

REV.	DESCRIPTION	DATE
1	CITY OF WILMINGTON STORMWATER - REVISION	10/28/2020
2	CITY OF WILMINGTON STORMWATER RESUBMITAL	04/05/2019

FINAL DRAWING -
FOR REVIEW
PURPOSES ONLY

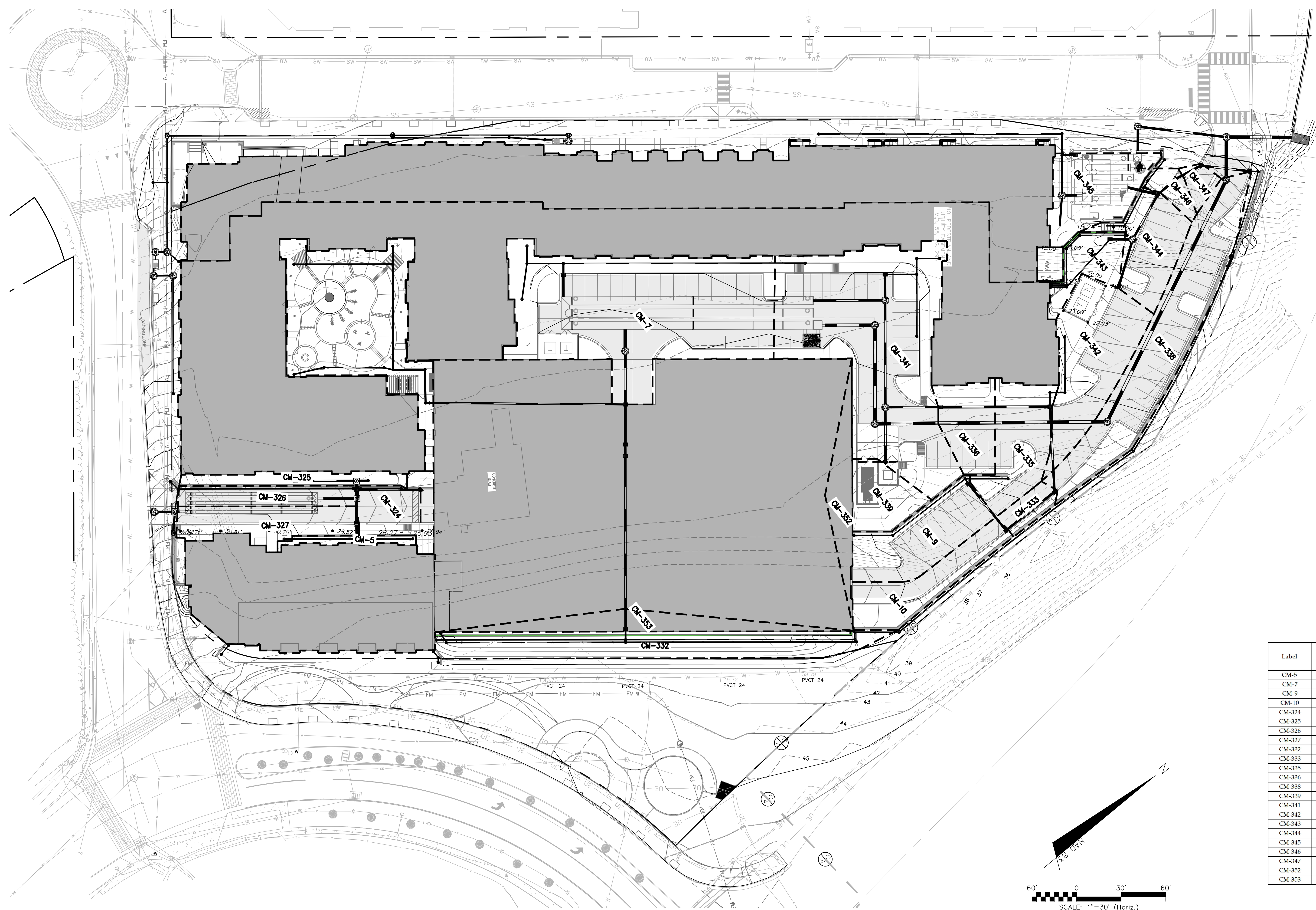
SEAL

243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
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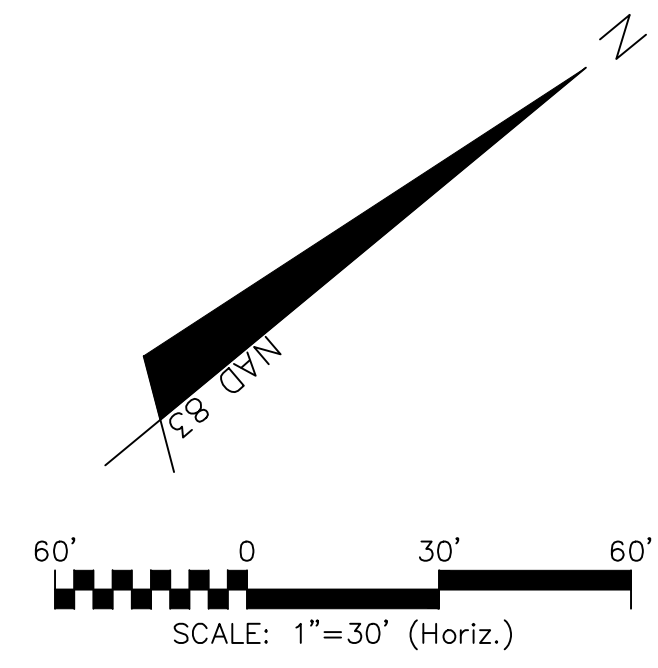
THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

STORMWATER DRAINAGE AREAS

DATE: 12-20-2018	SCALE: CG-002	MAC FILE NUMBER: CG-002
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: DA-2
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM/EEM		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: FINAL DRAWING	REVISION: M	
ISSUED FOR PERMITTING		



Label	Outflow Element	Area (Unifed) (acres)	Runoff Coefficient (Rational)	Time of Concentration (hours)
CM-5	HP-3-8	0.012	0.80	0.17
CM-7	CB-2-1	0.304	0.80	0.17
CM-9	CB-2-23	0.080	0.80	0.17
CM-10	CB-2-22	0.063	0.80	0.17
CM-324	FD-3-10	0.046	0.80	0.17
CM-325	HP-3-10	0.030	0.80	0.17
CM-326	CB-3-9	0.038	0.80	0.17
CM-327	CB-3-7	0.060	0.80	0.17
CM-332	DI-2-30	0.119	0.40	0.17
CM-333	CB-2-21	0.017	0.80	0.17
CM-335	CB-2-20	0.071	0.80	0.17
CM-336	CB-2-19	0.048	0.80	0.17
CM-338	CB-1-13	0.166	0.80	0.17
CM-339	FD-2-18	0.042	0.80	0.17
CM-341	CB-2-10	0.297	0.80	0.17
CM-342	CB-1-16	0.112	0.80	0.17
CM-343	DI-1-15	0.036	0.80	0.17
CM-344	CB-1-10	0.063	0.80	0.17
CM-345	DI-1-8	0.072	0.8	0.17
CM-346	CB-1-11	0.015	0.8	0.17
CM-347	CB-1-12	0.011	0.8	0.17
CM-352	DI-2-31	0.039	0.8	0.17
CM-353	DI-2-30	0.049	0.8	0.17



