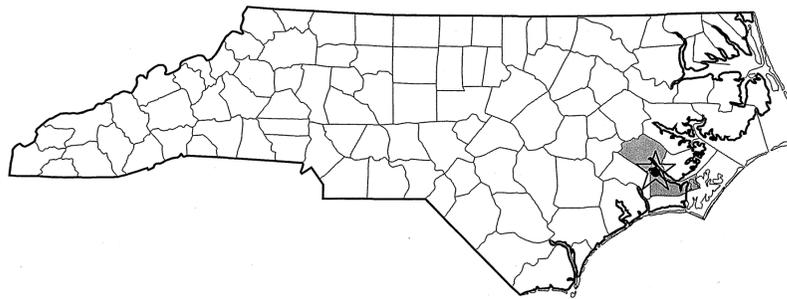


Craven County



CONSTRUCTION DRAWINGS

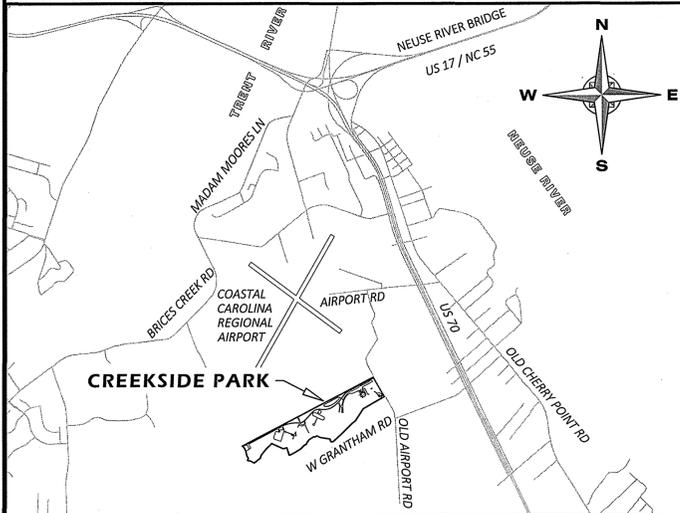
FOR

Creekside Park Playground

REVISIONS:		
REV.	DATE	DESCRIPTION



COVER
CREEKSIDE PARK PLAYGROUND
GRAVEN COUNTY
 NORTH CAROLINA



VICINITY MAP

SITE DATA:

TOTAL ACREAGE IN SITE:	108.5 ACRES
EXIST. IMPERVIOUS COVERAGE:	473,033.1 SF (10.86 ACRES)
TOTAL PROPOSED IMPERVIOUS COVERAGE:	497,123.6 SF (11.41 ACRES)
PROJECT LIMITS:	63,497 SF (1.46 ACRES±)

CIVIL ENGINEERING & LANDSCAPE ARCHITECTURE:

Rivers & Associates, Inc.
Greenville, NC



107 East Second Street
Greenville, North Carolina 27858
p 252-752-4135
f 252-752-3974

www.riversandassociates.com

Contact: Sharon Rhue, MLA, PLA
srhue@riversandassociates.com

James 'Dan' Withers, PE
dwithers@riversandassociates.com

PLUMBING, MECHANICAL & ELECTRICAL ENGINEERING:

Dibble & Pledger, P.A.
Washington, NC

222 West Main Street
Washington, North Carolina 27889

p 252-924-3320
f 252-946-5160

Contact: Ron Pledger, PE
rpledger@dibbleandpledger.com

OWNER:

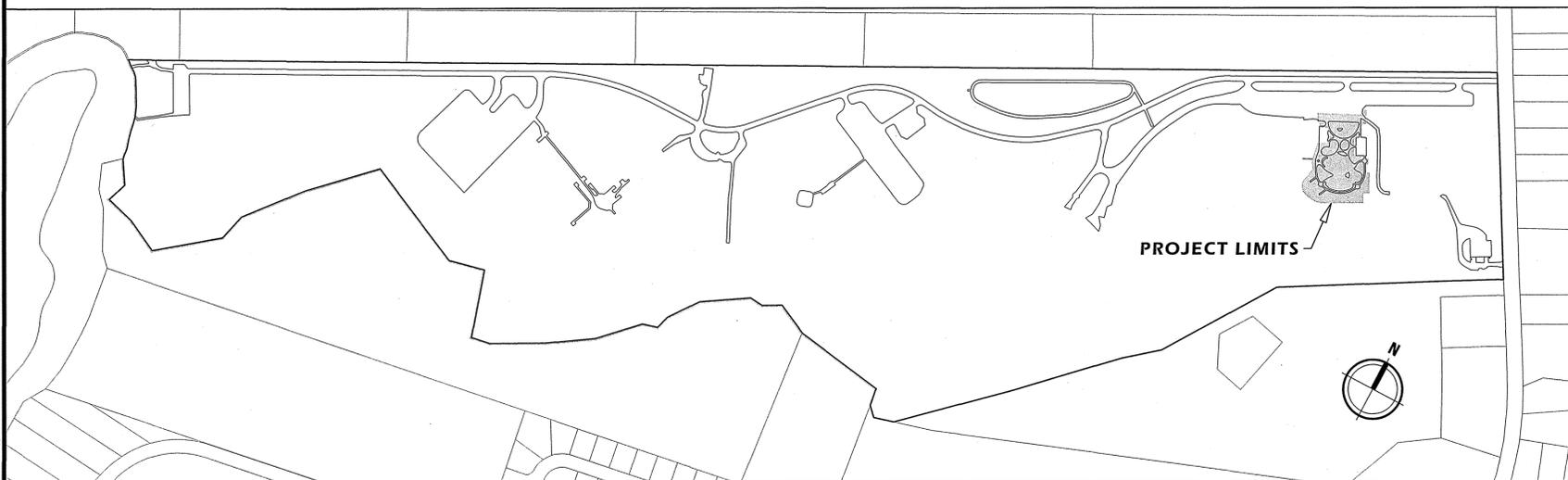
Craven County
New Bern, NC



RECREATION & PARKS DEPARTMENT
406 Craven Street
New Bern, North Carolina 28560

p 252-636-6606
f 252-636-6685

Contact: Eddie Games, Director
egames@cravencountync.gov



CREEKSIDE PARK - PROJECT LOCATION

SHEET INDEX

#	TITLE
C1	Cover
C2	Topographic Survey
C3	Demolition & Erosion Control
C4	Park Layout
C5	Park Layout - Alternates
C6	Grading & Utilities
C7	Planting Plan
D1	Construction Details
D2	Erosion Control Notes & Details
E1	Lighting Installation Plan
E2	Lighting Installation Plan



January 5, 2016

SURVEY	MS/JW	DRAFT	SR/LC
DESIGN	SR	CHECK	SR
PROJECT No.	2015189		
DRAWING No.	W-3646		
SCALE:	AS NOTED		
SHEET No.	OF		9

C1

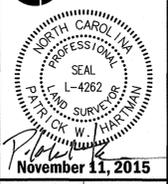
P:\New\Craven - Creekside Park Playground - 2015189\DWG\3646-Cover.dwg - C:\Users\RHUE\Documents - 01-Jan-16 3:00:08 PM

REV.	DATE	DESCRIPTION

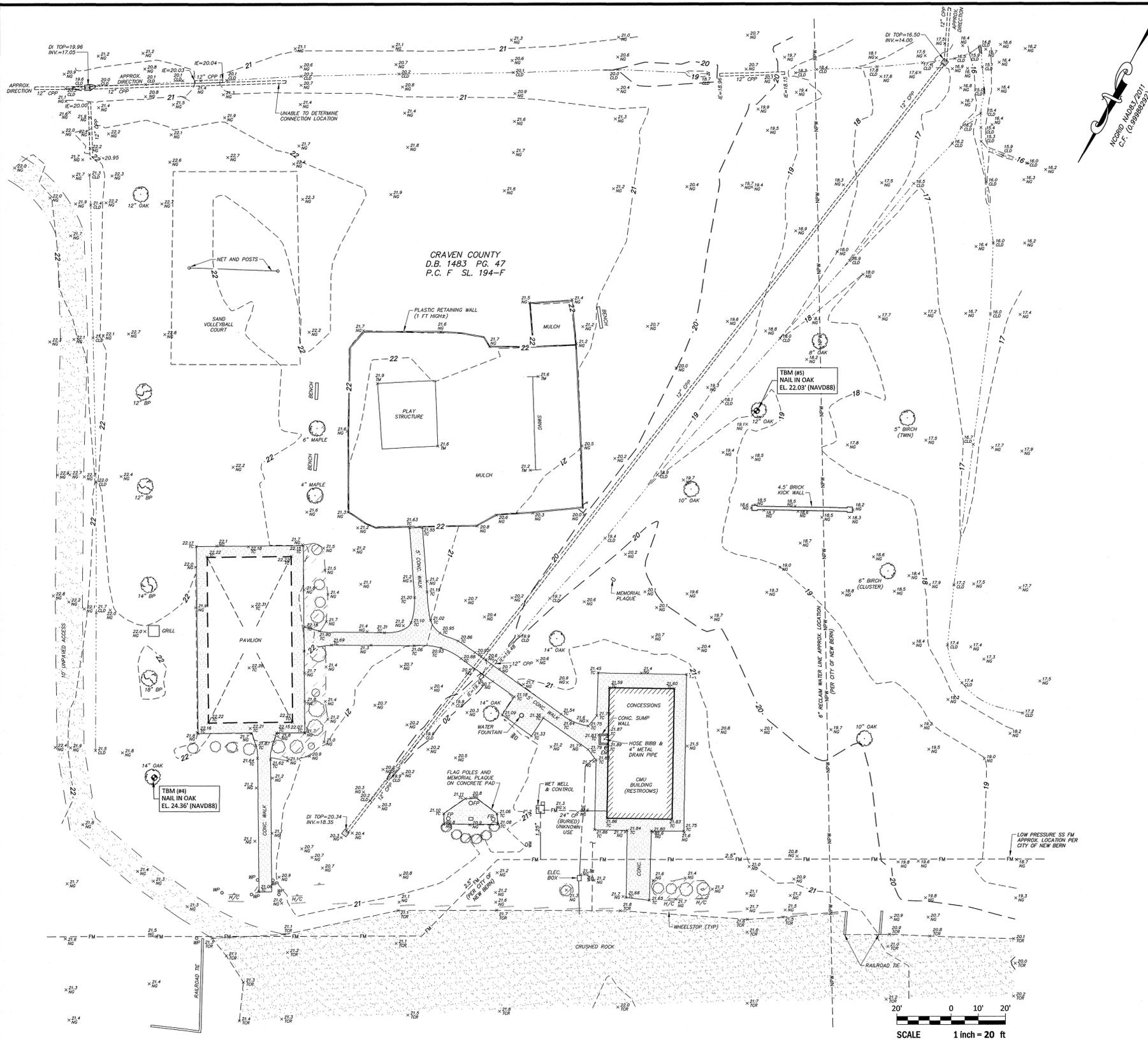


TOPOGRAPHIC SURVEY
CREKESIDE PARK PLAYGROUND
CRAVEN COUNTY
 NORTH CAROLINA
 CRAVEN COUNTY
 CRAVEN COUNTY ARCHITECTS

NC License # 6384
Rivers
 & ASSOCIATES, INC.
 Since 1918
 riversandassociates.com
 107 East Second Street
 Greenville, NC 27638
 (252) 752-4195
 Engineers
 Planners
 Surveyors
 Landscape Architects

