

A A TAKLA ENGINEERING, PLLC

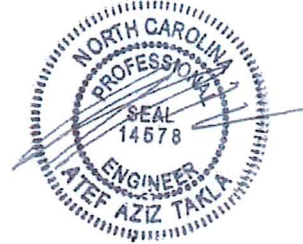
Consulting. Design. Efficiency.

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2-4-2018

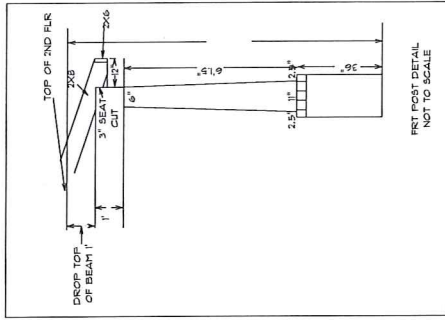
Project: 3105 Old Weaver Trail
Location: Creedmore, NC
Company: N/A Homeowner
Care Of: Danny Bingham
Subject: Foundation Wall Evaluations

As requested, engineer(s) from A A Takla Engineering visited the above referenced site on February 1st, 2018 to evaluate the below shown area of foundation wall that has a distinct vertical and step crack in the brick veneer. Based on observations, evaluations, our experiences, and information regarding the wall provided by homeowner. The crack in the wall is due to a stress concentration. At this area, there is a step down in the footing, resulting in the wall to have varying heights. Given these varying heights, the wall will expand and contract at different rates. These differences in heights and rates of shrinkage result in the crack that has developed. Repair or replacement of masonry at this area may or may not be effective. The area of the wall will inherently be the most vulnerable section to cracking now that the crack has already developed. The cracks however, are not structural and no evidence of structural deficiency was noted. Repair cosmetically as desired, but at a minimum, re-point and maintain the cracks (keep filled and sealed) in order to prevent further deterioration at this section, and help restore continuity.