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FINAL DRAWING FOR REVIEW PURPOSES ONLY

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THE FLATS ON FRONT
 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
INLET DRAINAGE AREAS

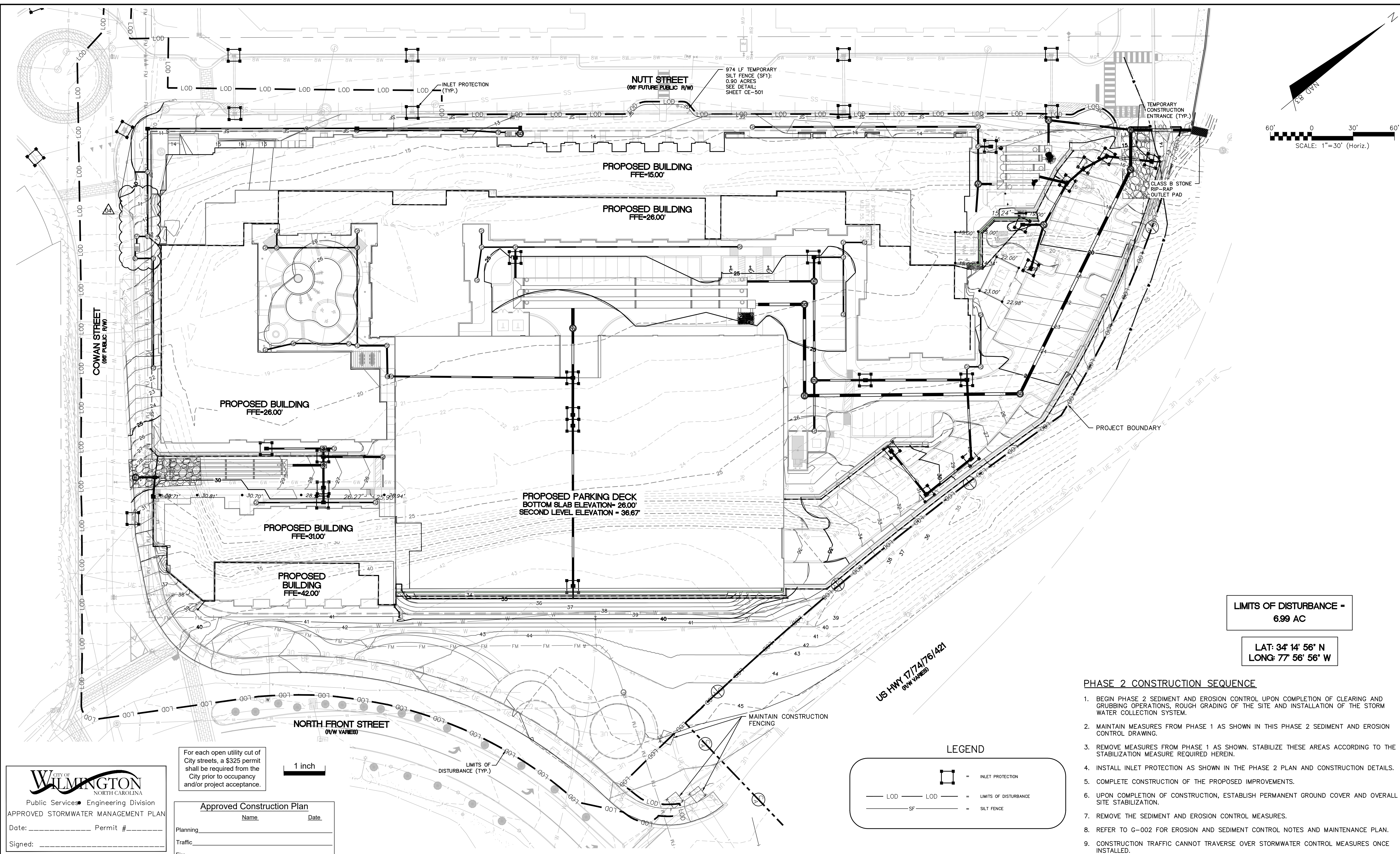
DATE: 12-20-2018
 MCE PROJ. # 7402-0001
 DRAWN ALM/KCE
 DESIGNED ALM/EEM
 CHECKED RMC
 PROJ. MGR. KCE

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

MAC FILE NUMBER **CG-003**
 DRAWING NUMBER **DA-3**

STATUS: **FINAL DRAWING**
 ISSUED FOR PERMITTING

REVISION **M**



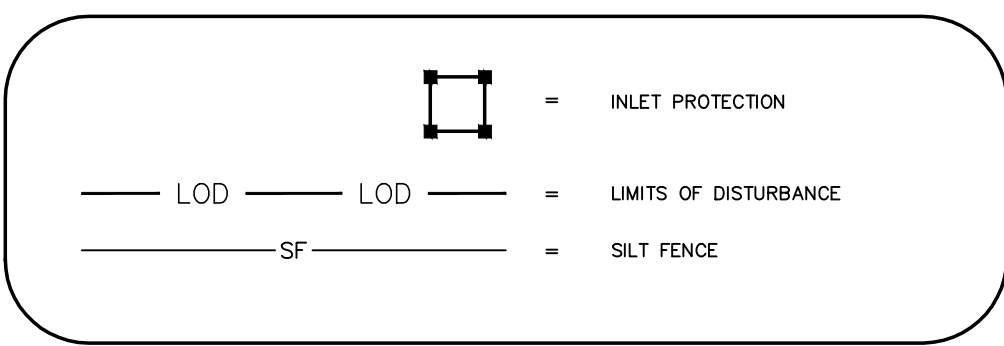
**LIMITS OF DISTURBANCE -
6.99 AC**

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

PHASE 2 CONSTRUCTION SEQUENCE

1. 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.
2. MAINTAIN MEASURES FROM PHASE 1 AS SHOWN IN THIS PHASE 2 SEDIMENT AND EROSION CONTROL DRAWING.
3. REMOVE MEASURES FROM PHASE 1 AS SHOWN. STABILIZE THESE AREAS ACCORDING TO THE STABILIZATION MEASURE REQUIRED HEREIN.
4. INSTALL INLET PROTECTION AS SHOWN IN THE PHASE 2 PLAN AND CONSTRUCTION DETAILS.
5. COMPLETE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
6. UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
7. REMOVE THE SEDIMENT AND EROSION CONTROL MEASURES.
8. REFER TO G-002 FOR EROSION AND SEDIMENT CONTROL NOTES AND MAINTENANCE PLAN.
9. CONSTRUCTION TRAFFIC CANNOT TRAVERSE OVER STORMWATER CONTROL MEASURES ONCE INSTALLED.