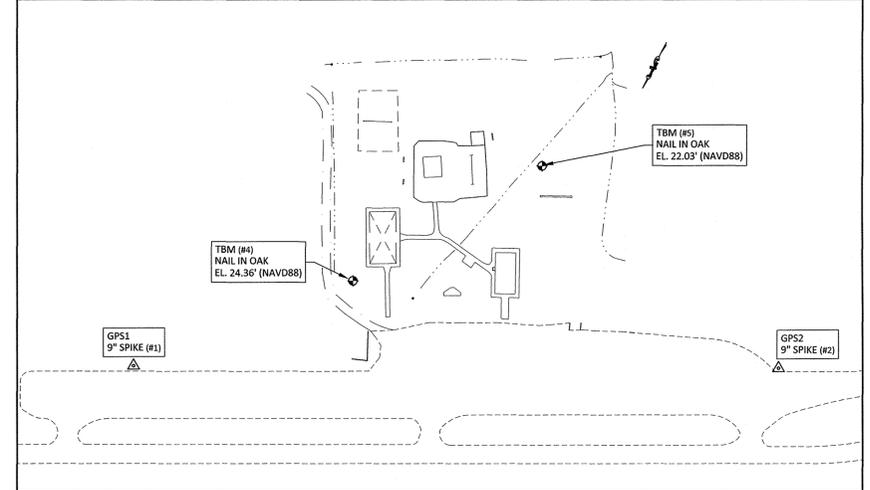


SURVEY	MS/JW	DRAFT	LC
DESIGN	-	CHECK	PH
PROJECT No.	2015189		
DRAWING No.	W-3646		
SCALE:	1" = 20'		
SHEET No.	OF		9



SURVEY CONTROL (GROUND)				
POINT	NORTHING (US FT)	EASTING (US FT)	ELEV. (NAVD88)	DESCRIPTION
1	484503.552	2588228.084	22.38	GPS1 - 9" SPIKE
2	484154.104	2587555.620	17.14	GPS2 - 9" SPIKE
4	484295.890	2588046.016	24.36	NAIL IN OAK
5	484023.554	2587912.043	22.03	NAIL IN OAK

COORDINATES ARE GROUND LOCALIZED AROUND GPS 2 (COMBINED FACTOR 0.99988292)



LEGEND		
	TEMPORARY BENCHMARK (TBM)	x 90.0
	CONTROL POINT	x 20.0
	ELECTRIC METER	x 90.0
	ELECTRIC (UNDERGROUND) (MARKED BY NC811)	x 90.0
	LIFT STATION/WET WELL	x 90.00
	SANITARY SEWER FORCE MAIN (APPROXIMATE FROM CITY OF NEW BERN GIS)	CONC.
	DROP INLET (DI)	BP
	STORM DRAIN	CPP
	WATER METER	IE=
	RECLAIM WATER (NON-POTABLE)	APPROX.
	SIGN	H/C
	SHRUB	WP
	TREES	FP
	BUILDING	SS
	LANDSCAPED AREA	FM
	CENTERLINE OF DITCH/SWALE	D.B.
	CONTOURS	PAGE
		P.C.
		SL.
		CMU
		NATURAL GROUND
		CENTERLINE OF DITCH/SWALE
		TOP OF MULCH
		TOP OF CRUSHED ROCK
		TOP OF CONCRETE
		CONC.
		BRADFORD PEAR
		CORRUGATED PLASTIC PIPE
		INVERT ELEVATION
		APPROX.
		ACCESSIBLE PARKING
		WOOD POST
		FLAG POLE
		SANITARY SEWER
		FORCE MAIN
		DEED BOOK
		PAGE
		PLAT CABINET
		SLIDE
		CONC. MASONRY UNIT

- NOTES:**
- SITE ADDRESS (PER CRAVEN COUNTY GIS): 1821 OLD AIRPORT RD, NEW BERN 28562.
 - ALL DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS.
 - NO POINTS SET UNLESS OTHERWISE INDICATED.
 - THIS PROPERTY IS LOCATED WITHIN A MINIMAL FLOOD RISK AREA, "ZONE X" (AREAS OUTSIDE THE 0.02% ANNUAL CHANCE FLOOD), AS DETERMINED FROM FIRM MAP NUMBER 3720548800J PANEL 5488, EFFECTIVE JULY 2, 2004.
 - ELEVATIONS AND CONTOURS SHOWN ARE BASED ON NAVD 88 DATUM. VERTICAL CONTROL ESTABLISHED FROM MULTIPLE NCGS RTN OBSERVATIONS ON CONTROL POINTS.
 - THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT REPORT. RIVERS AND ASSOCIATES DOES NOT CLAIM THAT ALL MATTERS OF RECORD WHICH MAY OR MAY NOT AFFECT THIS PROPERTY ARE SHOWN HEREON.
 - PROPERTY SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS OF WAY, RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD.
 - UNDERGROUND UTILITIES PLOTTED IN PART FROM ACTUAL FIELD LOCATION OF MARKINGS PAINTED BY NC811 AND IN PART FROM MAPS PROVIDED BY OTHERS AS NOTED. ACTUAL LOCATIONS MAY VARY. OTHER UTILITIES MAY EXIST. SURVEYOR CANNOT PROVIDE ACCURACY OF NC811 MARKINGS. CONTRACTOR SHOULD CONTACT NC811 AT 1-800-632-4949 TO HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING. NC811 TICKET NUMBERS: 0153082486.
 - THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.
 - PIPE INVERTS SHOWN HEREON WERE OBTAINED WITHOUT CONFINED SPACE ENTRY BY THE MOST PRACTICAL METHODS AVAILABLE TO THE SURVEYOR.

OWNER:
CRAVEN COUNTY
PO BOX 1128
NEW BERN, NC 28563

REFERENCES:
 PARCEL ID: 7-103-219
 D.B. 1483 PG. 47
 P.C. F. SL. 194-F

STATE OF NORTH CAROLINA COUNTY OF PITT

I, PATRICK W. HARTMAN, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY MADE BY JW/MS ON 11/04-11/2015 OF THE PROPERTY SHOWN. BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM INFORMATION FOUND IN REFERENCED BOOK(S) AND PAGE(S). THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+, AND IN ACCORDANCE WITH THE US NATIONAL MAPPING ACCURACY STANDARDS. THE MAXIMUM VERTICAL ERROR IS NOT GREATER THAN ONE-HALF THE CONTOUR INTERVAL EXCEPT AS NOTED; THAT VERTICAL CONTROL WAS ESTABLISHED AT THE SITE BY NC RTN SOLUTION.

1) CLASS OF SURVEY:	CLASS A (HORIZONTAL) CLASS C (VERTICAL)
2) POSITIONAL ACCURACY:	3 CM (VERTICAL)
3) TYPE OF GPS FIELD PROCEDURE:	NCGS RTN
4) DATE OF SURVEY WORK:	11/4-11/2015
5) DATUM/EPOCH:	NA83/2011 AND NAVD88
6) PUBLISHED CONTROL/FIXED CONTROL:	NCGS RTN
7) GEOID MODEL:	GEOID12A
8) COMBINED GRID FACTOR:	0.99988292
9) UNITS:	US SURVEY FEET

AND THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600). WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER, AND SEAL THIS 11TH DAY OF NOVEMBER, 2015.

PROFESSIONAL LAND SURVEYOR LICENSE No. L-4262

REV.	DESCRIPTION	DATE



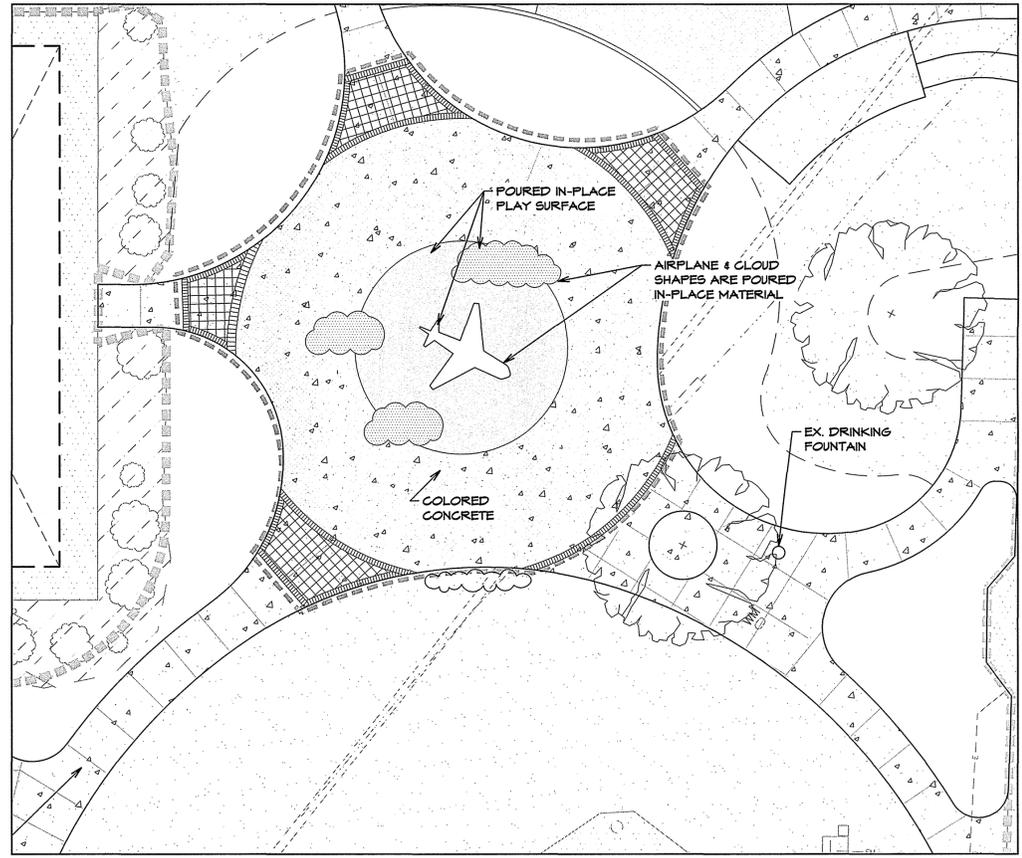
PARK LAYOUT - ALTERNATES
CREEKSIDE PARK PLAYGROUND
GRAVEN COUNTY
 NORTH CAROLINA
 CRAVEN COUNTY
 CRAVEN COUNTY ARCHITECTS

NC License: F-4924
Rivers & Associates, Inc.
 Since 1916
 Engineers
 Planners
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 Landscape Architects
 107 East Second Street
 Greenville, NC 27938
 (252) 752-4135

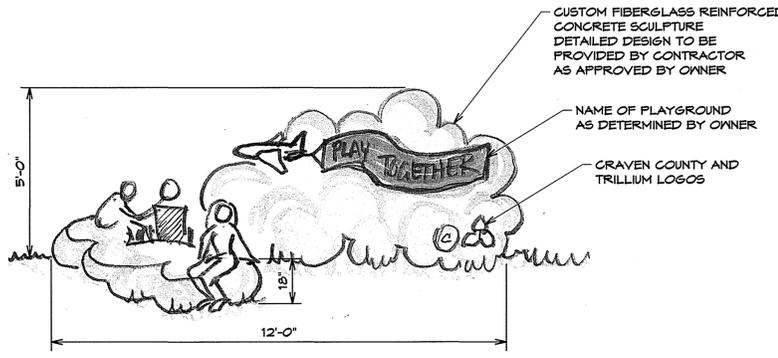
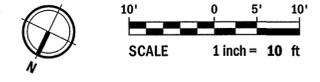
NORTH CAROLINA
 LANDSCAPE ARCHITECTS
 KATHLEEN M. RIVERS
 01.05.16
January 5, 2016

SURVEY	MS/JW	DRAFT	SR/LC
DESIGN	SR	CHECK	SR
PROJECT No.	2015189		
DRAWING No.	W-3646		
SCALE:	AS NOTED		
SHEET No.			OF 9

