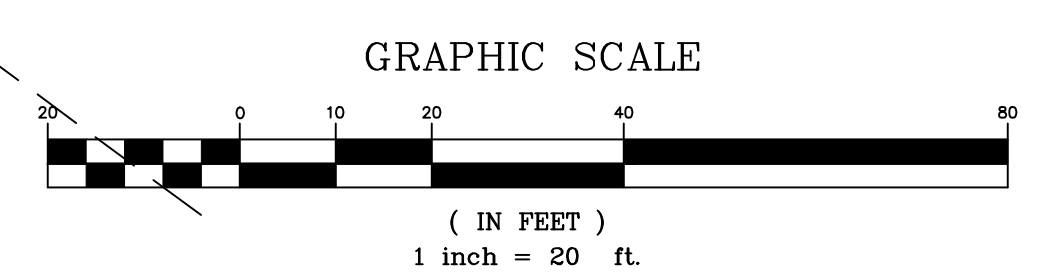


EXISTING PROTECTED TREES CHART					
POINT #	DESCRIPTION	REMOVAL	REASON FOR REMOVAL	MITIGATION REQUIRED	MITIGATION FACTOR
1	9" HW	NO	N/A	N/A	--
2	22" GUM	NO	N/A	N/A	--
3	21" PECAN	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
4	5" DOGWOOD	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
5	8" HW	NO	N/A	N/A	--
6	22" HW	NO	N/A	N/A	--
7	5" DOGWOOD	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
8	21" MAGNOLIA	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
9	5" DOGWOOD	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
10	28" OAK	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
11	24" OAK	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
12	15" PECAN	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
13	8" MAPLE	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
14	32" GUM	NO	N/A	N/A	--
15	8" DOGWOOD	YES	ESSENTIAL SITE IMPROVEMENTS	YES	2/3 (100%)
16	17" HW	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
17	7" DOGWOOD	NO	N/A	N/A	--
18	22" TWIN OAK	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
19	24" CEDAR	NO	N/A	N/A	--
20	6" DOGWOOD	NO	N/A	N/A	--
21	6" DOGWOOD	NO	N/A	N/A	--
22	8" DOGWOOD	NO	N/A	N/A	--
23	12" DOGWOOD	NO	N/A	N/A	--
24	16" OAK	YES	ESSENTIAL SITE IMPROVEMENTS	EXEMPT	--
25	24" GUM	YES	ESSENTIAL SITE IMPROVEMENTS	YES	2/3 (75%)
26	12"/24" OAK	YES	ESSENTIAL SITE IMPROVEMENTS	YES	2/3 (100%)
27	55" OAK	NO	N/A	N/A	--
28	24" GUM	NO	N/A	N/A	--

For each open utility cut of City streets a S325 permit shall be required from the City prior to occupancy and/or project acceptance.

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

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



REV. NO.	DESCRIPTION	DATE
1	REVISED PER TRC COMMENTS.	2-22-19

PRELIMINARY PLAN
NOT FOR RECORDATION,
CONVEYANCES, OR SALES

EXISTING CONDITIONS & DEMOLITION PLAN
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

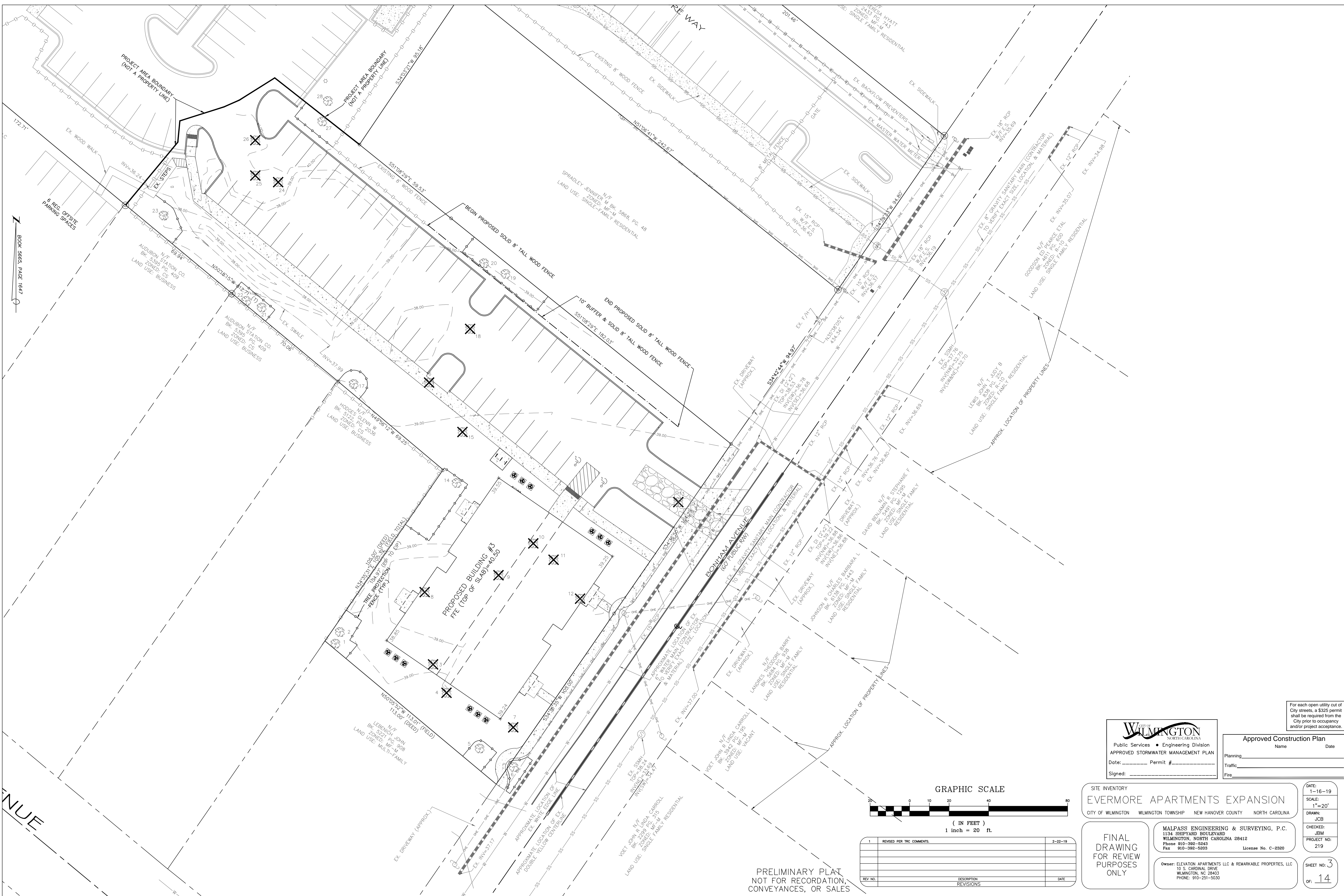
FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-382-6643
Fax 910-392-5993 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

DATE: 1-16-19
SCALE: 1"=20'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219
SHEET NO: 2
OF: 14

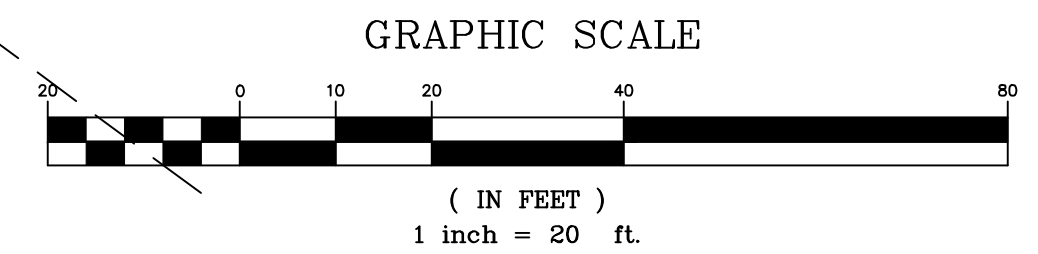
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BOOK 5965, PAGE 1647

AVENUE

PRELIMINARY PLAN
NOT FOR RECORDATION,
CONVEYANCES, OR SALES



REV NO.	DESCRIPTION	DATE
1	REVISED PER TRC COMMENTS.	2-22-19

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

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

SITE INVENTORY
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

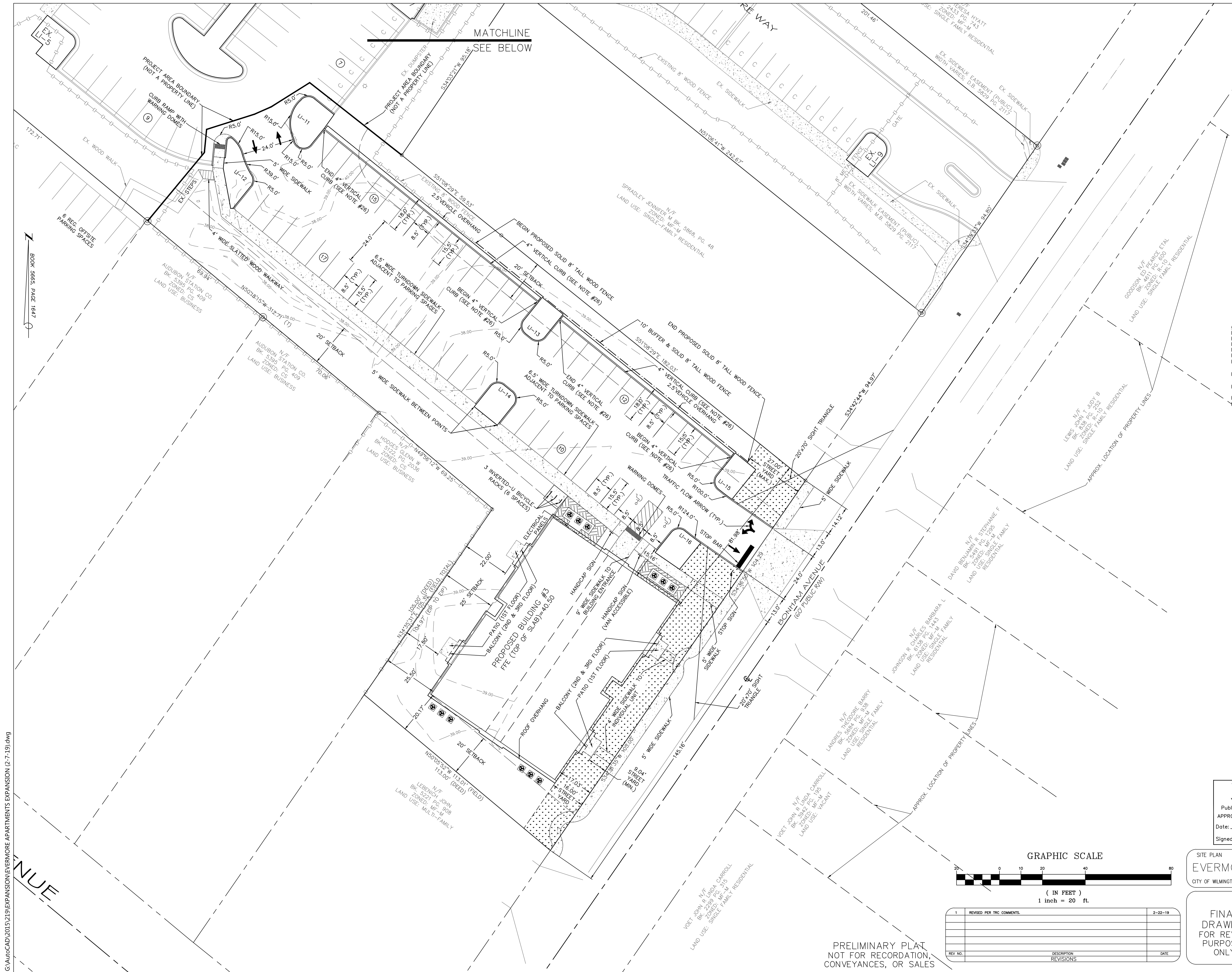
FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6543
Fax 910-392-6993 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLAN DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

DATE: 1-16-19
SCALE: 1"=20'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219
SHEET NO: 3
OF: 14

For each open utility cut of City streets, a S325 permit shall be required from the City prior to occupancy and/or project acceptance.



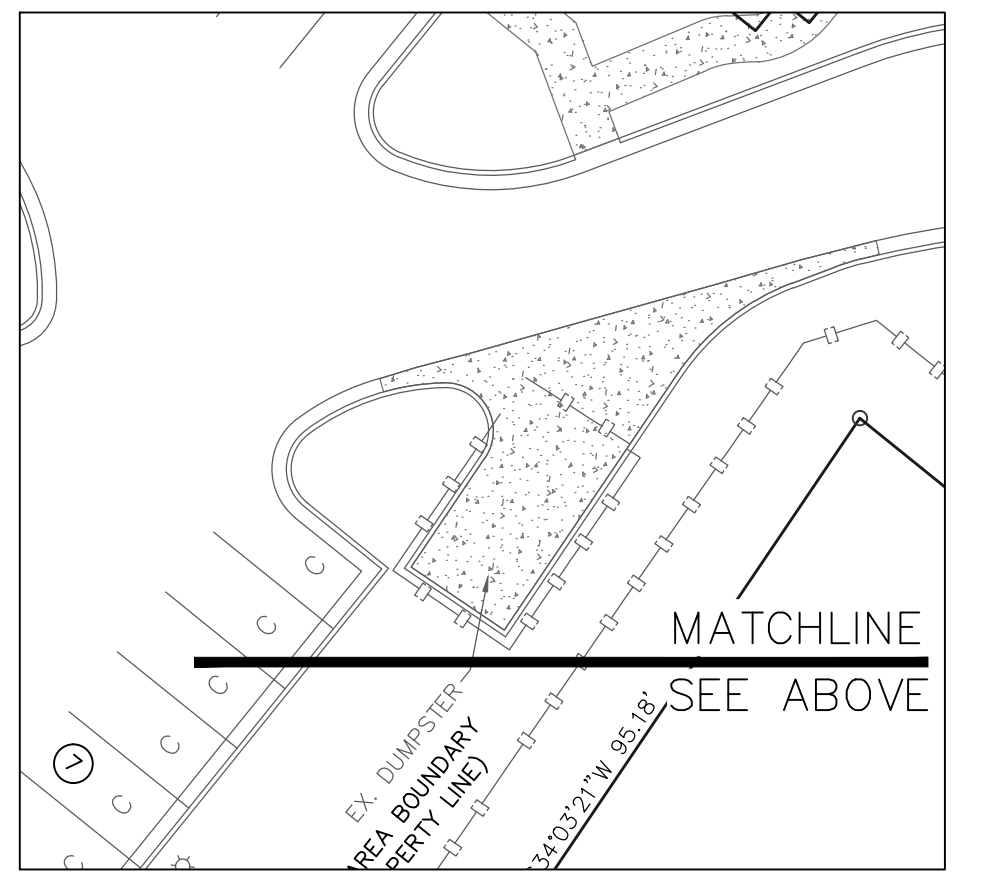
STREET YARD ALONG BONHAM AVENUE (PROJECT AREA)
 STREET FRONTAGE = 105.00 + 104.29 + 25.00 = 184.29 FT
 REQUIRED STREET YARD = 18 * 184.29 = 3,317.22 SF
 PROVIDED STREET YARD = 667.20 + 2,650.77 = 3,317.97 SF
 IMPERVIOUS AREA = 267 SF
 PERCENT IMPERVIOUS = 267 / 3,317.97 * 100% = 8.05%
 REQUIRED PLANTINGS = 3,317.97 / 600 = 5.53 * 6 = 33.18, 33 SHRUBS
 3 UNDERSTORY TREES PER 1 CANOPY TREE (OR 5.53 * 6 = 33.18, 33 SHRUBS)
 PROVIDED PLANTINGS = 18 UNDERSTORY TREES, 33 SHRUBS
 *SEE LANDSCAPING PLAN FOR PROVIDED TREES & SHRUBS

FOUNDATION PLANTING-NORTHEAST SIDE OF BUILDING #3
 REQUIRED FOUNDATION PLANTING (MAX.) = (70' * 35') * 0.12 = 294 SF
 PROVIDED FOUNDATION PLANTING = 299 SF
 *SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

INTERIOR SHADING (SITE AREA)
 PARKING FACILITY AREA (PARKING LOT AREA TO BACK OF CURB [OR SIDEWALK ADJACENT TO PARKING SPACES] MINUS LANDSCAPE ISLANDS PLUS DRIVEWAYS WITHIN BONHAM AVE. R/W) = 50,212 SF
 REQUIRED INTERIOR SHADING (IS) = 0.2 * 50,212 = 10,042 SF
 EXISTING INTERIOR SHADING (LANDSCAPE ISLANDS 1-10) = 7,150 SF
 EXISTING INTERIOR SHADING TO BE REMOVED (LANDSCAPE ISLAND 6) = 707 SF
 PROPOSED INTERIOR SHADING (LANDSCAPE ISLANDS 11-16) = 4,242 SF
 TOTAL PROVIDED INTERIOR SHADING = 7,150 + 707 + 4,242 = 10,865 SF
 *SEE LANDSCAPING PLAN FOR PROVIDED TREES

INTERIOR LANDSCAPING ISLANDS (SITE AREA)				
LANDSCAPE ISLAND	TOTAL AREA (SF)	IMPERVIOUS AREA (SF)	PERCENT IMPERVIOUS	INTERIOR SHADING (SF)
EX. LI-1	217.17	0	0	354
EX. LI-2	217.86	0	0	354
EX. LI-3	250.28	0	0	707
EX. LI-4	251.82	0	0	354
EX. LI-5	288.65	0	0	354
EX. LI-6	REMOVED DUE TO DRIVE AISLE CONNECTION			
EX. LI-7	242.07	0	0	707
EX. LI-8	217.76	0	0	157
EX. LI-9	216.90	0	0	707
EX. LI-10	1,456.02	0	0	2,749
LI-11	309.84	0	0	707
LI-12	267.77	0	0	707
LI-13	216.31	0	0	707
LI-14	218.18	0	0	707
LI-15	216.54	0	0	707
LI-16	216.25	0	0	707

OPEN SPACE (SITE AREA)
 REQUIRED OPEN SPACE = 0.35 * 137,351 = 48,073 SF
 REQUIRED RECREATION AREA = 0.5 * 48,073 = 24,037 SF
 REQUIRED ACTIVE RECREATION AREA = 0.5 * 24,037 = 12,019 SF
 PROVIDED ACTIVE RECREATION AREA = 5,069 SF
 REQUIRED PASSIVE RECREATION AREA = 0.5 * 24,037 = 12,019 SF
 PROVIDED PASSIVE RECREATION AREA = 11,869 SF (2,550 SF OF AREA IS SIDEWALK & SLATED WOOD WALKWAY)
 PROVIDED TOTAL RECREATION AREA (ACTIVE & PASSIVE) = 5,069 + 12,028 = 16,938 SF (2,550 SF OF AREA IS SIDEWALK & SLATED WOOD WALKWAY)
 PROVIDED OPEN SPACE (ACTIVE REC AREA, PASSIVE REC AREA, & OPEN SPACE) = 5,069 + 11,869 + 29,421 = 46,359 SF
 REQUIRED OPEN SPACE NOT PROVIDED = 48,073 - 46,359 = 1,714 SF
 PAYMENT IN LIEU FOR OPEN SPACE NOT PROVIDED (\$3.85/SF PER SRB APPROVAL) = 3.85 * 1,714 = \$6,598.90



City of Wilmington
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

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

SITE PLAN
EVERMORE APARTMENTS EXPANSION
 CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-6643
 Fax 910-392-6293 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
 10 S. CAROLAN DRIVE
 WILMINGTON, NC 28403
 PHONE: 910-251-5030

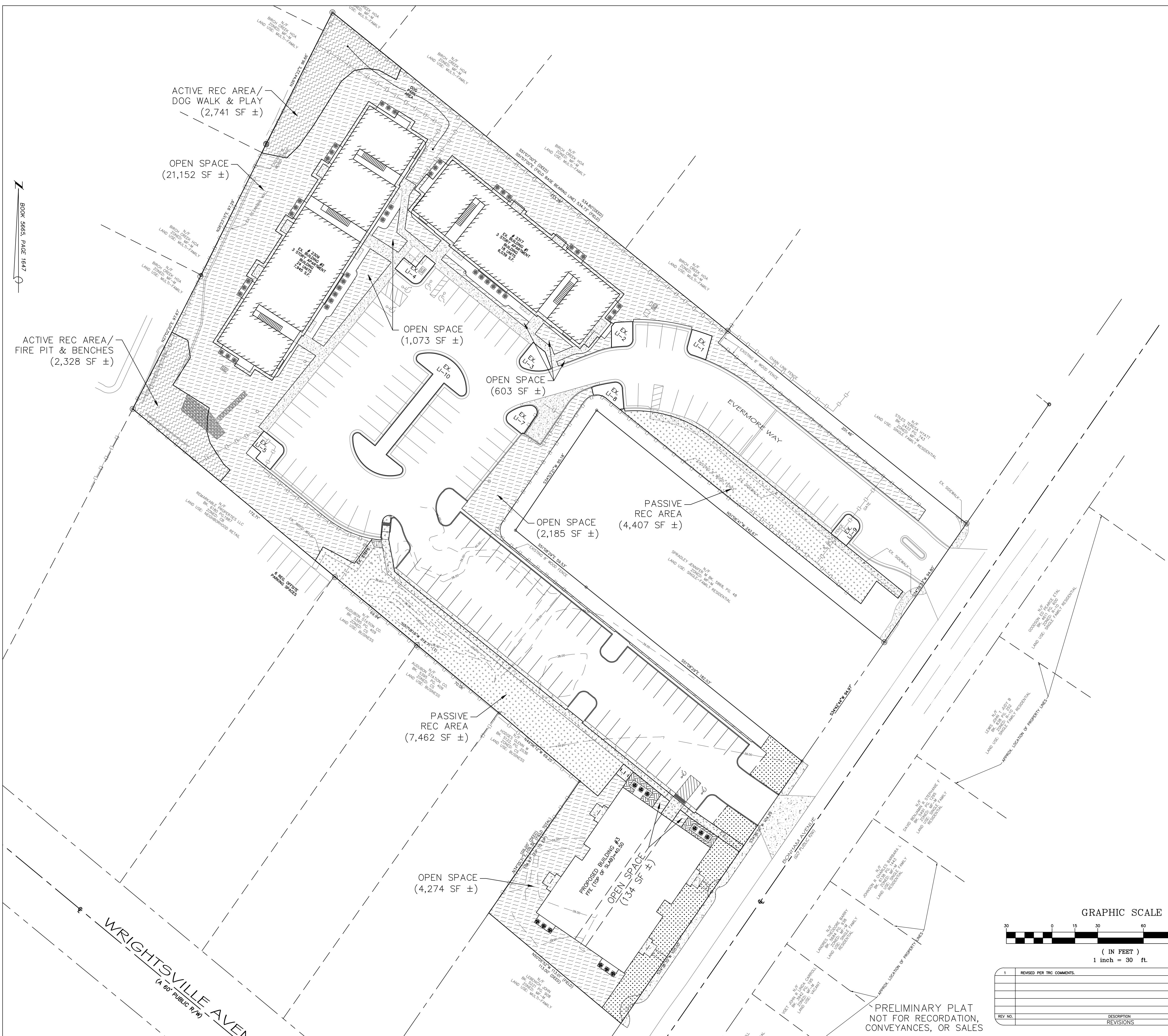
DATE: 1-16-19
 SCALE: 1"=20'
 DRAWN: JCB
 CHECKED: JBM
 PROJECT NO: 219
 SHEET NO: 4
 OF: 14

GRAPHIC SCALE
 (IN FEET)
 1 inch = 20 ft.

REV. NO.	DESCRIPTION	DATE
1	REVISED PER TRC COMMENTS.	2-22-19

PRELIMINARY PLAN
 NOT FOR RECORDATION,
 CONVEYANCES, OR SALES

OPEN SPACE (SITE AREA)
 REQUIRED OPEN SPACE = $0.35 \times 137,351 = 48,073$ SF
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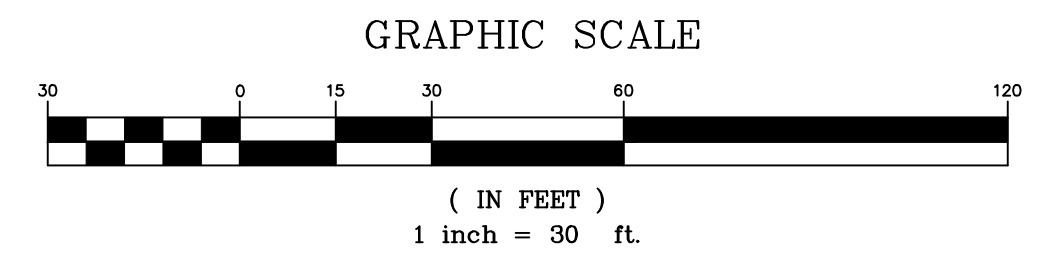
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 BOOK 5665, PAGE 1647

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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.