LEGEND



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
4	SCM 4 REVISIONS	10/27/2020
3	STORM DRAIN REVISIONS	11/21/2019
2	WALL DRAIN AND FOUNDATION DRAIN REVISIONS	06/21/2019
1	CIPRA REQUIRED CHANGES, WALL DRAIN AND FOUNDATION DRAIN ADDITIONS	05/16/2019
0	CITY OF WILMINGTON - RELEASE FOR CONSTRUCTION PLANS	04/18/2019

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WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

PHASE 2 SEDIMENT AND EROSION CONTROL

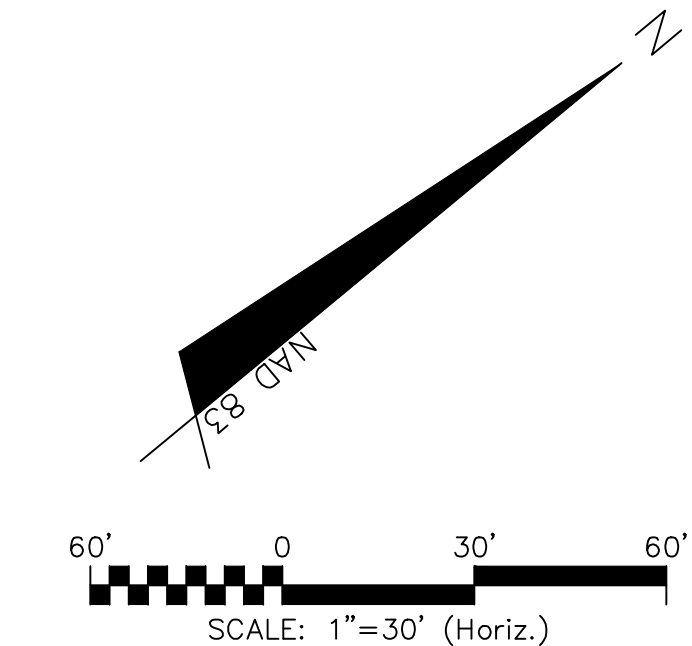
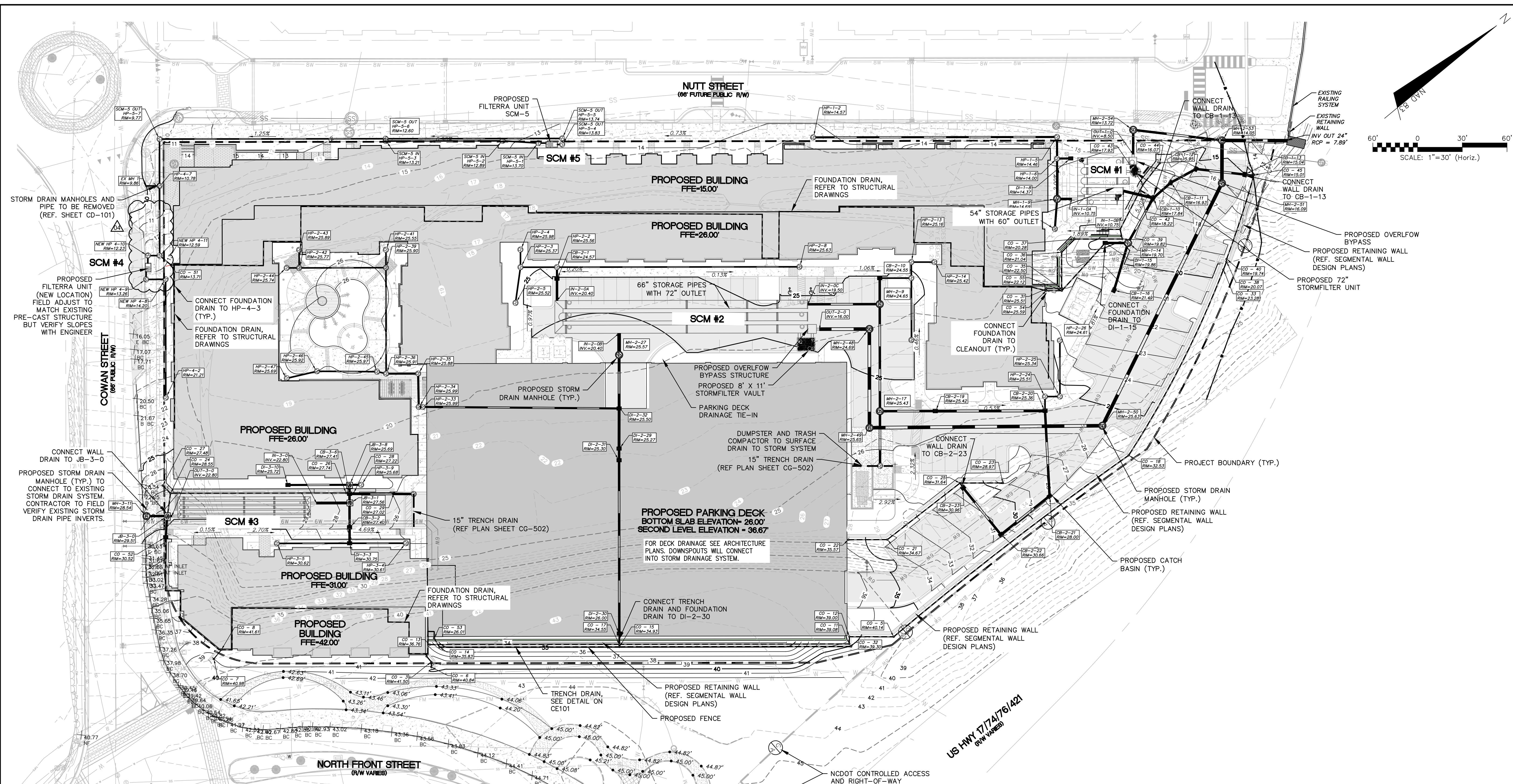
DATE: 04/18/2019
MCE PROJ. # 7402-0001
DRAWN ALM/KCE
DESIGNED ALM
CHECKED RMC
PROJ. MGR. KCE

