

CITY OF WILMINGTON STANDARD NOTES

- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES & NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS.
- NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED & APPROVED.
- PROTECTIVE TREE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS & METHODS.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FDR DRIVEWAYS ARE TO BE THERMOPLASTIC & MEET CITY AND/OR NCDOT STANDARDS.
- IT SHALL BE THE SUBDIVIDER'S RESPONSIBILITY TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS 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.
- CALL TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY APRON PANELS, OR CURB AND GUTTER SECTIONS SHALL BE REPLACED.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS/CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 332-6558 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPWA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE & MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA WATER SHALL COMPLY WITH THE CFPWA CROSS CONNECTION CONTROL REGULATIONS. CALL 332-6558 FOR INFORMATION.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USOCFCCOR OR ASSE.
- ALL TRAFFIC CONTROL SIGNS & MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PAVEMENT MARKINGS REGULATING TRAFFIC FLOW MUST BE THERMOPLASTIC.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET (CONTACT 341-5888 FOR MORE DETAILS). IN CERTAIN CASES, AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
- ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
- PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE & LIFE SAFETY DIVISION AT 910-343-0696.
- A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND UTILITIES.
- FDC'S CAN BE NO FURTHER THAN 150' FROM A FIRE HYDRANT.
- FDC'S CAN BE NO FURTHER THAN 40' FROM FIRE DEPARTMENT VEHICLE PLACEMENT.
- BUILDING CONSTRUCTION TYPE ACCORDING TO THE INTERNATIONAL BUILDING CODE IS III-B.
- TAMPER SWITCHES SHALL BE INSTALLED ON ALL VALVES THAT ARE CAPABLE OF TURNING THE WATER SUPPLY OFF TO THE SPRINKLER SYSTEMS.

FIRE AND LIFE SAFETY NOTES

- PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS OR FDC'S. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- FIRE HYDRANTS CANNOT BE FURTHER THAN 8' FROM THE CURB.
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
- ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
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- FDC'S CAN BE NO FURTHER THAN 40' FROM FIRE DEPARTMENT VEHICLE PLACEMENT.
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SITE DATA

PROPERTY OWNER: RACINE APARTMENTS, LLC
 PROJECT ADDRESS: 325 GOVERNMENT CENTER DRIVE
 PIN NUMBER: R0507-001-009-000
 ZONING DISTRICT: CDMU (COMMERCIAL DISTRICT MIXED USE) WITHIN RB (REGIONAL BUSINESS)
 FLOOD AREA: THIS TRACT IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 3720314700J & 3720314800J.
 EFFECTIVE APRIL 3, 2006
 MAXIMUM ALLOWABLE BUILDING HEIGHT (BASED ON REQUIRED SETBACK USED): 65'
 MAXIMUM PROPOSED BUILDING HEIGHT (AVG. EX. GROUND ELEV.=41.89 TO THE HIGHEST FINISHED ROOF SURFACE ELEV.=40.314): 61.25'
 BUILDING SETBACKS, REQUIRED: FRONT-25', REAR-31', INTERIOR SIDE (ADJACENT TO RESIDENTIAL DISTRICT)-78', INTERIOR SIDE (OTHER)-16'
 BUILDING SETBACKS, PROPOSED: FRONT-25.50', REAR-66.72' INTERIOR SIDE (ADJACENT TO RESIDENTIAL DISTRICT)-133.88'+, INTERIOR SIDE (OTHER)-58.68'
 SITE AREA: 100,181.40 SF = 2.30 ACRES ±
 TOTAL UNITS: 44 (40-THREE BEDROOM & 5-TWO BEDROOM)
 PROPOSED BUILDING AREA (1ST FLOOR FOOTPRINT), EXCLUDES PORCHES, PATIOS, BALCONIES, & ROOF OVERHANGS: 16,263.71 SF
 MAXIMUM ALLOWABLE LOT COVERAGE: 40%
 PROPOSED LOT COVERAGE: 16,263.71 / 100,181.40 x 100% = 16.23%
 NUMBER OF PROPOSED BUILDINGS: 3
 BUILDING SIZE (EXCLUDES PATIOS & BALCONIES):

BUILDING	SQUARE FOOTAGE (1ST STORY)	SQUARE FOOTAGE (2ND STORY)	SQUARE FOOTAGE (3RD STORY)	SQUARE FOOTAGE (4TH STORY)	SQUARE FOOTAGE (5TH STORY)
RETAIL, AMENITY & APARTMENT CABANA & STORAGE AMENITY	15,079.61	15,198.71	15,198.71	15,198.71	15,198.71
	375.00	N/A	N/A	N/A	N/A

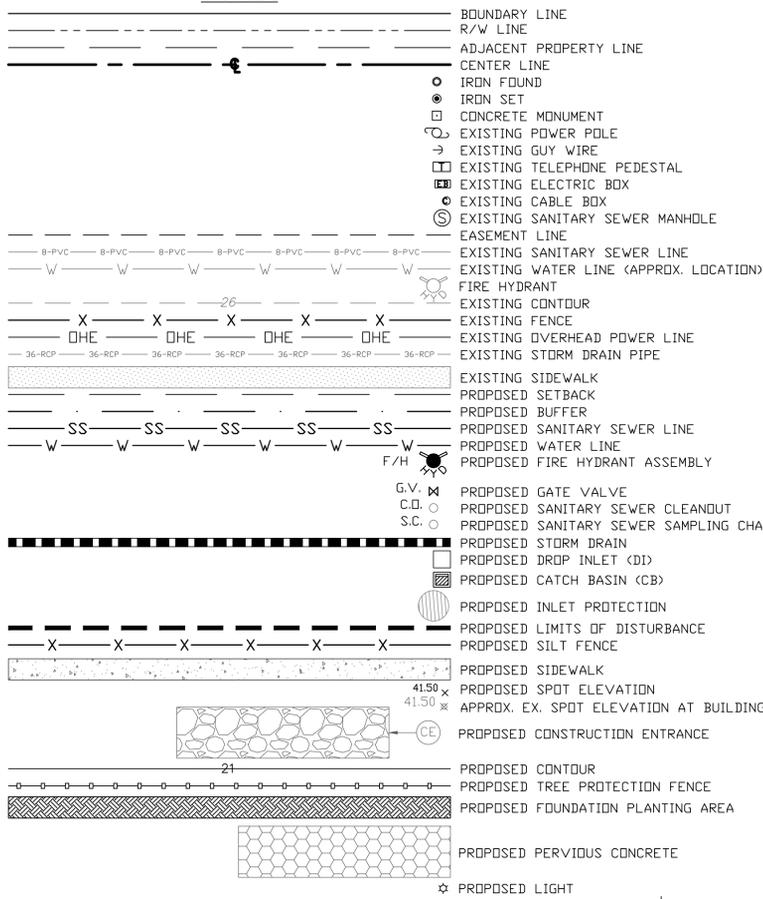
TOTAL BUILDING GROSS FLOOR AREA: 77,058.55 SF
 TOTAL AMOUNT & PERCENT OF IMPERVIOUS SURFACE AREAS ON-SITE:

BEFORE DEVELOPMENT	AREA (SF)	% OF SITE
BUILDINGS	0	0.00
DRIVEWAY	0	0.00
OTHER	0	0.00
TOTAL	0	0.00

AFTER DEVELOPMENT	PROPOSED (SF)	% OF SITE
BUILDINGS (INCLUDES ROOF OVERHANG)	17,304	17.27
IMPERVIOUS PAVEMENT	44,338	44.26
IMPERVIOUS PAVEMENT-DRIVEWAYS (OFF-SITE FOR CITY PURPOSES)	917	0.92
PERVIOUS PAVEMENT (NO CREDIT)	3,704	3.69
SIDEWALK	3,363	3.35
OTHER	2,512	2.51
FUTURE	16,031	16.00
TOTAL	90,169	90.00

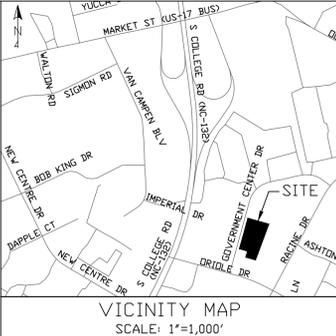
OFF-SITE SIDEWALK TO BE DEMOLISHED/REMOVED FOR INSTALLATION OF DRIVEWAYS = 295 SF
 OFF-SITE CURB TO BE DEMOLISHED/REMOVED FOR INSTALLATION OF DRIVEWAYS = 241 SF
 OFF STREET PARKING CALCULATIONS (RESIDENTIAL):
 MINIMUM PARKING REQUIRED = (1 SPACE / 400 SF x 2,568 SF RETAIL) + (1 SPACE / 300 SF x 768 SF OFFICE) + (2 SPACES / UNIT x 5 UNITS) + (2.25 SPACES / UNIT x 40 UNITS) = 109 SPACES
 MAXIMUM PARKING ALLOWED = (1 SPACE / 200 SF x 2,568 SF RETAIL) + (1 SPACE / 200 SF x 768 SF OFFICE) + (2.5 SPACES / UNIT x 5 UNITS) + (2.5 SPACES / UNIT x 40 UNITS) = 129 SPACES
 25% ABOVE MAXIMUM PARKING ALLOWED = 125 x 129 = 161 SPACES
 MIDPOINT BETWEEN MINIMUM REQUIRED PARKING & MAXIMUM PARKING ALLOWED = (129 + 109) / 2 = 119 SPACES
 (SPACES ABOVE MIDPOINT MUST BE CONSTRUCTED OF PERMEABLE PAVEMENT)
 NUMBER OF PROPOSED PARKING SPACES = 149 (THE COMMERCIAL PARKING ONLY SPACES ARE CLEARLY DESIGNATED WITH SIGNAGE)
 NUMBER OF REQUIRED HANDICAP PARKING SPACES (101-150 SPACES) = 5
 NUMBER OF PROPOSED HANDICAP PARKING SPACES = 5
 NUMBER OF REQUIRED BICYCLE PARKING SPACES = 15
 NUMBER OF PROPOSED BICYCLE PARKING SPACES = 32
 THE TRACT IS NOT WITHIN ANY SPECIAL HIGHWAY OVERLAY DISTRICT OR ANY OTHER ZONING OVERLAY DISTRICT PER THE CITY OF WILMINGTON ZONING MAPS (MAPS 3147-1 & 3148-3, DATED OCTOBER 27, 2015)
 CAMA LAND USE CLASSIFICATION PER THE 2006 CAMA PLAN UPDATE. LAND CLASSIFICATION MAP IS URBAN.

LEGEND



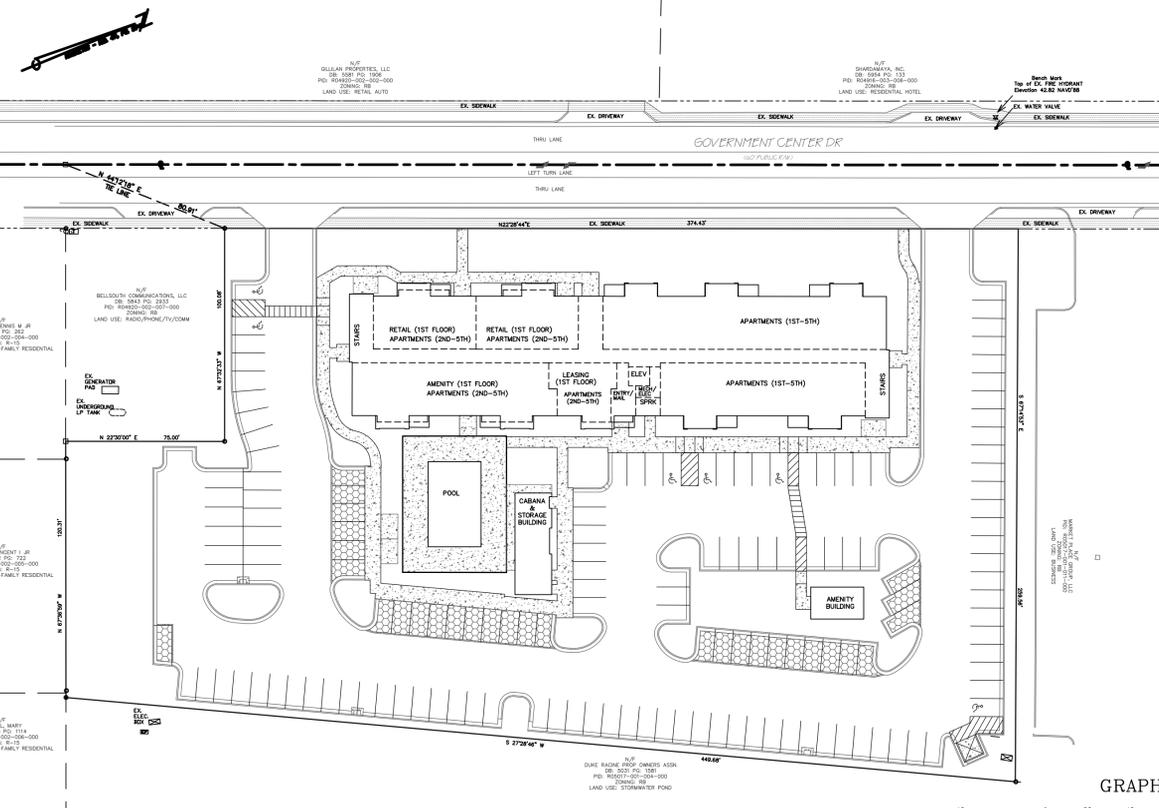
SHEET INDEX

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NOTES

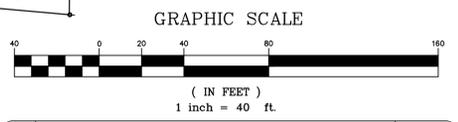
- BOUNDARY & TREE SURVEY BY BATEMAN CIVIL SURVEY COMPANY, 406 NORTH THIRD STREET, WILMINGTON, NC 28401, PHONE: 919-577-1080, NCBELS FIRM NO. C-2378. TOPOGRAPHICAL INFORMATION TAKEN FROM NHC GIS.
- ALL ELEVATIONS ARE IN FEET UNLESS OTHERWISE INDICATED.
- ALL CITY, STATE, & FEDERAL REGULATIONS SHALL BE FOLLOWED.
- PRIOR TO INSTALLATION OF WATER OR SANITARY SEWER MAINS CONTRACTOR SHALL NOTIFY THE ENGINEER WITH MALPASS ENGINEERING & SURVEYING, P.C. AT 910-392-5243.
- EXISTING SANITARY SEWER MAIN IS PRIVATE.
- EXISTING WATER MAINS ARE OWNED BY CFPWA.
- LIMITS OF DISTURBANCE = 97,388 SF = 2.24 ACRES.
- DISTURBED AREAS WITHIN ADJACENT RIGHT-OF-WAY SHALL BE IMMEDIATELY SEEDED & STABILIZED WITH MULCH, EXCELSDIOR MAT, OR STRAW MAT PRIOR TO ANY RAINFALL EVENT.
- UPON COMPLETION OF ANY PHASE OF ACTIVITY SIDE SLOPES WILL BE SEEDED/STABILIZED IN ACCORDANCE WITH GRASS STABILIZATION CHART ON SHEET 6.
- SLOPE ON HANDICAP SPACES SHALL BE 1:50 OR FLATTER.
- TACTILE WARNING MATS/DOMES SHALL BE INSTALLED ON ALL WHEELCHAIR (HANDICAP) RAMPS.
- ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE & TECHNICAL STANDARDS MANUAL, EXCEPT WHERE EXEMPTED OR VARIANCES ARE OBTAINED.
- THE PROPOSED CURB IS 4" VERTICAL CURB & GUTTER & 4" MEDIAN VERTICAL CURB & GUTTER (SD 3-11). SEE SITE PLAN ON SHEET 4 FOR CURB & GUTTER LABELING.
- IT IS THE APPLICANT'S/DEVELOPER'S RESPONSIBILITY TO BE COMPLIANT WITH ALL APPLICABLE ADA REQUIREMENTS.
- ALL PLANTED & RETAINED LIVING MATERIAL REQUIRED TO MEET THE PROVISIONS OF THE CITY OF WILMINGTON LAND DEVELOPMENT CODE, SHALL BE PERPETUALLY PROTECTED & MAINTAINED TO PROFESSIONALLY ACCEPTED STANDARDS BY JOINT & SEVERAL RESPONSIBILITY OF THE OWNER, OCCUPANT, TENANT, & RESPECTIVE AGENTS OF THE PROPERTY ON WHICH THE MATERIAL IS LOCATED.
- STORM DRAIN MANHOLES, CATCH BASINS, & DROP INLETS SHALL BE SIZED APPROPRIATELY TO ACCOMMODATE OVERSIZED PIPES AND FRAME & GRATE.
- ALL DROP INLETS TO HAVE HEAVY DUTY 2'x3' FRAME & GRATE (GENERAL FOUNDRIES INC., ITEM #24364 OR EQUIVALENT).
- NO PIPE JOINTS SHALL BE INSIDE ANY INTERFERENCE MANHOLE.
- BUILDING RUNOFF SHALL BE DIRECTED TO DRAIN TO THE STORM DRAIN SYSTEM (USE DOWNSPOUT PIPING AS NECESSARY). DOWNSPOUT PIPING SHALL BE DESIGNED BY OTHERS. ADDITIONAL YARD INLETS MAY BE INSTALLED AT DEVELOPER'S DISCRETION. CONTRACTOR SHALL ENSURE AREAS DRAINING TO DI-2 & CB-4 ARE ABLE TO DRAIN FROM THE RESPECTIVE CURB CUT TO THE INLET. PROVIDE BERM ALONG THE EAST SIDE OF THE INLETS TO DIRECT DRAINAGE TO THE INLETS. TOP OF BERM TO BE 0.5' ABOVE INLET GRADE.
- A MINIMUM COVER OF 2 FEET FROM TOP OF PIPE TO BOTTOM OF STONE SHALL BE PROVIDED OVER STORM DRAIN PIPE UNDER THE PARKING/DRIVE AISLES UNLESS CLASS IV RCP IS USED.
- ALL PROPOSED ON-SITE UTILITY LINES SHALL BE UNDERGROUND.
- LOCATION OF ANY SITE LIGHTS, ELECTRIC LINES, TELEPHONE LINES, AND/OR NATURAL GAS LINES TO BE DETERMINED BY UTILITY COMPANIES AND/OR OTHERS.
- CONTRACTOR SHALL CONTACT & COORDINATE WITH POWER COMPANY REGARDING RELOCATION OF EXISTING POWER POLE & GUY WIRE AT PROPOSED SOUTHERN DRIVEWAY LOCATION. CONTRACTOR TO CONTACT & COORDINATE WITH UTILITY PROVIDER REGARDING RELOCATION OF EXISTING CABLE BOX AT PROPOSED SOUTHERN DRIVEWAY LOCATION.
- CONTRACTOR MUST OBTAIN A UTILITY CUT PERMIT FROM THE CITY OF WILMINGTON (ENGINEERING) PRIOR TO OPEN CUTTING GOVERNMENT CENTER DRIVE & SIDEWALK. CONTRACTOR MUST OBTAIN AN UNDERGROUND FIRE LINE PERMIT FROM THE CITY OF WILMINGTON (FIRE & LIFE SAFETY) PRIOR TO INSTALLING THE FIRE LINE.
- THE 25' VEHICLE OVERHANG AREA SHALL NOT BE PLANTED WITH SHRUBS.
- 9' WIDE PARKING SPACES ARE SPECIFICALLY DIMENSIONED ON SHEET 4. ALL OTHER PARKING SPACES ARE 8.5' WIDE.
- THE PROPOSED LIGHTS SHOWN ON THE SITE PLAN ON SHEET 4 ARE CONCEPTUAL. ACTUAL LIGHT DESIGN TO BE DESIGNED BY OTHERS.
- PROPOSED DOMESTIC WATER SERVICE SHALL BE PUBLIC FROM THE EXISTING WATER MAIN IN GOVERNMENT CENTER DRIVE THROUGH THE WATER METER & PRIVATE AFTER THE WATER METER. PROPOSED FIRE LINE SHALL BE PUBLIC FROM THE EXISTING WATER MAIN IN GOVERNMENT CENTER DRIVE TO THE BACKFLOW PREVENTER & PRIVATE BEGINNING AT THE BACKFLOW PREVENTER.
- PROPOSED PVC DOMESTIC WATER LINE & FIRE LINES SHALL BE AWWA C900 CLASS 150 (DR-18) UNLESS OTHERWISE INDICATED. PROPOSED DIP DOMESTIC WATER LINES & FIRE LINES SHALL CONFORM TO AWWA C150 PRESSURE CLASS 350.
- PROPOSED SANITARY SEWER SERVICES SHALL BE PRIVATE.
- CONTRACTOR TO REPAIR DISTURBED AREAS (ASPHALT, STONE, CURB, SIDEWALK, GRASS PLAZA, ETC.) WITHIN GOVERNMENT CENTER DRIVE TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
- NO WETLANDS ON SITE PER ECS CAROLINAS, LLP (ALEXANDRA F. PERILLO & W. BRANDON FULTON).
- SILT SACKS SHALL BE INSTALLED IN DROP INLETS & CATCH BASINS IN THE PARKING LOT WHEN ABC STONE IS INSTALLED IN THE PARKING LOT. SILT SACKS ARE TEMPORARY EROSION CONTROL DEVICES & SHALL BE REMOVED FROM AN INLET ONCE THE ENTIRE AREA DRAINING TO IT IS STABILIZED.
- RETAINING WALLS SHALL BE DESIGNED BY OTHERS. MALPASS ENGINEERING & SURVEYING, P.C. IS NOT RESPONSIBLE FOR RETAINING WALL DESIGN.



WATER & SEWER CAPACITY

EXISTING WATER CAPACITY:	0 GPD
EXISTING SEWER CAPACITY:	0 GPD
PROPOSED WATER CAPACITY:	(45 UNITS x 400 GPD/UNIT) + (50 PEOPLE x 10 GPD/PERSON) + (3,336 SF x 100 GPD / 1,000 SF) = 18,833 GPD
PROPOSED SEWER CAPACITY:	(40 UNITS x 360 GPD/UNIT) + (5 UNITS x 240 GPD/UNIT) + (50 PEOPLE x 10 GPD/PERSON) + (3,336 x 100 GPD / 1,000 SF) = 16,434 GPD

PRELIMINARY PLAT
 NOT FOR RECORDATION,
 CONVEYANCES, OR SALES



1	REVISED PER THE COMMENTS.	6-17-16
2	REVISED TO ADJUST BUILDING.	7-13-16
3	REVISED TO ADJUST/ADD NOTES.	7-19-16
4	REVISED TO ADJUST CABANA/POOL AREA & SITE DATA TABLE.	7-23-16
REV. NO.	DESCRIPTION	DATE
	REVISIONS	

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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

Date: _____ Permit # _____

Signed: _____

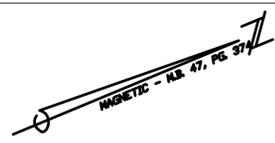
COVER SHEET
GOVERNMENT CENTER APARTMENTS
 WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-5243
 Fax 910-392-5203 License No. C-2380

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
 1000 PARKWAY DRIVE
 WILMINGTON, NORTH CAROLINA 28403

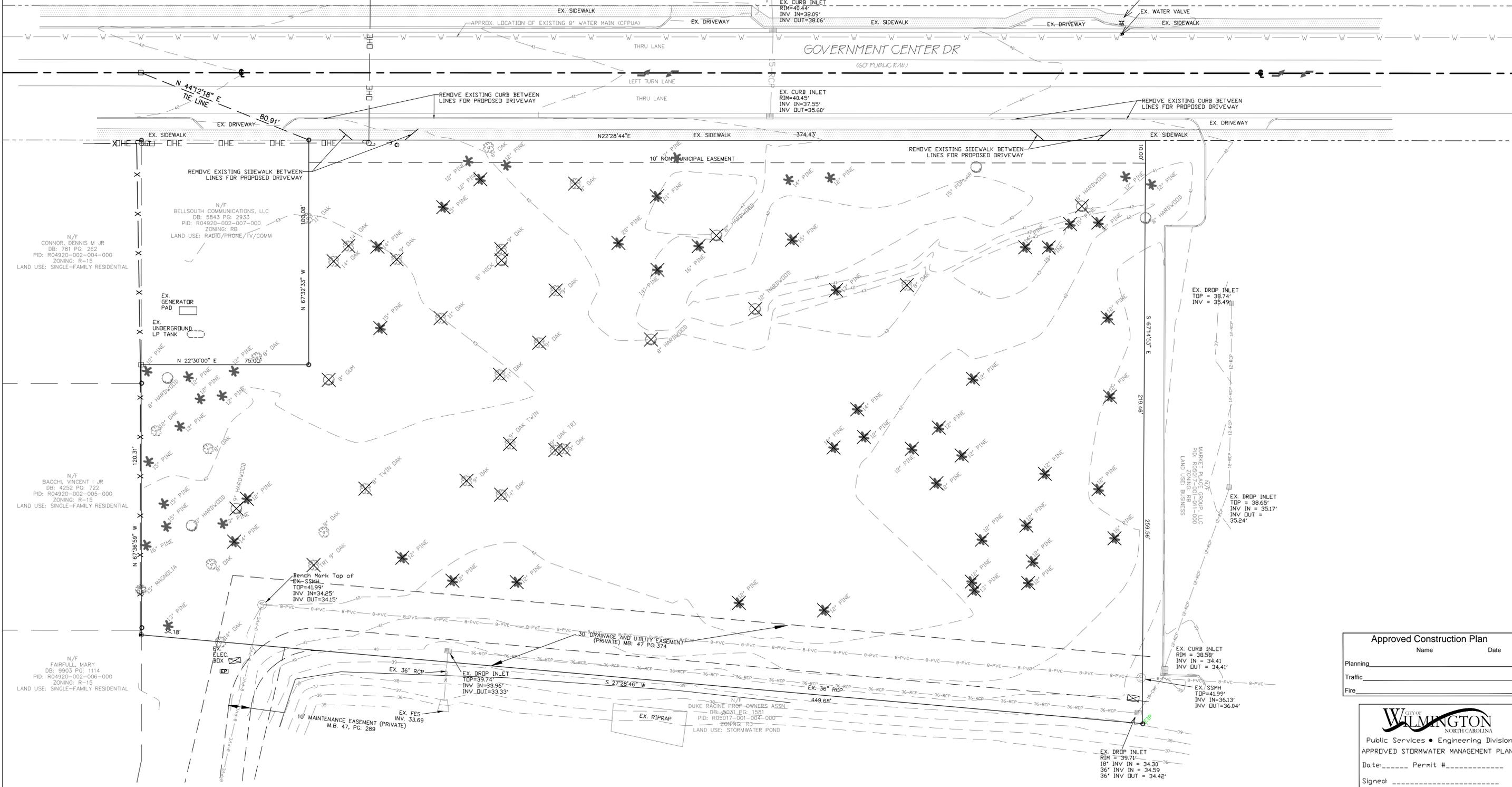
DATE: 5-16-16
 SCALE: 1"=40'
 DRAWN: JCB
 CHECKED: JEM
 PROJECT NO: 269
 SHEET NO: 1
 OF: 12