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.	DESCRIPTION	DATE
1	REVISED PER TRC COMMENTS.	2-22-19

PRELIMINARY PLAT
 NOT FOR RECORDATION,
 CONVEYANCES, OR SALES

OPEN SPACE MAP
EVERMORE APARTMENTS EXPANSION
 CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

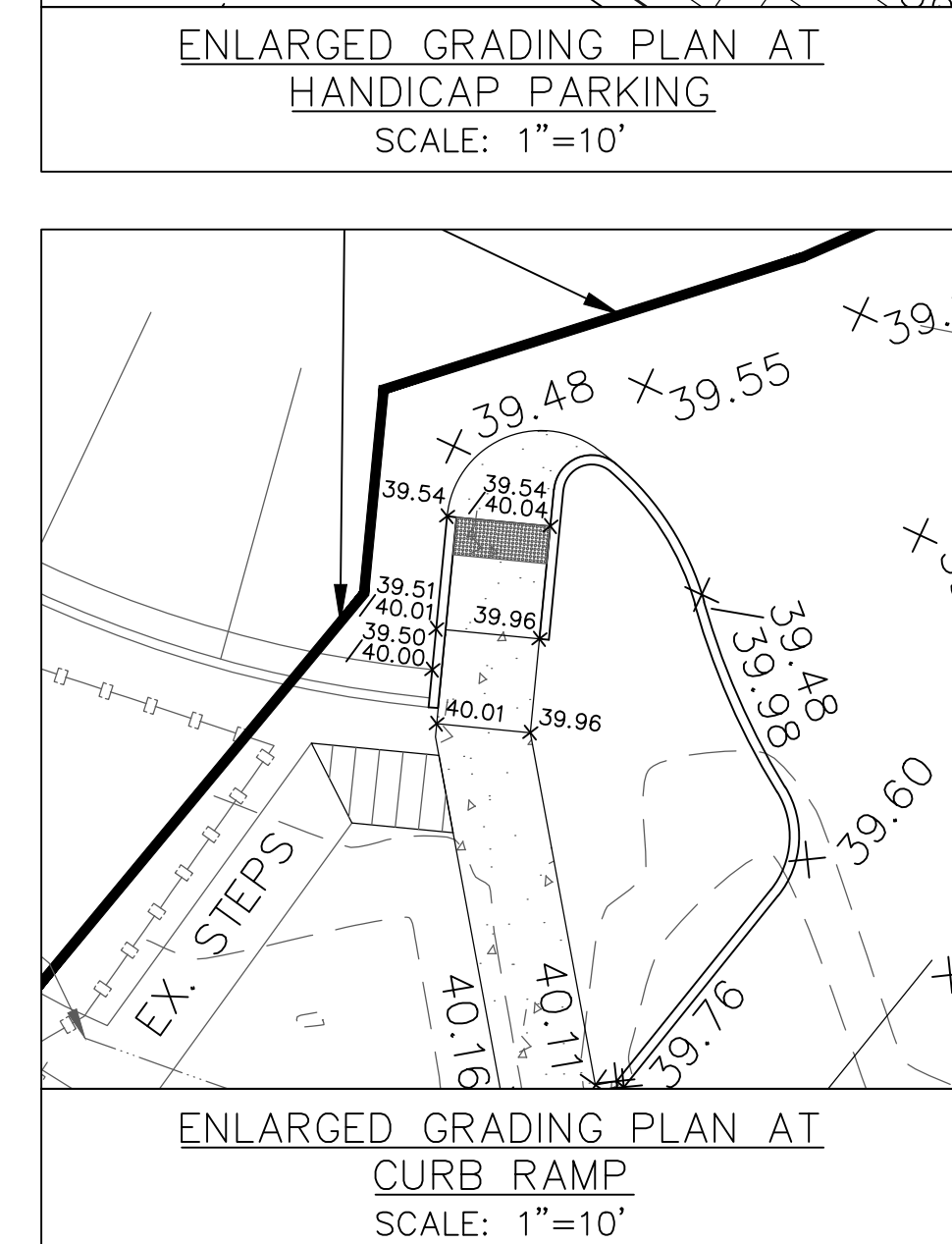
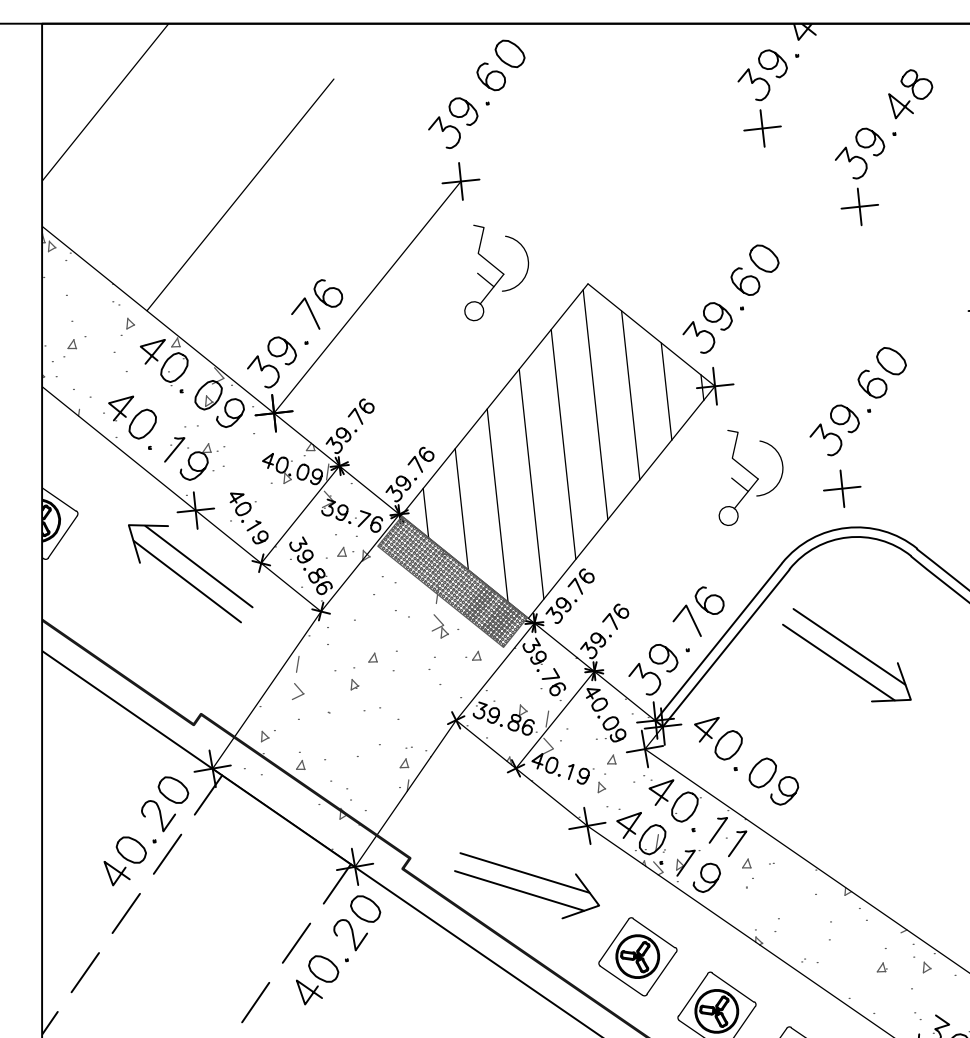
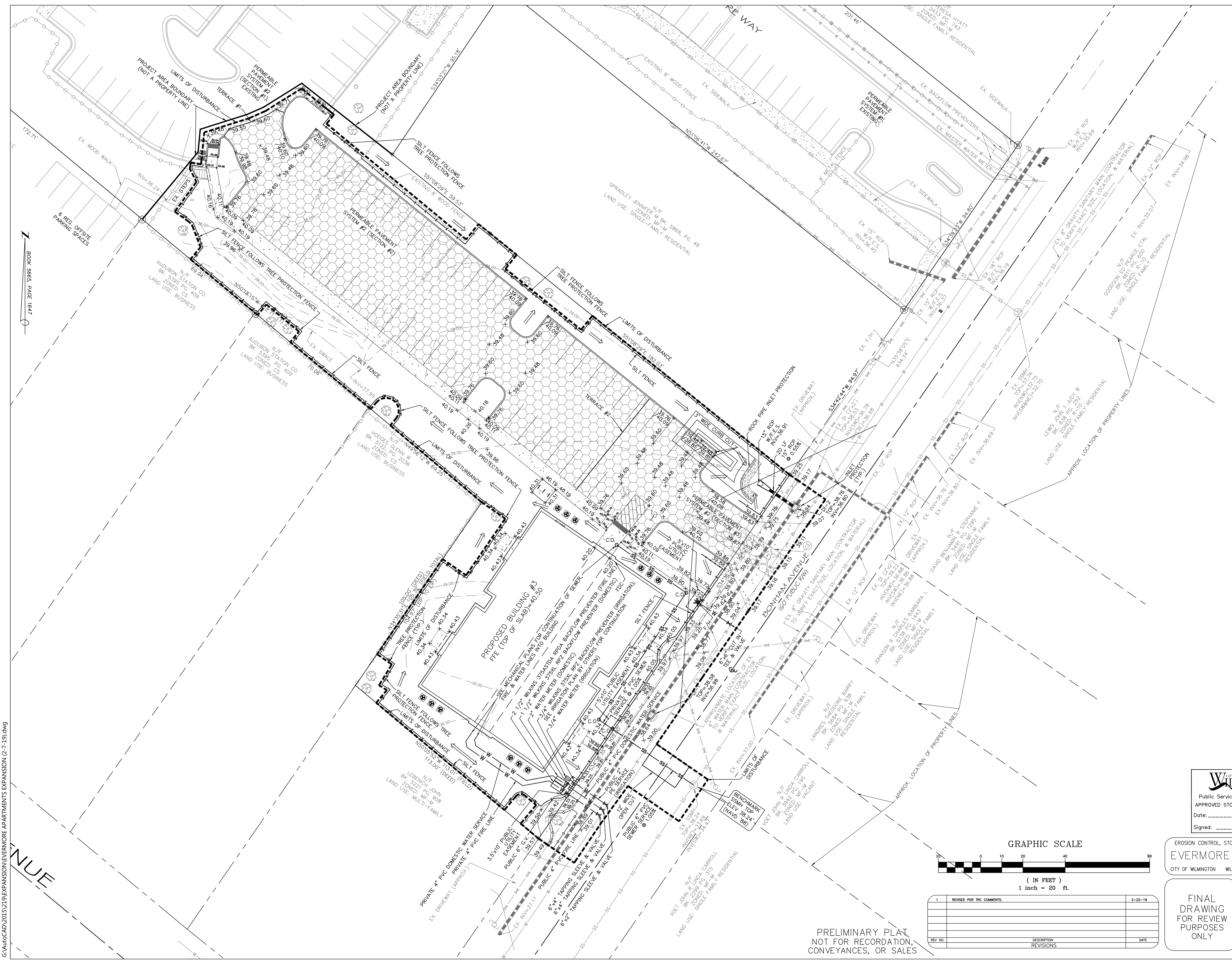
FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-8643
 Fax 910-392-5293 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
 10 S. CAROLINA DRIVE
 WILMINGTON, NC 28403
 PHONE: 910-251-5030

DATE: 1-16-19
 SCALE: 1"=30'
 DRAWN: JCB
 CHECKED: JBM
 PROJECT NO: 219

SHEET NO: 5
 OF: 14



- CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:**
1. ALL PROPOSED ADDITIONS TO THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) WATER DISTRIBUTION AND SANITARY SEWER COLLECTION SYSTEMS, AS SHOWN AND SPECIFIED HEREIN, SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO STATE RULES AND THE CFPUA'S MINIMUM TECHNICAL STANDARDS. THE CFPUA MINIMUM TECHNICAL STANDARDS ARE CONTAINED IN THE CURRENT DESIGN GUIDANCE MANUAL, MATERIAL SPECIFICATION MANUAL, TECHNICAL SPECIFICATIONS FOR CONSTRUCTION, AND STANDARD DRAWING DETAILS.
 2. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
 3. WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE 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 18" INSIDE RIGHT-OF-WAY LINE. ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL ALSO BE CONSTRUCTED OF DIP.
 4. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
 5. NO FLEXIBLE COUPLINGS SHALL BE USED.
 6. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.
 7. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
 8. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
 9. UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
 10. A MINIMUM OF 10' OF MAIN LINE SHALL BE REPLACED FOR NEW CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.

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

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

EROSION CONTROL, STORMWATER, & UTILITY PLAN
EVERMORE APARTMENTS EXPANSION
 CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone: 910-392-6543
 Fax: 910-392-6593 License No. C-2920

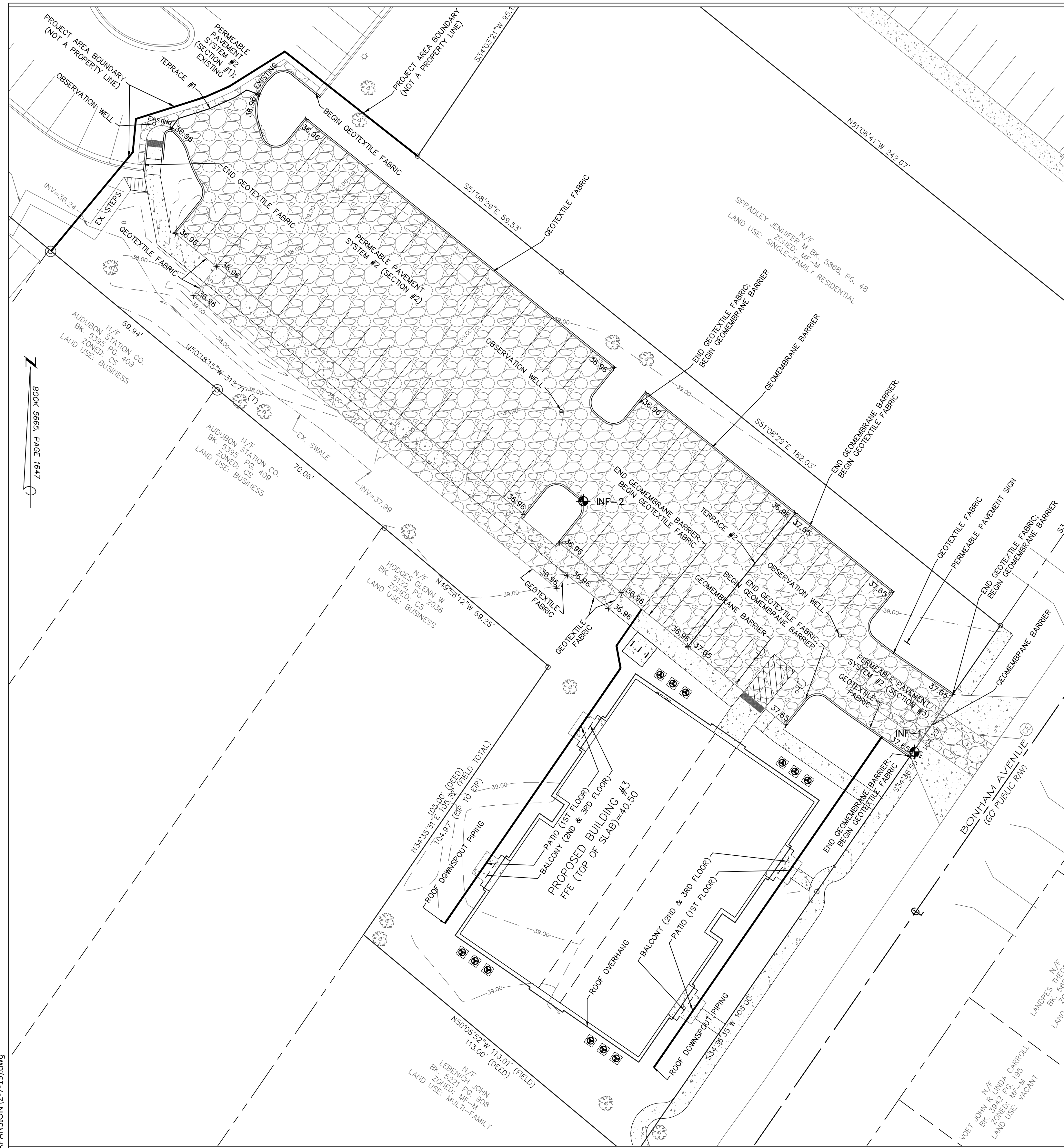
Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
 10 S. CAROLAN DRIVE
 WILMINGTON, NC 28403
 PHONE: 910-251-5030

DATE: 1-16-19
 SCALE: 1"=20'
 DRAWN: JCB
 CHECKED: JBM
 PROJECT NO: 219
 SHEET NO: 6
 OF: 14

GRAPHIC SCALE
 (IN FEET)
 1 inch = 20 ft.