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

MAC FILE NUMBER
CE-102
DRAWING NUMBER
8

STATUS: **IFC PLAN SET**
ISSUED FOR CONSTRUCTION

REVISION
4



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	

REV.	DESCRIPTION	DATE
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1 inch

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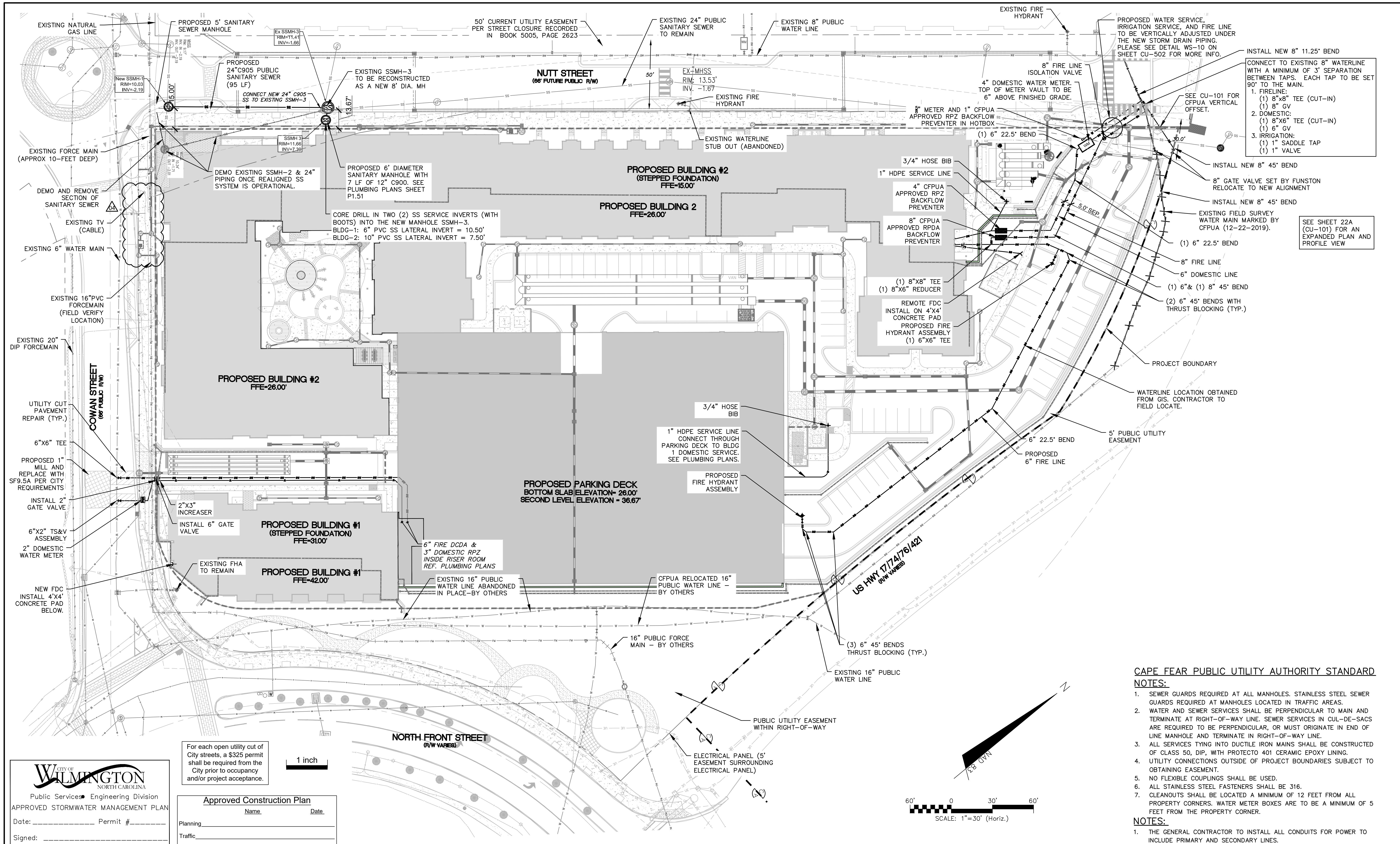
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THE FLATS ON FRONT
WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

GRADING AND STORMWATER PLAN

DATE: 04/18/2019	SCALE: 1"=30'	MAC FILE NUMBER: CG-100
MCE PROJ. # 7402-0001	HORIZONTAL: 1"=30'	DRAWING NUMBER: 21
DRAWN: ALM/KCE	VERTICAL: N/A	
DESIGNED: ALM		
CHECKED: RMC		
PROJ. MGR: KCE		
STATUS: IFC PLAN SET ISSUED FOR CONSTRUCTION		REVISION: 4

- NOTES:**
- THE GENERAL CONTRACTOR TO SHORE ANY WALLS OR EXCAVATIONS FOR THE CONSTRUCTION OF ANY NEW WALLS THROUGHOUT THE PROJECT. ANY COSTS ASSOCIATED WITH SHORING IS THE RESPONSIBLE OF THE GENERAL CONTRACTOR.
 - THE GENERAL CONTRACTOR TO PAINT ALL MANHOLES AND CURB INLETS BLACK BEFORE INSTALLATION.
 - CONTRACTOR SHALL REFER TO THE SEGMENTAL BLOCK RETAINING WALL PLAN SET FOR ELEVATIONS, DETAILS, AND INSTALLATION GUIDANCE FOR ALL SEGMENTAL BLOCK RETAINING WALLS, AND STRUCTURAL RETAINING WALLS.



INSTALL NEW 8" 11.25' BEND
 CONNECT TO EXISTING 8" WATERLINE WITH A MINIMUM OF 3' SEPARATION BETWEEN TAPS. EACH TAP TO BE SET 90° TO THE MAIN.
 1. FIRELINE:
 (1) 8"x8" TEE (CUT-IN)
 (1) 8" GV
 2. DOMESTIC:
 (1) 8"x6" TEE (CUT-IN)
 (1) 6" GV
 3. IRRIGATION:
 (1) 1" SADDLE TAP
 (1) 1" VALVE

SEE SHEET 22A (CU-101) FOR AN EXPANDED PLAN AND PROFILE VIEW

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.

NOTES:

- THE GENERAL CONTRACTOR TO INSTALL ALL CONDUITS FOR POWER TO INCLUDE PRIMARY AND SECONDARY LINES.

