### **GENERAL NOTES**

- 1. PROPERTY LINES SHOWN HERON ARE FOR REFERENCE ONLY AND WERE PLOTTED FROM INFORMATION FOUND ON THE NEW HANOVER COUNTY GIS SYSTEM.
- 2. TOPOGRAPHIC SURVEY BASED ON FIELD SURVEY COMPLETED BY W.K. DICKSON & CO., INC. DECEMBER 11, 2013.
- THIS PROPERTY IS NOT LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.
- 4. ELEVATIONS BASED ON VERTICAL DATUM NAVD 88. HORIZONTAL DATUM NAD83/2007.
- 5. LOCATION OF UNDERGROUND UTILITIES IS BASED UPON LOCATION OF VISIBLE ABOVE GROUND IMPROVEMENTS, DESIGN DRAWINGS, RECORD DRAWINGS AND PAINT MARKINGS BY THE NORTH CAROLINA ONE CALL CENTER.
- 6. THE SOIL TYPES PER SOIL SURVEY OF NEW HANOVER COUNTY, NORTH CAROLINA BY THE US DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCE CONSERVATION SERVICE ARE: Be - BAYMEADE FINE SAND
  - Le LEON SAND Lo - LEON-URBAN LAND COMPLEX
- 7. THERE ARE NO CONSERVATION RESOURCES OR ASSOCIATED SETBACKS ON THE SITE.
- 8. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE
- 9. ALL WORK IS TO BE IN ACCORDANCE WITH THE CITY OF WILMINGTON, NEW HANOVER COUNTY AND THE STATE OF NORTH CAROLINA.
- 10. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
- 11. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.
- 12. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
- 13. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY REVENUES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
- 14. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- 15. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE DOT.
- 16. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
- 17. THERE ARE NO WETLAND IMPACTS ASSOCIATED WITH THIS PROJECT.

### **DEMOLITION NOTES**

- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING. SIGNAGE SHALL BE PLACED ON THE TREE PROTECTION FENCING IN ENGLISH AND SPANISH STATING THAT TREE PROTECTION FENCING MUST REMAIN IN PLACE THROUGHOUT THE CONSTRUCTION PROCESS AND THAT NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- TREE PROTECTION SIGNAGE SHOULD STATE "TREE PROTECTION AREA: DO NOT ENTER" IN BOTH ENGLISH AND SPANISH. SIGNS SHOULD BE ATTACHED TO FENCE/POSTS, AND SHOULD BE SPACED EVERY 50' WITH AT LEAST TWO SIGNS PER TREE PROTECTION AREA.
- ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 4. NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
- ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
- 6. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
- CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
- DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES: ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
- 9. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.
- 10. ELECTRIC. TELEPHONE. SANITARY SEWER. WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
- 11. THE CONTRACTOR SHALL PRODUCE A PHOTOGRAPHIC RECORD (DIGITAL) OF DEVELOPMENT COMMENCING WITH A RECORD OF THE SITE AS IT APPEARS BEFORE DEMOLITION IS BEGUN. AFTERWARDS, A PHOTOGRAPHIC RECORD SHALL BE MAINTAINED WEEKLY DURING CONSTRUCTION AND ENDING WITH A PHOTOGRAPHIC RECORD OF THE DEVELOPMENT AS IT APPEARS AFTER DEMOLITION. THIS RECORD SHALL BE DELIVERED TO THE OWNER.
- 12. EXISTING CURB AND GUTTER, LIGHTS, SIDEWALK, AND UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.
- 13. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
- 14. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
- 15. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.

SITE NOTES

- 1. 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.
- 2. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- 3. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN
- 4. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- 5. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 6. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
- TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- 10. CONTACT KAREN DIXON AT 910-341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 11. CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING
- 12. NO OBSTRUCTIONS ARE PERMITTED IN THE SPACE BETWEEN THIRTY (30) INCHES AND TEN (10) FEET ABOVE THE GROUND WITHIN THE TRIANGULAR SITE DISTANCE.
- 13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMITS ISSUED AND ALL FEDERAL, STATE AND LOCAL CODES.
- 14. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- 15. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
- 16. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- 17. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
- 18. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
- 19. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- 20. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN
- 21. THE SIGN CONTRACTOR WILL ERECT AND ILLUMINATE SITE IDENTIFICATION SIGNAGE PER OWNER'S SPECIFICATIONS. SEE ARCHITECTURAL PLANS.
- 22. ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURB AND GUTTERS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
- 23. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- 24. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW, NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER.
- 25. FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
- 26. ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS
- 27. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
- 28. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- 29. ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.

### **GENERAL UTILITY NOTES**

- 1. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR PERMIT DETAILS.
- 2. ALL UTILITIES TO SERVICE BUILDING SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE SUCH PLACEMENT IS PROHIBITED OR DEEMED IMPRACTICAL BY THE UTILITY PROVIDER. UNDERGROUND TERMINAL FACILITIES FOR STREET LIGHTING ALONG ALL PUBLIC STREETS ABUTTING THE SUBJECT SITE SHALL BE INSTALLED BY THE DEVELOPER.
- 3. WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- 4. PROJECT SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 910-343-3910 FOR INFORMATION.
- 5. IF THE CONTRACTOR DESIRES CFPUA 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.
- 6. ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REGULATIONS. CALL 910-343-3910 FOR INFORMATION.
- 7. ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 8. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCCCHR OR ASSE.
- 9. CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
- 10. PRIVATE UNDERGROUND FIRE LINE(S) REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT AND INSPECTION BY THE WILMINGTON FIRE AND LIFE SAFETY DIVISION AT 910-341-0696.

- 11. THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY
- 12. UNDERGROUND CONDUITS SHALL BE PLACED IN GRASS OR LANDSCAPE AREAS WHENEVER POSSIBLE. THE LOCATION OF THE CONDUIT SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. PVC SCH. 40 SLEEVES SHALL BE INSTALLED FOR ALL CONDUIT CROSSINGS UNDER PAVED AREAS.
- 13. ALL WATER LINES SHALL HAVE FINAL COVER DEPTH OF 3'-0".
- 14. ALL SEWER LINES SHALL HAVE A FINAL COVER DEPTH OF 3'-0".
- 15. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED CONSTRUCTION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.
- 16. CONTRACTOR TO LOCATE EXISTING UNDERGROUND UTILITIES AT WATERLINE CROSSINGS AND USE FITTINGS AND BENDS AS NECESSARY TO AVOID CONFLICTS.
- 17. CONTRACTOR TO COORDINATE THE RELOCATION OF THE EXISTING GAS LINE TO ACCOMMODATE PROPOSED UTILITY LINES.
- 18. CONTRACTOR TO SUPPORT AND/OR BRACE EXISTING UNDERGROUND UTILITIES AS NECESSARY TO CONSTRUCT PROPOSED UTILITY CONNECTIONS.
- 19. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED
- 20. FIRE HYDRANTS CANNOT BE FURTHER THAN 8' FROM CURB.
- 21. PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANT OR FDC'S.
- 22. FDC'S CAN BE NO FURTHER THAN 40' FROM FIRE DEPARTMENT VEHICLE PLACEMENT.
- 23. FDC'S CAN BE NO FURTHER THAN 150' FROM A FIRE HYDRANT.

### DRAINAGE NOTES

- 1. ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF WILMINGTON & NCDOT SPECIFICATIONS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
- BEDDING FOR ALL STORM SEWER PIPES SHALL BE AS SPECIFIED IN THE DETAILS AND SPECIFICATIONS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 3. ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.
- 4. MINIMUM COVER FOR STORM DRAINAGE PIPING SHALL BE 2-FEET. CONTRACTOR SHALL NOTIFY ENGINEER IF CONDITION CANNOT BE MET.
- 5. ALL PIPES SHALL BE FLUSH WITH INSIDE WALL OF STRUCTURE.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID IN ACCORDANCE WITH DETAILS.
- 7. UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED.
- 8. MATERIAL DEEMED UNSUITABLE BY THE ENGINEER FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH SPECIFICATIONS.
- ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
- 10. THE STORM DRAINAGE SYSTEM WILL BE SUBJECT TO A VISUAL INSPECTION BY THE ENGINEER PRIOR TO BACKFILL.
- 11. RIM ELEVATIONS GIVEN ON THESE PLANS ARE APPROXIMATE AND ARE FOR INFORMATION PURPOSES ONLY. ACTUAL RIM ELEVATIONS SHALL BE SET BASED ON PROPOSED FINISHED GRADE AS STAKED IN THE
- 12. THERE ARE NO WETLAND IMPACTS ASSOCIATED WITH THIS PROJECT.

### **GRADING NOTES:**

- 1. GRADING SHOWN INDICATES FINISHED GRADES. ALL ELEVATIONS ARE IN REFERENCE TO THE TOPOGRAPHIC SURVEY BENCH MARK WHICH MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
- 2. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHALL BE CONSTRUCTED AT 3:1 (HORIZONTAL TO VERTICAL) MINIMUM.
- 3. LIMITS OF CLEARING SHOWN ARE BASED ON CUT & FILL SLOPES AND OTHER GRADING REQUIREMENTS AND ARE APPROXIMATE. ACTUAL LIMITS SHALL BE STAKED BASED ON FINE GRADING REQUIREMENTS. CONTRACTOR SHALL NOT GRADE BEYOND THE APPROVED LIMITS OF CONSTRUCTION WITHOUT APPROVAL FROM THE ENGINEER.
- 4. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON DENUDED AREAS. ESTABLISH VEGETATION IN ACCORDANCE WITH **EROSION CONTROL DETAILS AND SPECIFICATIONS.**
- 5. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS INDICATED. NO DEVICE SHALL BE REMOVED UNTIL THE SITE IS STABILIZED.
- CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING GRADE.
- GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS SUBJECT TO A FINE.
- 8. ALL DISTURBED AREAS OUTSIDE PROPOSED BUILDING FOOTPRINT ARE TO BE STABILIZED WITH SOD UNLESS OTHERWISE NOTED.

Approved Construction Plan

Public Services Engineering Division APPROVED DRAINAGE PLAN

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance. ALL DESIGNS SKETCHES DRAWINGS SPECIFICATIONS MODELS AND SAMPLES ARE THE EXCLUSIVE PROPER OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NO UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY

OTHER PURPOSE IS PROHIBITED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL BUILDING, ELEVATOR AND CORRIDOR CLEARANCES DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

	TYPE	DAT
•	SCHEMATIC DESIGN	12.18.1
•	DESIGN DEVELOPMENT	05.23.1
•	100% CD	06.27.1
•	BID AND PERMIT SET	07.25.1

### FOR CONSTRUCTION

Revisions

DATE **TYPE** 

**SEAL** 



### CHAMBERS ARCHITECTURAL ASSOCIATES



**ARCHITECT & INTERIORS CHAMBERS** 1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535

FAX: (410) 727-6982



Urban Development + Geomatics 909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201

www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



1518 COUNTRY CLUB ROAD

Sheet Title

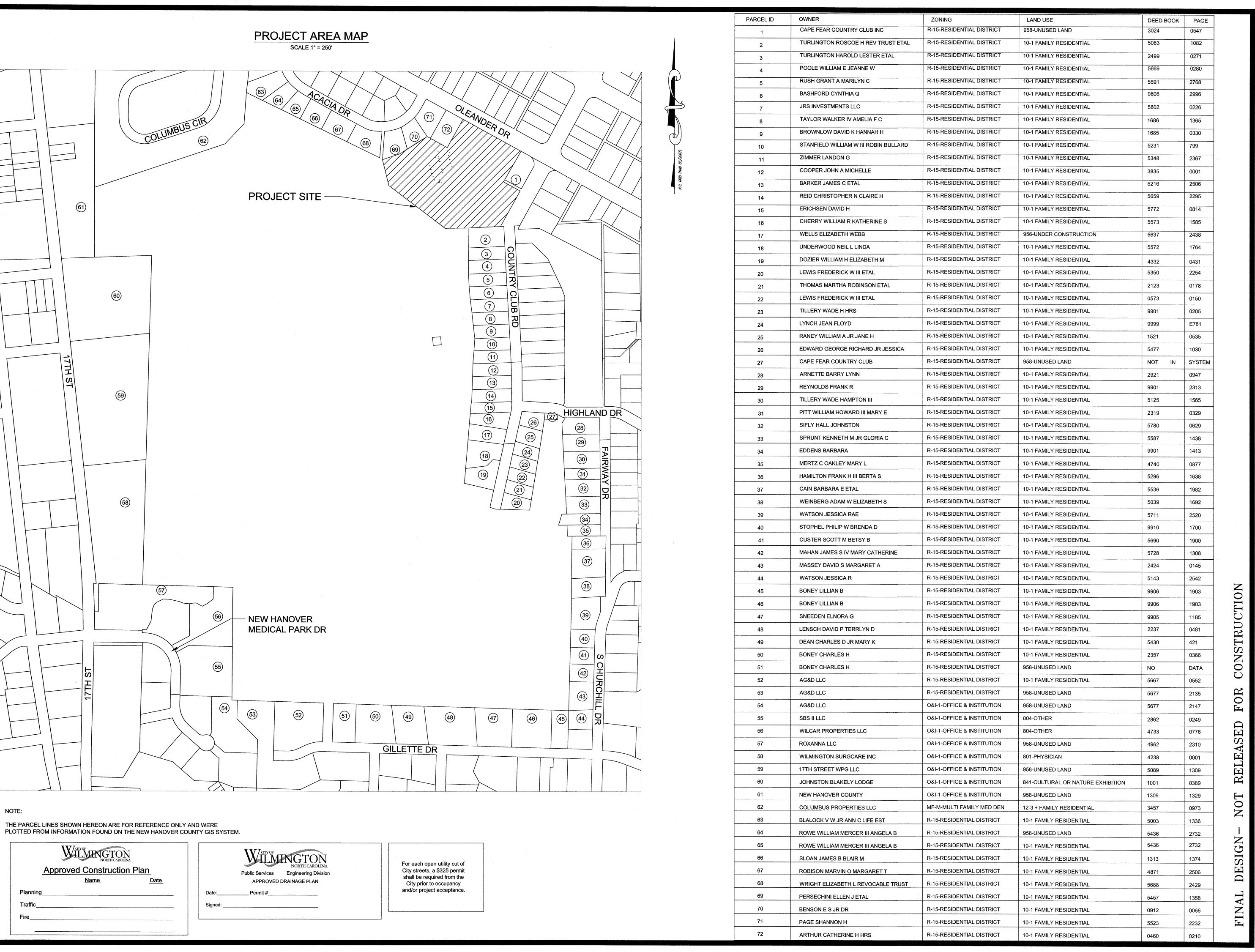
NOTES

Scale: AS SHOWN 07/25/14 Date: Drawn By: Checked By: DIF

Sheet Number

Job No.:

20130125.00.WL



ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC, FOR ANY

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL IMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING NSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

Issue

	TYPE	DATI
•	SCHEMATIC DESIGN	12.18.13
•	DESIGN DEVELOPMENT	05.23.1
•	100% CD	06.27.1
•	BID AND PERMIT SET	07.25.1
	FOR CONSTRUCTION	1_

Kev	'isions	
N0.	TYPE	DATE
	:	
	-	



### CHAMBERS ARCHITECTURAL ASSOCIATES



INTERIOR DESIGN ARCHITECT & INTERIORS

**CHAMBERS** 1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

# Transportation + Water Resources Urban Development + Geomatics

909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201

www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



FAMILY ACTIVITY 1518 COUNTRY CLUB ROAD

Sheet Title

ADJACENT PROPERTY INFORMATION

Scale:	AS SHOWN
Date:	07/25/14

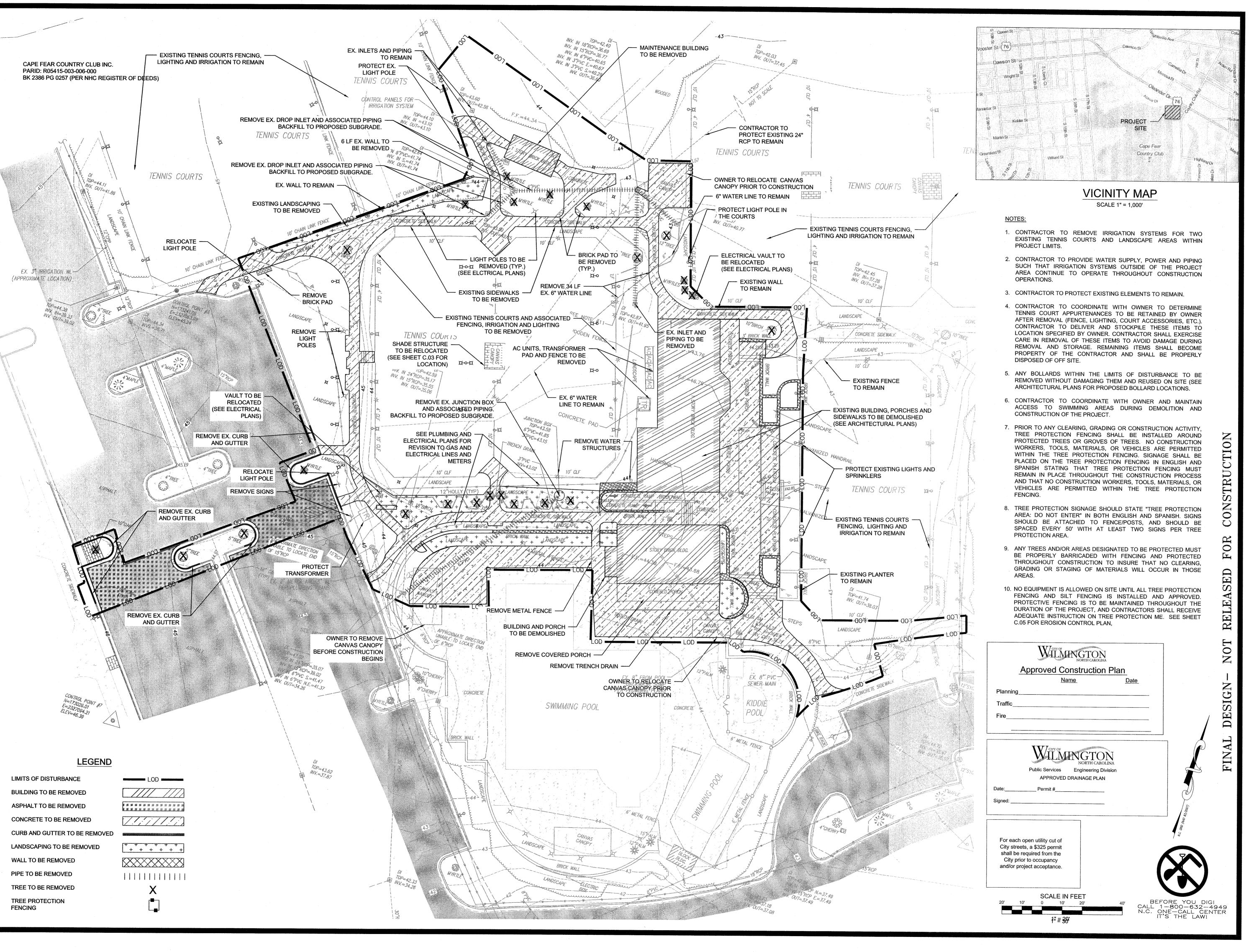
Drawn By:

20130125.00.WL

Checked By: DLF

Sheet Number

Job No.:



CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

Issue

	ТҮРЕ	DA
•	SCHEMATIC DESIGN	12.18
•	DESIGN DEVELOPMENT	05.23
•	100% CD	06.27
	BID AND PERMIT SET	07.25
	FOR CONSTRUCTION	1-

### Revisions

10.	TYPE	DATE
	- <del>1</del>	

TT A T



## CHAMBERS

ARCHITECTURAL ASSOCIATES



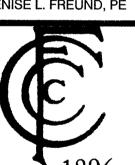
ARCHITECT & INTERIORS
CHAMBERS
1800 WASHINGTON BLVD.
SUITE 111
BALTIMORE, MARYLAND 21230
PHONE: (410) 727-4535
FAX: (410) 727-6982

# community infrastructure consultants Transportation + Water Resources Urban Development + Goografics

Transportation + Water Resources
Urban Development + Geomatics

909 MARKET STREET
WILMINGTON, NC 28401

909 MARKET STREET
VILMINGTON, NC 28401
(t) (910) 762-4200
(f) (910) 762-4201
www.wkdickson.com
LICENSE NO. F-0374
DENISE L. FREUND, PE



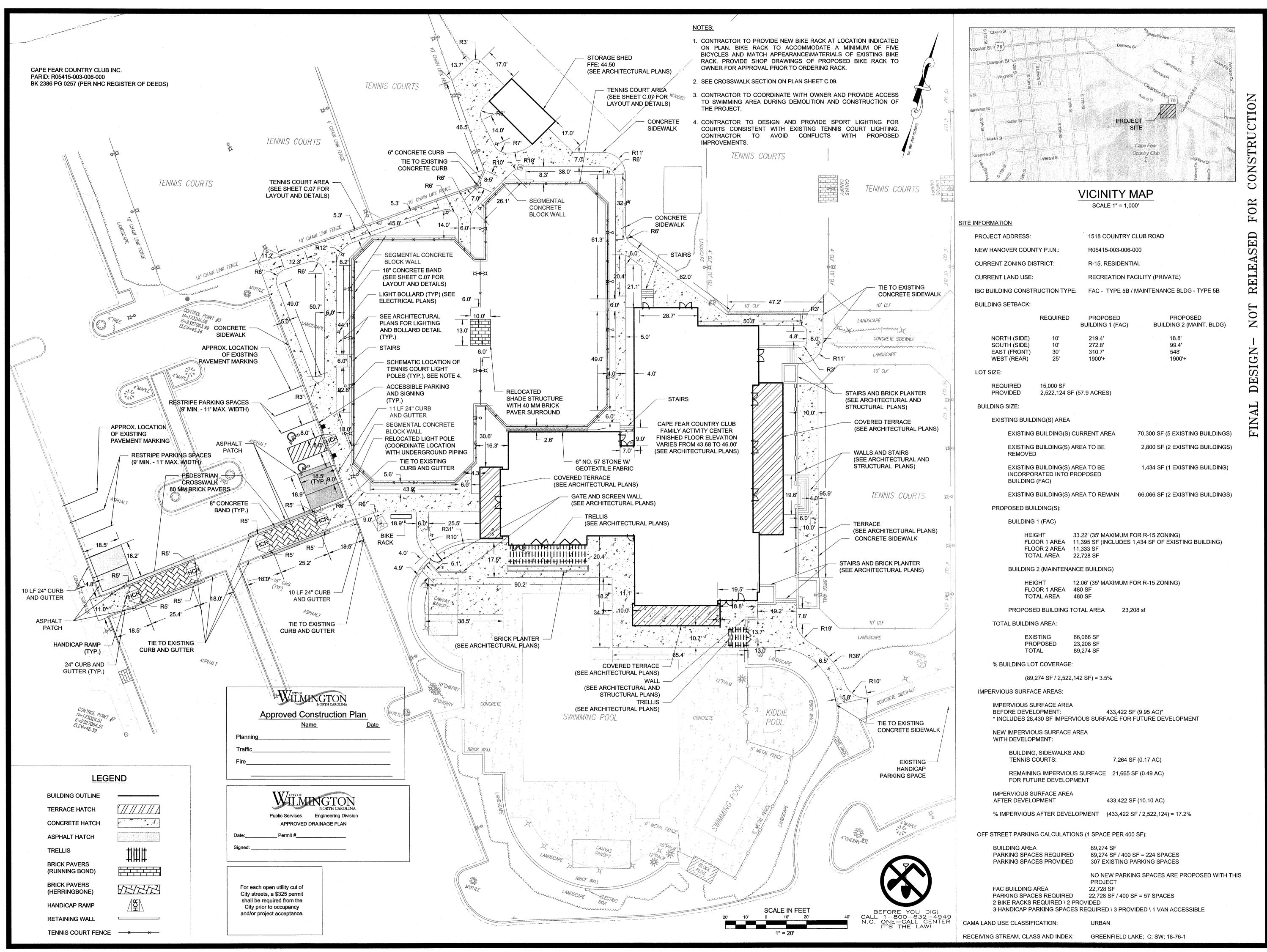
FAMILY ACTIVITY
ENTER - CAPE FEAR
COUNTRY CLUB

1518 COUNTRY CLUB ROAD

Sheet Title

DEMOLITION PLAN

Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF
Job No.:	20130125.00.WL



CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

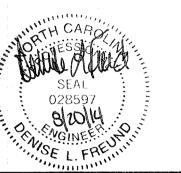
		TYPE	DA
(	D	SCHEMATIC DESIGN	12.18
(	D	DESIGN DEVELOPMENT	05.23
(	D	100% CD	06.27
	D	BID AND PERMIT SET	07.25

FOR CONSTRUCTION

### Revisions

0.	TYPE	DATE

SEAL



### C H A M B E R S ARCHITECTURAL ASSOCIATES



ARCHITECT & INTERIORS
CHAMBERS

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

Community infrastructure consultants
Transportation + Water Resources
Urban Development + Geomatics

909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374



FAMILY ACTIVITY
CENTER - CAPE FEAR
COUNTRY CLUB

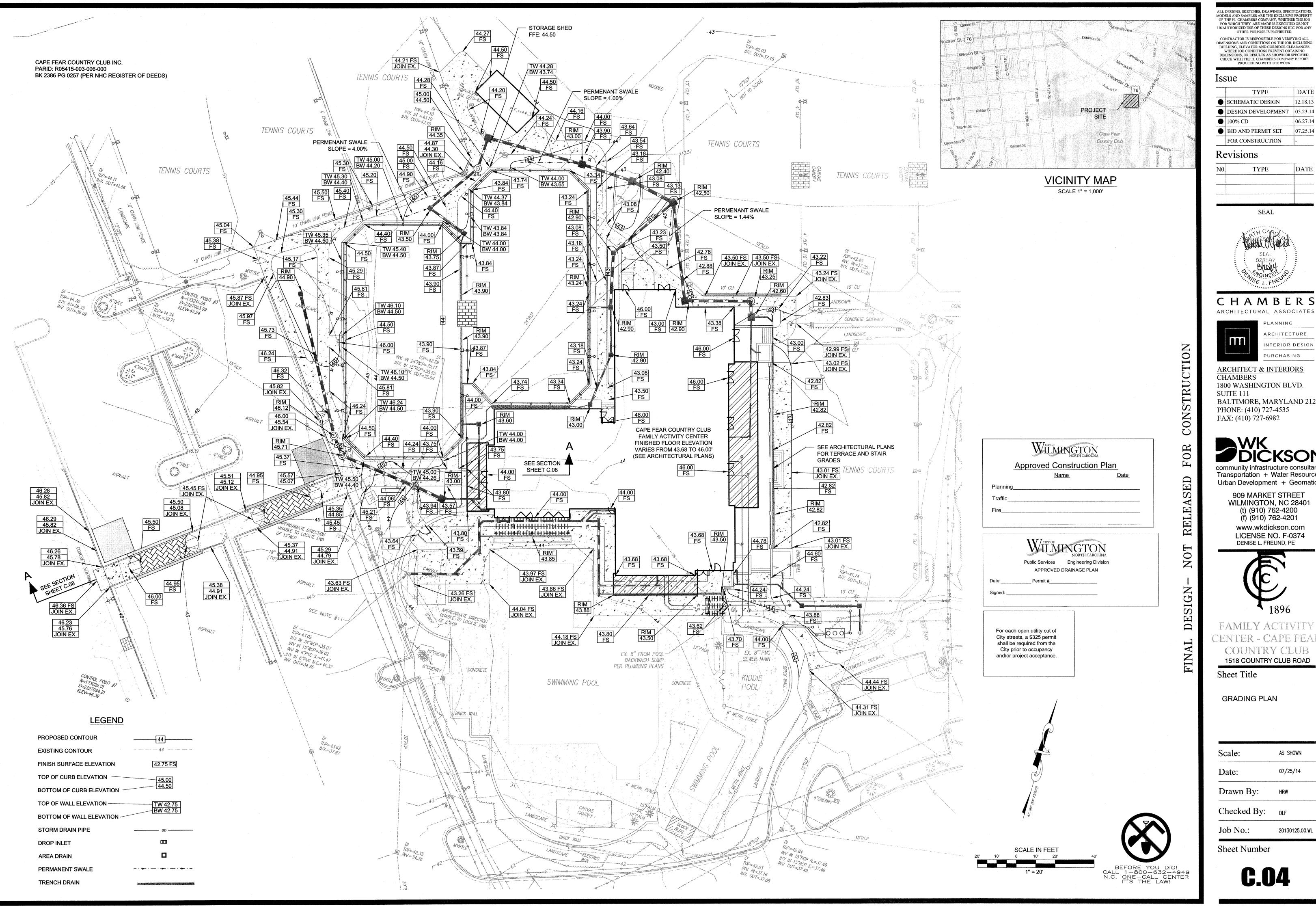
1518 COUNTRY CLUB ROAD

SITE LAYOUT PLAN

Sheet Title

	The second secon
Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF
Job No.:	20130125.00.WI

Sheet Number



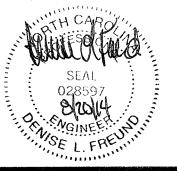
OTHER PURPOSE IS PROHIBITED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

	TYPE	DA
•	SCHEMATIC DESIGN	12.18
•	DESIGN DEVELOPMENT	05.23
•	100% CD	06.27
•	BID AND PERMIT SET	07.25
*******	FOR CONSTRUCTION	-

### Revisions

N0.	TYPE	DATE
	: .	