REV. NO.	DESCRIPTION	DATE
1	REVISED PER TRC COMMENTS.	2-22-19

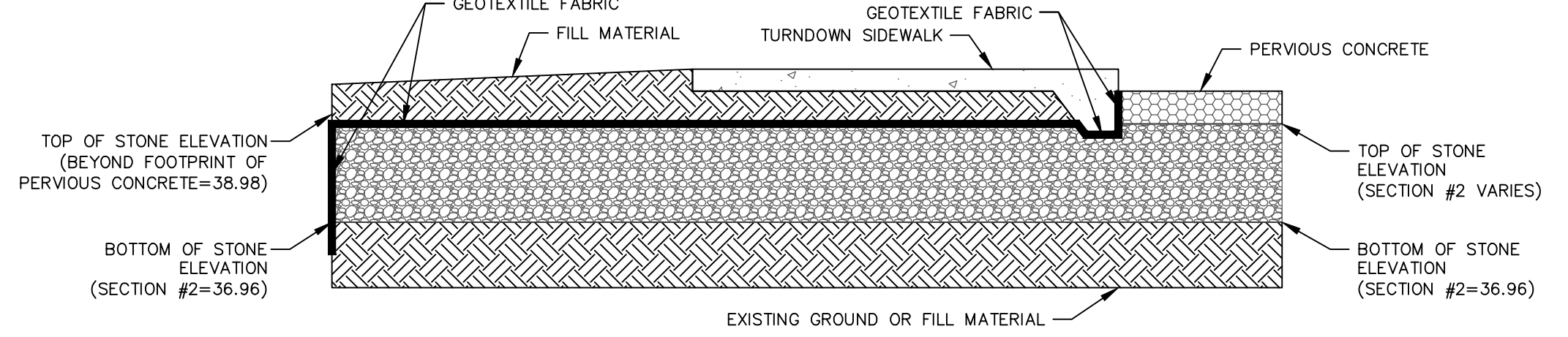
PRELIMINARY PLAN
 NOT FOR RECORDATION,
 CONVEYANCES, OR SALES



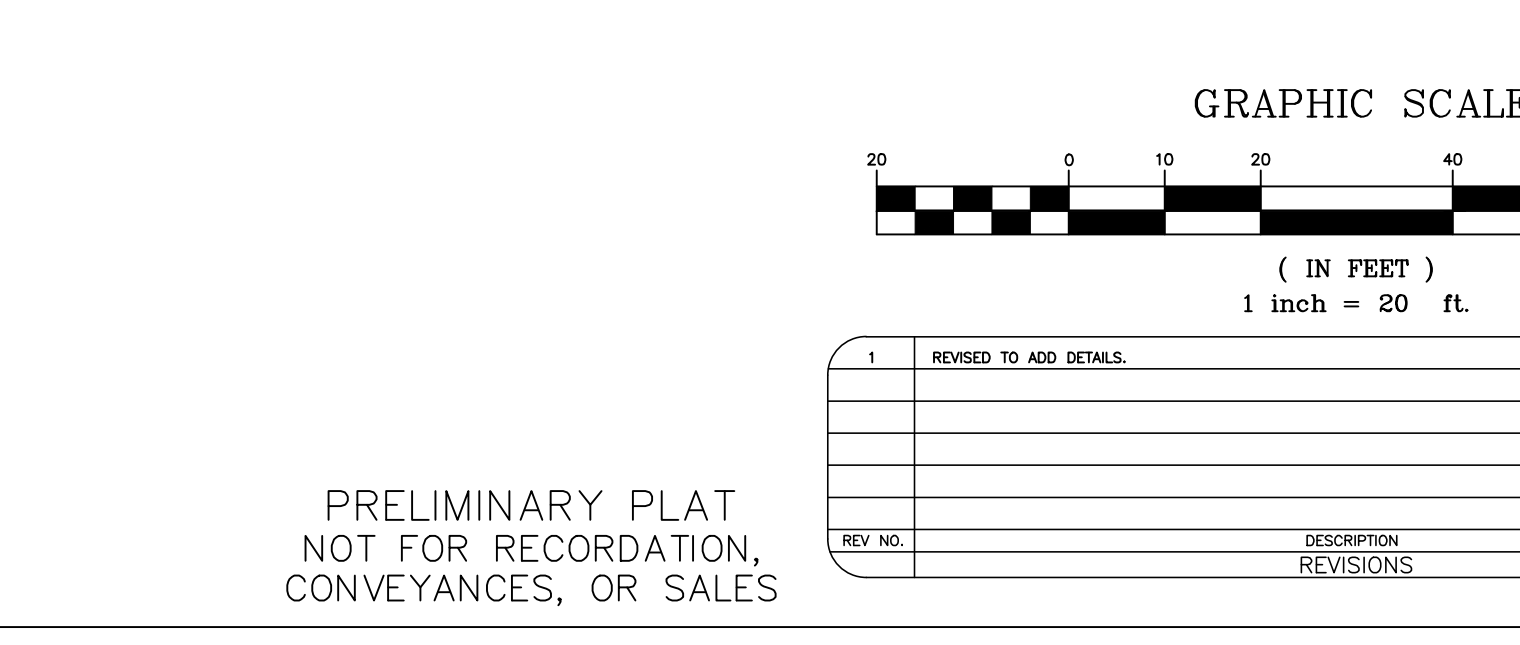
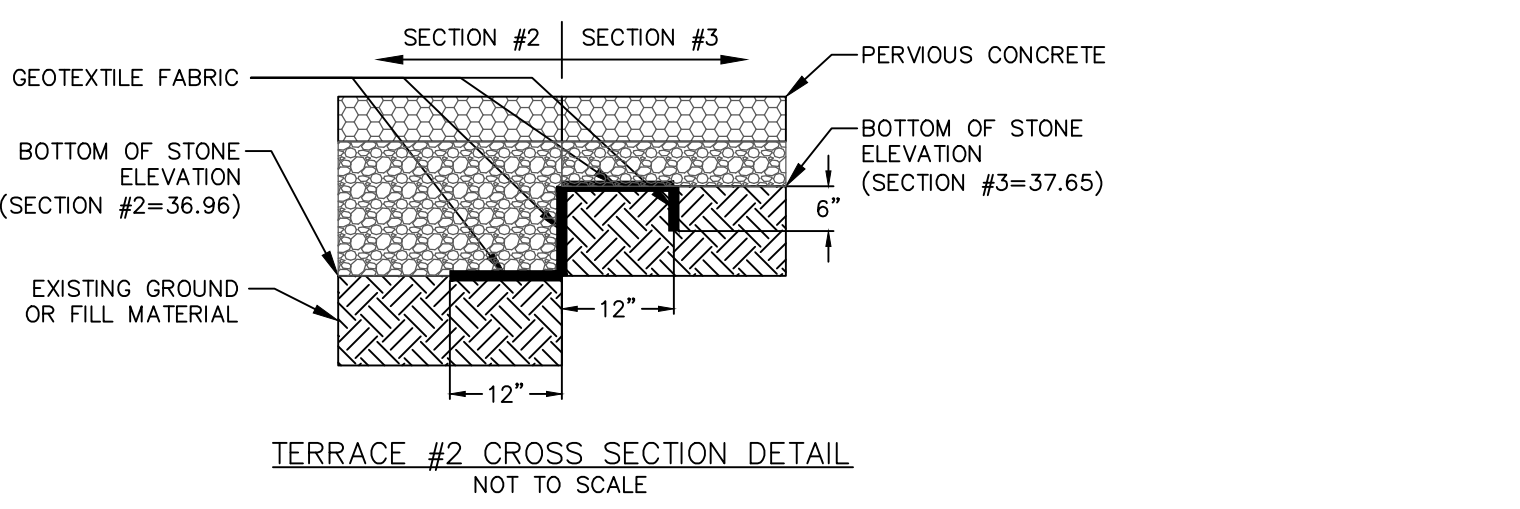
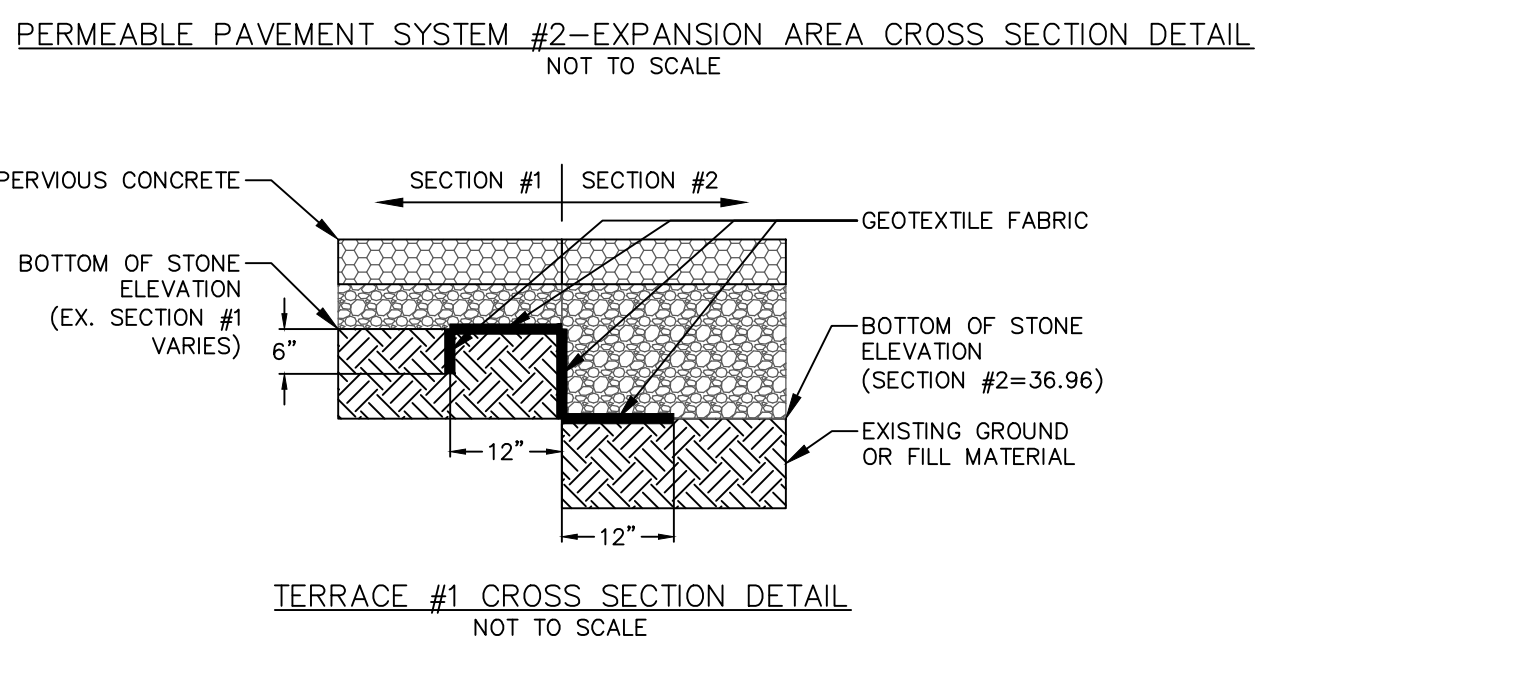
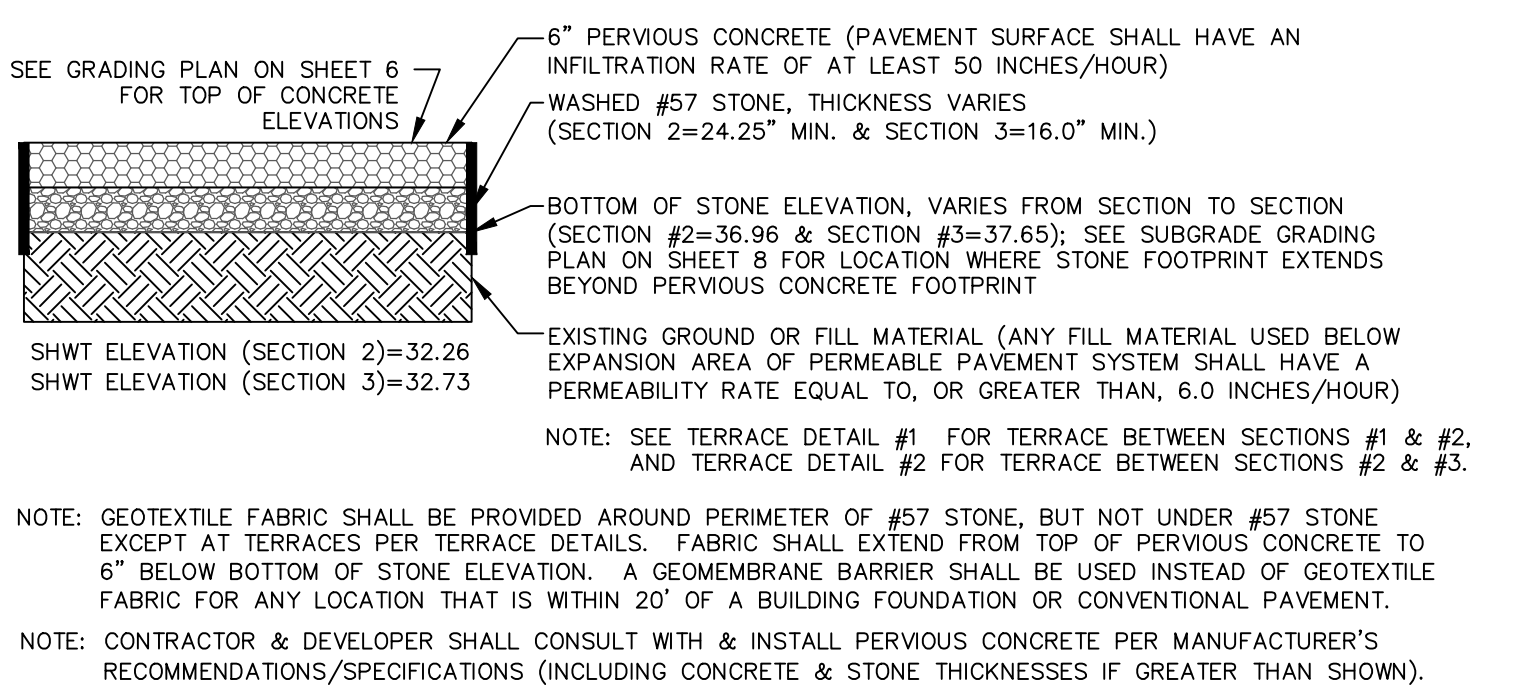
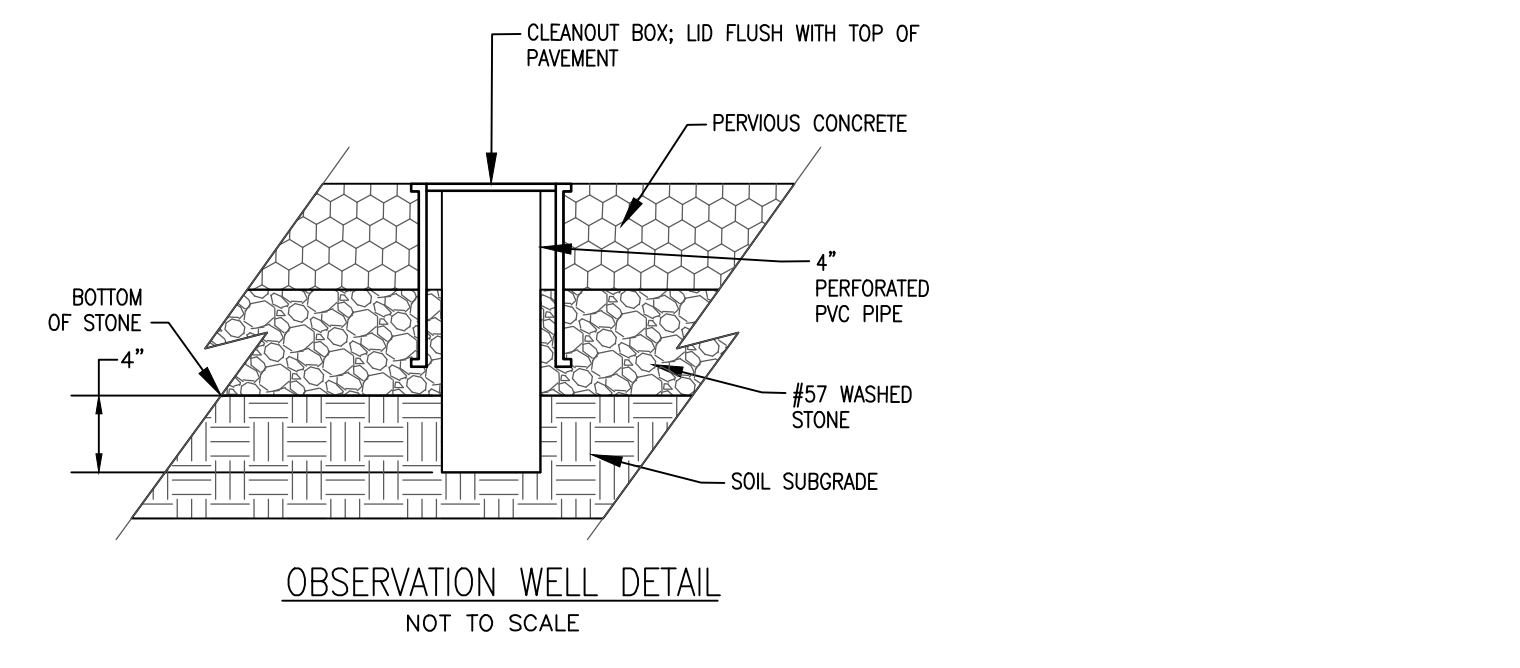
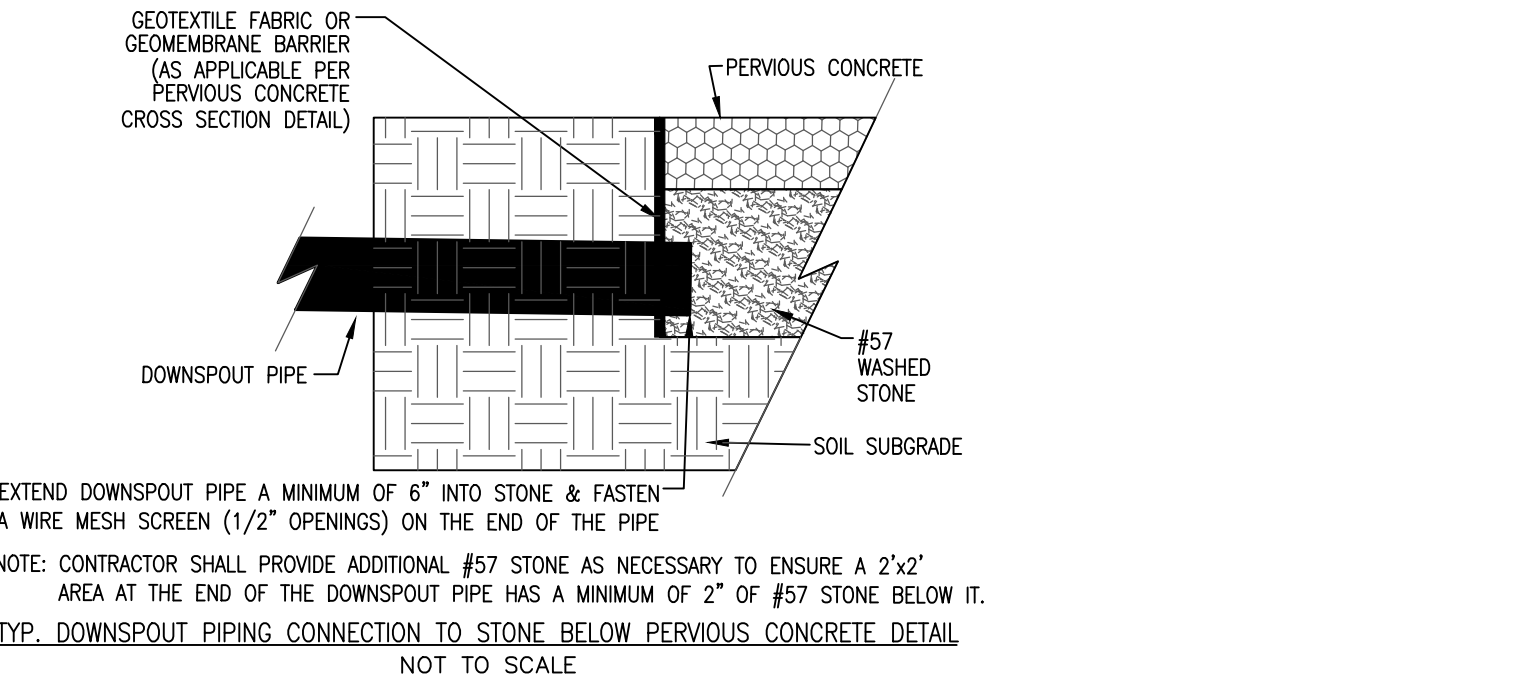
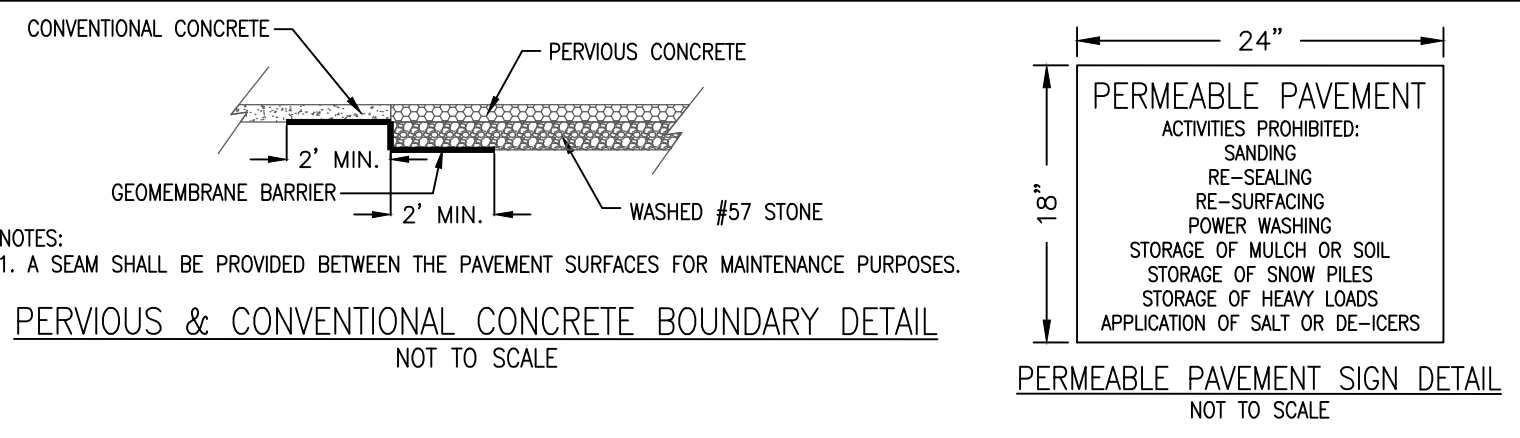
ROOF DOWNSPOUT PIPING (LAYOUT & DRAINAGE AREA MAP), TERRACE LOCATIONS, SUBGRADE GRADING, SOIL TEST LOCATIONS, OBSERVATION WELL LOCATIONS, PERMEABLE PAVEMENT SIGN LOCATION, & GEOTEXTILE/GEOMEMBRANE LOCATION MAP
SCALE: 1"=20'

TEST LOCATION	EXISTING GROUND ELEVATION (FEET)*	SHWT (INCHES BELOW GROUND SURFACE)**	SHWT ELEVATION (FEET)**	CALCULATED FIELD SATURATED HYDRAULIC CONDUCTIVITY (INCHES PER HOUR)**
INF-1	39.31	79	32.73	4.50
INF-2	38.59	76	32.26	6.00

* INFORMATION PROVIDED BY BATEMAN CIVIL SURVEY COMPANY.
** INFORMATION PROVIDED BY REFS, PLLC.
*** CALCULATED BASED ON INFORMATION PROVIDED BY OTHERS.



#57 STONE BEYOND FOOTPRINT OF PERVIOUS CONCRETE CROSS SECTION DETAIL
NOT TO SCALE



- CONSTRUCTION SEQUENCE FOR INSTALLATION OF PERMEABLE PAVEMENT (MOSTLY FROM NCDOT STORMWATER DESIGN MANUAL C-5)
- ENSURE ACCEPTABLE CONDITIONS FOR CONSTRUCTION
 - PERVIOUS SURFACES MUST BE GRADED TO DRAIN AWAY FROM THE PERMEABLE PAVEMENT, EXCEPT WHERE THIS IS UNAVOIDABLE, SUCH AS PARKING LOT ISLANDS, AREA BETWEEN BUILDINGS & PARKING LOT, & REDEVELOPMENT PROJECTS.
 - IMPERVIOUS AREAS THAT WILL DRAIN TO THE PERMEABLE PAVEMENT ARE COMPLETED.
 - AREAS ADJACENT TO THE PERMEABLE PAVEMENT ARE STABILIZED (VEGETATION, MULCH, STRAW, SEED, SOD, FIBER BLANKETS, ETC.) IN ORDER TO PREVENT EROSION & POSSIBLE CONTAMINATION WITH SEDIMENTS.
 - CONSTRUCTION ACCESS TO OTHER PORTIONS OF THE SITE IS ESTABLISHED SO THAT NO CONSTRUCTION TRAFFIC PASSES THROUGH THE PERMEABLE PAVEMENT SITE DURING INSTALLATION. INSTALL BARRIERS/FENCES AS NEEDED.
 - WEATHER FORECAST CALLS FOR A WINDOW OF DRY WEATHER TO PREVENT EXCESS COMPACTION OR SMEARING OF THE PERVIOUS CONCRETE.
 - ALL PERMEABLE PAVEMENT AREAS ARE CLEARLY MARKED ON THE SITE.
 - EXCAVATE PERMEABLE PAVEMENT AREA & PREPARE SUBGRADE SURFACE
 - EXCAVATE IN DRY SUBGRADE CONDITIONS & AVOID EXCAVATING IMMEDIATELY AFTER STORMS WITHOUT A SUFFICIENT DRYING PERIOD.
 - DO NOT ALLOW EQUIPMENT TO CROSS THE PAVEMENT AREA AFTER EXCAVATION HAS BEGUN.
 - OPERATE EXCAVATION EQUIPMENT FROM OUTSIDE THE EXCAVATION AREA OR FROM UNEXCAVATED PORTIONS OF THE AREA USING AN EXCAVATION STAGING PLAN.
 - USE EQUIPMENT WITH TRACKS RATHER THAN TIRES TO MINIMIZE SOIL COMPACTION WHEN EQUIPMENT ON THE SUBGRADE SURFACE IS UNAVOIDABLE.
 - DIG THE FINAL 9 TO 12 INCHES BY USING THE TEETH OF THE EXCAVATOR BUCKET TO LOOSEN SOIL & DO NOT SMEAR THE SUBGRADE SOIL SURFACE. FINAL GRADING OR SMOOTHING OF THE SUBGRADE SHOULD BE DONE BY HAND IF POSSIBLE.
 - THE FINAL SUBGRADE SLOPE SHALL NOT EXCEED 2.0%. THE FINAL SUBGRADE SHALL BE SURVEYED BEFORE PROCEEDING WITH INSTALLATION.
 - MINIMIZE THE TIME BETWEEN EXCAVATION AND PLACEMENT OF THE AGGREGATE.
 - AFTER THE SUBGRADE SLOPE IS VERIFIED, SCARIFY THE SOIL SUBGRADE SURFACE TO MAINTAIN THE SOILS PRE-DISTURBANCE INFILTRATION RATE.
 - TO SCARIFY THE PAVEMENT, USE THE EXCAVATOR BUCKET'S TEETH TO RAKE THE SURFACE OF THE SUBGRADE.
 - TEST THE SUBGRADE SOIL INFILTRATION RATE (INFILTRATION SYSTEMS ONLY)
 - IMMEDIATELY AFTER EXCAVATION & BEFORE THE AGGREGATE IS PLACED, CONDUCT A DIRECT MEASUREMENT OF THE SOIL'S INFILTRATION RATE. INFILTRATION TESTING SHALL BE PERFORMED BY AN APPROPRIATELY-QUALIFIED PROFESSIONAL.
 - RESULTS OF THE INFILTRATION TESTING SHALL BE PROVIDED TO THE ENGINEER.
 - IF THE SOIL TEST SHOWS INFILTRATION RATES THAT ARE LOWER THAN THE RATE(S) USED IN THE DESIGN, THEN ADDITIONAL SCARIFICATION, RIPPING, OR TRENCHING OF THE SOIL WILL BE NEEDED.
 - CONTRACTOR SHALL CONTACT & RECEIVE APPROVAL FROM ENGINEER OF RECORD TO CONTINUE INSTALLATION OF PERMEABLE PAVEMENT SYSTEM.
 - PLACE GEOTEXTILES AND GEOMEMBRANE (IF APPLICABLE)
 - FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR THE APPROPRIATE OVERLAP BETWEEN ROLLS OF MATERIAL. SECURE THE MATERIAL TO ENSURE IT DOES NOT MOVE OR WRINKLE WHEN PLACING AGGREGATE.
 - PLACE OBSERVATION WELL(S)
 - PLACE OBSERVATION WELL(S) ACCORDING TO THE PLAN AND VERIFY THAT THE ELEVATIONS ARE CORRECT.
 - PLACE & COMPACT AGGREGATE BASE
 - INSPECT ALL AGGREGATES TO ENSURE THEY ARE CLEAN, FREE OF FINES, AND CONFORM TO THE PLANS.
 - IF AGGREGATE DELIVERED TO THE SITE CANNOT BE IMMEDIATELY PLACED INTO THE EXCAVATION, THEY SHOULD BE STOCKPILED ON AN IMPERVIOUS SURFACE OR GEOTEXTILE TO KEEP THE AGGREGATE FREE OF SEDIMENT.
 - IF AGGREGATE BECOMES CONTAMINATED WITH SEDIMENT, THEN IT SHALL BE REPLACED WITH CLEAN AGGREGATE.
 - BEFORE PLACING THE AGGREGATE BASE, REMOVE ANY ACCUMULATION OF SEDIMENTS ON THE FINISHED SOIL SUBGRADE USING LIGHT, TRACKED EXCAVATION EQUIPMENT.
 - IF THE EXCAVATED SUBGRADE SURFACE HAS BEEN SUBJECTED TO RAINFALL BEFORE PLACEMENT OF THE AGGREGATE, THEN THE RESULTING SURFACE CRUST MUST BE EXCAVATED TO AT LEAST AN ADDITIONAL 2-INCH DEPTH, RAKED OR SCARIFIED TO BREAK UP THE CRUST.
 - REMOVE ANY ACCUMULATED SEDIMENTS FROM, AND CHECK PLACEMENT OF, ANY IMPERMEABLE LINERS OR GEOTEXTILES.
 - SLOPES & ELEVATIONS SHALL BE CHECKED ON THE SOIL SUBGRADE AND THE FINISHED ELEVATION OF BASE (AFTER COMPACTION) OR BEDDING MATERIALS TO ASSURE THEY CONFORM TO THE PLANS AND SPECIFICATIONS.
 - ALL AGGREGATE SHALL BE SPREAD (NOT DUMPED) BY A FRONT-END LOADER OR FROM DUMP TRUCKS DEPOSITING FROM NEAR THE EDGE OF THE EXCAVATION. AGGREGATE SHALL BE SPREAD DIRECTLY ON DEPOSITED AGGREGATE PILES. MOISTEN AND SPREAD THE WASHED STONE WITHOUT DRIVING ON THE SOIL SUBGRADE. BE CAREFUL NOT TO DAMAGE THE OBSERVATION WELLS DURING COMPACTION.
 - FOLLOW COMPACTION RECOMMENDATIONS BY THE PERMEABLE PAVEMENT MANUFACTURER OR THAT FROM INDUSTRY GUIDELINES.
 - BE SURE THAT CORNERS, AREAS AROUND UTILITY STRUCTURES AND OBSERVATION WELLS, & TRANSITION AREAS TO OTHER PAVEMENTS ARE ADEQUATELY COMPACTED.
 - DO NOT CRUSH AGGREGATES DURING COMPACTION.
 - INSTALL CURB RESTRAINTS AND PAVEMENT BARRIERS
 - EDGE RESTRAINTS AND BARRIERS BETWEEN PERMEABLE AND IMPERVIOUS PAVEMENT SHALL BE INSTALLED PER THE PLAN.
 - BEFORE MOVING ON TO CONSTRUCTION STEP 8, BE CERTAIN THE DESIGN AND INSTALLATION ARE CONSISTENT.
 - INSTALL PERVIOUS CONCRETE
 - PERVIOUS CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF ACI 522.1 SPECIFICATION FOR PERVIOUS CONCRETE.
 - INSTALLATION OF THE PERVIOUS CONCRETE MAY BE ACCOMPLISHED USING EITHER THE ONE-STEP OR THE TWO-STEP METHOD.
 - PROTECT THE PAVEMENT THROUGH PROJECT COMPLETION
 - IF IT IS NOT POSSIBLE TO INSTALL THE PERMEABLE PAVEMENT AT THE END OF THE SITE CONSTRUCTION TIMELINE, THEN PROTECT THE PAVEMENT UNTIL PROJECT COMPLETION. THIS SHALL BE DONE BY:
 - ROUTING CONSTRUCTION ACCESS THROUGH OTHER PORTIONS OF THE SITE SO THAT NO CONSTRUCTION TRAFFIC PASSES THROUGH THE PERMEABLE PAVEMENT SITE (INSTALL BARRIERS/FENCES AS NEEDED).
 - IF THIS IS NOT POSSIBLE, PROTECT THE PAVEMENT PER THE CONSTRUCTION DOCUMENTS. PROTECTION TECHNIQUES THAT MAY BE USED INCLUDE MATS, PLASTIC SHEETING, BARRIERS TO LIMIT ACCESS, OR MOVING THE STABILIZED CONSTRUCTION ENTRANCE.
 - SCHEDULE STREET SWEEPING DURING AND AFTER CONSTRUCTION TO PREVENT SEDIMENT FROM ACCUMULATING ON THE PAVEMENT.