N/F
GILLILAN PROPERTIES, LLC
DB: 5581 PG: 1906
PID: R04920-002-002-000
ZONING: RB
LAND USE: RETAIL AUTO

N/F
SHARDAMAYA, INC.
DB: 5954 PG: 133
PID: R04916-003-006-000
ZONING: RB
LAND USE: RESIDENTIAL HOTEL

Bench Mark
Top of EX. FIRE HYDRANT
Elevation 42.82 NAVD'88



N/F
CONNOR, DENNIS M JR
DB: 781 PG: 262
PID: R04920-002-004-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

N/F
BELLSOUTH COMMUNICATIONS, LLC
DB: 5843 PG: 2933
PID: R04920-002-007-000
ZONING: RB
LAND USE: RADIO/PHONE/TV/COMM

N/F
BACCHI, VINCENT I JR
DB: 4252 PG: 722
PID: R04920-002-005-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

N/F
FAIRFULL, MARY
DB: 9903 PG: 1114
PID: R04920-002-006-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

Bench Mark Top of
EX. SSMH
TOP=41.99'
INV IN=34.25'
INV OUT=34.15'

N/F
DUKE RACINE PROP-OWNERS ASSN
DB: 36031 PG: 1581
PID: R05017-001-004-000
ZONING: TRP
LAND USE: STORMWATER POND

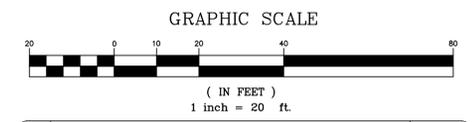
N/F
MARKET PLACE GROUP, LLC
PID: R06017-001-011-000
LAND USE: BUSINESS

EX. CURB INLET
RIM = 38.58'
INV IN = 34.41'
INV OUT = 34.41'

EX. DROP INLET
RIM = 39.71'
18" INV IN = 34.50
36" INV IN = 34.59
36" INV OUT = 34.42'

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	

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



REV NO.	DESCRIPTION	DATE
1	REVISED TO LABEL SIDEWALK TO BE REMOVED.	7-22-16
2	REVISED TO ADJUST EXISTING STORM DRAIN PIPE INVERT INTO POND.	7-26-16

EXISTING CONDITIONS & DEMOLITION PLAN
GOVERNMENT CENTER APARTMENTS
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

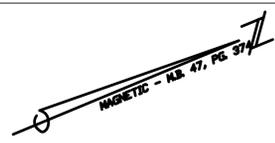
FINAL DRAWING
NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-5243
Fax 910-392-5203 License No. C-2320

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
10 S. CARDINAL DRIVE
WILMINGTON, NORTH CAROLINA 28403

DATE: 7-18-16
SCALE: 1"=20'
DRAWN: JCB
CHECKED: JEM
PROJECT NO: 269
SHEET NO: 2
OF: 12

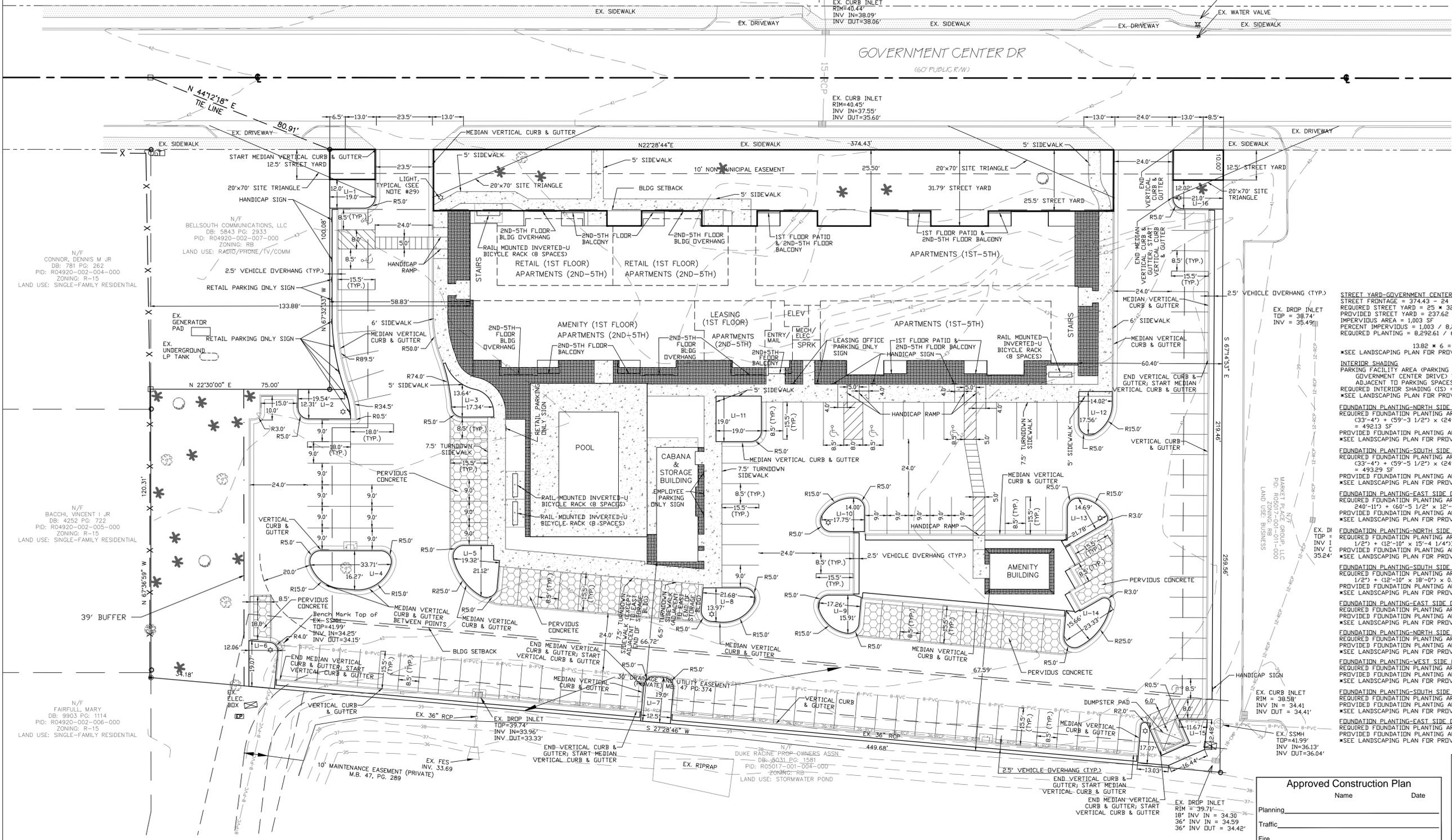
PRELIMINARY PLAT
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N/F
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DB: 5581 PG: 1906
PID: R04920-002-002-000
ZONING: RB
LAND USE: RETAIL AUTO

N/F
SHARDAMAYA, INC.
DB: 5954 PG: 133
PID: R04915-003-006-000
ZONING: RB
LAND USE: RESIDENTIAL HOTEL

Bench Mark
Top of EX. FIRE HYDRANT
Elevation 42.82 NAVD'88



INTERIOR LANDSCAPING ISLANDS			
LANDSCAPE ISLAND	TOTAL AREA (SF)	IMPERVIOUS AREA (SF)	PERCENT IMPERVIOUS
LI-1	223.72	0.00	0.00
LI-2	256.17	0.00	0.00
LI-3	220.27	0.00	0.00
LI-4	460.13	0.00	0.00
LI-5	315.14	0.00	0.00
LI-6	217.34	0.00	0.00
LI-7	228.80	0.00	0.00
LI-8	275.41	0.00	0.00
LI-9	229.04	0.00	0.00
LI-10	216.92	0.00	0.00
LI-11	356.65	0.00	0.00
LI-12	218.74	26.04	12.82
LI-13	221.38	0.00	0.00
LI-14	248.00	0.00	0.00
LI-15	292.16	0.00	0.00
LI-16	248.70	0.00	0.00

TREES PER DISTURBED ACRE
2.24 ACRES * 15 = 33.6, 34 TREES REQUIRED
*SEE LANDSCAPING PLAN FOR PROVIDED TREES

STREET YARD-GOVERNMENT CENTER DRIVE
STREET FRONTAGE = 374.43 - 24 - 24 = 326.43 FT
REQUIRED STREET YARD = 25 * 326.43 = 8,160.75 SF
PROVIDED STREET YARD = 237.62 + 7,792.49 + 262.50 = 8,292.61 SF
IMPERVIOUS AREA = 1,003 SF
PERCENT IMPERVIOUS = 1,003 / 8,292.61 * 100% = 12.10%
REQUIRED PLANTING = 8,292.61 / 600 = 13.82, 14 CANDY TREES OR 3 UNDERSTORY TREES PER 1 CANDY TREE

13.82 * 6 = 82.92, 83 SHRUBS
*SEE LANDSCAPING PLAN FOR PROVIDED TREES & SHRUBS

INTERIOR SHADING
PARKING FACILITY AREA (PARKING LOT AREA INCLUDING DRIVEWAY WITHIN PARKING DRIVE) TO BACK OF CURB OR BACK OF SIDEWALK ADJACENT TO PARKING SPACES) MINUS LANDSCAPE ISLANDS) = 52,719 SF
REQUIRED INTERIOR SHADING (IS) = 0.2 * 52,719 = 10,544 SF
*SEE LANDSCAPING PLAN FOR PROVIDED INTERIOR SHADING & TREES

FOUNDATION PLANTING-NORTH SIDE OF BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(57'-7 1/2") x (4'-9") + (60'-3 1/2") x (33'-4") + (59'-3 1/2") x (24'-6 1/2") + (57'-7 1/2") x (6'-3 1/2") x 0.12 = 492.13 SF
PROVIDED FOUNDATION PLANTING AREA = 567.64 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-SOUTH SIDE OF BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(57'-7 1/2") x (4'-9") + (60'-3 1/2") x (33'-4") + (59'-5 1/2") x (24'-6 1/2") + (57'-7 1/2") x (6'-3 1/2") x 0.12 = 493.29 SF
PROVIDED FOUNDATION PLANTING AREA = 556.14 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-EAST SIDE OF BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(60'-5 1/2") x 2'-6") + (59'-5 1/2") x 2'-6") + (60'-5 1/2") x 12'-8") x 0.12 = 1,828.97 SF
PROVIDED FOUNDATION PLANTING AREA = 1,862.49 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-NORTH SIDE OF CABANA & STORAGE BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(12'-10" x 17'-10 1/4") + (13'-10" x 14'-6 1/2") + (12'-10" x 15'-4 1/4") x 0.12 = 75.28 SF
PROVIDED FOUNDATION PLANTING AREA = 94.14 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-SOUTH SIDE OF CABANA & STORAGE BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(12'-10" x 17'-10 1/4") + (13'-10" x 14'-6 1/2") + (12'-10" x 18'-0") x 0.12 = 120.14 SF
PROVIDED FOUNDATION PLANTING AREA = 120.14 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-EAST SIDE OF CABANA & STORAGE BUILDING
REQUIRED FOUNDATION PLANTING AREA = [(12'-10" x 17'-4") x 0.12 = 26.69 SF
PROVIDED FOUNDATION PLANTING AREA = 46.86 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-NORTH SIDE OF AMENITY BUILDING
REQUIRED FOUNDATION PLANTING AREA = 10' x 15' x 0.12 = 18 SF
PROVIDED FOUNDATION PLANTING AREA = 34 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-WEST SIDE OF AMENITY BUILDING
REQUIRED FOUNDATION PLANTING AREA = 10' x 25' x 0.12 = 30 SF
PROVIDED FOUNDATION PLANTING AREA = 53 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-SOUTH SIDE OF AMENITY BUILDING
REQUIRED FOUNDATION PLANTING AREA = 10' x 15' x 0.12 = 18 SF
PROVIDED FOUNDATION PLANTING AREA = 22 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

FOUNDATION PLANTING-EAST SIDE OF AMENITY BUILDING
REQUIRED FOUNDATION PLANTING AREA = 10' x 25' x 0.12 = 30 SF
PROVIDED FOUNDATION PLANTING AREA = 54 SF
*SEE LANDSCAPING PLAN FOR PROVIDED PLANTINGS

WILMINGTON
NORTH CAROLINA

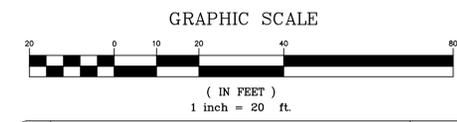
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____
Traffic _____
Fire _____



REV NO.	DESCRIPTION	DATE
1	REVISED TO ADJUST CABANA/POOL AREA & FOUNDATION PLANTING CALCULATIONS.	7-22-16
2	REVISED TO ADJUST EXISTING STORM DRAIN PIPE INVERT INTO POND.	7-26-16

SITE PLAN
GOVERNMENT CENTER APARTMENTS

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

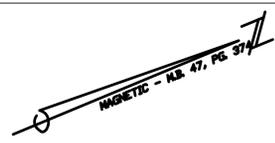
FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6343 License No. C-2320
Fax 910-392-5203

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
10 S. CARDINAL DRIVE
WILMINGTON, NORTH CAROLINA 28403

CHECKED: JEM
PROJECT NO: 269
SHEET NO: 4
OF: 12

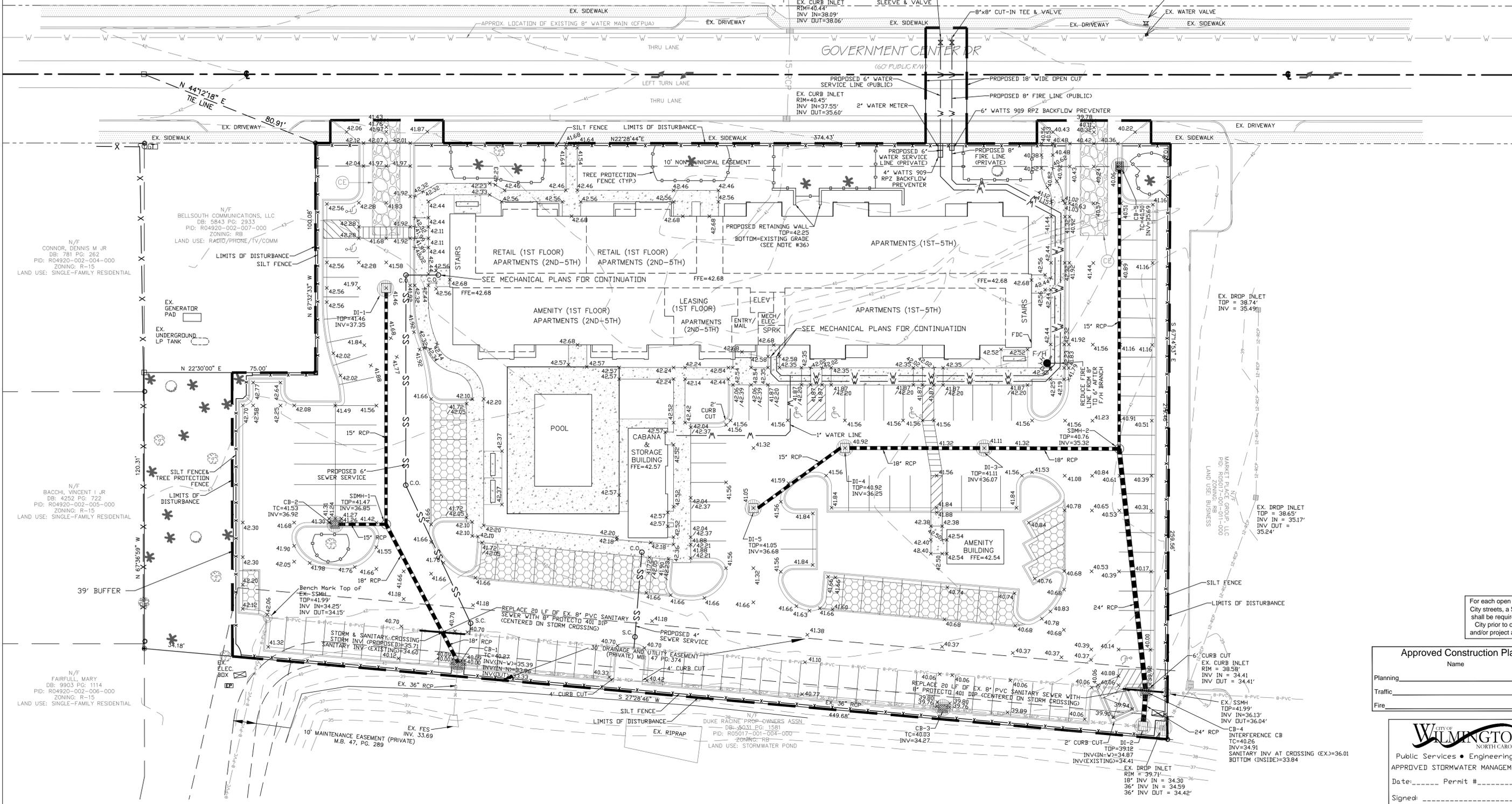
PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES



N/F
GILLIAN PROPERTIES, LLC
DB: 5581 PG: 1906
PID: R04920-002-002-000
ZONING: RB
LAND USE: RETAIL AUTO

N/F
SHARDAMAYA, INC.
DB: 5954 PG: 133
PID: R04916-003-006-000
ZONING: RB
LAND USE: RESIDENTIAL HOTEL

Bench Mark
Top of EX. FIRE HYDRANT
Elevation 42.82 NAVD'88



N/F
CONNOR, DENNIS M JR
DB: 781 PG: 262
PID: R04920-002-004-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

N/F
BELLSOUTH COMMUNICATIONS, LLC
DB: 5843 PG: 2933
PID: R04920-002-007-000
ZONING: RB
LAND USE: RADIO/PHONE/TV/COMM

N/F
BACCHI, VINCENT I JR
DB: 4252 PG: 722
PID: R04920-002-005-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

N/F
FAIRFULL, MARY
DB: 9903 PG: 1114
PID: R04920-002-006-000
ZONING: R-15
LAND USE: SINGLE-FAMILY RESIDENTIAL

N/F
DUKE RACINE PROP-OWNERS ASSN
DB: 36031 PG: 1581
PID: R05017-001-004-000
ZONING: TR-3
LAND USE: STORMWATER POND

N/F
MARKET PLACE GROUP, LLC
PID: R06017-001-011-000
LAND USE: BUSINESS

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

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

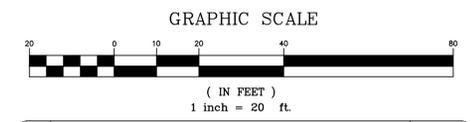
Fire _____

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____



REV NO.	DESCRIPTION	DATE
1	REVISED TO ADJUST BUILDING.	7-13-16
2	REVISED TO ADJUST/ADD UTILITY SERVICES.	7-19-16
3	REVISED TO ADJUST CABANA/POOL AREA.	7-22-16
4	REVISED TO ADJUST EXISTING STORM DRAIN PIPE INERT INTO POND.	7-28-16

EROSION CONTROL, STORMWATER, & UTILITY PLAN

GOVERNMENT CENTER APARTMENTS

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6243 Fax 910-392-5203 License No. C-2320

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
10 S. CARDINAL DRIVE
WILMINGTON, NORTH CAROLINA 28403

CHECKED: JEM
PROJECT NO: 269
SHEET NO: 5
OF: 12

PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES

Permanent Seeding
 Specifications #6.11 - Specifications
 (Specifications are as per the "Erosion and Sediment Control Planning and Design Manual" of the state of North Carolina)
 Table 6.11a - Seeding No. 10P for: Well-to Poorly Drained soils with Good Moisture Retention; Low Maintenance
 Seeding mixture
 Species Rate (lb/acre)
 Tall fescue 80
 Pensacola Bahiagrass 50
 Sericea lespedeza 30
 Kobe lespedeza 10
 Seeding Notes
 1. From Sept. 1 - Mar. 1, use unscarified sericea seed
 2. On poorly drained sites omit sericea and increase Kobe to 30 lb/acre.
 3. Where a neat appearance is desired, omit sericea and increase Kobe to 40 lb/acre.

Temporary Seeding
 Specifications #6.10 - Specifications
 (Specifications are as per the "Erosion and Sediment Control Planning and Design Manual" of the state of North Carolina)
 Table 6.10a - Temporary Seeding Recommendations
 For Late Winter and Early Spring
 Seeding Mixture
 Species Rate (lb/acre)
 Rye (grain) 120
 Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) 50
 Dmt annual lespedeza when duration of temporary cover is not to extend beyond June.
 Seeding dates
 Mountains - Above 2500 ft. Feb. 15-May 15
 Below 2500 ft. Feb. 1-May 1
 Piedmont - Jan. 1-May 1
 Coastal Plain - Dec. 1-Apr. 15

Soil amendments - Apply lime and fertilizer according to soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.
 Mulch - Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.
 Maintenance - Refertilize if growth is not fully adequate. Reseed, re-fertilize and mulch immediately following erosion or other damage.
 Table 6.10b Temporary Seeding Recommendations for Summer
 Seeding mixture
 Species Rate (lb/acre)
 German millet 40
 In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.
 Seeding dates
 Mountains - May 15-Aug. 15
 Piedmont - May 1-Aug. 15
 Coastal Plain - Apr. 15-Aug. 15

Soil amendments - Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.
 Mulch - Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.
 Maintenance - Refertilize if growth is not fully adequate. Reseed, re-fertilize and mulch immediately following erosion or other damage.
 Table 6.10c Temporary Seeding Recommendations for Fall
 Seeding mixture
 Species Rate (lb/acre)
 Rye (grain) 120
 Seeding dates
 Mountains - Aug. 15-Dec. 30
 Coastal Plain and Piedmont - Aug. 15-Dec. 30

Soil amendments - Follow soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.
 Mulch - Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool.
 Maintenance - Repair and re-fertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.
 Table 6.11r - Seeding No. 3CP for: Dry Sands to Sandy Loams; High Maintenance, Fine Turf
 Seeding mixture
 Species Rate (bu/1,000 ft²)
 Minimum: 3
 Hybrid Bermudagrass Rapid cover: 10
 Seeding Notes
 1. Sprig or sod (Practice 6.12, Sodding). Moisture is essential during initial establishment. Sod must be kept well watered for 2-3 weeks, but can be planted earlier or later than sprigs.
 2. Common Bermuda can be seeded or sprigged but does not produce a high-quality turf. It is also less cold tolerant than the hybrids, more weed prone, and a pest in flower beds and specimen plantings.
 Planting dates
 Apr. - July
 Soil amendments - Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer, or 50 lb/acre nitrogen from turf-to-mulch-release fertilizer. Add 25-50 lb/acre nitrogen at 2- to 3-week intervals through midsummer.
 Sprigging - Plant sprigs in furrows with a tractor-drawn transplanter, or broadcast by hand.
 Furrows should be 4-6 inches deep and 2 ft apart. Place sprigs about 2 ft apart in the row with one end at or above ground level (Figure 6.11d).
 Broadcast of rates shown above, and press sprigs into the top 1/2-2 inches of soil with a disk set straight so that sprigs are not brought back toward the surface.
 Mulch - Do not mulch.
 Maintenance - Water as needed and mow to 3/4- to 1-inch height. Topdress with 40 lb/acre nitrogen in Apr., 50 lb in May, 50 lb in June, 30 lb in July, and 25-50 lb in Aug.

Table 6.11s - Seeding No. 4CP for: Well-Drained Sandy Loams to Dry Sands, Coastal Plain and Eastern Edge of Piedmont; Low-to Medium-Care Lawns
 Seeding mixture
 Species Rate
 Centipedegrass 10-20 lb/acre (seeds) or 33 bu/acre (sprigs)
 Seeding dates
 Mar. - June
 (Sprigging can be done through July where water is available for irrigation.)
 Soil amendments - Apply lime and fertilizer according to soil tests, or apply 300 lb/acre 10-10-10.
 Sprigging - Plant sprigs in furrows with a tractor-drawn transplanter, or broadcast by hand.
 Furrows should be 4-6 inches deep and 2 ft apart. Place sprigs about 2 ft apart in the row with one end at or above ground level (Figure 6.11a).
 Broadcast of rates shown above, and press sprigs into the top 1/2-2 inches of soil with a disk set straight so that sprigs are not brought back toward the surface.
 Mulch - Do not mulch.
 Maintenance - Fertilize very sparingly - 20 lb/acre nitrogen in spring with no phosphorus. Centipedegrass cannot tolerate high pH or excess fertilizer.

Table 6.11t - Seeding No. 5CP for: Well-Drained Sandy Loams to Dry Sands; Low Maintenance
 Seeding mixture
 Species Rate (lb/acre)
 Pensacola Bahiagrass 50
 Sericea lespedeza 30
 Common Bermudagrass 10
 German millet 10
 Seeding Notes
 1. Where a neat appearance is desired, omit sericea.
 2. Use common Bermuda only on isolated sites where it cannot become a pest. Bermudagrass may be replaced with 5 lb/acre centipedegrass.
 Seeding dates
 Apr. 1 - July 15
 Soil amendments - Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer.
 Mulch - Apply 4,000 lb/acre grain straw or equivalent cover of another suitable mulch. Anchor by tacking with asphalt, netting, or by crimping with a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.
 Maintenance - Refertilize the following Apr. with 50 lb/acre nitrogen. Repeat as growth requires. May be mowed only once a year. Where a neat appearance is desired, omit sericea and mow as often as needed.

Table 6.11v - Seeding No. 7CP for: Grass-lined Channels; Coastal Plain, Lower Piedmont, and Dry Soils in the Central Piedmont
 Seeding mixture
 Species Rate (lb/acre)
 Common Bermudagrass 40-80 (1-2 lb/1,000 ft²)
 Seeding dates
 Coastal Plain: Apr. - July
 Piedmont: Apr. 15 - June 30
 Soil amendments - Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer.
 Mulch - Use jute, excelsior matting, or other effective channel lining material to cover the bottom of channels and ditches. The lining should extend above the highest calculated depth of flow. On channel side slopes above this height, and in drainages not requiring temporary linings, apply 4,000 lb/acre grain straw and anchor straw by stapling netting over the top.
 Mulch and anchoring materials must not be allowed to wash down slopes where they can clog drainage devices.
 Maintenance - A minimum of 3 weeks is required for establishment. Inspect and repair mulch frequently. Refertilize the following Apr. with 50 lb/acre nitrogen.
 Refer to Appendix 8.02 for botanical names.

Table 6.11a - Seeding No. 10P for: Well-to Poorly Drained soils with Good Moisture Retention; Low Maintenance
 Seeding mixture
 Species Rate (lb/acre)
 Tall fescue 80
 Pensacola Bahiagrass 50
 Sericea lespedeza 30
 Kobe lespedeza 10
 Seeding Notes
 1. From Sept. 1 - Mar. 1, use unscarified sericea seed
 2. On poorly drained sites omit sericea and increase Kobe to 30 lb/acre.
 3. Where a neat appearance is desired, omit sericea and increase Kobe to 40 lb/acre.