### CHAMBERS



ARCHITECT & INTERIORS CHAMBERS

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230

PHONE: (410) 727-4535 FAX: (410) 727-6982

ransportation + water Resources Urban Development + Geomatics 909 MARKET STREET

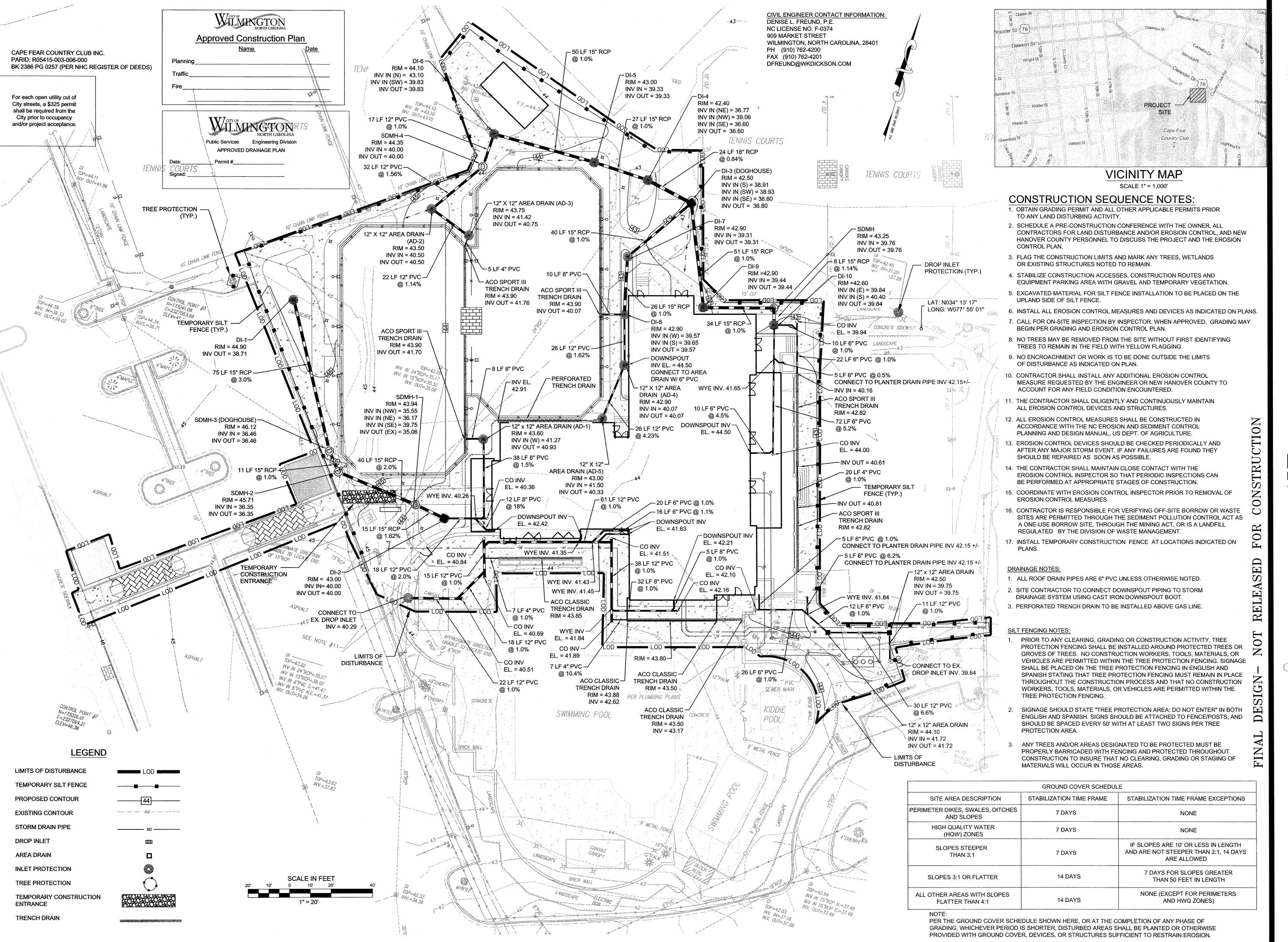
WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



FAMILY ACTIVITY CENTER - CAPE FEAR COUNTRY CLUB

**GRADING PLAN** 

Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF
Job No.:	20130125.00.WL



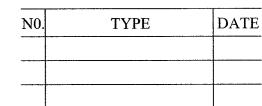
ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

	TYPE	DAT
•	SCHEMATIC DESIGN	12.18.
•	DESIGN DEVELOPMENT	05.23.
•	100% CD	06.27.
•	BID AND PERMIT SET	07.25.
	FOR CONSTRUCTION	

### Revisions



SEAL



### CHAMBERS ARCHITECTURAL ASSOCIATES



INTERIOR DESIGN PURCHASING **ARCHITECT & INTERIORS** 

**CHAMBERS** 1800 WASHINGTON BLVD. SUITE 111

BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

Transportation + Water Resources

Urban Development + Geomatics 909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200