OPERATION & MAINTENANCE PLAN FOR PERMEABLE PAVEMENT
AT ALL TIMES, THE PAVEMENT SHALL BE KEPT FREE OF:
-DEBRIS AND PARTICULATE MATTER THROUGH FREQUENT BLOWING THAT REMOVES SUCH DEBRIS, PARTICULARLY DURING THE FALL AND SPRING.
-PILES OF SOIL, SAND, MULCH, BUILDING MATERIALS OR OTHER MATERIALS THAT COULD DEPOSIT PARTICULATES ON THE PAVEMENT.
-PILES OF SNOW AND ICE.
-CHEMICALS OF ALL KINDS, INCLUDING DEICERS.
THE PERMEABLE PAVEMENT WILL BE INSPECTED ONCE A QUARTER. RECORDS OF OPERATION AND MAINTENANCE WILL BE KEPT IN A KNOWN SET LOCATION AND WILL BE AVAILABLE UPON REQUEST.
INSPECTION ACTIVITIES SHALL BE PERFORMED AS FOLLOWS. ANY PROBLEMS THAT ARE FOUND SHALL BE REPAIRED IMMEDIATELY:

BMP ELEMENT:	POTENTIAL PROBLEM:	HOW TO REMEDIATE THE PROBLEM:
THE ENTIRE BMP	TRASH/DEBRIS IS PRESENT.	REMOVE THE TRASH/DEBRIS.
THE PERIMETER OF THE PERMEABLE PAVEMENT	AREAS OF BARE SOIL AND/OR EROSION GULLIES.	REGRADE THE SOIL IF NECESSARY TO REMOVE THE GULLY, THEN PLANT GROUND COVER AND WATER UNTIL ESTABLISHED.
THE INLET DEVICE	A VEGETATED AREA DRAINS TOWARD THE PAVEMENT. THE PIPE IS CLOGGED.	REGRADE THE AREA SO THAT IT DRAINS AWAY FROM THE PAVEMENT, THEN PLANT GROUND COVER AND WATER UNTIL ESTABLISHED. UNBLOCK THE PIPE. DISPOSE OF THE SEDIMENT OFF-SITE.
THE SURFACE OF THE PERMEABLE PAVEMENT	TRASH/DEBRIS IS PRESENT. WEEDS SEDIMENT	REMOVE THE TRASH/DEBRIS. DO NOT PULL THE WEEDS (MAY PULL OUT MEDIA AS WELL). SPRAY THEM WITH A SYSTEMIC HERBICIDE SUCH AS GLYPHOSATE AND THEN RETURN WITHIN THE WEEK TO REMOVE THEM BY HAND. (ANOTHER OPTION IS TO POUR BOILING WATER ON THEM OR STEAM THEM.) VACUUM SWEEP THE PAVEMENT.
OBSERVATION WELL	RUTTING, CRACKING OR SLUMPING OR DAMAGED STRUCTURE. WATER PRESENT MORE THAN FIVE DAYS AFTER A STORM EVENT.	CONSULT AN APPROPRIATE PROFESSIONAL. CLEAN OUT CLOGGED UNDERDRAIN PIPES. CONSULT AN APPROPRIATE PROFESSIONAL FOR CLOGGED SOIL SUBGRADE.
EDUCATIONAL SIGN	MISSING OR IS DAMAGED.	REPLACE THE SIGN
THE OUTLET DEVICE	CLOGGING HAS OCCURRED. THE OUTLET DEVICE IS DAMAGED.	CLEAN OUT THE OUTLET DEVICE. DISPOSE OF THE SEDIMENT OFF-SITE. REPAIR OR REPLACE THE OUTLET DEVICE.
THE RECEIVING WATER	EROSION OR OTHER SIGNS OF DAMAGE HAVE OCCURRED AT THE OUTLET.	CONTACT THE LOCAL NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES REGIONAL OFFICE.

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 _____

STORMWATER DETAIL SHEET
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

DATE: 1-16-19
SCALE: 1"=20'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219

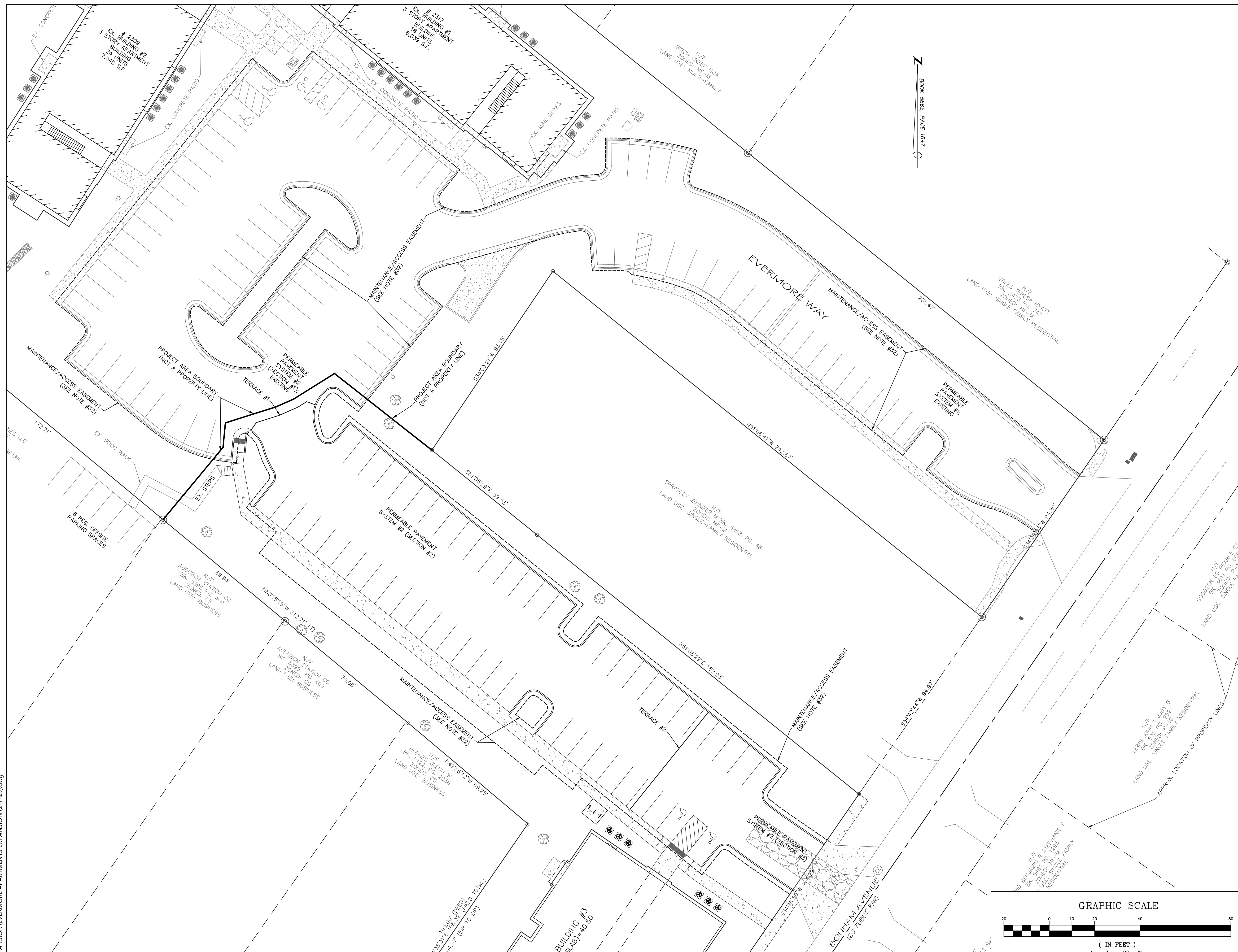
MALPASS ENGINEERING & SURVEYING, P.C.
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6543
Fax 910-392-6203 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

FINAL DRAWING FOR REVIEW PURPOSES ONLY
SHEET NO: 8 OF 14

G:\AutoCAD\2015\15\EXPANSION\EVERMORE APARTMENTS EXPANSION (2-7-19).dwg

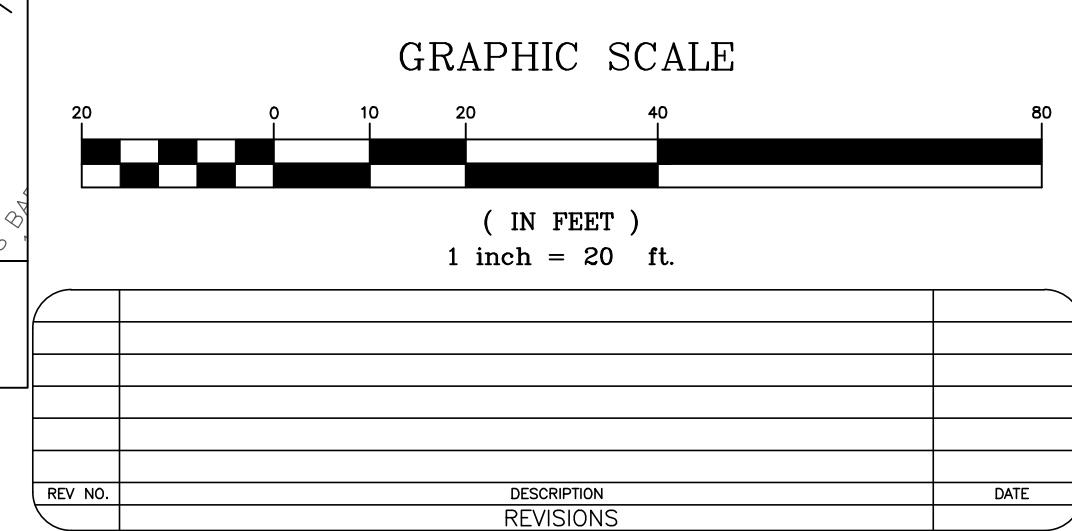
G:\AutoCAD\2019\EXPANSION\EVERMORE APARTMENTS EXPANSION (2-7-19).dwg



N
BOOK 5665, PAGE 1647

MAINTENANCE/ACCESS EASEMENT FOR PERMEABLE PAVEMENT
SCALE: 1"=20'

PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES



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

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

For each open utility cut of City streets, a S325 permit shall be required from the City prior to occupancy and/or project acceptance.

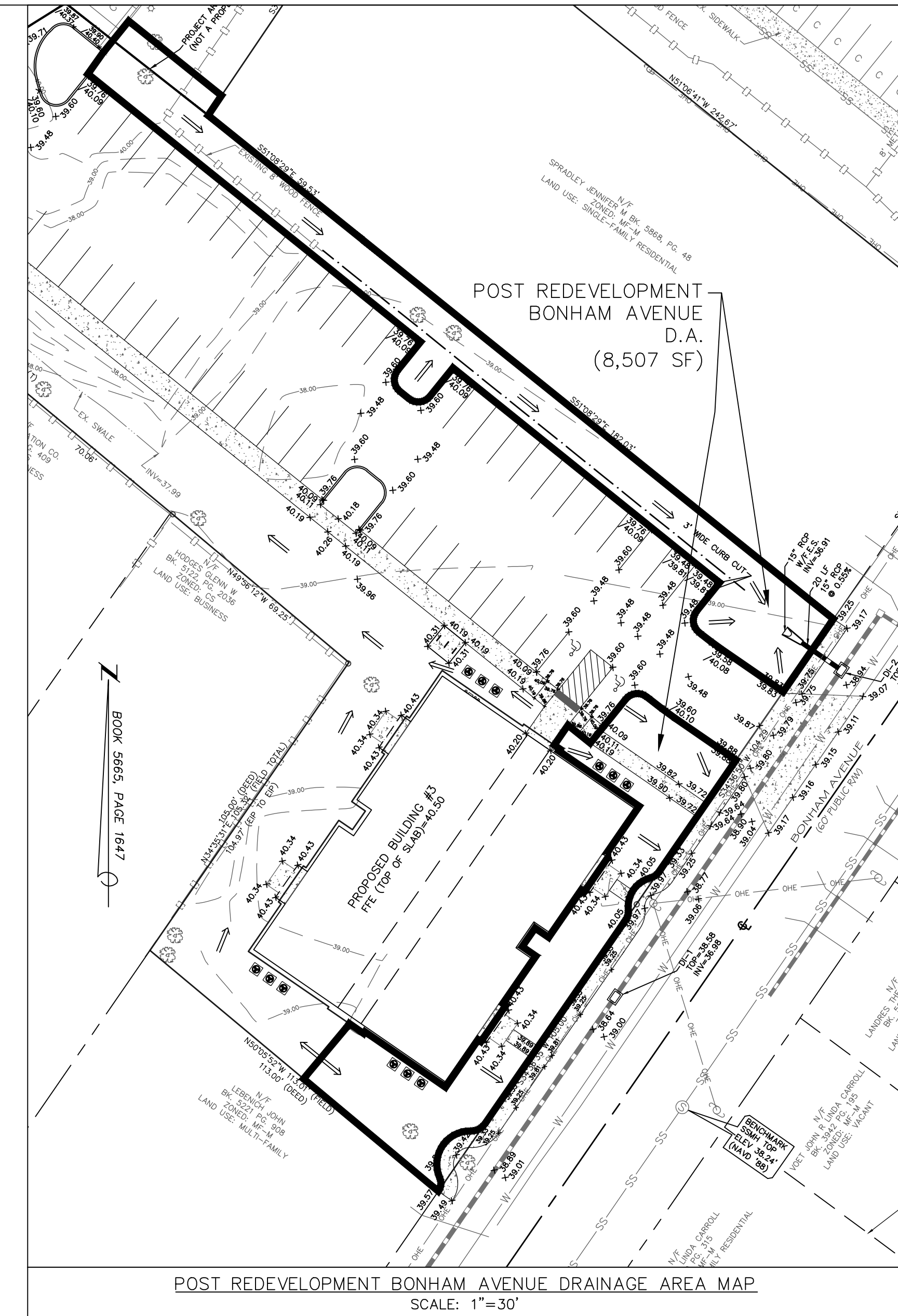
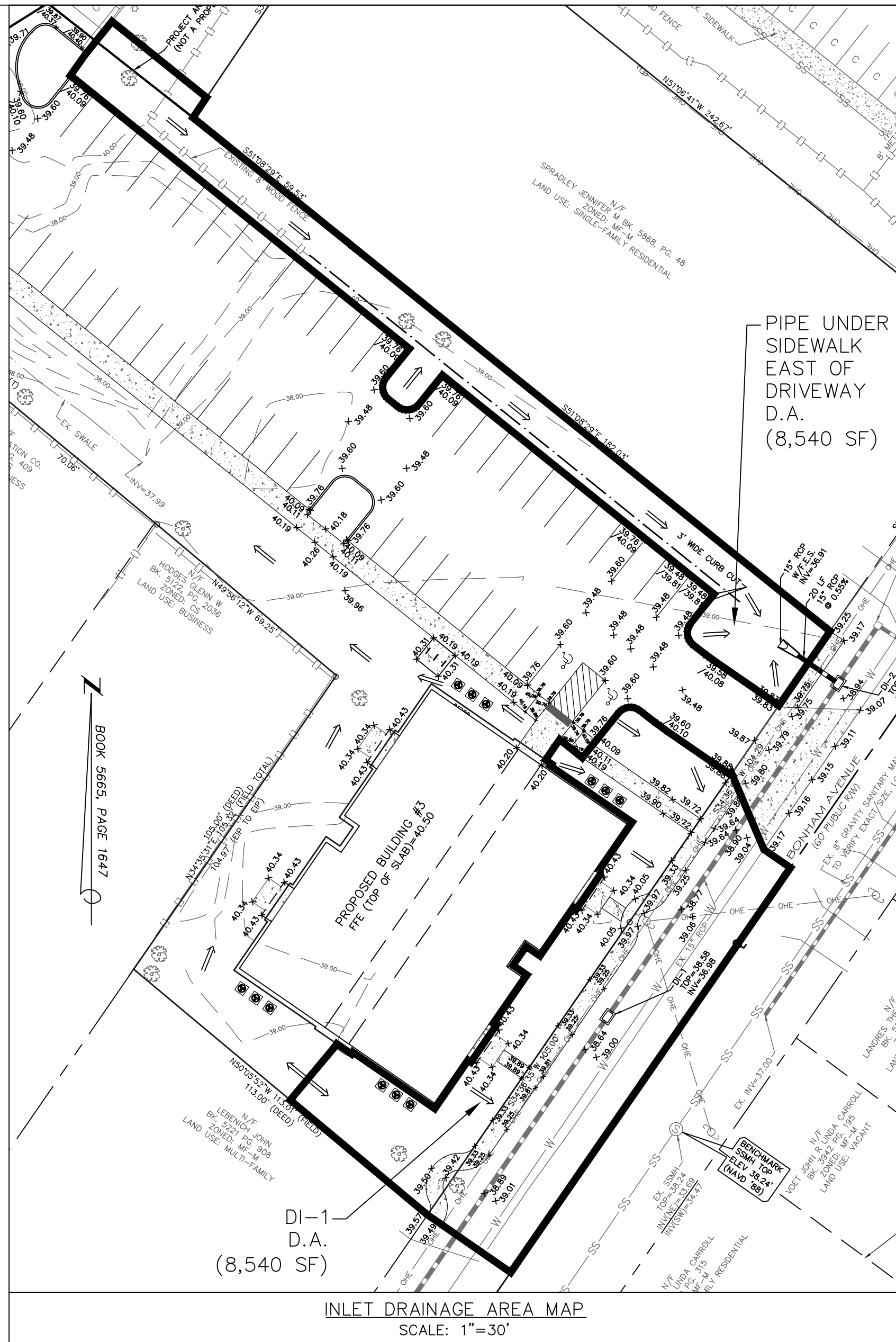
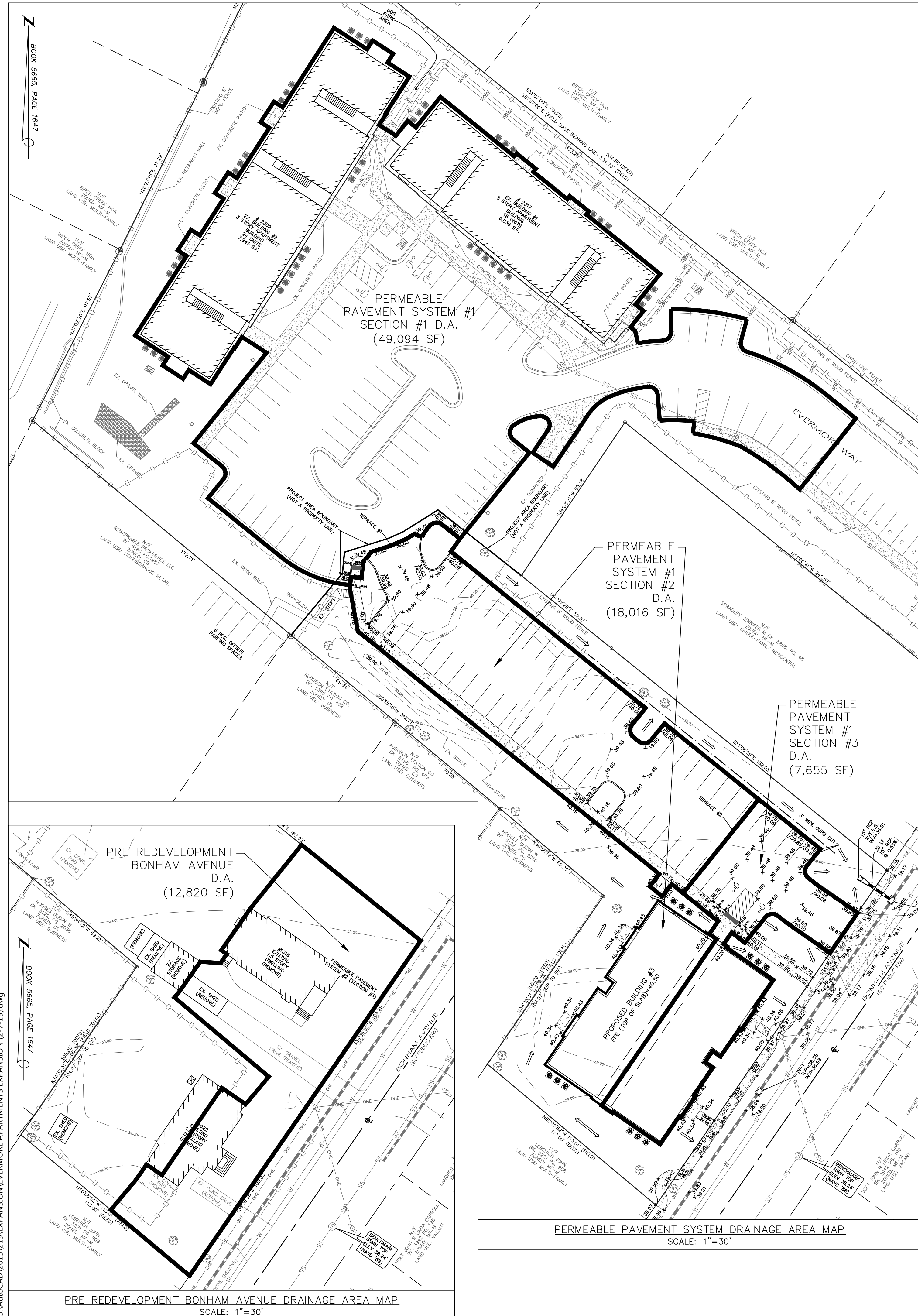
STORMWATER DETAIL SHEET
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL
DRAWING
FOR REVIEW
PURPOSES
ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6643
Fax 910-392-5993 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

DATE: 2-22-19
SCALE: 1"=20'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219
SHEET NO: BA
OF: 14



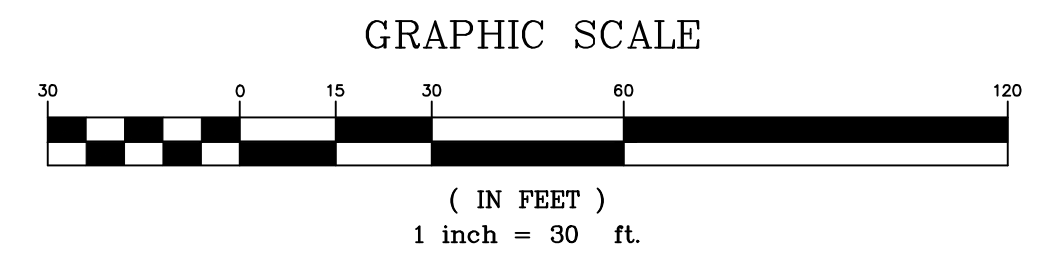
G:\AutoCAD\2015\15\EXPANSION\EVERMORE APARTMENTS EXPANSION (2-7-19).dwg

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

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

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

Date: _____ Permit # _____
Signed: _____



REV. NO.	DESCRIPTION	DATE

PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES

DRAINAGE AREA MAP
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6543
Fax 910-392-6593 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

DATE: 2-22-19
SCALE: 1"=30'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219
SHEET NO: 9
OF: 14

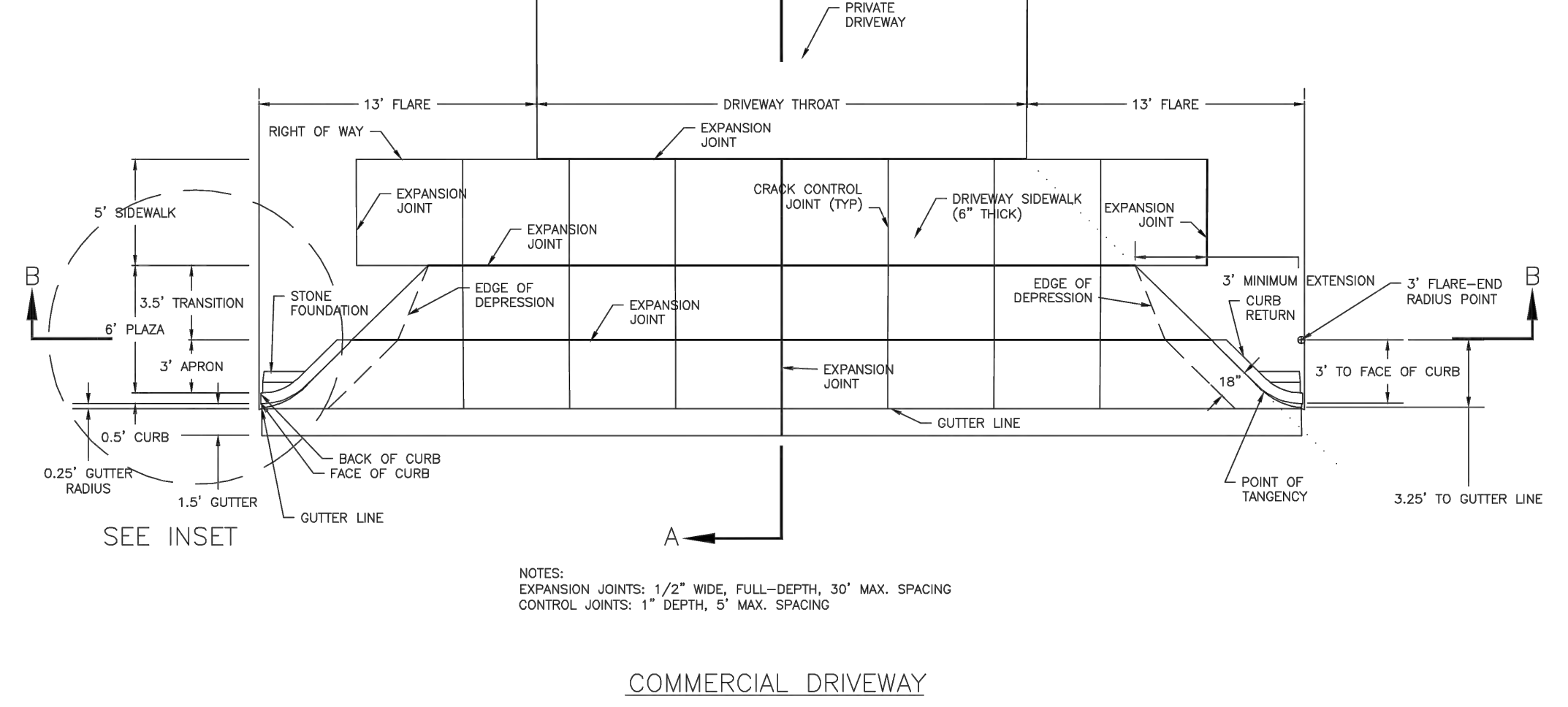
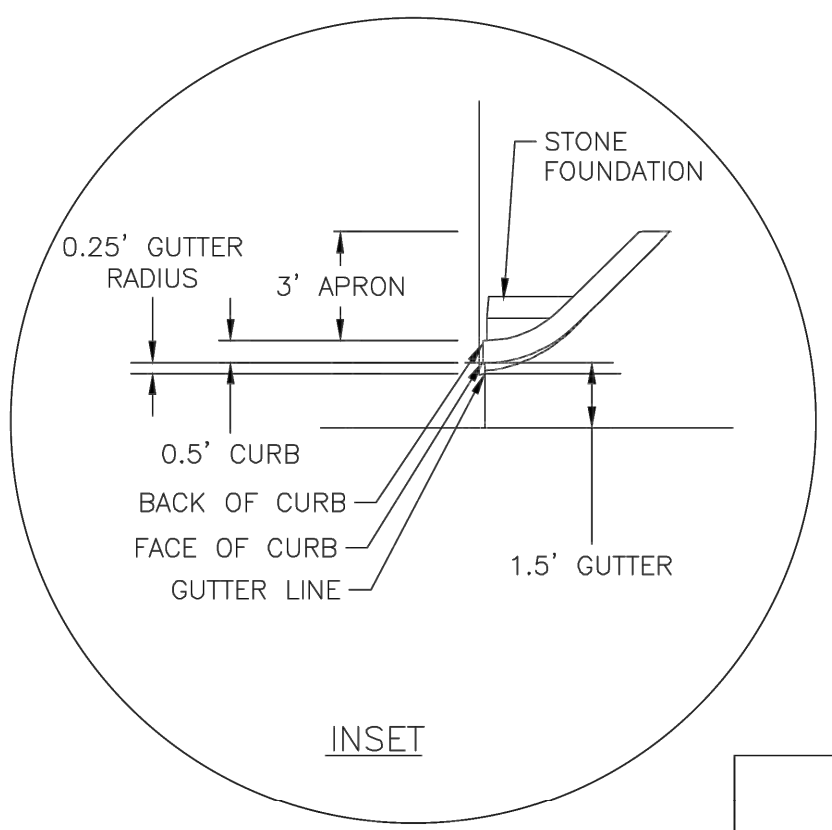
FINAL DRAWING FOR REVIEW PURPOSES ONLY

