## DEVELOPMENT DATA:

Total Tract Area – 13.486 ac.

Total Lots Proposed – 38
(proposed residences are single–family structures w/ max. 3 bedrooms)

Overall Density – 2.8 units/ac.

| | |
|---|---|
| Area of Lots – | 7.57 ac.± |
| Area of R/W – | 2.79 ac.± |
| Common Area – | 1.63 ac.± |

Average Lot Size – 8,680 s.f.

Total Linear Feet in Roads – 2,524 l.f.±

Park, Recreation and Open Space (PROS)

38 lots @ 0.03 ac./unit = 1.14 ac. req'd.
(49,658 sq.ft.–MINIMUM)

| | | |
|---|---|---|
| Passive: | 25,801 + 9,797 = | 35,598 sq. ft. |
| Active: | | 29,786 sq. ft. |
| TOTAL PROS provided: | | 65,384 sq. ft. |

Conservation Resource: 404 Wetlands
25' Conservation Resource Setback

Building setbacks:
Min. Lot Size = 5000 s.f.
Setbacks –15' Front
10' Corner
15' Rear

## GENERAL NOTES:

1. Applicant: Derek Danford,PLS
2. Property owner: South College Associates, LLC
3. Property developer: Deans Hackney
4. Site address: 4900 Gate Post Lane
5. Zone: MF–L (CD)
6. New Hanover County Parcel Nos.: PIN 3134(06)–29–9119
   [PID R07100–003–017–000] PIN 3134(06)–39–4823
   [PID R07100–003–015–001]
7. CAMA Land Classification: Urban
8. This property is not impacted by any AEC.
9. There are Conservation Resources affecting this property. Conservation Resources shall be permanently protected, remain undivided and shall be permanently preserved by conservation easements, protective covenants, or similar restrictions or by any of the procedures for the dedication of park, recreation, and open space areas set forth in the Land Development Code.
10. This site is not impacted by any recognized historic or archeological significance.
11. No cemeteries were evidenced on the site.
12. There is no evidence of endangered species or habitat issues on the site.
13. This tract is not within a Special Flood Hazard Area as referenced on FIRM Map # 3720313400J, Effective April 3, 2006.
14. The tract is within the Motts Creek watershed. Cape Fear River Basin.
15. All development shall be in accordance with the City of Wilmington Land Development Code.
16. All roads to be dedicated for public use to the City of Wilmington and will be designed & constructed in accordance with their standards for subdivision roads.
17. All common areas shall be dedicated to and maintained by a Homeowners' Association.
18. Existing water and sanitary sewer services are currently available to the site from Cape Fear Public Utility Authority public mains.
19. No thoroughfares, routes or trails.
20. Jurisdictional wetlands have been delineated on the site as shown. Signed US Army Corp of Engineers map provided.
21. There are no perennial streams on site.
22. Sidewalks, 5 feet in width, to be installed along all rights of way.
23. All pavement markings in public rights–of–way and for driveways are to be thermoplastic and meet City and/or NCDOT standards.
24. All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards.
25. Install reflectors per City and NCDOT standards. Traffic Engineering must approve of pavement marking layout prior to actual striping.
26. 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 910–341–7888 to discuss installation of traffic and street name signs. Proposed street names must be approved prior to installation of street name signs.
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30. Per the requirements of the stormwater permit, the following shall occur prior to issuance of a certificate of occupancy or operation of the permitted facility:
    a. As–built drawings for all stormwater management facilities shall be submitted to the City of Wilmington Engineering Division.
    b. An Engineer's certification shall also be submitted, along with all supporting documentation that specifies, under seal that the as–built stormwater measures, controls and devices are in compliance with the approved stormwater management plans.
    c. A final inspection by City of Wilmington Engineering personnel.
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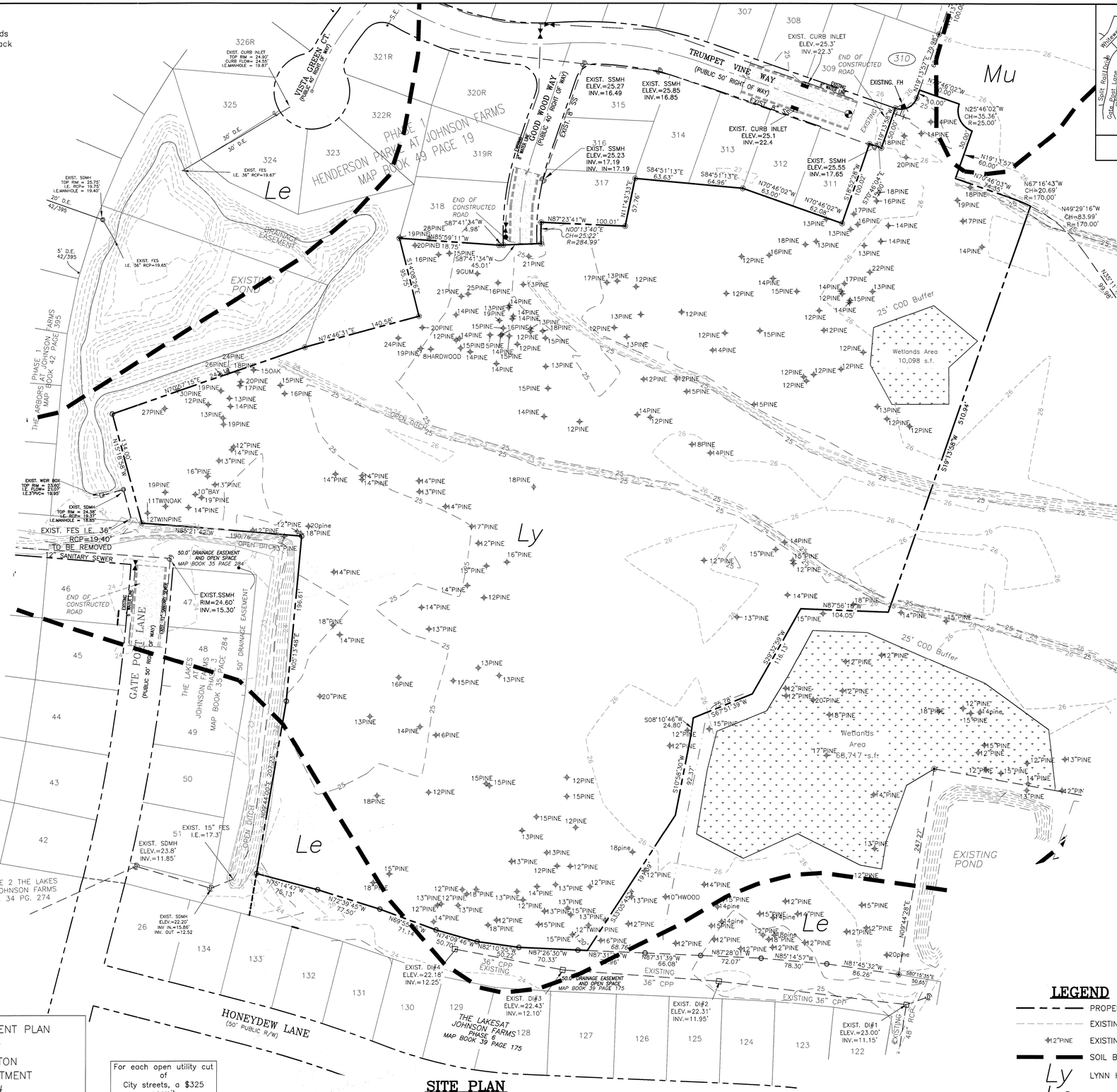



## SITE PLAN

BAR SCALE 1"=60'

60' 30' 0' 60' 120' 180'

## LEGEND

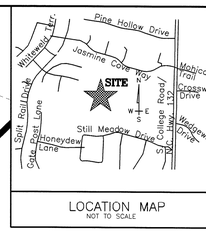
| | |
|---|---|
| | PROPERTY BOUNDARY |
| | EXISTING CONTOUR |
| 12"PINE | EXISTING TREE |
| | SOIL BOUNDARY LINE |
| Ly | LYNN HAVEN FINE SAND |
| Le | LEON SAND |
| Mu | MURVILLE FINE SAND |

Approved Construction Plan

| | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

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




LOCATION MAP
NOT TO SCALE

| REVISIONS | | |
|---|---|---|
| No./Date | Description | By |

EXISTING CONDITIONS AND SITE INVENTORY PLAN

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA


TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910–763–5100
Fax 910–763–5631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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

5-30-14

| | |
|---|---|
| DATE | 05–30–14 |
| DESIGN | PGT |
| DRAWN | EJW |

C1

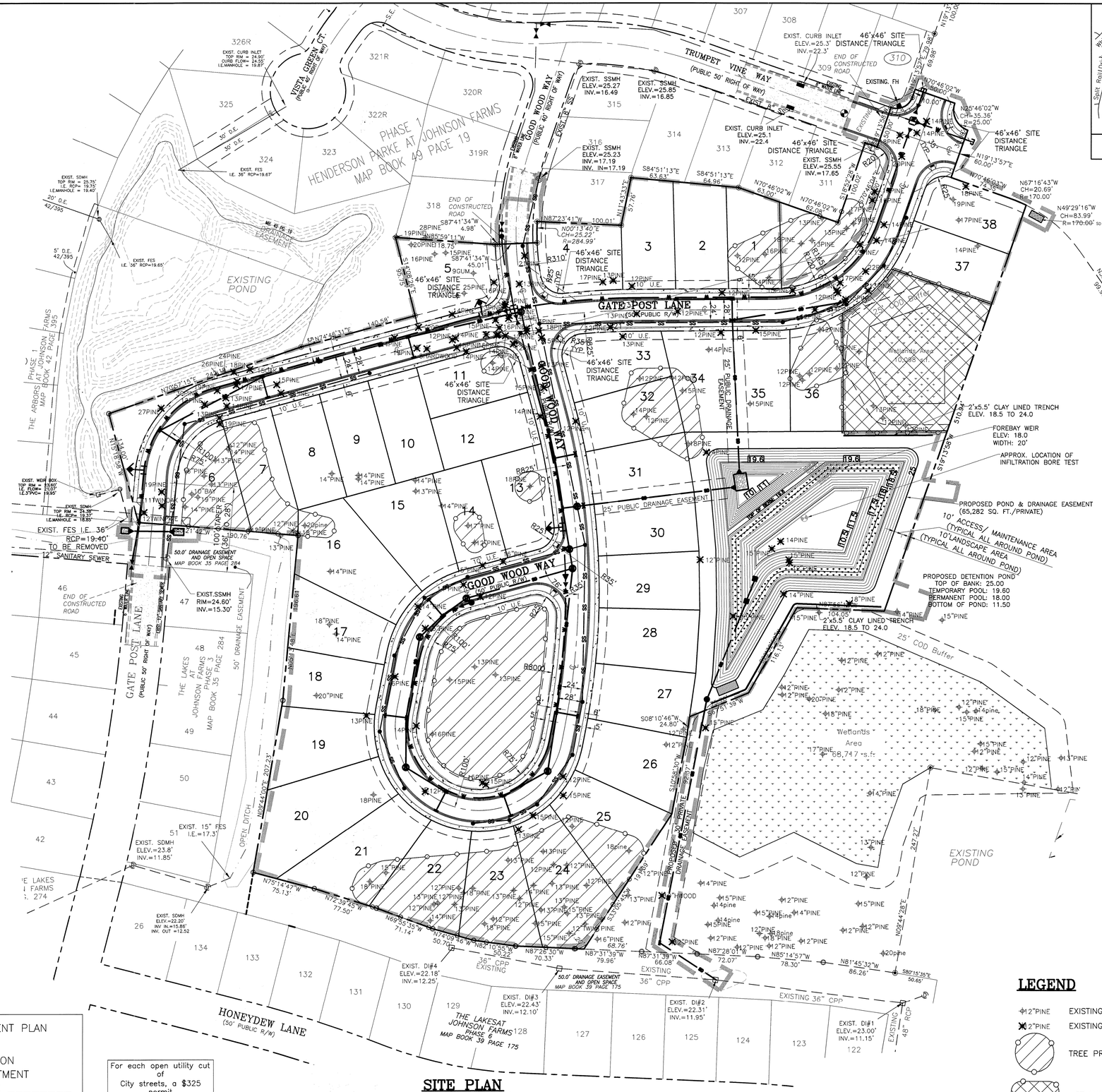
SHEET 1 OF 9

13013

## TREE REMOVAL CHART

| TREE TYPE | TREE SIZE (in) | # OF TREES |
|---|---|---|
| PINE | 12 | 17 |
| PINE | 13 | 15 |
| PINE | 14 | 19 |
| PINE | 15 | 17 |
| PINE | 16 | 6 |
| PINE | 17 | 3 |
| PINE | 18 | 7 |
| PINE | 19 | 5 |
| PINE | 20 | 3 |
| PINE | 21 | 1 |
| PINE | 22 | 1 |
| PINE* | 24 | 1 |
| PINE* | 27 | 1 |
| TWIN PINE | 12 | 1 |
| TWIN OAK | 11 | 1 |
| OAK | 15 | 1 |
| HARDWOOD | 8 | 1 |
| HARDWOOD | 10 | 1 |

* SIGNIFICANT TREES TO BE MITIGATED (SEE SHEET C5)



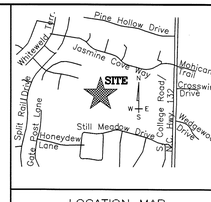

## SITE PLAN

BAR SCALE 1"=60'

60' 30' 0' 60' 120' 180'

## LEGEND

- 12"PINE — EXISTING TREE
- 12"PINE — EXISTING TREE TO BE REMOVED
- TREE PROTECTION – DO NOT DISTURB
- WETLAND AREA – DO NOT DISTURB




LOCATION MAP
NOT TO SCALE

| REVISIONS | | |
|---|---|---|
| No./ Date | Description | By |

SITE AND TREE REMOVAL PLAN

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA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419 Chestnut Street
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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

5-30-14

DATE 05-30-14
DESIGN PGT
DRAWN EJW

C2

SHEET 2 OF 9

13013

Approved Construction Plan

| | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

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| | | |
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25' Conservation Resource Setback

Building setbacks:
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Setbacks –15' Front
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5' Interior Side

## GENERAL NOTES:

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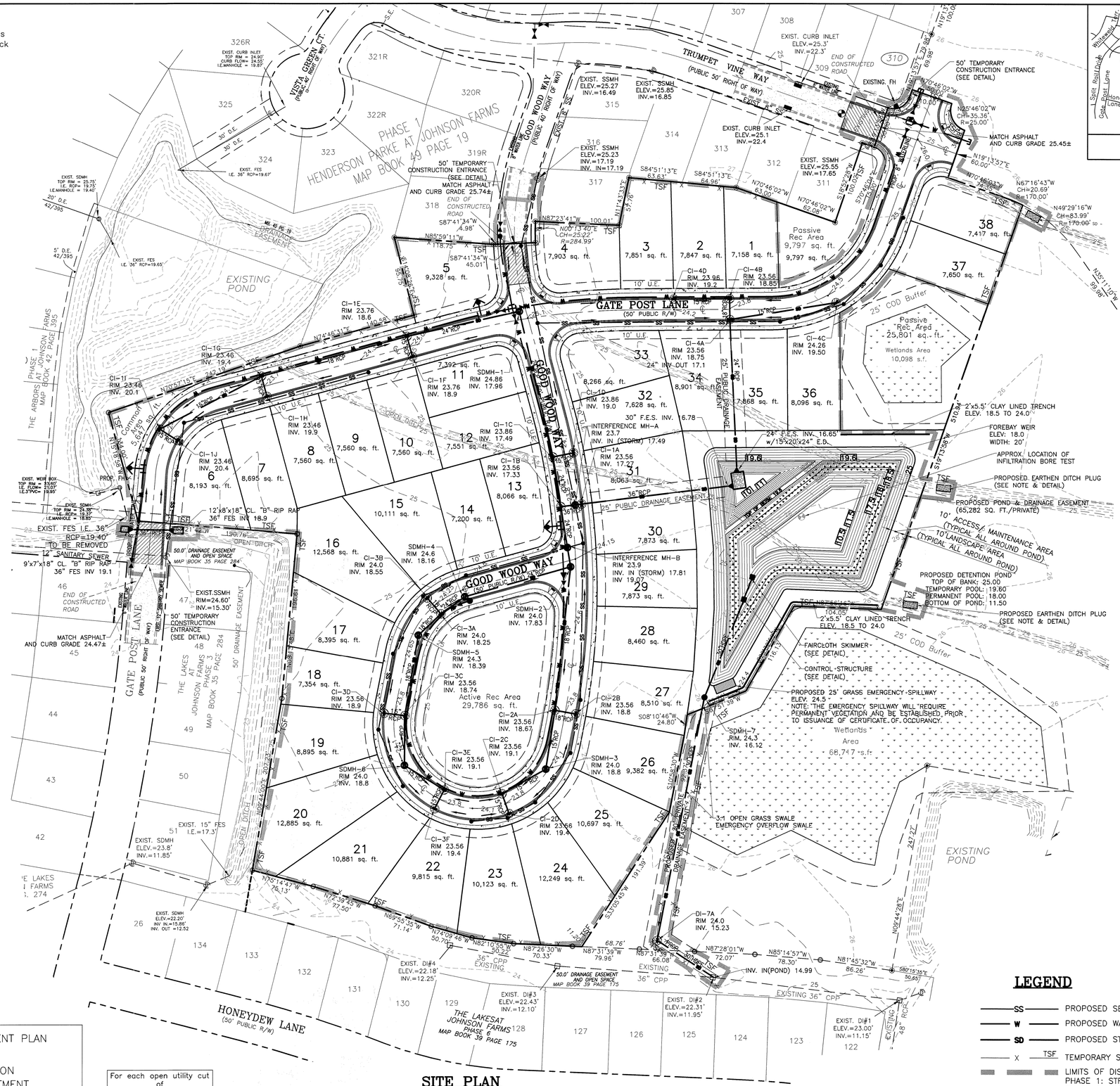
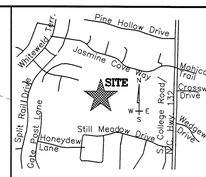



## SITE PLAN

BAR SCALE 1"=60'

60' 30' 0' 60' 120' 180'




LOCATION MAP
NOT TO SCALE

## LEGEND

| | |
|---|---|
| SS | PROPOSED SEWER |
| W | PROPOSED WATER |
| SD | PROPOSED STORM WATER |
| X TSF | TEMPORARY SILT FENCE |
| | LIMITS OF DISTURBANCE PHASE 1: STREETS AND POND= 4.9 Ac. PHASE 2: LOTS= 7.6 Ac. |

| Approved Construction Plan | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

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

REVISIONS

| No. Date | Description | By |
|---|---|---|
| | | |

GRADING, DRAINAGE, EROSION CONTROL AND STORMWATER MANAGEMENT PLAN

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA


TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910–763–5100
Fax 910–763–5631
C-0512, LICENSED FIRM - ENGINEERING, P.C.

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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