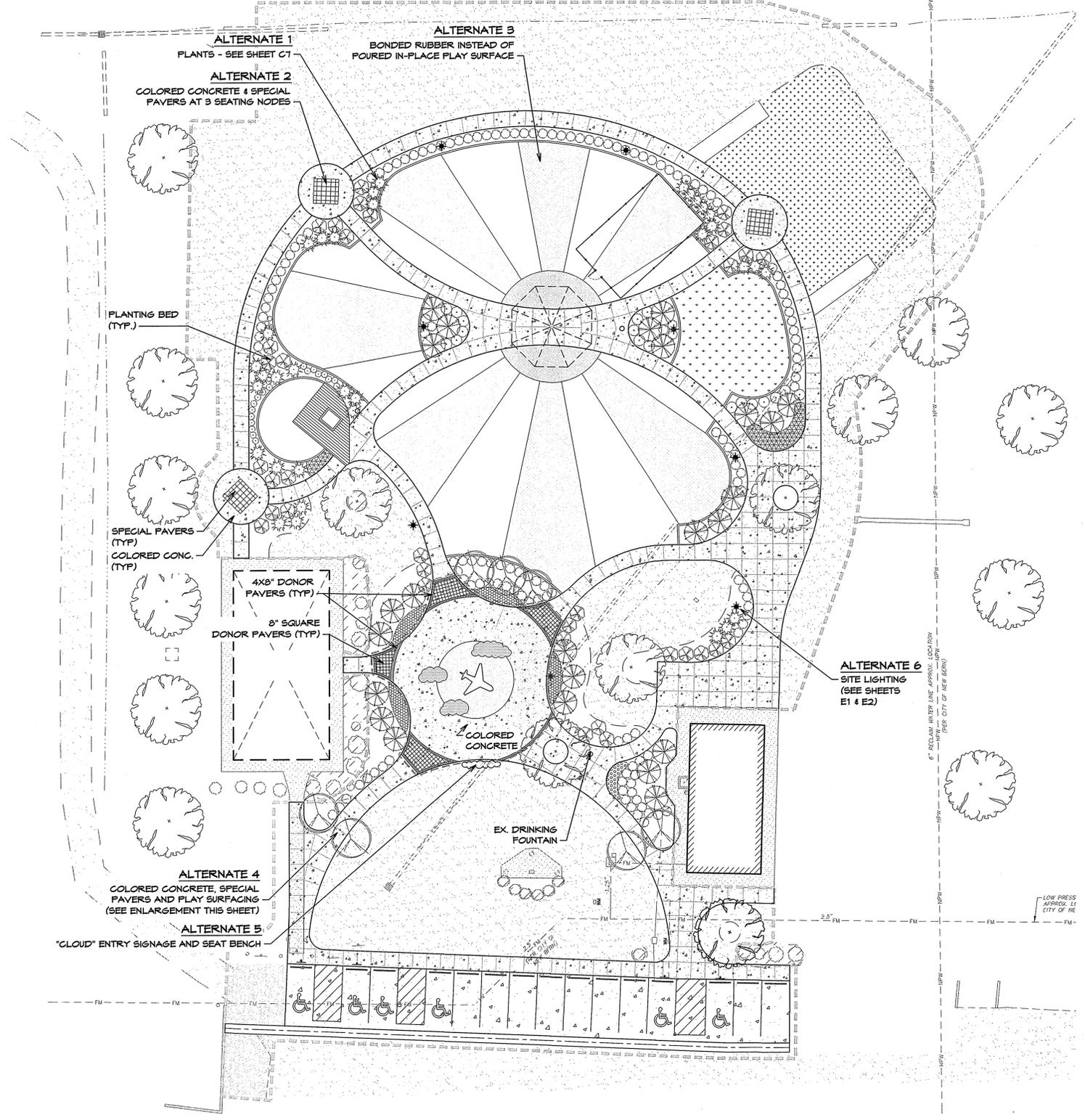
C5



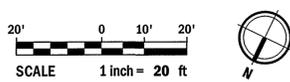
ALTERNATE 4 - CENTERPIECE ENLARGEMENT
SCALE: 1" = 10'



ALTERNATE 5 - CONCEPTUAL ENTRY SIGNAGE & BENCH
NTS



ALTERNATES - PARK LAYOUT
SCALE: 1" = 20'

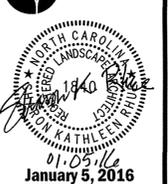


Craven County - Creekside Park Playground - 2015189/3646-Creekside Park.dwg - CS-PARK_AJT - RIVERS/MS - Jan 16 @ 3:42:14 PM



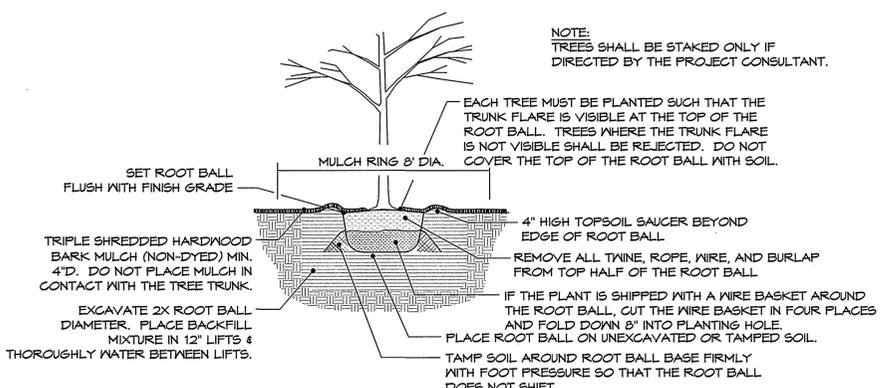
PLANTING PLAN
CREEKSIDE PARK PLAYGROUND
GRAVEN COUNTY
 NORTH CAROLINA

NC License #4-034
Rivers & Associates, Inc.
 iverriversandassociates.com Since 1976
 107 East Second Street Greenville, NC 27836
 Engineers Planners Architects Landscape Architects
 (252) 752-4159

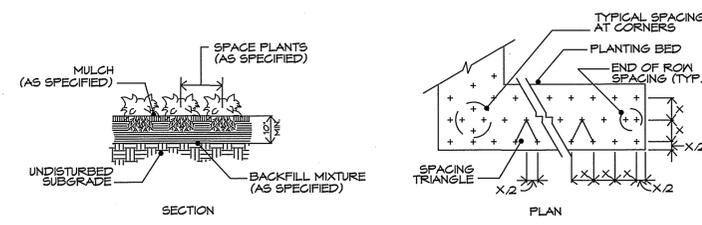


SURVEY MS/JW DRAFT SR/LC
 DESIGN SR CHECK SR
 PROJECT No. **2015189**
 DRAWING No. **W-3646**
 SCALE: **AS NOTED**
 SHEET No. **OF 9**

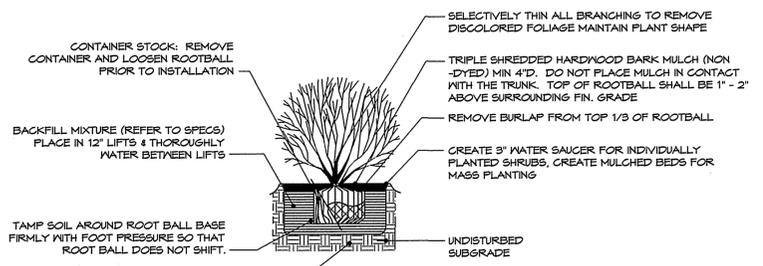
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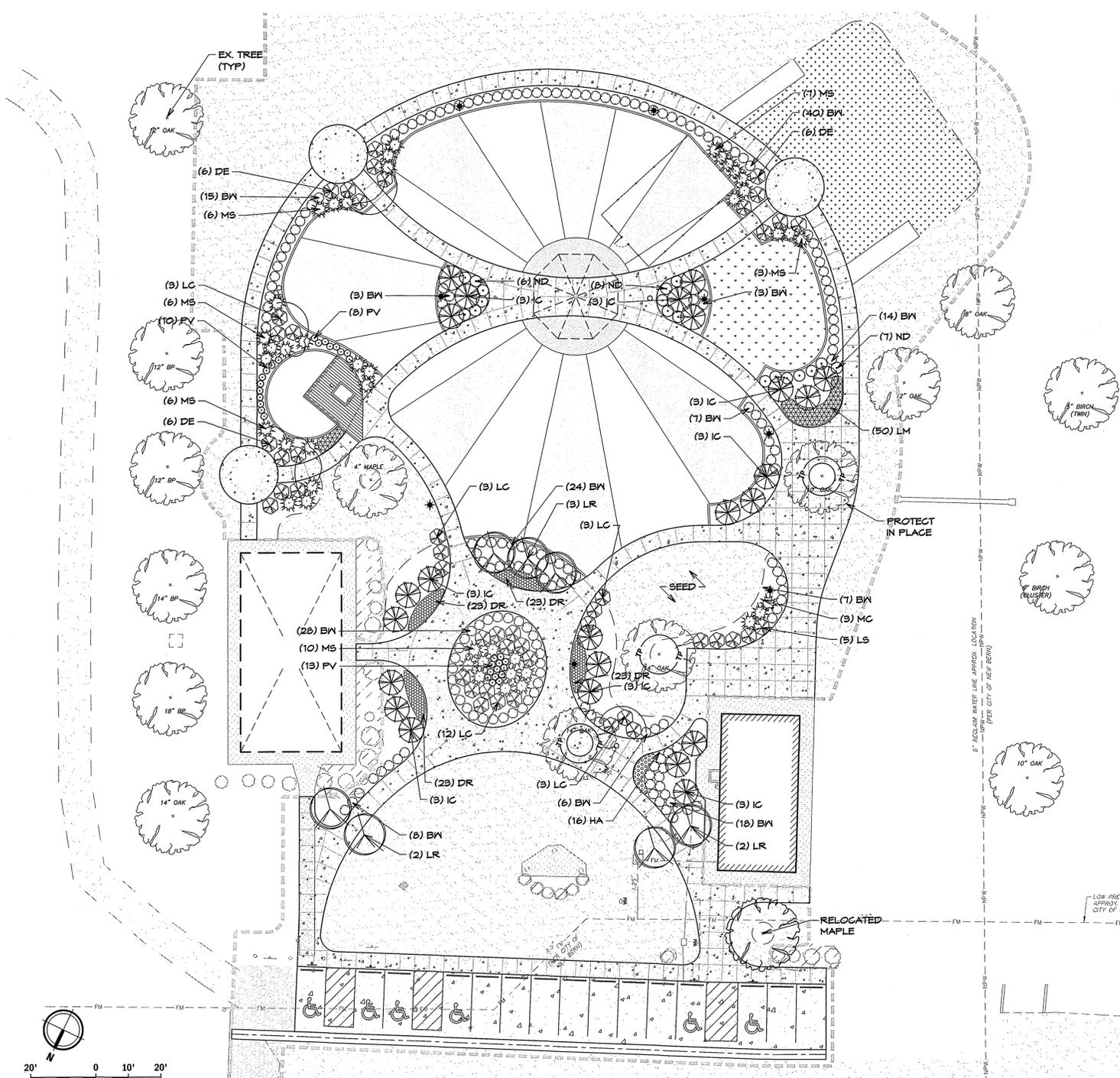
1 TREE PLANTING DETAIL
SCALE: NTS



2 GROUNDCOVER PLANTING DETAIL
SCALE: NTS



3 SHRUB PLANTING DETAIL
SCALE: NTS



PLANTING NOTES

PROTECTION: Root balls, trunks, branches and foliage of plants shall be adequately protected at all times from sun and drying wind or frost. Plants with broken root balls or excessive damage to the crown shall be replaced, in kind, prior to installation.

STANDARDS: All plants shall be in accordance with the American Standard For Nursery Stock, latest edition, published by the American Association of Nurserymen, Inc. with regard to sizing and description.

QUALITY: All plants shall be nursery grown and hardy under climatic conditions similar to those in the locality of the project. All plants shall be typical of their species or variety and shall have a normal habit of growth. They shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They should be free of disease and insect pests, eggs or larvae. They shall have healthy, well-developed root systems.

SUBSTITUTIONS: When plants of a specified kind or size are not available within a reasonable distance, the contractor may make substitutions upon request, if approved by the Project Consultant. Proposal for substitution of plant material shall be submitted at least 5 days prior to the final bid date for consideration.

SIZE: All plants shall conform to the measurements specified on the plant list unless otherwise authorized in writing by the Project Consultant.

PRUNING: Each tree and shrub shall be pruned in accordance with American Association of Nurserymen, Inc. standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed.

ROOT SYSTEMS: Balled & burlapped plants shall be dug with firm natural balls of earth of diameter and depth to include most of the fibrous roots. Container grown stock shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil together firm and whole. No plants shall be loose in container or ball.

MULCH: Immediately following plant installations all tree and shrub planting pits shall be covered with four (4") layer of triple shredded hardwood mulch (non-dyed). The limits of this mulch for deciduous trees and single evergreen trees shall be the area of the pit; for evergreen tree clusters or shrub masses; a mulched bed shall be created.

ANTI-DESICCANT SPRAY: Trees and when planted in leaf shall be treated with anti-desiccant such as "Wilt-Proof".

PLANTING MIX: Before backfilling, the topsoil back fill mixture shall be prepared and mixed to the following proportions: Deciduous plants - two parts by volume of topsoil, one part organic compost and five pounds bone meal per cubic yard.

Evergreen Plants - three parts by volume of topsoil and one part organic compost. Fertilizer - to the above mixtures, add three pounds of specified commercial fertilizer for trees up to three (3") inches in caliper and one pound per inch of caliper for larger trees. Shrubs shall be fertilized with six (6) ounces of fertilizer for shrubs four (4'-0") feet and over.