(f) (910) 762-4201 www.wkdickson.com

LICENSE NO. F-0374 DENISE L. FREUND, PE



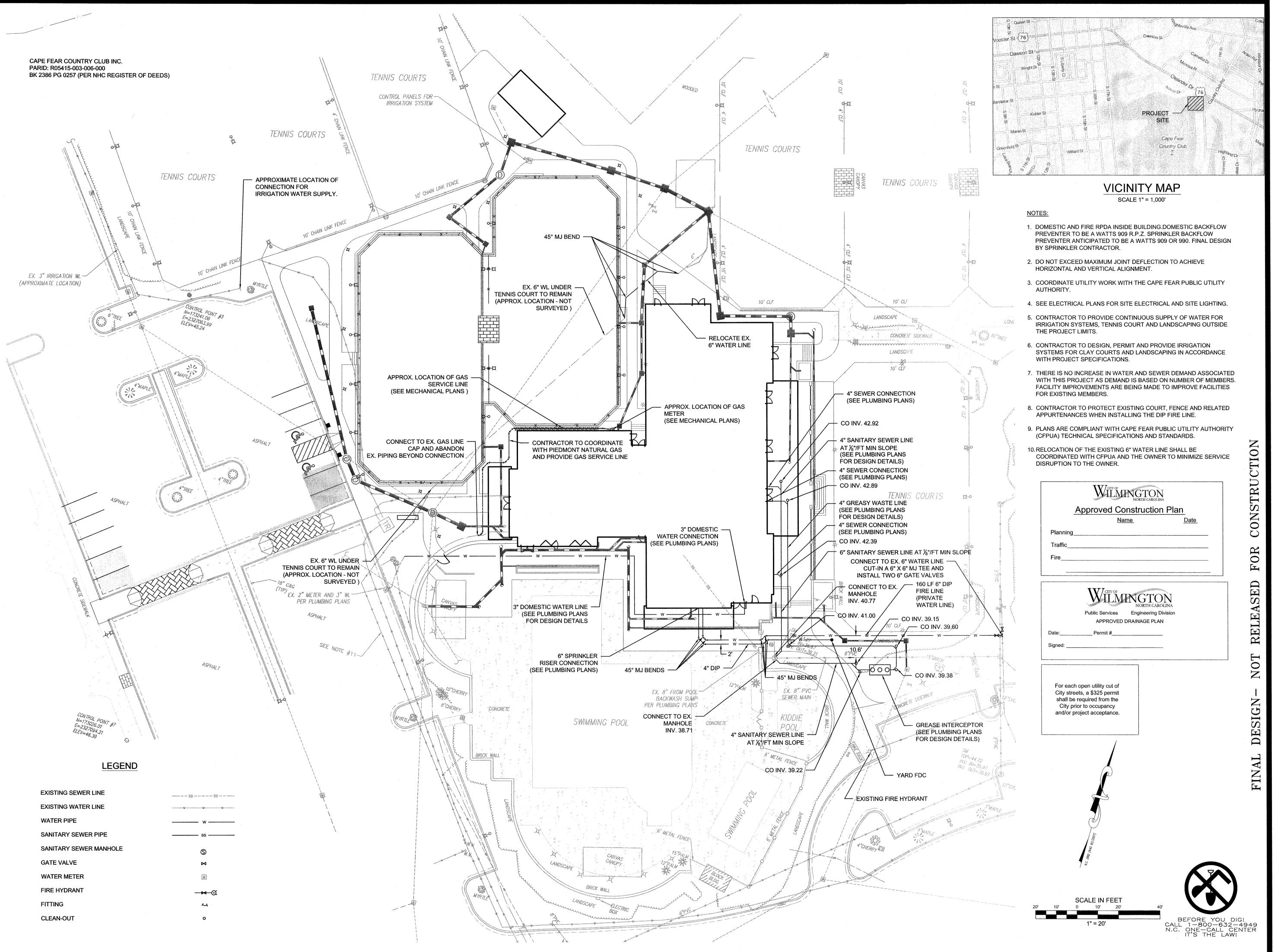
FAMILY ACTIVITY CENTER - CAPE FEAR

COUNTRY CLUB 1518 COUNTRY CLUB ROAD

Sheet Title

DRAINAGE AND **EROSION CONTROL** PLAN

Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF
Job No.:	20130125.00.WL



OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

<b>)</b> (		
	TYPE	DA
•	SCHEMATIC DESIGN	12.18

06.27.14

07.25.14

DESIGN DEVELOPMENT100% CD

BID AND PERMIT SET

# For construction Revisions

N0.	TYPE	DATI

SEAL



## CHAMBERS

ARCHITECTURAL ASSOCIATES



PURCHASING

ARCHITECT & INTERIORS
CHAMBERS

1800 WASHINGTON BLVD.
SUITE 111
BALTIMORE, MARYLAND 21230
PHONE: (410) 727-4535

PHONE: (410) 727-4535 FAX: (410) 727-6982

# DICKSON community infrastructure consultan

Transportation + Water Resources
Urban Development + Geomatics

909 MARKET STREET
WILMINGTON, NC 28401

WILMINGTON, NC 2840 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



FAMILY ACTIVITY
CENTER - CAPE FEAR
COUNTRY CLUB
1518 COUNTRY CLUB ROAD

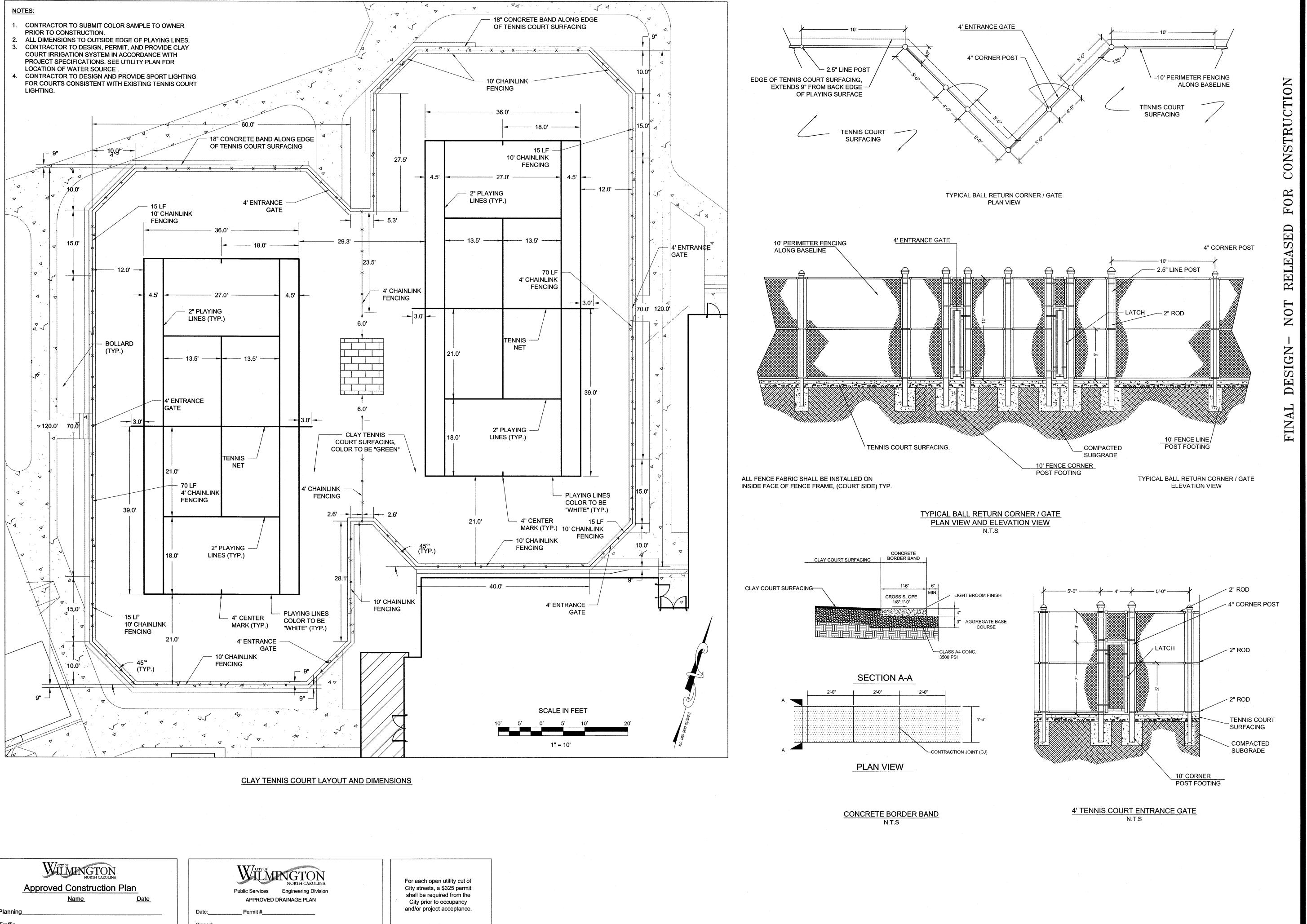
Sheet Title

UTILITY PLAN

Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF

Job No.: 20130125.00.WL

Sheet Number



Issue

● |100% CD

Revisions

UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES

WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED,

CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

**TYPE** 

● DESIGN DEVELOPMENT 05.23.14

SCHEMATIC DESIGN

● BID AND PERMIT SET

FOR CONSTRUCTION

**TYPE** 

**SEAL** 

CHAMBERS

ARCHITECTURAL ASSOCIATES

ARCHITECT & INTERIORS

1800 WASHINGTON BLVD.

PHONE: (410) 727-4535

FAX: (410) 727-6982

BALTIMORE, MARYLAND 21230

Transportation + Water Resources

Urban Development + Geomatics

909 MARKET STREET

WILMINGTON, NC 28401

(t) (910) 762-4200

(f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE

FAMILY ACTIVITY

**CENTER - CAPE FEAR** 

COUNTRY CLUB

1518 COUNTRY CLUB ROAD

Sheet Title

Drawn By:

Job No.:

Sheet Number

Checked By: DLF

**TENNIS COURT** 

LAYOUT AND DETAILS

AS SHOWN

07/25/14

20130125.00.WL

**CHAMBERS** 

SUITE 111

LANNING

PURCHASING

ARCHITECTURE

INTERIOR DESIGN

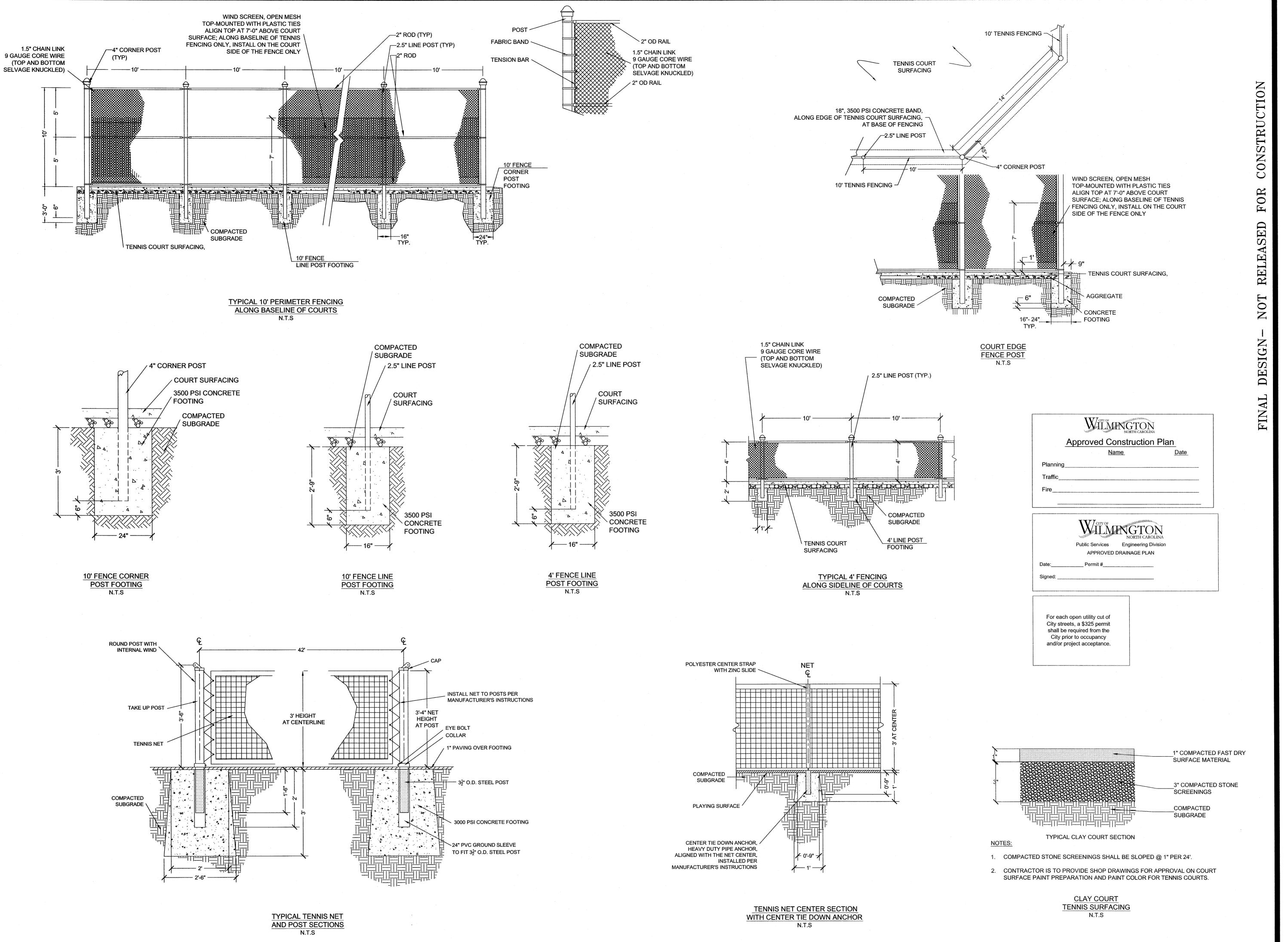
DATE

12.18.13

06.27.14

07.25.14

DATE

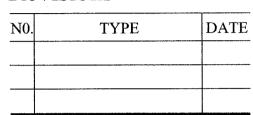


CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

	TYPE	DATE
•	SCHEMATIC DESIGN	12.18.13
	DESIGN DEVELOPMENT	05.23.14
•	100% CD	06.27.14
	BID AND PERMIT SET	07.25.14
	FOR CONSTRUCTION	

### Revisions



SEAL



## C H A M B E R S ARCHITECTURAL ASSOCIATES



ARCHITECT & INTERIORS
CHAMBERS

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

# **SURPLIANCE**Community infrastructure consultants

Urban Development + Geomatics

909 MARKET STREET

WILMINGTON NC 28401

WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374



FAMILY ACTIVITY
CENTER - CAPE FEAR

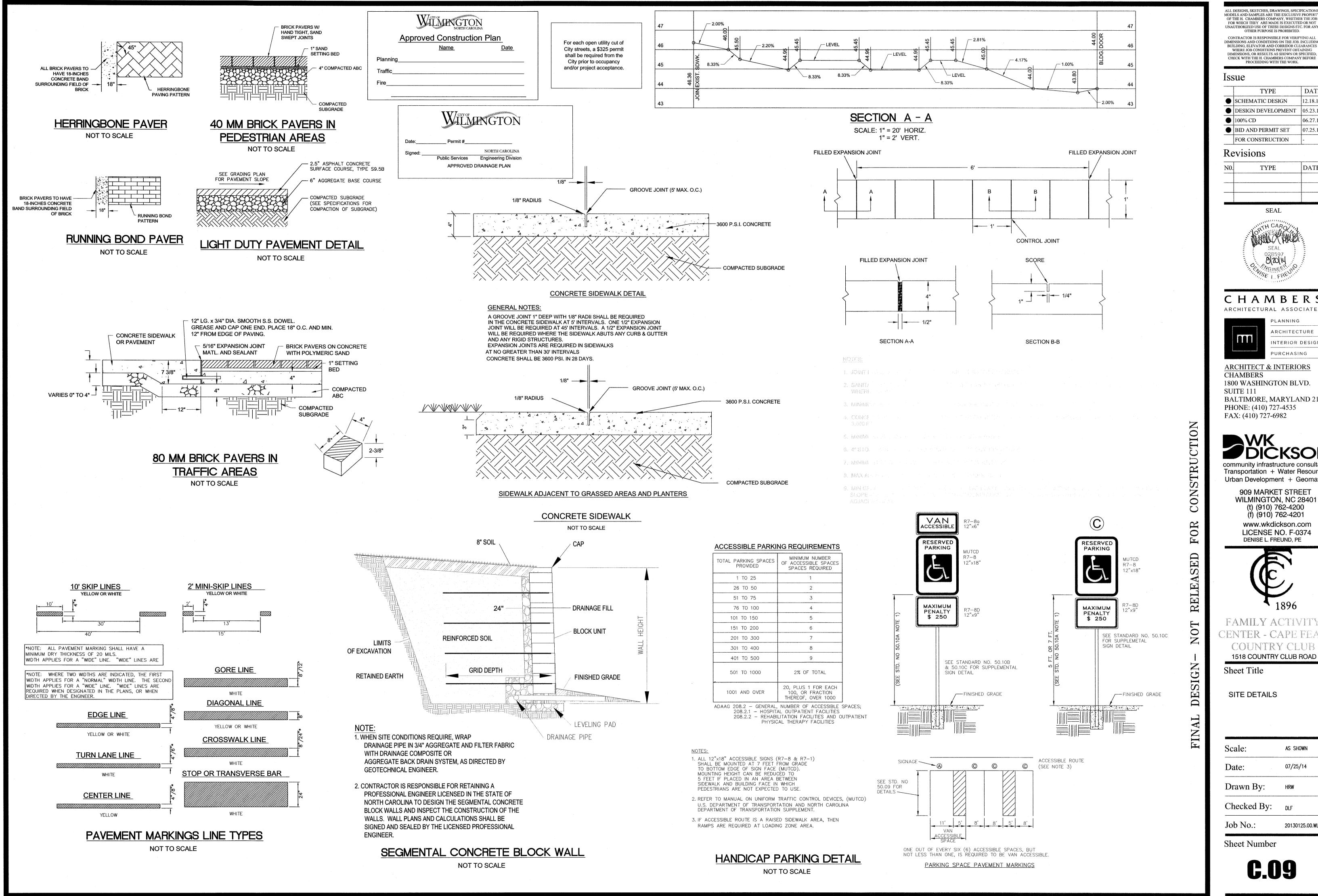
COUNTRY CLUB 1518 COUNTRY CLUB ROAD

Sheet Title

TENNIS COURT DETAILS

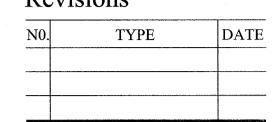
Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW
Checked By:	DLF
Job No.:	20130125.00.W

Sheet Number



CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

	TYPE	DAT
•	SCHEMATIC DESIGN	12.18.
•	DESIGN DEVELOPMENT	05.23.
•	100% CD	06.27.
•	BID AND PERMIT SET	07.25.



**SEAL** 



### CHAMBERS ARCHITECTURAL ASSOCIATES



INTERIOR DESIGN ARCHITECT & INTERIORS

CHAMBERS 1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535

Transportation + Water Resources Urban Development + Geomatics

909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201

www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



FAMILY ACTIVITY COUNTRY CLUB

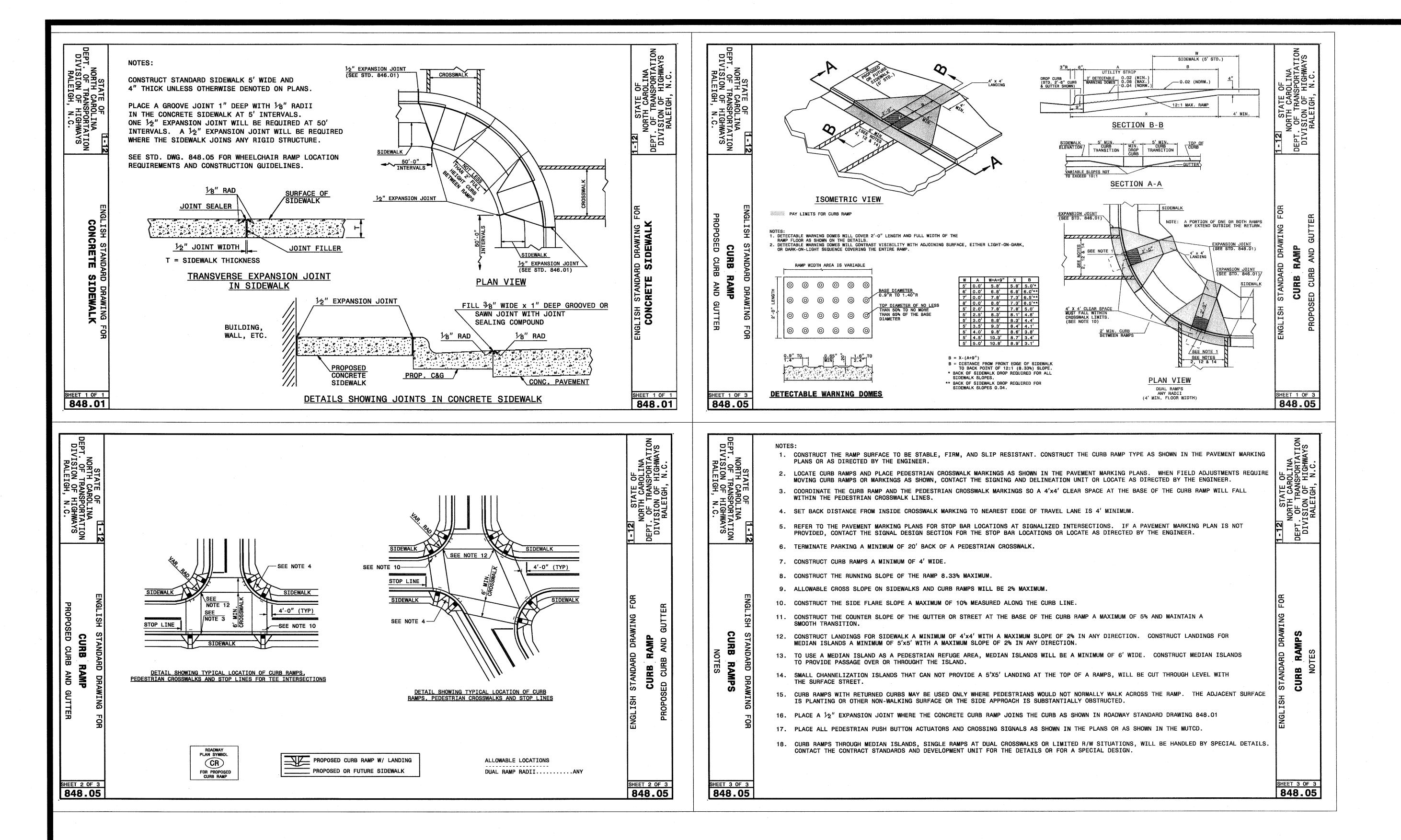
Sheet Title

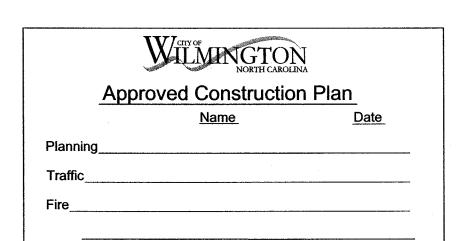
SITE DETAILS

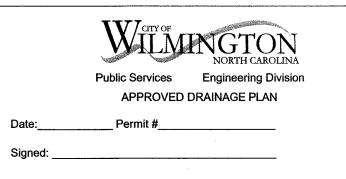
Scale:	AS SHOWN
Date:	07/25/14
Drawn By:	HRW

