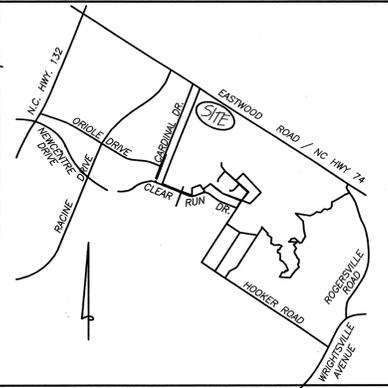
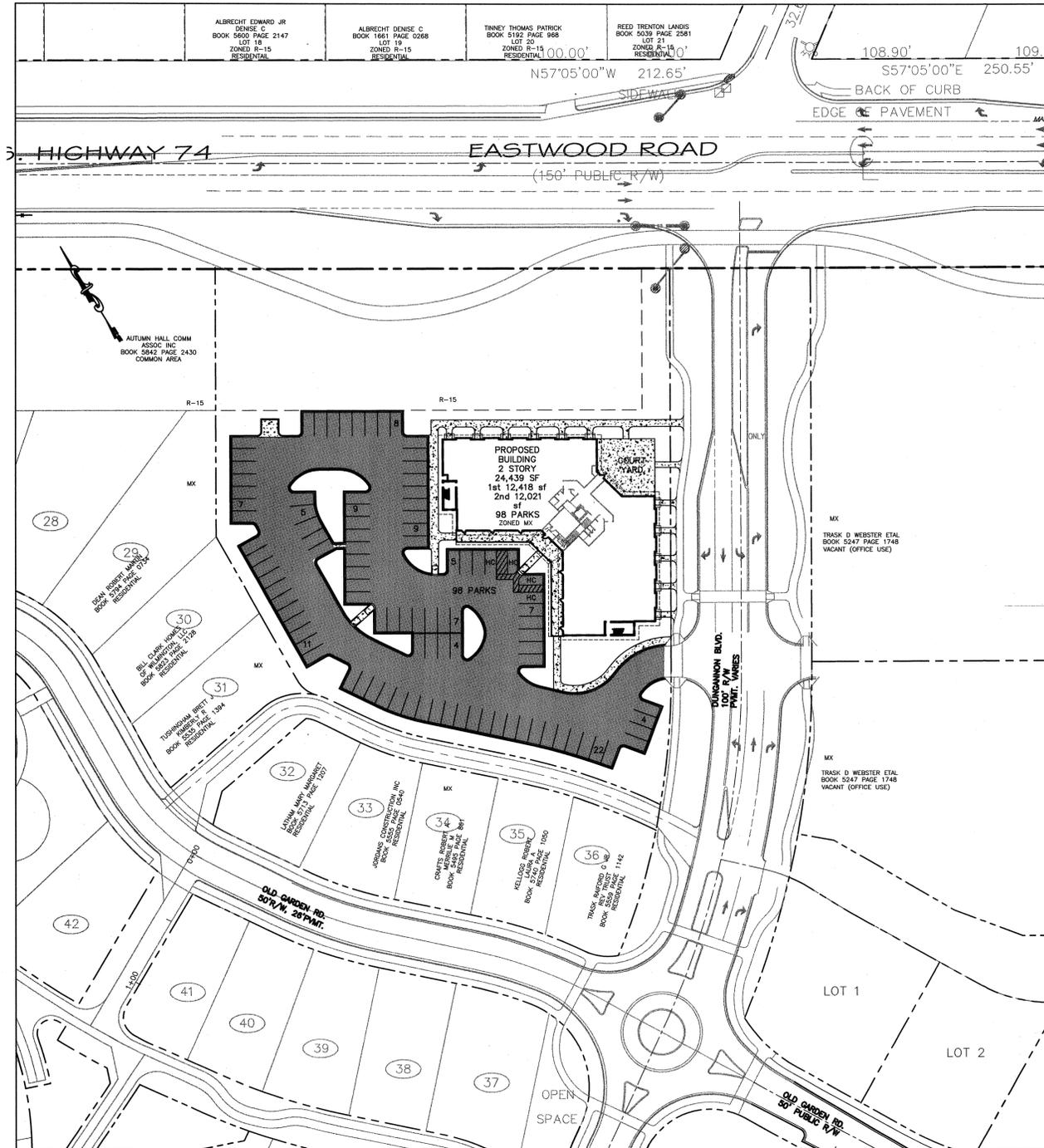


DUNGANNON VILLAGE AUTUMN HALL



LOCATION MAP
NOT TO SCALE



SCALE: 1" = 50'

SITE DATA TABLE	
USE:	OFFICE/RETAIL
SITE AREA:	2.41 ACRES (105,107 SF)
PARCEL ID#:	R0500-004-080-000
MAP ID#:	314707.69.69.62.000
ADDRESS:	110 DUNGANNON BLVD.
ZONING:	MX/R15/SHOD
CAMA LAND USE:	WATERSHED RESOURCE PROTECTION
BUILDING SETBACKS MAX (REQUIRED):	20' MIN. FROM MX BOUNDARY 50' MIN. FROM US AND NC HIGHWAYS AND MAJOR THROUGHFARES INTERIOR: NO MINIMUM, WITHIN 10' OF INTERNAL STREET R/W PREFERRED
BUILDING SETBACKS (PROPOSED):	20' FROM MX BOUNDARY NORTH 11' FROM ROW EAST 91.39' FROM P/L SOUTH 161' FROM P/L WEST
SHOD SETBACKS:	BUILDING: 100' INTERIOR SIDE: 20' PARKING: 50'
BUILDING:	
BUILDING COVERAGE:	15.22%
BUILDING HEIGHT:	32', 2 STORY
BUILDING CONSTRUCTION TYPE:	V-B
BUILDING SQUARE FOOTAGE:	12,418 SF (1ST FLOOR) 12,021 SF (2ND FLOOR) 24,439 SF TOTAL
PARKING REQUIREMENT MAXIMUM, NO MINIMUM REQUIREMENT IN MX ZONE	
PARKING ALLOWED: OFFICE	1/200 SF MAX.
PARKING ALLOWED MAX:	122 MAX.
TOTAL PROVIDED:	98 SPACES
HC SPACES REQUIRED:	4 SPACES
HC SPACES PROVIDED:	4 SPACES
IMPERVIOUS AREA:	
BUILDING:	16,000 SF (ROOF AREA)
ASPHALT, CONCRETE, CURB & GUTTER:	37,000 SF
SIDEWALK:	3,950 SF
TOTAL:	56,950 SF
% SITE IMPERVIOUS AREA:	54.18%
LANDSCAPING: (SEE LANDSCAPE PLAN)	
FOUNDATION PLANTINGS (12%):	
WEST: 32' X 66' X .12 = 253 SF REQD.	
FRONT: 32' X 140' X .12 = 537 SF REQD.	
SOUTH: 32' X 66' X .12 = 253 SF REQD.	
EAST: 32' X 90' X .12 = 345 SF REQD.	
LANDSCAPING REQ'D INTERIOR (AS PER O&M REGULATIONS):	37,000 SF
ASPHALT, CONCRETE, CURB & GUTTER	
30% SHADING REQUIRED	
DISTURBED AREA: 1.74 ACRES	
ALLOTTED IMPERVIOUS FOR THIS PARCEL = 85%	
FROM PERMIT SWB 040333 MOD	

LEGEND

---	PROPERTY LINE/DISTURBED AREA LIMITS
---	DISTURBED AREA LIMITS
---	TEMPORARY SILT FENCE
SD	PROPOSED STORMDRAIN PIPE
W	PROPOSED WATERLINE
SS	PROPOSED SANITARY SEWER
34.75	PROPOSED FINISH GRADE SPOT ELEVATION
⊕	JUNCTION BOX WITH INLET PROTECTION (DI)
⊕	DROP INLET WITH INLET PROTECTION (DI)
⊕	CURB INLET WITH INLET PROTECTION (CI)
---	EXISTING CONTOUR
⊕	EXISTING TREE
TP	TREE PROTECTION FENCE
▨	NEW ASPHALT
▨	NEW CONCRETE/SIDEWALK

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 \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

OVERALL SITE PLAN
DUNGANNON VILLAGE
AUTUMN HALL
WILMINGTON, NORTH CAROLINA 28403

OWNER:
AUTUMN HALL, INC.
1201 EASTWOOD ROAD
WILMINGTON, N.C. 28403
(910) 799-8755

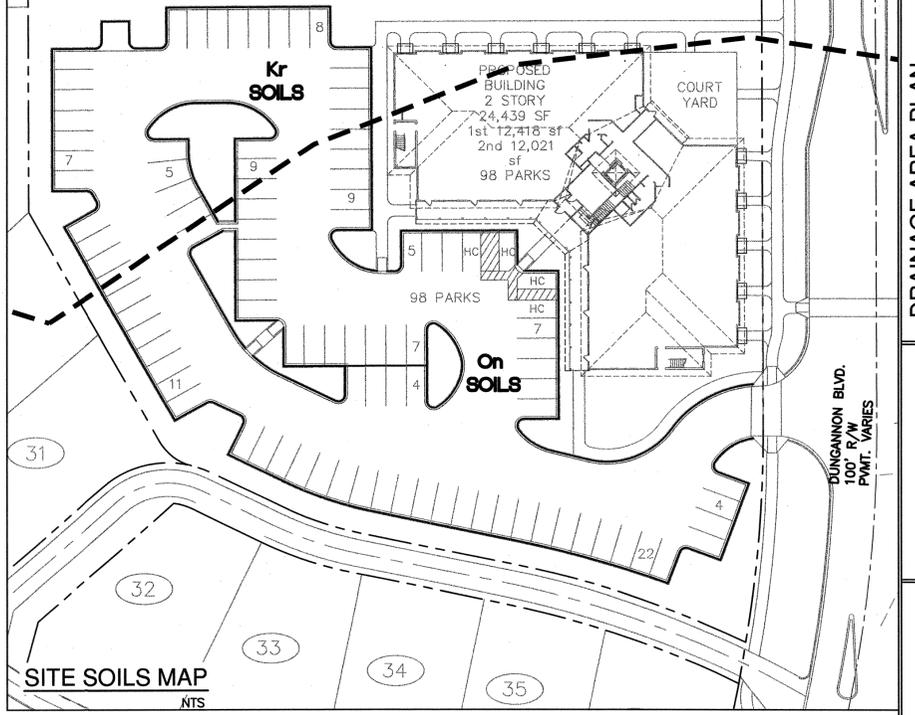
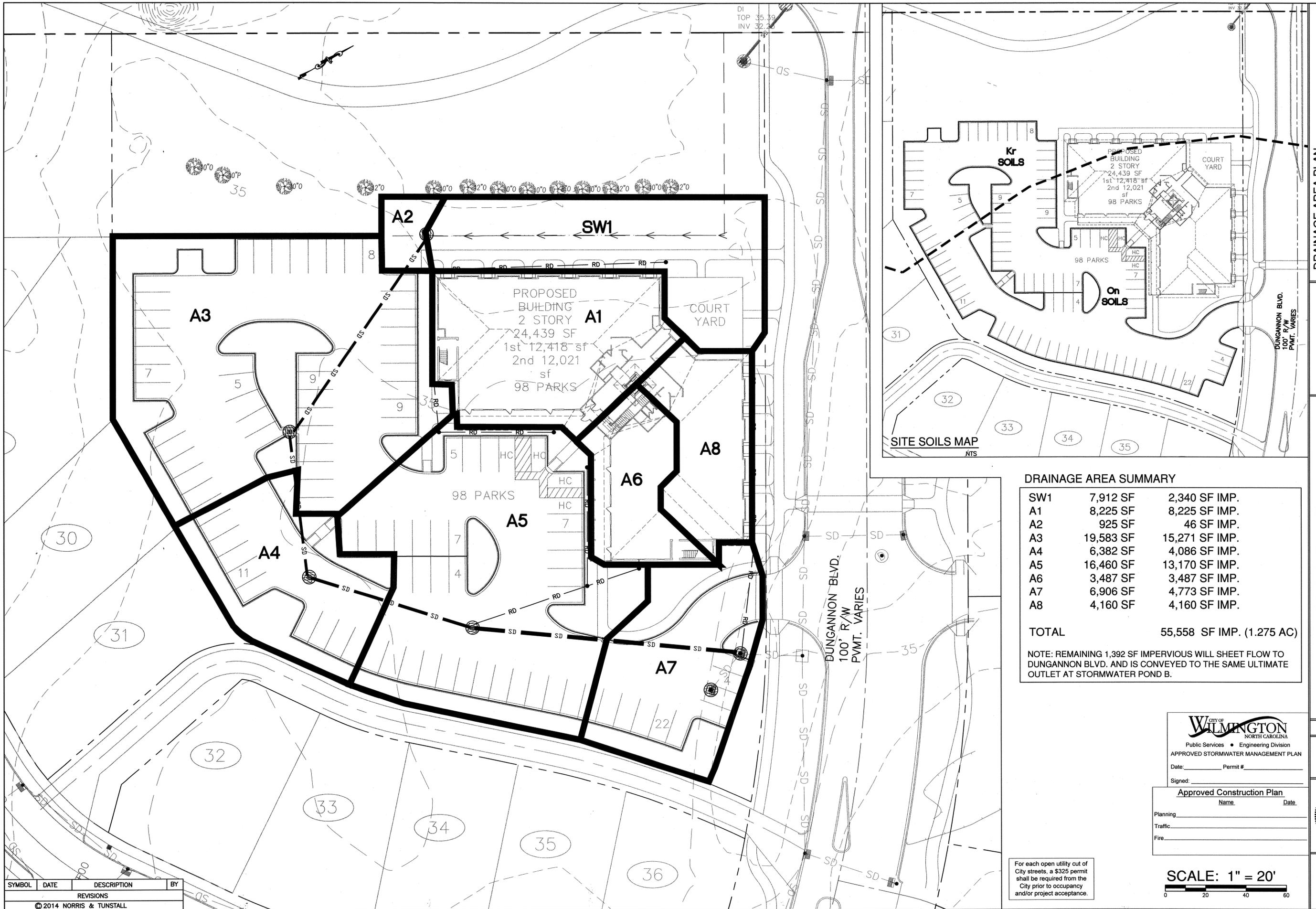
NORRIS & TUNSTALL
CONSULTING ENGINEERS, INC.
902 MARKET STREET
WILMINGTON, NC, 28401
PHONE (910) 343-9653
FAX (910) 343-9604
licence #C-3641

14069
DES. JUST
ORD. JPN
DRWN. NKS

DATE 12/10/14

Professional Engineer Seal for Jason S. Clark, License No. 8848

CO



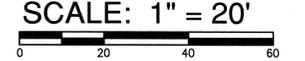
DRAINAGE AREA SUMMARY

SW1	7,912 SF	2,340 SF IMP.
A1	8,225 SF	8,225 SF IMP.
A2	925 SF	46 SF IMP.
A3	19,583 SF	15,271 SF IMP.
A4	6,382 SF	4,086 SF IMP.
A5	16,460 SF	13,170 SF IMP.
A6	3,487 SF	3,487 SF IMP.
A7	6,906 SF	4,773 SF IMP.
A8	4,160 SF	4,160 SF IMP.
TOTAL		55,558 SF IMP. (1.275 AC)

NOTE: REMAINING 1,392 SF IMPERVIOUS WILL SHEET FLOW TO DUNANNON BLVD. AND IS CONVEYED TO THE SAME ULTIMATE OUTLET AT STORMWATER POND B.

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
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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.



DRAINAGE AREA PLAN
 DUNANNON VILLAGE
 AUTUMN HALL
 WILMINGTON, NORTH CAROLINA 28403

OWNER:
 AUTUMN HALL, INC.
 1201 EASTWOOD ROAD
 WILMINGTON, N.C. 28403
 (910) 799-8755

NORRIS & TUNSTALL
 CONSULTING ENGINEERS, INC.
 902 MARKET STREET
 WILMINGTON, NC, 28401
 PHONE (910) 343-9653
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 license #C-3641

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

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

14069
 DES. JST
 OKD. JPN
 DRWN. NKS
 DATE 12/10/14



C1.1

PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

DISTURBED AREA PREVIOUSLY APPROVED

SWALE #1
3:1 MAX.

DI-DV-4
T=34.50
I=30.80

DI-DV-3
T=34.00
I=30.40

DI-DV-2
T=34.00
I=29.98

CONVERT EX. CI TO A DI DV-1
T=RAISE TOP TO 34.0
I=29.50 EXIST.

CONVERT EX. CI TO A DI-JB-1
T=GRADE
I=29.31

EX. JB-BN188
T=35.80
I=29.20

NOTES:
1. NO WETLANDS EXIST WITHIN THE SITE AREA.
2. ROOF DRAIN SIZING SHALL BE VERIFIED WITH THE PLUMBING PLANS.

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 # _____
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Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____

SCALE: 1" = 20'
0 20 40 60



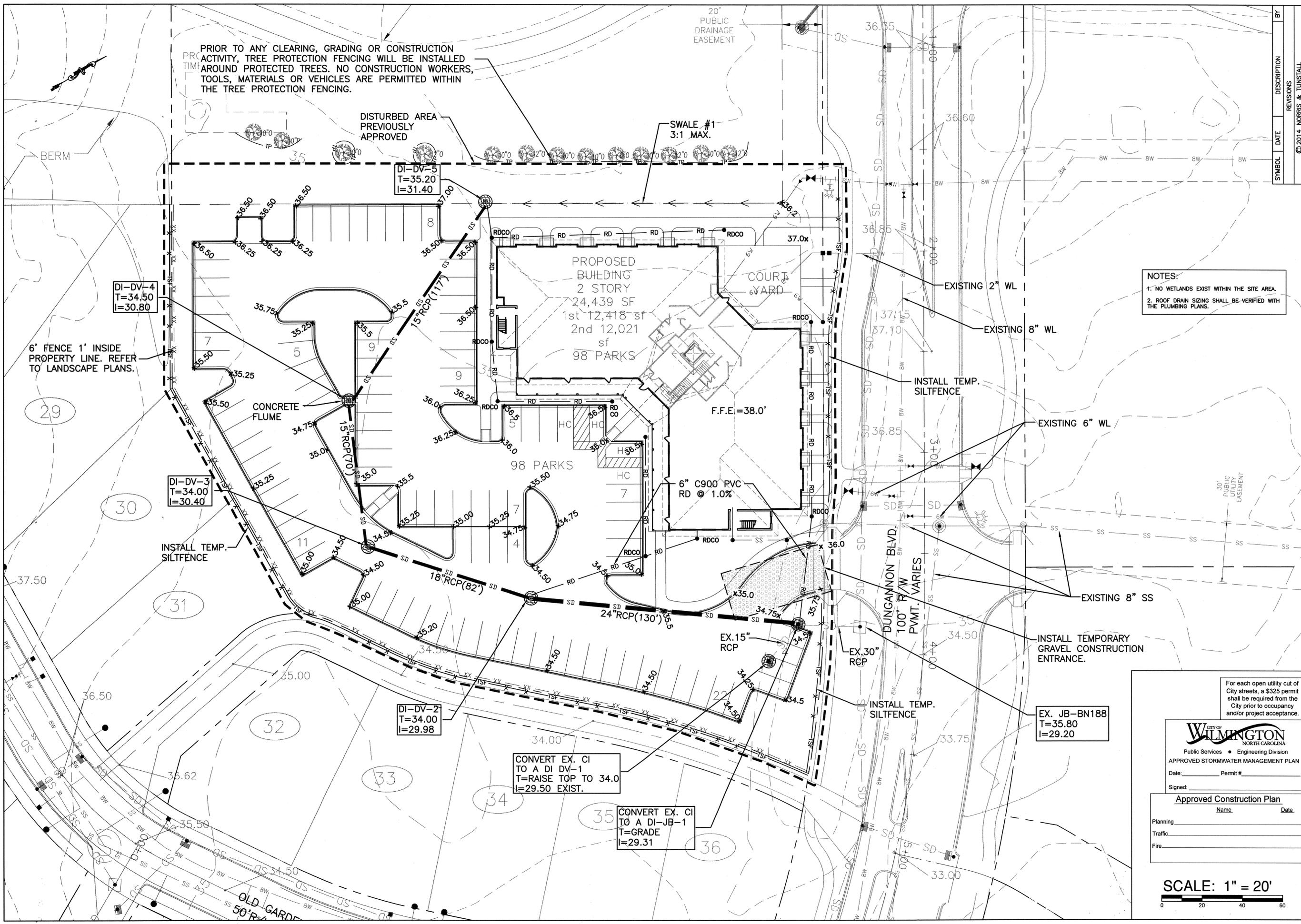
C1

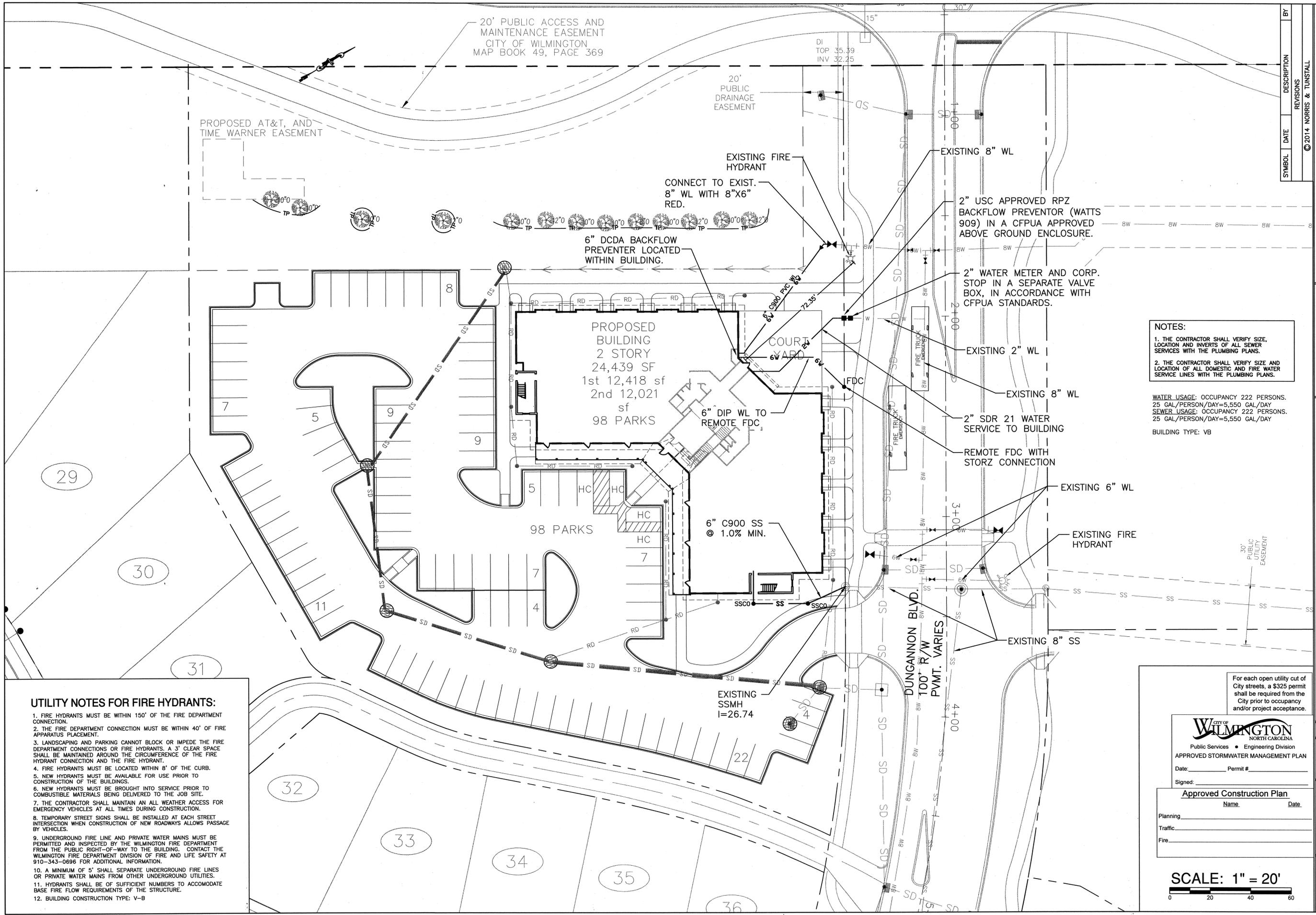
NORRIS & TUNSTALL
CONSULTING ENGINEERS, INC.
902 MARKET STREET
WILMINGTON, NC, 28401
PHONE (910) 343-9653
FAX (910) 343-9604
license #C-3641

OWNER:
AUTUMN HALL, INC.
1201 EASTWOOD ROAD
WILMINGTON, N.C. 28403
(910) 799-8755

GRADING, STORMWATER AND EROSION CONTROL PLAN
DUNGANNON VILLAGE
AUTUMN HALL
WILMINGTON, NORTH CAROLINA 28403

BY	REVISIONS
	SYMBOL DATE DESCRIPTION





20' PUBLIC ACCESS AND MAINTENANCE EASEMENT
CITY OF WILMINGTON
MAP BOOK 49, PAGE 369

PROPOSED AT&T, AND TIME WARNER EASEMENT

20' PUBLIC DRAINAGE EASEMENT

EXISTING FIRE HYDRANT
CONNECT TO EXIST. 8" WL WITH 8"x6" RED.

6" DCDA BACKFLOW PREVENTER LOCATED WITHIN BUILDING.

PROPOSED BUILDING
2 STORY
24,439 SF
1st 12,418 sf
2nd 12,021 sf
98 PARKS

6" DIP WL TO REMOTE FDC

6" C900 SS @ 1.0% MIN.

EXISTING SSMH I=26.74

EXISTING 8" WL

2" USC APPROVED RPZ BACKFLOW PREVENTOR (WATTS 909) IN A CFPWA APPROVED ABOVE GROUND ENCLOSURE.

2" WATER METER AND CORP. STOP IN A SEPARATE VALVE BOX, IN ACCORDANCE WITH CFPWA STANDARDS.

EXISTING 2" WL

EXISTING 8" WL

2" SDR 21 WATER SERVICE TO BUILDING

REMOTE FDC WITH STORZ CONNECTION

EXISTING 6" WL

EXISTING FIRE HYDRANT

EXISTING 8" SS

NOTES:
1. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OF ALL SEWER SERVICES WITH THE PLUMBING PLANS.
2. THE CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL DOMESTIC AND FIRE WATER SERVICE LINES WITH THE PLUMBING PLANS.

WATER USAGE: OCCUPANCY 222 PERSONS.
25 GAL/PERSON/DAY=5,550 GAL/DAY
SEWER USAGE: OCCUPANCY 222 PERSONS.
25 GAL/PERSON/DAY=5,550 GAL/DAY
BUILDING TYPE: VB

UTILITY NOTES FOR FIRE HYDRANTS:

1. FIRE HYDRANTS MUST BE WITHIN 150' OF THE FIRE DEPARTMENT CONNECTION.
2. THE FIRE DEPARTMENT CONNECTION MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
3. LANDSCAPING AND PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTIONS OR FIRE HYDRANTS. A 3' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANT CONNECTION AND THE FIRE HYDRANT.
4. FIRE HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
5. NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDINGS.
6. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
7. THE CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
8. TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES.
9. UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0896 FOR ADDITIONAL INFORMATION.
10. A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND UTILITIES.
11. HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF THE STRUCTURE.
12. BUILDING CONSTRUCTION TYPE: V-B

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

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____

SCALE: 1" = 20'



SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
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UTILITY PLAN

DUNGANNON VILLAGE
AUTUMN HALL

WILMINGTON, NORTH CAROLINA 28403

OWNER:
AUTUMN HALL, INC.
1201 EASTWOOD ROAD
WILMINGTON, N.C. 28403
(910) 799-8755

NORRIS & TUNSTALL
CONSULTING ENGINEERS, INC.
902 MARKET STREET
WILMINGTON, NC, 28401
PHONE (910) 343-9653
FAX (910) 343-9604
license #C-3641

14069

DES. JST
CKD. JPN
DRWN. NKS

DATE 12/10/14



C2

ALBRECHT EDWARD JR
DENISE C
BOOK 5600 PAGE 2147
LOT 18
ZONED R-15
RESIDENTIAL

ALBRECHT DENISE C
BOOK 1661 PAGE 0268
LOT 19
ZONED R-15
RESIDENTIAL

TINNEY THOMAS PATRICK
BOOK 5192 PAGE 968
LOT 20
ZONED R-15
RESIDENTIAL

REED TRENTON LANDIS
BOOK 5039 PAGE 2581
LOT 21
ZONED R-15
RESIDENTIAL

U.S. HIGHWAY 74

EASTWOOD ROAD
(150' PUBLIC R/W)

BACK OF CURB
EDGE OF PAVEMENT

WINDEMERE
SECTION 1
MAP BOOK 9, PAGE 33

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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LAYOUT PLAN

DUNGANNON VILLAGE
AUTUMN HALL

WILMINGTON, NORTH CAROLINA 28403

OWNER:
AUTUMN HALL, INC.
1201 EASTWOOD ROAD
WILMINGTON, N.C. 28403
(910) 799-8755

NORRIS & TUNSTALL
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902 MARKET STREET
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PHONE (910) 343-9653
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licence #C-3641

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DES. JST
CHK. JPN
DRWN. NKS
DATE 12/10/14

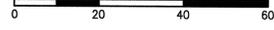
CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____



SCALE: 1" = 20'



C3

NOTES:
1. TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
2. ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH VISUAL SIGHT LINES FROM 30' - 10'.

MX
TRASK D WEBSTER ETAL
BOOK 5247 PAGE 1748
VACANT (OFFICE USE)

MX
TRASK D WEBSTER ETAL
BOOK 5247 PAGE 1748
VACANT (OFFICE USE)

AUTUMN HALL COMM
ASSOC INC
BOOK 5842 PAGE 2430
COMMON AREA

DEAN ROBERT MARTIN
BOOK 5794 PAGE 0734
RESIDENTIAL

BILL CLARK HOWES
OF WILMINGTON, LLC
BOOK 5923 PAGE 2128
RESIDENTIAL

TUSHINGHAM BRETT J
KIMBERLY R
BOOK 5535 PAGE 1394
RESIDENTIAL

LATHAM MARY MARGARET
BOOK 5713 PAGE 1207
RESIDENTIAL

JORDANS CONSTRUCTION INC
BOOK 5555 PAGE 0540
RESIDENTIAL

CRAPTS ROBERT A
MERRILLE M
BOOK 4485 PAGE 861
RESIDENTIAL

KELLOGG ROBERT
LAURA
BOOK 5740 PAGE 1050
RESIDENTIAL

TRASK RAIFORD G JR
REV TRUST
BOOK 5559 PAGE 1142
RESIDENTIAL

PROPOSED BUILDING
2 STORY
24,439 SF
1st 12,418 sf
2nd 12,021 sf
98 PARKS

20' PUBLIC ACCESS AND
MAINTENANCE EASEMENT
CITY OF WILMINGTON
MAP BOOK 49, PAGE 369

20' PUBLIC
DRAINAGE
EASEMENT

20' PUBLIC
UTILITY
EASEMENT

20' PUBLIC
UTILITY
EASEMENT

20' PUBLIC
UTILITY
EASEMENT

R15

R15

MX

MX

MX

MX

MX

26

27

28

29

30

31

32

33

34

35

36

42

OLD GARDEN RD.
50'R/W, 26'PVMT.

DUNGANNON BLVD.
100' R/W
PVMT. VARIES

STOP SIGN

20X70 SIGHT
TRIANGLE, TYP

EXISTING ADA
ACCESSIBLE
RAMPS AND
CROSS WALK

EXISTING SIDEWALK

BICYCLE PARKING
(5) MIN.

ADA RAMP

HC SIGNS,
TYPICAL.