STAKING & GUYING: Trees shall be staked and guyed as is detailed on the drawings and according to accepted industry practice.

LAYOUT: The contractor shall layout with identifiable stakes, the location of all plants and the arrangement and outlines of planting beds as indicated on the drawings. Prior to any excavation of plant pits or preparation of plant beds, the Project Consultant shall approve the layout of planting. All planting shall be

at the locations indicated on the drawings. The Contractor shall be responsible for planting at the correct grades, alignment and layout of planting beds. Minor adjustments to tree locations may be necessary due to field conditions and final grading. The Contractor shall notify the Project Consultant if major adjustments are anticipated.

ADVERSE CONDITIONS: The contractor shall notify the Project Consultant in writing of any soil or drainage conditions which the Contractor considers detrimental to plant growth. The documented conditions shall include a proposal for correcting the situation, including any change in cost, for review and acceptance by the Project Consultant.

QUANTITY: The quantity of plants in the Plant Schedule is for general reference only. The Contractor shall obtain quantities for pricing by compiling numbers from the plants illustrated on the drawings. Should there be a discrepancy between the drawings and the plant schedule, the quantities illustrated on the drawings shall take precedence.

GUARANTEE: The Contractor shall guarantee all plant material for a full year from the date of initial acceptance. The Owner shall be responsible for maintenance unless otherwise agreed. It is the Contractor's responsibility to monitor the project during the guarantee period and notify the Owner in writing if problems are occurring or situations developed that appear detrimental to the plant material. Any plant material that is 25% dead or more shall be considered dead and must be replaced at no charge to the Owner. A tree is considered dead when the main leader has died back or there is 25% of the crown dead.

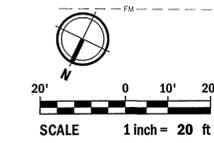
PLANTING SCHEDULE

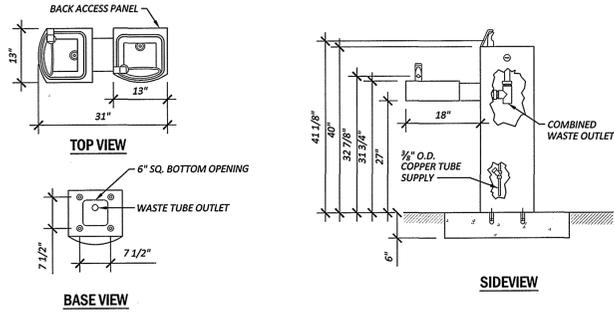
SYMBOL	KEY	QTY	BOTANICAL NAME (COMMON NAME)	HEIGHT	SPREAD	CALIPER	CONT.	REMARKS
SMALL TREES								
⊙	LR	7	Lagerstroemia 'Red Rocket' (Red Rocket Crape Myrtle)	7' min.	-	-	25 gal.	Multi-stem, symmetrical, Full
⊙	IC	24	Ilex cornuta 'Fine Line' (Tree-form Fine Line Holly)	6' min.	-	-	25 gal.	Multi-stem, symmetrical, Full, limbed up abt. 1/2 ht. of tree

SYMBOL	KEY	QTY	BOTANICAL NAME (COMMON NAME)	HEIGHT	SPREAD	CALIPER	CONT.	REMARKS
SHRUBS								
⊙	BW	172	Buxus microphylla 'Winter Gem' (Winter Gem Korean Boxwood)	15" min.	15" min.	-	3 gal.	Plant @ 3' OC Full, symmetrical, matching
⊙	DE	16	Distylium 'Emerald Heights' (Blue Isu)	15" min.	18" min.	-	5 gal.	Plant @ 5' OC Full, symmetrical, matching
⊙	LC	24	Loropetalum chinense 'Ever Red' (Ever Red Fringe Flower)	18" min.	24" min.	-	5 gal.	Plant @ 5' OC Full, symmetrical, matching
⊙	LS	5	Ligustrum sinense 'Swift Creek' (Dwarf Variegated Privet)	##	##	-	5 gal.	Plant @ 5' OC Full, symmetrical, matching
⊙	ND	23	Nandina domestica 'Flum Passion' (Flum Passion Heavenly Bamboo)	##	##	-	3 gal.	Plant @ 3.5' OC Full, symmetrical, matching

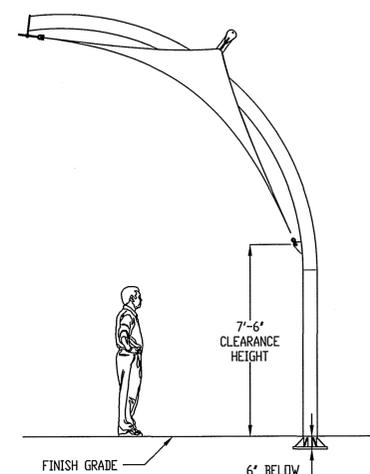
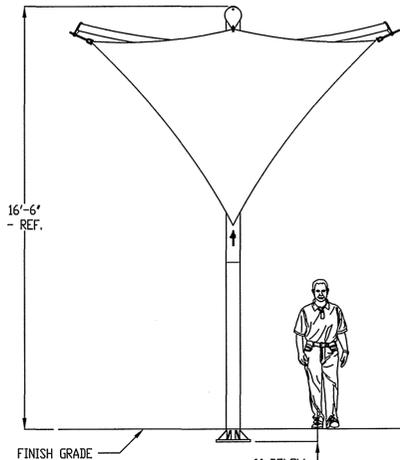
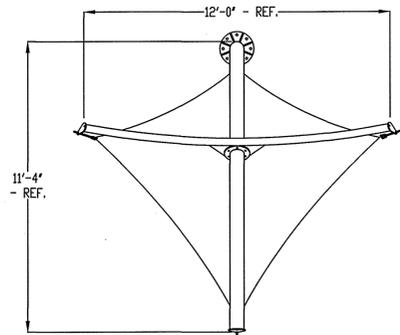
SYMBOL	KEY	QTY	BOTANICAL NAME (COMMON NAME)	HEIGHT	SPREAD	CALIPER	CONT.	REMARKS
GROUNDCOVER/GRASSES/PERENNIALS								
☼	MS	33	Miscanthus sinensis 'Morning Light' (Maidenhair Grass)	##	##	-	-	PLANT AS SHOWN, (MIN. 3.5' OC)
☼	DR	42	Dianthus x 'Ruby Tuesday' (Dianthus)	##	##	-	-	PLANT @ 18" OC
☼	FV	31	Panicum virgatum 'Rotstrahlbusch' (Red Switchgrass)	##	##	-	-	PLANT @ 18" OC
☼	HA	16	Hemerocallis 'Ancient Glow' (Daylily)	##	##	-	-	PLANT @ 18" OC
☼	LM	50	Liliphe muscari 'Big Blue' (Big Blue Lilyturf)	12" min.	12" min.	-	-	PLANT @ 15" OC

ALTERNATE 1 - PLANTING PLAN
SCALE: 1" = 20'

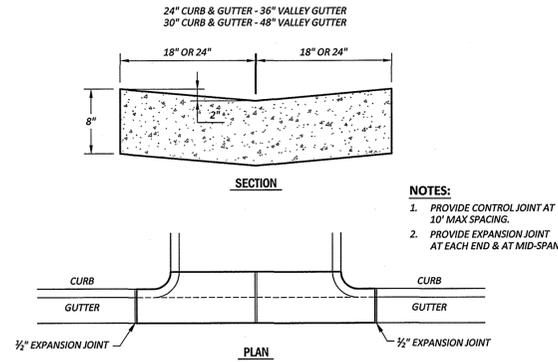




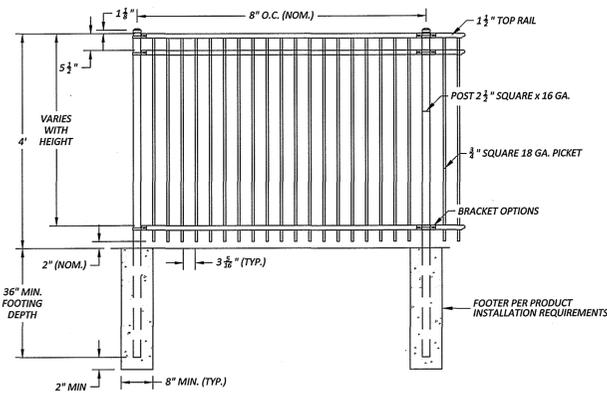
11 HI-LO DRINKING FOUNTAIN
N.T.S.



12 KITE SHADE STRUCTURE
N.T.S.

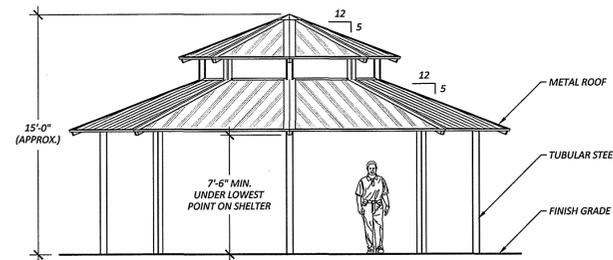
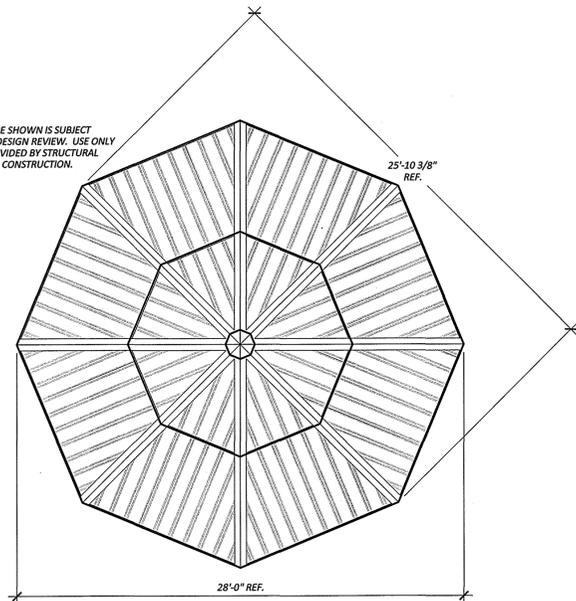


8 CONCRETE VALLEY GUTTER
N.T.S.
STR-10A



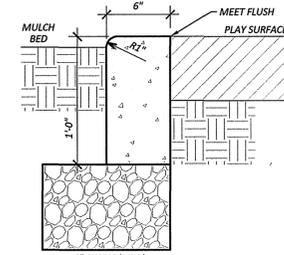
9 ORNAMENTAL FENCE
N.T.S.

NOTE:
THE STRUCTURE SHOWN IS SUBJECT TO ONGOING DESIGN REVIEW. USE ONLY DRAWING PROVIDED BY STRUCTURAL ENGINEER FOR CONSTRUCTION.

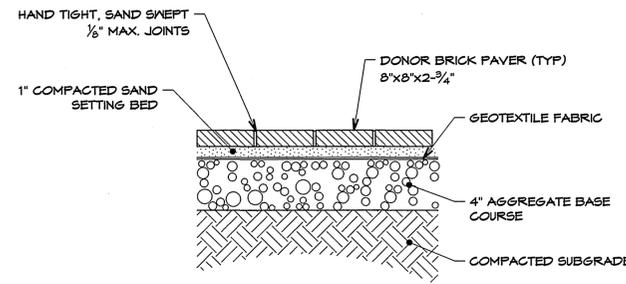


10 GAZEBO
N.T.S.

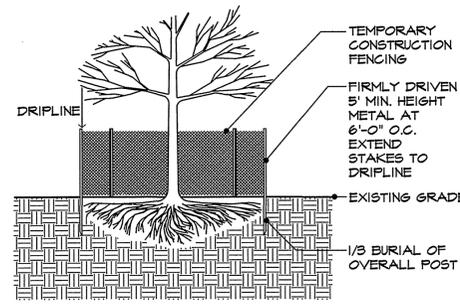
NOTES:
CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN A SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED.
ALL CONTRACTION JOINTS SHALL BE FILLED WITH JOINT FILLER.
EXPANSION JOINTS SHALL BE PLACED AT 90' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.
ALL CURBS ARE TO BE POURED WITH CLASS 'A' CONCRETE (3,000 PSI)
FLEXIBLE FORMS ARE TO BE USED WHEN RADII IS LESS THAN 20'



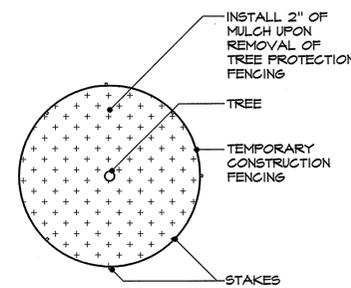
5 CONCRETE RIBBON EDGING
N.T.S.



6 DONOR BRICK PAVERS
N.T.S.

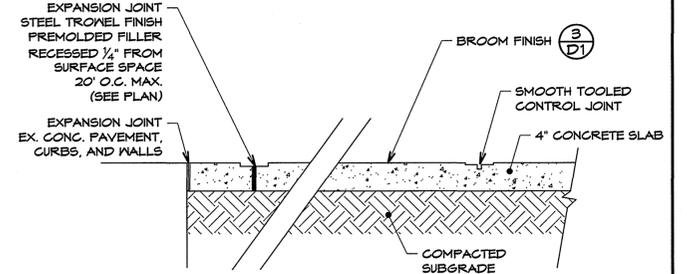


SECTION

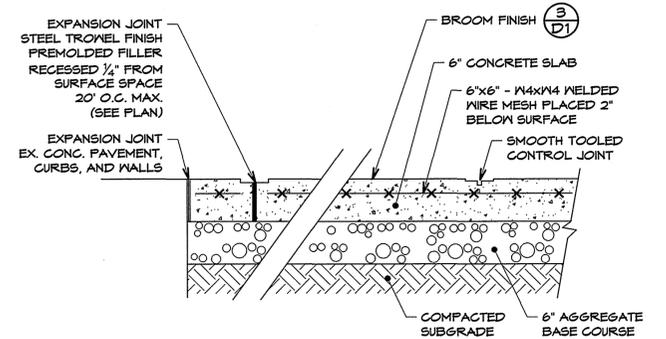


PLAN

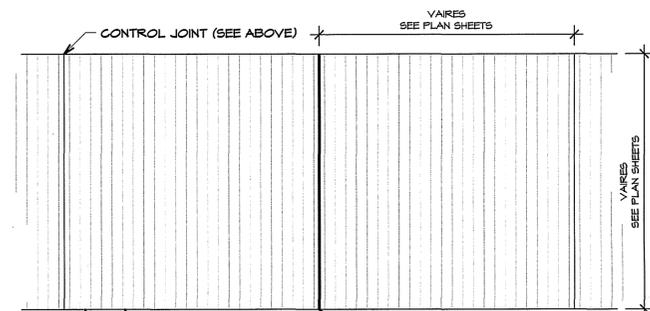
7 TREE PROTECTION FENCE
N.T.S.



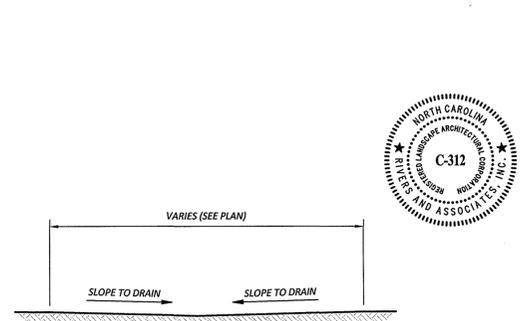
1 PEDESTRIAN GRADE CONCRETE
N.T.S.



2 VEHICULAR GRADE CONCRETE
N.T.S.



3 BROOM FINISH AND SCORING SINGLE DIRECTION
N.T.S.



4 GRADED SWALE
N.T.S.
SS-18

REVISIONS:

NO.	DATE	DESCRIPTION



CONSTRUCTION DETAILS
CREEKSIDE PARK PLAYGROUND
CRAVEN COUNTY
NORTH CAROLINA

NC License: F-4884
Rivers
& ASSOCIATES, INC.
riversandassociates.com Since 1918
107 East Second Street
Greenville, NC 27608
(252) 752-4130
Engineers
Planners
Surveyors
Landscape Architects



01.05.16
January 5, 2016

SURVEY	-	DRAFT	JT/LC
DESIGN	-	CHECK	SR
PROJECT No.	2015189		
DRAWING No.	W-3646		
SCALE:	AS NOTED		
SHEET No.			OF 9

D1

P:\Client\Craven - Creekside Park Playground - 2015189\DWG\04-Creekside Park Details.dwg - JT, RIVERS, Jan-16 @ 3:45:41 PM

EROSION CONTROL NOTES:

- ALL WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES. NO LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL THE APPROPRIATE EROSION CONTROL MEASURE MAY PROCEED UNTIL MEASURES ARE INSPECTED AND APPROVED.
- FOLLOWING STRIPPING OF SITE, ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED. SILT FENCES SHALL BE PLACED ALONG PROPERTY LINES AS INDICATED ON PLANS TO PROTECT ADJACENT DEVELOPMENTS. ROCK INLET SEDIMENT TRAPS SHALL BE INSTALLED AROUND ALL DRAINAGE STRUCTURES TO COLLECT SURFACE RUNOFF AND CONTROL SILTATION AND RELEASE WATER AT A GRADUAL RATE. ALL DISTURBED AREAS WILL BE GRADED, SEEDED AND MULCHED.
- ALL SHOULDERS SHALL BE SEED TO STABILIZE THE SOIL. SEED BED PREPARATION SHALL BE CONDUCTED ACCORDING TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (NCDOT). THE GROUND SURFACE SHALL BE CLEARED OF STUMPS, STONES, ROOTS, CABLES, WIRE, GRADE STAKES, AND OTHER MATERIALS THAT MIGHT HINDER PROPER GRADING, TILLAGE, SEEDING OR SUBSEQUENT MAINTENANCE OPERATIONS. GRADES ON THE AREA TO BE SEEDED SHALL BE MAINTAINED IN A TRUE AND EVEN CONDITION. MAINTENANCE SHALL INCLUDE ANY NECESSARY REPAIRS TO PREVIOUSLY GRADED AREAS. ALL GRADED AREAS SHALL BE THOROUGHLY TILLED TO A DEPTH OF AT LEAST FOUR (4) INCHES BY PLOWING, DISKING, HARROWING, OR OTHER APPROVED METHODS UNTIL THE CONDITION OF THE SOIL IS ACCEPTABLE. ON SITES WHERE SOIL CONDITIONS ARE SUCH THAT HIGH CLAY CONTENT AND EXCESSIVE COMPACTION CAUSE DIFFICULTY IN GETTING CLODS AND LUMPS EFFECTIVELY PULVERIZED, THE CONTRACTOR SHALL USE THE ROTARY TILLAGE MACHINERY UNTIL THE MIXING OF THE SOIL IS ACCEPTABLE AND NO CLODS OR CLUMPS REMAIN LARGER THAN 1 1/2 INCHES IN DIAMETER. A FIRM AND COMPACT SEED BED IS REQUIRED AND AFTER BEING GRADED, THE SEED BED SHALL BE LIGHTLY COMPACTED WITH A LAND ROLLER, SUCH AS A CULTIPACKER, BEFORE AND AFTER SEEDING. LIMESTONE SHALL BE GEOMETRIC AGRICULTURE GROUND LIMESTONE CONTAINING NOT LESS THAN 10 PERCENT MAGNESIUM AT ONCE. LIME SHALL BE UNIFORMLY APPLIED AT THE RATE OF 2 TONS PER ACRE AS TESTING REQUIRES PER THE SPECIFICATIONS. IF REQUIRED PER SPECIFICATIONS, FERTILIZER SHALL BE INCORPORATED INTO THE UPPER THREE OR FOUR INCHES OF PREPARED SEED BED JUST PRIOR TO THE LAST TILLAGE OPERATION, BUT IN NO CASE SHALL IT BE APPLIED MORE THAN THREE DAYS PRIOR TO SEEDING. FERTILIZER SHALL BE USED IMMEDIATELY AFTER DELIVERY OR STORED IN A MANNER THAT WILL NOT PERMIT IT TO HARDEN OR DESTROY ITS EFFECTIVENESS.

PERMANENT SEEDING

APPLY DOLEMITIC LIMESTONE AT THE RATE OF 2 TONS PER ACRE. IF HYDRATED LIME IS USED, FOLLOW RECOMMENDATION FROM SOIL TEST. COST OF THE TEST SHALL BE BORNE BY THE CONTRACTOR.

APPLY 10-10-10 FERTILIZER OUTSIDE OF NCDOT RIGHT-OF-WAY AT A RATE OF 1,000 POUNDS PER ACRE.

APPLY 10-20-20 FERTILIZER WITHIN NCDOT RIGHT-OF-WAY AT A RATE OF 500 POUNDS PER ACRE

PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

OUTSIDE OF NCDOT R/W	
(JANUARY 1 – MARCH 31)	
COMMON BERMU DA GRASS (UNHULLED)	-20 POUNDS PER ACRE
(APRIL 1 – JULY 31)	
COMMON BERMU DA GRASS (HULLED)	-15 POUNDS PER ACRE
CENTPEDE	-8 POUNDS PER ACRE
(AUGUST 1 – DECEMBER 31)	
COMMON BERMU DA GRASS (UNHULLED)	-15 POUNDS PER ACRE
TALL FESCUE	-120 POUNDS PER ACRE
CENTPEDE	-8 POUNDS PER ACRE
WITHIN NCDOT R/W	
(JANUARY 1 – DECEMBER 31)	
FESCUE	-50 POUNDS PER ACRE
PENSACOLA BAHIA GRASS	-25 POUNDS PER ACRE
CENTPEDE	-5 POUNDS PER ACRE

- GROUND STABILIZATION (PER NCG010000)
 - SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
 - 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.
 - 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.
 - CONDITIONS - IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:
 - EXTENSION OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.
 - ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE 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.
 - ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT.
 - 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.
 - ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.
 - FOR PORTIONS OF PROJECTS WITHIN ONE MILE AND DRAINING TO TROUT WATERS AND HIGH QUALITY WATERS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, 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.
 - FOR PORTIONS OF PROJECTS LOCATED IN OUTSTANDING RESOURCE WATERS WATERSHEDS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.
 - PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&S PLAN OR ADDED BY THE PERMITTING AUTHORITY.

SELF INSPECTION AND REPORTING REQUIREMENTS (PER NCG010000)

MINIMUM SELF INSPECTION AND REPORTING REQUIREMENTS ARE AS FOLLOWS UNLESS OTHERWISE APPROVED IN WRITING BY THE DIVISION OF WATER QUALITY.

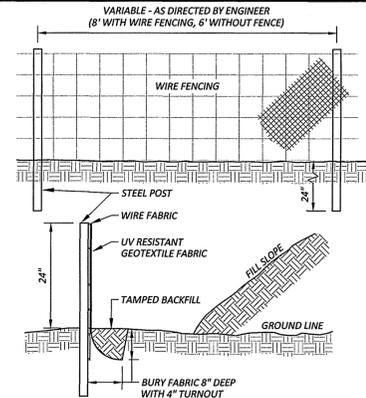
- A RAIN GAUGE SHALL BE MAINTAINED IN GOOD WORKING ORDER ON THE SITE UNLESS ANOTHER RAIN MONITORING DEVICE HAS BEEN APPROVED BY THE PERMITTING AUTHORITY.
- A WRITTEN RECORD OF THE DAILY RAINFALL AMOUNTS SHALL BE RETAINED AND ALL RECORDS SHALL BE MADE AVAILABLE TO DWQ OR AUTHORIZED AGENT UPON REQUEST (NOTE: IF NO RAINFALL OCCURRED, THE PERMITTEE MUST RECORD "ZERO").
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. INSPECTION RECORDS MUST BE MAINTAINED FOR EACH INSPECTION EVENT AND FOR EACH MEASURE. AT A MINIMUM, INSPECTION OF MEASURES MUST OCCUR AT THE FREQUENCY INDICATED BELOW:
 - ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD.
 - TIMES WHEN A DETERMINATION THAT ADVERSE WEATHER CONDITIONS PREVENTED INSPECTIONS SHOULD BE DOCUMENTED ON THE INSPECTION RECORD.
 - ONCE LAND DISTURBANCE HAS BEGUN ON THE SITE, STORMWATER RUNOFF DISCHARGE OUTFALLS SHALL BE INSPECTED BY OBSERVATION FOR EROSION, SEDIMENTATION AND OTHER STORMWATER DISCHARGE CHARACTERISTICS SUCH AS CLARITY, FLOATING SOLIDS, AND OIL SHEENS. INSPECTIONS OF THE OUTFALLS SHALL BE MADE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD.
 - INSPECTIONS ARE ONLY REQUIRED TO BE MADE DURING NORMAL BUSINESS HOURS, WHEN ADVERSE WEATHER CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION CAN BE DELAYED UNTIL IT IS DEEMED SAFE TO PERFORM THESE DUTIES. IF THE INSPECTION CANNOT BE DONE ON THAT DAY, IT MUST BE COMPLETED ON THE FOLLOWING BUSINESS DAY.
 - TWENTY-FOUR HOUR REPORTING FOR VISIBLE SEDIMENT DEPOSITION
 - THE PERMITTEE SHALL REPORT TO THE DIVISION OF WATER QUALITY CENTRAL OFFICE OR THE APPROPRIATE REGIONAL OFFICE ANY VISIBLE SEDIMENT BEING DEPOSITED IN ANY STREAM OR WETLAND OR ANY NONCOMPLIANCE WHICH MAY ENDANGER HEALTH OR THE ENVIRONMENT. (SEE SECTION IX OF THIS PERMIT FOR CONTACT INFORMATION.) ANY INFORMATION SHALL BE PROVIDED ORALLY OR ELECTRONICALLY WITHIN 24 HOURS FROM THE TIME THE PERMITTEE BECAME AWARE OF THE CIRCUMSTANCES. VISIBLE DISCOLORATION OR SUSPENDED SOLIDS IN THE EFFLUENT SHOULD BE RECORDED ON THE INSPECTION RECORD AS DESCRIBED BELOW.
 - A WRITTEN SUBMISSION SHALL BE PROVIDED TO THE APPROPRIATE REGIONAL OFFICE OF THE DWQ WITHIN 5 DAYS OF THE TIME THE PERMITTEE BECAMES AWARE OF THE CIRCUMSTANCES. THE WRITTEN SUBMISSION SHALL CONTAIN A DESCRIPTION OF THE SEDIMENT DEPOSITION AND ACTIONS TAKEN TO ADDRESS THE CAUSE OF THE DEPOSITION. THE DIVISION OF WATER QUALITY STAFF MAY WAIVE THE REQUIREMENT FOR A WRITTEN REPORT ON A CASE-BY-CASE BASIS.
- RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS 30 DAYS SHALL REMAIN ON THE SITE AND AVAILABLE FOR AGENCY INSPECTORS AT ALL TIMES DURING NORMAL WORKING HOURS, UNLESS THE PERMITTING AUTHORITY PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL. OLDER RECORDS MUST BE MAINTAINED FOR A PERIOD OF ONE YEAR AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST. THE RECORDS MUST PROVIDE THE DETAILS OF EACH INSPECTION INCLUDING OBSERVATIONS, AND ACTIONS TAKEN IN ACCORDANCE WITH THIS PERMIT. THE PERMITTEE SHALL RECORD THE REQUIRED RAINFALL AND MONITORING OBSERVATIONS ON THE "INSPECTION RECORD FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000" FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT IS INCLUSIVE OF ALL OF THE ELEMENTS CONTAINED IN THE DIVISION'S FORM. ELECTRONIC STORAGE OF RECORDS WILL BE ALLOWED IF APPROVED BY THE PERMITTING AUTHORITY.

EROSION CONTROL NOTES: (CONT.)

- INSPECTION RECORDS MUST INCLUDE, AT A MINIMUM, THE FOLLOWING:
 - CONTROL MEASURE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM:
 - IDENTIFICATION OF THE MEASURES INSPECTED,
 - DATE AND TIME OF THE INSPECTION,
 - NAME OF THE PERSON PERFORMING THE INSPECTION,
 - INDICATION OF WHETHER THE MEASURES WERE OPERATING PROPERLY,
 - DESCRIPTION OF MAINTENANCE NEEDS FOR THE MEASURE,
 - CORRECTIVE ACTIONS TAKEN AND
 - DATE OF ACTIONS TAKEN.
 - STORMWATER DISCHARGE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM:
 - IDENTIFICATION OF THE DISCHARGE OUTFALL INSPECTED,
 - DATE AND TIME OF THE INSPECTION,
 - NAME OF THE PERSON PERFORMING THE INSPECTION,
 - EVIDENCE OF INDICATORS OF STORMWATER POLLUTION SUCH AS OIL SHEEN, FLOATING OR SUSPENDED SOLIDS OR DISCOLORATION,
 - INDICATION OF VISIBLE SEDIMENT LEAVING THE SITE,
 - ACTIONS TAKEN TO CORRECT/PREVENT SEDIMENTATION AND
 - DATE OF ACTIONS TAKEN.
 - VISIBLE SEDIMENTATION FOUND OUTSIDE THE SITE LIMITS: INSPECTION RECORDS MUST INCLUDE:
 - AN EXPLANATION AS TO THE ACTIONS TAKEN TO CONTROL FUTURE RELEASES,
 - ACTIONS TAKEN TO CLEAN UP OR STABILIZE THE SEDIMENT THAT HAS LEFT THE SITE LIMITS AND
 - THE DATE OF ACTIONS TAKEN.
 - VISIBLE SEDIMENTATION FOUND IN STREAMS OR WETLANDS: ALL INSPECTIONS SHOULD INCLUDE EVALUATION OF STREAMS OR WETLANDS ONSITE OR OFFSITE (WHERE ACCESSIBLE) TO DETERMINE IF VISIBLE SEDIMENTATION HAS OCCURRED.
- VISIBLE STREAM TURBIDITY - IF THE DISCHARGE FROM A SITE RESULTS IN VISIBLE STREAM TURBIDITY, INSPECTION RECORDS MUST RECORD THAT EVIDENCE AND ACTIONS TAKEN TO REDUCE SEDIMENT CONTRIBUTIONS. SITES DISCHARGING TO STREAMS LISTED AS IMPAIRED FOR SEDIMENT-RELATED CAUSES MAY BE REQUIRED TO PERFORM ADDITIONAL MONITORING, INSPECTIONS OR APPLICATION OF MORE-STRINGENT MANAGEMENT PRACTICES IF IT IS DETERMINED THAT THE ADDITIONAL REQUIREMENTS ARE NEEDED TO ASSURE COMPLIANCE WITH THE FEDERAL OR STATE IMPAIRED-WATERS CONDITIONS. IF A DISCHARGE COVERED BY THIS PERMIT ENTERS A STREAM SEGMENT THAT IS LISTED ON THE IMPAIRED STREAM LIST FOR SEDIMENT-RELATED CAUSES, AND A TOTAL MAXIMUM DAILY LOAD (TMDL) HAS BEEN PREPARED FOR THOSE POLLUTANTS, THE PERMITTEE MUST IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE SITE IS CONSISTENT WITH THE ASSUMPTIONS AND MEETS THE REQUIREMENTS OF THE APPROVED TMDL. THE DWQ 303(D) LIST CAN BE FOUND AT: [HTTP://HD.ENR.STATE.NC.US/TMDL/GENERAL_303D.HTM](http://hd.enr.state.nc.us/tmdl/general_303d.htm)
- IN THE EVENT OF A CONFLICT BETWEEN THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT, THE SUBMITTED PLAN AND/OR THE CONTRACT SPECIFICATIONS, THE MORE RESTRICTIVE REQUIREMENT SHALL PREVAIL. THE LAND-DISTURBING ACTIVITY SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- THE LATEST APPROVED EROSION AND SEDIMENTATION CONTROL PLAN WILL BE USED DURING PERIODIC UNANNOUNCED INSPECTIONS TO DETERMINE COMPLIANCE AND A COPY OF THE PLAN MUST BE ON FILE AT THE JOB SITE. IF IT IS DETERMINED THAT THE IMPLEMENTED PLAN IS INADEQUATE, THIS OFFICE MAY REQUIRE THE INSTALLATION OF ADDITIONAL MEASURES AND/OR THAT THE PLAN BE REVISED TO COMPLY WITH STATE LAW.
- THE CERTIFICATE OF PLAN APPROVAL MUST BE POSTED AT THE PRIMARY ENTRANCE TO THE JOB SITE AND REMAIN UNTIL THE SITE IS PERMANENTLY STABILIZED.
- A BUFFER ZONE, SUFFICIENT TO RESTRAIN VISIBLE SEDIMENTATION WITHIN THE FIRST 25% OF THE WIDTH CLOSEST TO THE LAND DISTURBANCE, MUST BE PROVIDED AND MAINTAINED BETWEEN THE LAND-DISTURBING ACTIVITY AND ANY ADJACENT PROPERTY OR WATERCOURSE.
- IN ORDER TO COMPLY WITH THE INTENT OF THE ACT, THE SCHEDULING OF THE LAND-DISTURBING ACTIVITIES IS TO BE SUCH THAT BOTH THE AREA OF EXPOSURE AND THE TIME BETWEEN LAND DISTURBANCE AND PROVIDING GROUND COVER IS MINIMIZED.
- UNLESS A TEMPORARY, MANUFACTURED, LINING MATERIAL HAS BEEN SPECIFIED, A CLEAN STRAW MULCH MUST BE APPLIED, AT A MINIMUM RATE OF 2 TONS/ACRE, TO ALL SEEDED AREAS. THE MULCH MUST COVER AT LEAST 75% OF THE SEEDED AREA AFTER IT IS EITHER TACKED WITH AN ACCEPTABLE TACKING MATERIAL, OR CRIMPED IN PLACE.
- ADEQUATE AND APPROPRIATE MEASURES MUST BE PROPERLY INSTALLED DOWNSTREAM, WITHIN THE LIMITS OF DISTURBANCE, OF ANY LAND-DISTURBING ACTIVITY TO PREVENT SEDIMENT FROM LEAVING THE LIMITS OF DISTURBANCE, ENTERING EXISTING DRAINAGE SYSTEMS, IMPACTING AN ON-SITE NATURAL WATERCOURSE OR ADJOINING PROPERTY.
- SILT FENCES, INCLUDING OUTFLET SECTIONS, ARE NOT APPROPRIATE FOR AREAS OF CONCENTRATED FLOW SUCH AS SWALES OR DITCHES. PROVIDE ADEQUATE AND APPROPRIATE MEASURES FOR ALL CONSTRUCTION WITHIN AREAS OF CONCENTRATED FLOW.
- ALL SLOPES AFFECTED DURING THE INSTALLATION/CLEANUP PROCESS MUST BE PROVIDED ON A GRADE THAT CAN BE RETAINED BY VEGETATIVE OR OTHER APPROPRIATE COVER.
- AT ANY GIVEN TIME WITHIN THE PROJECT AREA, THE MAXIMUM AFFECTED, EXPOSED AND "UNRESTORED" AREA IS LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION (APPROXIMATELY 2 MILES). A ROAD SECTION BEING DEFINED AS A CONTINUOUS SECTION OF ROAD HAVING THE SAME SR NUMBER OR ROAD NAME.
- INSTALL SILT FENCE OVER AND AROUND THE TOP OF EXISTING PIPES AND INLETS AT DISTURBED AREAS.
- ALL DISTURBED AREAS SHALL BE GRADED TO MINIMIZE RUNOFF.
- INSTALL SILT FENCE AROUND SPOIL PILES AND ALONG TRENCHES TO MINIMIZE SEDIMENT FROM ENTERING ROADSIDE DITCHES AND EXISTING DRAINAGE OUTFLETS.
- PROVIDE EROSION CONTROL MEASURES AROUND STOCK/WASTE PILES AND STAGING AREAS AS NEEDED OR AS DIRECTED BY ENGINEER.
- PROTECT STORM PIPE INLETS FROM SEDIMENT RUNOFF FROM LAND DISTURBING ACTIVITIES WITH SILT FENCE, STONE CHECK DAM, OR ABC FILTER AS APPROPRIATE FOR SITE CONDITIONS.
- REPLACE DISTURBED STORM PIPE OUTFLET PROTECTION WITH EQUAL OR GREATER AMOUNT OF RIP-RAP WITHIN 15 DAYS OF DISTURBANCE - OR AS REQUIRED BY NCDENR-DWQ.
- WHERE THE AREA AROUND AN OUTFLET IS DISTURBED AND NO OUTFLET PROTECTION EXISTS, CLASS "1" RIP-RAP SHALL BE PLACED AROUND PIPE OUTFLET AS DIRECTED BY THE ENGINEER.
- PROVIDE EROSION CONTROL MATTINGS WHERE INDICATED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE SEEDING SCHEDULE.
- REPORT EROSION CONTROL DEFICIENCIES TO THE ENGINEER IMMEDIATELY.
- ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL ALL SEEDING IS ESTABLISHED AND CONSTRUCTION AREAS HAVE BEEN STABILIZED.
- CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. WHEN INSPECTION REVEALS THE TRAP TO BE REDUCED TO 50% OF DESIGN CAPACITY OR THE DEVICE TO BE DEFICIENT IN ITS INTENDED PURPOSE SUCH AS FABRIC DETERIORATION FOR SILT FENCES THE CONTRACTOR SHALL RESTORE THE DEVICE TO ITS ORIGINAL CONDITION. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5,000.00 PER DAY OF VIOLATION.

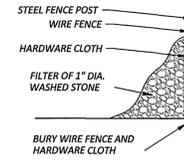
NOTES:

- USE STANDARD STRENGTH FABRIC WITH 8' POST SPACING AND WIRE FENCING WHERE REINFORCED SILT FENCE IS REQUIRED.
- WITH EXTRA STRENGTH FABRIC, USE 6' POST SPACING AND NO WIRE FENCING.
- WIRE FENCING TO BE 32" WITH 6-LINE WIRES AND STAY WIRES ON 12" CENTERS/ BOTTOM AND TOP WIRES 10 GA., INTERMEDIATE WIRES 12.5 GA.



1 TEMPORARY SILT FENCE

N.T.S. EC-1

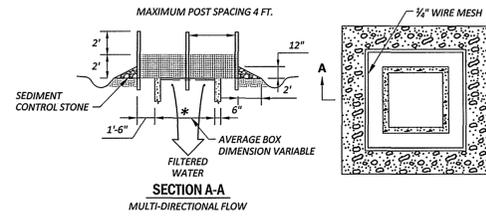


2 SILT FENCE OUTFLET

N.T.S.

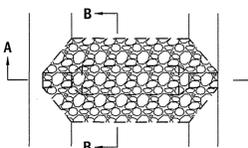
NOTE:

- SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57
- WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH OPENINGS.
- TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
- STEEL POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.



3 ROCK INLET SEDIMENT BARRIER

N.T.S. EC-15



4 TEMPORARY ROCK SILT CHECK DAM

N.T.S. EC-3

REVISIONS:

NO.	DATE	DESCRIPTION



EROSION CONTROL NOTES & DETAILS
CREEKSIDE PARK PLAYGROUND
GRAVEN COUNTY
 NORTH CAROLINA
 CRAVEN COUNTY

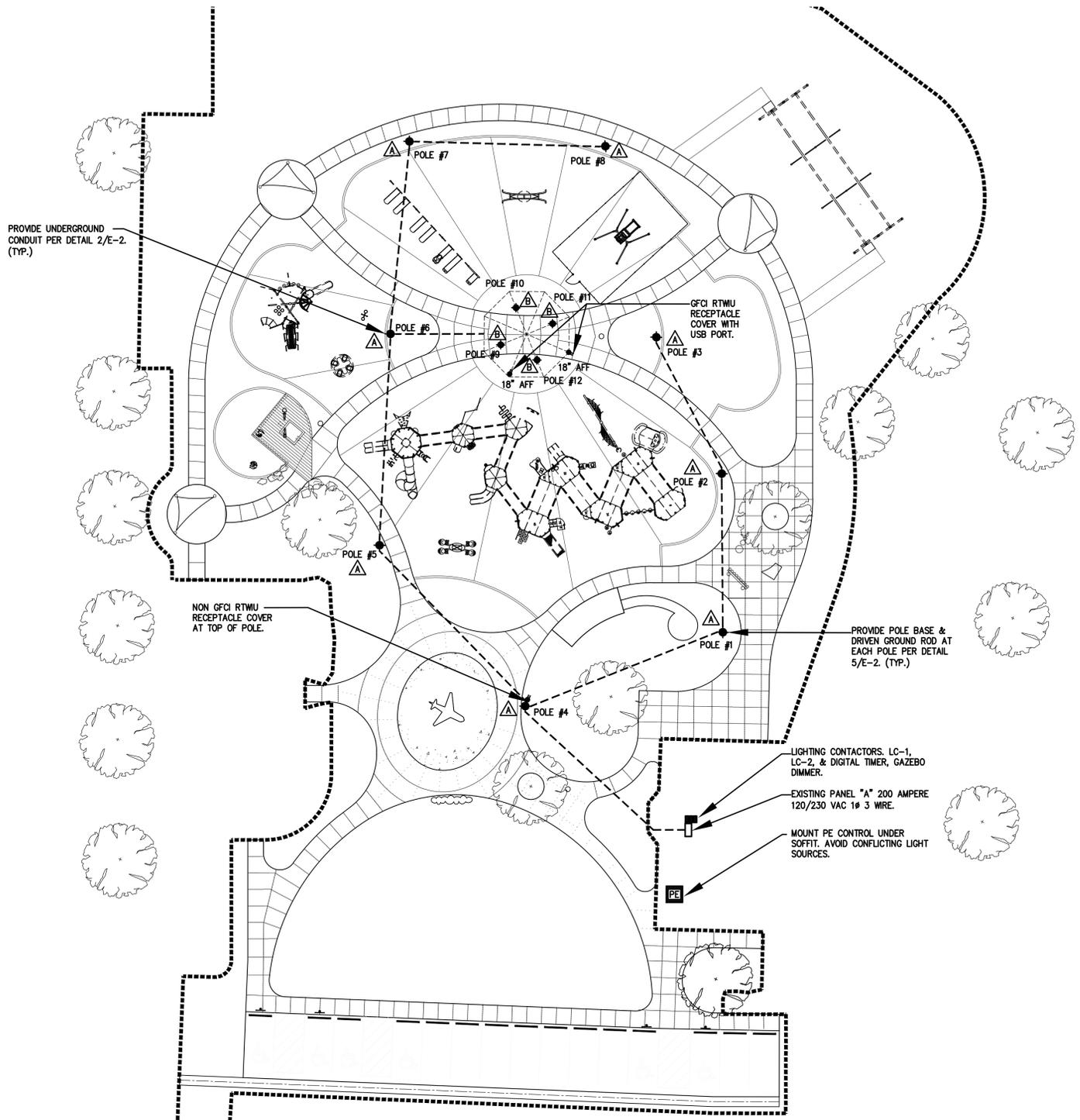
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 Landscape Architects
 107 East Great Street
 Cravenville, NC 27836
 (252) 752-4135



SURVEY	DRAFT	LC
DESIGN	CHECK	JDW
PROJECT No.	2015189	
DRAWING No.	W-3646	
SCALE:	AS NOTED	
SHEET No.	OF 9	

D2

REV	DATE	DESCRIPTION



ELECTRICAL LEGEND

◆	NEW LIGHTS	—	CIRCUIT BREAKER
---	DIRECT BURIAL UNDERGROUND CONDUIT & WIRE	— AH	CIRCUIT HOME RUN W/ ONE UNGROUNDED ONE NEUTRAL & ONE GROUNDING CONDUCTOR
---	NEW CONDUIT & WIRE	□	SAFETY SWITCH
□	EXISTING EQUIPMENT	□	JUNCTION BOX
▨	NEW EQUIPMENT	---	EXISTING CONDUIT & WIRE TO BE REMOVED
▩	EXISTING EQUIPMENT TO BE REMOVED	---	L.S.O.S. LINE SIDE OF LOCAL SWITCH
---	NEW WIRE AND CONDUIT	○	LIGHT
---	EXISTING WIRE AND CONDUIT	○	MOTOR
1	CONDUIT AND CABLE IDENTIFICATION	⊕	GROUND
△	LIGHTING FIXTURE IDENTIFICATION	G.C.	GENERAL CONTRACTOR
○	RECEPTACLE	E.C.	ELECTRICAL CONTRACTOR
○ WP	RECEPTACLE - WEATHERPROOF GROUND FAULT INTERRUPTING	PE	PHOTOTELECTRIC CONTROL
○ GFCI	RECEPTACLE WITH RAIN TIGHT WHILE IN USE COVER	⊕	208 VOLT RECEPTACLE
○ RTWIUC			

LIGHTING FIXTURE SCHEDULE

- (ALL FIXTURES SHALL BE UL LISTED)
(ALL FIXTURES SHALL BE FURNISHED WITH LAMPS)
(FURNISHED & INSTALLED BY CONTRACTOR)
- △ TRADITIONAL LED LANTERN STYLE ALL ALUMINUM CONSTRUCTION WITH FINIAL. PROVIDE CLEAR ACRYLIC PANES LED 80 WATT TYPE 5 LIGHT DISTRIBUTION, 4000K WITH UNIVERSAL LED DRIVER. PROVIDE BLACK MATT FINISH. PROVIDE 3" TO 5" TENON TOP ADAPTOR. USE BEACON LIGHTING TRA-30-AC-36NB-80-4K-UNIV-DIRS-PT-BBT OR EQUAL BY ARCHITECTURAL AREA LIGHT OR HUBBLE. PROVIDE 5" ALL ALUMINUM ROUND STRAIGHT POLE WITH HANDHOLE FITTED TO FLUTED BASE. USE BLACK MATT FINISH. BEACON SH05-S-15-50-0T-BBT POLE AND DOMUS DOMU-5-BBT BASE OR EQUAL BY ARCHITECTURAL AREA LIGHTING OR HUBBLE.
 - △ ARCHITECTURAL CYLINDRICAL LED FLOODLIGHT. DIE CAST LOW COPPER CONTENT, A360 ALUMINUM, 3500K 750 LUMENS, MEDIUM FLOOD, 0-10V DIMMING DRIVER, BLACK FINISH, 120 VAC. USE VISTA PROFESSIONAL OUTDOOR LIGHTING MODEL 1043B-MF-35-D-MV-010 OR EQUAL BY HUBBLE OR KIM.

GENERAL ELECTRICAL NOTES:

1. THE SCOPE OF EXTERIOR ELECTRICAL WORK INCLUDES THE FOLLOWING:
B. FURNISH & INSTALL NEW AREA LIGHTING FIXTURES & MISC. LIGHTING FIXTURES AT LOCATIONS DESIGNATED ON DRAWINGS.
2. ALL WORK SHALL CONFORM TO THE MOST RECENT EDITION OF THE NATIONAL ELECTRIC CODE, OSHA, AND ALL APPLICABLE STATE CODES.
3. ALL WIRE TO BE COPPER. ALL INSULATION TO BE THHN/THWN.
4. ALL CONDUIT ABOVE GRADE SHALL BE RIGID GALVANIZED STEEL. PROVIDE SCHEDULE 40 PVC DIRECT BURIAL FOR UNDERGROUND CONDUIT. PROVIDE TRANSITION TO PVC CONDUIT BELOW GRADE. ALL CONDUIT IN CONCESSION STAND BUILDING SHALL BE RIGID GALVANIZED STEEL.
5. ALL UNDERGROUND CONDUIT SHALL BE DIRECT BURIAL SCHEDULE 40 PVC. 30" MINIMUM BELOW GRADE TO BOTTOM OF TRENCH. SEE DETAIL 2/E-2.
6. CONDUIT ROUTING IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE TO AVOID ALL EXISTING CONDUIT, EQUIPMENT, AND PIPING UNDERGROUND. PROVIDE PULL BOXES AS NECESSARY TO MAINTAIN LESS THAN 4-90° FITTINGS BETWEEN PULLING POINTS.
7. PROVIDE A UTILITY "LOCATE" PRIOR TO ALL UNDERGROUND DIGGING. CONTACT UTILITY LOCATING COMPANY CRAVEN COUNTY STAFF. HAND DIG IN THOSE AREAS OF HIGH CONFLICT WITH OTHER UTILITIES.
8. PROVIDE DRIVEN GROUND ROD AT EACH POLE. INTERCONNECT DRIVEN GROUND TO PEDESTAL REBAR. INTERCONNECT REBAR TO POLE GROUNDING LUG.
9. REFER TO THE CIVIL & LANDSCAPE DRAWINGS FOR EXACT DIMENSIONS.

1
E-1 LIGHTING INSTALLATION PLAN
1"=20'-0"
SCALE 1 inch = 20 ft

1/15/2016

Donald E. Pledger

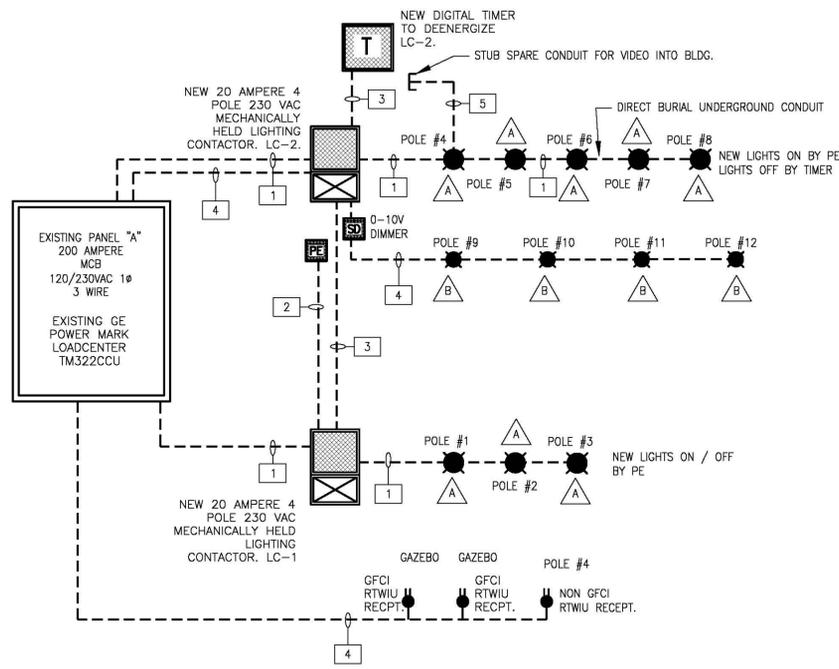
LIGHTING INSTALLATION PLAN
CRAVEN COUNTY
CREEKSIDE PARK PLAYGROUND
 NORTH CAROLINA

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 (252) 752-4193

January 2016

SURVEY	DRAFT	WAW
DESIGN	REP	CHECK
PROJECT No.	2015189	
DRAWING No.	W-3646	
SCALE:	AS NOTED	
#1379	LD6131	
DESIGN BY	DIBBLE & PLEDGER, P.A.	
222 WEST MAIN STREET, WASHINGTON, N.C. 27889	PHONE: (252) 946-3320 FAX: (252) 946-9160	
E-MAIL: rpledger@dibbleandpledger.com		

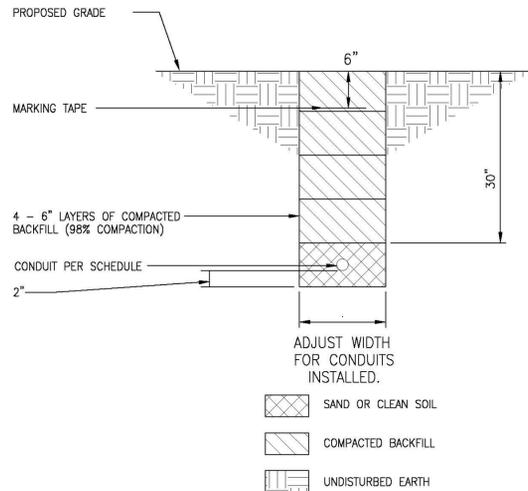
E-1



1 ONE LINE DIAGRAM - ELECTRICAL
E-2 N.T.S.

CONDUIT / CABLE SCHEDULE

- 1 2 #10 AWG Cu THHN/THWN UNGROUNDED CONDUCTOR
1 #10 AWG Cu THHN/THWN GROUNDING CONDUCTOR
3/4" CONDUIT
- 2 4 #14 AWG Cu THHN/THWN UNGROUNDED CONDUCTOR
1 #14 AWG Cu THHN/THWN NEUTRAL CONDUCTOR
1 #14 AWG Cu THHN/THWN GROUNDING CONDUCTOR
3/4" CONDUIT
- 3 4 #14 AWG Cu THHN/THWN UNGROUNDED CONDUCTOR
1 #14 AWG Cu THHN/THWN NEUTRAL CONDUCTOR
1 #14 AWG Cu THHN/THWN GROUNDING CONDUCTOR
3/4" CONDUIT
- 4 1 #12 AWG Cu THHN/THWN UNGROUNDED CONDUCTOR
4 #14 AWG Cu THHN/THWN UNGROUNDED CONDUCTORS
1 #12 AWG Cu THHN/THWN NEUTRAL CONDUCTOR
1 #12 AWG Cu THHN/THWN GROUNDING CONDUCTOR
3/4" CONDUIT
- 5 1" SPARE CONDUIT. PROVIDE PULL STRING.



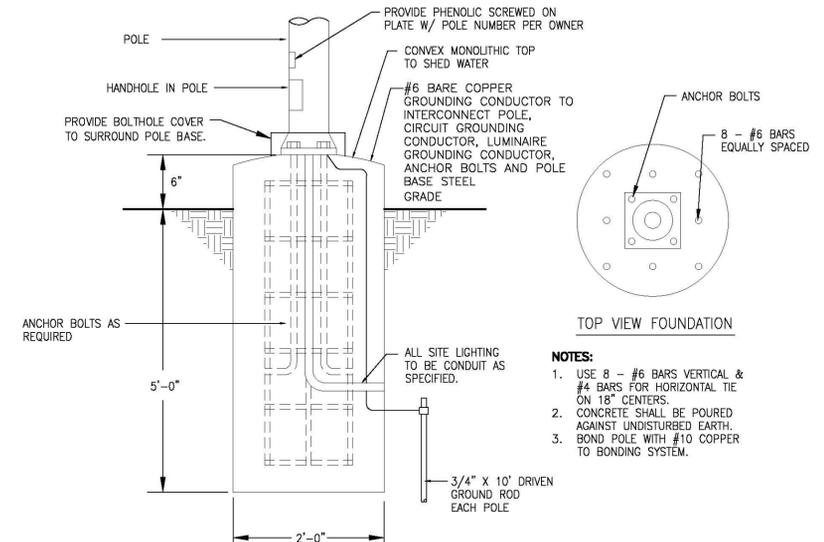
2 TRENCH DETAIL (LIGHTING CIRCUITS)
E-2 (USE SCH 40 PVC - DIRECT BURIAL.) N.T.S.

DESIGNATION TYPED ON DIRECTORY	COND (*)	GRND	WIRE SIZE	BRKR RAT'G	CKT NO.	S/N	CKT. NO.	BRKR RAT'G	WIRE SIZE	GRND	COND (*)	DESIGNATION TYPED ON DIRECTORY
EXISTING LOADS					1		2	20	#10	#10	1"	EXISTING LOADS
					3		4					
					5		6					
					7		8					
					9		10					
					11		12					
					13		14					
					15		16					
					17		18					
					19		20					
					21		22					
					23		24					
* NEW AREA LIGHTING	3/4"	#10	#10		25		26					
* NEW AREA LIGHTING	3/4"	#10	#10		27		28	20	#12	#12	3/4"	LIGHTING CONTROL *
					29		30	20	#12	#12	3/4"	GAZEBO LIGHTS *
					31		32	20	#12	#12	3/4"	GAZEBO/POLE 4 RECEPTACLES *

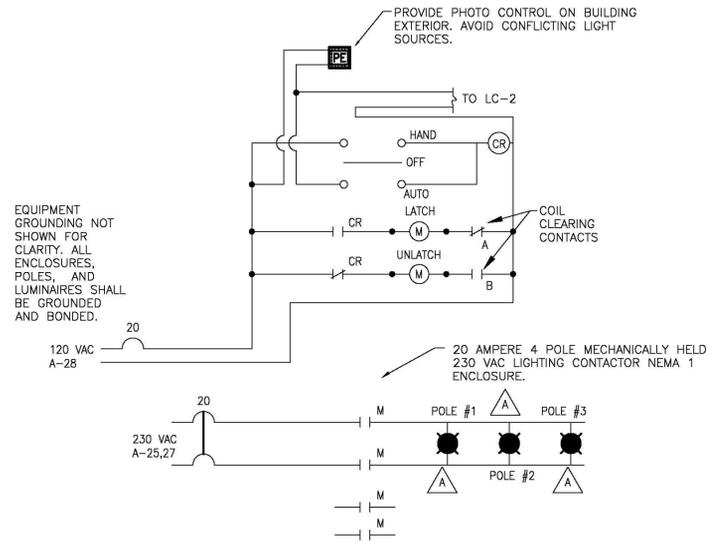
200 AMPERE MAIN CIRCUIT BREAKER
120/240 VAC 1 PHASE 3 WIRE 60HZ
PANEL IS GE POWER MARK TM 3220CCU
LOADCENTER. PROVIDE NEW THQP CIRCUIT BREAKERS IN BLANK SPACES.

* PROVIDE THQP GE BREAKERS OR COMPATIBLE.

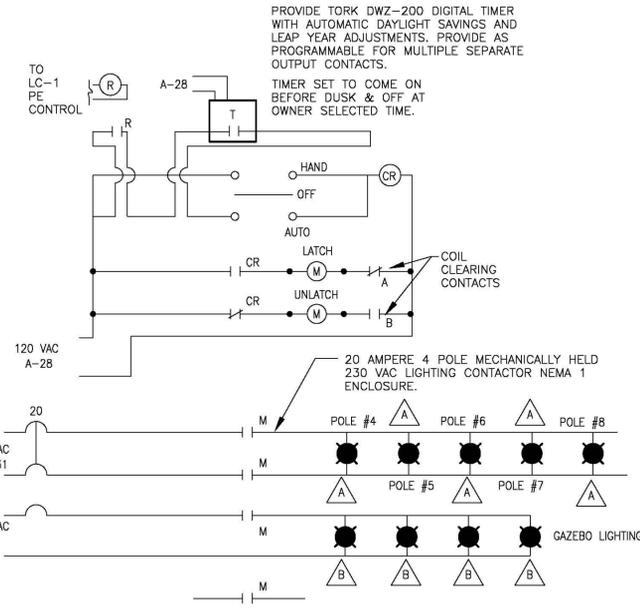
EXISTING PANEL "A"



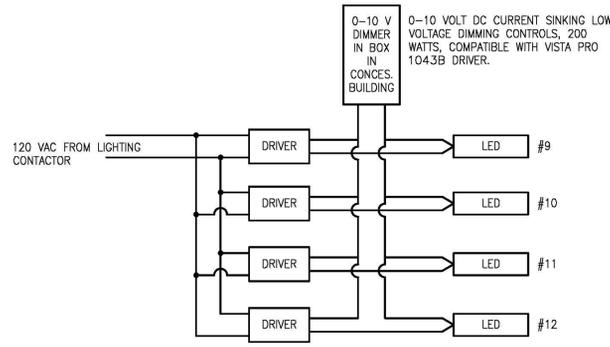
5 AREA LIGHTING FIXTURE POLE ANCHOR DETAIL
E-2 ABOVE TYPICAL FOR NEW POLE MOUNTED LUMINAIRES. N.T.S.



3 LIGHTING CONTACTOR LC-1
E-2 N.T.S.



4 LIGHTING CONTACTOR LC-2
E-2 N.T.S.



6 LED DIMMING WIRING SCHEMATIC
E-2 (GAZEBO LIGHTING) N.T.S.

1/15/2016

Professional Engineer Seal: DONALD E. PLEDGER, No. 11654, State of North Carolina.

Professional Engineer Seal: RONALD E. PLEDGER, No. 11654, State of North Carolina.

LIGHTING INSTALLATION PLAN
GRAVEN COUNTY
CREEKSIDE PARK PLAYGROUND
GRAVEN COUNTY
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 Engineers Planners Surveyors Landscape Architects

January 2016
 DESIGN MS/JW DRAFT SR/LC
 DESIGN SR CHECK SR
 PROJECT No. 2015189
 DRAWING No. W-3646
 SCALE: AS NOTED
 SHEET No. OF XX

DESIGN BY:
DIBBLE & PLEDGER, P.A.
 222 WEST MAIN STREET, WASHINGTON N.C. 27789
 PHONE: (252) 946-3320 FAX: (252) 946-9100
 E-MAIL: rpledger@dibbleandpledger.com

E-2