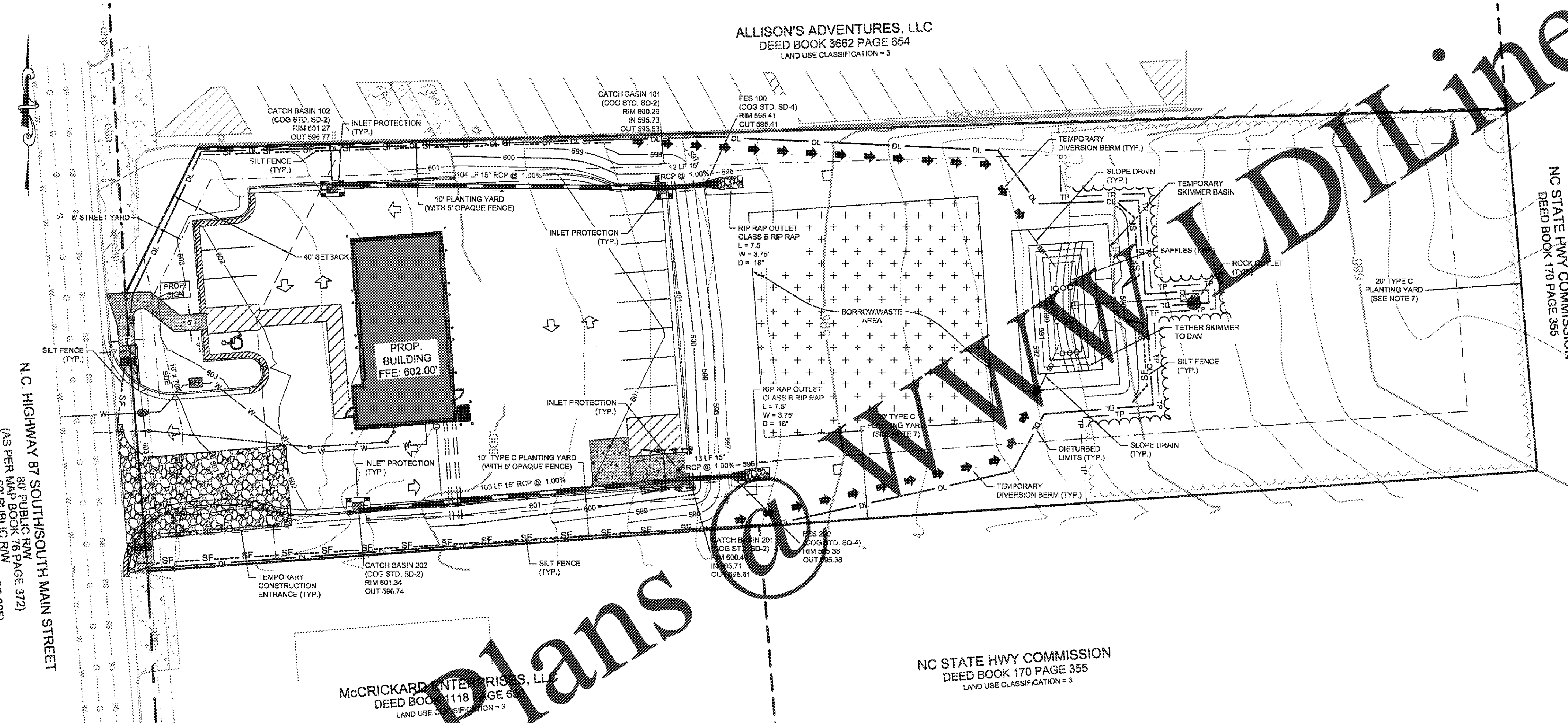
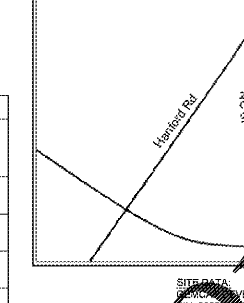
STORM NETWORK SUMMARY																				
Upstream Node	Downstream Node	Drainage Area (Acres)	Total Area (Acres)	Runoff Coef.	Rainfall Intensity (in/hr)	Flow to Inlet (cfs)	Total Flow (cfs)	Diameter (in)	Slope (%)	Pipe Length (ft)	Average Velocity (fps)	Full Flow Velocity (fps)	Full Flow (cfs)	Maximum Flow (cfs)	Upstream HGL (ft)	Downstream HGL (ft)	Upstream Rim Elev (ft)	Downstream Rim Elev (ft)	Upstream Pipe Invert (ft)	Downstream Pipe Invert(ft)
CATCH BASIN 102	CATCH BASIN 101	0.16	0.16	0.50	7.04	0.55	0.53	15.00	1.00	103.72	3.17	5.26	6.46	6.95	597.01	595.97	601.27	600.29	596.77	595.73
CATCH BASIN 101	FES 100	0.10	0.26	0.90	5.63	0.56	0.95	15.00	1.00	12.36	3.76	5.25	6.45	6.93	595.85	595.73	600.29	595.41	595.53	595.41
CATCH BASIN 202	CATCH BASIN 201	0.11	0.11	0.50	7.04	0.39	0.39	15.00	1.00	103.25	2.89	5.26	6.46	6.95	596.95	595.91	601.34	600.47	596.74	595.71
CATCH BASIN 201	FES 200	0.10	0.21	0.90	5.63	0.49	0.78	15.00	1.00	13.42	3.55	5.26	6.46	6.95	595.80	595.67	600.47	595.38	595.51	595.38



VICINITY MAP - NOT TO SCALE



SITE DATA:
GEMCAP DEVELOPMENT, LLC
PIN: 8883[illegible]76
PARCEL ID: [illegible]4075
DB. 408 PG. [illegible]

TOTAL AREA: 1.08 ACRES

DISTURBED AREA: 0.65 ACRES

ZONING:
EXISTING ZONING: R-7
PROPOSED ZONING: B-2
DEVELOPMENT STANDARDS: CITY OF GRAHAM
STREET SETBACK: 40'
SIDE SETBACK: N/A
REAR SETBACK: N/A
MAXIMUM HEIGHT: N/A'

WATERSHED DATA:
WATERSHED: COUNTY HOME BRANCH (STILL HOUSE BRANCH)
WATERSHED CLASSIFICATION: WS-V; NSW
RIVER BASIN: CAPE FEAR
STREAM INDEX: 16-17-1
SOIL TYPES: Ur, EoB2
AVG. SLOPE: 5%

LANDSCAPE YARD REQUIREMENTS:
PROPOSED LAND-USE-CLASSIFICATION: 4
ADJACENT PROPERTY LAND-USE-CLASSIFICATION: 3
STREET YARD: 8'
SIDE & REAR YARD: 20' TYPE C (10' W/ OPAQUE FENCE)

PARKING REQUIREMENTS:
PROPOSED USE: VEHICLE ACCESSORIES/REPAIR/WASH
- REQUIRED: 1,680 S.F. X 1 SPACE / 200 S.F. GFA = 9 SPACES
- PROVIDED: 12 TOTAL SPACES (1 HANDICAP)

NOTES:

1. PROPERTY WILL BE SERVED BY COG WATER AND PUBLIC SEWER.
2. ALL CONSTRUCTION IS TO BE TO CITY OF GRAHAM, NCDOT, AND NCDEQ STANDARDS.
3. FIELD LOCATION INFORMATION SHOWN PROVIDED BY CAIN SURVEYING, P.C. PER SURVEY DATED 03/03/2020.
4. THIS MAP DOES NOT MEET G.S. 47-30 REQUIREMENTS AND IS NOT FOR RECORDING OR CONVEYANCE.
5. THIS MAP IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT OF WAYS, AND AGREEMENTS NOT VISIBLE OR APPARENT AT THE TIME OF THE SURVEY.
6. THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A TITLE INVESTIGATION, THEREFORE, THIS MAP IS SUBJECT TO ANY AND ALL FACTS AN ACCURATE TITLE INVESTIGATION MAY DISCLOSE.
7. WHERE POSSIBLE, EXISTING VEGETATION WITHIN THE 20' TYPE C PLANTING YARD WILL REMAIN AND BE INSPECTED BY CITY OF GRAHAM FOR APPROVAL. SEE SHEET 7 FOR LIMITS OF TREE FENCING FOR TREE PRESERVATION.
8. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
9. ALL CONSTRUCTION SHALL COMPLY WITH THE SOUTH MAIN STREET/HIGHWAY 87 OVERLAY DISTRICT STANDARDS.
10. EXISTING DRIVEWAY ON SOUTH MAIN STREET (HIGHWAY 87) IS TO BE REMOVED.
11. PRIOR TO CONSTRUCTION, DRIVEWAY PERMITS WILL BE OBTAINED FROM CITY OF GRAHAM NCDOT AS APPLICABLE.
12. CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED IMMEDIATELY IF SURVEY DOES NOT MATCH EXISTING CONDITIONS. THE EXISTING LOCATION OF THE WATER LINE AND SEWER MAIN HAS NOT BEEN FIELD LOCATED. CONTRACTOR SHALL HAVE BOTH UTILITIES FIELD VERIFIED BEFORE OPEN CUTTING ROAD FOR SERVICE INSTALLATION/MODIFICATION.
13. THE EXACT LOCATION OF THE WATER AND SEWER MAIN IS UNKNOWN. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING MAINS AND COORDINATE WITH NCDOT PRIOR TO PERFORMING SERVICE TIES. WHEN WORKING WITHIN NCDOT PUBLIC R/W, CONTRACTOR SHALL FOLLOW ALL GUIDELINES AND REQUIREMENTS OUTLINED IN THE ENCROACHMENT AGREEMENT AND DRIVEWAY PERMIT. CONTRACTOR SHALL COORDINATE WITH COG UTILITIES DEPARTMENT WHEN INSTALLING WATER SERVICE AND BACKFLOW DEVICE.
14. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
15. SEWER SERVICE TO FACILITY SHALL BE INSTALLED PER CURRENT NC PLUMBING CODE. CONTRACTOR TO VERIFY SEWER SERVICE TO MAIN IS EXISTING 4" PRIOR TO PERFORMING EXTENSION TO THE BUILDING.
16. SOIL UNDER BUILDINGS AND PAVED AREAS SHALL BE COMPACTED TO STANDARD PROCTOR MAXIMUM DRY DENSITY AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER; AND WITHIN PUBLIC RIGHT OF WAY SHALL CONFORM TO COG AND NCDOT REQUIREMENTS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY. CONTRACTOR TO COORDINATE ACTIVITIES WITH UTILITY COMPANIES INVOLVED IN ANY RELATED RELOCATIONS.
18. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.
19. MINIMUM SLOPE FOR 4" SANITARY SEWER COLLECTION LINES SHALL BE NO LESS THAN 2%.
20. ALL SEWER CLEANOUTS IN PAVEMENT AREAS SHALL BE TRAFFIC BEARING.
21. EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THE ORIGINAL CONDITION OR THE SATISFACTION OF THE OWNER BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
22. HANDICAP PARKING AND ACCESS TO BUILDING MUST MEET ALL CURRENT FEDERAL AND LOCAL ACCESSIBILITY RULES AND GUIDELINES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE AREAS ARE GRADED TO ADA COMPLIANT SPECIFICATIONS. PARKING SPACE AND HATCHED AREA MUST BE FLATTER THAN 2% IN ALL DIRECTIONS INCLUDING THE DIAGONAL.

EROSION CONTROL MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL MEASURES AS DESIGNED.
2. SEDIMENT BASINS SHALL BE INSPECTED REGULARLY DURING LAND DISTURBING ACTIVITIES AND AFTER EACH RUNOFF-PRODUCING RAINFALL. SEDIMENT SHALL BE REMOVED AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF EACH BASIN. PORTIONS OF THE BASIN'S GRAVEL FACING THAT ARE CONTAMINATED BY SEDIMENT SHALL BE REPLACED WITH FRESH GRAVEL DURING EACH SEDIMENT REMOVAL EPISODE.
3. SEDIMENT FENCES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS NEEDED TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAINFALL EVENT, AND TO REDUCE PRESSURE ON THE FENCE. FENCING MATERIALS AND SEDIMENT DEPOSITS SHALL BE REMOVED, AND THE AREA BROUGHT TO GRADE FOLLOWING STABILIZATION OF UPGRADIENT DISTURBED AREAS.
4. DIVERSION DITCHES MUST REMAIN IN PLACE UNTIL PROJECT IS STABILIZED AND PERMISSION GIVEN BY THE EROSION CONTROL OFFICER.
5. THE NC STATE BUILDING CODE REQUIRES THAT ANY CONSTRUCTION INCLUDING DECKS LOCATED LESS THAN FIVE (5) FEET FROM A PROPERTY LINE, SHALL HAVE NOT LESS THAN A ONE-HOUR FIRE-RESISTIVE RATING WITH EXPOSURE FROM BOTH SIDES. THIS REQUIREMENT APPLIES TO ANY ATTACHED STRUCTURE SUCH AS DECKS OR PORCHES. THE NC STATE BUILDING CODE REQUIREMENTS IN EFFECT AT THE TIME OF THE BUILDING PERMIT APPLICATION WILL SUPERSEDE THIS NOTE.
6. A RAIN GAUGE AND REPORT BOX SHALL BE LOCATED ON-SITE FOR RAINFALL MONITORING AND SITE INSPECTIONS. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING THE WEEKLY INSPECTIONS OR AFTER 1" OF RAINFALL TO CONFORM WITH THE NPDES PERMIT REQUIREMENTS. REPORTS SHALL BE KEPT IN THE INSPECTION BOX AND REMAIN AVAILABLE TO REVIEWING AGENCIES UPON REQUEST.

CONSTRUCTION SEQUENCE:

1. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE. TEMPORARY DIVERSION DITCHES SHALL REMAIN IN PLACE UNTIL ALL STORM DRAINAGE IS INSTALLED, SITE IS PAVED AND PERMANENTLY STABILIZED, AND COG (IF REQUIRED) APPROVES REMOVAL OF TEMPORARY DEVICES.
2. ALL AREAS AND SLOPES DISTURBED DURING CONSTRUCTION AND EXPOSED SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING WITHIN 14 CALENDAR DAYS, FOLLOWING COMPLETION OF ANY PHASE OF GRADING OR PERIOD OF INACTIVITY. PERMANENT GROUNDCOVER IS TO BE ESTABLISHED FOR ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS, FOLLOWING COMPLETION OF CONSTRUCTION, COMPLETION OF GRADING OR PERIOD OF INACTIVITY. PERMANENT SEEDING, MULCHING AND GROUND COVER SHALL BE APPLIED TO THE SITE FOLLOWING COMPLETION OF CONSTRUCTION. HIGH QUALITY WATER (HWQ) ZONES AND PERIMETER DIKES, SWALES, DITCHES, AND SLOPES SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING WITHIN 7 CALENDAR DAYS.
3. INSTALL STORM DRAINAGE NETWORK. INLET PROTECTION SHALL BE PLACED AT EACH OF THE STRUCTURES ONCE INSTALLED.
4. BORROW/WASTE AREA TO BE FILLED AND RETURNED TO EXISTING GRADE. CONTRACTOR TO ENSURE POSITIVE DRAINAGE TO SKIMMER BASIN.
5. FINE GRADE THE SITE. WHEN AREAS ARE FINE GRADED, INSTALL STONE, CURB AND GUTTER, AND PROCEED TO PAVE THE PARKING LOT.
6. STABILIZE ALL REMAINING AREAS. ONCE AREAS ARE STABILIZED, CONTACT EROSION INSPECTOR TO REMOVE TEMPORARY EROSION CONTROL DEVICES.
7. REMOVE TEMPORARY EROSION CONTROL MEASURES.
8. OBTAIN FINAL INSPECTION TO CLOSE THE GRADING PERMIT.

Skimmer Basin Summary	Required
Basin volume =	1464 cu. ft.
Basin surface area =	800 sq. ft.
Basin storage depth =	2 ft
Basin Min Width =	40 ft
Basin Min Width =	20 ft
Spillway length =	10 ft
Side Slopes=	2:1

Skimmer Size Summary:	Required
Skimmer size:	1.5 in
Orifice size:	1.0 in

20 0 10 20 40 80
SCALE: 1"=20'

ALL CONSTRUCTION MUST CONFORM TO THE UNDERGROUND UTILITY PROTECTION ACT
BEFORE YOU DIG! CONTACT ONE-CALL CENTER

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STRICKLAND BROTHER'S 10 MINUTE OIL CHANGE

EROSION CONTROL - STAGE 2

OWNER INFORMATION:
GEMCAP DEVELOPMENT, LLC
418 N MARSHALL STREET, SUITE 201
WINSTON-SALEM, NC 27101

PROJECT LOCATION:
CITY: GRAHAM
COUNTY: ALAMANCE
STATE: NORTH CAROLINA

NO	DATE	REVISION NOTE
1		
2		
3		
4		
5		
6		

DRAWN BY : CP
CHECKED BY: AC
DATE: 05/14/2020
PROJECT NO. 07510.018
REF. NO.: -
SCALE: N/A

NORTH CAROLINA PROFESSIONAL SEAL 027436 ENGINEER RAVINDRA BISSRAM
PRELIMINARY NOT FOR CONSTRUCTION

SHEET

PRELIMINARY - NOT RELEASED FOR CONSTRUCTION

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