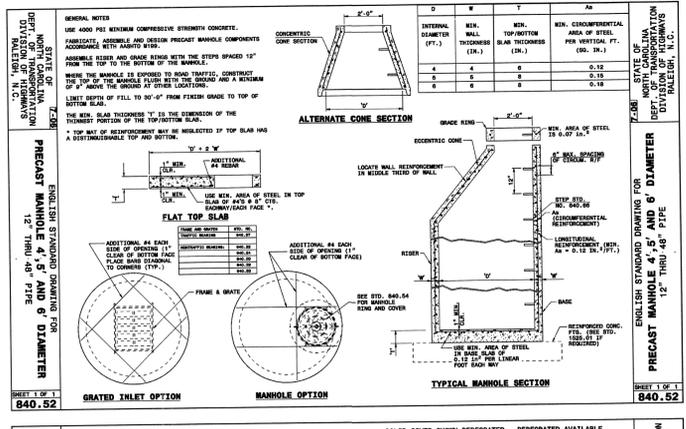
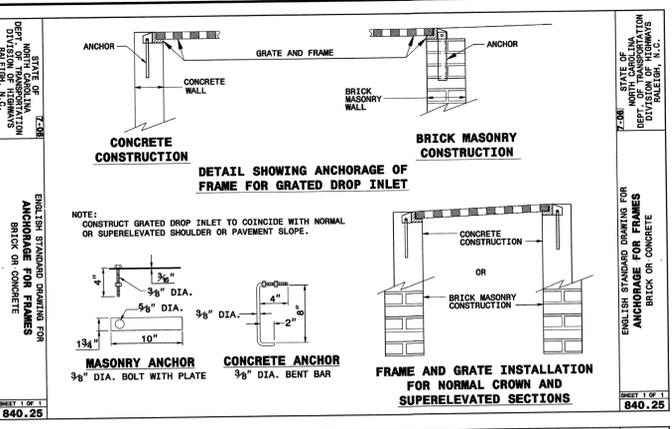
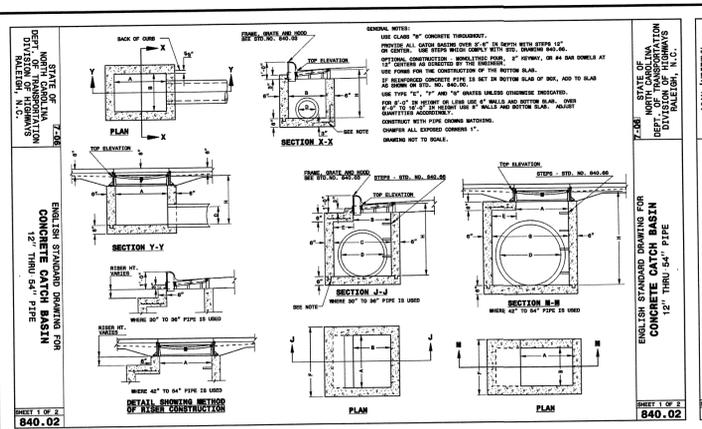
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DRAWN: TCM	DESIGNED: TCM	CHECKED: RMC
PROJ. MGR: RMC	STATUS: PRELIMINARY PLANS	REVISION: NOT FOR CONSTRUCTION