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

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Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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4	SDM 4 REVISIONS	10/27/2020
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1	CFPUA REQUIRED CHANGES, WALL DRAIN AND FOUNDATION DRAIN ADDITIONS	05/16/2019
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 WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

OVERALL UTILITY PLAN

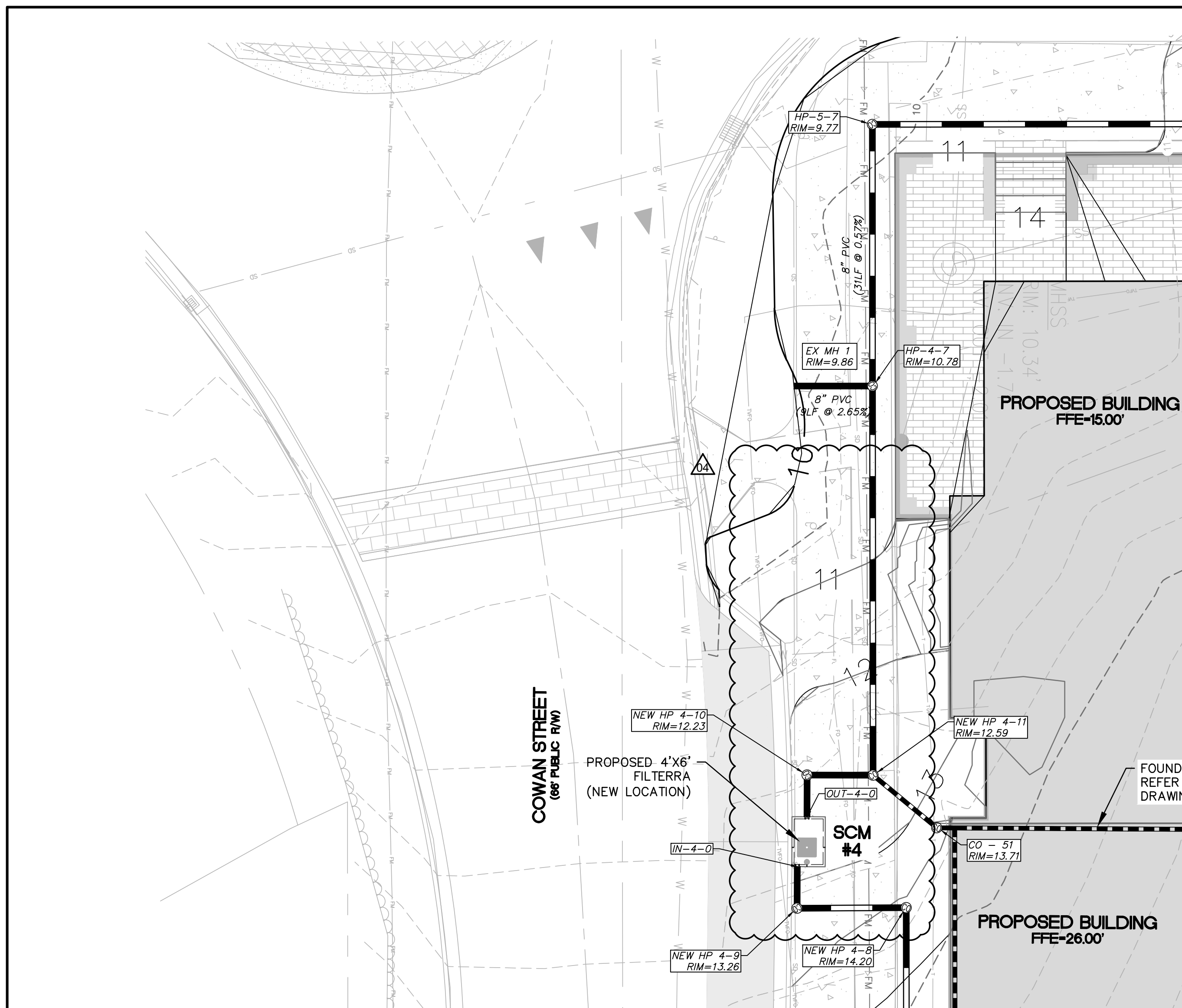
DATE: 04/18/2019
 MCE PROJ # 7402-0001
 DRAWN ALM/KCE
 DESIGNED ALM
 CHECKED RMC
 PROJ. MGR. KCE