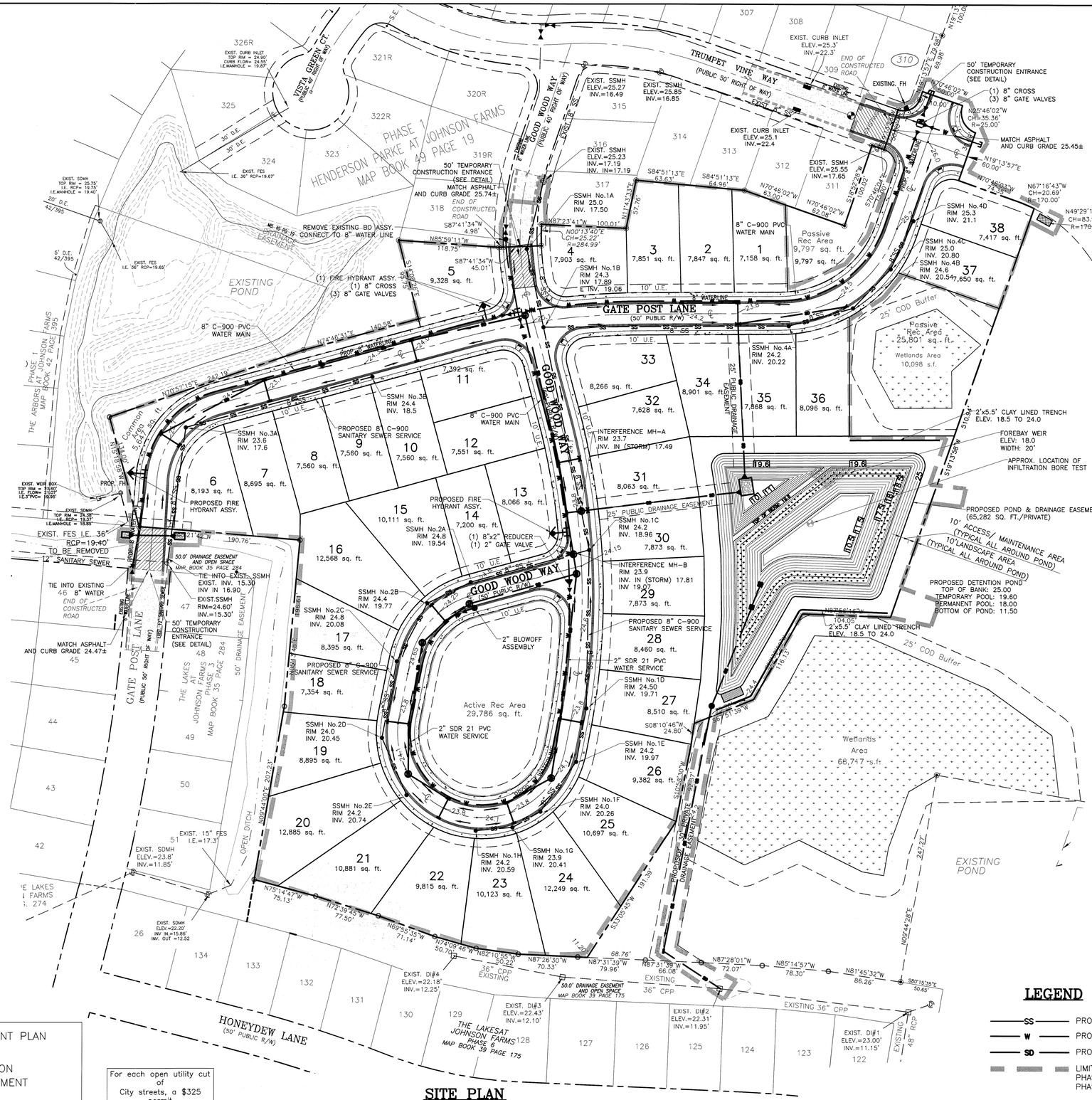
5-30-14

| | |
|---|---|
| DATE | 05–30–14 |
| DESIGN | PGT |
| DRAWN | EJW |

C3

SHEET 3 OF 9

13013




## SITE PLAN

BAR SCALE 1"=60'

60' 30' 0' 60' 120' 180'

## LEGEND

- SS — PROPOSED SEWER
- W — PROPOSED WATER
- SD — PROPOSED STORM WATER
- LIMITS OF DISTURBANCE
  PHASE 1: STREETS AND POND= 4.9 Ac.
  PHASE 2: LOTS= 7.6 Ac.

| Approved Construction Plan | | |
|---|---|---|
| | Name | Date |
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

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

LOCATION MAP
NOT TO SCALE

REVISIONS

| No./ Date | Description | By |
|---|---|---|
| | | |

UTILITY PLAN

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA


TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631



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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

5-30-14

| | |
|---|---|
| DATE | 05-30-14 |
| DESIGN | PGT |
| DRAWN | EJW |

C4

SHEET 4 OF 9

13013

## SIGNIFICANT TREE MITIGATION CHART

| TREE TYPE | TREE SIZE | # OF TREES | % MITIGATION | REPLACEMENT TREES REQUIRED |
|---|---|---|---|---|
| LOBLOLLY PINE | 24 IN. | 1 | 50 | 24x(2x0.50)/3=8 |
| LOBLOLLY PINE | 27 IN. | 1 | 50 | 27x(2x0.50)/3=9 |

## STORMWATER FACILITY LANDSCAPING CALCULATION

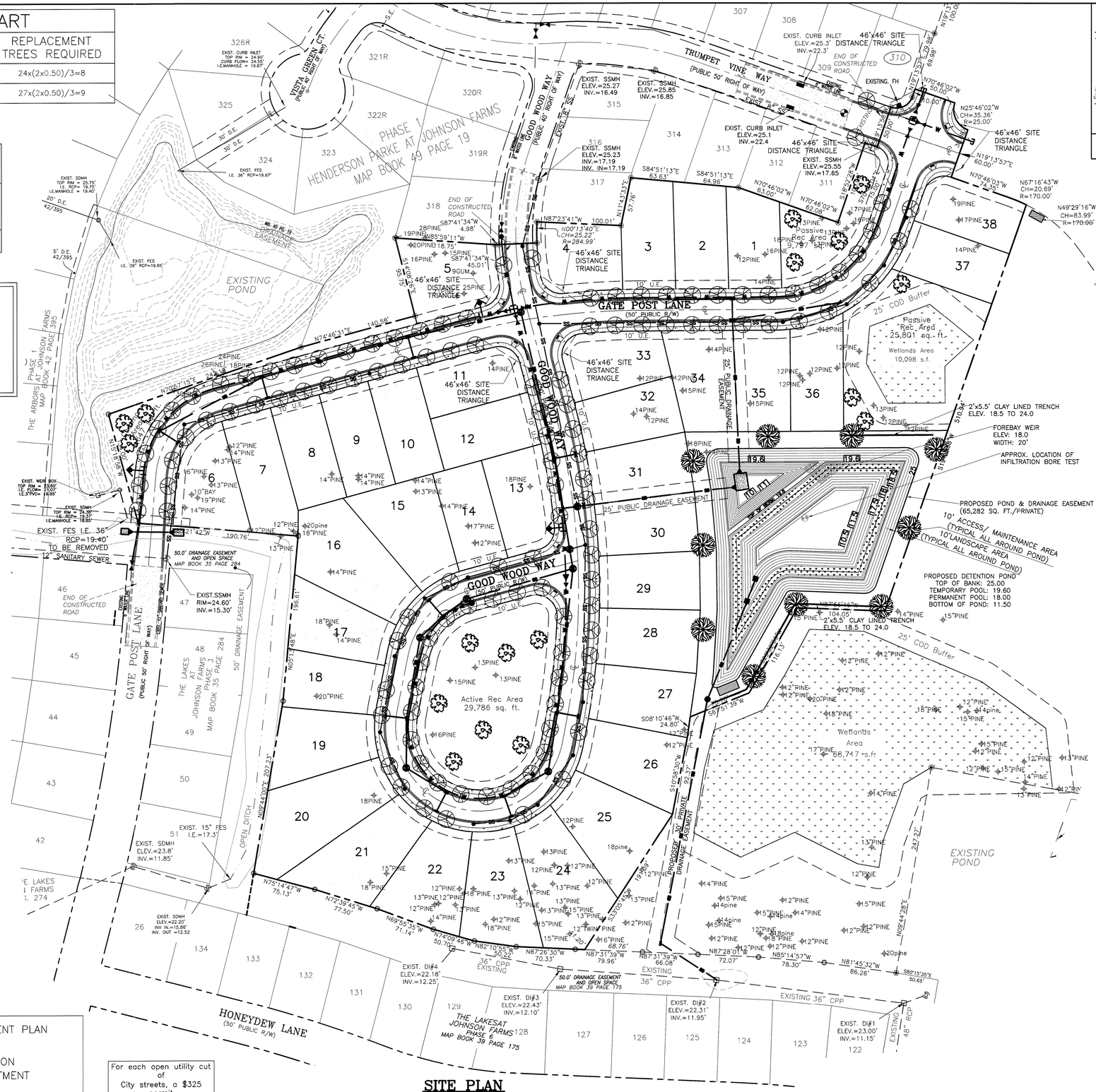
| TOP OF BANK LINEAR FOOTAGE | VEGETATION CLUSTERS REQUIRED | VEGETATION CLUSTERS PROVIDED | TYPE OF CLUSTER PROVIDED |
|---|---|---|---|
| 955 | 955 / 100 = 9.55 | 10 | CANOPY TREE |

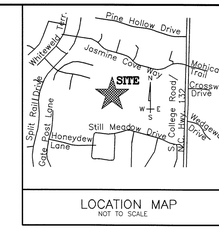
## PLANT LIST

O.C. – "ON CENTER"

| SYM. | NO. | TYPE | COMMON NAME | SCIENTIFIC NAME | MIN. SIZE | PLANTING REMARKS |
|---|---|---|---|---|---|---|
| LI | 119 | TREE | CRAPE MYRTLE | LAGERSTROEMIA INDICIA | 4' | 30' O.C. |
| QL | 17 | TREE | DARLINGTON OAK | QUERCUS LAURIFOLIA | 2"–2.5" CALIPER | -- |
| QV | 10 | TREE | LIVE OAK | QUERCUS VIRGINIANA | 2"–2.5" CALIPER | -- |

NOTE:
1) ALL PROPOSED VEGETATION WITHIN THE SITE TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"–10'.




LOCATION MAP
NOT TO SCALE

| REVISIONS | | |
|---|---|---|
| No./Date | Description | By |

LANDSCAPE PLAN

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA


TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631



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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

DATE 05-30-14
DESIGN PGT
DRAWN EJW

C5

SHEET 5 OF 9

13013

Approved Construction Plan

| | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

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**SITE PLAN**

BAR SCALE 1"=60'

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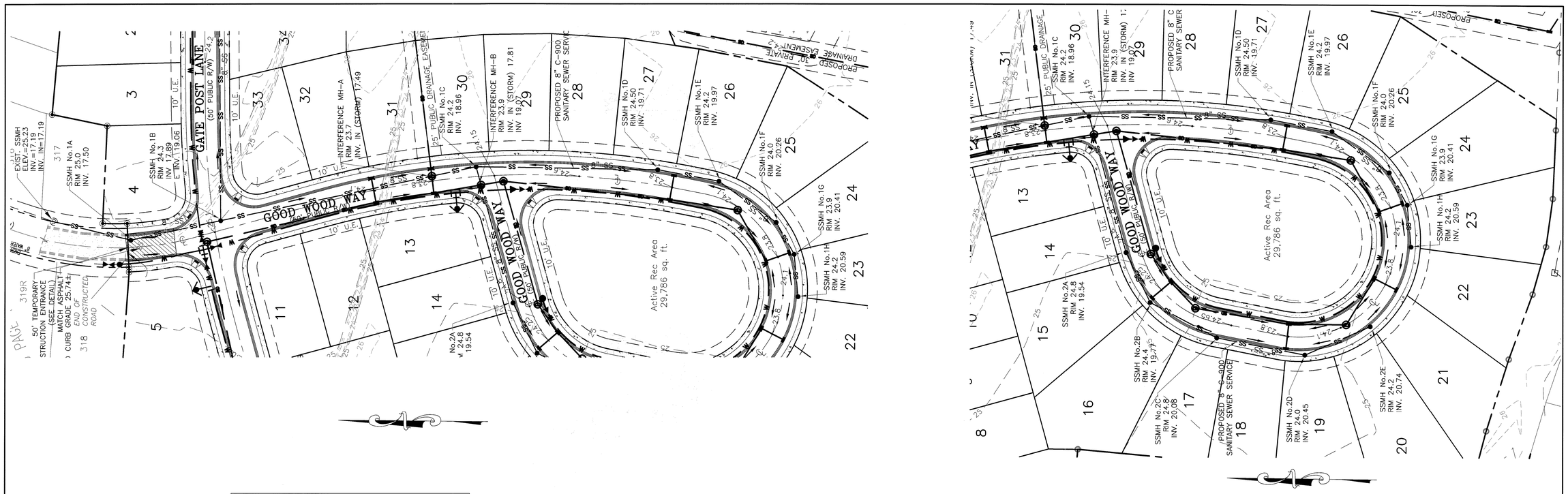