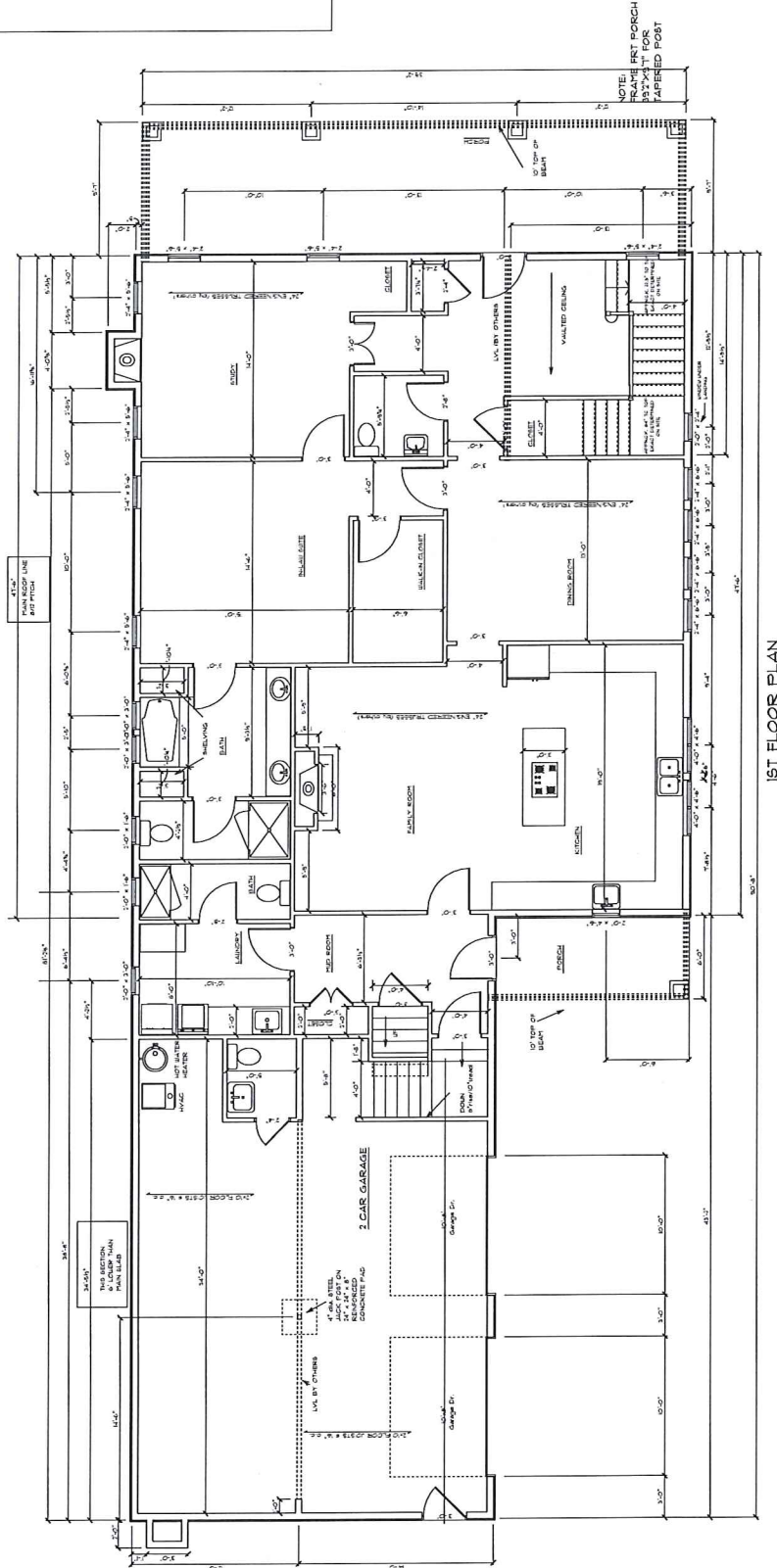


Limitations of Inspection: Services provided are in accordance with the standard of practice for structural engineering and within the limits imposed by scope, schedule and budget. The determinations contained in this report are based on conditions observed at the time of the evaluation. No guarantees or warranties, expressed or implied, under this Agreement or otherwise, shall be construed in connection with services provided. Sequencing, shoring, means and methods of construction are considered beyond the scope of this report.

FRAMING NOTES:
ALL EXTERIOR WALLS 16" OC
2" MIN. THICKNESS
ALL INTERIOR WALLS 12" OC
UNLESS NOTED OTHERWISE
MATCH WINDOW HEIGHT
TO FRT DOOR



TYPICAL 2x6 SIDING EXTERIOR WALL:
1/2" FLUOROCARBON SHEATHING
2x6 STUDS @ 16" O.C.
R50 BATT INSULATION
1/2" DRYWALL
TAPED & SANDED



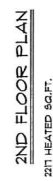
2264 HEATED SQ. FT.
781 GARAGE SQ. FT.
481 PORCH SQ. FT.