SCALE
 HORIZONTAL: 1"=50'
 VERTICAL: N/A

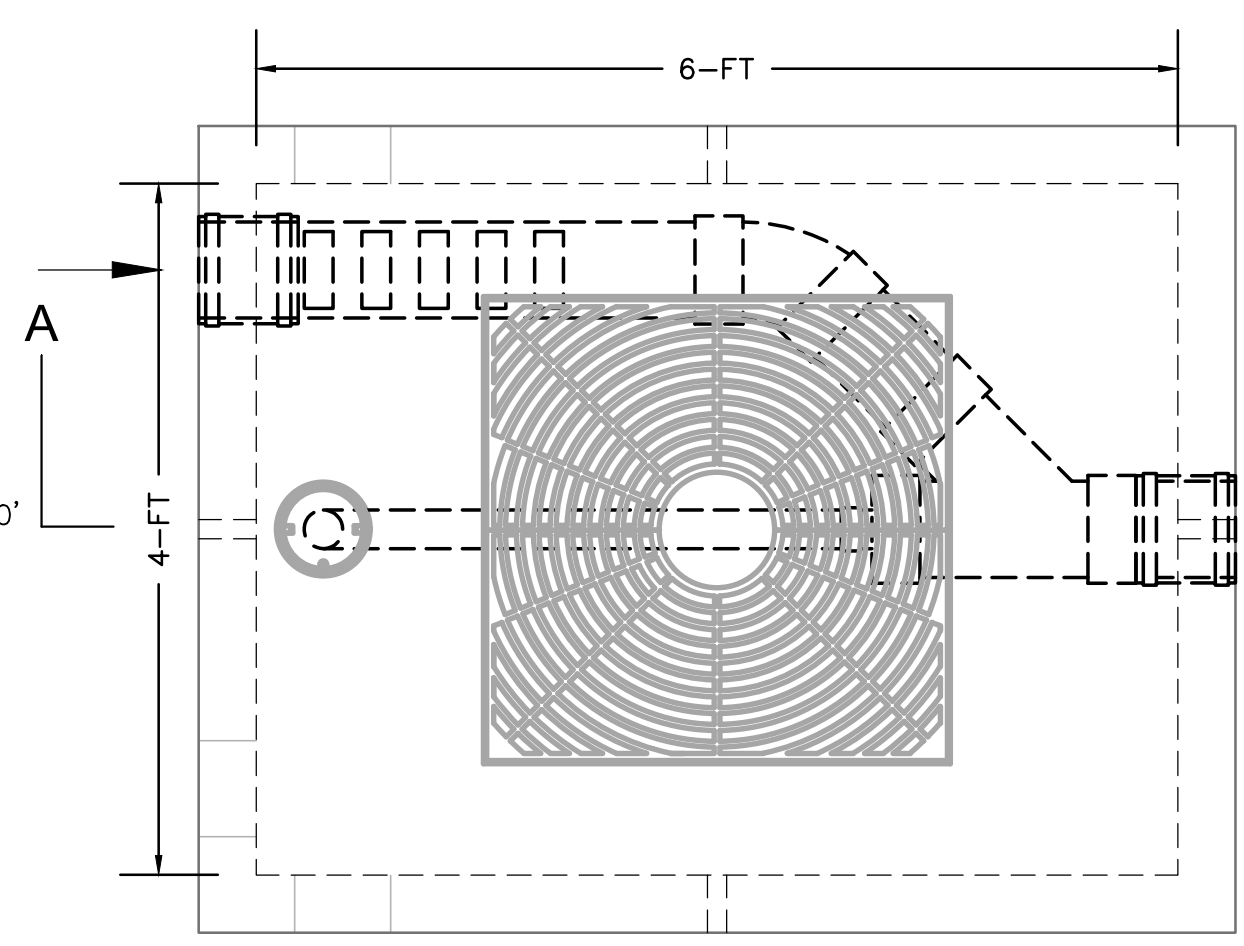
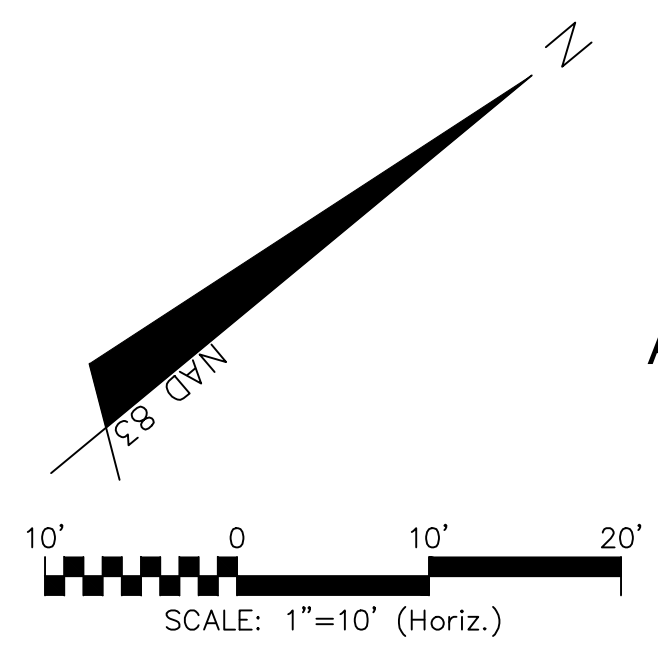
MAC FILE NUMBER
CU-100
 DRAWING NUMBER
22