NOTES:
1) CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITY LOCATION, INVERT, MATERIAL, SIZE AND DEPTH PRIOR TO INSTALLATION.
2) NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
3) THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
4) THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
5) THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
6) THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND INSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

Approved Construction Plan

| | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
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CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
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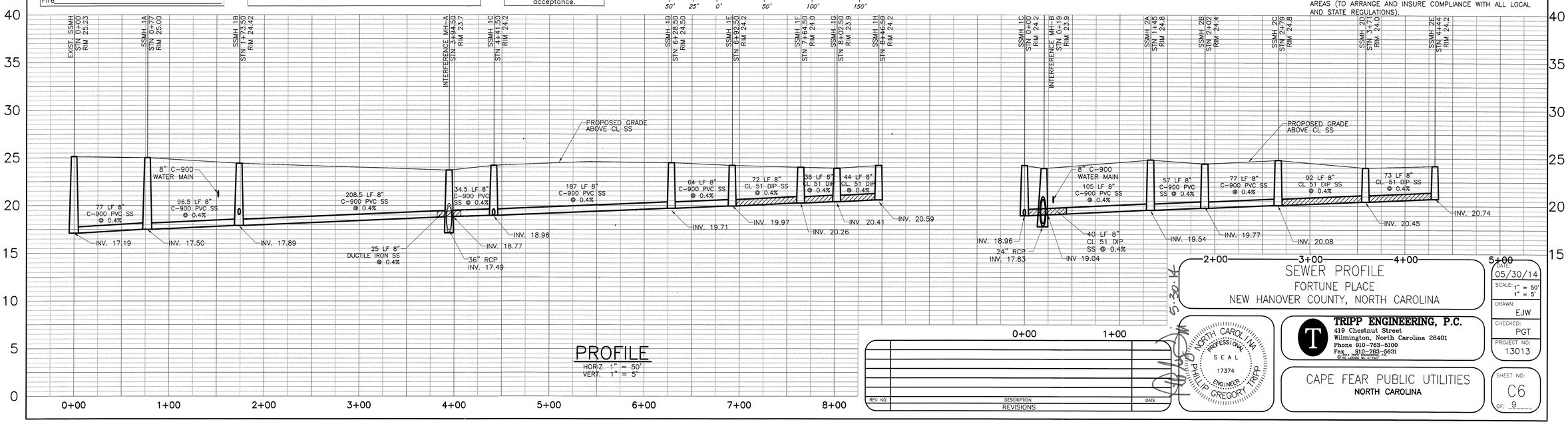
## PLAN

BAR SCALE 1"=50'

50' 25' 0' 50' 100' 150'




## PROFILE

HORIZ. 1" = 50'
VERT. 1" = 5'

| REV NO. | DESCRIPTION | DATE |
|---|---|---|
| | REVISIONS | |

NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

5-30-14

**TRIPP ENGINEERING, P.C.**
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
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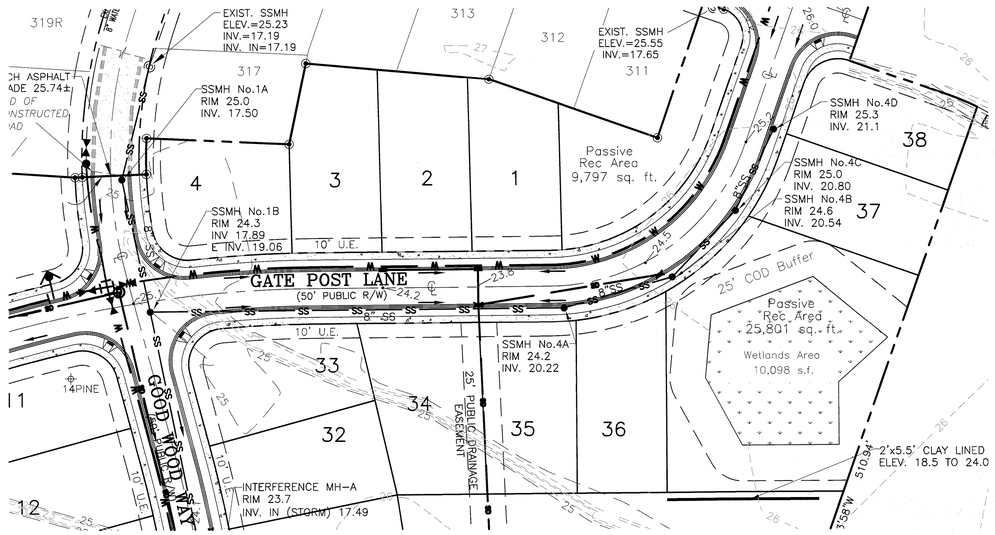
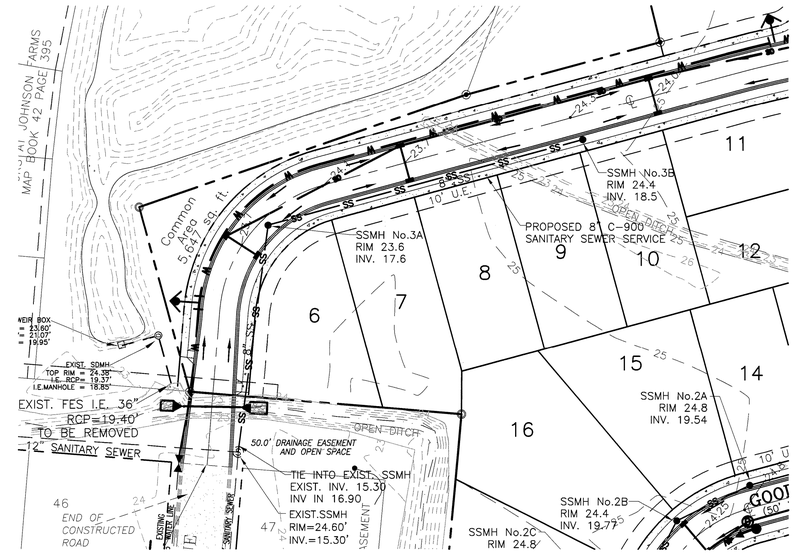
NC LICENSE No. C-1427

SEWER PROFILE
FORTUNE PLACE
NEW HANOVER COUNTY, NORTH CAROLINA

CAPE FEAR PUBLIC UTILITIES
NORTH CAROLINA

DATE: 05/30/14
SCALE: 1" = 50' 1" = 5'
DRAWN: EJW
CHECKED: PGT
PROJECT NO: 13013
SHEET NO: C6
OF: 9

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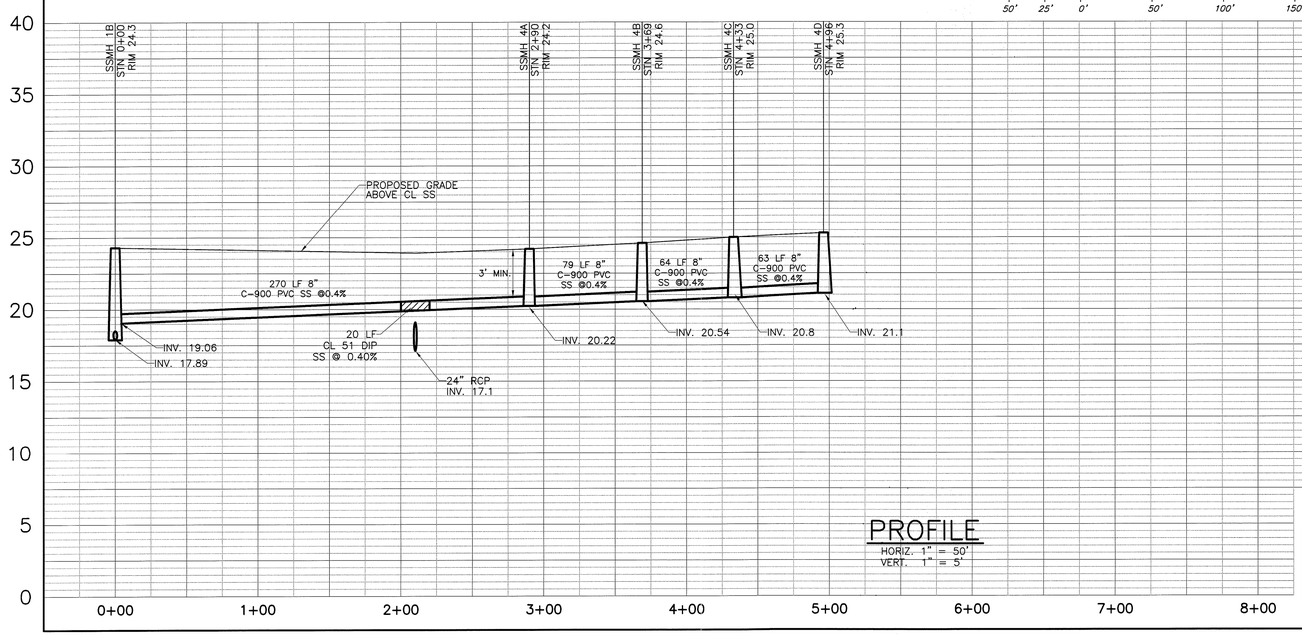
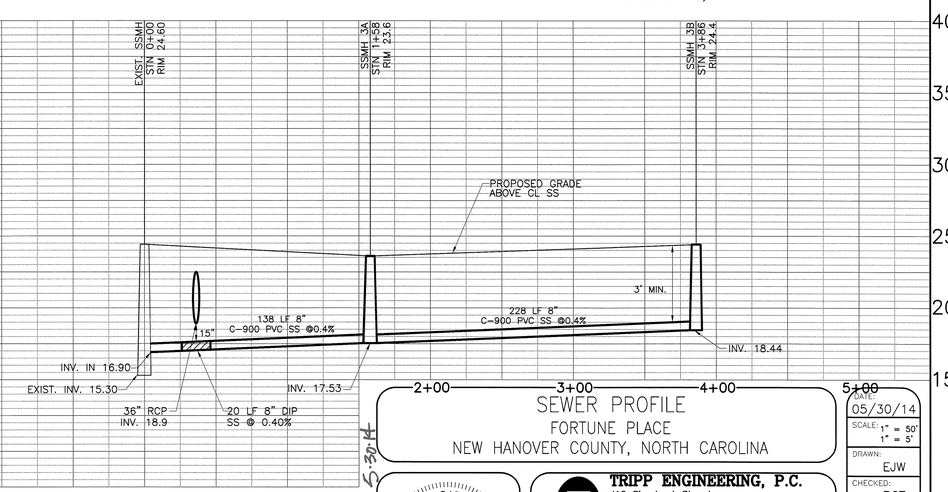
5) THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
6) THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND INSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).