BINGHAM
REIDENCE

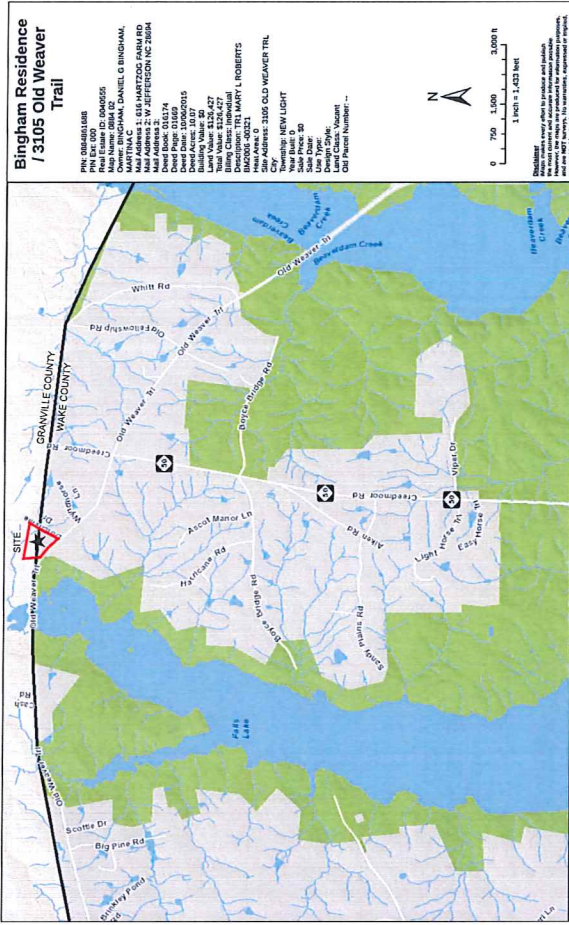
3/16

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

DRAWN BY: R. Longoria
SCALE: 1/4" = 1'-0"
DATE: _____
PAGE: 3



NORTH CAROLINA



CONSULTANT: ARCADIA CONSULTING ENGINEERS, PLLC
PO BOX 2077
APEX, NC 27502

CONTACT: TRENTON D. STEWART, PE
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FAX: (919) 363-1477
E-MAIL: trent@arcadiaengineers.com

THIS PROJECT IS A SINGLE FAMILY RESIDENCE LOCATED ON 10 ACRES. THE PROPERTY IS SITUATED BY THE GRANVILLE COUNTY / WAKE COUNTY LINE. THE PROPERTY IS A 10 ACRE PLOT OF LAND. THE PROPERTY IS LOCATED IN GRANVILLE COUNTY. THE SITE IS CONSIDERED TO BE A RURAL AREA. THE PROJECT HAS ALREADY RECEIVED A STORMWATER PERMIT FROM GRANVILLE COUNTY AND IS APPROVED AS A LOW IMPACT DEVELOPMENT (LID) PROJECT. DRIVEWAY LOCATION HAS RECEIVED APPROVAL FROM THE US ARMY CORPS OF ENGINEERS ON 7 APRIL 2016. THE SITE IS TO REMAIN WOODED EXCEPT FOR THE CLEARING TO FACILITATE THE CONSTRUCTION OF A 10' WIDE DRIVEWAY. THE SITE SLOPE IN THE AREA OF CONSTRUCTION IS 1:1.

SHEETS

COVER _____ C1.0

SITE LAYOUT PLAN _____ C1.1

EROSION CONTROL PLAN _____ C2.1

DETAILS _____ C3.1

SHEET NUMBER
C1.0
1 OF 4

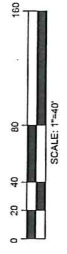


WAKE / GRANVILLE COUNTY

SHEET NUMBER
C1.1
2 OF 4

2 of 4

NOTE:
BOUNDARY, RIGHT-OF-WAY AND US ARMY CORPS OF ENGINEERS
(USACE) BASEMENT INFORMATION TAKEN FROM SURVEY PREPARED
BY PROFESSIONAL LAND SURVEYOR AND SURVEYOR AS
SHOWN ON ENCLOSURE 2. THIS IS REPRODUCED IN WATE
COUNTY REGISTERS OF DEEDS ON 2/14/2006.
EXISTING CONTOUR INFORMATION TAKEN FROM WAKE AND
GRAVILLÉ COUNTIES GIS.
SEPTIC LINE AND DRAINFIELD LOCATION TAKEN FROM SKETCH IN
PERMIT ISSUED 4/23/2007 BY THE GRANVILLE COUNTY HEALTH
DEPARTMENT.
TOTAL DISTURBED AREA = 1.14 ACRES

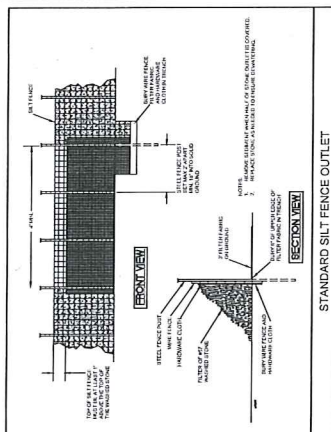


BINGHAM RESIDENCE
3105 OLD WEAVER TRAIL

[illegible]

SHEET TITLE	DETAILS	SHEET NUMBER
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C3.1
4 OF 4



STANDARD SILT FENCE OUTLET

SEEDBED PREPARATION

- [illegible]

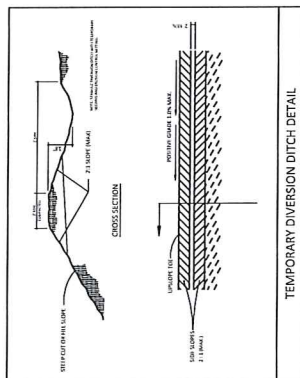
SEEDING SCHEDULE

MINIMUM REQUIREMENTS FOR SLOPE STABILIZATION	PLANTING RATE
3:1 SLOPE	300 US/Acre
4:1 SLOPE	300 US/Acre
5:1 SLOPE	300 US/Acre
6:1 SLOPE	300 US/Acre
7:1 SLOPE	300 US/Acre
8:1 SLOPE	300 US/Acre
9:1 SLOPE	300 US/Acre
10:1 SLOPE	300 US/Acre
11:1 SLOPE	300 US/Acre
12:1 SLOPE	300 US/Acre
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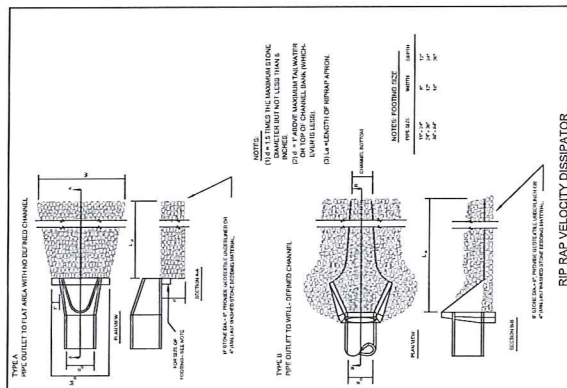
	SLOPES (2:1 TO 2:1)	
1	SERIEDA LESPEDEA (SCARIFIED)	50 LBS./ACRE
2	ADD TALL FESCUE	120 LBS./ACRE
3	OR ADD WEEPING LOVEGRASS	10 LBS./ACRE
4	OR ADD HILLED COMMON BERMUDAGRASS	25 LBS./ACRE
5	***BURNING MULET	120 LBS./ACRE
6	***OR SORGHUM - SUDAN HYBRIDS	35 LBS./ACRE
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CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF CONSIDERED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE CONSIDERATIONS ARE POSSIBLE.

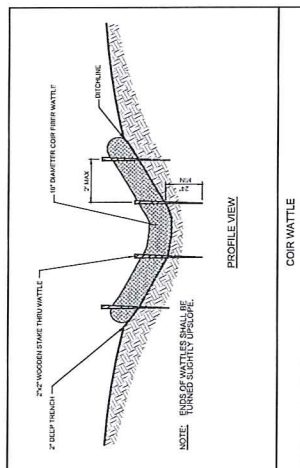
***TEMPERATURE - MEASURED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING. OTHERWISE, FESCUE MAY BE SHADDED OUT.



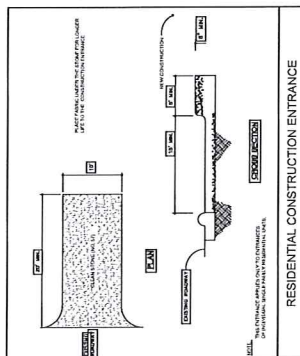
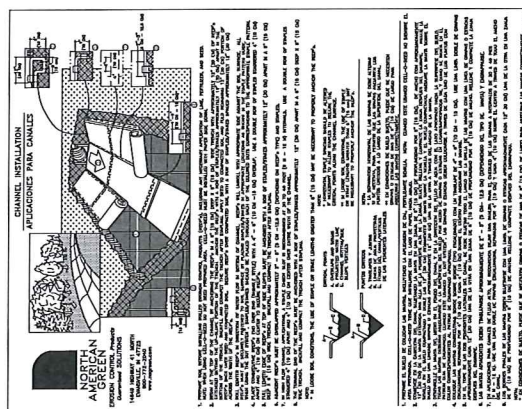
TEMPORARY DIVERSION DITCH DETAIL



CRIP RAP VELOCITY DISSIPATOR



COIR WATTLE



RESIDENTIAL CONSTRUCTION ENTRANCE