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REV. NO.	DESCRIPTION	DATE

**Professional Engineer Seal**  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 036675  
MARIA C. MURPHY  
1/17/11

**MCKIM & CREED**  
243 North Front Street  
Wilmington, NC 28401  
Phone: (910)343-1048, Fax: (910)251-8282  
NC LICENSE F-1222  
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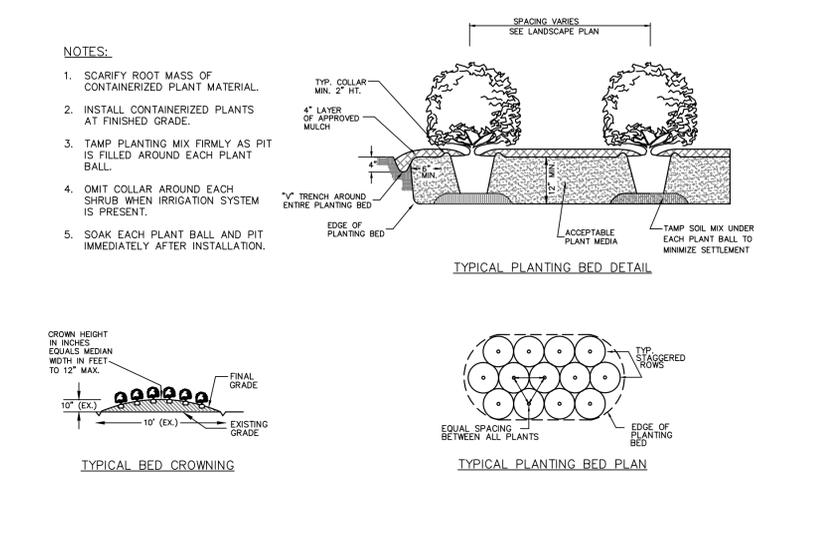
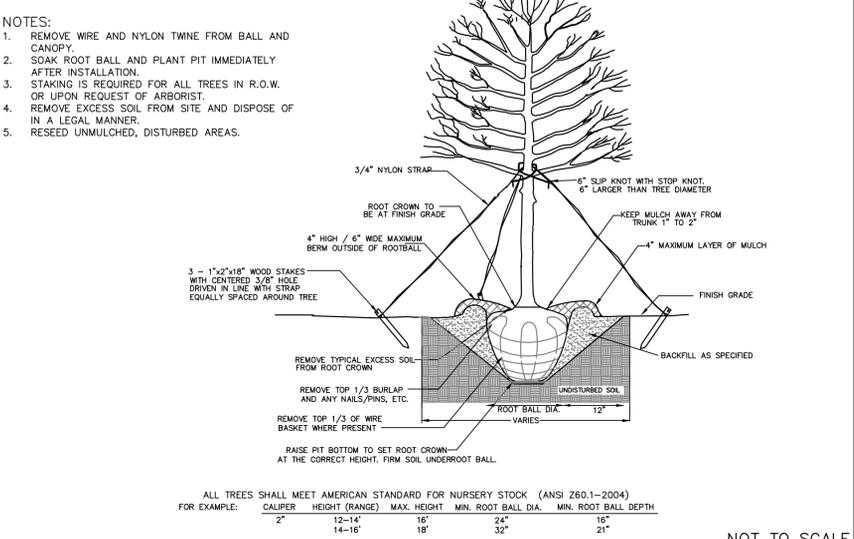
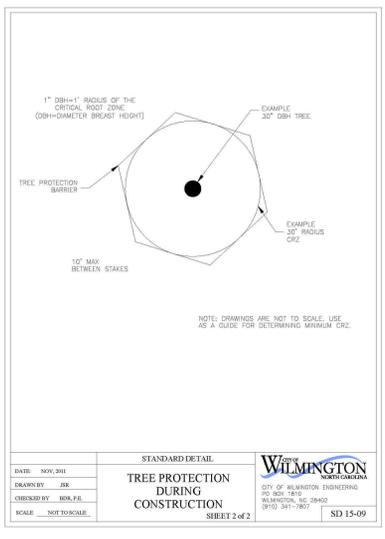
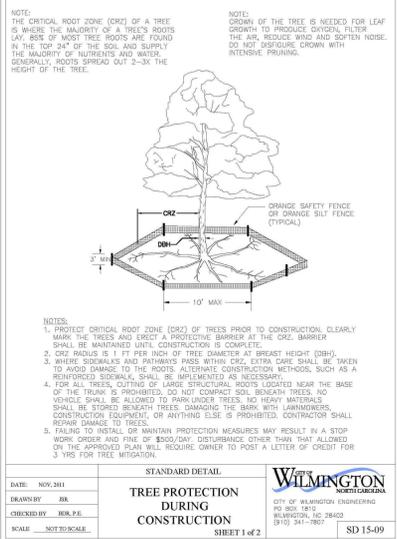
**STORM DRAINAGE AND GRADING DETAILS**

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DRAWN: TCM  
DESIGNED: TCM  
CHECKED: RMC  
PROJ. MGR: RMC

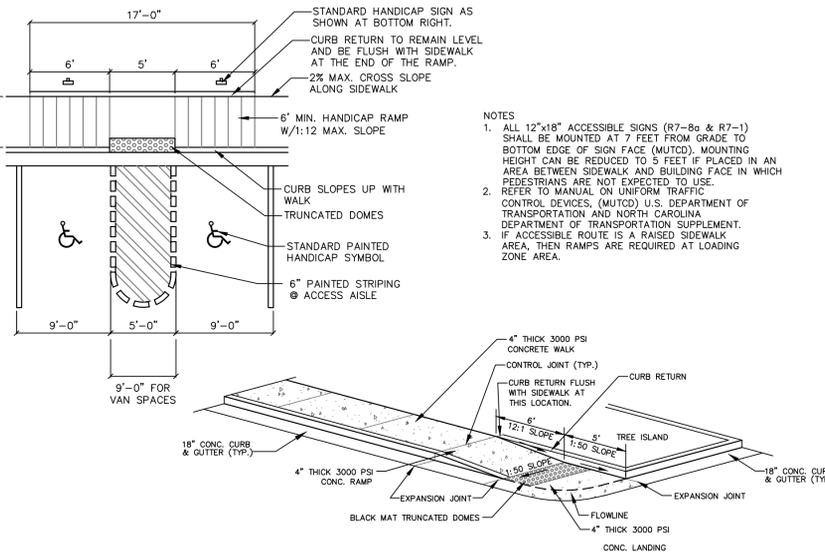
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STATUS: PRELIMINARY PLANS  
REVISION: NOT FOR CONSTRUCTION