Table 6.10a - Temporary Seeding Recommendations
 For Late Winter and Early Spring
 Seeding Mixture
 Species Rate (lb/acre)
 Rye (grain) 120
 Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) 50
 Dmt annual lespedeza when duration of temporary cover is not to extend beyond June.
 Seeding dates
 Mountains - Above 2500 ft. Feb. 15-May 15
 Below 2500 ft. Feb. 1-May 1
 Piedmont - Jan. 1-May 1
 Coastal Plain - Dec. 1-Apr. 15

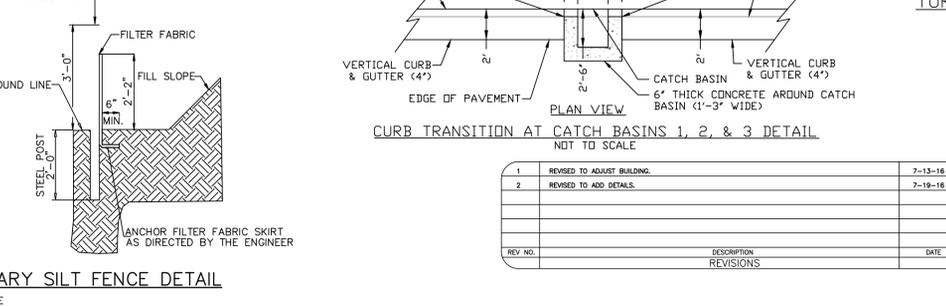
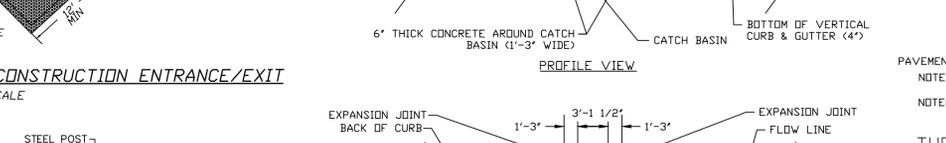
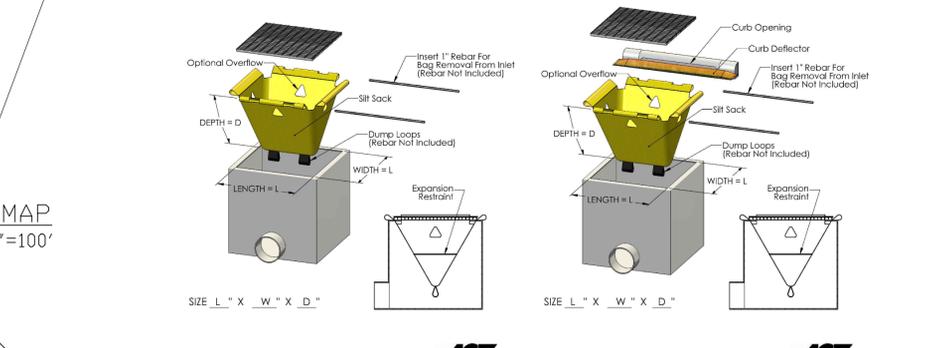
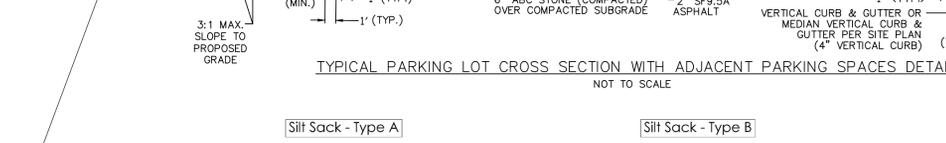
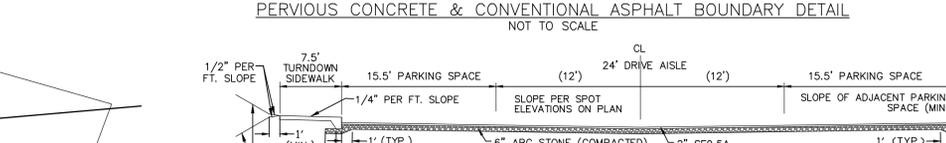
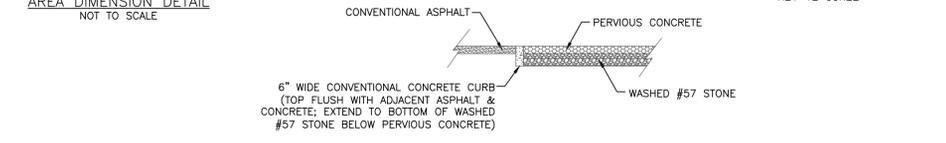
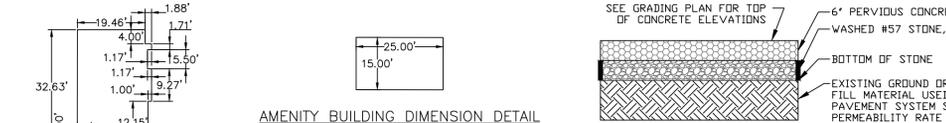
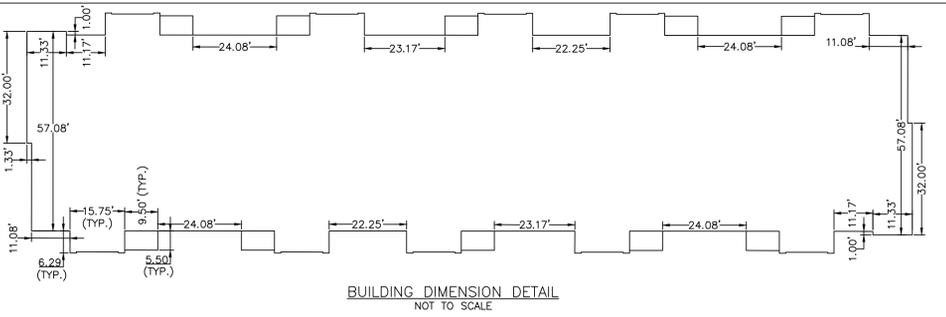
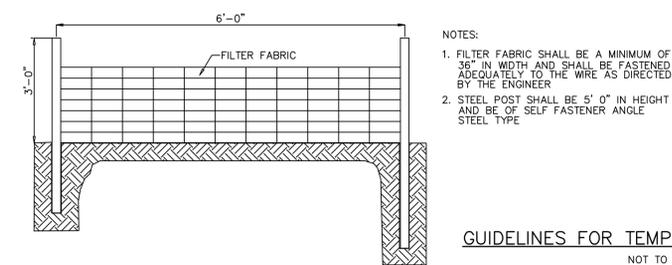
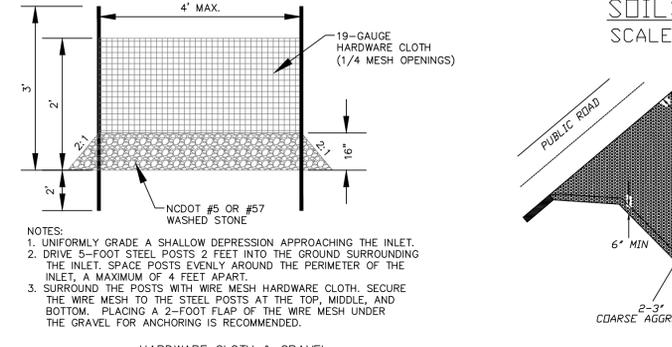
Table 6.10b Temporary Seeding Recommendations for Summer
 Seeding mixture
 Species Rate (lb/acre)
 German millet 40
 In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.
 Seeding dates
 Mountains - May 15-Aug. 15
 Piedmont - May 1-Aug. 15
 Coastal Plain - Apr. 15-Aug. 15

Table 6.10c Temporary Seeding Recommendations for Fall
 Seeding mixture
 Species Rate (lb/acre)
 Rye (grain) 120
 Seeding dates
 Mountains - Aug. 15-Dec. 30
 Coastal Plain and Piedmont - Aug. 15-Dec. 30

SITE AREA DESCRIPTION	GROUND STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10 FEET OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

*NEW HANOVER COUNTY LAND QUALITY SEEDING DEADLINES: 21 CALENDAR DAYS FOR ALL SLOPES & 15 WORKING DAYS FOR ALL OTHER AREAS.
 **THE SHORTER STABILIZATION TIME FRAME BETWEEN THE ABOVE CHART AND THE NEW HANOVER COUNTY LAND QUALITY SEEDING DEADLINES, FOR THE RESPECTIVE AREAS, SHALL BE FOLLOWED.

Table 6.11t - Seeding No. 5CP for: Well-Drained Sandy Loams to Dry Sands; Low Maintenance
 Seeding mixture
 Species Rate (lb/acre)
 Pensacola Bahiagrass 50
 Sericea lespedeza 30
 Common Bermudagrass 10
 German millet 10
 Seeding Notes
 1. Where a neat appearance is desired, omit sericea.
 2. Use common Bermuda only on isolated sites where it cannot become a pest. Bermudagrass may be replaced with 5 lb/acre centipedegrass.
 Seeding dates
 Apr. 1 - July 15



- MAINTENANCE PLAN**
1. ALL EROSION CONTROL MEASURES WILL BE CHECKED EVERY 7 DAYS OR AFTER EACH RAIN PRODUCING 1/2 INCHES OR MORE WHICH EVER COMES FIRST.
 2. SEDIMENT WILL BE REMOVED FROM BEHIND SILT FENCES WHERE SEDIMENT IS 0.5 FEET DEEP AND REPAIR FABRIC IF TORN, LEAKING OR FAILING.
 3. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED, WASHED, OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
 4. CHECK SEDIMENT BASINS AFTER PERIODS OF SIGNIFICANT RUNOFF. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY OR IF THE ROCK IS DISLOADED.
 5. INSPECT TEMPORARY SEDIMENT TRAPS AFTER EACH SIGNIFICANT RAINFALL. REMOVE SEDIMENT AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING. CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FT BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE GRADE. ANY RIPRAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY. AFTER ALL SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.
 6. INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY RIPRAP HAS BEEN DISLOADED OR IF THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLOADED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
 7. RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLOADED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.
 8. CHECK DAM. CHECK SEDIMENT AFTER EACH RAINFALL. REMOVE SEDIMENT AND RESTORE ORIGINAL VOLUME WHEN SEDIMENT ACCUMULATES TO ABOUT ONE-HALF THE DESIGN VOLUME. CHECK THE STRUCTURE FOR EROSION, PIPING, AND ROCK DISPLACEMENT AFTER EACH SIGNIFICANT RAINFALL.
 9. INSPECT ALL MULCHES PERIODICALLY AND AFTER RAINFALLS TO CHECK FOR RILL EROSION, DISLOCATION, OR FAILURE. WHERE EROSION IS OBSERVED, APPLY ADDITIONAL MULCH. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED, AND REINSTATE MULCH. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
 10. INSPECT CHECK DAMS AND CHANNELS FOR DAMAGE AFTER EACH RUNOFF EVENT. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, INSTALL A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL. REMOVE ALL SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.
 11. INSPECT Baffles AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE Baffles. SHOULD THE FABRIC OF A Baffle COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE Baffles. TAKE CARE TO AVOID DAMAGING THE Baffles DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL Baffle MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.
 12. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. SEDIMENT REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
 13. INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.
 14. INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST Baffle. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER. REPAIR THE Baffles IF THEY ARE DAMAGED. RE-ANCHOR THE Baffles IF WATER IS FLOWING UNDERNEATH OR AROUND THEM. IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLOGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS. REPAIR THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER. CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS. FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.
 15. ALL SEEDED AREAS WILL BE FERTILIZED, RESEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. SEE GROUND STABILIZATION CHART FOR STABILIZATION TIME FRAME.

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit #: _____

Signed: _____

EROSION CONTROL & STORMWATER DETAIL SHEET

GOVERNMENT CENTER APARTMENTS

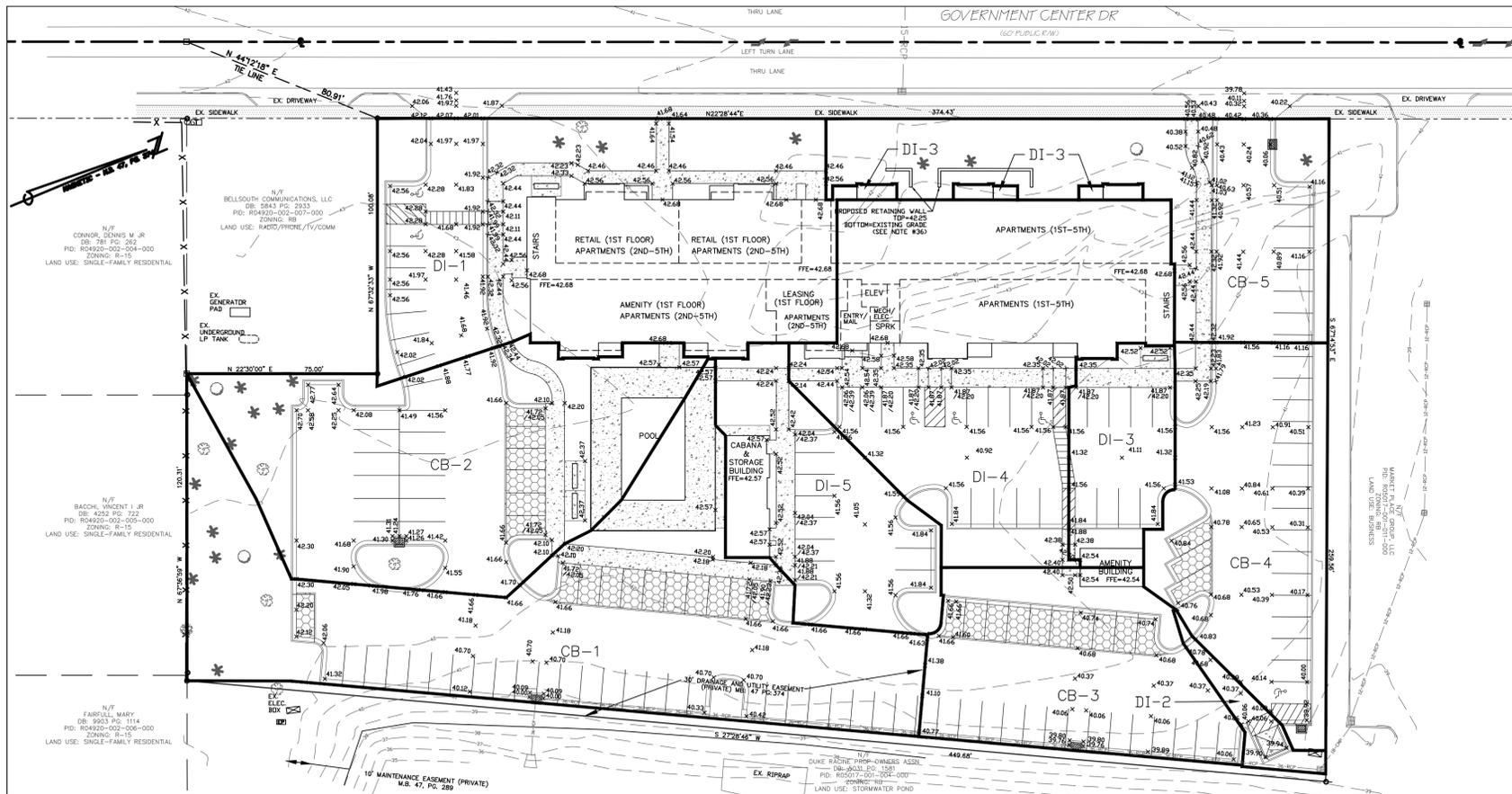
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-6243
 Fax 910-392-6203 License No. C-2320

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
 10 S. CAROLINA DRIVE
 WILMINGTON, NORTH CAROLINA 28403

DATE: 6-17-16
 SCALE: N.T.S.
 DRAWN: JCB
 CHECKED: JEM
 PROJECT NO: 269
 SHEET NO: 6
 OF: 12

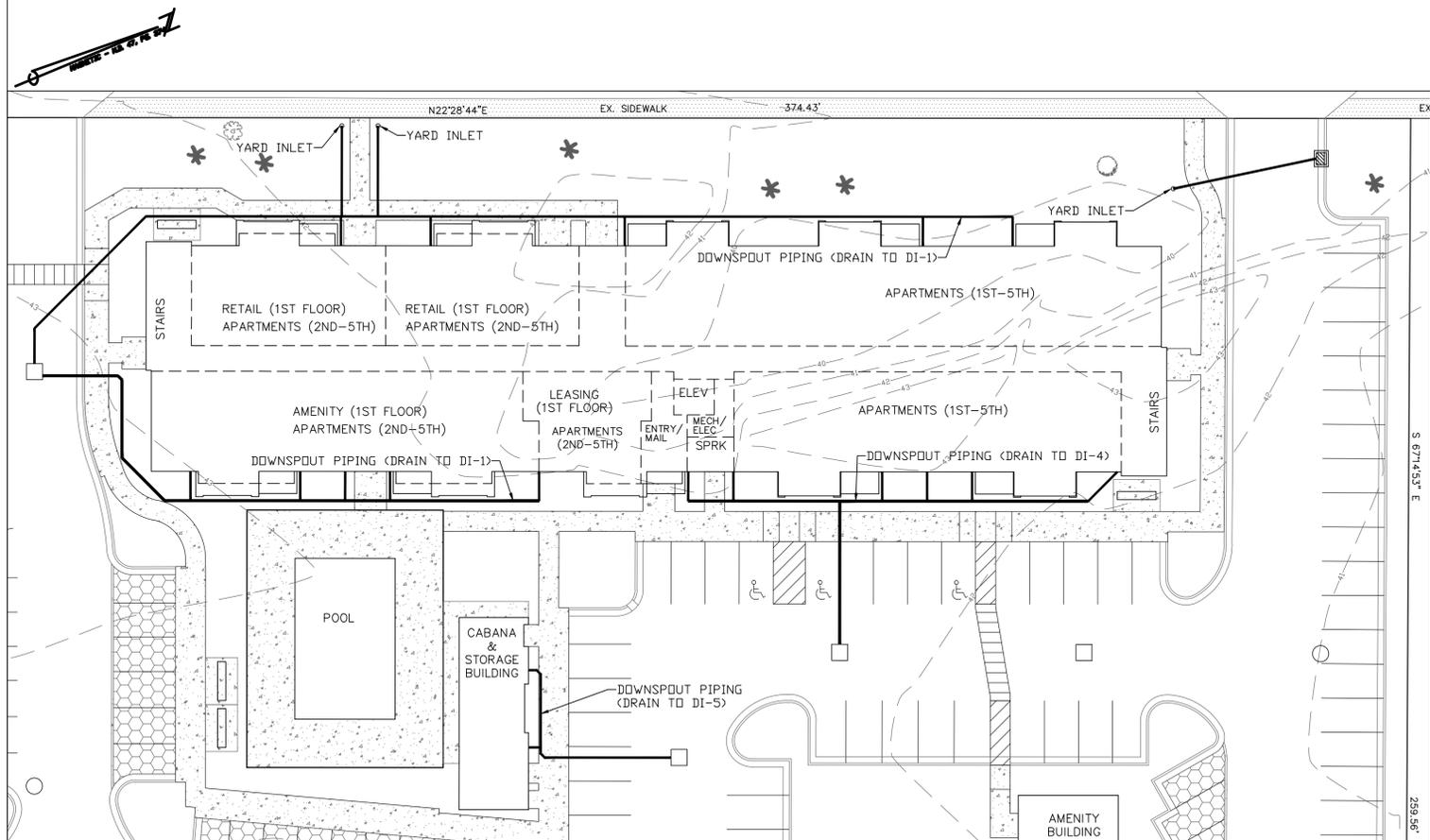


DRAINAGE AREA MAP-INLETS
SCALE: 1" = 30'

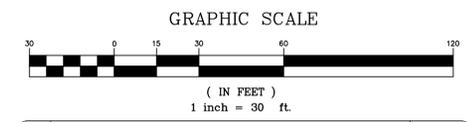
INLET	DRAINAGE AREA (ACRES)
CB-1	0.42
CB-2	0.31
CB-3	0.18
CB-4	0.20
CB-5	0.22
DI-1	0.39
DI-2	0.02
DI-3	0.08
DI-4	0.34
DI-5	0.15

PIPE TABLE - SYSTEM #1						
FROM	TO	SIZE (IN)	LENGTH (FT)	SLOPE (%)	D.S. INVERT	U.S. INVERT
CB-1	PDND	36	26	-1.385	33.69	33.33
SDMH-1	CB-1	18	69	2.116	35.99	36.85
CB-2	SDMH-1	15	21	0.333	36.85	36.92
DI-1	SDMH-1	15	101	0.495	36.85	37.35
CB-3	CB-1	36	211	0.147	33.96	34.27
DI-2	CB-3	36	85	0.165	34.27	34.41
CB-4	DI-2	24	12	0.333	34.87	34.91
SDMH-2	CB-4	24	106	0.287	34.91	35.32
DI-3	SDMH-2	18	59	1.293	35.32	36.07
DI-4	DI-3	18	57	0.316	36.07	36.25
DI-5	DI-4	15	45	0.956	36.25	36.68
CB-5	SDMH-2	15	122	0.303	35.32	35.69

- CONSTRUCTION SEQUENCE FOR INSTALLATION OF PERMEABLE PAVEMENT (NCDENR STORMWATER BMP MANUAL CHAPTER 18)
- 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, AND AREA BETWEEN BUILDINGS & PARKING LOT.
 - IMPERVIOUS AREAS THAT WILL DRAIN TO THE PERMEABLE PAVEMENT ARE COMPLETED.
 - AREAS ADJACENT TO THE PERMEABLE PAVEMENT ARE STABILIZED (VEGETATION, MULCH, STRAW, 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 SOIL SUBGRADE WHILE IT IS EXPOSED.
 - 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 FINALS 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 SUBGRADE SHOULD BE DONE BY HAND IF POSSIBLE.
 - THE FINAL SUBGRADE SLOPE SHALL NOT EXCEED 0.5%. 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.
 - 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 RATE(S) 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.
 - 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 WELLS(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, GEOTEXTILE, OR ON AN IMPERVIOUS MATERIAL 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.
 - IF THE EXPOSED SUBGRADE HAS BEEN SUBJECT TO RAINFALL BEFORE PLACEMENT OF THE AGGREGATE, THEN THE SUBGRADE SURFACE MUST BE SCARIFIED TO BREAK UP THE RESULTING SURFACE CRUST.
 - 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.
 - THE AGGREGATE SHALL BE SPREAD (NOT DUMPED) BY A FRONT-END LOADER OR FROM DUMP TRUCKS DEPOSITING FROM NEAR THE EDGE OF THE EXCAVATED AREA OR 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 IMPERVIOUS PAVEMENT SHALL BE INSTALLED PER THE PLAN. BEFORE MOVING ON TO CONSTRUCTION STEP 8, BE CERTAIN THE DESIGN AND INSTALLATION ARE CONSISTENT.
 - INSTALL PAVEMENT COURSE
 - 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.



DOWNSPOUT & YARD INLET PIPING LOCATION MAP
SCALE: 1" = 20'



REV NO.	DESCRIPTION	DATE
1	REVISED TO ADJUST BUILDINGS.	7-13-16
2	REVISED TO ADD PIPE CHART.	7-19-16
3	REVISED TO ADJUST DRAINAGE AREA & INLET DRAINAGE AREA CHART, AND ADD CONSTRUCTION SEQUENCE FOR INSTALLATION OF PERMEABLE PAVEMENT.	7-22-16
4	REVISED TO ADJUST EXISTING STORM DRAIN PIPE INVERT INTO POND IN PIPE CHART.	7-26-16

Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

DRAINAGE AREA MAP

GOVERNMENT CENTER APARTMENTS

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

DATE: 6-17-16

SCALE: 1" = 30'

DRAWN: JCB

CHECKED: JEM

PROJECT NO: 269

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.

1134 SHIPYARD BOULEVARD

WILMINGTON, NORTH CAROLINA 28412

Phone 910-392-6343 License No. C-2320

Fax 910-392-5203

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.

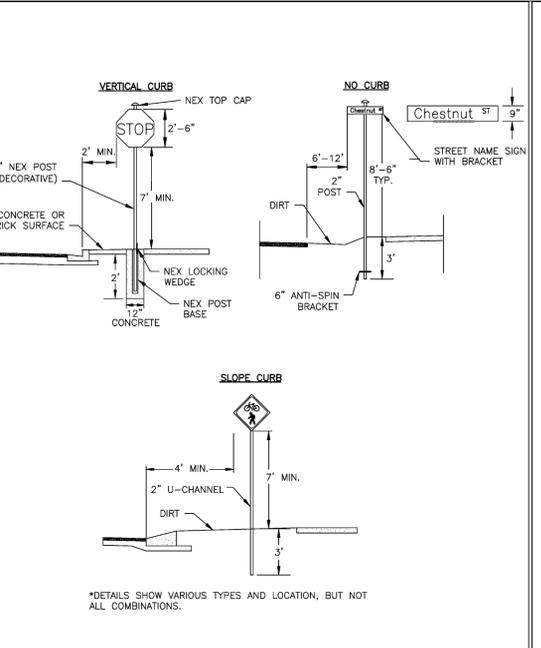
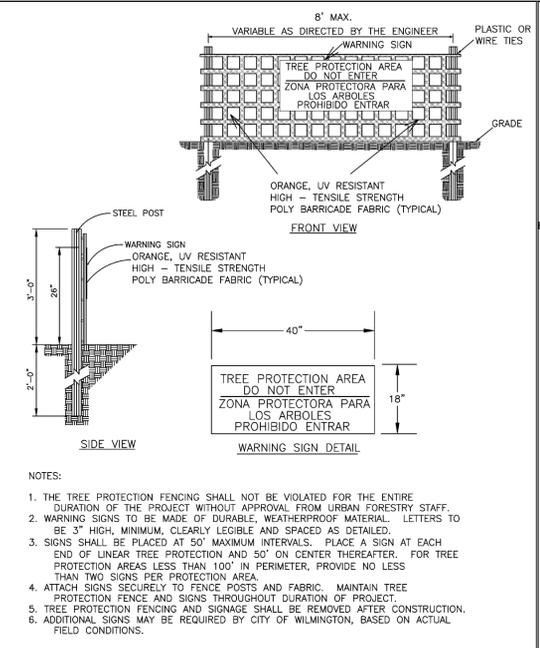
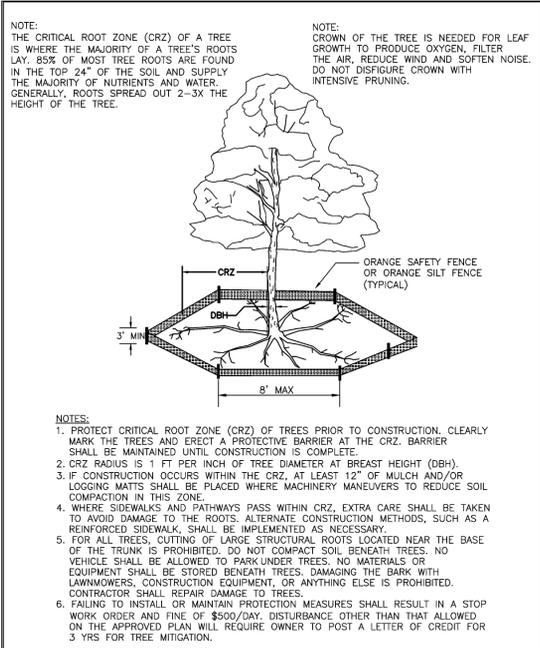
10 S. CARDINAL DRIVE