## PROFILE

HORIZ. 1" = 50'
VERT. 1" = 5'




| REV NO. | DESCRIPTION | DATE |
|---|---|---|
| | REVISIONS | |

## SEWER PROFILE
FORTUNE PLACE
NEW HANOVER COUNTY, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP


**TRIPP ENGINEERING, P.C.**
419 Chestnut Street
Wilmington, North Carolina 28401
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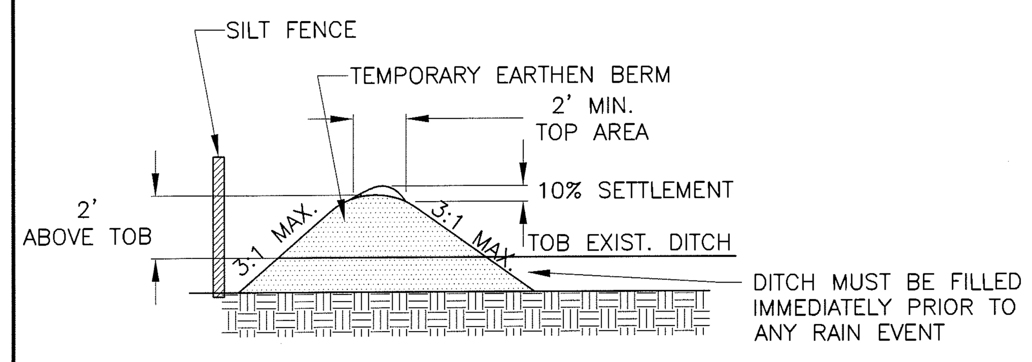
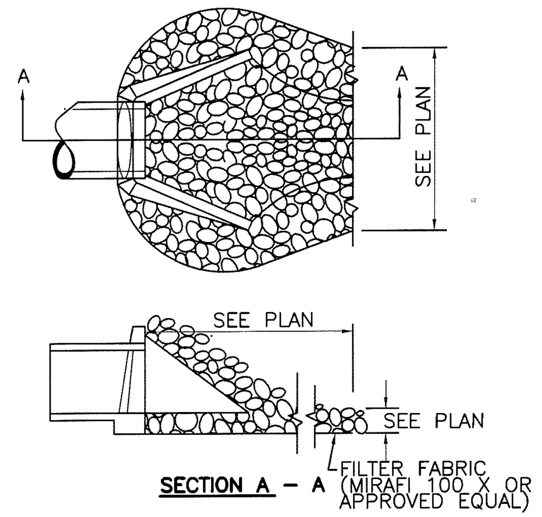
CAPE FEAR PUBLIC UTILITIES
NORTH CAROLINA

| | |
|---|---|
| DATE: | 05/30/14 |
| SCALE: | 1" = 50'<br>1" = 5' |
| DRAWN: | EJW |
| CHECKED: | PGT |
| PROJECT NO: | 13013 |
| SHEET NO: | C7 |
| OF: | 9 |

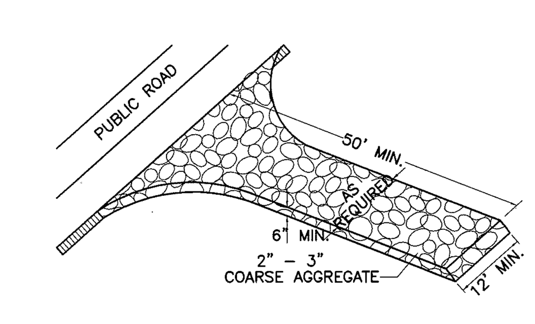



GENERAL NOTES FOR TEMP. PLUG DETAIL
1) BUILD RIDGE HIGHER THAN DESIGN AND COMPACT WITH WHEELS OF CONSTRUCTION EQUIPMENT. COMPACTED RIDGE MUST BE AT OR ABOVE DESIGN GRADE AT ALL POINTS.
2) LEAVE SUFFICIENT AREA TO PERMIT CLEAN OUT AND REGRADING.
3) CONSTRUCT SILT FENCE ON DOWN STREAM SIDE OF BERM.

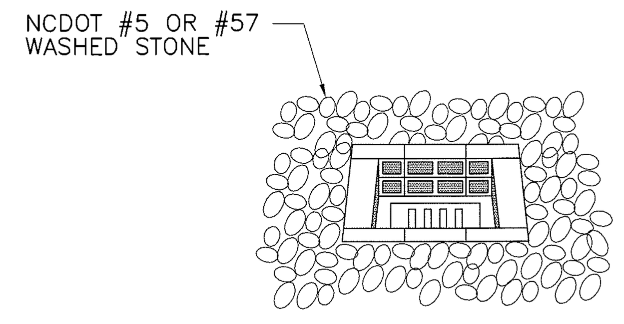
## TEMPORARY PLUG DETAIL
NTS



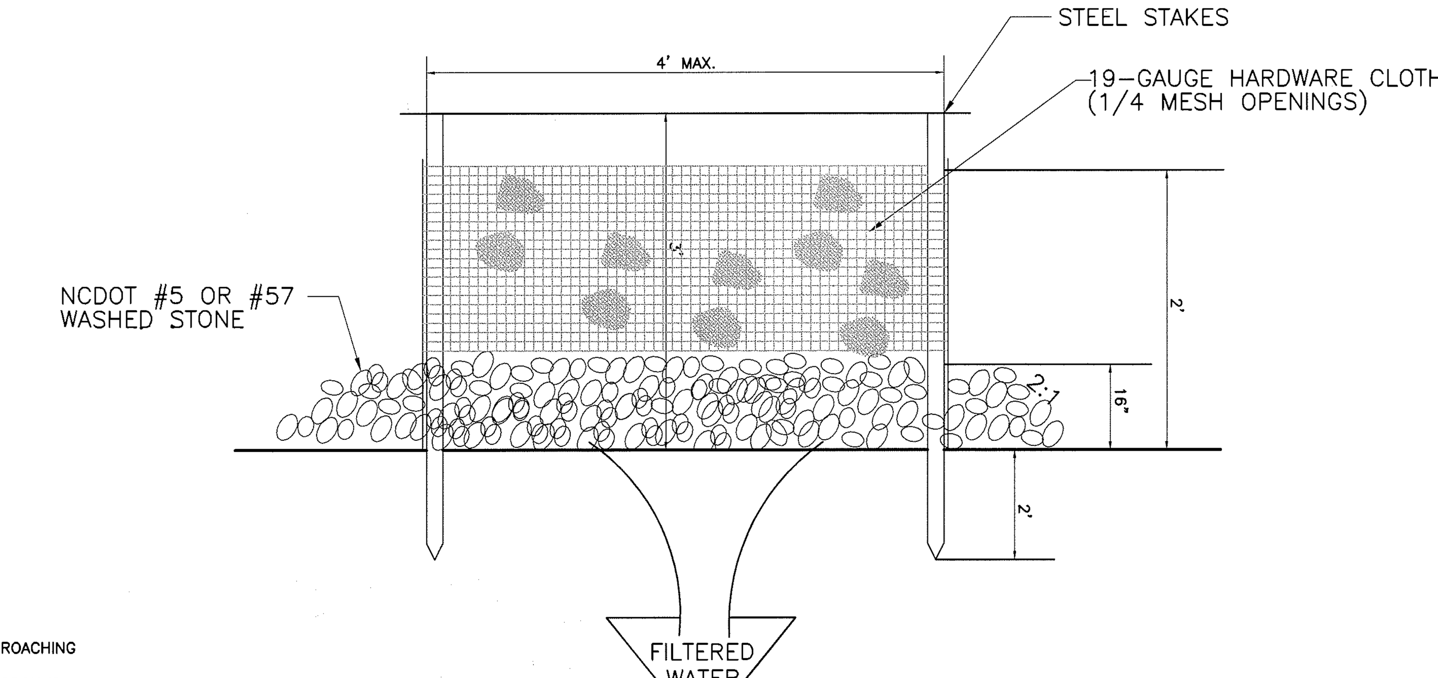

## ENERGY DISSIPATOR
NTS




## TEMPORARY GRAVELED CONSTRUCTION ENTRANCE
NTS

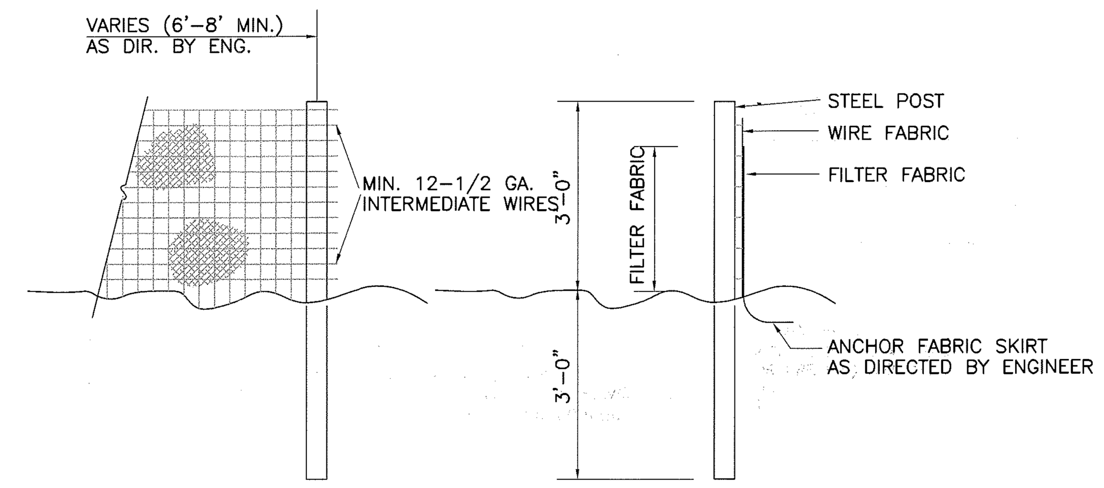



CONSTRUCTION SPECIFICATIONS:
1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5–FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACINGA 2–FOOT FLAP OF WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.