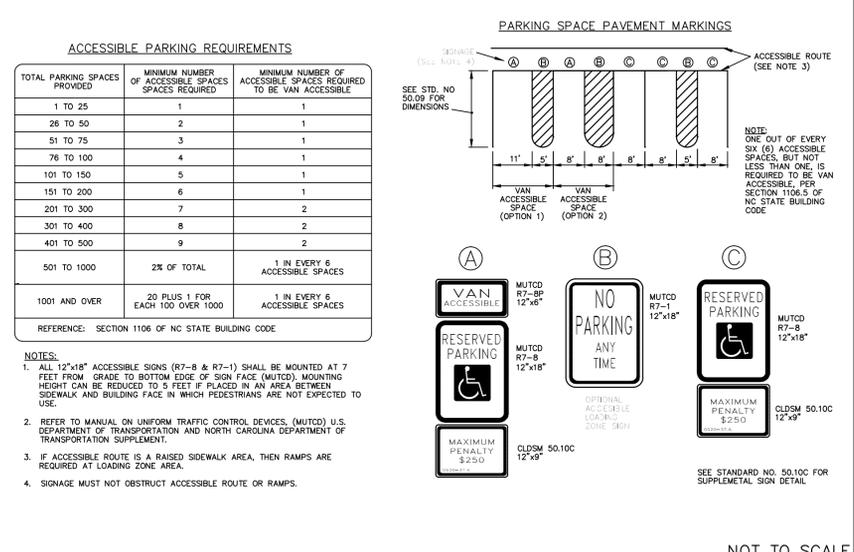
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CG501  
DRAWING NUMBER  
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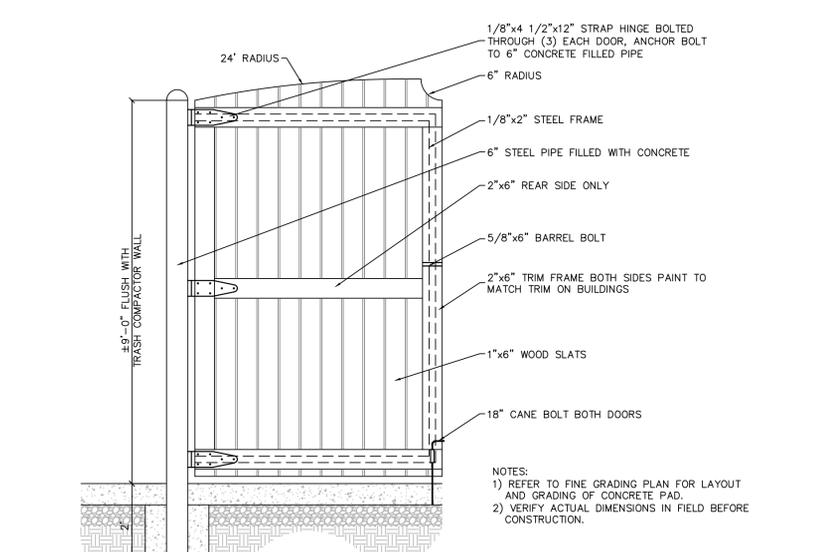
**1 TREE PROTECTION FENCING**



**2 TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)**

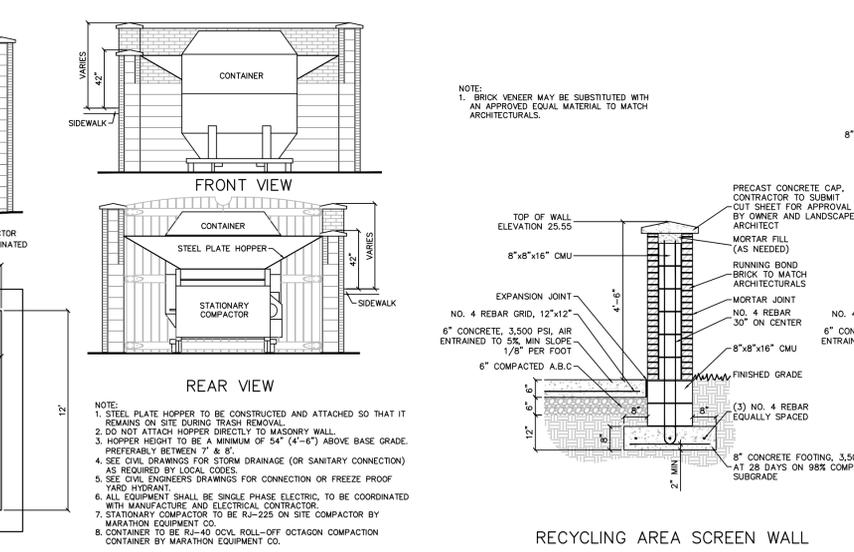
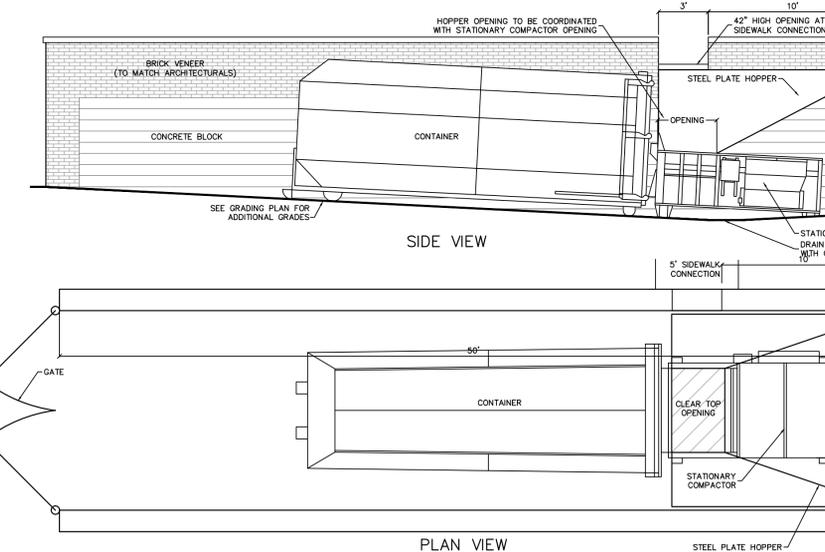


**3 SHRUB PLANTING BED**

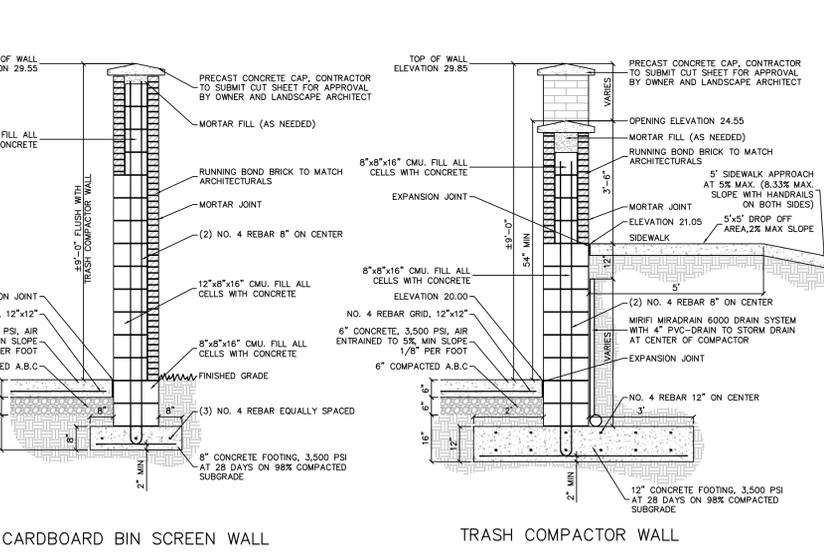


**4 TYPICAL CURB RAMP, PARKING SPACE AND ISLAND HANDICAP RAMP**

**5 ACCESSIBLE PARKING AND SIGNAGE STANDARDS**



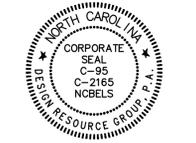
**6 TRASH COMPACTOR AND RECYCLING AREA DETAILS**



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WILMINGTON, NORTH CAROLINA  
**SYMPHONY PROPERTIES, LLC.**  
103 TORREY PINES DRIVE  
CARY, NC 27513

CONSTRUCTION DOCUMENTS



NOT TO SCALE

PROJECT #: 364-004  
DRAWN BY: MB  
CHECKED BY: SK

**SITE DETAILS**

SEPTEMBER 17, 2014

REVISIONS:

CL-501