DATE: FEB. 14, 2017
 DRAWN BY: JSR
 CHECKED BY: D.E.C., P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**COMMERCIAL DRIVEWAY
 PLAN
 (VERTICAL CURB)**

1 of 2

SD 3-03.3



NOTES:
 EXPANSION JOINTS: 1/2" WIDE, FULL-DEPTH, 30" MAX. SPACING
 CONTROL JOINTS: 1" DEPTH, 5' MAX. SPACING

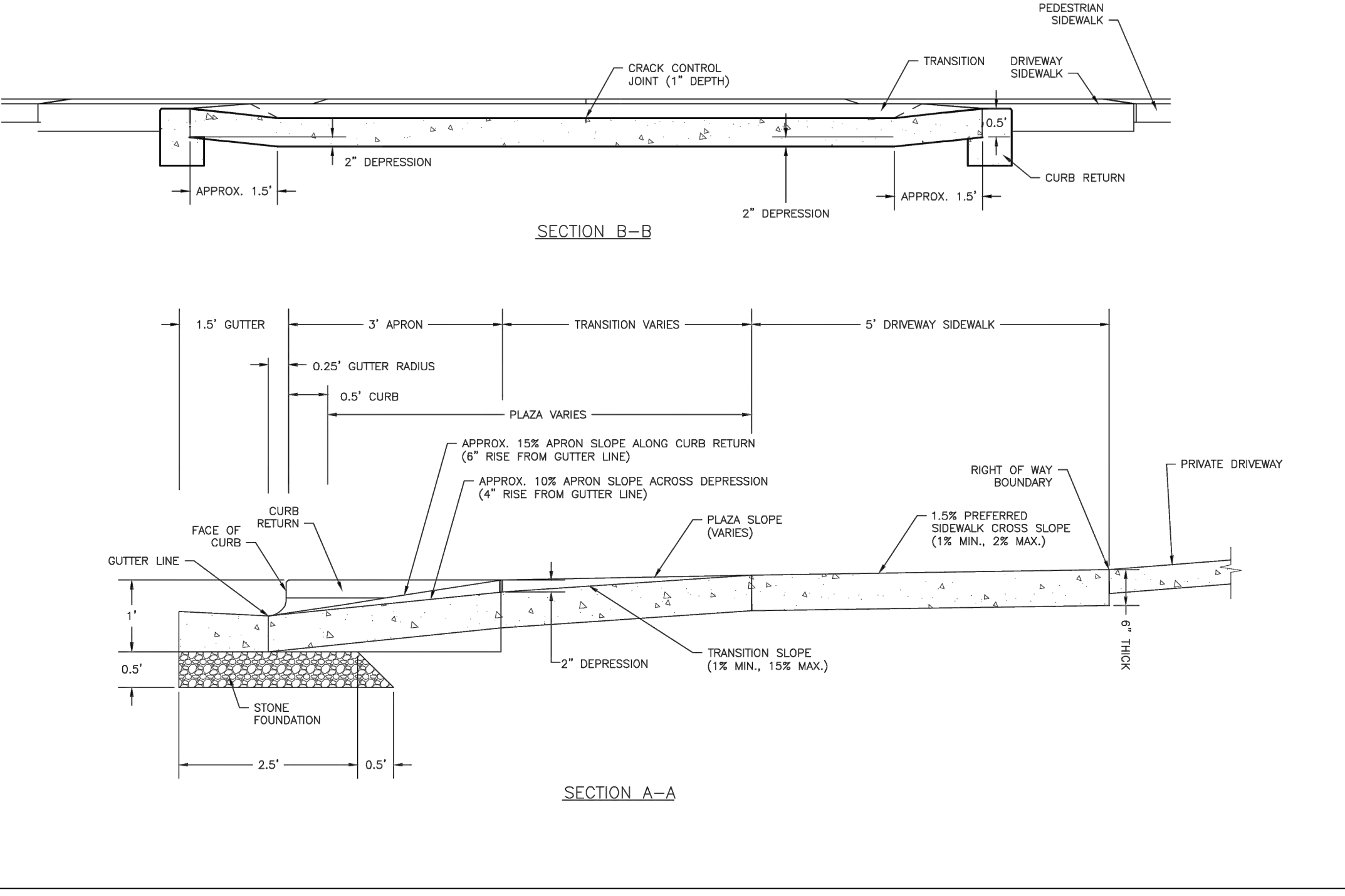
COMMERCIAL DRIVEWAY

DATE: FEB. 14, 2017
 DRAWN BY: JSR
 CHECKED BY: D.E.C., P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**COMMERCIAL DRIVEWAY
 SECTIONS
 (VERTICAL CURB)**

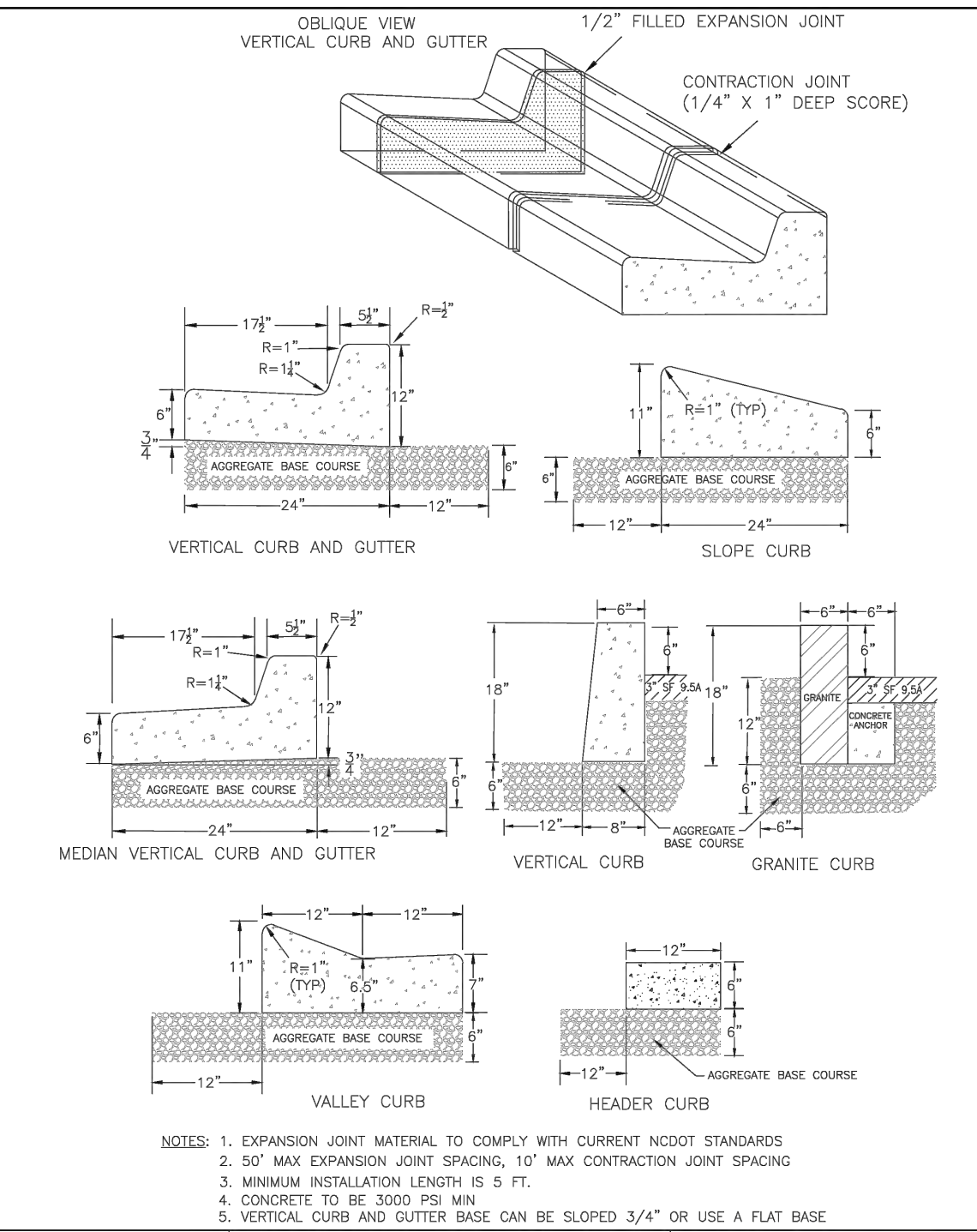
2 of 2

SD 3-03.4



SECTION B-B

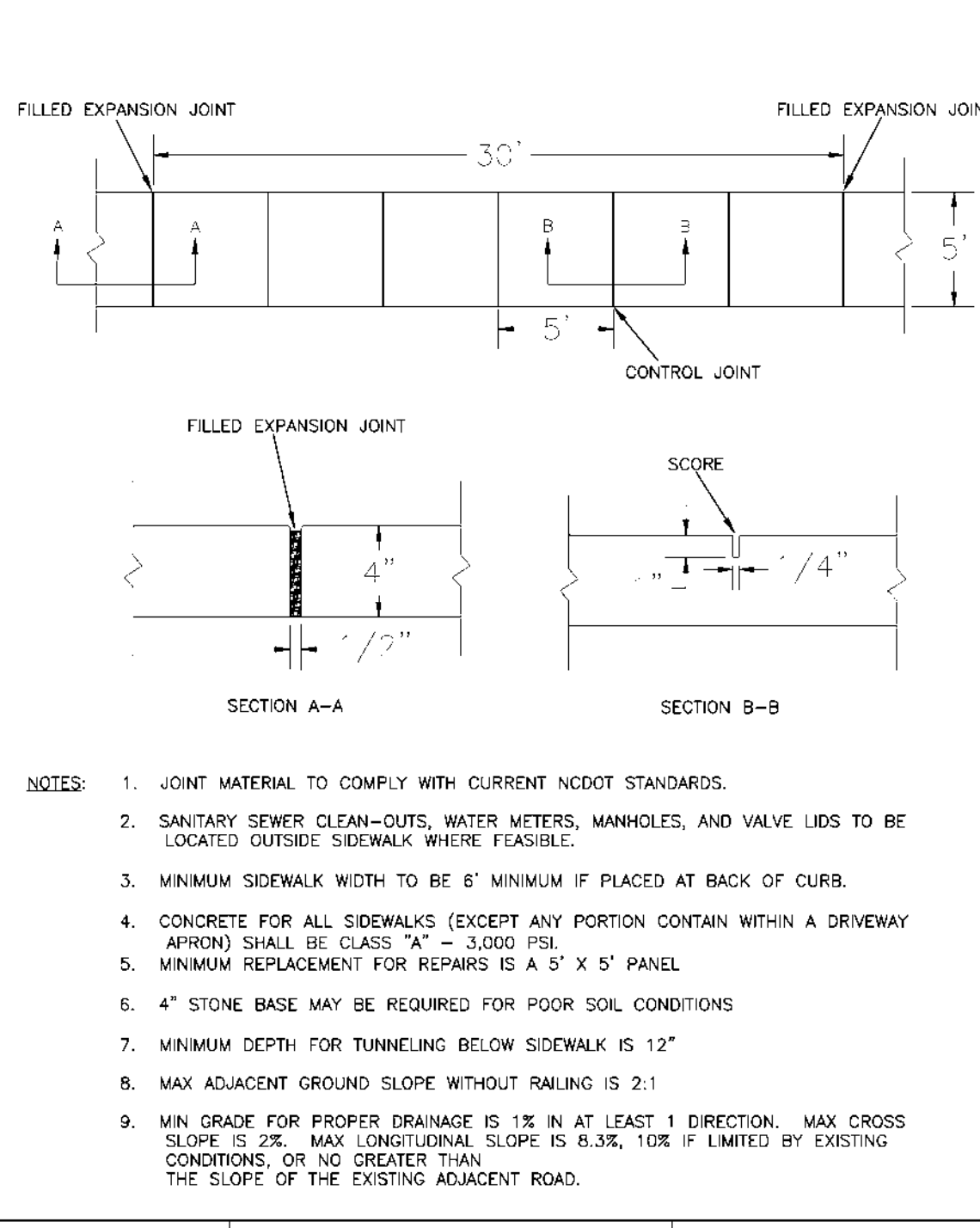
SECTION A-A



DATE: AUGUST, 2011
 DRAWN BY: JSR
 CHECKED BY: D.E.C., P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
CURBING

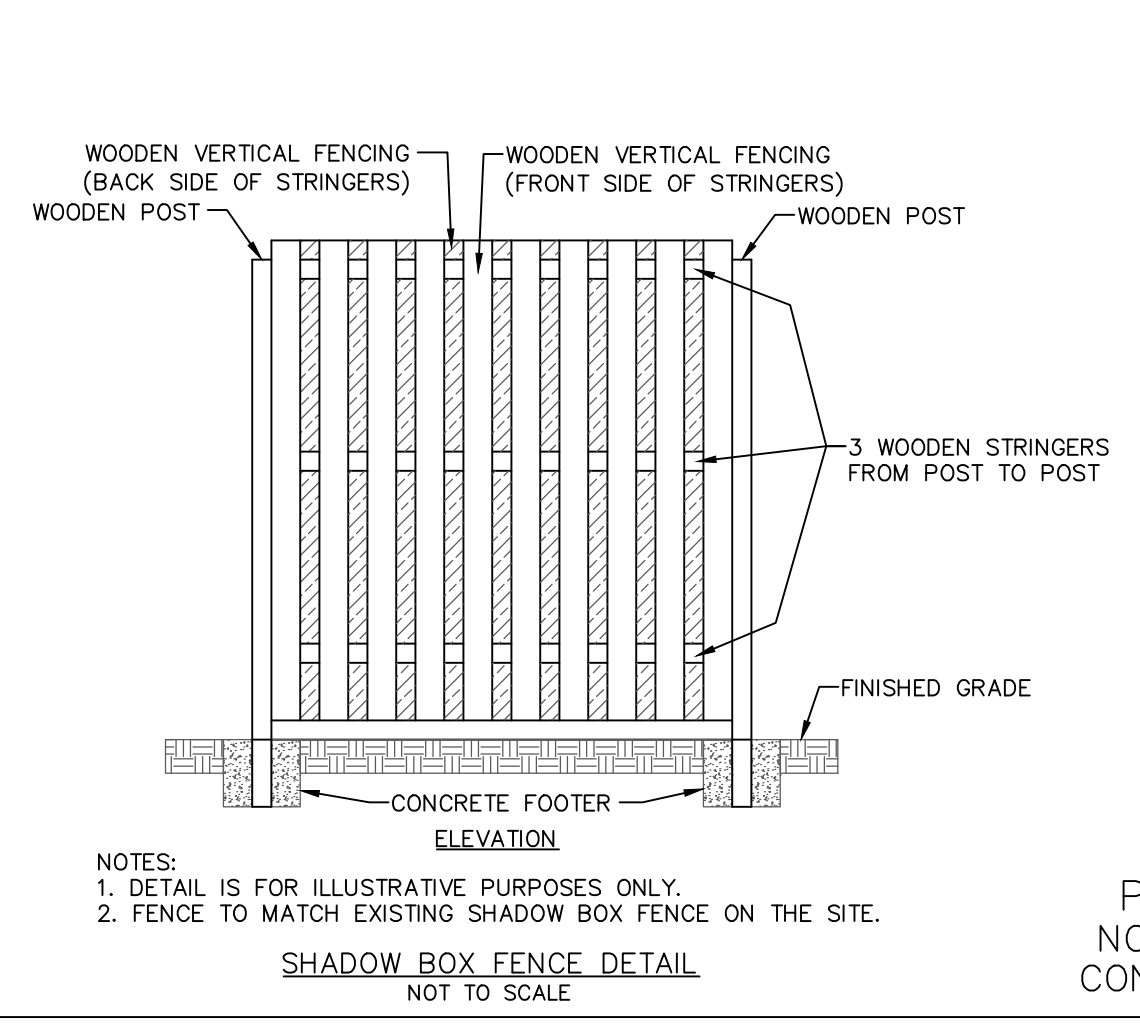
SD 3-11



DATE: OCTOBER, 2010
 DRAWN BY: JSR
 CHECKED BY: D.E.C., P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
SIDEWALK

SD 3-10

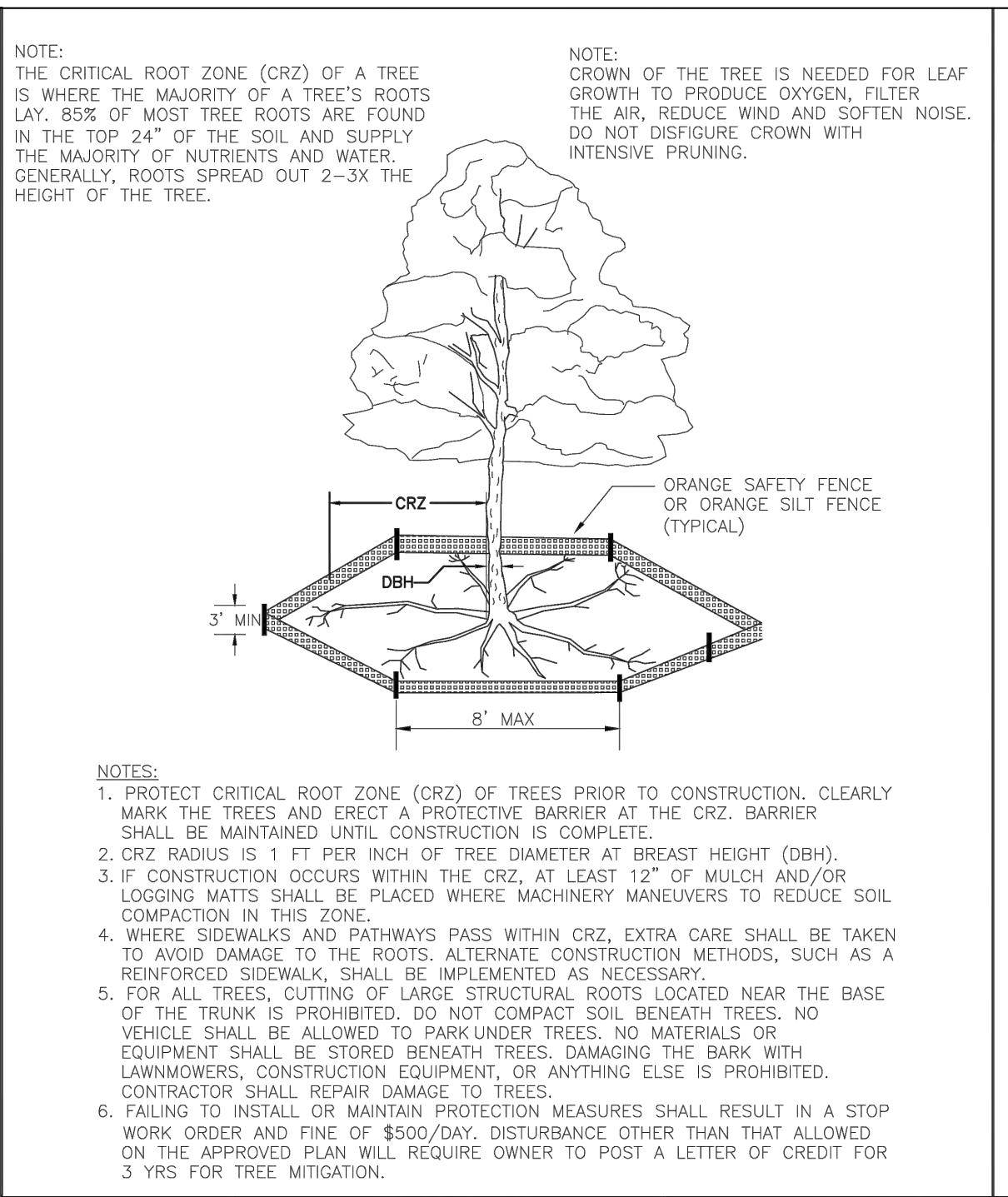


DATE: NOVEMBER, 2011
 DRAWN BY: JSR
 CHECKED BY: BDR, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**STREET SIGNS
 AND LOCATION**

SHEET 1 of 2

SD 15-03

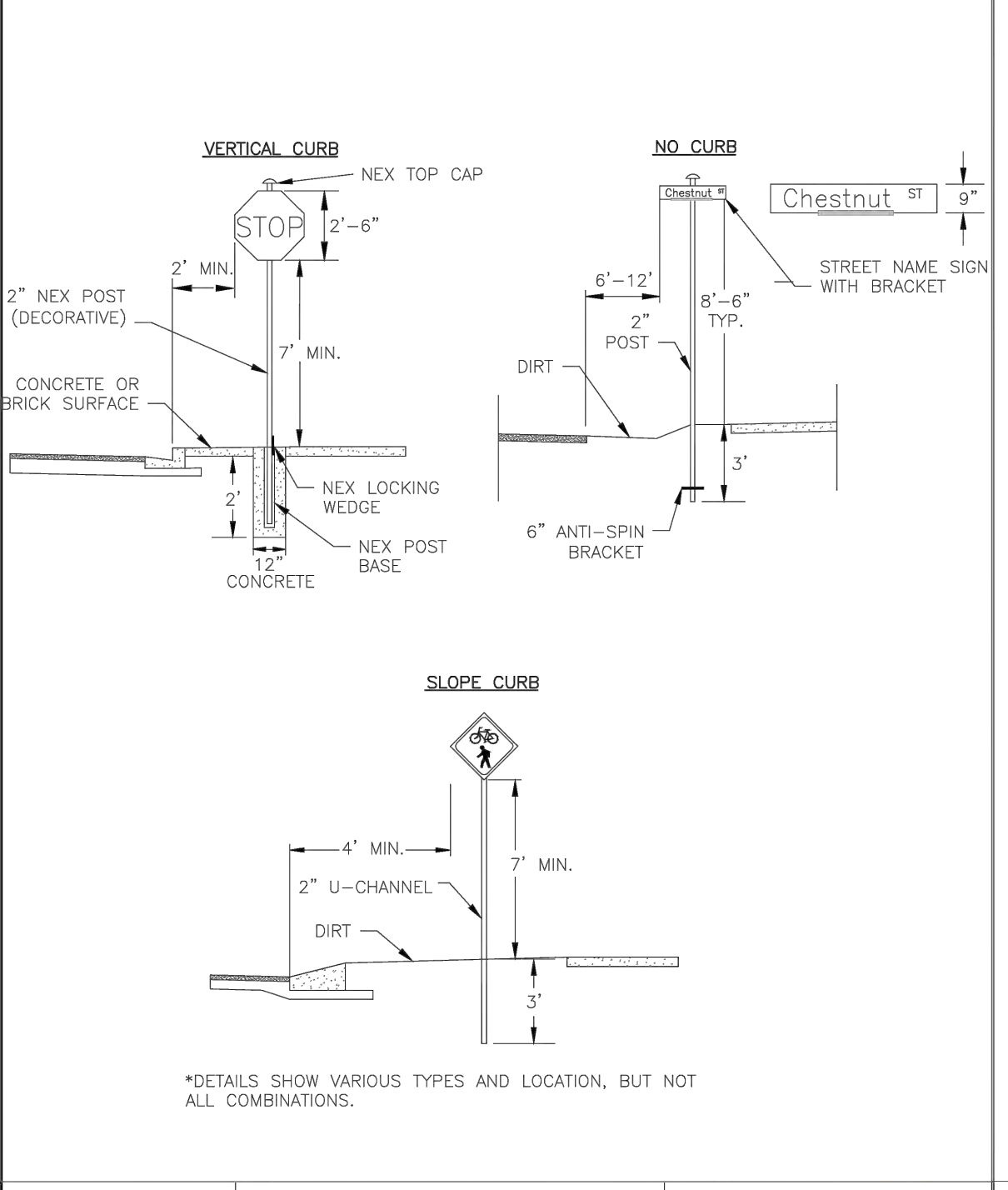


DATE: JAN, 2015
 DRAWN BY: JSR
 CHECKED BY: RDG, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**TREE PROTECTION
 DURING
 CONSTRUCTION**

SHEET 1 of 2

SD 15-09

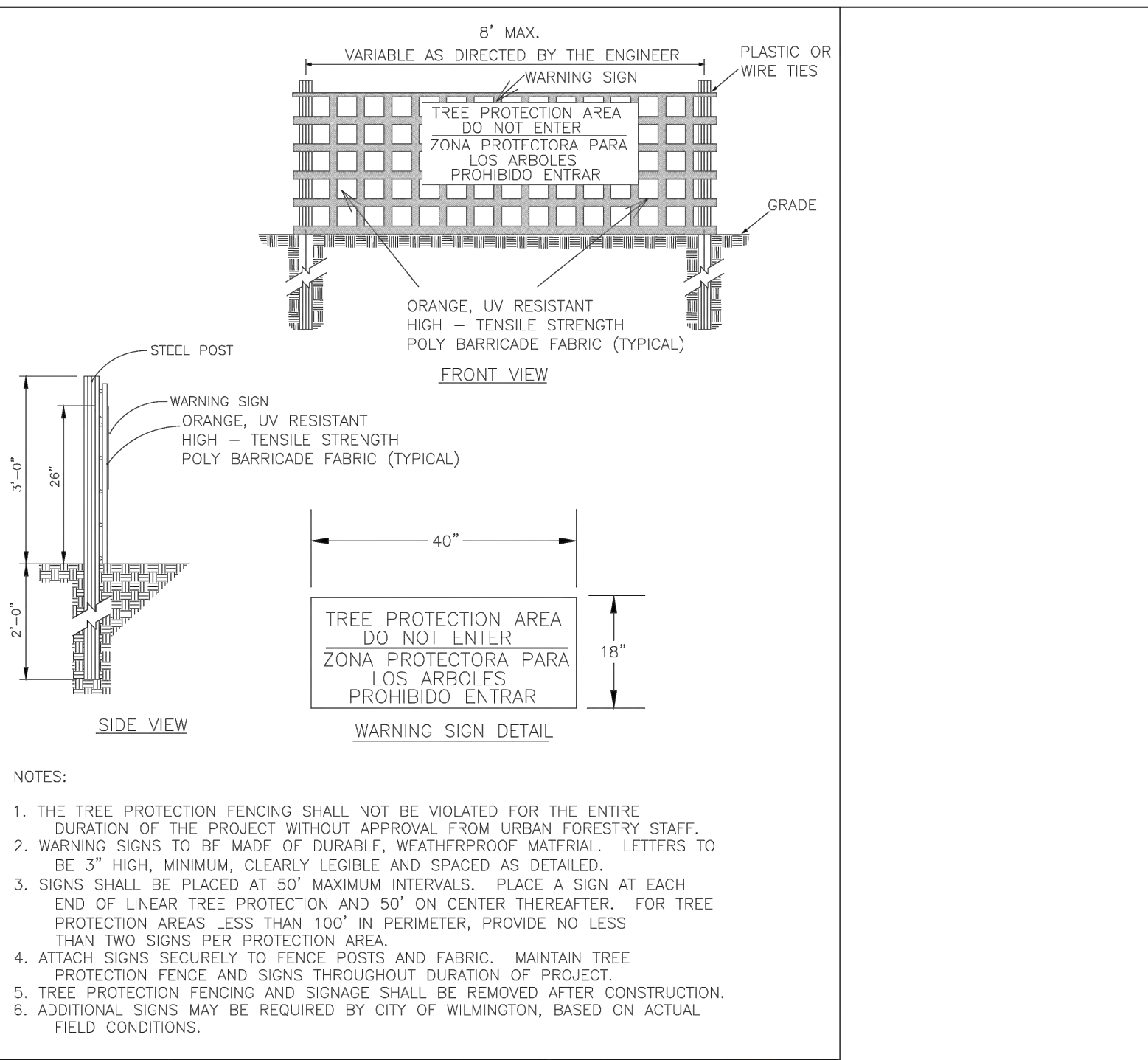


DATE: NOVEMBER, 2011
 DRAWN BY: JSR
 CHECKED BY: BDR, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**STREET SIGNS
 AND LOCATION**

SHEET 2 of 2

SD 15-03



DATE: JAN, 2015
 DRAWN BY: JSR
 CHECKED BY: RDG, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**TREE PROTECTION
 DURING
 CONSTRUCTION**

SHEET 2 of 2

SD 15-09

SIGNS

- All signs shall meet the requirements of MUTCD and City Traffic Engineering in effect at the time of construction.
- All Traffic Control Signs including multi-use paths shall be fabricated with 0.080 inch aluminum blanks using high intensity prismatic reflective sheeting Type IV or better. STOP signs shall be a minimum of 30"x30".
- SPECIAL DESIGNATION signs by location and type shall adhere to City of Wilmington signage plan (i.e. downtown, historic, cross-city trail, parks, riverfront, scenic by-way, parking, etc.) and all associated policies.
- POST MOUNTED STREET NAME SIGNS shall be fabricated with 9" extruded aluminum street name sign blanks using a standard cut-out. Minimum sign length is 18" long and increasing in 6" increments to 54" maximum as dictated by the number of letters in the name. The color scheme shall be white letters on a green background without a border. Generally, in the downtown and historic areas or as designated in the City of Wilmington signage plan the background shall be blue and contain a topper.
- Decorative sign posts shall consist of the NEX sign support system, 2" octagonal tube, 14 gauge, powder coated glossy black and include cap, post, base and wedge.
- All other sign posts shall be u-channel posts made of galvanized steel with 8" posts 2lbs/ft or 12" posts 3lbs/ft. Galvanized NEX post may be substituted with approval from the City Signs and Markings Engineer.
- OVERHEAD STREET NAME SIGNS shall be fabricated with 0.080 inch aluminum flat sign blanks 18" in height using a standard cut-out. Sign length will be dictated by the number of letters in the name. For mast-arm type traffic signal supports and other overhead support systems refer to the design plans for maximum sign length.
- All sign lettering, colors and fonts shall adhere to the MUTCD in effect at the time of construction. Fluorescent Yellow-Green shall be used on signs, in place of Yellow, when listed as an optional color in the MUTCD. Generally, the font will be FHWA series fonts (Highway Gothic.) Other font types require prior City Signs and Markings Engineer approval.

LOCATION

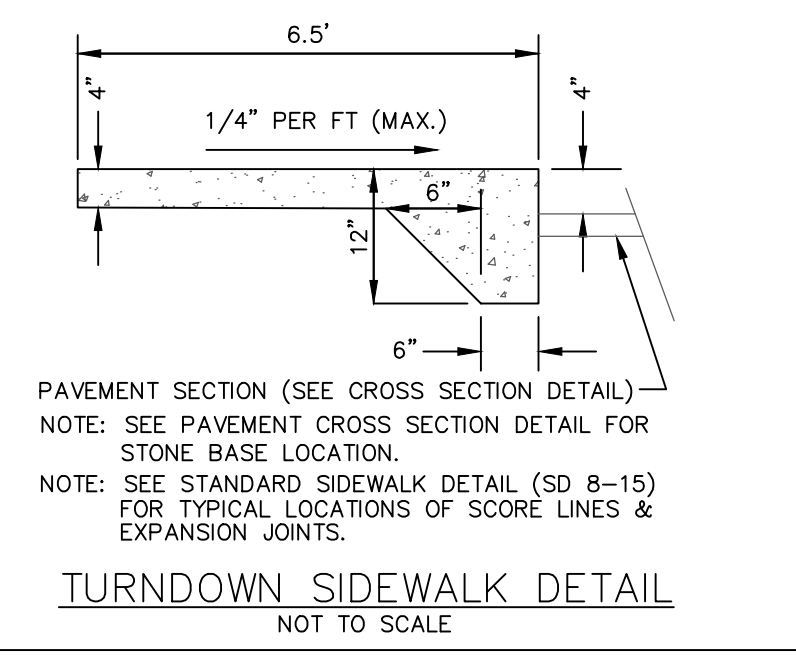
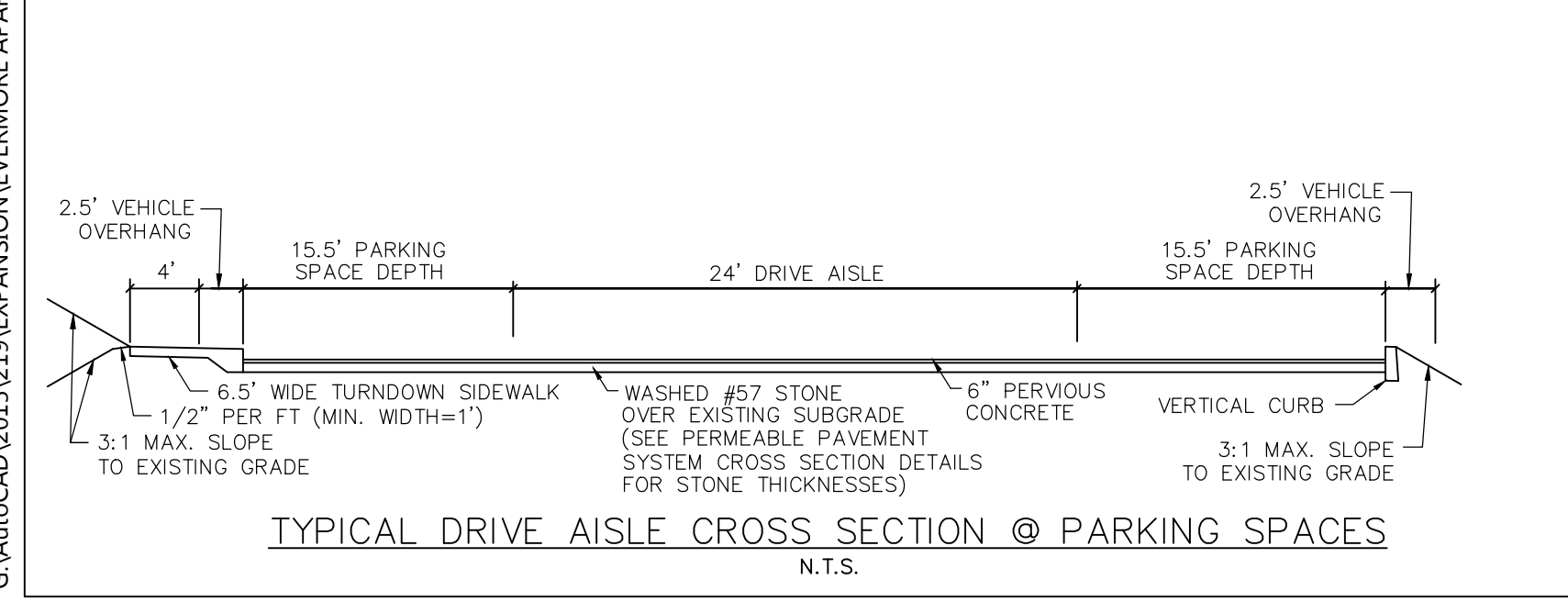
- Sign locations depend on the edge of road condition. Generally, signs shall be a minimum 2' from face of a vertical curb, 4' from front of slope face curb, and 6' from edge of pavement without curb. Signs shall not be located more than 12' from any of these locations.
- Sign posts installed in dirt shall be buried a minimum of 36". Octagonal posts shall utilize an anti-spin device, 6" in length minimum. Sign posts installed in concrete or brick shall utilize a base cast in concrete 24" x 12" diameter.
- Street name signs shall be installed 8'-6" from the ground to the bottom of the sign. Street name signs co-located with STOP signs shall be installed above the STOP sign. A 6" space shall be maintained between the STOP sign and the Street name sign that is parallel to the STOP sign face. All other signs should be mounted per MUTCD guidelines for Urban Areas.

DATE: NOVEMBER, 2011
 DRAWN BY: JSR
 CHECKED BY: BDR, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**STREET SIGNS
 AND LOCATION**

SHEET 2 of 2

SD 15-03



DATE: NOVEMBER, 2011
 DRAWN BY: JSR
 CHECKED BY: BDR, P.E.
 SCALE: NOT TO SCALE

STANDARD DETAIL
**SHADOW BOX FENCE
 DETAIL**

NOT TO SCALE

PRELIMINARY PLAT
 NOT FOR RECORDATION,
 CONVEYANCES, OR SALES

For each open utility cut of City streets, a \$250 permit shall be required from the City prior to occupancy and/or project acceptance.

City of Wilmington logo and contact information.

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

Signature: _____

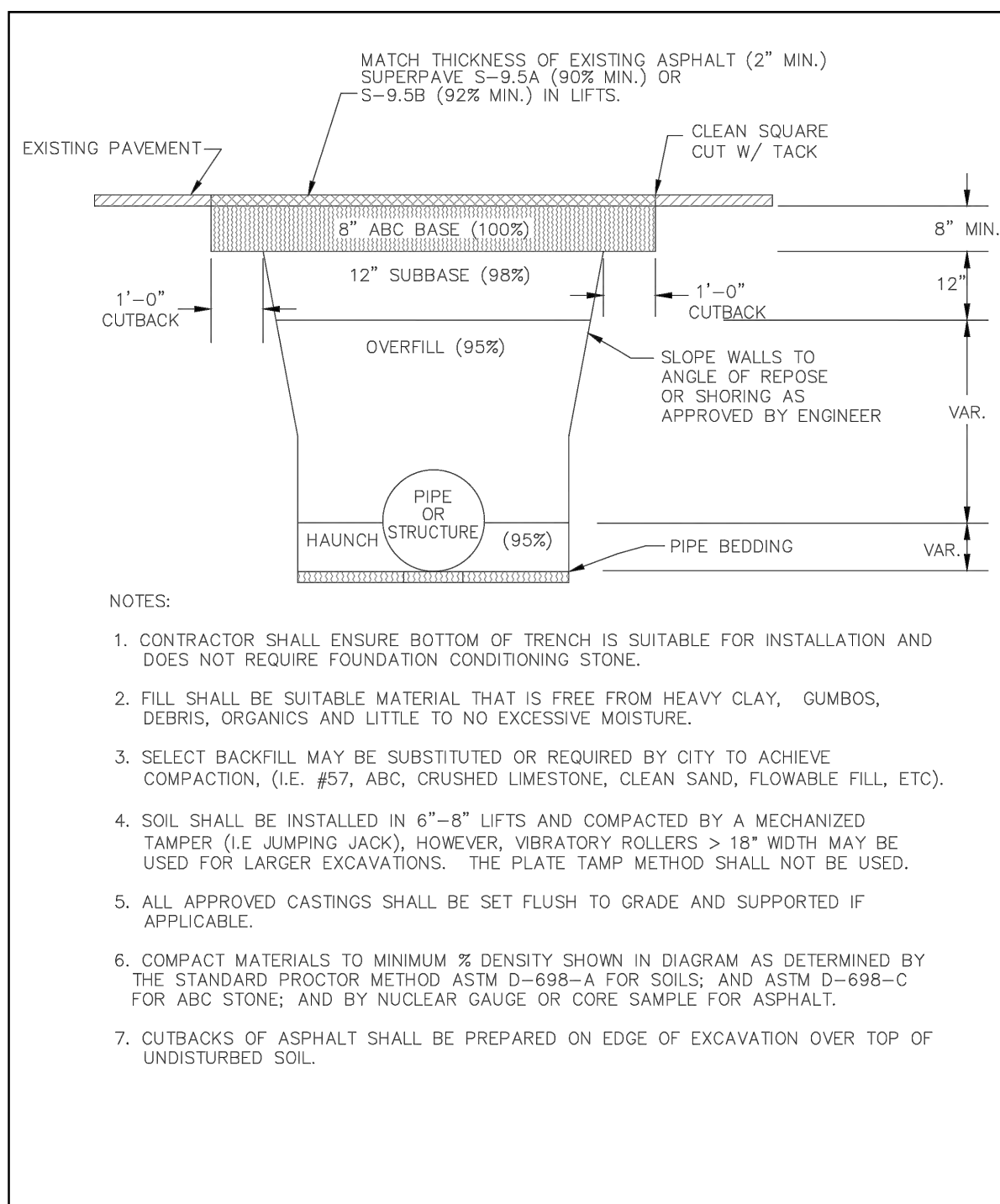
DETAIL SHEET
EVERMORE APARTMENTS EXPANSION
 CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

DATE: 1-18-19
 SCALE: N.T.S.
 DRAWN: JCB
 CHECKED: JBM
 PROJECT NO: 219

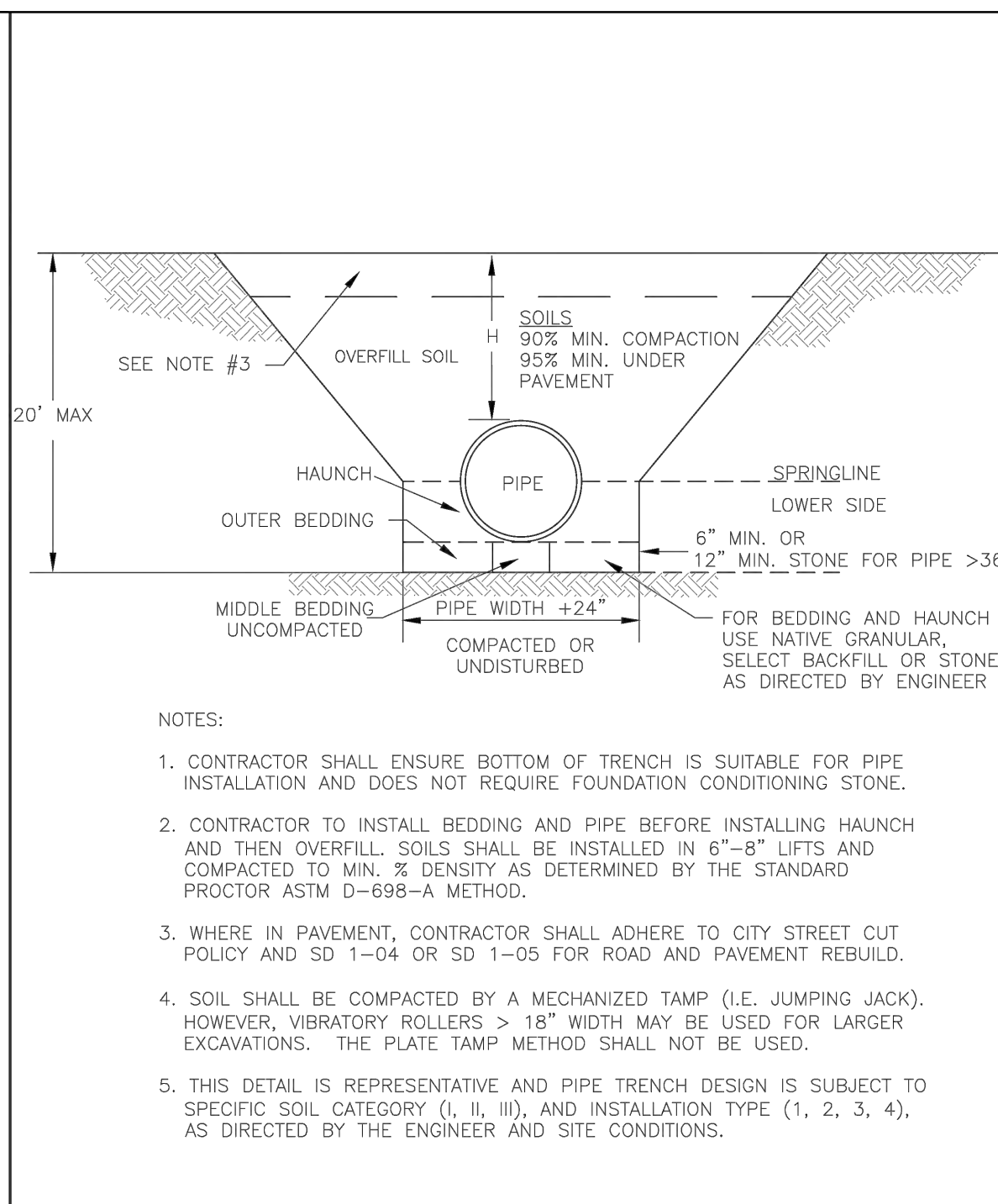
MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-6643
 Fax 910-392-5993 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
 10 S. CAROLINA DRIVE
 WILMINGTON, NC 28403
 PHONE: 910-251-5030

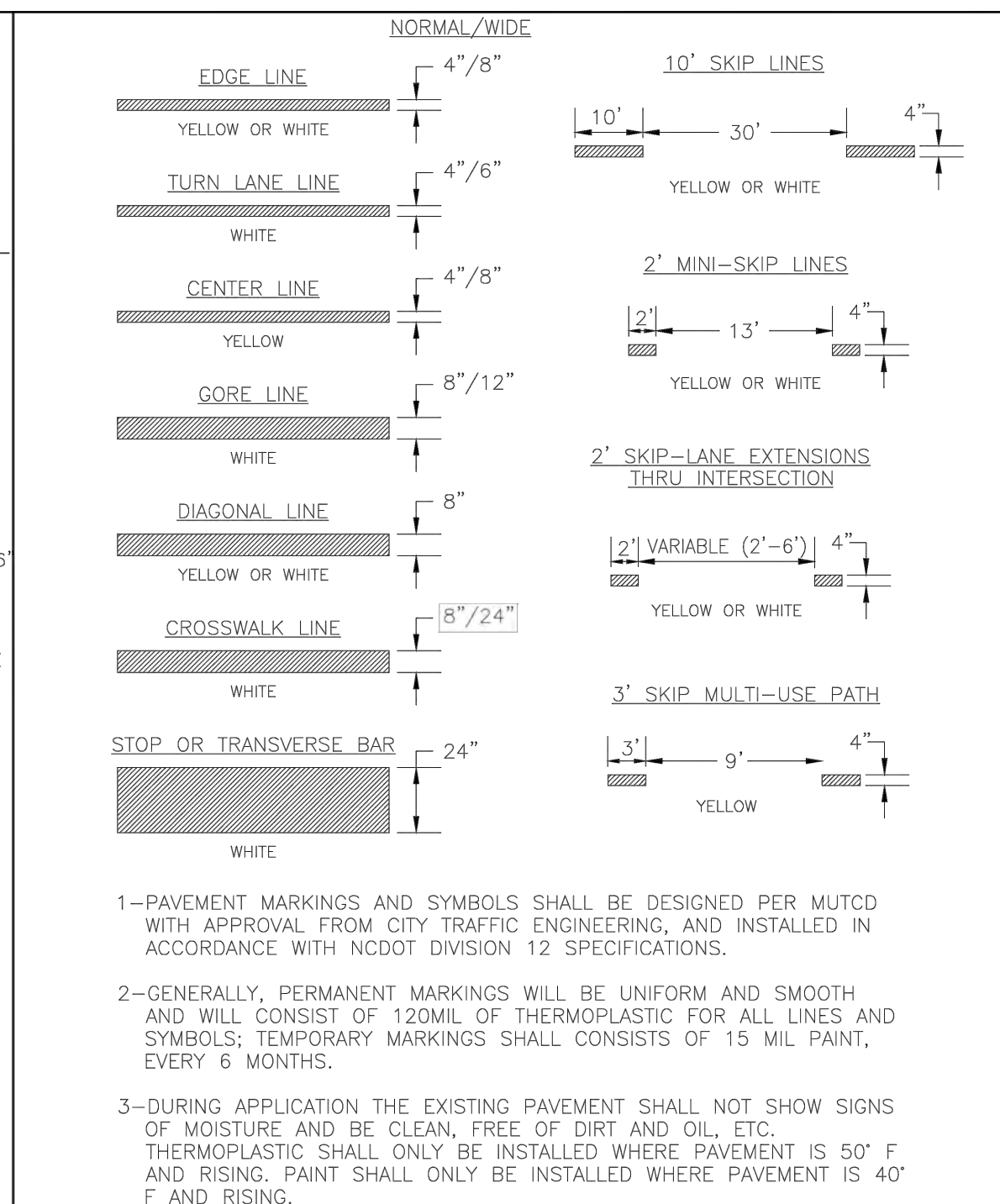
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 OF: 14



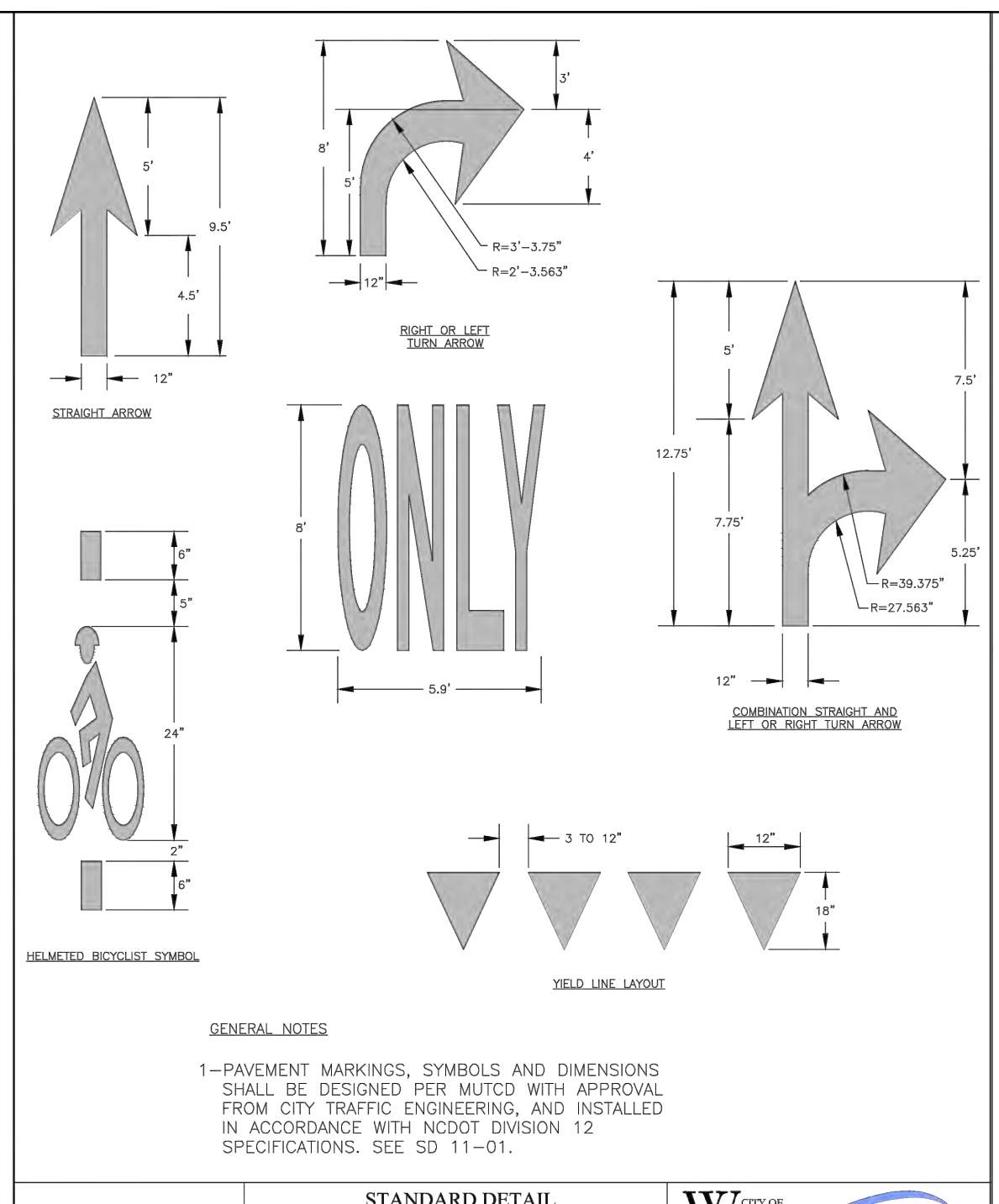
- NOTES:
- CONTRACTOR SHALL ENSURE BOTTOM OF TRENCH IS SUITABLE FOR INSTALLATION AND DOES NOT REQUIRE FOUNDATION CONDITIONING STONE.
 - FILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
 - SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57, ABC, CRUSHED LESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
 - SOIL SHALL BE INSTALLED IN 6"-8" LIFTS AND COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 - ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
 - COMPACT MATERIALS TO MINIMUM % DENSITY SHOWN IN DIAGRAM AS DETERMINED BY THE STANDARD PROCTOR METHOD ASTM D-698-A FOR SOILS, AND ASTM D-698-C FOR ABC STONE, AND BY NUCLEAR GAUGE OR CORE SAMPLE FOR ASPHALT.
 - CUTBACKS OF ASPHALT SHALL BE PREPARED ON EDGE OF EXCAVATION OVER TOP OF UNDISTURBED SOIL.



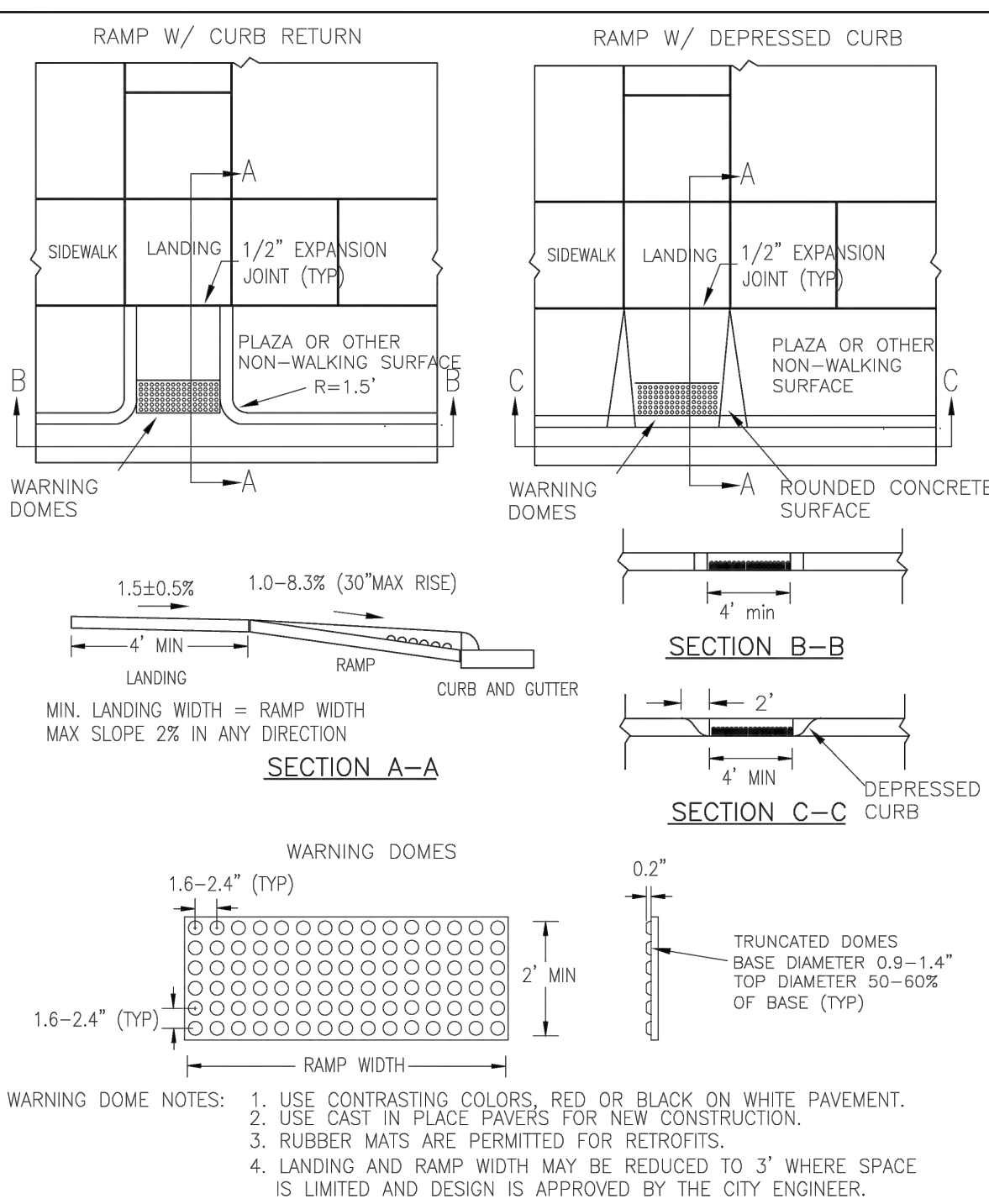
- NOTES:
- CONTRACTOR SHALL ENSURE BOTTOM OF TRENCH IS SUITABLE FOR PIPE INSTALLATION AND DOES NOT REQUIRE FOUNDATION CONDITIONING STONE.
 - CONTRACTOR TO INSTALL BEDDING AND PIPE BEFORE INSTALLING HAUNCH AND THEN OVERFILL. SOILS SHALL BE INSTALLED IN 6"-8" LIFTS AND COMPACTED TO MIN. % DENSITY AS DETERMINED BY THE STANDARD PROCTOR ASTM D-698-A METHOD.
 - WHERE IN PAVEMENT, CONTRACTOR SHALL ADHERE TO CITY STREET CUT POLICY AND SD 1-04 OR SD 1-05 FOR ROAD AND PAVEMENT REBUILD.
 - SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 - THIS DETAIL IS REPRESENTATIVE AND PIPE TRENCH DESIGN IS SUBJECT TO SPECIFIC SOIL CATEGORY (I, II, III), AND INSTALLATION TYPE (1, 2, 3, 4), AS DIRECTED BY THE ENGINEER AND SITE CONDITIONS.



- PAVEMENT MARKINGS AND SYMBOLS SHALL BE DESIGNED PER MUTCD WITH APPROVAL FROM CITY TRAFFIC ENGINEERING, AND INSTALLED IN ACCORDANCE WITH NCDOT DIVISION 12 SPECIFICATIONS.
- GENERALLY, PERMANENT MARKINGS WILL BE UNIFORM AND SMOOTH AND WILL CONSIST OF 120MIL OF THERMOPLASTIC FOR ALL LINES AND SYMBOLS; TEMPORARY MARKINGS SHALL CONSIST OF 15 MIL PAINT, EVERY 6 MONTHS.
- DURING APPLICATION THE EXISTING PAVEMENT SHALL NOT SHOW SIGNS OF MOISTURE AND BE CLEAN, FREE OF DIRT AND OIL, ETC. THERMOPLASTIC SHALL ONLY BE INSTALLED WHERE PAVEMENT IS 50' F AND RISING. PAINT SHALL ONLY BE INSTALLED WHERE PAVEMENT IS 40' F AND RISING.



- GENERAL NOTES:
- PAVEMENT MARKINGS, SYMBOLS AND DIMENSIONS SHALL BE DESIGNED PER MUTCD WITH APPROVAL FROM CITY TRAFFIC ENGINEERING, AND INSTALLED IN ACCORDANCE WITH NCDOT DIVISION 12 SPECIFICATIONS. SEE SD 11-01.



- WARNING DOME NOTES:
- USE CONTRASTING COLORS, RED OR BLACK ON WHITE PAVEMENT.
 - USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
 - RUBBER MATS ARE PERMITTED FOR RETROFITS.
 - LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

DATE: MAY, 2013
DRAWN BY: JSR
CHECKED BY: D.E.C., P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
PAVEMENT REPAIRS - UTILITY CUTS

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
212 OPERATING CENTER DRIVE
WILMINGTON, N.C. 28412
(910) 341-7807

SD 1-05

DATE: MAY, 2013
DRAWN BY: JSR
CHECKED BY: D.E.C., P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
PIPE TRENCH TYPICAL

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
212 OPERATING CENTER DRIVE
WILMINGTON, N.C. 28412
(910) 341-7807

SD 1-07

DATE: DECEMBER, 2011
DRAWN BY: JSR
CHECKED BY: D.E.C., P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
PAVEMENT MARKINGS LINE TYPES

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 11-01

DATE: OCTOBER, 2012
DRAWN BY: JSR
CHECKED BY: D.E.C., P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
GUIDELINES FOR PAVEMENT MARKINGS AND SYMBOLS

CITY OF WILMINGTON
NORTH CAROLINA
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WILMINGTON, NC 28402
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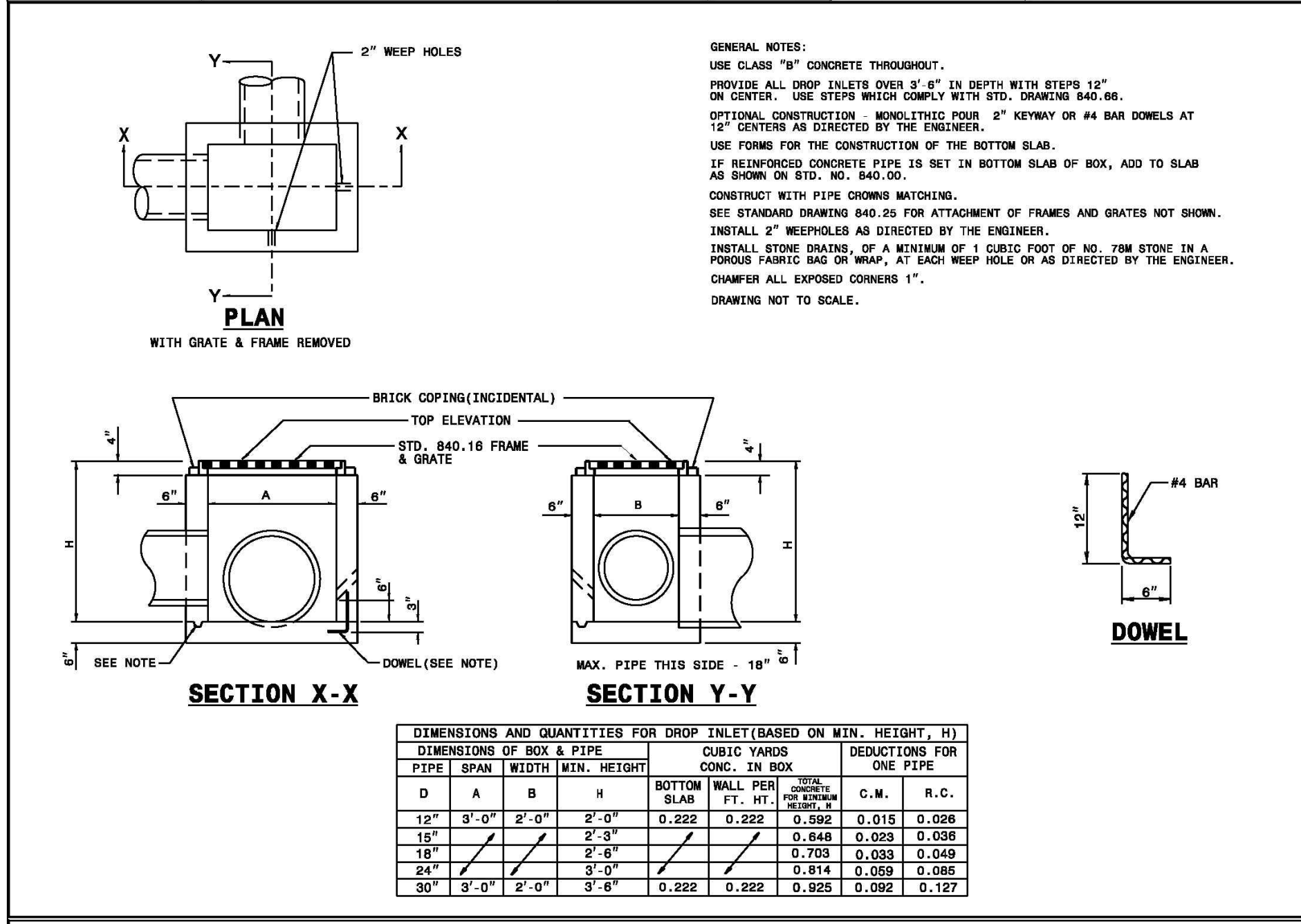
SD 11-03

DATE: DECEMBER, 2010
DRAWN BY: PBJSR
CHECKED BY: DEC
SCALE: NOT TO SCALE

STANDARD DETAIL
PERPENDICULAR CURB RAMP ADJACENT TO PLAZA

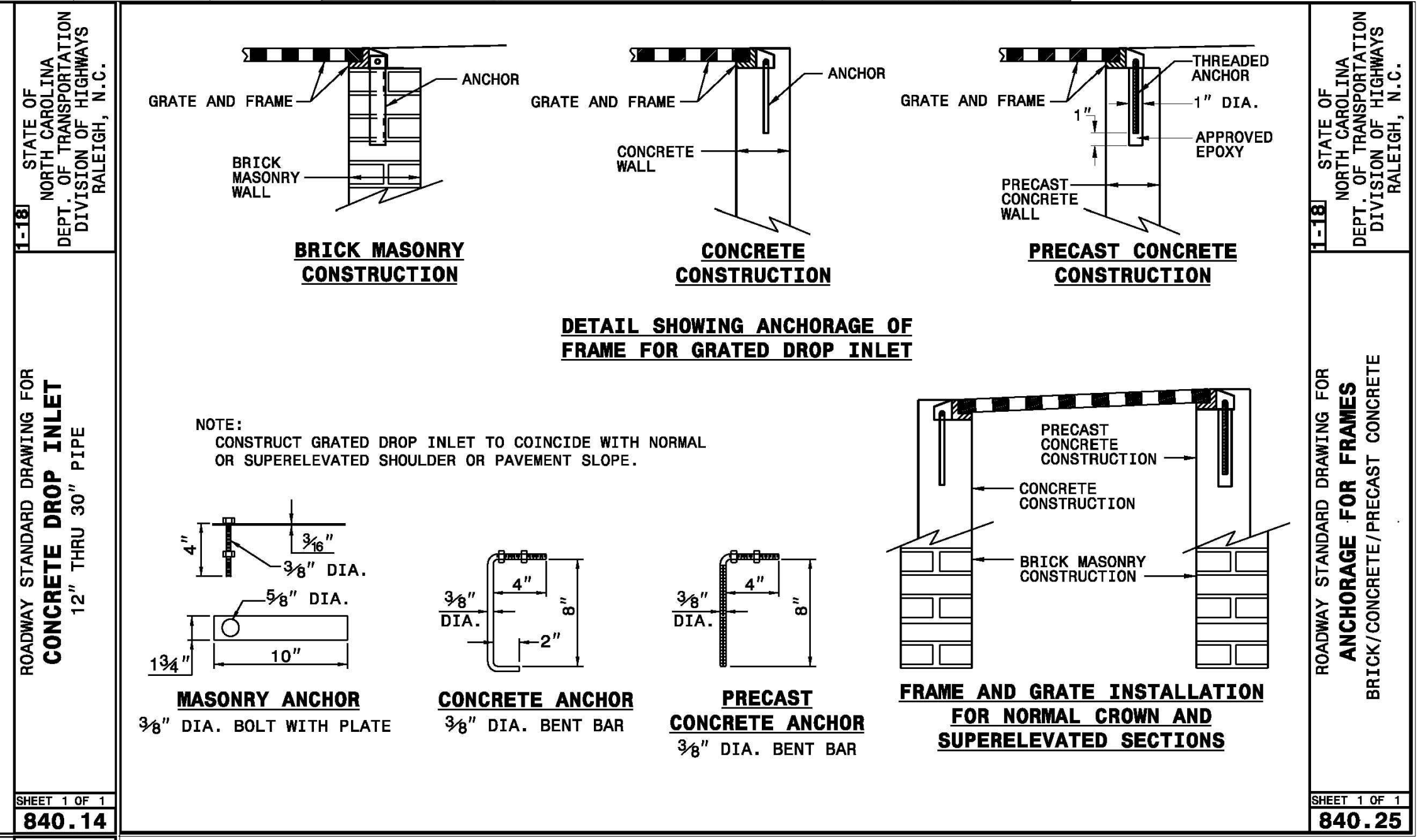
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NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, N.C. 28402
(910) 341-7807

SD3-08

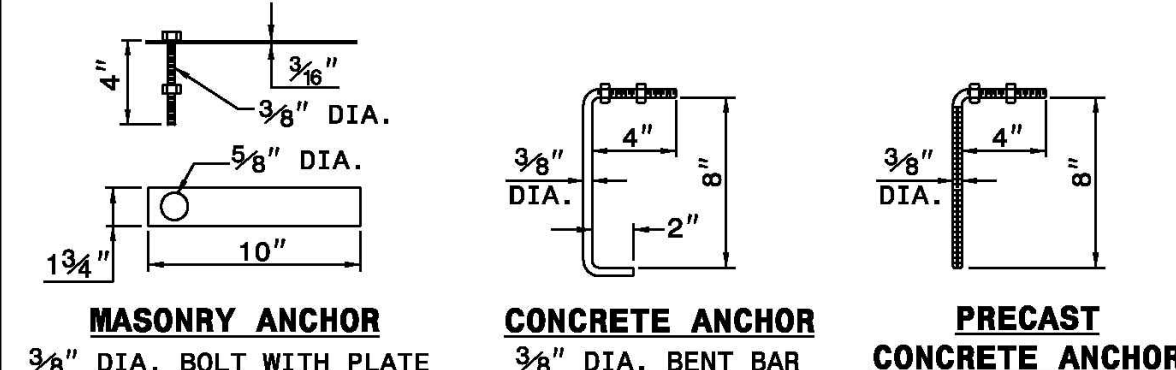


- GENERAL NOTES:
- USE CLASS "B" CONCRETE THROUGHOUT.
 - PROVIDE ALL DROP INLETS OVER 30" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 - OPTIONAL CONSTRUCTION: MONOLITHIC POUR 2" KEYWAY OR #4 BAR DOMELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 - USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 - IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
 - CONSTRUCT WITH PIPE CHAINS MATCHING.
 - SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
 - INSTALL 2" REINFORCES AS DIRECTED BY THE ENGINEER.
 - INSTALL STONE DRAINS OF A MINIMUM OF 1 CUBIC FOOT OF NO. 70M STONE IN A POROUS FABRIC BAG OR MAT, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
 - CHAMFER ALL EXPOSED CORNERS 1".
 - DRAWING NOT TO SCALE.

DIMENSIONS OF BOX & PIPE		CUBIC YARDS CONC. IN BOX		DEDUCTIONS FOR ONE PIPE	
D	A	B	H	FT.	R.C.
12"	3'-0"	2'-0"	2'-0"	0.222	0.015
18"	3'-0"	2'-0"	2'-3"	0.848	0.038
18"	3'-0"	2'-0"	2'-6"	0.753	0.049
24"	3'-0"	2'-0"	3'-0"	0.814	0.085
30"	3'-0"	2'-0"	3'-6"	0.222	0.092



- NOTE:
- CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.

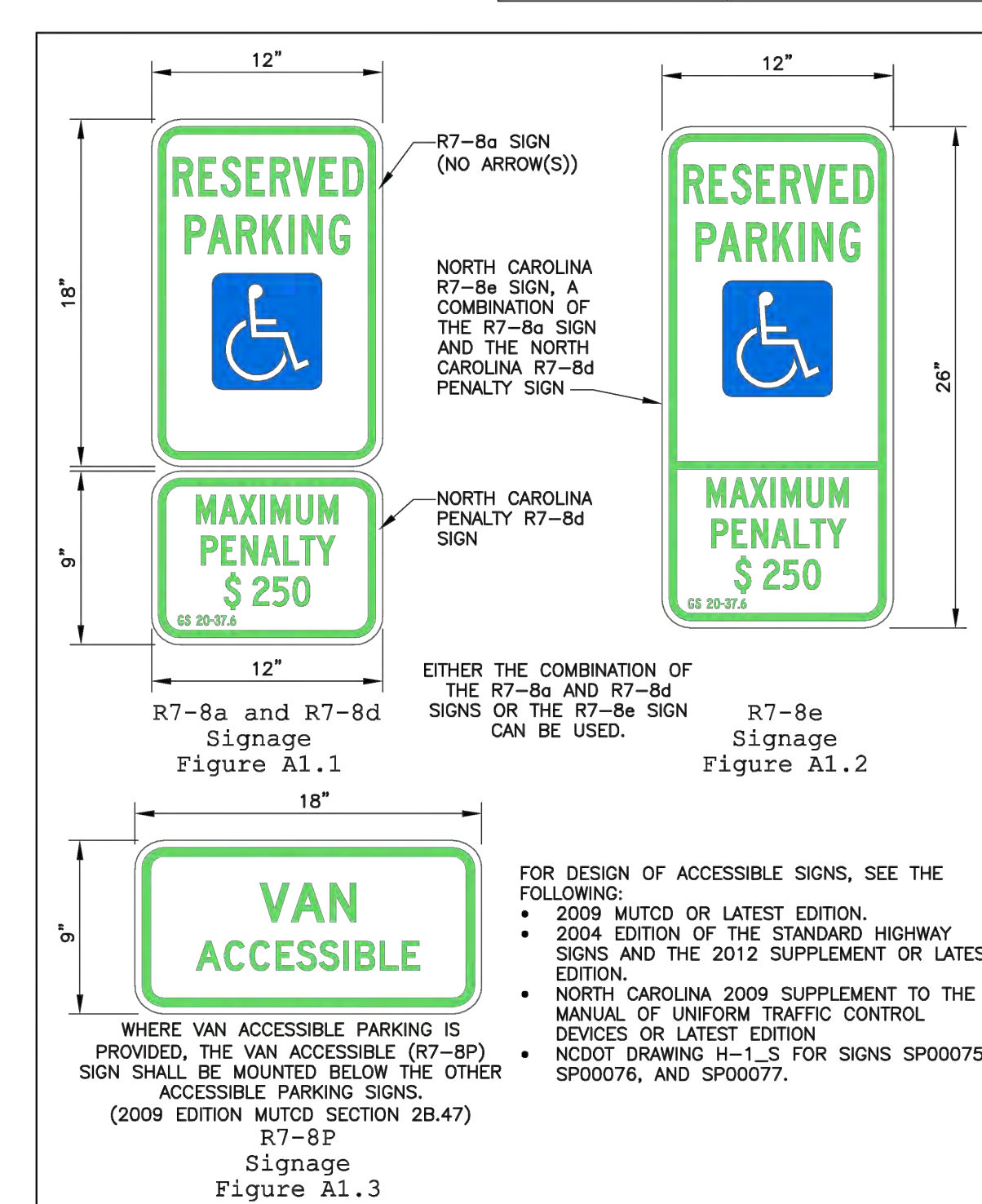


DATE: NOVEMBER 8, 2016
DRAWN BY: DALE THOMPSON
CHECKED BY: RANDALL GLAZIER
SCALE: NOT TO SCALE

ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
SHEET A1 OF 5

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SD 11-03

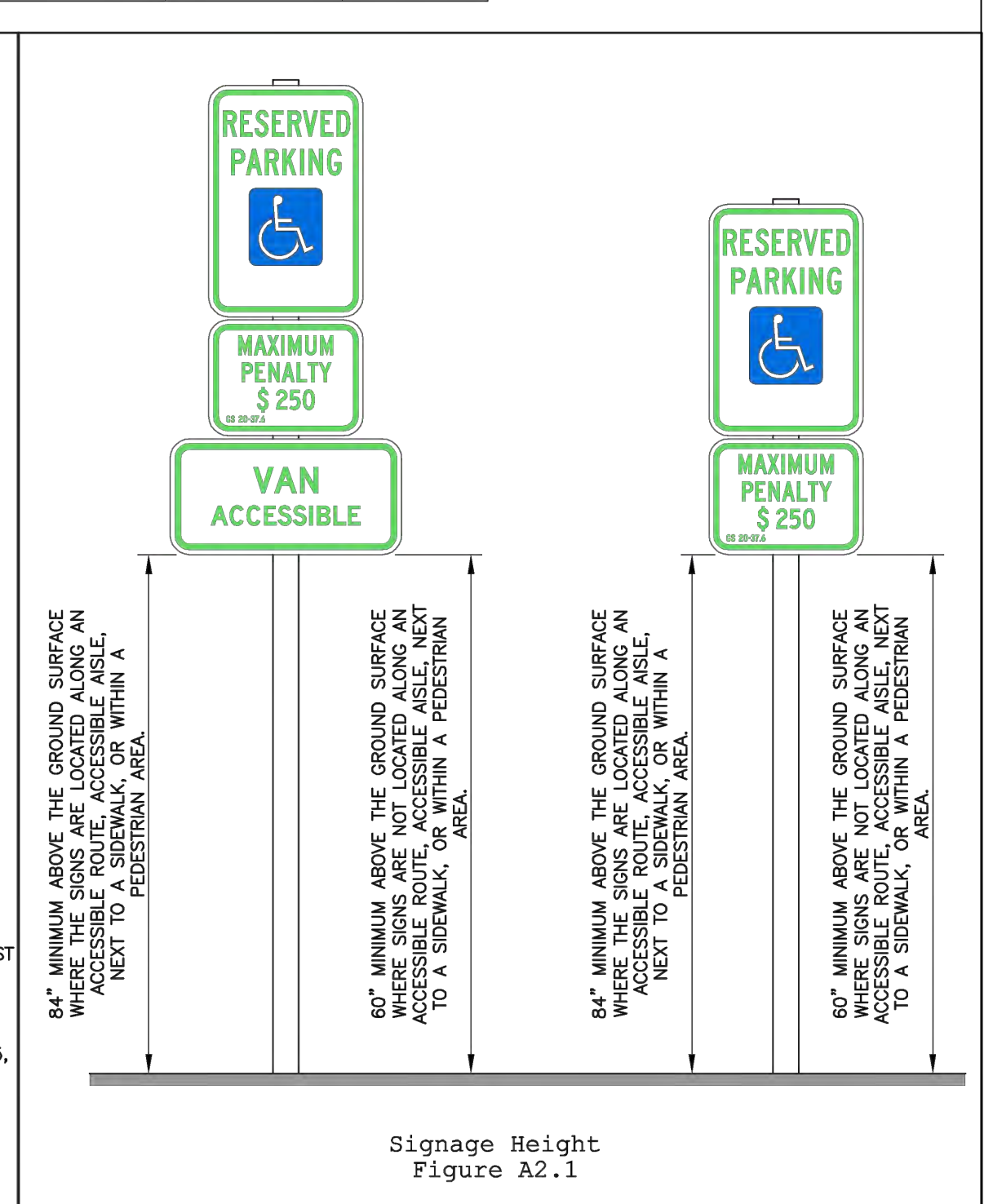


DATE: NOVEMBER 8, 2016
DRAWN BY: DALE THOMPSON
CHECKED BY: RANDALL GLAZIER
SCALE: NOT TO SCALE

ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
SHEET A2 OF 5

CITY OF WILMINGTON
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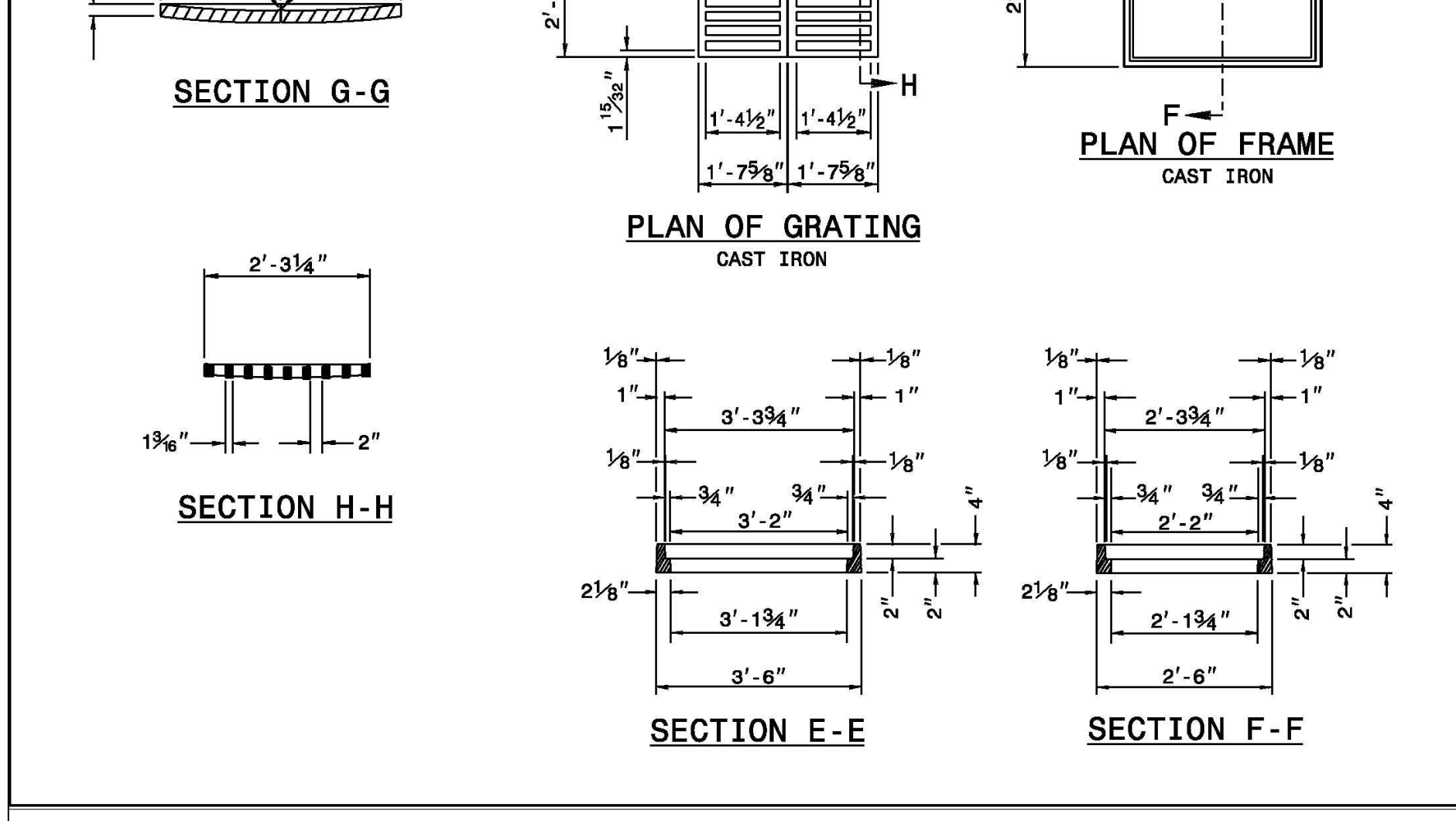


DATE: NOVEMBER 8, 2016
DRAWN BY: DALE THOMPSON
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SCALE: NOT TO SCALE

ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
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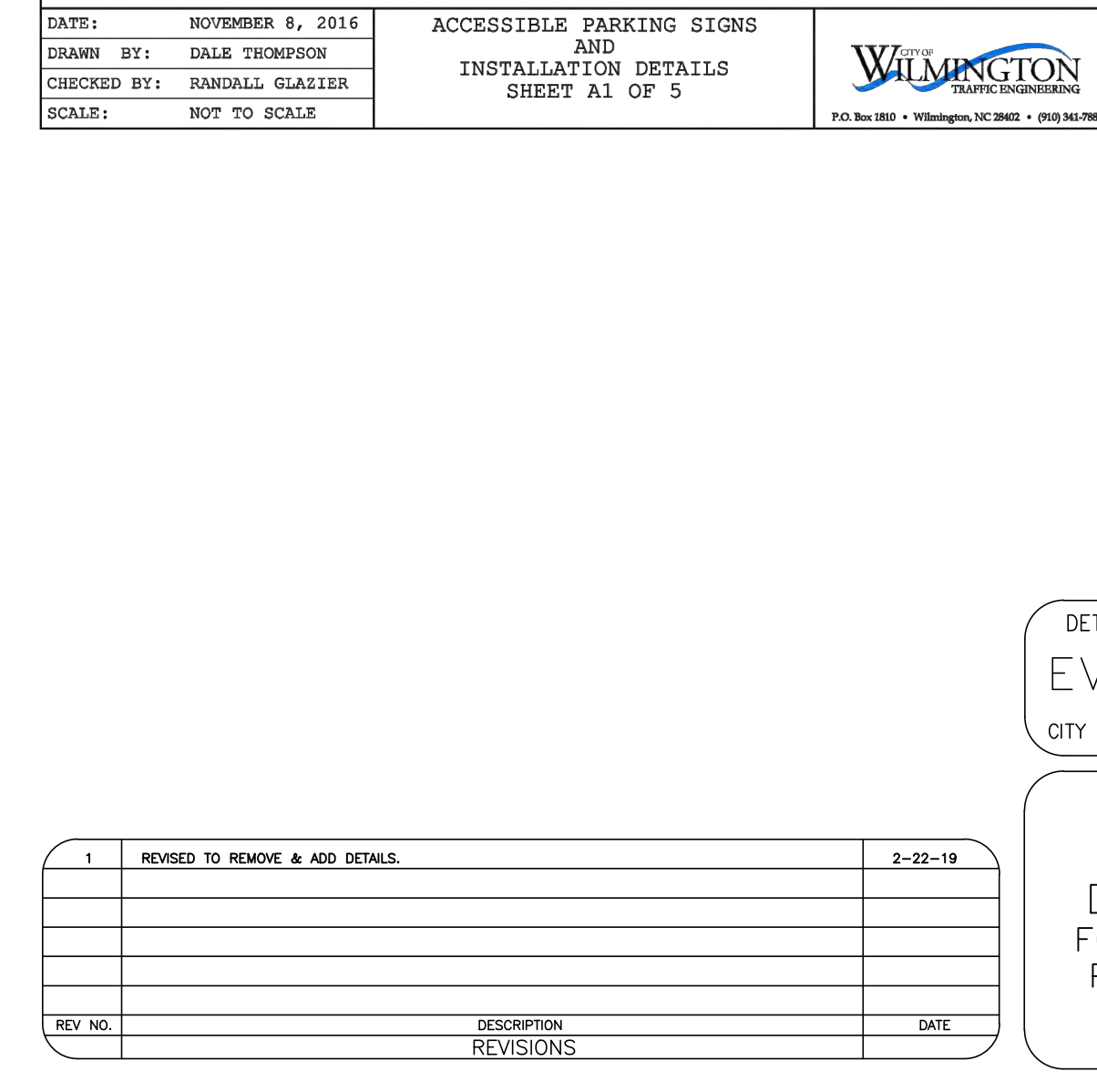


DATE: NOVEMBER 8, 2016
DRAWN BY: DALE THOMPSON
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ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
SHEET A1 OF 5

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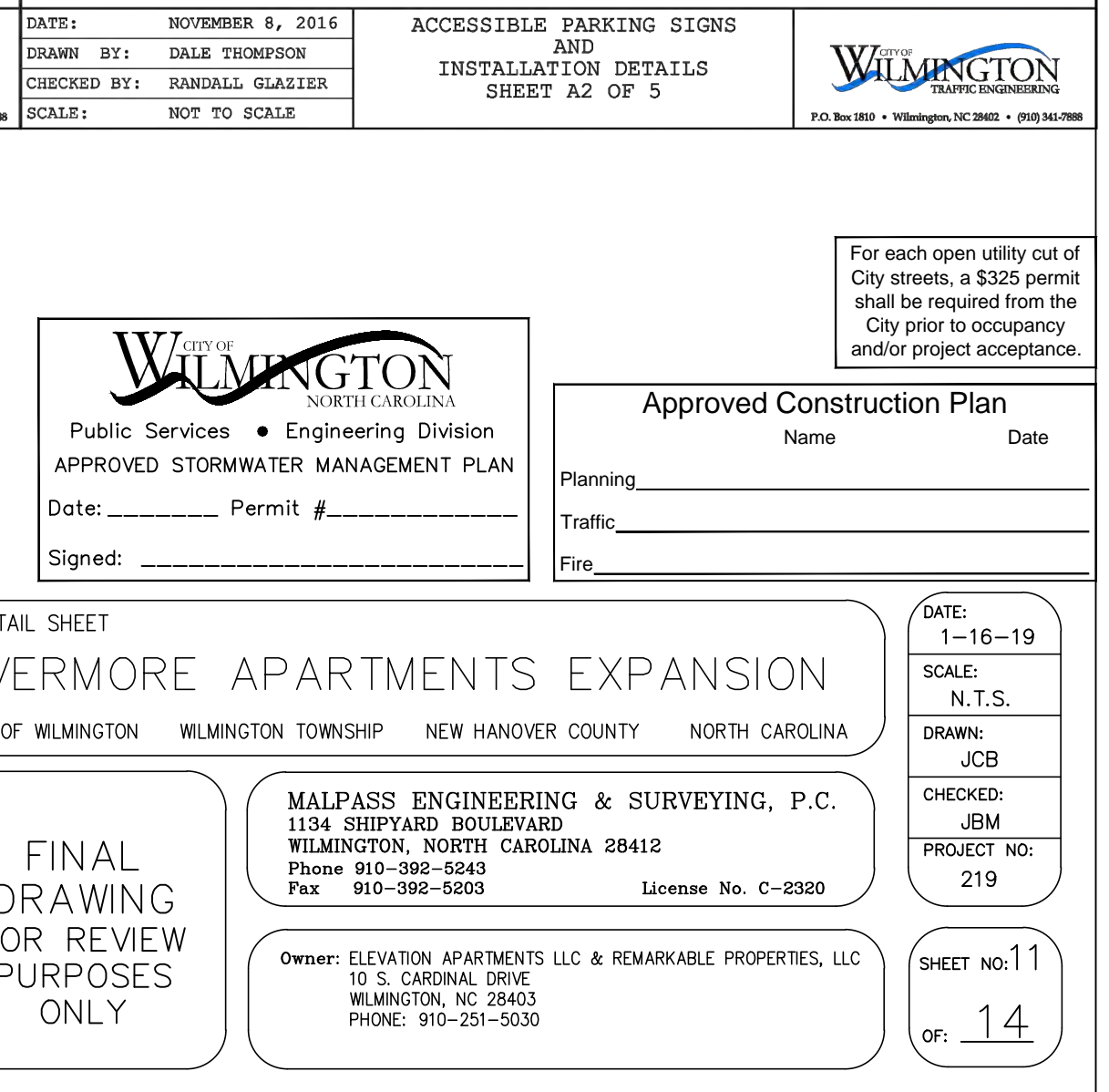


DATE: NOVEMBER 8, 2016
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ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
SHEET A2 OF 5

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SHEET A2 OF 5

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(910) 341-7807

SD 11-03

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PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES

REV. NO.	DESCRIPTION	DATE
1	REVISED TO REMOVE & ADD DETAILS.	2-22-19

DETAIL SHEET
EVERMORE APARTMENTS EXPANSION
CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING FOR REVIEW PURPOSES ONLY

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

License No. C-2920

DATE: 1-16-19
SCALE: N.T.S.
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219
SHEET NO: 11
OF: 14

For each open utility cut of City sheets a \$25 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

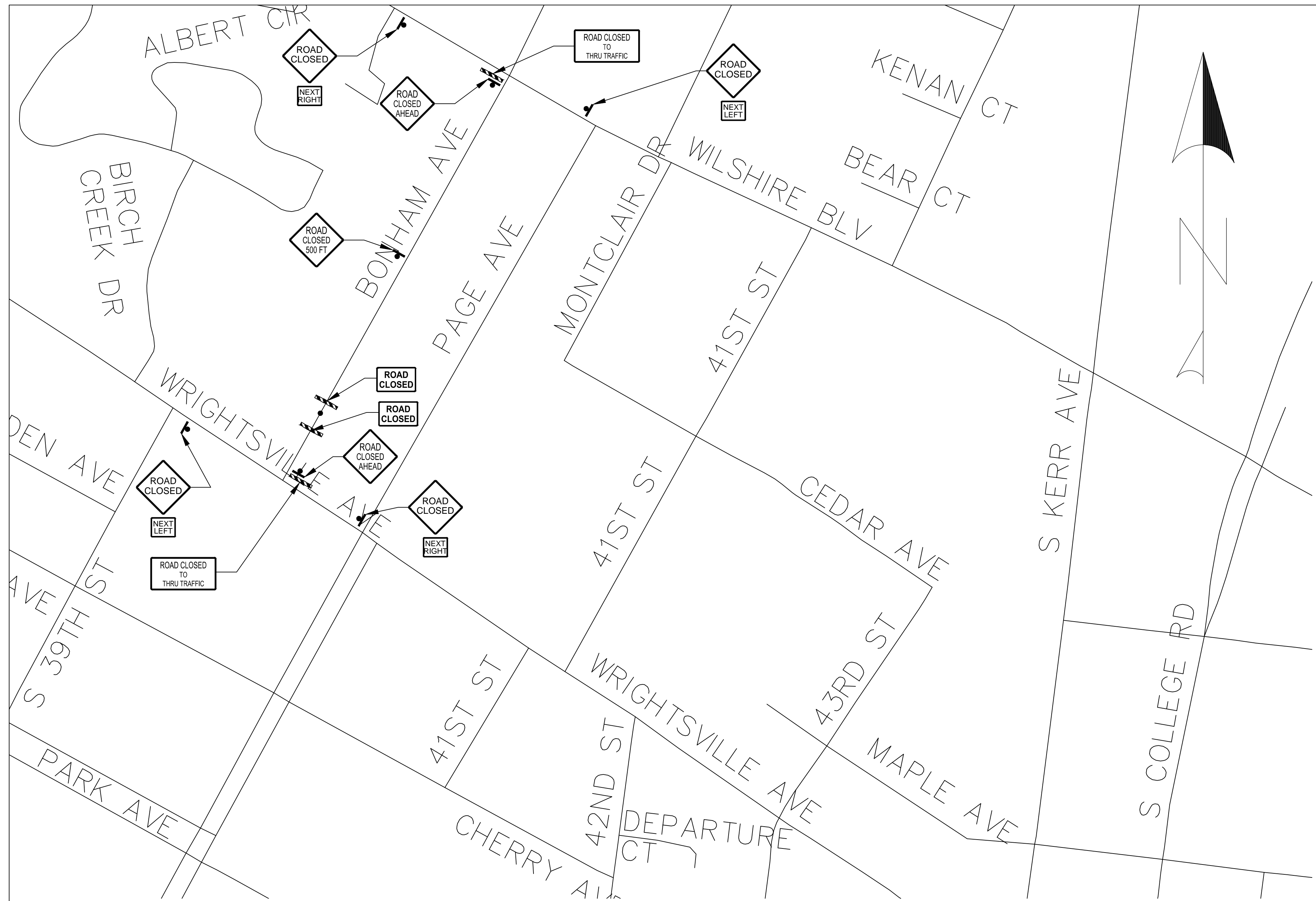
Name _____ Date _____

Planning _____

Traffic _____

Fire _____

Signed: _____ Permit # _____



TRAFFIC CONTROL PLAN LEGEND:

- Type III Barricade
- Signs
- Point of Road Closure

TRAFFIC CONTROL PLAN SIGN LEGEND:

- R11-2 48' X 30'
- R11-4 80' X 30'
- W20-3 36" X 36"
- W20-3 36" X 36"
- 24" X 18"

- TRAFFIC CONTROL PLAN NOTE:**
1. CONTRACTOR MUST CONTACT THE CITY OF WILMINGTON AND/OR NCDOT FOR PERMISSION TO ALTER ANY EXISTING SIGNAGE.
 2. CONTRACTOR MUST INSTALL WARNING SIGNS IN ACCORDANCE WITH NCDOT & MUTCD STANDARDS.
 3. SIGNS SHALL BE COVERED UP WHEN ROAD IS NOT CLOSED.

TYPE III BARRICADE

TYPE III BARRICADE
END-OF-ROADWAY APPLICATIONS

GENERAL NOTES

- 1- HORIZONTAL RAILS MAY BE CONSTRUCTED OF APPROVED COMPOSITE, HOLLOW/CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER NCDOT APPROVED MATERIAL.
- 2- BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS NCHRP 350 CRASH TESTED FOR CATEGORY II DEVICES AND NCDOT APPROVED.
- 3- ONLY NCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE RAILS. MOUNT SIGNS TO BARRICADE RAILS TO ENSURE SIGN WILL NOT BECOME DETACHED UNDER NORMAL WIND AND TRAFFIC CONDITIONS.
- 4- SIGNS SHALL BE MOUNTED A MINIMUM OF 1 FOOT FROM THE GROUND TO THE BOTTOM OF THE SIGN UNLESS SIGNS R11-3 OR R11-4 ARE REQUIRED BY THE PLANS OR DIRECTED BY THE ENGINEER.
- 5- BARRICADE MUST BE NCHRP 350 FOR CATEGORY II DEVICES AND NCDOT APPROVED WITH STABILIZER BAR OR ADEQUATE LATERAL BRACING.
- 6- ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
- 7- BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY. WHERE LOCAL TRAFFIC MUST BE MAINTAINED, THEY MAY BE PLACED IN A STAGGERED PATTERN.
- 8- STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPED DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN DETOURING. WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES.
- 9- USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
- 10- ALL BARRICADES MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.
- 11- PLACE MANUFACTURER'S NAME AND FEDERAL HIGHWAY ADMINISTRATION'S NCHRP 350 APPROVAL LETTER NUMBER ON BARRICADE FRAME.
- 12- PLACE SANDBAGS OR OTHER APPROVED BALLASTING METHODS ON THE FEET OF THE FRAME. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL OR STABILIZER BAR. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS STRUCK BY A VEHICLE.

ROADWAY STANDARD DRAWING FOR BARRICADES TYPE-III

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

SHEET 1 OF 1
1145.01

**STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.**

ROADWAY STANDARD DRAWING FOR PORTABLE WORK ZONE SIGNS MOUNTING HEIGHT & LATERAL CLEARANCE

**SHEET 1 OF 1
1110.02**

GENERAL NOTES

- 1- DIMENSIONS SHOWN ARE MINIMUM VALUES. MOUNT SIGNS SO THEY WILL BE CLEARLY VISIBLE TO APPROACHING TRAFFIC EVEN WHEN SIGNS ARE MOUNTED BEHIND TRAFFIC CONTROL DEVICES SUCH AS DRUMS, BARRIERS, OR OTHER OBJECTS.
- 2- ALL PORTABLE SIGNS AND STANDS MUST MEET OR EXCEED THE REQUIREMENTS OF NCHRP 350 FOR CATEGORY II DEVICES. USE PORTABLE WORK ZONE SIGNS AND STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER.
- 3- ALL PORTABLE WORK ZONE SIGNS AND STANDS MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.

PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES

GRAPHIC SCALE

REV. NO.	DESCRIPTION	DATE

City of WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

DATE: 2-22-19
SCALE: 1"=200'
DRAWN: JCB
CHECKED: JBM
PROJECT NO: 219

SIGNED: _____ PERMIT # _____

TRAFFIC CONTROL PLAN

EVERMORE APARTMENTS EXPANSION

CITY OF WILMINGTON WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING FOR REVIEW PURPOSES ONLY

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone: 910-392-5643
Fax: 910-392-5293 License No. C-2920

Owner: ELEVATION APARTMENTS LLC & REMARKABLE PROPERTIES, LLC
10 S. CAROLINA DRIVE
WILMINGTON, NC 28403
PHONE: 910-251-5030

SHEET NO: 12
OF: 14

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