WILMINGTON, NORTH CAROLINA 28403

SHEET NO: 7

OF: 12

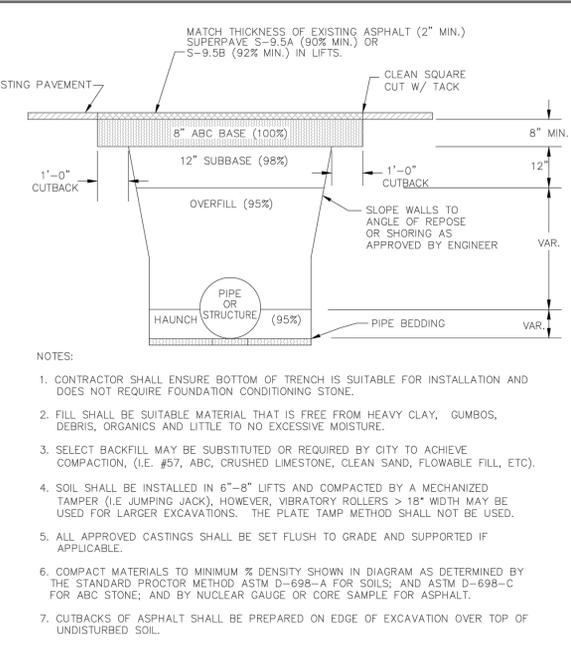
PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES, OR SALES



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 sign supports and other overhead support systems refer to the design plans for maximum sign lengths.
- 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.
- 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 a 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: RDG, P.E.
SCALE: NOT TO SCALE



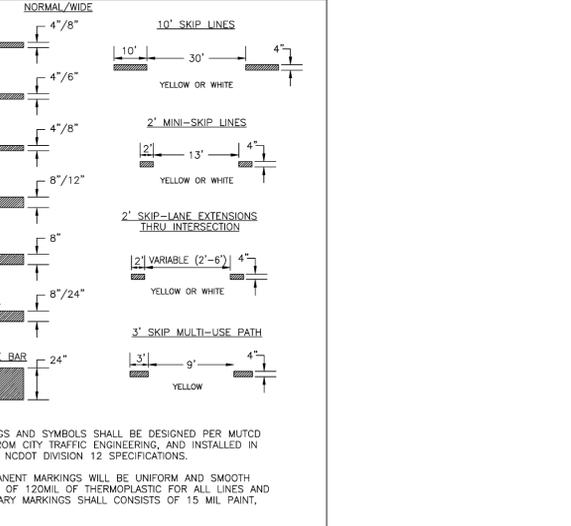
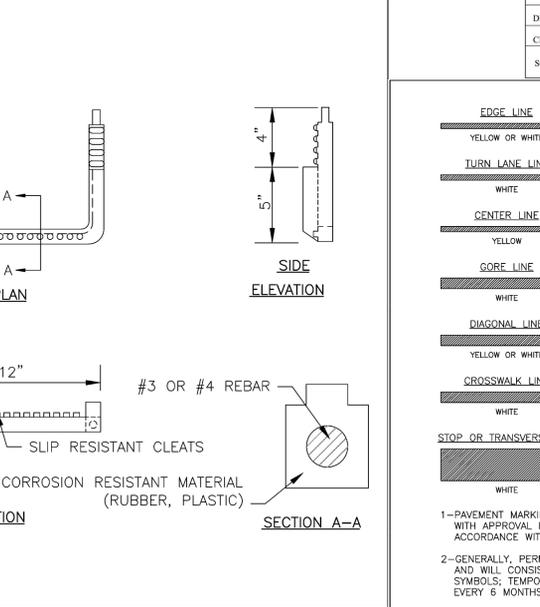
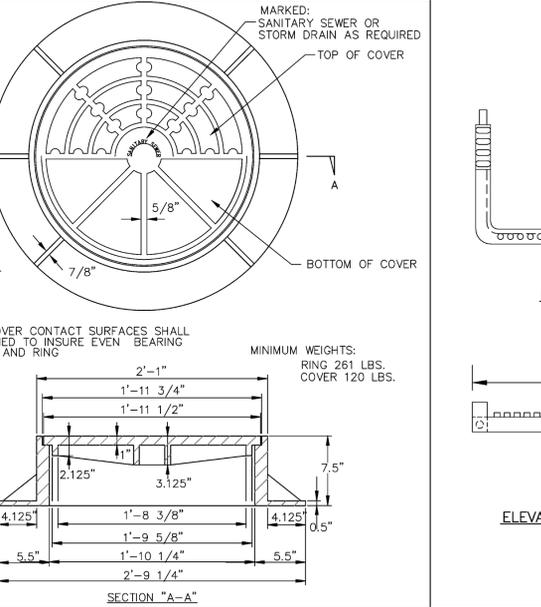
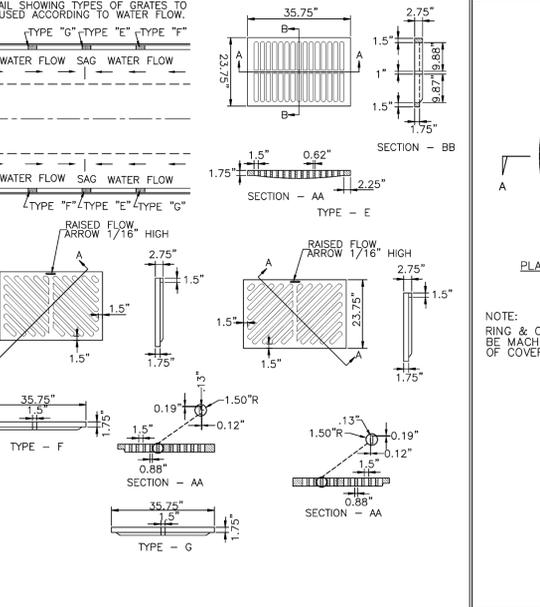
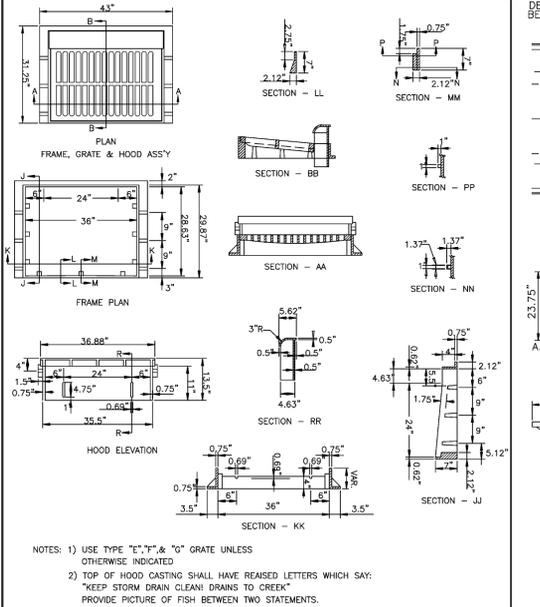
STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION
SHEET 1 of 2
SD 15-09

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION
SHEET 2 of 2
SD 15-09

STANDARD DETAIL
STREET SIGNS AND LOCATION
SHEET 1 of 2
SD 15-03

STANDARD DETAIL
STREET SIGNS AND LOCATION
SHEET 2 of 2
SD 15-03

STANDARD DETAIL
PAVEMENT REPAIRS- UTILITY CUTS
SD 11-05



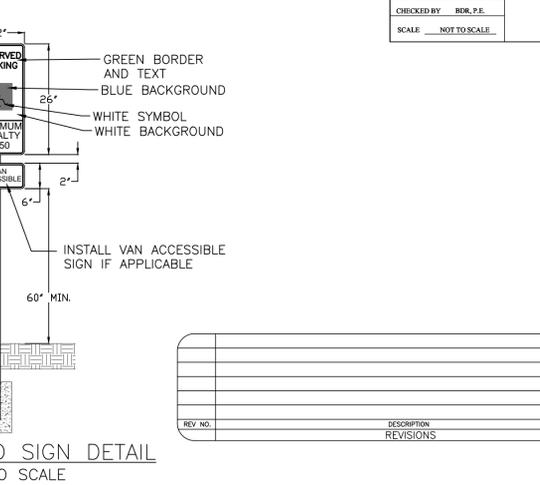
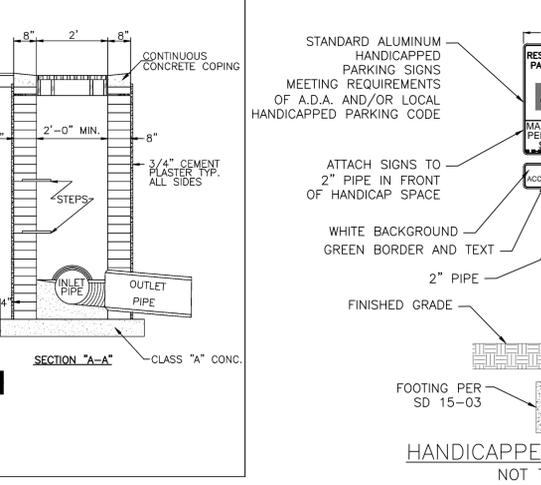
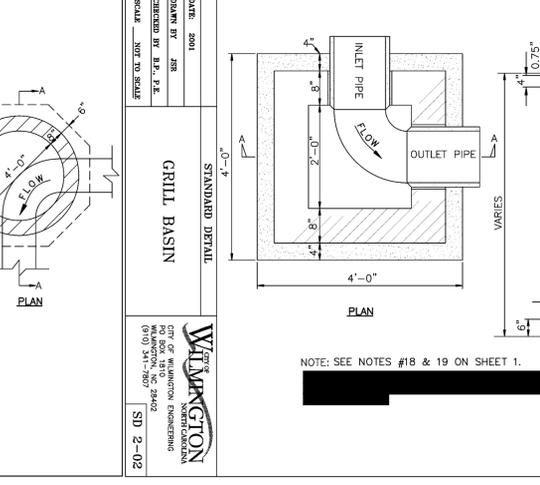
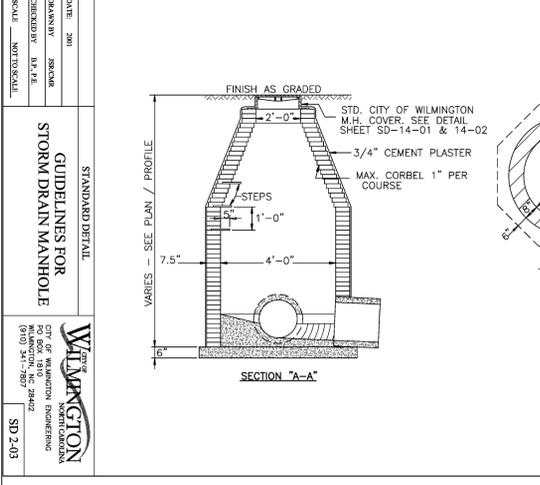
STANDARD DETAIL
CATCH BASIN CASTING FOR 30" HOOD AND GRATE
SD 2-19

STANDARD DETAIL
CATCH BASIN GRATE FOR 30" HOOD AND GRATE
SD 2-20

STANDARD DETAIL
STANDARD MAN-HOLE RING AND COVER
SD 14-02

STANDARD DETAIL
SLIP RESISTANT MANHOLE STEP
SD 14-10

STANDARD DETAIL
PAVEMENT MARKINGS LINE TYPES
SD 11-01



Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

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

GOVERNMENT CENTER APARTMENTS
WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
1134 SHIPYARD BOULEVARD
WILMINGTON, NORTH CAROLINA 28412
Phone 910-392-6343
Fax 910-392-6303 License No. C-2320

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
10 S. CARDINAL DRIVE
WILMINGTON, NORTH CAROLINA 28403

DATE: 6-17-16
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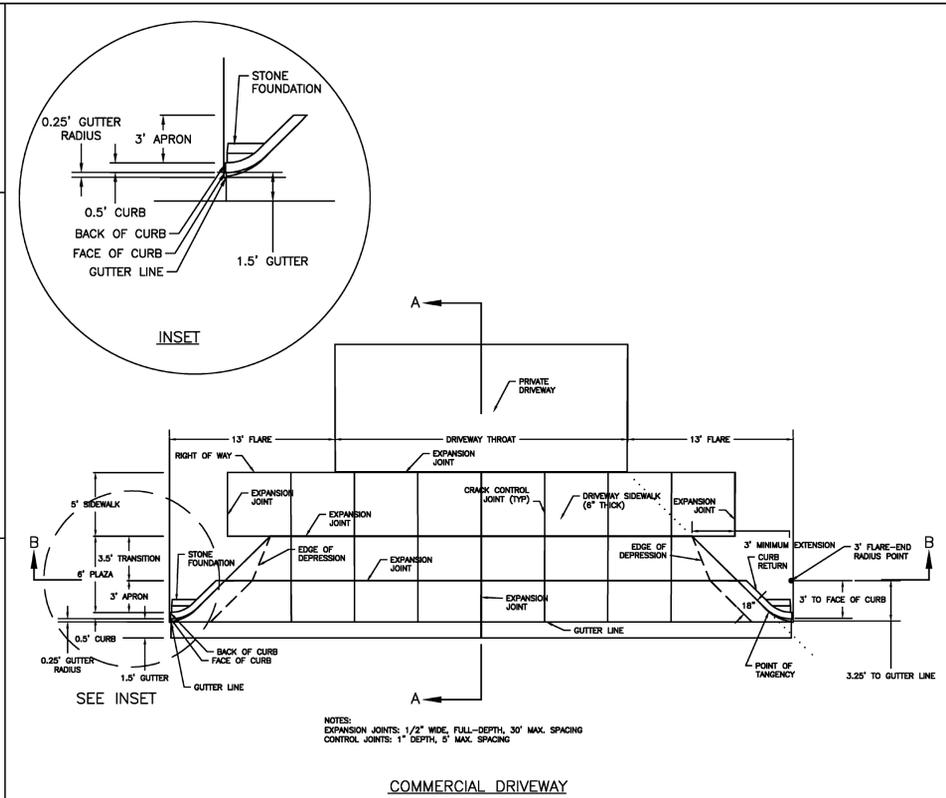
DATE: JUNE 1, 2015
 DRAWN BY: JSR
 CHECKED BY: D.F.C., P.E.
 SCALE: NOT TO SCALE

COMMERCIAL DRIVEWAY PLAN

1 OF 2

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

SD 3-03.3



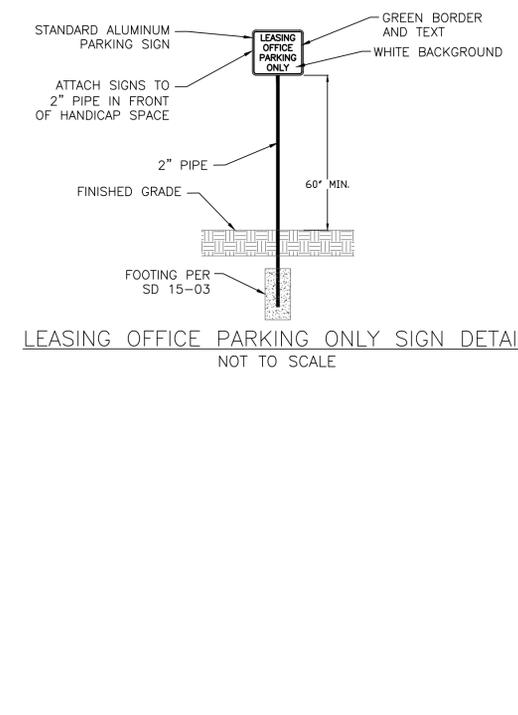
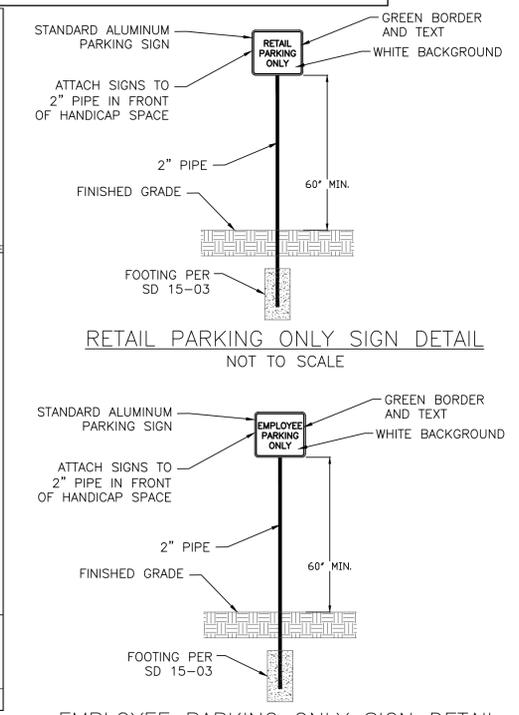
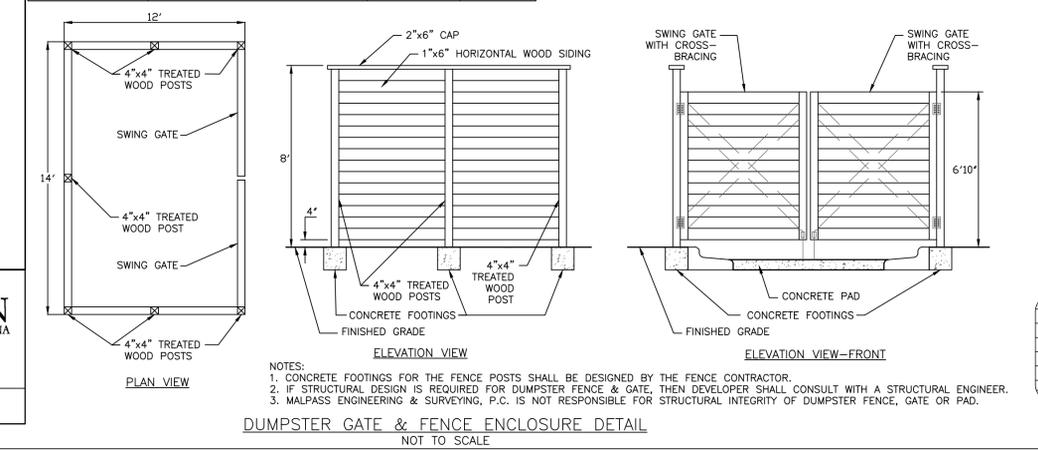
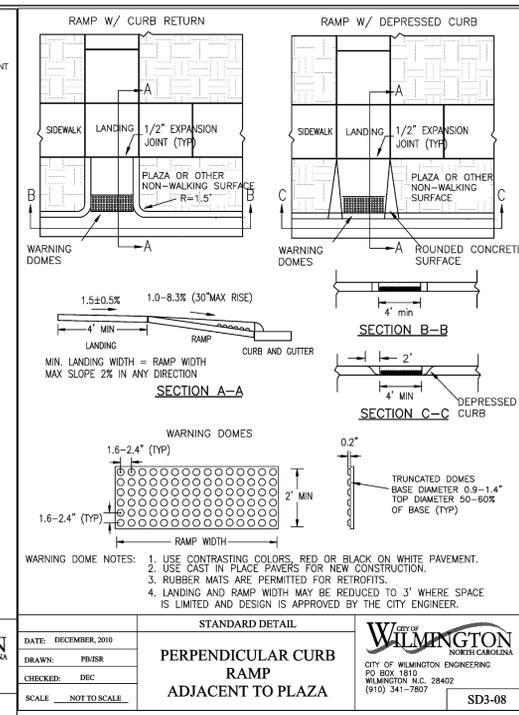
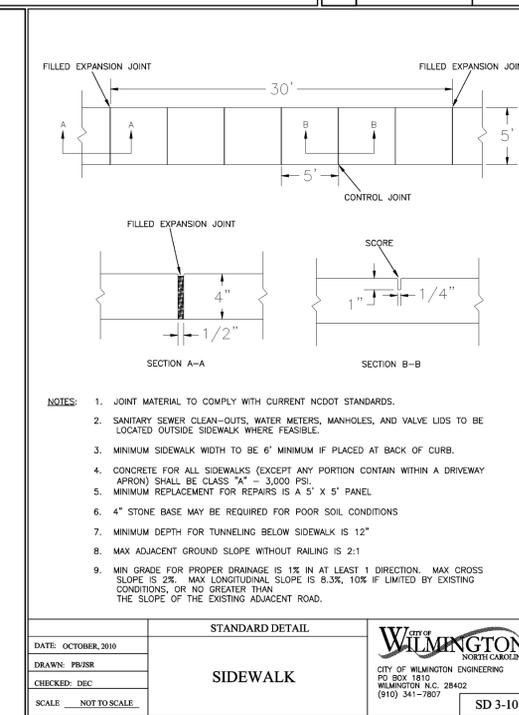
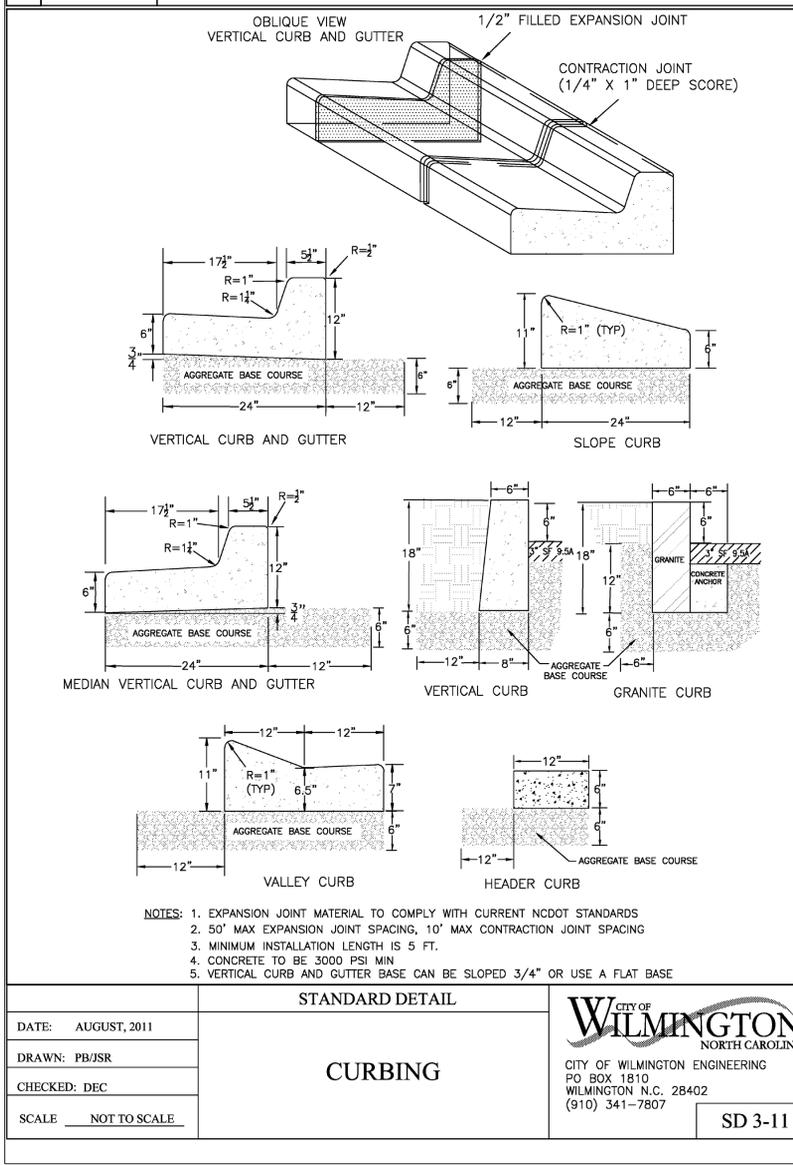
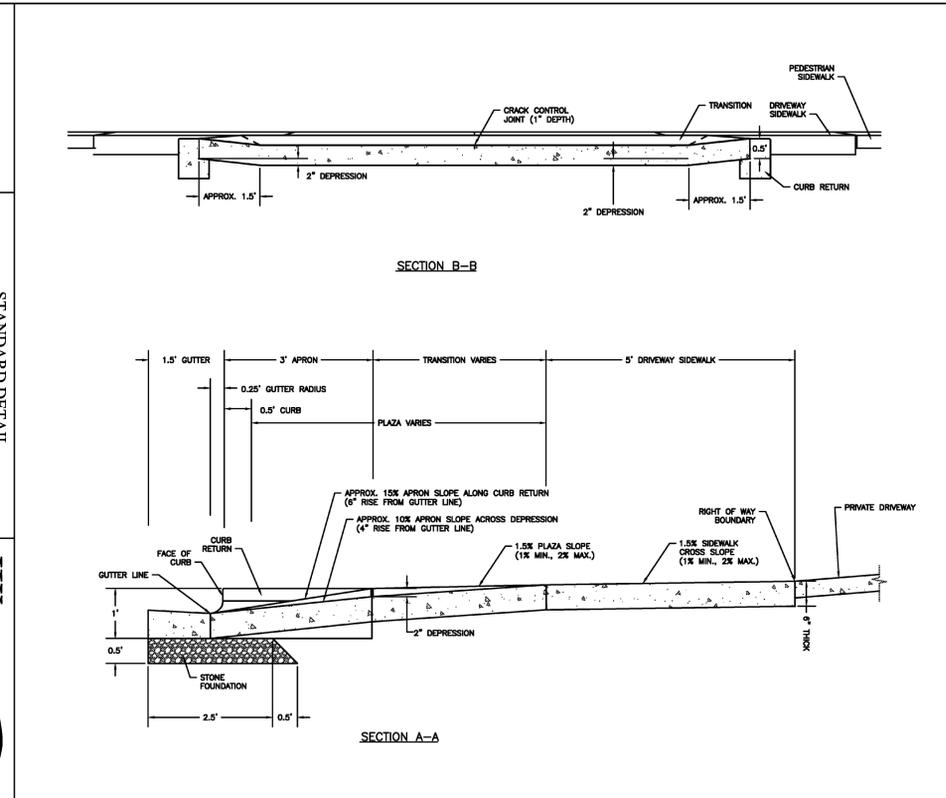
DATE: JUNE 1, 2015
 DRAWN BY: JSR
 CHECKED BY: D.F.C., P.E.
 SCALE: NOT TO SCALE

COMMERCIAL DRIVEWAY SECTIONS

2 OF 2

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

SD 3-03.4



Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

GRAPHIC SCALE

(IN FEET)
 1 inch = 20 ft.

DETAIL SHEET

GOVERNMENT CENTER APARTMENTS

WILMINGTON TOWNSHIP NEW HANOVER COUNTY NORTH CAROLINA

FINAL DRAWING NOT RELEASED FOR CONSTRUCTION

MALPASS ENGINEERING & SURVEYING, P.C.
 1134 SHIPYARD BOULEVARD
 WILMINGTON, NORTH CAROLINA 28412
 Phone 910-392-5243
 Fax 910-392-5203 License No. C-2520

Developer: TRIBUTE INVESTMENT & DEVELOPMENT, INC.
 10 S. CARDINAL DRIVE
 WILMINGTON, NORTH CAROLINA 28403

CHECKED: JEM
 PROJECT NO: 269

SHEET NO: 9
 OF: 12