COURT YARD

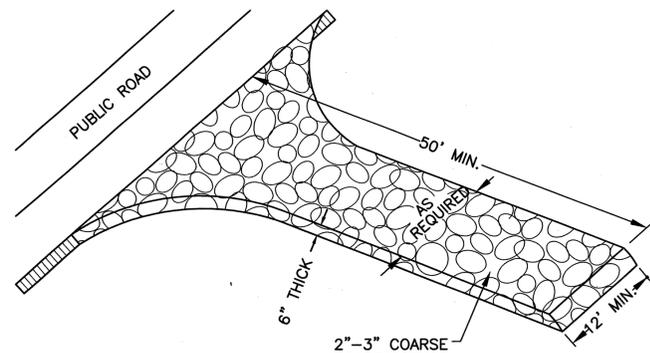
CONCRETE DUMPSTER
AREA SCREENED IN
ACCORDANCE WITH
COW STANDARDS.

PROPOSED AT&T, AND
TIME WARNER EASEMENT

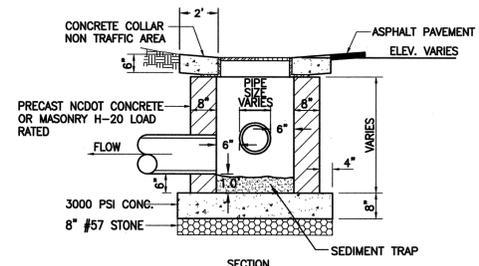
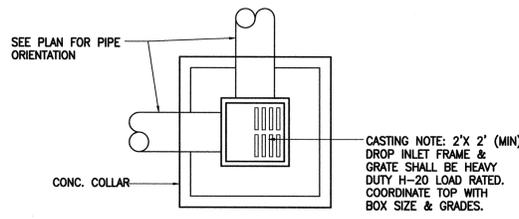
EXISTING MUP

ZONING LINE

NOVELS
000'S
100'



NOT TO SCALE



MUST COMPLY WITH CITY OF WILMINGTON STANDARDS

NOT TO SCALE

EROSION CONTROL NOTES AND MAINTENANCE PLAN:

- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF-INCH RAINFALL.
- 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.
- SEDIMENT WILL BE 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. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND WATTLES, BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
- DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY ASSOCIATED WITH A SWALE.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX. WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX. WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE SEDIMENT FENCE, THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF-FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.
- SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. THE ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR WHEN THE ROCK IS DISLOADED. BAFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED AND KEPT CLEAN WEEKLY.
- SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE DESIGN STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR IF THE ROCK IS DISLOADED. BAFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BEHIND BAFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN.
- LAND QUALITY REQUIRES:** ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED, ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN, TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS. **WATER QUALITY REQUIRES:** ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, ALL SLOPES STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL (3:1) AND ALL HIGH QUALITY WATER (HOW) ZONES SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN SEVEN (7) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN FOURTEEN (14) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- FLOCCULANTS WILL BE USED TO ADDRESS TURBIDITY ISSUES. THE PUMPS, TANKS, HOSES AND INJECT SYSTEMS WILL BE CHECKED FOR PROBLEMS OR TURBID DISCHARGES DAILY.
- BASIN OUTLET STRUCTURES AND SKIMMERS SHALL WITHDRAW WATER FROM THE SURFACE.

SITE WORK NOTES:

- THE CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH FIELD CONSTRUCTION CONDITIONS.
- CONTRACTOR SHALL COORDINATE WORK WITHIN NCDOT AND LOCAL RIGHT OF WAYS WITH PROPER AUTHORITIES AND SHALL MEET ANY REQUIREMENTS AS TO TRAFFIC CONTROL AND CONNECTION TO EXISTING STREETS.
- CLEARING AND GRUBBING: REMOVE ALL TREES AS REQUIRED UNLESS OTHERWISE NOTED TO REMAIN. STUMPS, ROOTS, SHRUBBERY, ASPHALT CONCRETE, STRUCTURES, BURIED UTILITIES, STORAGE TANKS, ETC. WITHIN LIMITS OF CONSTRUCTION.
- STRIPPING: BEFORE EXCAVATING OR FILLING, REMOVE ALL TOPSOIL, WOOD, LEAVES, AND ANY OTHER UNSUITABLE MATERIAL.
- MUCKING: REMOVE ANY SOFT, ORGANIC SILT MATERIALS AND EXISTING BURIED CONSTRUCTION DEBRIS AS REQUIRED AND FILL TO SUBGRADE ELEVATIONS WITH A CLEAN SELECT-FILL COMPACTED AS SPECIFIED.
- DISPOSAL: CLEARED, GRUBBED, STRIPPED OR EXCAVATED SPOIL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES.
- BORROW MATERIAL: THE CONTRACTOR SHALL FURNISH BORROW MATERIAL REQUIRED FROM OFF SITE AND OBTAIN ALL REQUIRED PERMITS ASSOCIATED WITH BORROW OPERATIONS.
- FILL AND COMPACTION: AFTER STRIPPING THOSE AREAS DESIGNATED TO RECEIVE FILL SHOULD BE PROOFROLLED. THE TOP 8" OF SUBGRADE SHALL BE COMPACTED TO AT LEAST 98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. ANY AREA WHICH PUMPS OR RUTS EXCESSIVELY SHOULD BE UNDERCUT AND REPLACED WITH A CLEAN, SILTY OR CLAYEY SAND HAVING A UNIFIED SOIL CLASSIFICATION OF SP, SM, OR SC. FILL MATERIAL 5" OUTSIDE OF BUILDING AREAS SHALL THEN BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED TO 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. FILL MATERIALS WITHIN BUILDING AREAS TO A LINE OUTSIDE THE BUILDING AREAS SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED IN 6 INCH LAYERS TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. IN AREAS WHERE NO STRUCTURAL FILL IS TO BE PLACED THE UPPER 12 INCHES OF IN-PLACE SUBGRADE SHOULD BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. IF THE MATERIAL IS TOO DRY TO COMPACT TO THE REQUIRED DENSITY EACH LAYER SHALL BE WETTED IN ACCORDANCE WITH COMPACTION REQUIREMENTS. IF THE MATERIAL IS TOO WET TO SECURE PROPER COMPACTION, IT SHALL BE HARROWED REPEATEDLY OR OTHERWISE AERATED WITH SUITABLE EQUIPMENT UNTIL OPTIMUM MOISTURE CONTENT IS OBTAINED. FILL SHALL BE PLACED IN SUCH A MANNER THAT THE SURFACE WILL DRAIN READILY AT ALL TIMES. SEE STRUCTURAL NOTES AND SOILS REPORT FOR ADDITIONAL REQUIREMENTS.
- LAYOUT: THE CONTRACTOR SHALL PROVIDE ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION.
- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION FROM SURVEY BY ARNOLD CARSON AND PROVIDED BY OWNER.
- THE CONTRACTOR SHALL VERIFY DIMENSIONS AT JOBSITE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF RELOCATION OR DISCONNECTION OF ALL EXISTING UTILITIES WITH APPLICABLE AGENCIES AND AUTHORITIES.
- ALL PAVEMENT AND BASE MATERIALS AND WORKMANSHIP SHALL CONFORM TO NCDOT STANDARDS.
- WATER AND SEWER SERVICES SHALL BE INSTALLED TO MEET LOCAL AND STATE PLUMBING CODES. METER AND TAPS SHALL MEET ALL LOCAL REQUIREMENTS.
- SEE SOILS REPORT FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL NOTE THAT EARTHWORK QUANTITIES ARE HIS RESPONSIBILITY. PLANS DO NOT REPRESENT A BALANCED EARTHWORK CONDITION.
- REINFC. CONC. PIPE SHALL BE CLASS III W/RUBBER GASKETED JOINT OR "RAM NECK". INSTALL PER MANUFACTURER'S REQUIREMENTS.
- USE WHITE LANE MARKING PAINT FOR ALL PAVEMENT MARKINGS. PAINT SHALL BE A CHLORINATED RUBBER ALKYD, FS TT-P-115, TYPE III, FACTORY MIXED, QUICK DRYING, NON-BLEEDING.
- REFER TO THE PLUMBING DRAWINGS FOR LOCATION AND INVERTS OF NEW WASTE, WATER AND ROOF DRAIN LINES.

NOTES AND DETAILS

DUNGANNON VILLAGE
AUTUMN HALL

WILMINGTON, NORTH CAROLINA 28403

OWNER/DEVELOPER

AUTUMN HALL, INC.
1201 EASTWOOD ROAD
WILMINGTON, N.C. 28403
(910) 799-8755

NORRIS & TUNSTALL

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license #C-3641

14069

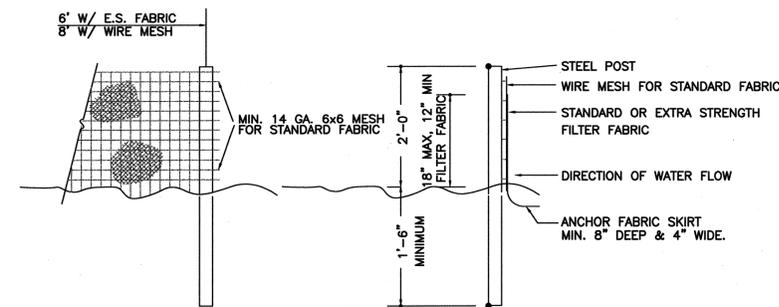
DES. JUST
ORD. JPN
DRAW. NKS

DATE 12/10/14



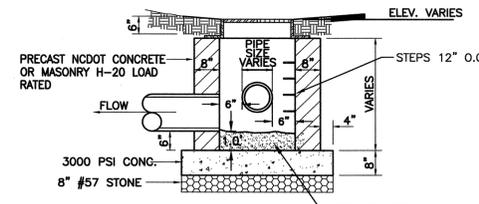
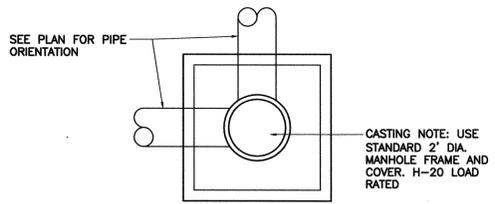
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1 TEMPORARY GRAVELLED CONSTRUCTION ENTRANCE



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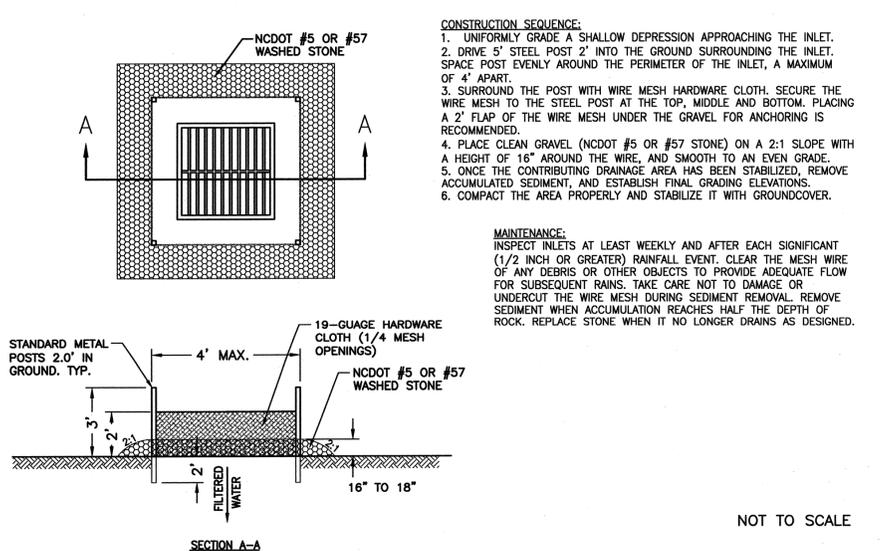
2 DROP INLET DETAIL



MUST COMPLY WITH CITY OF WILMINGTON STANDARDS

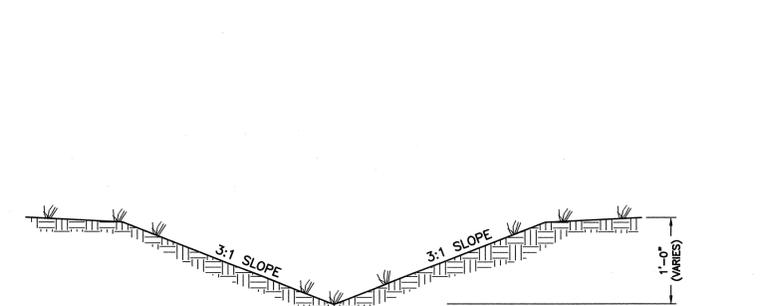
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3 TEMPORARY SILT FENCE



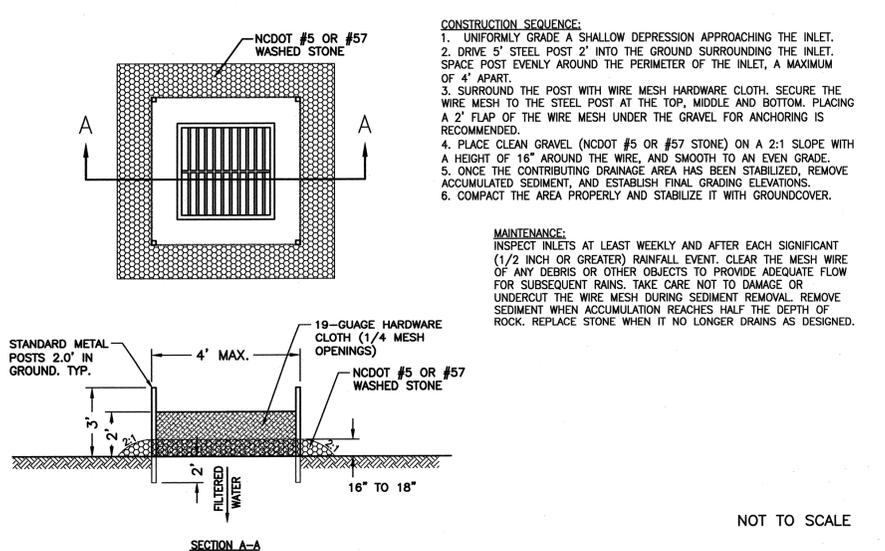
NOT TO SCALE

4 JUNCTION BOX DETAIL



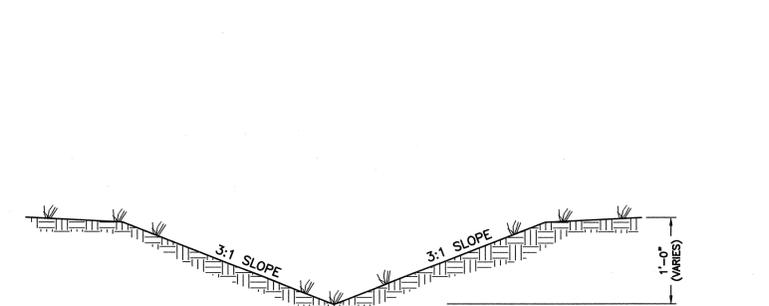
NOT TO SCALE

5 HARDWARE CLOTH AND GRAVEL INLET PROTECTION



NOT TO SCALE

6 TYPICAL GRASS SWALE

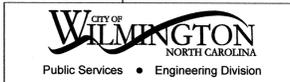


NOT TO SCALE

TEMPORARY/PERMANENT GRASS SPECIFICATION:

- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS.
 - RIP THE ENTIRE AREA TO A 6 INCH DEPTH.
 - REMOVE ALL ROCKS, ROOTS AND OTHER OBSTRUCTIONS LEAVING SURFACES SMOOTH AND UNIFORM.
 - APPLY AGRICULTURAL LIME AND FERTILIZER UNIFORMLY AND MIX WITH SOIL.
LIME: 45 LBS. PER 1000 S.F.
PHOSPHOROUS: 20 LBS. PER 1000 S.F.
FERTILIZER: 17 LBS. PER 1000 S.F.
 - CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, UNIFORM SEED BED IS PREPARED 4-6 INCHES DEEP.
 - SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY.
2-3 LBS PER 1000 S.F. (SEE MIXTURE BELOW)
 - MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
WOOD CHIPS AT 500 LBS. PER 1000 S.F.
JUTE & MESH AS PER MANUFACTURER
 - ASPHALT FOR ANCHORING MULCH SHALL BE TYPE SS-1 EMULSION AND APPLIED AT A RATE OF 1000 GAL. PER ACRE FOR SLOPE STABILIZATION, AND 150 GAL. PER TON OF STRAW FOR ANCHORING STRAW.
 - INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEED WITHIN THE PLANTING SEASON, IF POSSIBLE. IF GRASS STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
 - CONSULT CONSERVATION INSPECTOR ON MAINTENANCE, TREATMENT, AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
 - SEED FOR TEMPORARY AND PERMANENT APPLICATIONS SHALL BE:
20% CARPET GRASS
28% BERMUDA GRASS
20% TURF FESCUE
10% CREEPING RED FESCUE
20% ANNUAL RYE GRASS
*BERMUDA SEED SHALL BE HULLED FOR WARM WEATHER PLANTING. PURITY OF SEED SHALL BE A MIN. OF 98% AND GERMINATION SHALL BE A MIN. OF 85%.
- ALL DISTURBED AREA SHALL BE SEEDED WITHIN 7-14 DAYS OF THE COMPLETION OF GRADING. SEE EROSION CONTROL AND MAINTENANCE NOTES. CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS, OTHER SEEDING SCHEDULES MAY BE POSSIBLE.

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

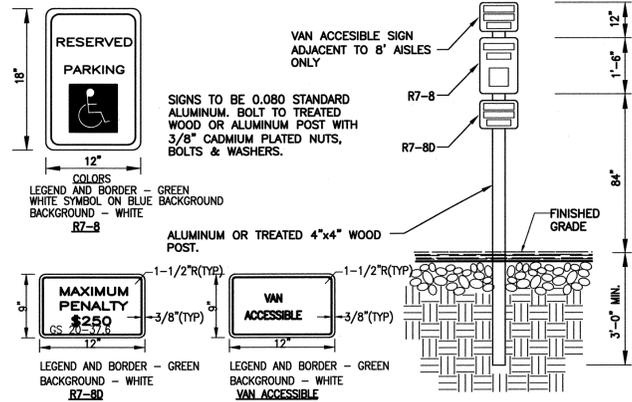


Approved Stormwater Management Plan
Name: _____ Date: _____
Permit # _____
Signed: _____

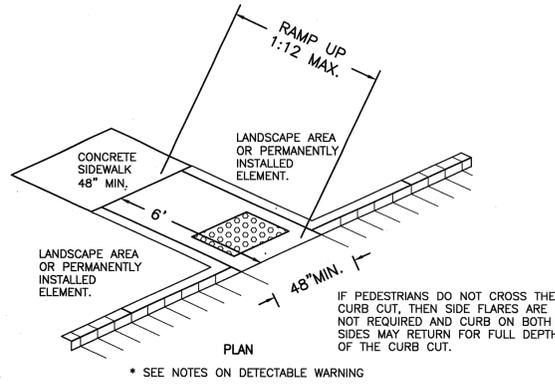
Approved Construction Plan
Name: _____ Date: _____
Planning: _____
Traffic: _____
Fire: _____

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			

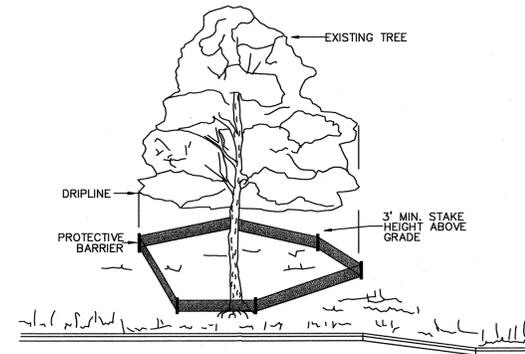
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NOT TO SCALE



NOT TO SCALE



- NOTE:
- TREES TO BE SAVED WILL BE CLEARLY MARKED PRIOR TO CONSTRUCTION AND A PROTECTIVE BARRIER IS TO BE INSTALLED AT THE DRIPLINE.
 - DRIPLINE - THE AREA OF SOIL DIRECTLY BENEATH THE TREE EXTENDING OUT TO THE TIPS OF THE OUTERMOST BRANCHES.
 - SIGNAGE STATING "TREE PROTECTION ZONE DO NOT ENTER" IN ENGLISH SHALL BE ATTACHED TO FENCING AND PLACED AT 50' INTERVALS WITH A MINIMUM OF TWO SIGNS PER TREE PROTECTION AREA.

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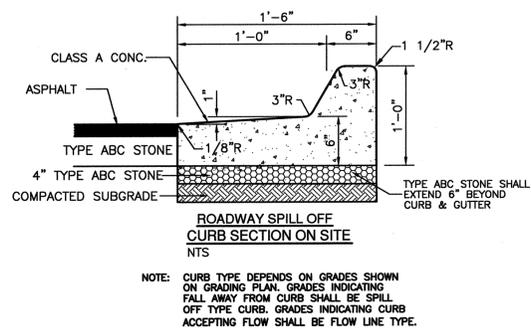
CITY OF WILMINGTON STANDARD NOTES:

- CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 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.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. POSTED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- 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.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS, AND CURBING WILL BE REPLACED.
- CONTACT KAREN DIXON AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPWA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA WATER SHALL COMPLY WITH 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 USFCOCHR OR ASSC.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED SINGLE STRAND COPPER WIRE INSTALLED THE ENTIRE LENGTH AND SECURED TO ALL VALVES. THIS WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- THE NUMBER AND SPACING OF DRIVEWAYS FOR ALL INTERCONNECTED SITES WILL BE DETERMINED BY THE COMBINED FRONTAGE OF THE INTERCONNECTED PROPERTIES.
- UNDERGROUND FIRE LINE MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC ROW TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- A LANDSCAPE PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.

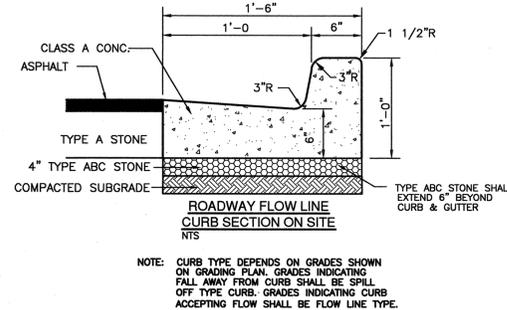
1 TYPICAL HANDICAPPED SIGN DETAIL

2 SIDEWALK, CURB CUT AND WHEEL CHAIR RAMP DETAIL

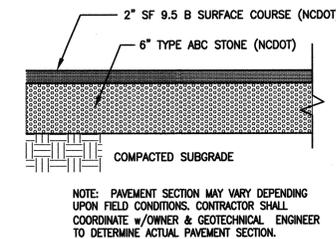
3 METHOD OF TREE PROTECTION



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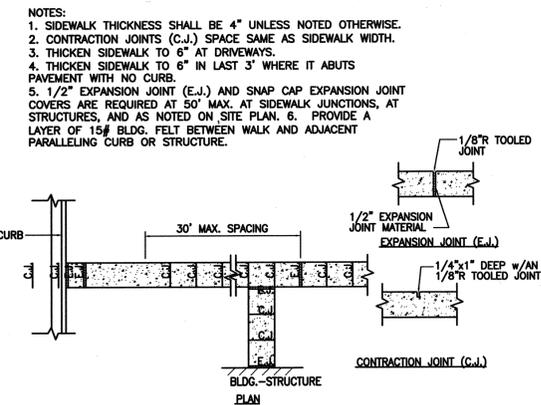


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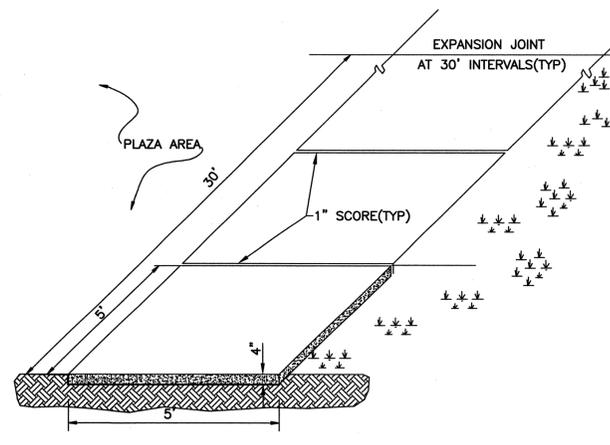
4 18" CURB AND GUTTER SECTION (SPILL-OFF)

5 18" CURB AND GUTTER SECTION (FLOW-LINE)

6 ASPHALT PAVEMENT SECTION



NOT TO SCALE

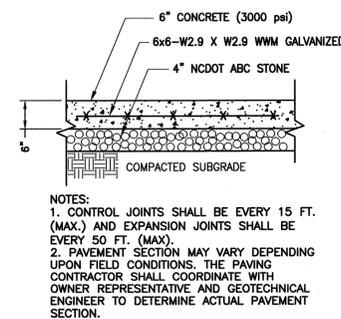


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7 SIDEWALK JOINT DETAIL

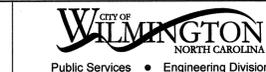
8 STANDARD SIDEWALK DETAIL

9 HEAVY DUTY CONCRETE PAVEMENT SECTION



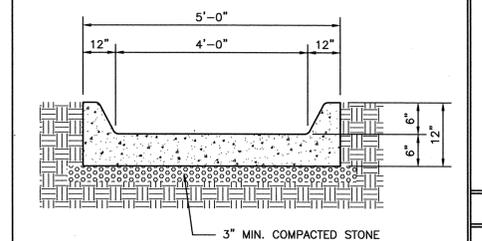
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APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

10 CONCRETE FLUME SECTION



14069

DES. JUST
 O.D. JPN
 DRWN. NKS

DATE 12/10/14

Approved Construction Plan

Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
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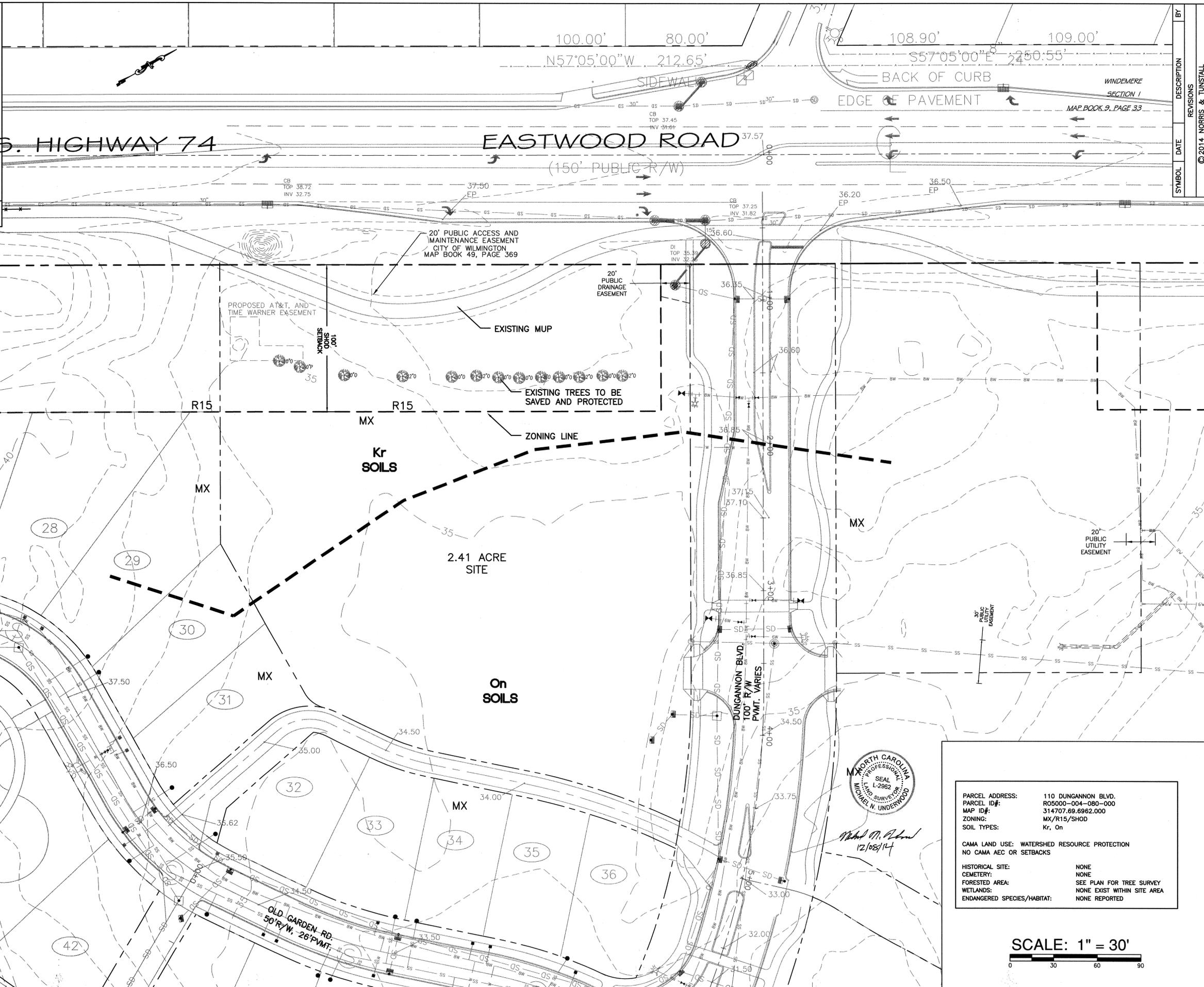
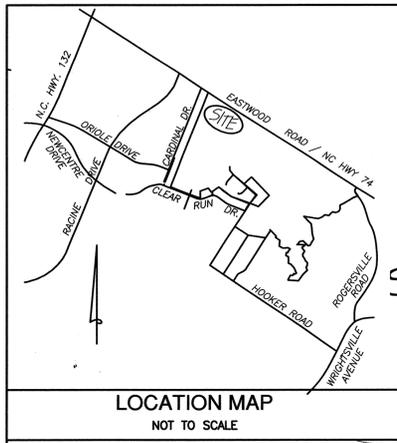
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NOTES AND DETAILS
 DUNGANNON VILLAGE
 AUTUMN HALL
 WILMINGTON, NORTH CAROLINA 28403

OWNER/DEVELOPER
 AUTUMN HALL, INC.
 1201 EASTWOOD ROAD
 WILMINGTON, N.C. 28403
 (910) 799-8755

NORRIS & TUNSTALL
 CONSULTING ENGINEERS, P.C.
 902 MARKET STREET
 WILMINGTON, NC, 28401
 PHONE (910) 343-9653
 FAX (910) 343-9604
 office@nkteng.com
 licence #6-3641





SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
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INVENTORY SITE PLAN
DUNGANNON VILLAGE
AUTUMN HALL
 WILMINGTON, NORTH CAROLINA 28403

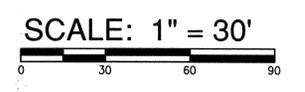
OWNER:
 AUTUMN HALL, INC.
 1201 EASTWOOD ROAD
 WILMINGTON, N.C. 28403
 (910) 799-8755

NORRIS & TUNSTALL
CONSULTING ENGINEERS, INC.
 902 MARKET STREET
 WILMINGTON, NC, 28401
 PHONE (910) 343-9653
 FAX (910) 343-9604
 License #C-3641



Michael N. Underwood
 12/08/14

PARCEL ADDRESS:	110 DUNGANNON BLVD.
PARCEL ID#:	RO5000-004-080-000
MAP ID#:	314707.69.6962.000
ZONING:	MX/R15/SHOD
SOIL TYPES:	Kr, On
CAMA LAND USE:	WATERSHED RESOURCE PROTECTION NO CAMA AEC OR SETBACKS
HISTORICAL SITE:	NONE
CEMETERY:	NONE
FORESTED AREA:	SEE PLAN FOR TREE SURVEY
WETLANDS:	NONE EXIST WITHIN SITE AREA
ENDANGERED SPECIES/HABITAT:	NONE REPORTED



14069
DES. JUST
CHK. JPN
DRWN. NKS
DATE 12/8/14