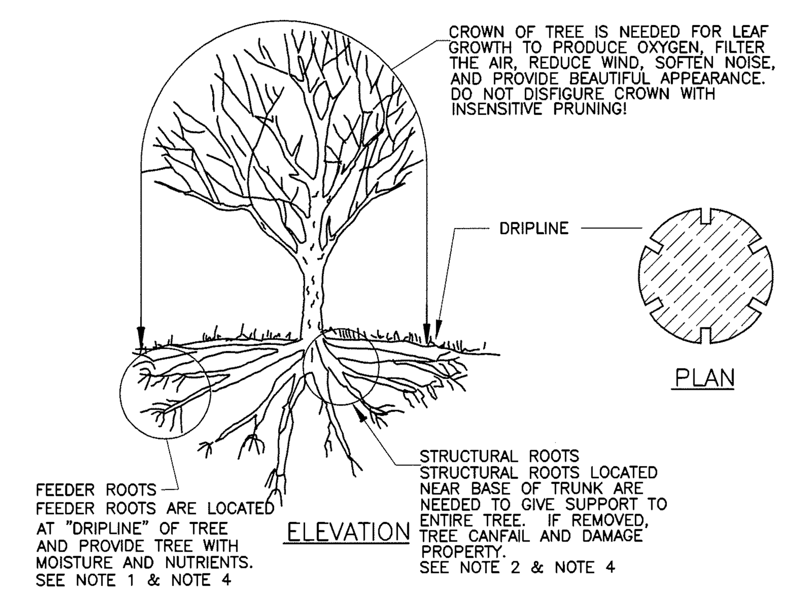

MAINTENANCE:
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

## HARDWARE CLOTH AND GRAVEL INLET PROTECTION
NTS



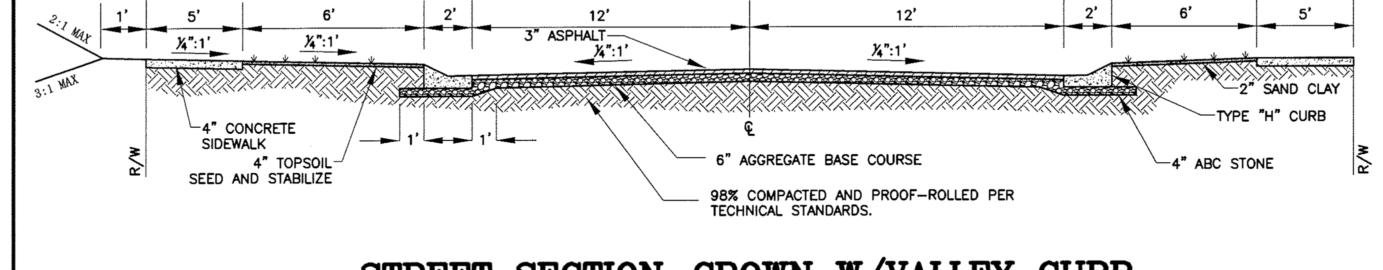

NOTES:
1. FENCE FABRIC SHALL BE A MIN. OF 32" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" STAY SPACING.
2. FABRIC SHALL BE FOR EROSION CONTROL AND MIN. OF 36" IN WIDTH. FABRIC SHALL BE FASTENED ADEQUATELY TO THE WIRE FABRIC AS DIRECTED BY THE ENGINEER.
3. STEEL POST SHALL BE 5'–0" IN HEIGHT AND BE OF THE SELF–FASTENER STEEL ANGLE TYPE.

## TEMPORARY SILT FENCE
NTS

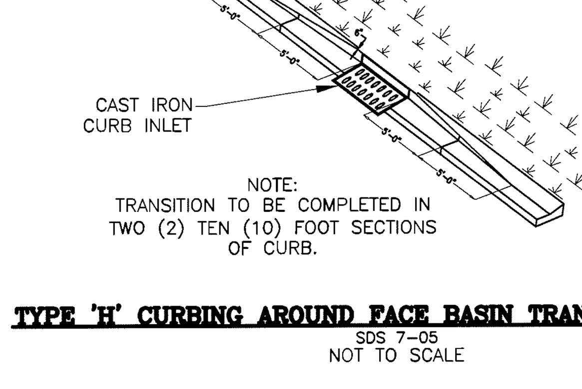



TREE PROTECTION DURING CONSTRUCTION
1. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO HEAVY MATERIALS SHALL BE STORED BENEATH TREES. RESULTS OF COMPACTION CAUSE WATER AND AIR NOT TO REACH THE ROOTS AND THE TREE WILL DIE. THESE "FEEDING ROOTS" OCCUR WELL AWAY FROM THE BASE OF THE TREE TO THE EDGE OF THE OVERHEAD BRANCH CANOPY. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. APROTECTIVE BARRIER SHOULD PREVENT DAMAGE FROM OCCURING DURING CONSTRUCTION.
2. NO CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK. THESE ARE ESSENTIAL IN SUPPORTING THE TREE AND HOLDING IT UPRIGHT IN HIGH WINDS. REMOVAL OF THESE ROOTS ALONG ONE SIDE IS OFTEN DONE BECAUSE OF A WALK, PAVING OR BUILDING WHICH IS BEING CONSTRUCTED.
3. AVOID CUT AND FILL WITHIN DIAMETER OF TREE CROWN DURING EXCAVATION.

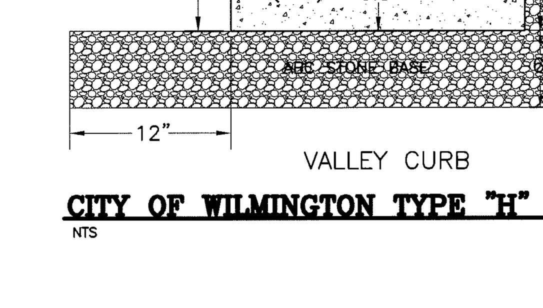
## METHOD OF TREE PROTECTION DURING CONSTRUCTION
NOT TO SCALE



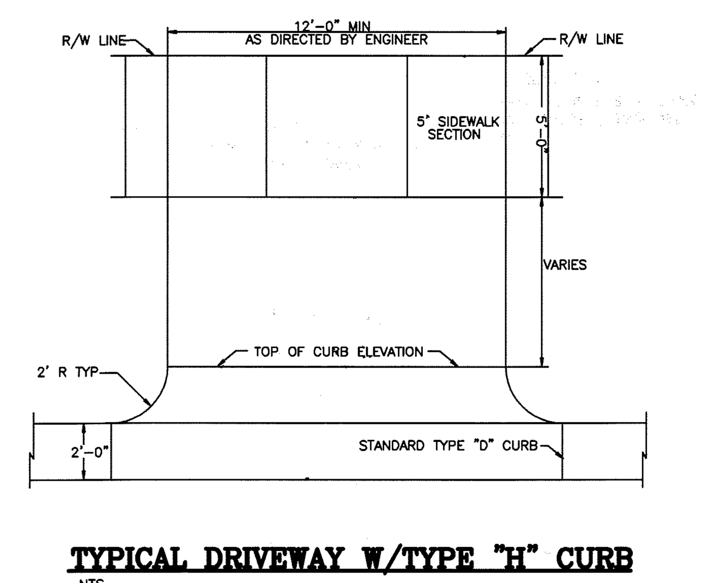

## STREET SECTION–CROWN W/VALLEY CURB
NTS




## TYPE 'H' CURBING AROUND FACE BASIN TRANSITION SECTION
SDS 7–05
NOT TO SCALE

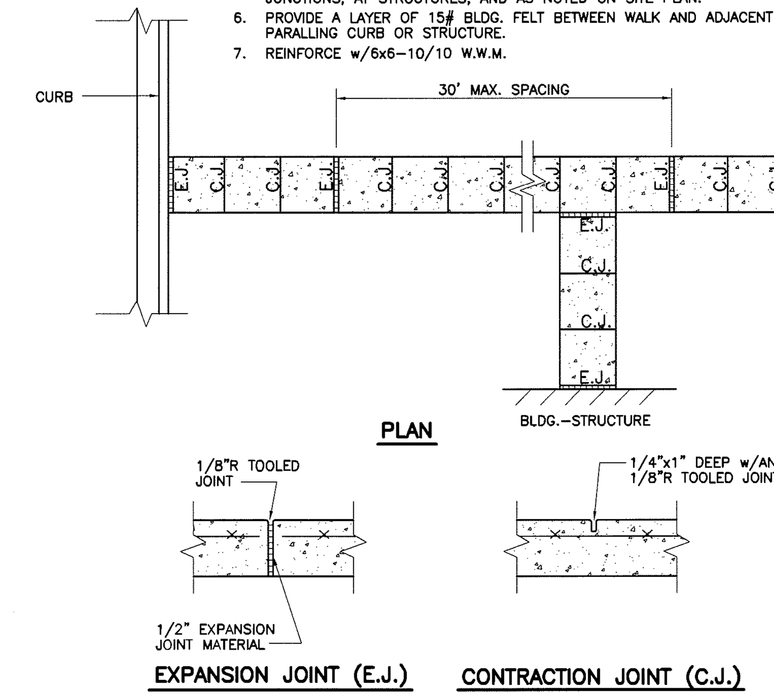



## CITY OF WILMINGTON TYPE "H" CURB
NTS




## TYPICAL DRIVEWAY W/TYPE "H" CURB
NTS

NOTES:
1. SIDEWALK THICKNESS SHALL BE 4" UNLESS NOTED OTHERWISE.
2. CONTRACTION JOINTS (C.J.) SPACE SAME AS SIDEWALK WIDTH.
3. THICKEN SIDEWALK TO 6" AT DRIVEWAYS.
4. THICKEN SIDEWALK TO 6" IN LAST 3' WHERE IT ABUTS PAVEMENT WITH NO CURB.
5. 1/2" EXPANSION JOINT (E.J.) REQUIRED AT 30' MAX. AT SIDEWALK JUNCTIONS, AT STRUCTURES, AND AS NOTED ON SITE PLAN.
6. PROVIDE A LAYER OF 15# BLDG. FELT BETWEEN WALK AND ADJACENT PARALLING CURB OR STRUCTURE.
7. REINFORCE w/6x6–10/10 W.W.M.




## SIDEWALK JOINT DETAILS
NTS

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

## NPDES GROUND STABILIZATION CRITERIA
NTS

## SPRING–SUMMER PERMANENT GRASSING DETAIL
### SEEDING MIXTURE

| SPECIES | RATE (lb/acre) |
|---|---|
| PENSACOLA BAHIAGRASS | 50 |
| SERICEA LESPEDEZA | 30 |
| COMMON BERMUDA GRASS | 10 |
| GERMAN MILLET | 10 |
| TALL FESCUE | 50 |

### SEEDING NOTES
1. WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA.
2. USE COMMON BERMUDA GRASS ONLY ON ISOLATED SITES WHERE IT CANNOT BECOME A PEST. BERMUDA GRASS MAY BE REPLACED WITH 5 lb/acre CENTIPEDE GRASS.

### SEEDING DATES
APRIL 1 – JULY 15

### SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000 lb/acre GROUND AGRICULTURE LIMESTONE AND 500 lb/acre 10–10–10 FERTILIZER.

### MULCH
APPLY 4,000 lb/acre GRAIN STRAWOR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR BY TACKING WITH ASPHALT, ROVING, OR 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 APRIL 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.

## FALL–WINTER PERMANENT GRASSING DETAIL
### SEEDING MIXTURE

| SPECIES | RATE (lb/acre) |
|---|---|
| TALL FESCUE (BLEND OF TWO OR THREE IMPROVED VARIETIES) | 200 |
| RYE (GRAIN) | 25 |

### SEEDING DATES
JANUARY – APRIL
AUGUST – DECEMBER

### SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000–5,000 lb/acre GROUND AGRICULTURAL LIMESTONE (USE THE LOWER RATE ON SANDY SOILS) AND 1,000 lb/acre 10–10–10 FERTILIZER.

### MULCH
APPLY 4,000 lb/acre GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, ROVING, OR 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
FERTILIZE ACCORDING TO SOIL TESTS OR APPLY 40 lb/acre NITROGEN IN JANUARY OR FEBRUARY, 40 lb IN SEPTEMBER AND 40 lb IN NOVEMBER, FROM A 12–4–8, 16–4–8, OR SIMILAR TURF FERTILIZER. AVOID FERTILIZER APPLICATIONS DURING WARM WEATHER, AS THIS INCREASES STAND LOSSES TO DISEASE. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY. MOW TO A HEIGHT OF 2.5–3.5 INCHES AS NEEDED.

## LATE WINTER & EARLY SPRING TEMPORARY GRASSING DETAIL
### SEEDING MIXTURE

| SPECIES | RATE (lb/acre) |
|---|---|
| Rye (grain) | 120 |
| Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) | 50 |

Omit 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
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, refertilize and mulch immediately following erosion or other damage.

## TEMPORARY SUMMER GRASSING DETAIL
### SEEDING MIXTURE

| SPECIES | RATE (lb/acre) |
|---|---|
| GERMAN MILLET | 40 |

IN THE PIEDMONT AND MOUNTAINS, A SMALL–STEMMED SUNDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

### SEEDING NOTES
MOUNTAINS – MAY 15–AUG. 15
PIEDMONT – MAY 1–AUG. 15
COASTAL PLAN – 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, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

## TEMPORARY FALL GRASSING DETAIL
### SEEDING MIXTURE

| SPECIES | RATE (lb/acre) |
|---|---|
| Rye (grain) | 120 |

### SEEDING NOTES
MOUNTAINS – AUG. 15–DEC. 15
COASTAL PLAN 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. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

### MAINTENANCE
Repair and refertilize 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.

SITE WORK NOTES
1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIARIZED WITH EXISTING CONDITIONS BOTH ON AND IMMEDIATELY ADJACENT TO THE SITE.
2. CLEARING: CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE DESIGNATED TO REMAIN.
3. GRUBBING AND STRIPPING: CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN LIMITS OF CONSTRUCTION.
4. MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
5. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
6. FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL REPORT.
7. THE CONTRACTOR SHALL NOTE THAT THE GRADING PLAN MAY NOT REPRESENT A BALANCED EARTHWORK CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT AND FILL QUANTITIES AND COMPLETE INSTALLATION TO SPECIFIED GRADES.
8. THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF–SITE PROPERLY PERMITTED FACILITY AS REQUIRED.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. BEFORE COMMENCING ANY EXCAVATIONS IN OR ALONG ROADWAYS OR RIGHT–OF–WAYS, PUBLIC AREAS OR IN PRIVATE EASEMENTS, THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE PERSONNEL OF THEIR INTENT TO EXCAVATE, IN WRITING, NOT LESS THAN 10 DAYS PRIOR TO EXCAVATING.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.
11. EXISTING SURVEYING PERFORMED BY DEREK DANFORD AND SUPPLIED BY THE OWNER.
12. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES OR QUESTIONS TO THE ENGINEER PRIOR TO INSTALLATION.
13. THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
14. ALL PVC UTILITY MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER AT FINAL GRADE.
15. ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL AND STATE CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
16. ALL PAVEMENT, BASE AND SUBGRADE SHALL CONFORM TO NCDOT STANDARDS INCLUDING WORKMANSHIP, MATERIALS AND EQUIPMENT. APPROPRIATE BARRICADES, SIGNS, LIGHTS OR OTHER TRAFFIC CONTROL DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH NCDOT TO MAINTAIN SAFETY AND TWO WAY TRAFFIC.
17. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO INSTALLATION. ALL AREAS SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT ALL TIMES.
18. CONCRETE STORM DRAINAGE PIPE SHALL BE CLASS III WITH RUBBER GASKETED JOINTS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
19. 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. REFLECTIVE MATERIAL MAY BE ADDED AT OWNER'S OPTION FOR NIGHT REFLECTING.
20. DUCTILE IRON SHALL BE CLASS 50.
21. CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS – AIR ENTRAINED.
22. FIELD TESTING SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.
23. SEE GEOTECHNICAL REPORT NO. __________, DATED _______, BY _________ ______ FOR ADDITIONAL REQUIREMENTS.

CONSTRUCTION SEQUENCE
1. NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3 HORIZONTAL).
2. NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES DURING AND AFTER CONSTRUCTION.
3. INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO GRAVELED CONSTRUCTION ENTRANCE, SILT FENCE, CHECK DAMS, ETC. INSTALL ALL SECONDARY EROSION CONTROL MEASURES AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
4. ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION ARE TO BE CLEANED WHEN 0.5 FEET OF SEDIMENT HAVE ACCUMULATED IN FRONT OF THE DEVICE OR WHEN THEY LEAK OR FAIL. SEDIMENT TRAPS ARE CLEANED OUT AS STATED OR WHEN HALF FULL.
5. IF APPLICABLE, CONSTRUCT PROPOSED RETENTION POND TO ACT AS A SEDIMENT BASIN DURING CONSTRUCTION. REMOVE ACCUMULATION OF SILT AS REQUIRED TO ALLOW PROPER FUNCTIONING. RESTORE POND TO DESIGN LEVELS AT THE COMPLETION OF CONSTRUCTION.
6. IF APPLICABLE, INSTALL DROP INLETS WITH INLET PROTECTION TO ACT AS SILT TRAPS DURING CONSTRUCTION. REMOVE ACCUMULATED SILT AS NEEDED TO PREVENT SILT FROM ENTERING STORM DRAIN PIPING.
7. A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
8. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
9. MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
10. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

MAINTENANCE PLAN
1. ALL EROSION AND SEDIMENT CONTROL PRACTICES 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.
2. 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.
3. SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET, 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 BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
4. 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.
5. 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 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.
6. 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 DISLODGED. BAFFLES 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 WEEKLY AND WILL BE KEPT CLEAN.
7. 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 DISLODGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BAFFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN.
8. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED 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.
9. FLOCCULATES WILL BE USED TO ADDRESS TURBIDITY ISSUES. THE PUMPS, TANKS, HOSES AND INJECTION SYSTEMS WILL BE CHECKED FOR PROBLEMS OR TURBID DISCHARGES DAILY.

SITE POLLUTANTS NOTES
1. LOCATE AREAS DEDICATED FOR MANAGEMENT OF LAND CLEARING AND DEMOLITION DEBRIS, CONSTRUCTION AND DOMESTIC WASTE, AND HAZARDOUS OR TOXIC WASTE. THIS LOCATION SHALL BE AT LEAST 50' AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
2. DUMPING OF PAINT OR OTHER LIQUID BUILDING MATERIAL WASTES IN STORM DRAINS IS PROHIBITED.
3. LITTER AND SANITARY WASTE–THE PERMITTEE SHALL CONTROL THE MANAGEMENT AND DISPOSAL OF LITTER AND SANITARY WASTE FROM THE SITE.
4. LOCATE EARTHEN–MATERIAL STOCK PILE AREAS AT LEAST 50' AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
5. CONCRETE MATERIALS ONSITE, INCLUDING EXCESS CONCRETE, MUST BE CONTROLLED AND MANAGED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS OR BUFFERS. NO CONCRETE OR CEMENT SLURRY SHALL BE DISCHARGED FROM THE SITE.
6. ANY HARDENED CONCRETE RESIDUE WILL BE DISPOSED OF, OR RECYCLED ON SITE, IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS.
7. SOIL STABILIZATION SHALL BE ACHEIVED ON ANY AREA OF A SITE WHERE LAND–DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
i. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY.
ii. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND–DISTURBING ACTIVITY.
8. CONDITIONS–IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:
i. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE–SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.
ii. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY TO GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7–DAY REQUIREMENT APPLIES.
iii. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7–DAY GROUND COVER REQUIREMENT.
iv. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7–DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.
v. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE–BY–CASE BASIS.
vi. FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION–DEFINED "HIGH QUALITY WATER ZONE" (15A NCAC 04A. 0105), STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND–DISTURBING ACT.

| Approved Construction Plan | | |
|---|---|---|
| | Name | Date |
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE ________ PERMIT # ________
SIGNED__________________________

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

| REVISIONS | | |
|---|---|---|
| No./Date | Description | By |
| | | |

DETAILS AND NOTES

# FORTUNE PLACE
NEW HANOVER COUNTY, NORTH CAROLINA


TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910–763–5100
Fax 910–763–5631

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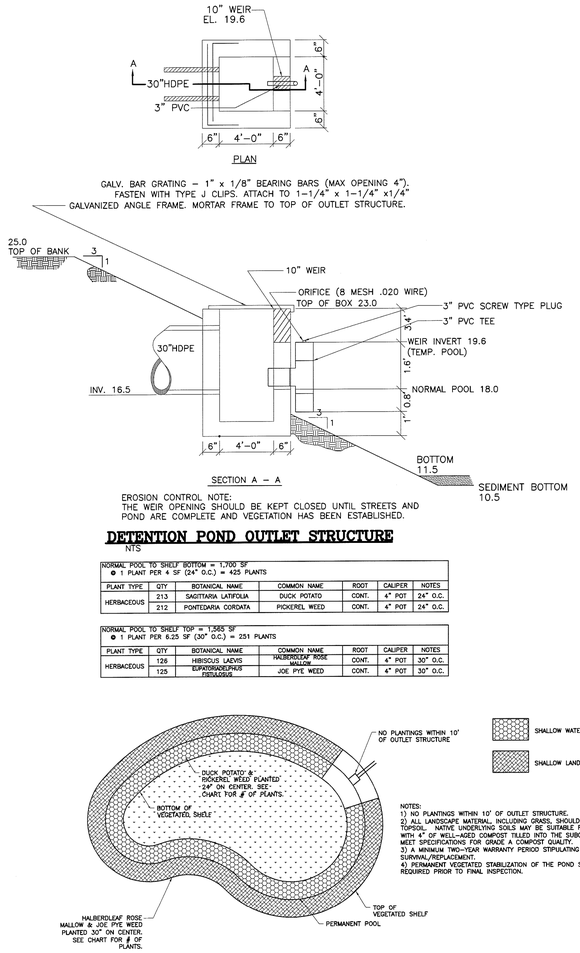
NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP
5.30.14

DATE 05–30–14
DESIGN PGT
DRAWN EJW

C8


13013

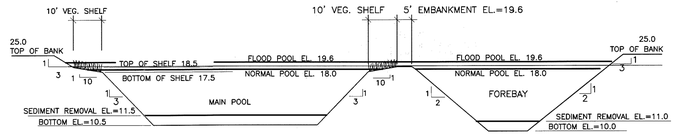



## DETENTION POND OUTLET STRUCTURE

NTS

| NORMAL POOL TO SHELF BOTTOM = 1,700 SF<br>● 1 PLANT PER 4 SF (24" O.C.) = 425 PLANTS | | | | | | |
|---|---|---|---|---|---|---|
| PLANT TYPE | QTY | BOTANICAL NAME | COMMON NAME | ROOT | CALIPER | NOTES |
| HERBACEOUS | 213 | SAGITTARIA LATIFOLIA | DUCK POTATO | CONT. | 4" POT | 24" O.C. |
| | 212 | PONTEDARIA CORDATA | PICKEREL WEED | CONT. | 4" POT | 24" O.C. |

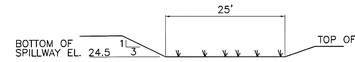
| NORMAL POOL TO SHELF TOP = 1,565 SF<br>● 1 PLANT PER 6.25 SF (30" O.C.) = 251 PLANTS | | | | | | |
|---|---|---|---|---|---|---|
| PLANT TYPE | QTY | BOTANICAL NAME | COMMON NAME | ROOT | CALIPER | NOTES |
| HERBACEOUS | 126 | HIBISCUS LAEVIS | HALBERDLEAF ROSE MALLOW | CONT. | 4" POT | 30" O.C. |
| | 125 | EUPATORIADELPHUS FISTULOSUS | JOE PYE WEED | CONT. | 4" POT | 30" O.C. |




* POND SLOPE TO BE SEEDED IN ACCORDANCE TO SEEDING SPECIFICATIONS
* A PUMP WILL BE PROVIDED TO DRAIN THE BASIN FOR MAINTENANCE AND EMERGENCIES
* SEE TYPICAL VEGETATED SHELF LANDSCAPING DETAIL.
* PERMANENT VEGETATED STABILIZATION OF THE POND SIDESLOPES WILL BE REQUIRED PRIOR TO FINAL INSPECTION.

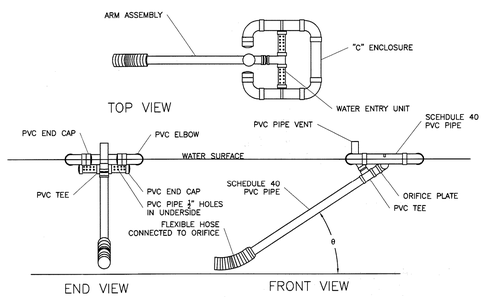
## DETENTION POND & FOREBAY SECTION

NTS




## GRASS EMERGENCY SPILLWAY

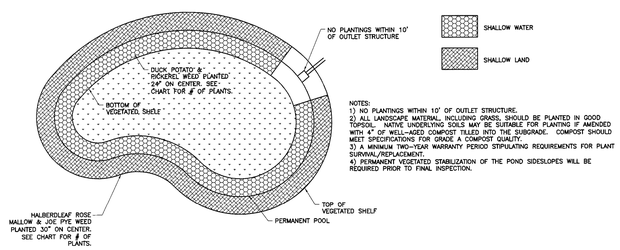
NTS




## FAIRCLOTH SKIMMER DETAIL

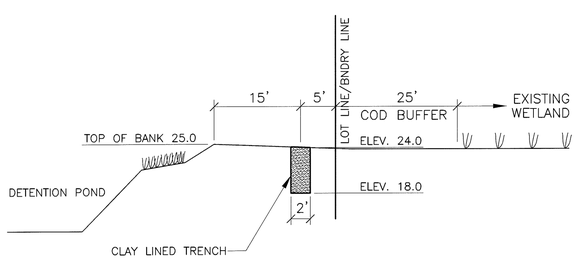
3" SKIMMER W/3" ORIFICE

NTS




NOTES:
1) NO PLANTINGS WITHIN 10' OF OUTLET STRUCTURE.
2) ALL LANDSCAPE MATERIAL, INCLUDING GRASS, SHOULD BE PLANTED IN GOOD TOPSOIL. NATIVE UNDERLYING SOILS MAY BE SUITABLE FOR PLANTING IF AMENDED WITH 4" OF WELL-AGED COMPOST TILLED INTO THE SUBGRADE. COMPOST SHOULD MEET SPECIFICATIONS FOR GRADE A COMPOST QUALITY.
3) A MINIMUM TWO-YEAR WARRANTY PERIOD STIPULATING REQUIREMENTS FOR PLANT SURVIVAL/REPLACEMENT.
4) PERMANENT VEGETATED STABILIZATION OF THE POND SIDESLOPES WILL BE REQUIRED PRIOR TO FINAL INSPECTION.

## TYPICAL VEGETATED SHELF LANDSCAPING DETAIL




## CLAY LINED TRENCH DETAIL

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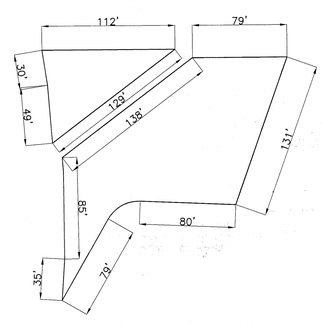


## NORMAL POOL POND DIMENSIONS

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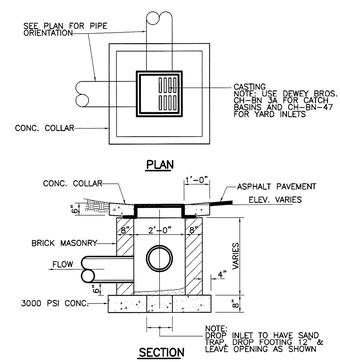


SECTION

## DROP INLET DETAIL

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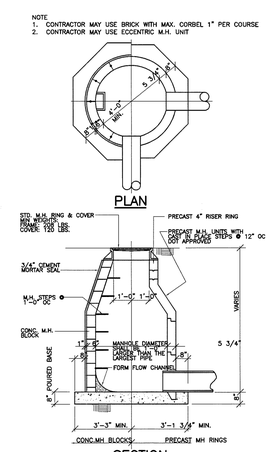


## STORM DRAIN MANHOLE DETAIL

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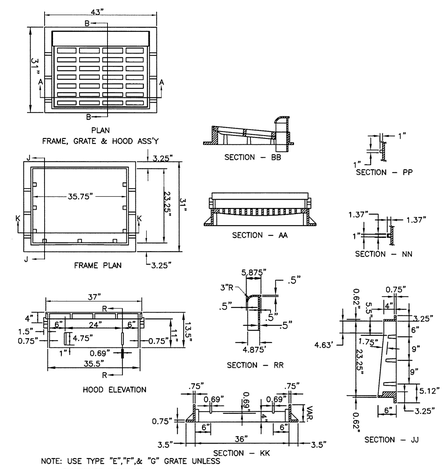
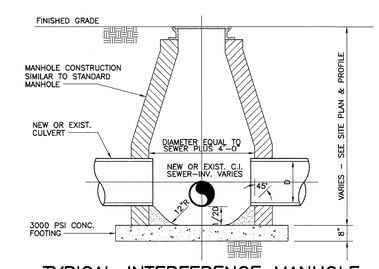



## CATCH BASIN CASTING FOR HOOD & GRATE

NTS




## TYPICAL INTERFERENCE MANHOLE

NTS

| Approved Construction Plan | Name | Date |
|---|---|---|
| Planning | | |
| Traffic | | |
| Fire | | |

STORMWATER MANAGEMENT PLAN
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DETAILS AND NOTES

# FORTUNE PLACE

NEW HANOVER COUNTY, NORTH CAROLINA


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NORTH CAROLINA PROFESSIONAL SEAL 17374 ENGINEER PHILLIP GREGORY TRIPP

5.30.14

DATE 05-30-14
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SHEET 9 OF 9

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