STATUS: **IFC PLAN SET**
 ISSUED FOR CONSTRUCTION

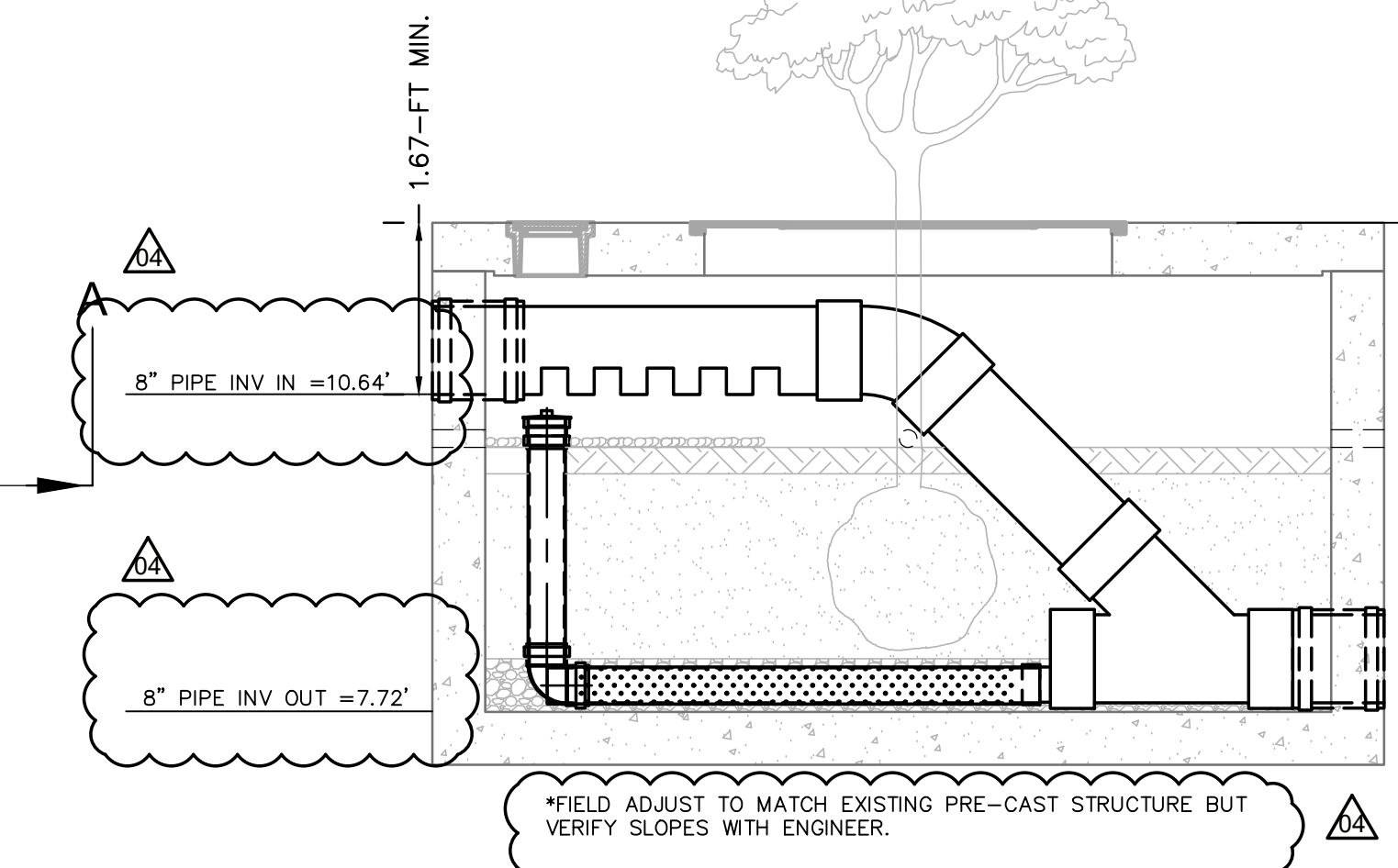
REVISION
2



FILTERRA BIOFILTRATION (TYP.) - SCM #4



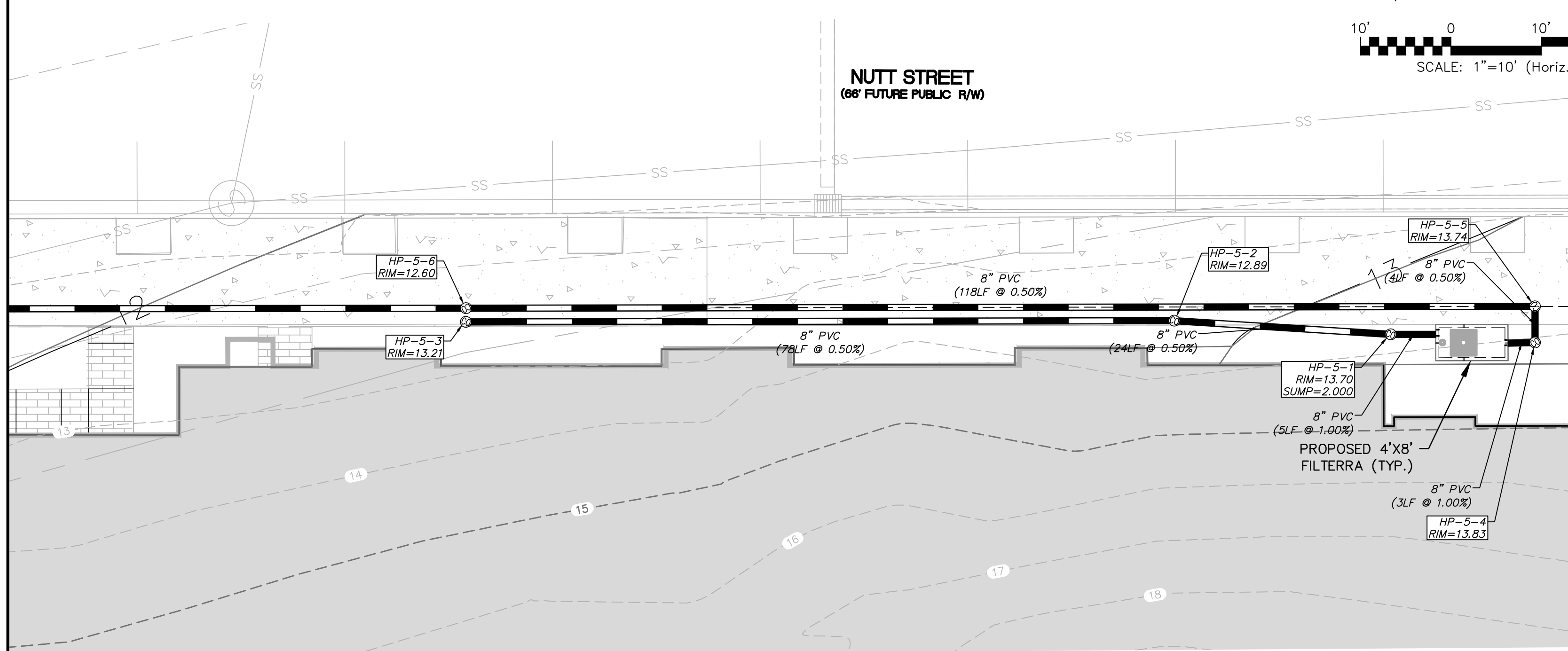
PLAN VIEW-NTS



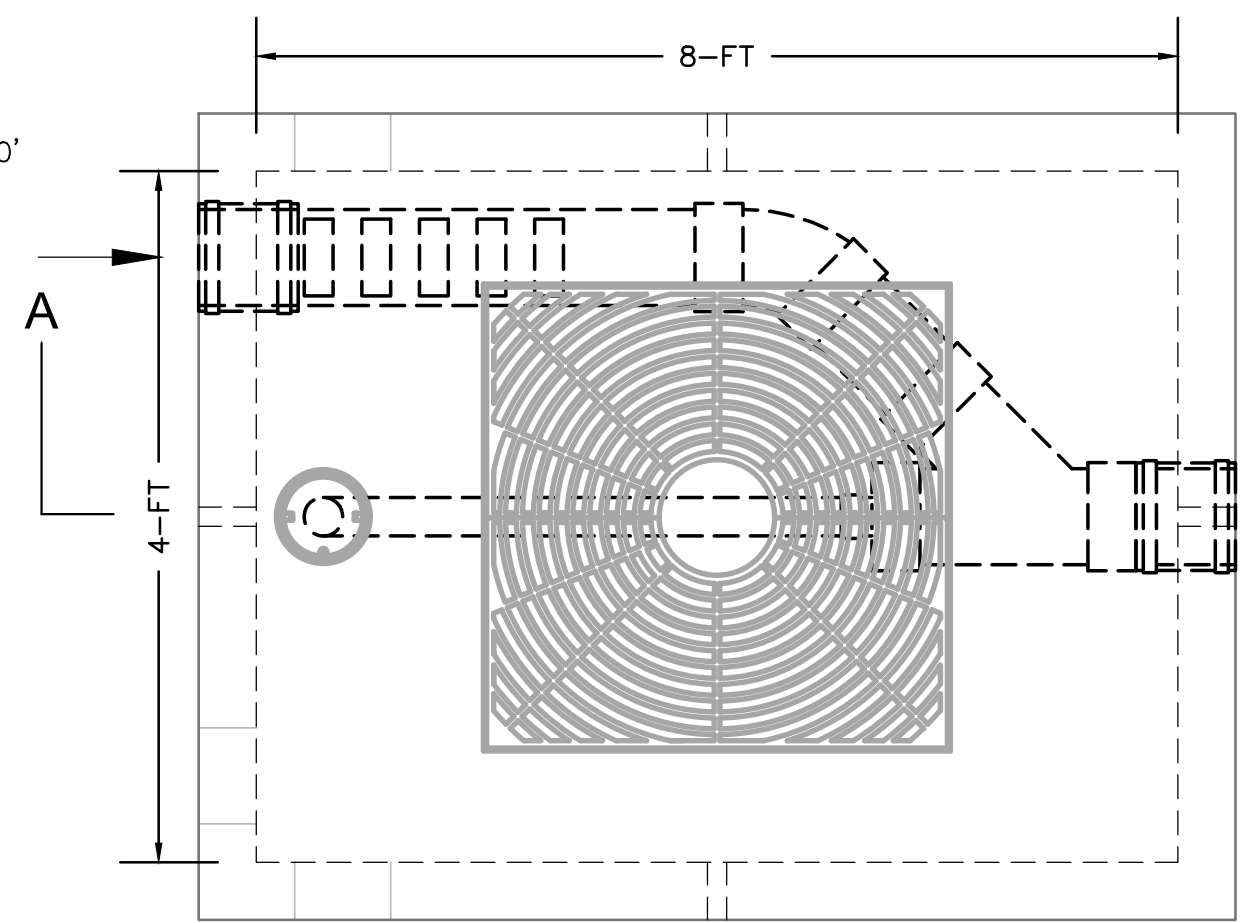
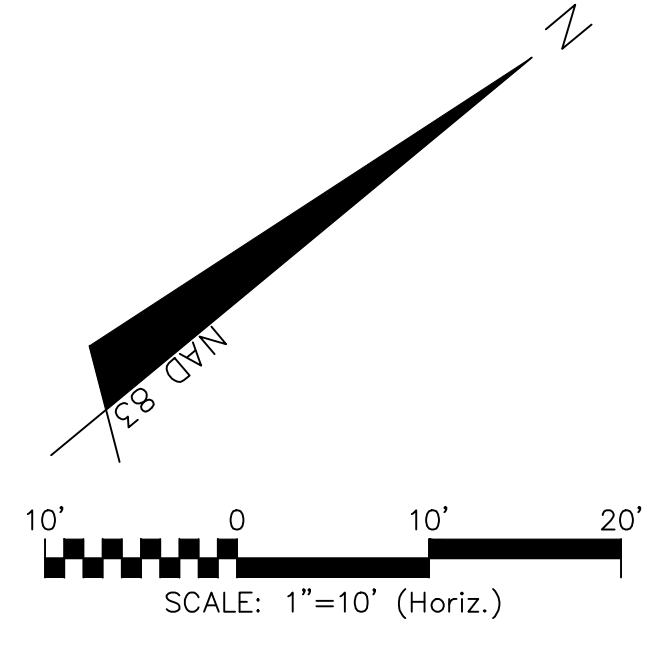
SECTION A-A

NOTES:

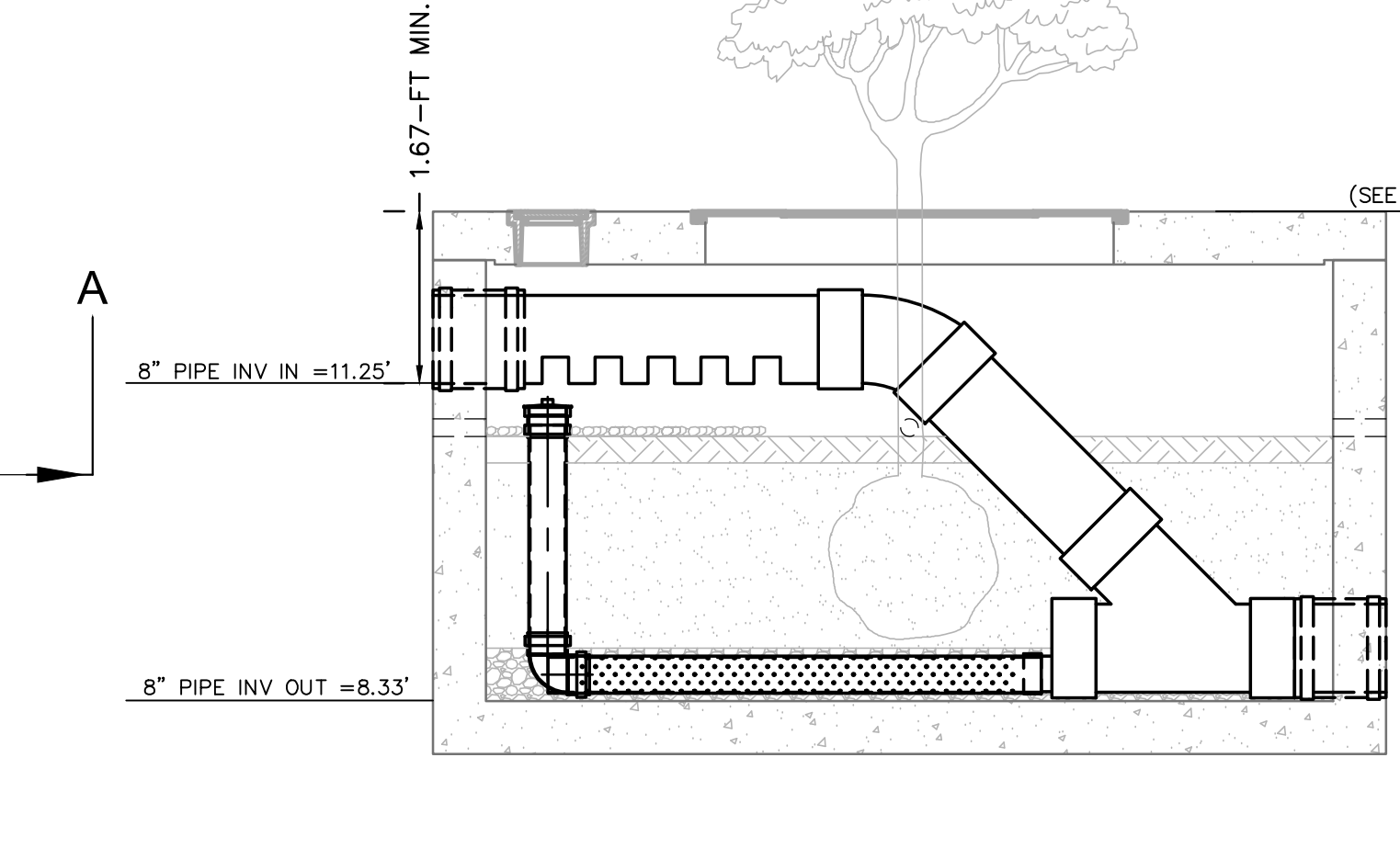
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2. THE GENERAL CONTRACTOR TO PAINT ALL MANHOLES AND CURB INLETS BLACK BEFORE INSTALLATION.



FILTERRA BIOFILTRATION (TYP.) - SCM #5



PLAN VIEW-NTS



SECTION A-A

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1 inch

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

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Signed: _____

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DESIGN

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WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

STORMWATER MANAGEMENT DETAILS

DATE: 04/18/2019
MCE PROJ. # 7402-0001
DRAWN: ALM/KCE
DESIGNED: ALM
CHECKED: RMC
PROJ. MGR. KCE

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

MAC FILE NUMBER
CN-504
DRAWING NUMBER
44

STATUS: **IFC PLAN SET**
ISSUED FOR CONSTRUCTION

REVISION
4