Checked By: DLF

20130125.00.WL







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

ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS, MODELS AND SAMPLES ARE THE EXCLUSIVE PROPERTY OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

<u></u>	TYPE	DAT
•	SCHEMATIC DESIGN	12.18.
•	DESIGN DEVELOPMENT	05.23.
	100% CD	06.27.
•	BID AND PERMIT SET	07.25.
	FOR CONSTRUCTION	-

### Revisions

N0.	TYPE	DATE

SEAL



### C H A M B E R S ARCHITECTURAL ASSOCIATES



ARCHITECT & INTERIORS CHAMBERS

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

# Community infrastructure consultar

Transportation + Water Resources
Urban Development + Geomatics
909 MARKET STREET

WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374

www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



FAMILY ACTIVITY
CENTER - CAPE FEAR

COUNTRY CLUB ROAD

Sheet Title

SITE DETAILS

Scale: AS SHOWN

Date: 07/25/14

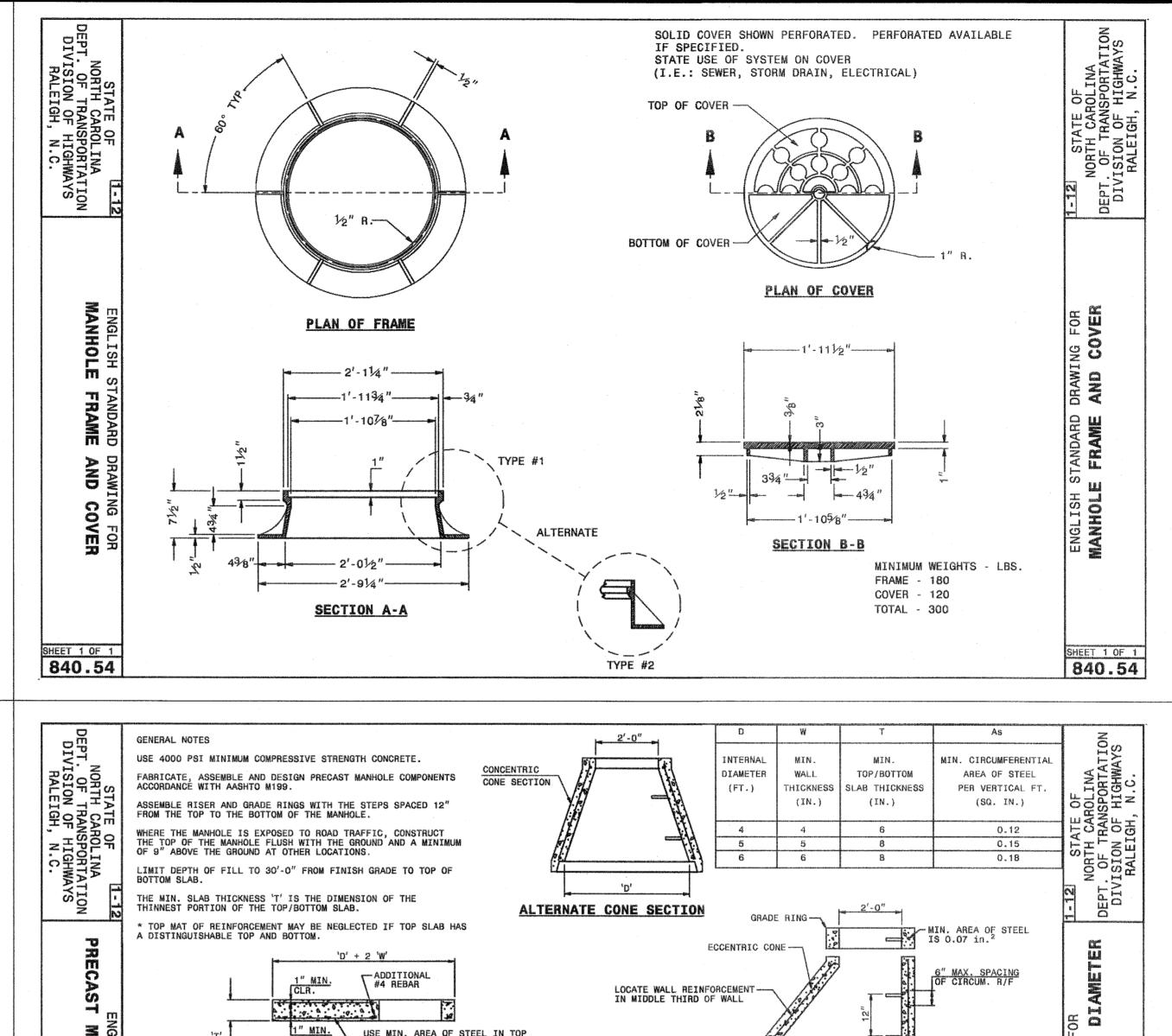
Drawn By: HRW

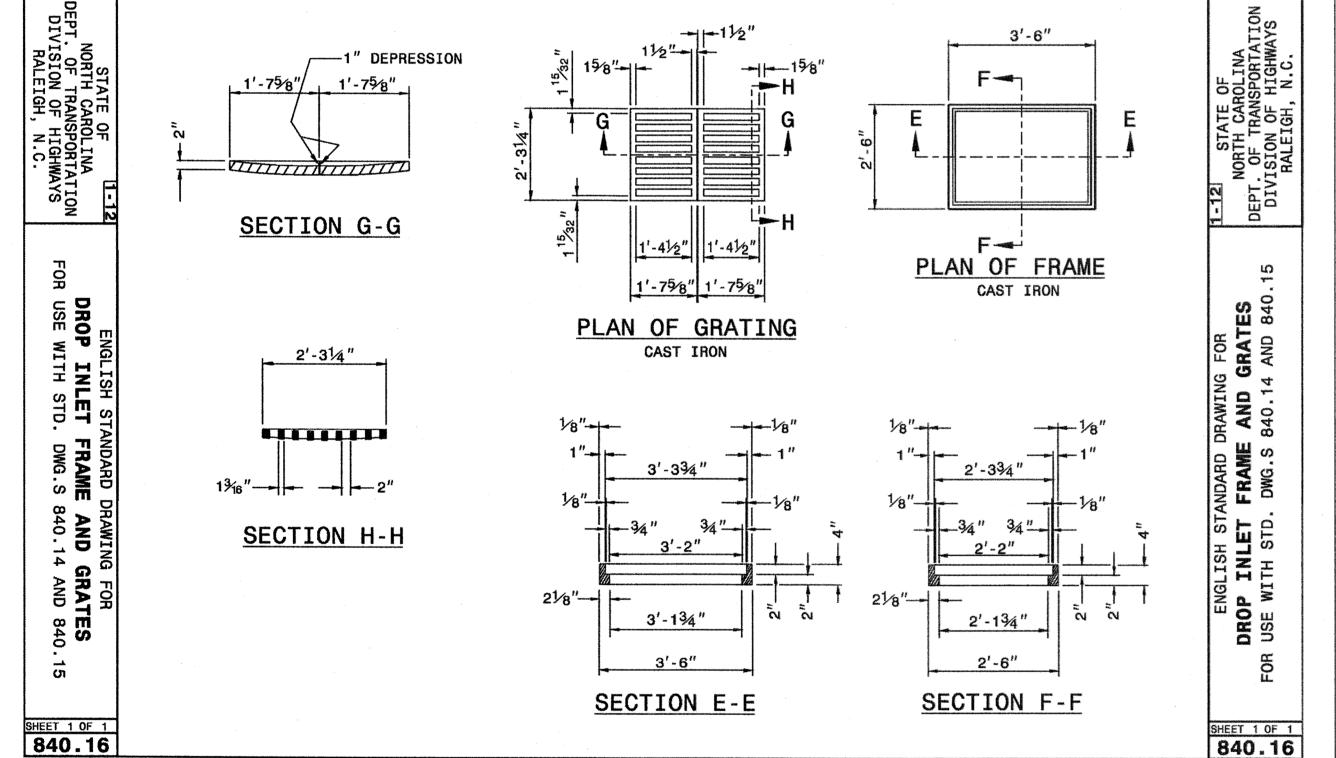
Checked By: DLF

Job No.: 20130125.00.WL

C 10







MAX. PIPE THIS SIDE - 18" 0

DIMENSIONS AND QUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H)

CUBIC YARDS

CONC. IN BOX

SECTION Y-Y

GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

CONSTRUCT WITH PIPE CROWNS MATCHING.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.

DEDUCTIONS FOR

ONE PIPE

SHEET 1 OF 1

840.14

OPTIONAL CONSTRUCTION - MONOLITHIC POUR  $2^{\prime\prime}$  KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.90.

SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.

INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.

- 2" WEEP HOLES

- BRICK COPING(INCIDENTAL) ----

DIMENSIONS OF BOX & PIPE

PIPE | SPAN | WIDTH | MIN. HEIGHT

-TOP ELEVATION ---

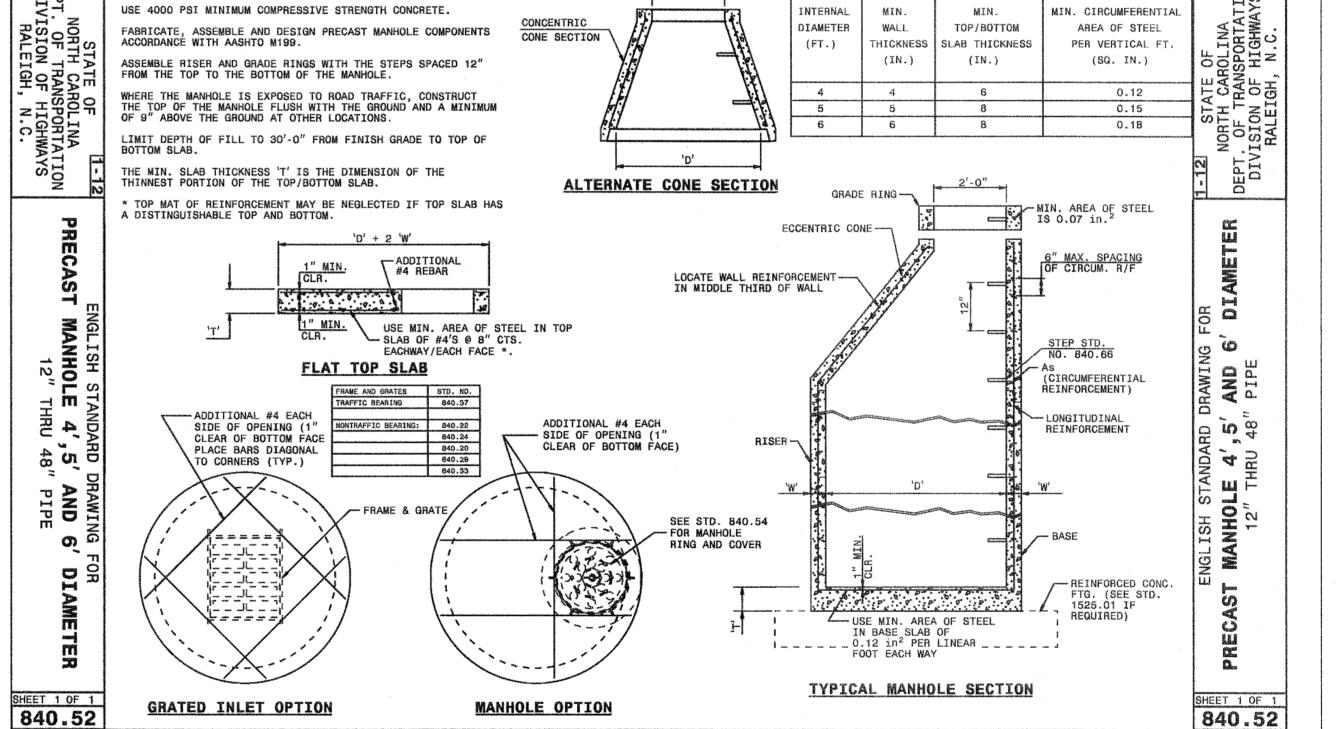
- STD. 840.16 FRAME -

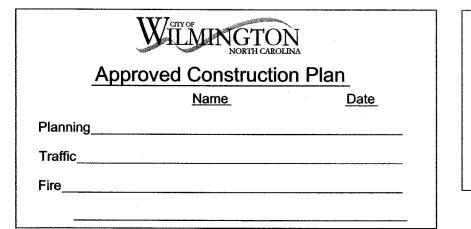
WITH GRATE & FRAME REMOVED

SECTION X-X

SHEET 1 OF 1

840.14







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

ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS, MODELS AND SAMPLES ARE THE EXCLUSIVE PROPERTY OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

	TYPE	DA
•	SCHEMATIC DESIGN	12.18.
	DESIGN DEVELOPMENT	05.23
•	100% CD	06.27
•	BID AND PERMIT SET	07.25

FOR CONSTRUCTION

### Revisions

N0.	TYPE	DATE
		, ,

SEAL



# C H A M B E R S ARCHITECTURAL ASSOCIATES



ARCHITECT & INTERIORS
CHAMBERS
1800 WASHINGTON BLVD.

SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

# Community infrastructure consultants Transportation + Water Resources

Urban Development + Geomatics

909 MARKET STREET

WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374



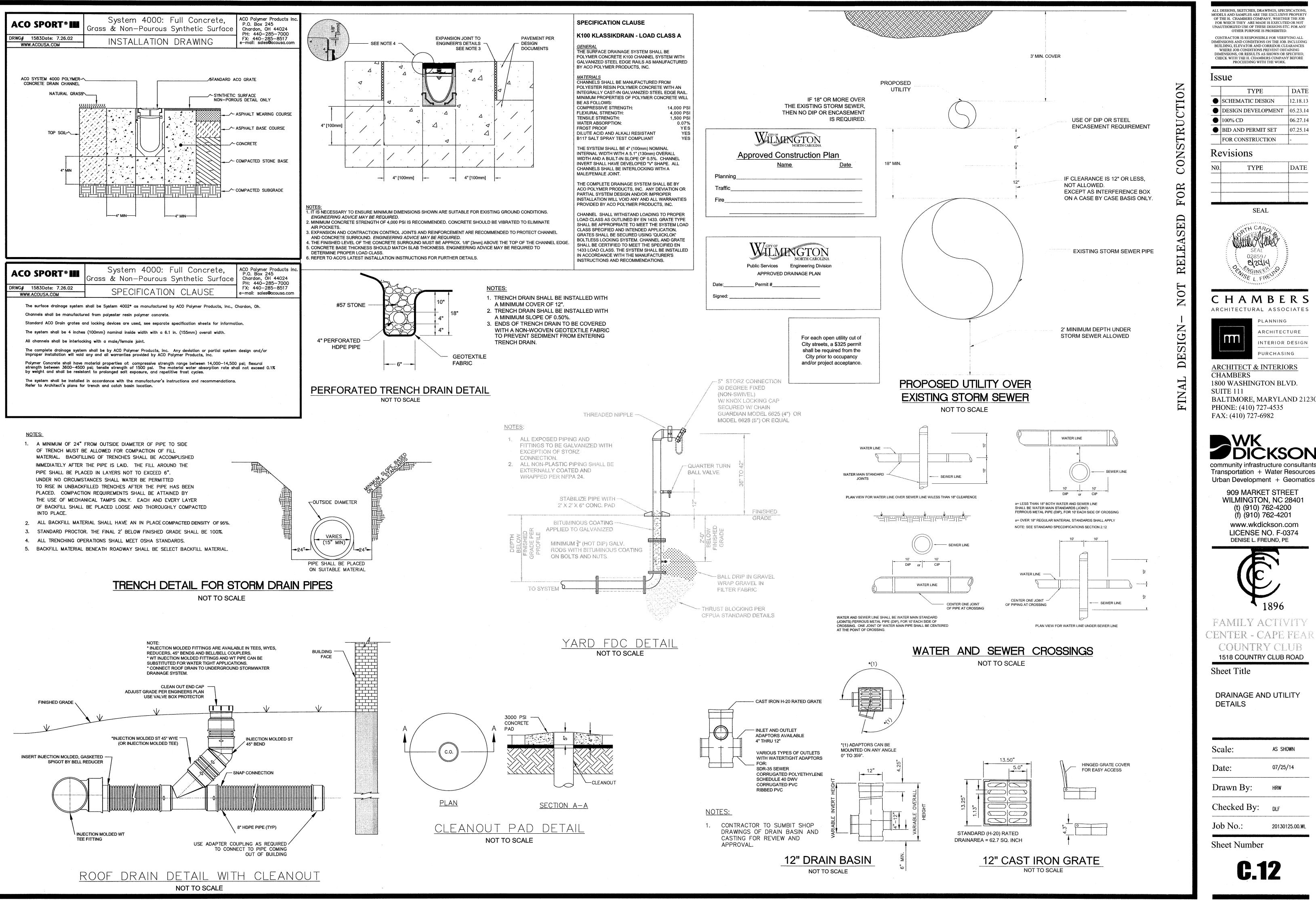
FAMILY ACTIVITY
CENTER - CAPE FEAR
COUNTRY CLUB
1518 COUNTRY CLUB ROAD

Sheet Title

DRAINAGE DETAILS

AS SHOWN
07/25/14
HRW
DLF
20130125.00.WL

**6 11** 



CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

	TYPE	DA
•	SCHEMATIC DESIGN	12.18
•	DESIGN DEVELOPMENT	05.23
•	100% CD	06.27
•	BID AND PERMIT SET	07.25
	FOR CONSTRUCTION	_

### Revisions

CC V 1510115					
10.	TYPE	DATE			

SEAL



### CHAMBERS ARCHITECTURAL ASSOCIATES



ARCHITECTURE INTERIOR DESIGN

**ARCHITECT & INTERIORS** CHAMBERS

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

Urban Development + Geomatics 909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200

(f) (910) 762-4201 www.wkdickson.com LICENSE NO. F-0374

DENISE L. FREUND, PE



FAMILY ACTIVITY CENTER - CAPE FEAR COUNTRY CLUB

1518 COUNTRY CLUB ROAD

Sheet Title

DRAINAGE AND UTILITY DETAILS

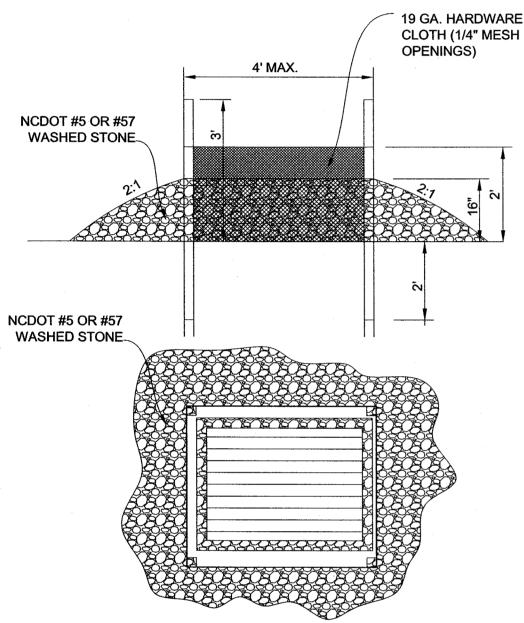
AS SHOWN 07/25/14 Drawn By: Checked By: Job No.: 20130125.00.WL

CLEARLY MARK TREES TO BE SAVED PRIOR TO CONSTRUCTION AND PROVIDE A PROTECTIVE BARRIER AT THE DRIP LINE.

DRIP LINE - THE AREA OF SOIL DIRECTLY BENEATH THE TREE EXTENDING OUT TO THE TIPS OF THE OUTERMOST BRANCHES.

## TREE PROTECTION FENCE

NOT TO SCALE



### **CONSTRUCTION SPECIFICATIONS**

- 1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET
- 2. DRIVE 5' STEEL POSTS 2' INTO THE GROUND, SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 4' APART.
- 3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING AS 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 STABILIZE IT WITH GROUNDCOVER.

## DROP INLET PROTECTION

NOT TO SCALE STEEL POST WOVEN FILTER FABRIC WIRE FENCING - FILTER FABRIC -ANCHOR SKIRT 8" MINIMUM IN BURYING SKIRT, 8" OF #5 WASHED STONE MAY BE USED OVER TURNDOWN. - STEEL POST - FILTER FABRIC WASHED STONE

→ ANCHOR SKIR<sup>™</sup>

6" MINIMUM

### **EROSION AND SEDIMENT CONTROL NOTES:**

- 1. STABILIZATION MEASURES INCLUDING TEMPORARY GRASSING SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
  - -WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- 3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS. IF SITE INSPECTIONS IDENTIFY DEVICES THAT ARE DAMAGED OR ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED AS SOON AS PRACTICAL OR AS REASONABLY POSSIBLE AND BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE.
- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION, FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED.
- 5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 7. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 8. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 9. INLET PROTECTION IS TO BE PROVIDED AT ALL EXISTING INLETS THAT RECEIVE FLOW FROM THE DISTURBED AREAS.

APPROVED SEDIMENT BASIN.

1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND

2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN

4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF

6. WIRE MESH SHALL BE MIN. 13 GAGE WITH MAXIMUM 12" OPENINGS.

7. WIRE AND WASHED STONE WILL BE REQUIRED AND NOTED ON PLANS WHEN:

A. AT TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE)

SILT FENCE

NOT TO SCALE

B. AT DENUDED LIMITS WHERE AN UNDISTURBED BUFFER IS 50 FEET

3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE

FOR A PERIOD OF MORE THAN 30 DAYS.

SELF-FASTENER ANGLE STEEL TYPE.

6 LINE WIRES WITH 12" STAY SPACING.

5. TURN SILT FENCE UP SLOPE AT ENDS.

OR LESS AWAY

SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.

EXISTING GROUND

STEEL POST -

**GENERAL NOTES:** 

WIRE FENCING

10. CONTRACTOR SHALL PROVIDE ONE STABILIZED CONSTRUCTION ENTRANCE AT ALL TIMES DURING CONSTRUCTION. LOCATION SHALL BE FIELD LOCATED AND COORDINATED WITH THE OWNER.

\$4.400 CARCAR CARAR CARA

1. A STABILIZED ENTRANCE PAD OF 2" OF 3" SIZE COURSE STONE OR RAIL ROAD BALLAST SHALL BE LOCATED

2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE MAY BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE

ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL

4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.

STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT

5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN

WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN

WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.

6. SOIL STABILIZATION FABRIC (AS SPECIFIED BY THE DESIGNER) SHALL BE USED.

SOIL STABILIZATION FABRIC -UNDER 2" OF 3"WASHED STONE

### MAINTENANCE REQUIREMENTS

PUBLIC STREET

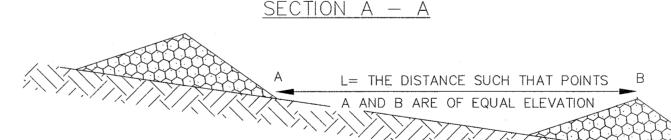
Approved Construction Plan

- 1. RESEED AND MULCH SEEDED AREAS WHERE SEEDLING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE.
- 2. MOW SEEDED AREAS NO MORE THAN ONCE A YEAR. REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.
- 3. RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES, CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.
- 4. INSPECT PERMANENT DIVERSIONS AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA, AND REPAIR THE DIVERSION RIDGE. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITION AT ALL TIMES.
- 5. INSPECT CHANNELS AT REGULAR INTERVALS AS WELL AS AFTER MAJOR RAINS AND MAKE REPAIRS PROMPTLY, GIVE SPECIAL ATTENTION TO THE OUTLET AND INLET SECTIONS OTHER POINTS WHERE CONCENTRATED FLOW ENTERS. SCOUR HOLES OR BANK FAILURES, MAKE REPAIRS IMMEDIATELY. MAINTAIN ALL VEGETATION ADJACENT TO THE CHANNEL IN A HEALTHY, VIGOROUS CONDITION TO PROTECT THE AREA FROM EROSION AND SCOUR DURING OUT-OF-BANK FLOW.
- 7. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 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.
- 8. INSPECT SILT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SILT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- 9. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF NO. 4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
- 10. INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.

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, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL.

REMOVE 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.

# FILTER FABRIC-12" OF NCDOT #5 OR #57 WASHED STONE UPSTREAM SIDE 2' MAX. AT CENTER - CLASS 'B' STONE 4' TO 6' FILTER FABRIC-SECTION A - /



FOUNDATION. 2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS.

1. PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC

- 3. EXTEND STONE AT LEAST 1.5 FT. BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
- 4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
- . 5. PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
- 6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.
- 7. ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

## TEMPORARY ROCK CHECK DAM

NOT TO SCALE



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

### **EROSION CONTROL NOTES**

### SEEDBED PREPARATION NOTES

- SURFACE WATER CONTROL MEASURES TO BE INSTALLED ACCORDING TO PLAN. COMPLETE GRADING BEFORE PREPARING SEEDBED.
- AREAS TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL 3" DEEP ON SLOPES 2:1 OR FLATTER. TOTAL SEEDBED PREPARED DEPTH SHALL BE 4" TO 6" DEEP. IF SOILS ARE COMPACTED DURING GRADING LOOSEN TO A DEPTH OF 6" TO 8".
- LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS SHALL BE REMOVED FROM THE SURFACE TO PREVENT INTERFERENCE WITH ESTABLISHMENT AND MAINTENANCE OF VEGETATION.
- 4. APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. SOILS WITH pH HIGHER THAN 6 NEED NOT BE LIMED. IF pH IS NOT KNOWN, APPLY LIME ACCORDING TO SEEDING SPECIFICATIONS BELOW. APPLY LIMESTONE AND INCORPORATE INTO TOP 4" TO 6" OF SOIL.
- APPLY FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF NO SOIL TEST HAS BEEN PERFORMED, APPLY FERTILIZER ACCORDING TO SEEDING SPECIFICATIONS BELOW.
- ROUGHEN SEEDBED SURFACE PRIOR TO APPLICATION. GROOVE OR FURROW SLOPES STEEPER THAN 3:1.
- 7. FOR TEMPORARY SEEDING OF AREAS WHICH WILL NOT BE BROUGHT TO FINAL GRADE FOR MORE THAN 15 WORKING DAYS, FOLLOW THE TEMPORARY SEEDING SPECIFICATIONS BELOW.

PERMANENT SEEDING SPECIFICATIONS

### LOW MAINTENANCE AREAS

STEEP SLOPES OR STONY, SHALLOW OR DRY SOILS

DATES	TYPE	RATE
AUG. 25 - SEPT. 15 FEB. 15 - MAR. 21	TALL FESCUE SERICEA LESPEDEZA KOBE LESPEDEZA	100 LB/ACRE 30 LB/ACRE 10 LB/ACRE

### GENTLE SLOPES, AVERAGE SOILS

DATES	TYPE	RATE
AUG. 25 — SEPT. 15 FEB. 15 — MAR. 21	TALL FESCUE SERICEA LESPEDEZA KOBE LESPEDEZA	80 LB/ACRE 20 LB/ACRE 10 LB/ACRE

### HIGH MAINTENANCE AREAS

GENTLE SLOPES, SOILS WITH AVERAGE OR BETTER MOISTURE, COOL SITES

DATES	TYPE	RATE
AUG. 25 — SEPT. 15	BLEND OF TWO TALL FESCUES (S TWO OR MORE K BLUEGRASS VARI	•

### GENTLE SLOPES, DRIER SOILS, PHYSICAL LIMITATIONS

DATES		TYPE	RATE	
AUG. 25 – SE	EPT. 15	FESCUE AND	IORE TURF TYPE	250 LB/ACRE

### GRASS-LINED CHANNELS, AVERAGE SOILS

DATES	TYPE	RATE
AUG. 25 - OCT.	TALL FESCUE	200 LB/ACRE OR 4 - 5 LB/1000 SF

### GRASS-LINED CHANNELS, DRY SOILS

DATES	TYPE	RATE	
APRIL 15 - JUNE 30	COMMON BERMUDA	GRASS 40 - 80 LB/ACRE 1 - 2 LB/1000 SF	Ol

AMENDMENTS SHALL BE APPLIED AT THE RATE OF 4000 LB/ACRE OF GROUND AGRICULTURAL LIMESTONE AND 1000 LB/ACRE OF 10-10-10 FERTILIZER. DRY SOIL, GRASS-LINED CHANNELS SHALL USE 3000 LB/ACRE OF GROUND AGRICULTURAL LIMESTONE AND 500 LB/ACRE OF 10-10-10 FERTILIZER.

MULCH SHALL BE APPLIED AT THE RATE OF 4000 LB/ACRE OF STRAW. STRAW SHALL BE ANCHORED BY TACKING WITH ASPHALT. NETTING OR MULCH ANCHORING TOOL. JUTE OR EXCELSIOR MATTING SHALL BE USED IN GRASS LINED CHANNELS TO CALCULATED HIGH WATER DEPTH.

**AMENDMENTS** 

ACRE OF 10-10-10

FERTILIZER

TEMPORARY	SEEDING	SPECIFICATIONS	– (TS)
DATES		TYPE	RA'

JAN. 1 — MAY 1 FEB. 15 — MAR. 21	RYE (GRAIN) ANNUAL LESPEDEZ OR LOBE	120 LB/ACRE A 50 LB/ACRE	2000 LB/ACRE GROUN AGRICULTURAL LIME— STONE AND 750 LB/ ACRE OF 10-10-10 FERTILIZER
DATES	TYPE	RATE	AMENDMENTS
MAY 1 - AUG. 15	GERMAN MILLET	40 LB/ACRE	2000 LB/ACRE GROUN AGRICULTURAL LIME— STONE AND 750 LB/ ACRE OF 10-10-10 FERTILIZER
DATES	TYPE	RATE	<u>AMENDMENT</u> S
AUG. 15 - DEC. 30	RYE (GRAIN)	120 LB/ACRE	2000 LB/ACRE GROUN AGRICULTURAL LIME-

MULCH SHALL BE APPLIED AT THE RATE OF 4000 LB/ACRE STRAW. STRAW SHALL BE ANCHORED BY TACKING WITH ASPHALT. NETTING OR MULCH

GRADED SLOPES AND FILLS — THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE WHICH CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED SHALL, WITHIN 2 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

GROUND COVER - WHENEVER LAND DISTURBING ACTIVITY IS UNDERTAKEN ON A TRACT COMPRISING MORE THAN ONE ACRE, IF MORE THAN ONE

CONTIGUOUS ACRE IS UNCOVERED A GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE PLANTED OR OTHERWISE PROVIDE WITHIN 21 CALENDAR DAYS ON THAT PORTION OF THE TRACT UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAKEN, PROVIDED THAT THIS SHALL NOT APPLY TO CLEARED LAND FORMING THE BASIN OF A RESERVOIR LATER TO BE INUNDATED.

ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS MODELS AND SAMPLES ARE THE EXCLUSIVE PROPERTY OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

LIOIL

0

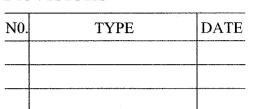
 $^{1}$ OR

SED

RELE/

	TYPE	DATE
•	SCHEMATIC DESIGN	12.18.13
•	DESIGN DEVELOPMENT	05.23.14
•	100% CD	06.27.14
•	BID AND PERMIT SET	07.25.14
-	FOR CONSTRUCTION	

### Revisions



SEAL



### CHAMBERS ARCHITECTURAL ASSOCIATES



### ARCHITECT & INTERIORS CHAMBERS 1800 WASHINGTON BLVD.

SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982



Urban Development + Geomatics 909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201

> www.wkdickson.com LICENSE NO. F-0374 DENISE L. FREUND, PE



CENTER - CAPE FEAR COUNTRY CLUB 1518 COUNTRY CLUB ROAD

Sheet Title

**EROSION CONTROL** DETAILS

as shown 07/25/14

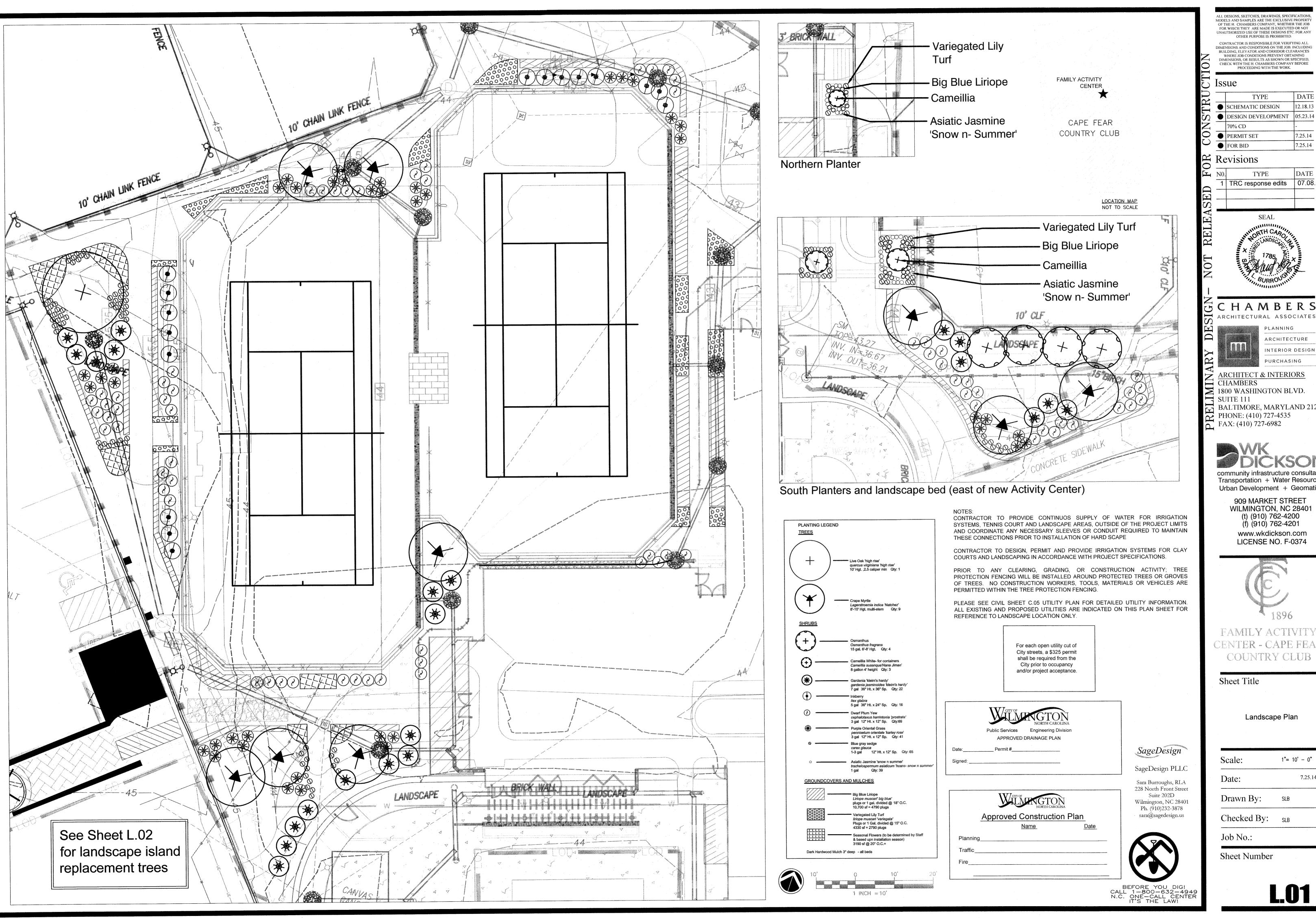
Drawn By:

Checked By:

Sheet Number

Job No.:

20130125.00.WL



ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATION MODELS AND SAMPLES ARE THE EXCLUSIVE PROPER FOR WHICH THEY ARE MADE IS EXECUTED OR NOT UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

Issue

ر د		TYPE	DATI
<u> </u>	•	SCHEMATIC DESIGN	12.18.13
$\mathbf{Q}^{-}$	•	DESIGN DEVELOPMENT	05.23.1
		70% CD	-
Ś	•	PERMIT SET	7.25.14
<u>ر</u>		COD DID	7 25 14

Revisions

TYPE TRC response edits

SEAL

5 C H A M B E R S

ARCHITECTURE INTERIOR DESIGN PURCHASING

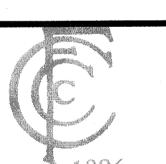
ARCHITECT & INTERIORS **CHAMBERS** ≥ 1800 WASHINGTON BLVD.

BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982

Transportation + Water Resources Urban Development + Geomatics

> 909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201

www.wkdickson.com LICENSE NO. F-0374



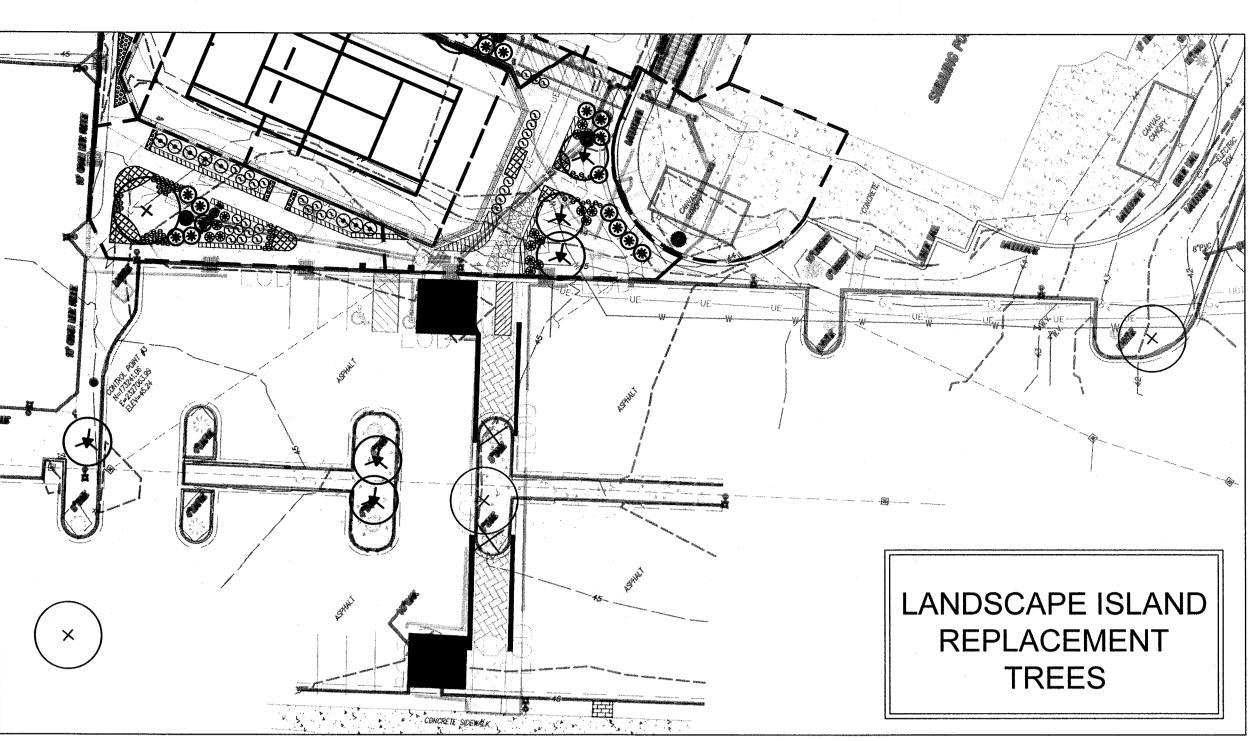
FAMILY ACTIVITY CENTER - CAPE FEAR COUNTRY CLUB

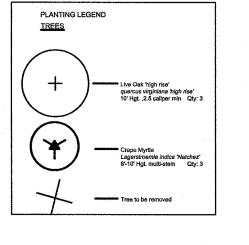
Sheet Title

Landscape Plan

1"= 10' - 0" Date: Drawn By: SLB Checked By: SLB

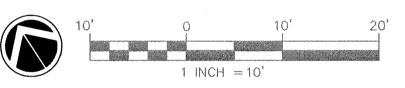
Job No.:

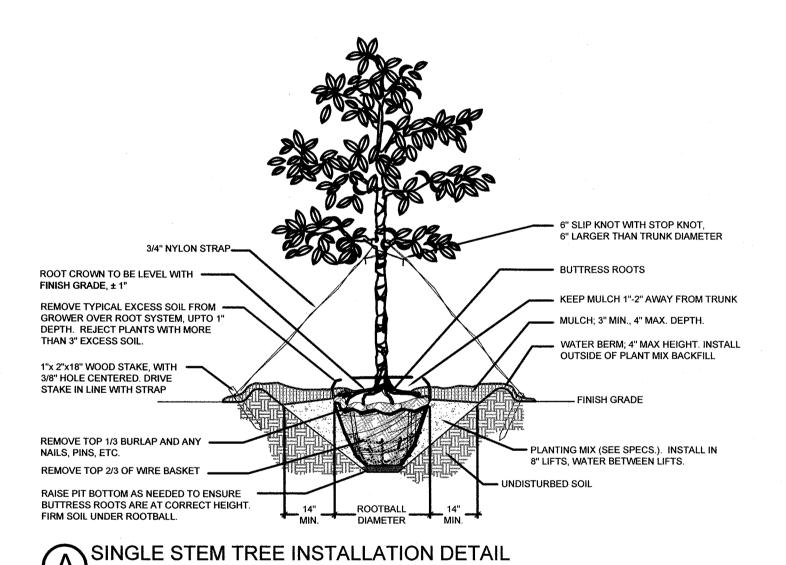


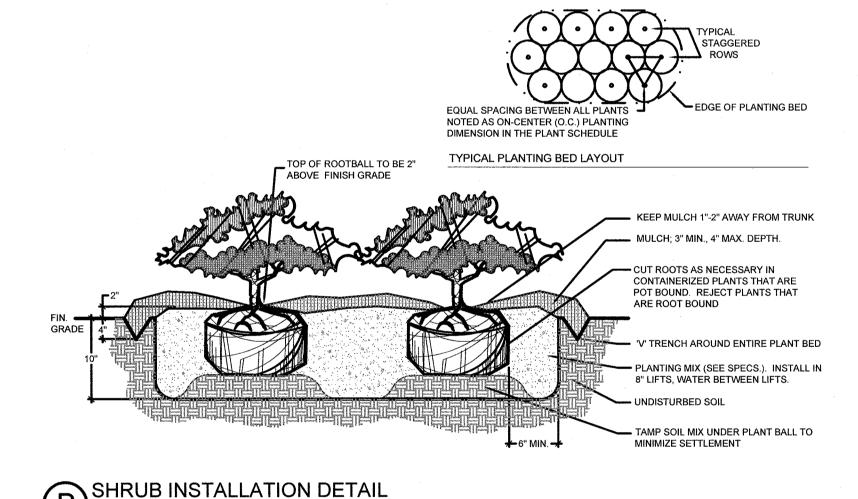


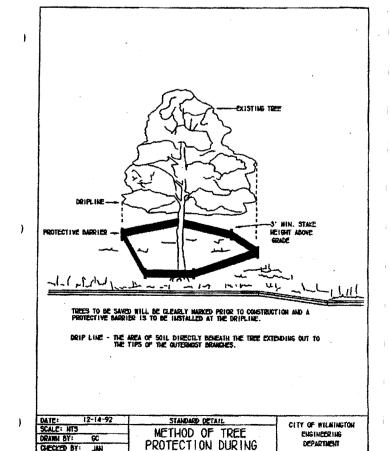
### **REPLACEMENT NOTES:**

- 1. Three (3) Trees to be removed:
- (1) 10" Oak • (2) 5' Crape Myrtles
- Replacement ratio: • 10" Oak x 100% ÷ 3 = 3 trees (3 live oak high rise)
- $5"+5" \times 100\% \div 3 = 3 \text{ trees (3 crape myrtles)}$ No parking space shall be greater than 120' from a landscape island.
- 4. Live Oak in center Island shall be located to maintain a clear accessible route.
- 5. No parking space is more than 120' from a landscape island.

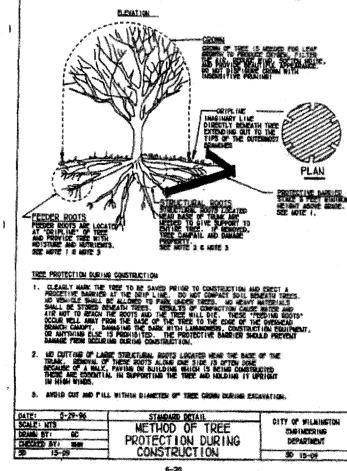


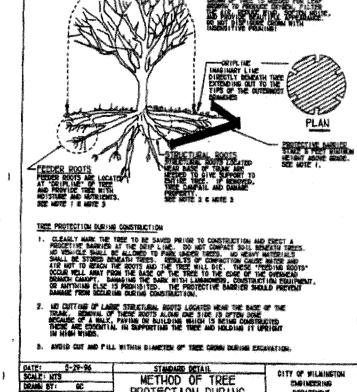






PLANTING ISLAND REPLACEMENT TREES



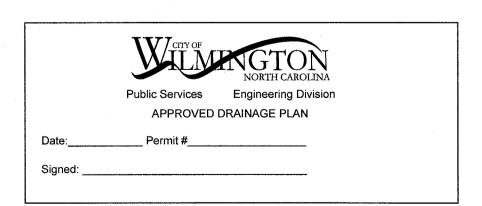


CITY TREE PROTECTION FENCE DETAIL

SCALE: NTS

See engineers demolition plans for tree protection locations

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



Appr	oved Construction	<u>n Plan</u>
	<u>Name</u>	Date
Planning		
Traffic		

### PLANT MATERIAL NOTES

ARCHITECT PRIOER TO SHIPMENT.

- ALL PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT STANDARDS ESTABLISHED BY 'THE AMERICAN ASSOCIATION OF NURSERYMAN".
- 2. CONTAINERIZED PLANTS SHALL HAVE A ROOT SYSTEM SUFFICIENT ENOUGH IN DEVELOPMENT TO HOLD THE SOIL INTACT WHEN REMOVED FROM THE CONTAINER. THE ROOT SYSTEM SHALL NOT BE ROOT BOUND, A CONDITION WHERE THE ROOT SYSTEM IS DENSE IN MASS, EXCESSIVELY INTERTWINED, AND HAS ESTABLISHED A CIRCULAR GROWTH PATTERN.
- 3. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
- 4. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY UNLESS APPROVED BY THE LANDSCAPE
- 5. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.
- 6. TOPSOIL AMENDMENTS REQUIRED FOR SOIL MIXES SHALL BE PROVIDED BY CONTRACTOR AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR MUST LOAD, HAUL, MIX AND SPREAD ALL TOPSOIL AND OTHER SOIL ADDITIVES AS REQUIRED ON SITE.
- 7. CONTRACTOR SHALL VERIFY AND/ OR AMEND ALL PLANTING SOILS TO ENSURE PROPER SUITABILITY INCLUDING STATE RECOMMENDED QUANTITIES OF NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE QUALITY PLANTING SOIL FOR ALL PLANT MATERIAL TO SURVIVE.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PLANTING PITS PERCOLATE PROPERLY PRIOR TO PLANTING INSTALLATION.
- 9. SHRUBS, BULBS, AND GROUNDCOVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS AND/OR IN THE PLANT SCHEDULE.
- 10. THE CONTRACTOR SHALL THE VERIFY EXTENT OF SEEDING OR SOD AREA WITH OWNER REPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 11. INSTALLATION OF PLANT MATERIAL TO BE COMPLETED BY CITY CREW AND WILL BEGIN UPON COMPLETION OF PARKING LOT AND HARDSCAPE.
- 12. IRRIGATION LAYOUT AND PLAN BY OTHERS. NEW IRRIGATION LINES SHALL CONNECT TO THE EXISTING SYSTEM AND WATER SUPPLY AS INDICATED ON PLANS.
- 13. CONTRACTOR TO DESIGN, PERMIT AND PROVIDE IRRIGATION SYSTEMS FOR CLAY COURTS AND LANDSCAPING IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
- 14. CONTRACTOR TO PROVIDE CONTINUOS SUPPLY OF WATER FOR IRRIGATION SYSTEMS, TENNIS COURT AND LANDSCAPE AREAS, OUTSIDE OF THE PROJECT LIMITS AND COORDINATE ANY NECESSARY SLEEVES OR CONDUIT REQUIRED TO MAINTAIN THESE CONNECTIONS PRIOR TO INSTALLATION OF HARDSCAPE

### TREE INSTALLATION NOTES

- 1. ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI, 1990, PART 1, "SHADE AND FLOWERING TREES").
- 2. TREES SUPPLIED MUST HAVE BEEN PROPERLY PLANTED AND GROWN IN THE NURSERY. THE ROOT CROWN (ALSO CALLED THE TRUNK FLARE) SHALL BE EVIDENT NEAR THE TOP OF THE GROUND. ANY EXCESS SOIL, UP TO 3 INCHES COVERING THE CROWN WILL HAVE TO BE REMOVED CAREFULLY BY HAND, IN ORDER TO PREVENT ROOT SCRAPES. THE TREE IS THEN TO BE PLANTED WITH THE ROOT CROWN IN PROPER RELATION TO THE SURROUNDING GRADE. ANY TREES WITH MORE THAN 3 INCHES OF SOIL ON TOP OF THE ROOT CROWN WILL BE REJECTED. THE NURSERY OWNERS MAY DIG OVERSIZE BALLS AND REMOVE THE SOIL IN ORDER FOR THE ROOT SYSTEM DIAMETER (WHICH IS THE REQUIRED ROOT BALL DIAMETER) TO MEET THE SPECIFICATION FOR THE TRUNK CALIPER REQUIRED.
- 3. BALL AND BURLAPPED (B&B) PLANTS MUST HAVE FIRM, NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN RECOMMENDED IN THE "TREE AND SHRUB TRANSPLANTING MANUAL", AND BE OF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS DRY, CRACKED OR BROKEN BEFORE OR DURING PLANTING
- REMOVE ALL TREATED OR PLASTIC-COATED BURLAP, STRAPPING, WIRE OR NYLON TWINE FROM ROOT BALL. AFTER SETTING IN HOLE, CUT AWAY 2/3 OF WIRE BASKET, IF ANY, AND TOP 1/3 OF
- 5. SOAK ROOT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
- 6. CONSTRUCT 4" HIGH SAUCER (WATER BERM) OUTSIDE OF PLANT MIX BACK FILL.
- 7. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.
- 8. NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER REPRESENTATIVE EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR WITHIN EXISTING TREE AREAS.
- 9. THE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PROPOSED TREES AND OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT AND OWNER REPRESENTATIVE PRIOR TO INSTALLATION.
- 10. ALL TREES SHALL BE STAKED AT TIME OF INSTALLATION IN ACCORDANCE WITH PLANTING DETAILS.
- 11. THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
- 12. STAKES FOR TREE SUPPORT SHALL BE CONSTRUCTED OF 2"x2" x18" UNTREATED PINE. GUYING FABRIC SHALL BE 'ARBOR TAPE', AS MANUFACTURED BY NEPTCO, PAWTUCKET, RI. (401) 722-5500 (OR APPROVED EQUAL). COLOR SHALL BE OLIVE DRAB.

### SHRUB INSTALLATION NOTES

- CUT ROOTS AS NECESSARY IN CONTAINERIZED PLANTS THAT ARE POT BOUND. REJECT PLANTS THAT HAVE GIRDLED ROOT OR ARE BOUND.
- INSTALL TOP OF PLANT BALL 2" ABOVE ADJACENT GRADE.
- 3. TAMP PLANT SOIL MIX FIRMLY IN 8" LIFTS AROUND PLANT BALL.
- 4. SOAK PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.





SageDesign PLLC

Sara Burroughs, RLA 228 North Front Street Suite 202D Wilmington, NC 28401 Ph. (910)232-3878 sara@sagedesign.us

ALL DESIGNS, SKETCHES, DRAWINGS, SPECIFICATIONS OF THE H. CHAMBERS COMPANY, WHETHER THE JOB FOR WHICH THEY ARE MADE IS EXECUTED OR NO UNAUTHORIZED USE OF THESE DESIGNS ETC. FOR ANY OTHER PURPOSE IS PROHIBITED.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. INCLUDING BUILDING, ELEVATOR AND CORRIDOR CLEARANCES WHERE JOB CONDITIONS PREVENT OBTAINING DIMENSIONS, OR RESULTS AS SHOWN OR SPECIFIED, CHECK WITH THE H. CHAMBERS COMPANY BEFORE PROCEEDING WITH THE WORK.

### Issue

$\subseteq$	TOU	, ac	
$\sum_{i=1}^{n}$		TYPE	DA
	•	SCHEMATIC DESIGN	12.1
$\mathbf{\tilde{N}}$	•	DESIGN DEVELOPMENT	05.2
Z		70% CD	-
0	•	PERMIT SET	7.25

### Revisions

FOR BID

_				
<u>-</u>	N0.	TYPE	DATE	
	1	TRC response edits	07.08.14	
<u> </u>				
$\overline{\mathcal{L}}$		,		

7.25.14

SEAL



### & C H A M B E R S ARCHITECTURAL ASSOCIATES

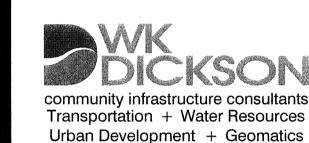
PLANNING



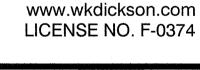
ARCHITECTURE INTERIOR DESIGN PURCHASING

### ARCHITECT & INTERIORS **CHAMBERS**

1800 WASHINGTON BLVD. SUITE 111 BALTIMORE, MARYLAND 21230 PHONE: (410) 727-4535 FAX: (410) 727-6982



909 MARKET STREET WILMINGTON, NC 28401 (t) (910) 762-4200 (f) (910) 762-4201





FAMILY ACTIVITY CENTER - CAPE FEAR COUNTRY CLUB

Sheet Title

LANDSCAPE DETAILS

1"= 10' - 0"

7.25.14 Date:

Drawn By:

Checked By: SLB

Job No.: