PART 3: Authorization to Operate (ATO)

Except for date received, the Section below is to be completed by the Owner or the PE.

LHD USE ONLY: Initial submittal of request for ATO received: 11/6/23 (Date) by OT (Initials)

Date of Post-construction Conference: _____

The following items are included in this submittal for an Authorization to Operate under an EOP:

1.	Signed and sealed copy of the Engineer's report that includes the information in G.S. 130A-336.1(k)(1) and 15A NCAC 18A .1971(f)	☒ Yes	☐ No
2.	Operation and management program	☒ Yes	☐ No
3.	Fee (as applicable)	☐ Yes	☒ No
4.	Notarized letter documenting Owner's acceptance of the system from the PE	☒ Yes	☐ No
5.	Owner meets requirements of ownership or control of the system per 15A NCAC 18A .1938(j)	☒ Yes	☐ No
6.	Easement, right of way, or encroachment agreement required per 15A NCAC 18A .1938(j)	☐ Yes	☒ No
7.	Multi-party agreements required, as applicable, pursuant to 15A NCAC 18A. .1937(h)	☐ Yes	☒ No

If yes, agreements filed in _____ County Register of Deeds in Deed Book _____ Page _____

Attestation by the Owner or the PE for Authorization to Operate

I, Gary S MacConnell (Print name of Owner or Professional Engineer) hereby attest that all items indicated above have been provided to the Haywood County LHD and the system shall meet applicable federal, state, and local laws, regulations, rules and ordinances in accordance with G.S. 130A-336.1(e)(6).

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL

_____ 8/25/2023
Signature of Owner or Professional Engineer *Date*

This section for LHD Use Only

LHD Review of required information for the ATO

☐ INCOMPLETE

Based upon review of information submitted in the Section above, the following items are missing from the information required for an Authorization to Operate for an EOP: _____

_____.

Copies of this signed form were sent to the design PE and the Owner on _____ (Date) via _____ (Email, FAX, USPS, Hand-delivered).

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

☒ COMPLETE

Based upon review of information submitted in the Section above, this Authorization to Operate is hereby issued in accordance with G.S. 130A-336.1(m).

A copy of this complete NOI/ATO with tracking information was sent to the State on 11/6/23 (Date) via _____ (Email, FAX, USPS, Hand-delivered).

OLIVER TOLKSDORF _____ 11/6/23
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

ISSUANCE OF CERTIFICATE OF OCCUPANCY: Once the LHD determines completeness based upon the ATO submission, the owner may apply to the local permitting agency for permanent electrical service to a residence, place of business or place of public assembly pursuant to G.S. 130A-339.

NW Harnett Fire Station 3
Engineered Option Permit

A. Evaluation of Soil Conditions & Site Features

MacConnell & Associates, P.C.
501 Cascade Pointe Lane, Suite 103
Cary, North Carolina 27513

P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
Fax: (919) 319-6510

P.O. Box 129
Morrisville, NC 27560

(919) 467-1239

MacCONNELL & Associates, P.C.
"Engineering Today For Tomorrow's Future"

501 Cascade Pointe Lane
Suite 103
Cary, NC 27513

www.macconnellandassoc.com

September 29, 2023

To Local Health Department:

Please note the following Session Law:

WAIVER OF POST-CONSTRUCTION CONFERENCE FOR CERTAIN ENGINEERED WASTEWATER SYSTEMS
SECTION 12A. G.S. 130A-336.1(j) reads as rewritten: House Bill 366 Session Law 2021-117 Page 7.

Per the above reference Session Law, we request that the Post-Construction Conference be waived for the following project:

Client: Bobbitt Design Build, Inc.
Project: US HWY 401 N
Project: A21203.00

Requested By:
Engineer: Gary S. MacConnell, P.E.

NORTH CAROLINA PROFESSIONAL SEAL 17059 ENGINEER GARY S. MACCONNELL

Signature 11/3/2023

Approved By:
Owner or Owner's Representative:

CHRIS PRINCE
Print Name

Chris Prince, chief
Signature

I Certify that the following person (s) Chris Prince personally appeared before me this day November 2, 2023.

CHRISTINE L. BYRD NOTARY PUBLIC My Commission Expires July 29, 2028 JOHNSTON COUNTY, NC

July 29, 2028

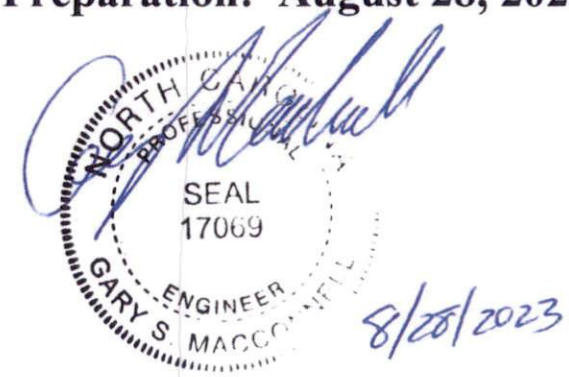
Bobbitt Design Build, Inc.
NW Harnett Fire Station 3

Authorization to Operate
Engineered Option Permit
Conventional Gravity System

US HWY 401 N
Harnett County, North Carolina

Project Number: A21203.00

Date of Preparation: August 28, 2023



Supporting Information &
Technical Specifications Prepared By:

MacConnell & Associates, P.C.
Full-Service Consulting Engineers

501 Cascade Pointe Lane, Ste 103
Cary, North Carolina 27513

Post Office Box 129
Morrisville, North Carolina 27560

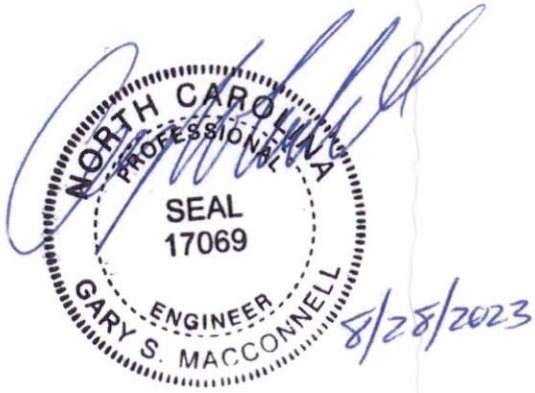
Telephone: (919) 467-1239 Fax: (919) 319-6510

MacCONNELL & ASSOCIATES, P.C.

Table of Contents

NW Harnett Fire Station 3
Engineered Option Permit

1. Common Form Part 3 – Authorization to Operate



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Cary, North Carolina 27513

P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
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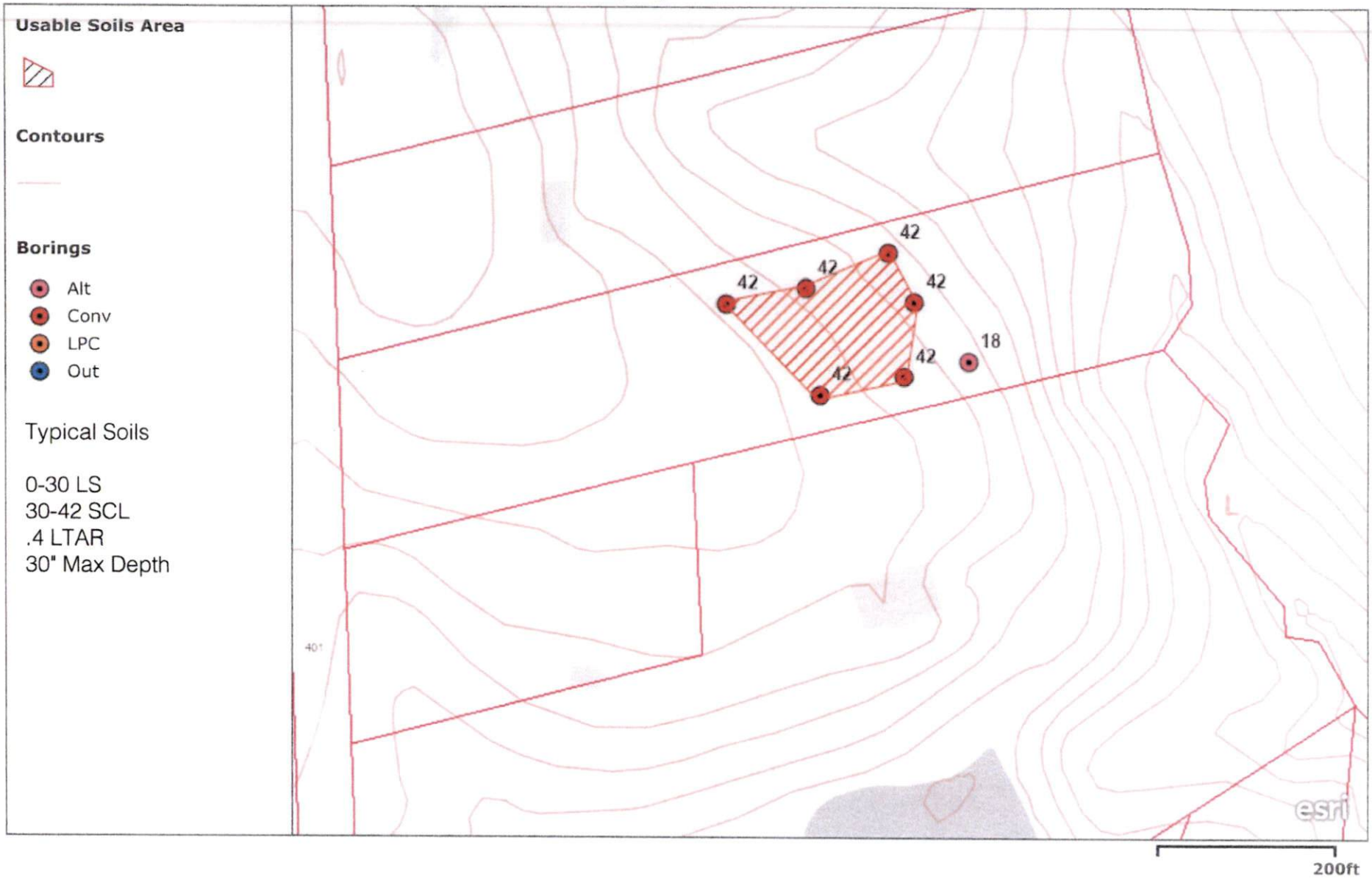
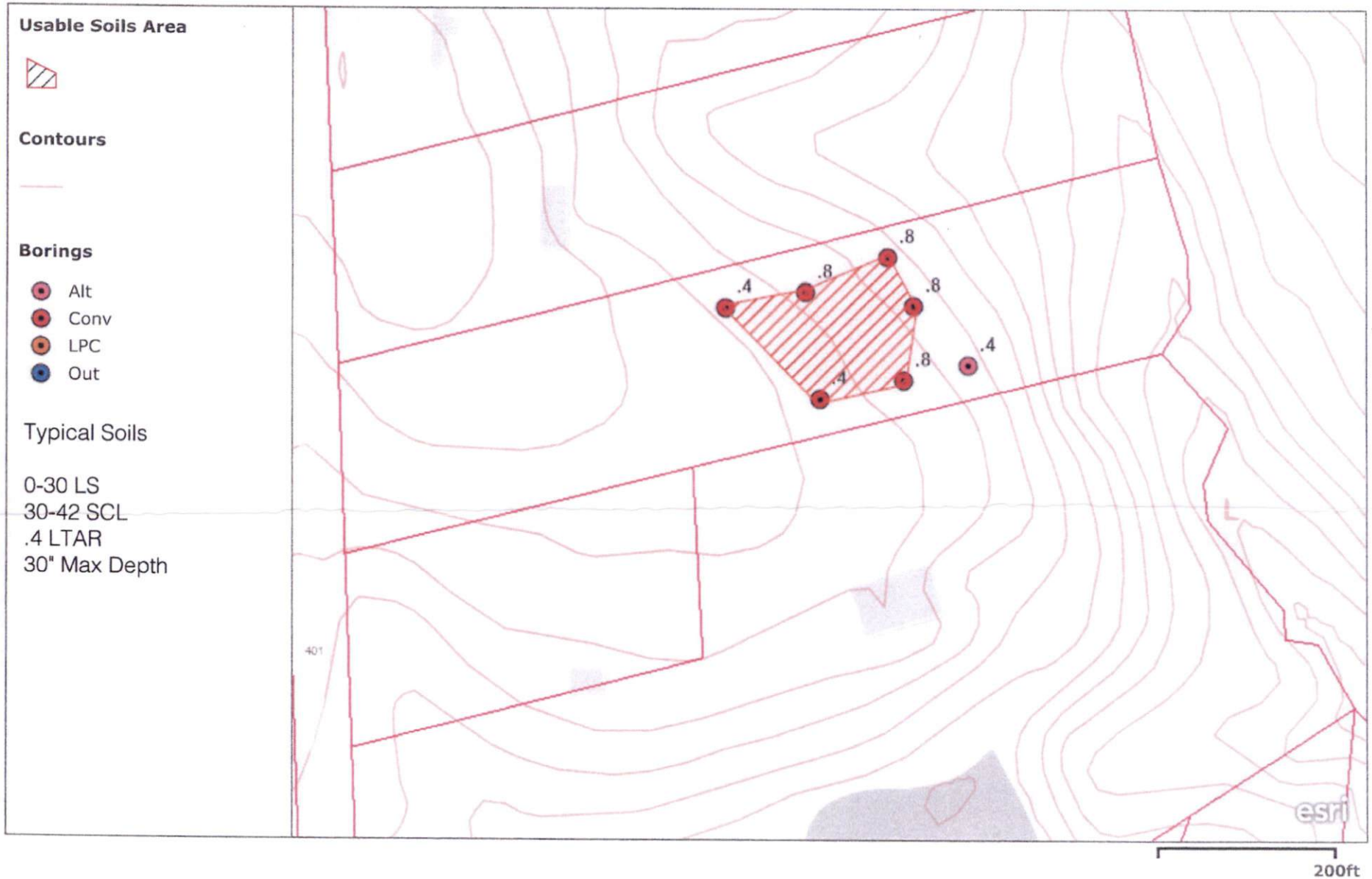
Soil Evaluation - NW Harnett Fire Station 3-Fuquay-Varina



Soil Evaluation - NW Harnett Fire Station 3-Fuquay-Varina



Soil Evaluation - NW Harnett Fire Station 3-Fuquay-Varina

Usable Soils Area

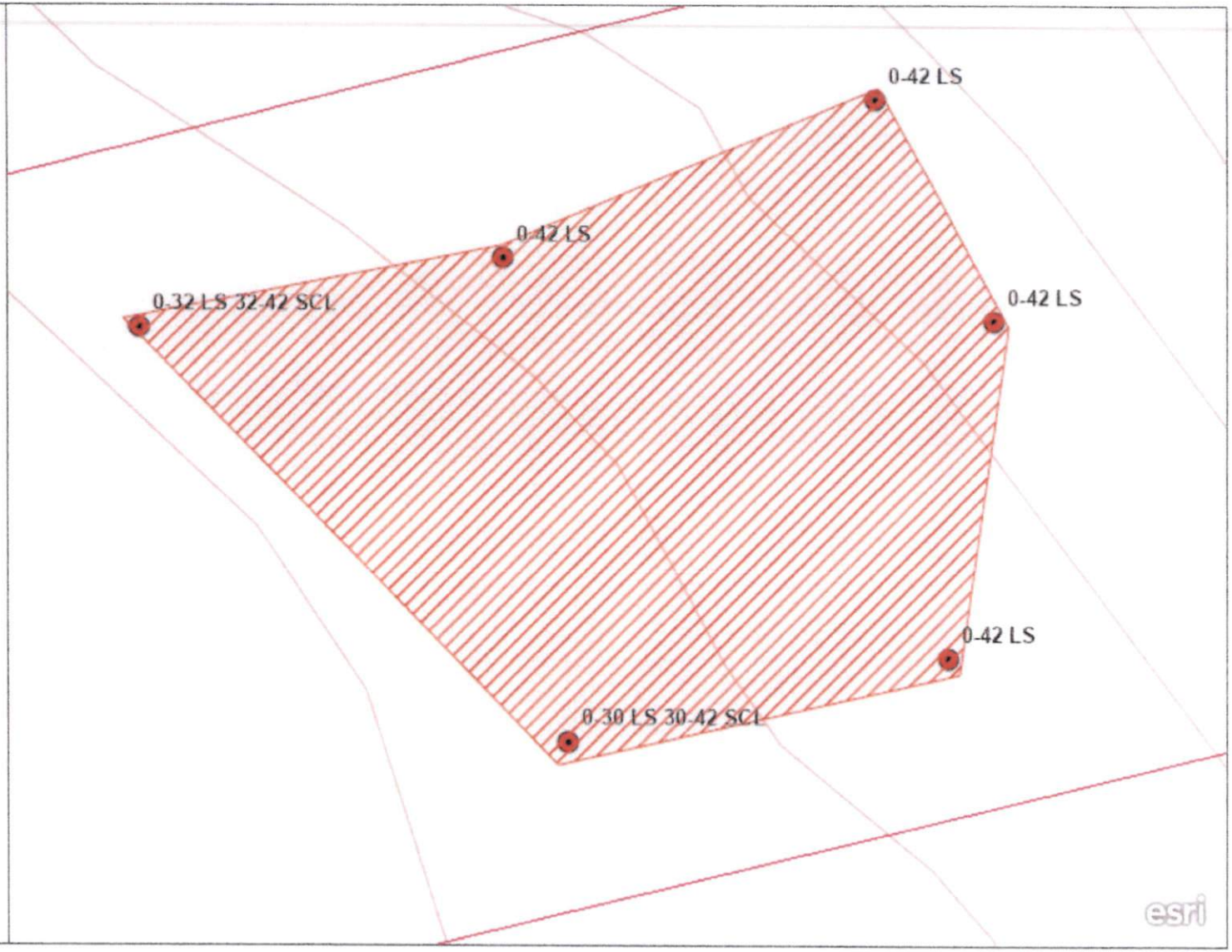
Contours

Borings

- Alt
- Conv
- LPC
- Out

Typical Soils

0-30 LS
30-42 SCL
.4 LTAR
30" Max Depth



NW Harnett Fire Station 3
Engineered Option Permit

B. Drawings, Specifications, and Plans

8/28/2023

MacConnell & Associates, P.C.
501 Cascade Pointe Lane, Suite 103
Cary, North Carolina 27513

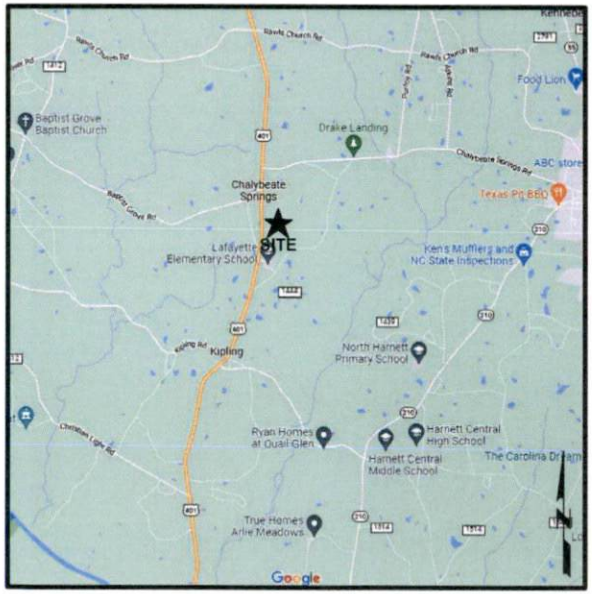
P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
Fax: (919) 319-6510

BOBBITT DESIGN BUILD, INC.

US HIGHWAY 401 N
NW HARNETT FIRE STATION 3

CONVENTIONAL GRAVITY SYSTEM - EOP



VICINITY MAP

ORIGINAL SUBMITTAL: 03/04/2022
RESUBMITTAL: 01/13/2023

PROJECT No. A21203.00

HARNETT COUNTY, NC

PIN# 0653-68-0029.000

SCHEDULE OF DRAWINGS:

C-100	COVER SHEET
C-101	OVERALL SITE LAYOUT
C-102	DRAINFIELD LAYOUT
C-103	NOTES
C-104	SUPPLY LINE PLAN & PROFILE
D-101	DETAILS 1 OF 3
D-102	DETAILS 2 OF 3
D-103	DETAILS 3 OF 3

LOCATION MAP

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE DESIGN PROFESSIONAL CANNOT ASSURE ITS ACCURACY, AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DRAWING OR FOR ANY ERRORS OR OMMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

RECORD DRAWING
AUGUST 24, 2021

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL
08/24/2023

MacCONNELL & Associates, P. C.
501 CASCADE POINTE LANE, SUITE 103
CARY, NORTH CAROLINA 27513
P. O. BOX 129
MORRISVILLE, NORTH CAROLINA 27560
TEL: (919) 467-1239 FAX: (919) 319-6510

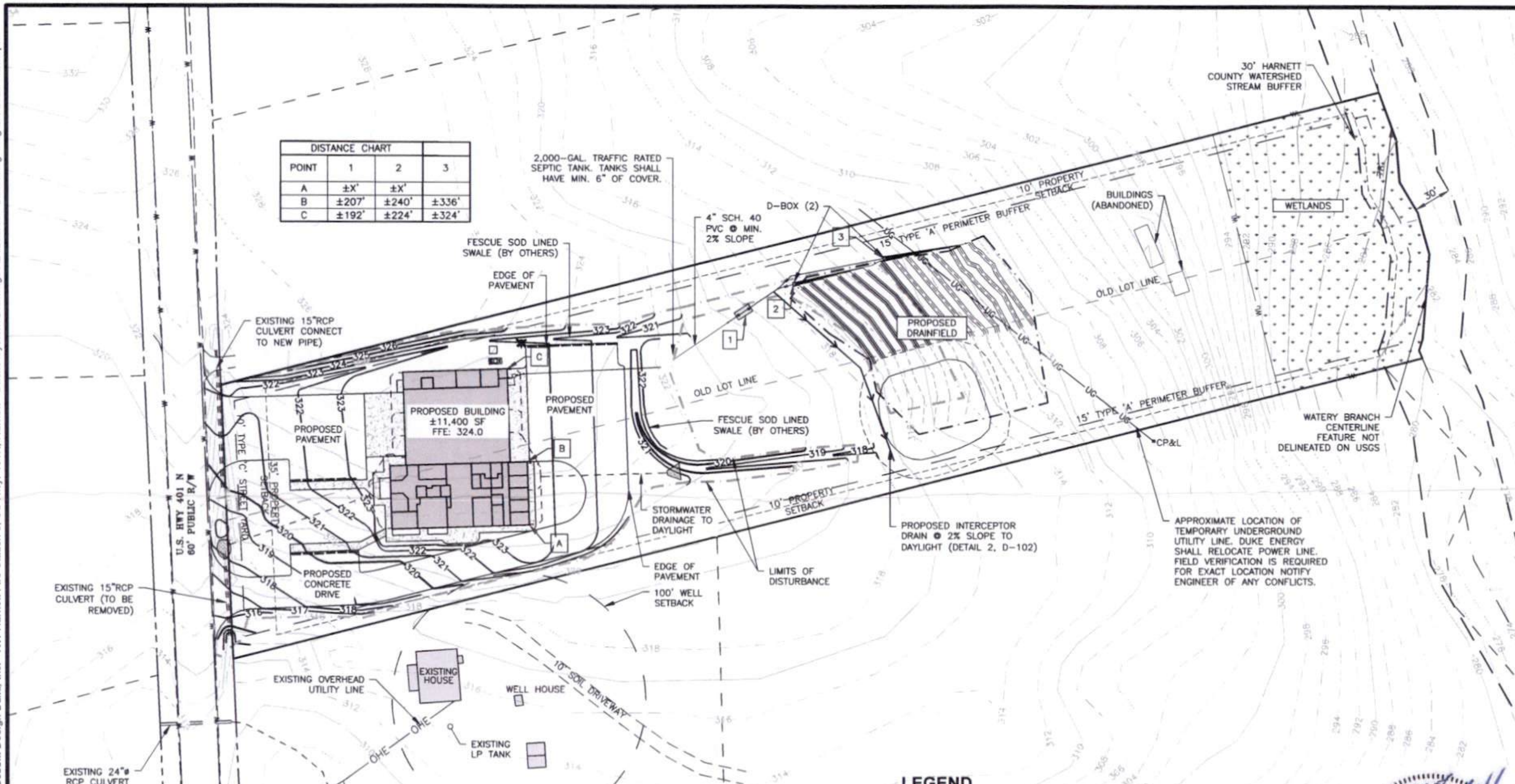
BY:	CAC, HGM
JOB #:	A21203.00
DATE:	01/13/2023

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N
CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

COVER SHEET

C-100

Z:\T-Drive (Projects)\Library\2022\A21203.00 - Bobbitt Design Build, Inc. - NW Harnett Fire Station 3, US Hwy. 401N, Harnett - Onsite System\Drawings\A21203.00 - Cover.dwg Aug 24, 2023 12:53pm



DISTANCE CHART			
POINT	1	2	3
A	±X'	±X'	
B	±207'	±240'	±336'
C	±192'	±224'	±324'

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RECORD DRAWING
AUGUST 24, 2023

NOTES

1. PARCELS TAKEN FROM HARNETT COUNTY GIS. TOPO TAKEN FROM NC FRIS. SITE PLAN INFORMATION PROVIDED BY BOBBITT DESIGN BUILD, INC. SOIL INFORMATION PROVIDED BY MARLIN SEPTIC SERVICES.
2. KEEP TANKS AND DRAIN LINES A MINIMUM OF 10' OFF OF PROPERTY LINES.
3. KEEP SUPPLY LINES, PRESSURE MANIFOLD, FORCE MAIN A MINIMUM OF 5' OFF OF PROPERTY LINES.
4. INSTALL DRAINLINES ON CONTOUR WITH A MAXIMUM TRENCH DEPTH OF 30".

LEGEND

- ADJACENT BOUNDARY
- BOUNDARY (PROPERTY)
- CONTOURS – INDEX
- CONTOURS – INTERMEDIATE
- PROPOSED DRAIN LINES/TRENCHES
- PROPOSED REPAIR DRAIN LINES/TRENCHES
- DRAIN LINES NOT USED
- SETBACKS
- FM — FORCE MAIN
- W — WATER LINE
- CO — CLEAN OUT

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL
08/24/2023

GRAPHIC SCALE: 1" = 80'
0 40 80 160 240

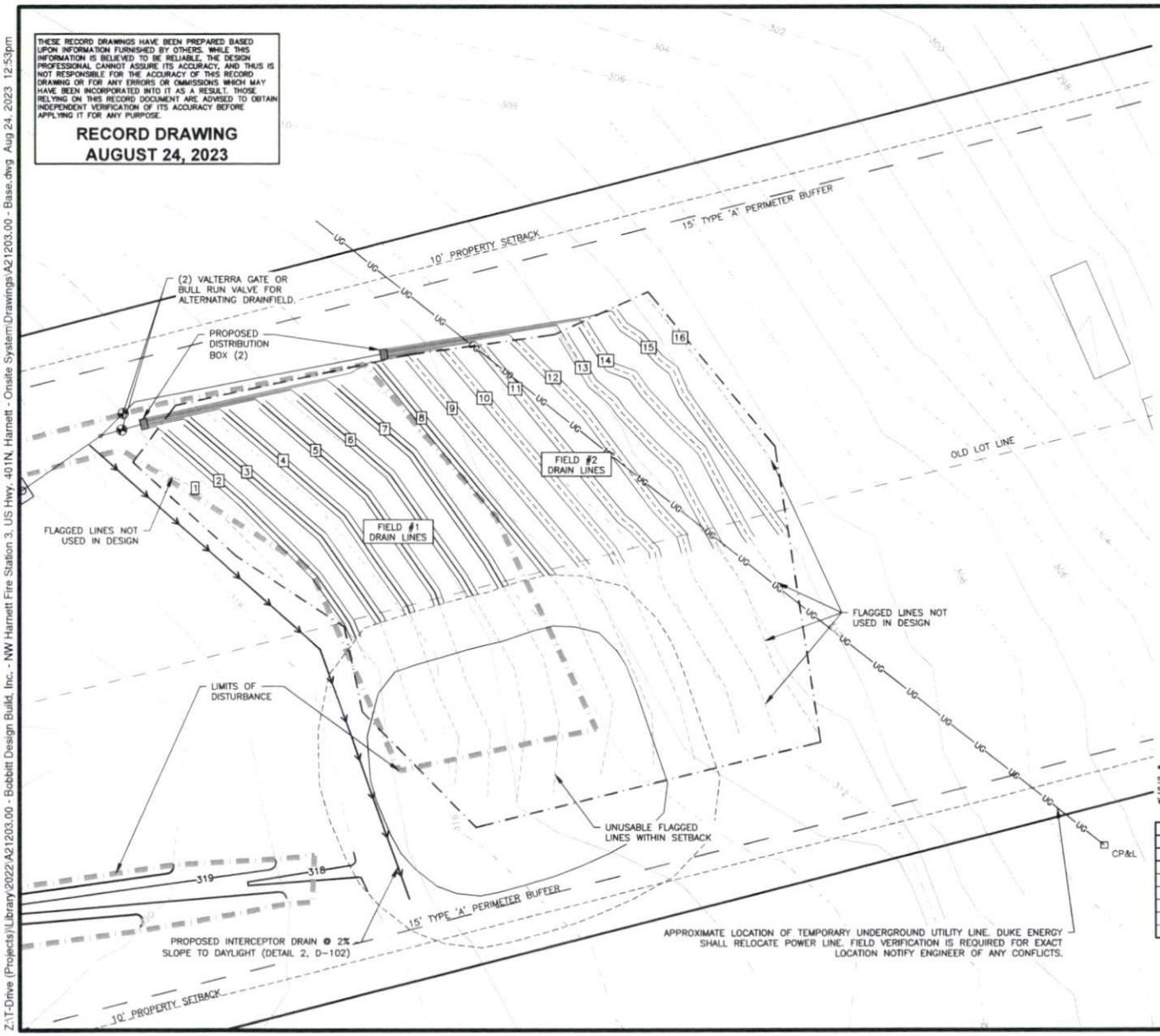
MacCONNELL & Associates, P. C.
501 CASCADE POINTE LANE, SUITE 103
CARY, NORTH CAROLINA 27513
P. O. BOX 129
MORRISVILLE, NORTH CAROLINA 27560
TEL: (919) 467-1239 FAX: (919) 319-6510

BY: CAC, HGM
JOB #: A21203.00
DATE: 01/13/2023

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N
CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

OVERALL SITE LAYOUT

C-101



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NOTES

1. PARCELS TAKEN FROM HARNETT COUNTY GIS. TOPO TAKEN FROM NC FRIS. SITE PLAN INFORMATION PROVIDED BY BOBBITT DESIGN BUILD, INC. SOIL INFORMATION PROVIDED BY THOMAS J. BOYCE, LSS.
2. KEEP TANKS AND DRAIN LINES A MINIMUM OF 10' OFF OF PROPERTY LINES.
3. KEEP SUPPLY LINES AND D-BOX A MINIMUM OF 5' OFF OF PROPERTY LINES.
4. INSTALL DRAINLINES ON CONTOUR WITH A MAXIMUM TRENCH DEPTH OF 30".

DRAIN LINE SEGMENTS (FIELD #1)

LINE #	FLAG COLOR	LENGTH	EXISTING GRADE	TRENCH BOTTOM DEPTH*
2	PINK	80'	316.5'	30" BELOW EGS (±314.0')
3	PURPLE	80'	316.3'	30" BELOW EGS (±313.8')
4	GREEN	80'	315.8'	30" BELOW EGS (±313.3')
5	PINK	80'	315.3'	30" BELOW EGS (±312.8')
6	PURPLE	80'	314.8'	30" BELOW EGS (±312.3')
7	GREEN	80'	314.4'	30" BELOW EGS (±311.9')
8	PINK	80'	313.8'	30" BELOW EGS (±311.3')
TOTALS	560'			

DRAIN LINE SEGMENTS (FIELD #2)

LINE #	FLAG COLOR	LENGTH	EXISTING GRADE	TRENCH BOTTOM DEPTH*
9	PURPLE	80'	313.3'	30" BELOW EGS (±310.8')
10	GREEN	80'	312.7'	30" BELOW EGS (±310.2')
11	PINK	80'	312.0'	30" BELOW EGS (±309.5')
12	PURPLE	80'	311.6'	30" BELOW EGS (±309.1')
13	GREEN	80'	311.4'	30" BELOW EGS (±308.9')
14	PINK	80'	311.2'	30" BELOW EGS (±308.7')
15	PURPLE	80'	311.0'	30" BELOW EGS (±308.5')
TOTALS	560'			

*DEPTH FROM EXISTING GROUND SURFACE. PROVIDE MIN.12" SEPARATION FROM SEASONAL SOIL WETNESS.

UNUSED DRAIN LINES

LINE #	FLAG	LENGTH
1	GREEN	60'
16	GREEN	58'

GRAPHIC SCALE: 1" = 30'
0 15 30 60 90

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL
08/24/2023

DRAINFIELD LAYOUT
C-102

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N
CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

BY: CAC, HGM
JOB #: A21203.00
DATE: 01/13/2023

MacCONNELL & Associates, P. C.
501 CASCADE POINTE LANE, SUITE 103
CARY, NORTH CAROLINA 27513
P. O. BOX 129
MORRISVILLE, NORTH CAROLINA 27560
TEL: (919) 467-1239 FAX: (919) 319-6510

MAINTENANCE SCHEDULE

ITEM	FREQUENCY	TASK
WATER CONSUMPTION	MONTHLY	RECORD TOTAL GALLONS USED FROM METER AT POTABLE WATER SUPPLY SOURCE.
		PUMP OUT ACCUMULATED GREASE AND DISPOSE OF IN A STATE-PERMITTED MANNER/FACILITY.
SEPTIC TANKS	WEEKLY	CHECK EFFLUENT FILTERS AND CLEAN AS REQ'D.
	MONTHLY	CHECK FOR SOLIDS ACCUMULATION, BLOCKAGES, AND BAFFLE AND/OR EFFLUENT FILTER DAMAGE. CHECK FOR IN/EXFILTRATION OF LIQUID.
	12 MONTHS OR AS REQ'D	PUMP OUT ACCUMULATED SOLIDS AND DISPOSE OF IN A STATE-PERMITTED MANNER/FACILITY.
DISPOSAL FIELDS	MONTHLY OR AS REQ'D	MOW VEGETATIVE COVER. CHECK FOR EROSION OR SURFACING OR PONDING OF EFFLUENT.
	MONTHLY	WATER LEVELS IN THE FIELD TRENCH OBSERVATION PORTS SHOULD BE INSPECTED/RECORDED.

NOTES

1. DRAWINGS BASED ON SITE SKETCH BY MARLIN WASTEWATER SERVICES, HARNETT COUNTY GIS AND SITE PLAN BY BOBBITT DESIGN BUILD, INC.
2. THE CONTRACTOR IS REQUIRED TO VERIFY ALL DIMENSIONS, ELEVATIONS, AND UTILITIES BEFORE BEGINNING ANY CONSTRUCTION.
3. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS OF THE COUNTY AND STATE.
4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA, NCDOT, AND SAFETY REQUIREMENTS OF THE COUNTY AND STATE.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL CONSTRUCTION DAMAGE EXPEDITIOUSLY AND AT NO ADDITIONAL COST TO THE OWNER.
6. FOUR OR SIX-INCH DIAMETER CORRUGATED PLASTIC TUBING SHALL COMPLY WITH ASTM F405 AND G.S. 150B-21.6.
7. NITRIFICATION TRENCH SHALL FOLLOW THE CONTOUR OF THE GROUND.
8. SURFACE WATER RUNOFF AND PONDING SHALL BE PROHIBITED AT ALL TIME.
9. SOIL COVER SHALL BE PLACED OVER A NITRIFICATION FIELD ONLY AFTER PROPER PREPARATION OF THE ORIGINAL GROUND SURFACE. THE TYPE OF SOIL COVER SHALL BE APPROVED BY THE LOCAL HEALTH DEPARTMENT.
10. ALL SERVICE ACCESS OPENINGS WILL BE A MINIMUM OF 24 INCHES UNLESS OTHERWISE SHOWN.
11. ALL JOINTS (MID-SEAM, TOP-SEAM) SHALL BE SEALED USING CONCRETE SEALANTS BUTYL SEALANT # CS-102 MEETING ASTM C-990.
12. TANKS SHALL BE LEAK-TESTED PRIOR TO SYSTEM START UP BY APPLYING A VACUUM OF 5-INCHES OF MERCURY WITH RISER ASSEMBLIES IN PLACE OR A 24-HOUR STATIC WATER TEST, IN ACCORDANCE WITH ASTM STANDARDS
13. ALL PIPE PENETRATIONS THROUGH PRECAST CONCRETE TANKS SHALL BE PRESS-SEAL CAST-A-SEAL 402 RUBBER BOOTS OR EQUAL AND GROUTED.
14. ANY CHANGES TO TANK LAYOUT AND INVERTS MAY BE ADJUSTED AS NECESSARY TO COMPLY WITH ACTUAL FIELD CONDITIONS UPON APPROVAL BY THE ENGINEER.
15. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN TANK INSTALLATION WILL OCCUR SO FIELD INSPECTION CAN TAKE PLACE.
16. CONTRACTOR SHALL DIVERT SURFACE WATER FROM ALL TANK AREAS. (SEPTIC TANKS, ETC.)
17. VEGETATIVE COVER SHALL BE ESTABLISHED IMMEDIATELY AFTER FIELD INSTALLATION.
18. ALL COMPONENTS TO BE ACCESSIBLE AT GRADE WITHOUT ENTERING INTO THE RISER/TANK.
19. CONTRACTOR MAY USE LARGER TANK WITH ENGINEER'S APPROVAL. PUMP TANK DOSE VOLUME, ETC. WILL NEED TO BE ADJUSTED.
20. PRE-CAST CONCRETE SEPTIC TANK DIMENSIONS SHOWN ARE BASED ON DAVID BRANTLEY & SONS. OTHER MANUFACTURERS ARE ACCEPTABLE, PROVIDED THEIR PRODUCTS COMPLY WITH APPLICABLE NCDENR-DEH RULES AND HAVE BEEN ASSIGNED A STATE APPROVAL NUMBER.
21. CONCRETE SHALL HAVE A MINIMUM 4,500 PSI AT 28 DAYS. CONCRETE SHALL BE WATERPROOFED WITH BITUMINOUS MASTIC OR OTHER APPROVED COATING SYSTEM.
22. EXCAVATE AREA FOR SEPTIC TANKS AND PUMP TANKS TO FIRM EARTH. LEVEL ON STONE. TANKS SHALL BE CAREFULLY BACKFILLED TO MAXIMUM 95% DENSITY. BACK FILL SHALL DIRECT WATER AWAY FROM ACCESS RISERS. IF MORE THAN 5 FEET OF COVER IS PROPOSED, CONSULT ENGINEER AND TANK MANUFACTURER TO DEVELOP STRUCTURAL AMENDMENTS.
23. FIELD VERIFY ACCESS RISERS BEFORE ORDERING.
24. BALL AND CHECK VALVES SHALL BE RATED AT A MIN. OF 235 PSI.

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RECORD DRAWING
AUGUST 24, 2023

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL

08/24/2023

NOTES

C-103

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N

CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

BY: CAC, HGM
JOB #: A21203.00
DATE: 01/13/2023

MacCONNELL & Associates, P. C.
501 CASCADE POINTE LANE, SUITE 103
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P. O. BOX 129
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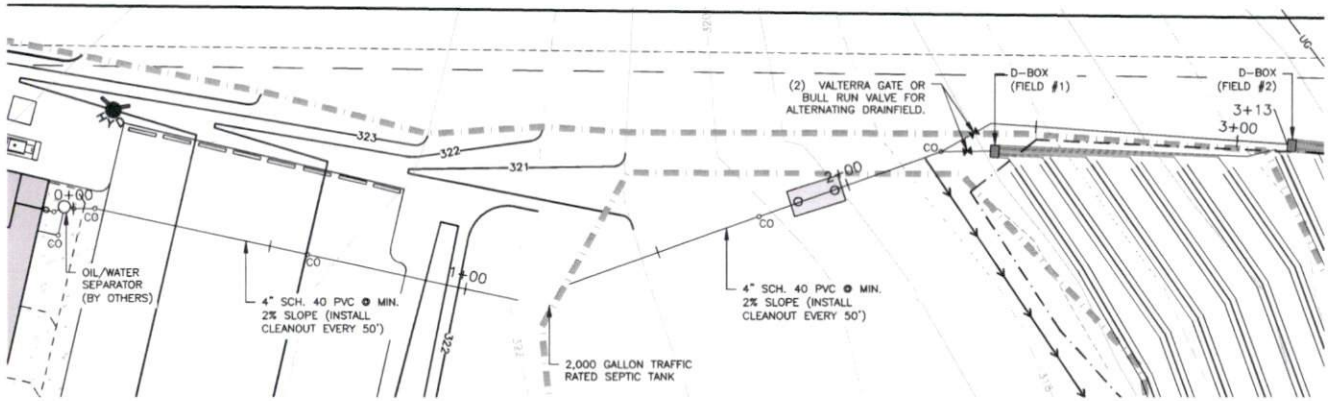
TEL: (919) 467-1239 FAX: (919) 319-6510



LEGEND

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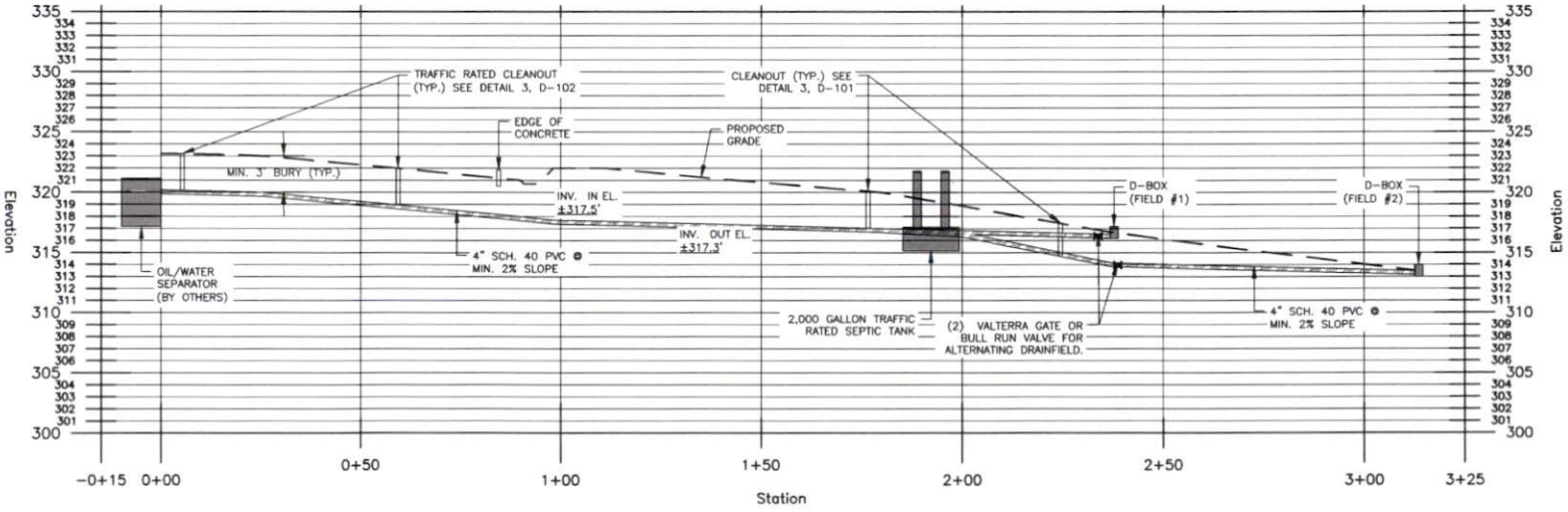
- W — WATER LINE
- CO — CLEAN OUT

GRAPHIC SCALE: 1" = 30'

0 15 30 60 90

1 C-104 SUPPLY LINE PLAN (STATION 0+00 - 3+13)

1"=30'



2 C-104 SUPPLY LINE PROFILE (STATION 0+00 - 3+13)

HORIZONTAL SCALE 1"=30' ; VERTICAL SCALE 1"=10'

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RECORD DRAWING
AUGUST 24, 2023

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL

08/24/2023

SUPPLY LINE PLAN AND PROFILE — C-104

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N
CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

BY: CAC, HGM
JOB #: A21203.00
DATE: 01/13/2023

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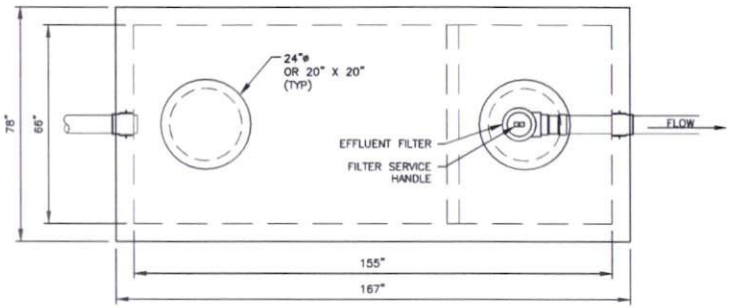
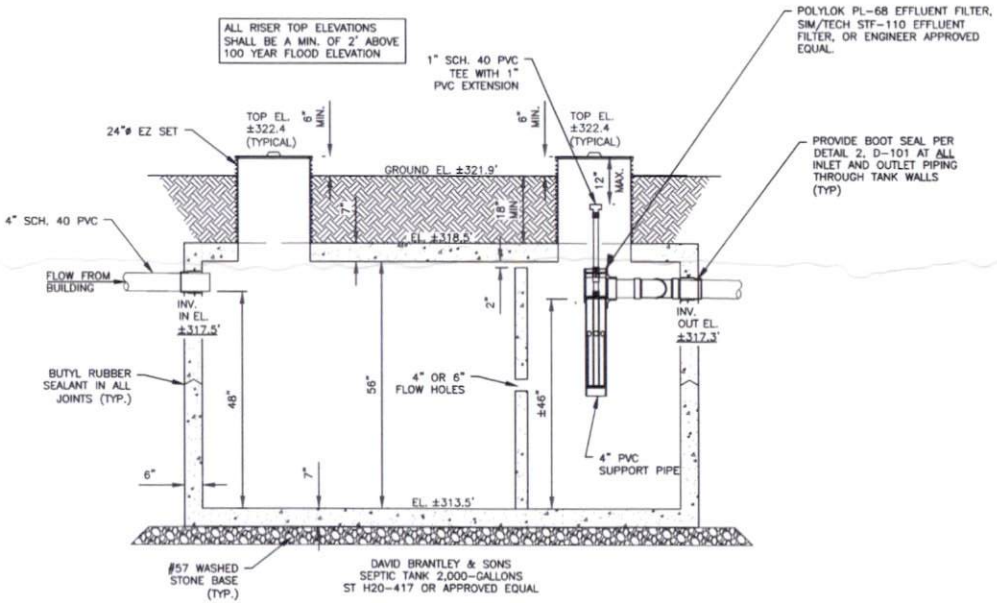
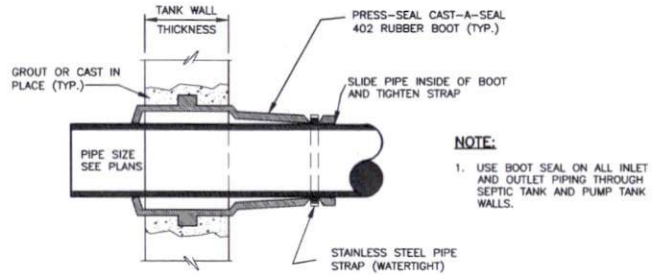
TEL: (919) 467-1239 FAX: (919) 319-4510





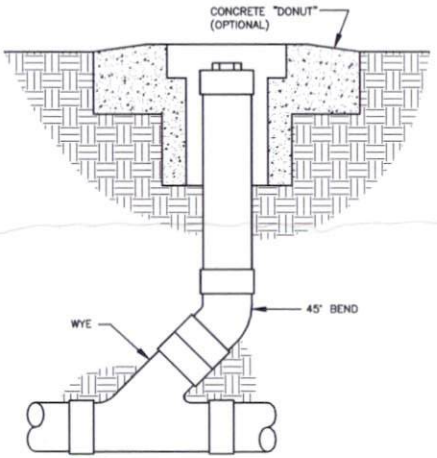
1 D-101 SEPTIC TANK
NTS



NOTE:

1. USE BOOT SEAL ON ALL INLET AND OUTLET PIPING THROUGH SEPTIC TANK AND PUMP TANK WALLS.

2 D-101 PIPE THRU TANK PENETRATIONS
NTS



NOTES:

1. PIPING TO BE SCH. 40 PVC.
2. SEE SITE PLAN FOR PIPE SIZE.
3. SEE DETAIL 3, D-102 FOR TRAFFIC RATED CLEANOUT DETAIL.

3 D-101 GRAVITY CLEANOUT
NTS

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE DESIGN PROFESSIONAL CANNOT ASSURE ITS ACCURACY, AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DRAWING OR FOR ANY ERRORS OR OMMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

RECORD DRAWING
AUGUST 24, 2023

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08/24/2023

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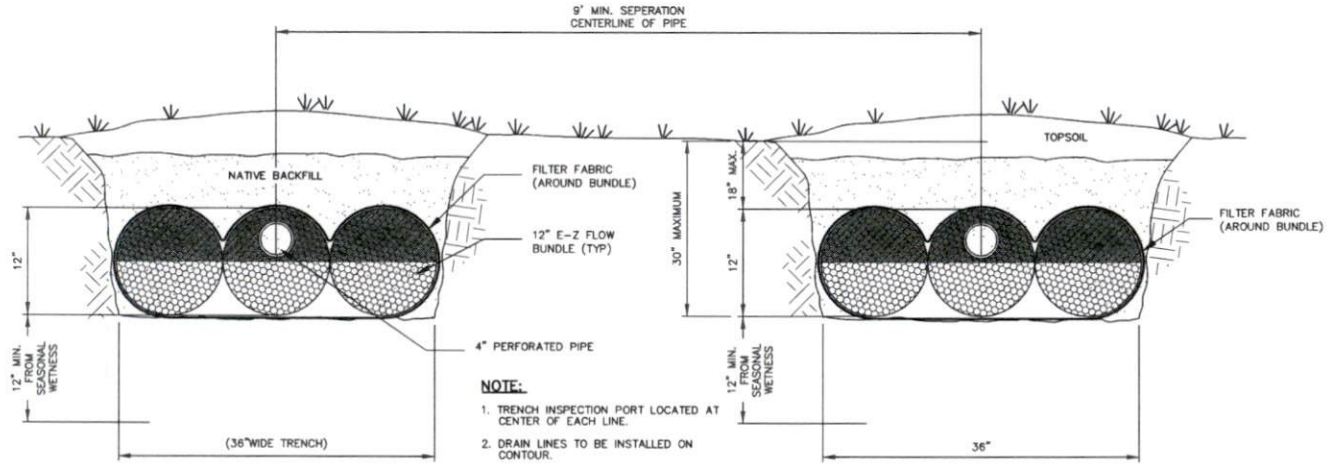
BY: CAC, HGM
JOB #: A21203.00
DATE: 01/13/2023

BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N

CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

DETAILS - 1 OF 3

D-101

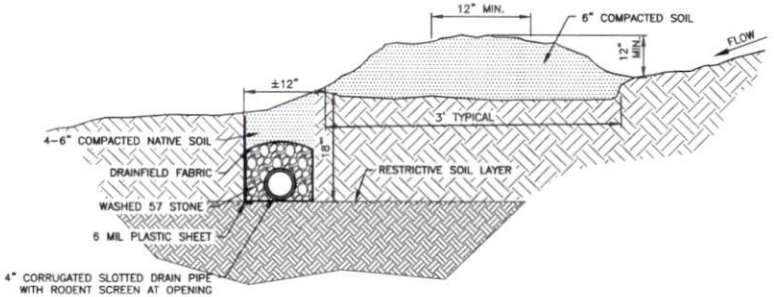


NOTE:

1. TRENCH INSPECTION PORT LOCATED AT CENTER OF EACH LINE.
2. DRAIN LINES TO BE INSTALLED ON CONTOUR.

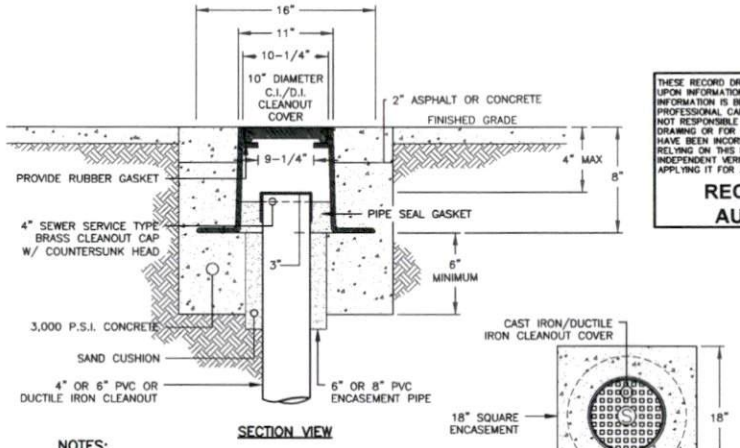
1 / D-102 EZ FLOW TYPICAL TRENCH DETAIL

NTS



2 / D-102 INTERCEPTOR DRAIN

NTS



NOTES:

1. WITHIN TOWNHOUSE DEVELOPMENTS, SEWER SERVICE WITHIN TOWNHOUSE DEVELOPMENTS, SEWER SERVICE CONNECTIONS SHALL BE LOCATED WITHIN 4 FEET OF DRIVEWAYS, OR UNDER DRIVEWAYS, IN ORDER TO MINIMIZE CONFLICTS BETWEEN SERVICE LINES AND TREES.
2. TRAFFIC AREAS SHALL INCLUDE DRIVEWAYS AND 2 FEET ON TRAFFIC AREAS SHALL INCLUDE DRIVEWAYS AND 2 FEET ON EITHER SIDE.

3 / D-102 MINI MANHOLE FOR SEWER SERVICE CLEANOUT ASSEMBLY IN TRAFFIC AREAS

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08/24/2023

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JOB #: A21203.00
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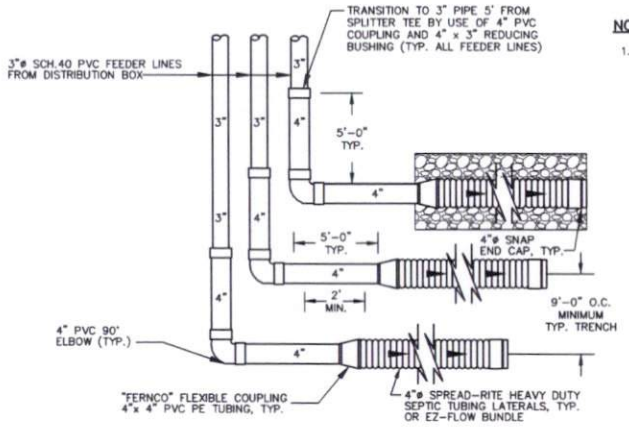
CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

DETAILS - 2 OF 3

D-102

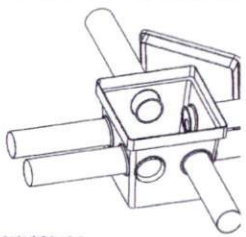


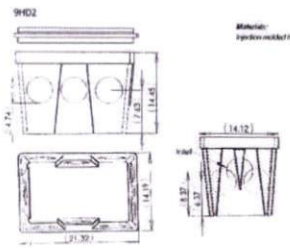
NOTE:

1. REPAIR SHALL USE CHAMBERS SEE DETAIL 2, D-102.

1 / D-103 LATERAL PLAN VIEW

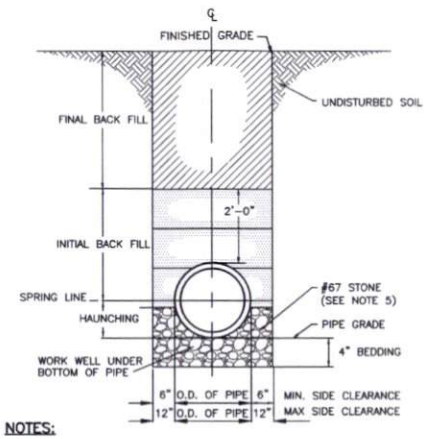
NTS





3 / D-103 TUF-TITE DISTRIBUTION BOX- MODEL 9HDB

NTS

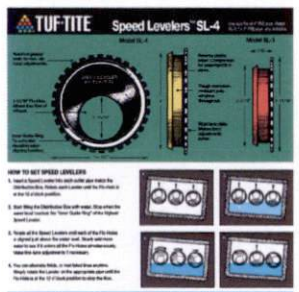


NOTES:

1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND THE BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
3. ALL BACK FILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACK FILL SHALL BE TAMPED IN 6" LAYERS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
5. STONE BEDDING TO BE USED IF ROCK IS ENCOUNTERED.

2 / D-103 GRAVITY SEWER INSTALLATION DETAIL

NTS



4 / D-103 TUF-TITE SPEED LEVELERS

NTS

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08/24/2023

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BOBBITT DESIGN BUILD, INC.
NW HARNETT FIRE STATION 3
US HWY 401 N

CONVENTIONAL GRAVITY SYSTEM
EOP
HARNETT COUNTY, NC

DETAILS - 3 OF 3

D-103

Project Specifications

Excavation and Backfilling

1. Excavated materials acceptable as backfill shall be stockpiled in a location approved by the Owner. The materials shall be located away from the edge of any excavations. Excavated materials shall not be stored where existing trees are located.

2. All open excavations shall be barricaded when construction in the area has stopped. Night barricading should include posted warning lights.

3. Protect existing structures, utilities, sidewalks, pavement, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations. Protect root systems from damage or dry-out to the greatest extent possible.

4. Soil materials shall be free of boulders, roots, sod, organic matter, and frozen material.

5. Bedding materials for pre-cast concrete structure installation shall be #57 washed stone to the dimensions and depth shown on the construction drawings.

6. All excavation is unclassified and includes excavation to subgrade elevations indicated on the construction drawings regardless of character of materials and obstruction encountered. In the event that rock is encountered, the Contractor shall remove it at no additional cost to the owner.

7. Stability of excavations shall be maintained by sloping of the sides and shall comply with local codes, ordinances, and requirements of agencies having jurisdiction. Where space restrictions prevent sloping of the sides, shoring and bracing of the walls shall be employed in full compliance with OSHA requirements. In the case of pipe installations, sheeting shall remain in place until backfilling progresses to a stage where no damage to the pipe will result from removal.

8. The Contractor shall attempt to prevent surface and subsurface water from flowing into excavations. The Contractor shall provide equipment, materials, and work necessary to dewater any accumulation of water in the excavation to prevent softening of the soils, undercutting of footings, and changes to the soils detrimental to the stability of the improvements.

9. Excavations for structures shall conform to dimensions and elevations shown on the construction drawings within a tolerance of plus or minus 0.10 feet and to the standards of ASTM C891-90.

10. Backfill shall be installed to excavated spaces in 8-inch lifts and tamped by hand or pneumatically around pipe or structures. Tamping shall be performed evenly on both sides

of pipe and around sides of structures to a depth such that damage to the pipe or structures is avoided as a result of subsequent methods of compaction. Extreme care shall be exercised in backfilling operations to avoid displacement of pipe and structures either horizontally or vertically. Backfill consolidation by ponding water is not permitted. Compaction of each layer of backfill and the top 6 inches of subgrade shall achieve a 90 percent maximum dry density as measured by AASHTO method T-99.

11. Remove all waste materials including unacceptable excavated material, trash, and debris and legally dispose of it off Owner's property. Where settling is measurable or observable at excavated areas during project warranty period, the Contractor shall remove surface finish, add backfill material, compact, and replace surface treatment to a quality and appearance matching adjacent areas of previous work.

Septic Tank Installation and Testing

1. Septic tanks shall conform to criteria in 15A NCAC 18A .1952-.1954. The septic tank should be installed on a 6-inch minimum layer of No. 57 washed stone aggregate.

2. Place bell ends of pre-cast sections or the groove end of the concrete facing down. In preparation for making joints, all surfaces of the portion of the section to be jointed and the factory-made jointing materials shall be clean and dry. Each joint, seam, and pipe penetration inside and outside of joints shall receive liberal applications of non-shrink grout as well as liberal amounts of bitumastic waterproof sealant.

3. Lifting holes and other penetrations of the pre-cast structure wall shall be sealed with nonshrinking grout. Pipe connections shall be made so that the pipe does not project beyond the inside wall of the structure. Grout connections as necessary to make smooth and uniform surfaces on the inside of the structure.

4. Before placing any tank into operation, remove any dropped grout, sand or other imperfections and obstructions from the interior of the structure. Specifically, the inside walls of the tank shall be smooth and uniform. Smooth-finish inverts so that wastewater flow is confined and directed through the inlet and outlet pipes with easy transition.

5. Tanks shall be backfilled in accordance with the applicable specifications herein before described.

6. All pipe penetrations shall be through Press-Seal Cast-A-Seal 402 rubber connectors or approved equal.

7. All joints (mid-seam, top-seam) shall be sealed using Concrete Sealants butyl sealant #CS-102 meeting ASTM C-990.

8. All service access openings will be a minimum of 24 inches. All access openings shall be fitted with E-Z Set riser assemblies.

9. A 24-hour static water test, in accordance with ASTM standards, shall be performed on all precast tanks in order to insure they are water tight.

    a. The testing shall be performed in the presence of the engineer or his representative.

    b. Each tank shall be filled with water and the initial water level shall be measured.

    c. At the end of the 24-hour period, the level of the water shall be measured again.

    d. The engineer shall pass the tank if the water level did not drop more than 0.5 inches or if the total volume of the displaced water is less than 1 percent of the total effective liquid capacity of the tank.

    e. Tanks may also be leak-tested by applying a vacuum of 5-inches of Hg with riser assemblies in place.

    f. Each failed tank shall be tested again. In the event that the tank does not pass the second test, the Contractor shall remove and replace the tank at no additional cost to the owner.

10. Septic Tank shall meet the following additional criteria:

    a. Minimum liquid depth of 36 inches.

    b. Minimum airspace of 9 inches.

    c. Length shall be at least twice as long as the width.

    d. Septic tank shall be constructed with a baffle wall dividing the tank interior $2/3^{rd}$ to $1/3^{rd}$. The baffle wall shall be constructed to permit passage of effluent through a slot or holes located between 45 and 55 percent of the interior depth.

11. Septic tank shall be fitted with either a POLYLOK PL-68 or SIM/TECK STF-110 effluent filter or engineer approved equal that extends down to 50 percent of the liquid depth of the tank.

12. Septic model shall be as shown on the construction drawings or approved equal by engineer.

Piping Installation and Testing

1. Piping shall be PVC and of type and size as shown on the construction drawings. Piping shall be installed with a minimum of three (3) feet of cover unless shown otherwise on the construction drawings.

2. Piping shall be installed to be able to meet a pressure test whereby the pressure remains constant for a minimum of two hours, and the allowable leakage is not more than 10 gpd/inch of pipe diameter/mile.

3. Any line installed under a driveway shall be sleeved in Class 52 Ductile Iron Pipe or encased in concrete and extend a minimum of 5 feet on either side and as shown on the construction drawings.

4. Forcemains installed under streams shall be sleeved in Class 52 Ductile Iron Pipe as shown on the construction drawings.

Distribution Box

1. Distribution box shall be watertight, not subject to excessive corrosion, and of adequate design as approved by the local health department.

2. Distribution box shall be separated from the septic tank and nitrification lines by a minimum of two feet of undisturbed or compacted soil and shall be placed level on a solid foundation of soil or concrete to prevent differential settlement of the device. The installer shall demonstrate that the distribution devices perform as designed.

3. If necessary, installer may employ the use of speed levels to achieve even distribution of flow.

4. Distribution box shall be installed per manufacturer's recommendations unless shown otherwise on the construction drawings.

EZflow Trench Lines

5. The trench lines shall be the EZflow drain lines (1203H – GEO type).

6. The EZflow trench lines shall be installed per manufacturer's recommendations unless shown otherwise on the construction drawings.

NW Harnett Fire Station 3
Engineered Option Permit

C. Reports on Special Inspections & Final Inspections

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Site Inspection Report For Conventional Gravity Septic System

Client: NW Harnett Fire station 3 Date: 8-22-2023

Address: US Hwy 401 N Arrival Time: 10:00 AM

Project #: A21203.00 Departure Time: 11:30 AM

Weather Conditions: Sunny 88°F

Installer (print) Shane Brantley

Inspector (print) Tyler MacConnell Signature: Tyler MacConnell

Septic Tank

Is the septic tank the same manufacturer/model as specified on drawings? Yes ☒ No ☐

If no, record the following:

Manufacturer/Model Brantley / 5+ - 1120 - 417

Capacity 2,000

If preapproved tank is used, is there a M&A stamp to verify a leak test was already performed and inspected at manufacturer's site? Yes ☐ No ☒

If yes, M#: _____

If no, perform and record leak test:

Leak test date 8-22-2023 Test start time 10:27 AM Test end time 10:29 AM

Static Test		Vacuum Test *(Minimum Hold Time = 2 mins at 5 inches of Hg)*	
Starting water level	inches	Starting negative pressure	5 inches of Hg
Ending water level	inches	Ending negative pressure	5 inches of Hg
Water level difference	inches	Negative pressure difference	0 inches of Hg
1% of tank liquid capacity	inches	10% of starting negative pressure	
Difference ≤ 0.5" or 1% of tank capacity ☐ Yes ☐ No		Difference ≤ 10% of starting pressure ☐ Yes ☒ No	

Septic Tank Effluent Filter (check one):

- [X] Polylok PL-68
- [ ] Simtech STF-110
- [ ] Other (manufacturer/model):_____
- [ ] None installed

Septic Tank Conditions	Satisfactory	N/A	Problem
Tank is installed on a 6-inch minimum layer of No. 57 washed stone aggregate.	☑	☐	☐
Condition of the exterior walls and top of the tanks	☒	☐	☐
Air vents present and open	☒	☐	☐
Condition of risers and access lids	☒	☐	☐
Condition of the interior walls (inlet/outlet/baffle/bottom)	☒	☐	☐
Inlets and outlets are at proper location	☒	☐	☐
Inlet and outlet tees on center line	☒	☐	☐

Comments:_____

_____

_____

Supply Line

Same material as specified on site plans? Yes ☒ No ☐ If no, record:_____

Same diameter as specified on site plans? Yes ☒ No ☐ If no, record:_____

Same length as specified on site plans? Yes ☒ No ☐ If no, record:_____

Same discharge pressure* as specified on site plans? Yes ☒ No ☐ If no, record:_____

*"design head" on tap chart

Distribution Box

Distribution Device Conditions	Satisfactory	N/A	Problem
Distribution devices are watertight	☒	☐	☐
Minimum of 2 feet undisturbed soil to trench	☑	☐	☐
Proper center to center trench spacing maintained	☒	☐	☐

Devices installed on solid foundations	☒	☐	☐
All outlet inverts properly adjusted	☒	☐	☐
Turnups/cleanouts/valves are accessible	☒	☐	☐
Devices perform according to design specifications	☒	☐	☐

Comments/Concerns:_____

_____

_____

Drain Field

Is the trench product the same manufacturer/model as specified on site plans? yes

If no: manufacturer/model_____

Measure trench depth from downhill side

Line	Line Length	Inlet Depth	Middle Point Depth	End Point Depth
2 1	80'	30'	30'	30'
3 2	80'			
4 3	80'			
5 4	80'			
6 5	80'			
7 6	80'			
8 7	80'			

Trench Conditions	Satisfactory	N/A	Problem
Installation depth per approved plans and specifications	☒	☐	☐
Soil cover adequate and per approved plans and specifications	☒	☐	☐
Trench spacing per approved plans and specifications	☒	☐	☐
Proper effluent distribution	☒	☐	☐
Pressure head meets parameters in approved specifications	☒	☐	☐

Product installation meets manufacturers specifications	☒	☐	☐

Is the area for repair field undisturbed? Yes ☐ No ☒

Comments: Repair field was installed as well for grease Reduction

System Layout

Is the location and orientation of the tank(s), supply line, and drain lines accurately recorded on the site plans? Yes ☒ No ☐

If no, record any variations on site plans for record drawings.

Measure locations of tanks, distribution devices, and drain lines using triangulation with respect to house (and/or property lines) and record distances on site plans for final record drawings.

Verify all setback requirements are met below, measure and record any distances that are close to the minimum limit on site plans for record drawings.

Setbacks	Satisfactory	N/A	Problem
Distance from system to any wells (100ft)	☐	☒	☐
Distance from system to foundation (5ft)	☒	☐	☐
Distance from system to basement (15ft)	☐	☒	☐
Distance from septic tank/ drain lines to all property lines (10ft)	☒	☐	☐
Distance from distribution box to all property lines (10ft)	☒	☐	☐
Distance from system to pool (15ft)	☐	☒	☐
System meets all other applicable setback requirements Rule .1950 (check back page)	☒	☐	☐

****For As-Built/record drawings measure and mark up the following ****
(measure two distances for each)

- ☐ Distance from septic tank to house_____
- ☐ Distance from pump tank to house_____
- ☐ Distance from pressure manifold/manitee to house _____
- ☐ Distance from house to closest line _____
- ☐ Distance from house to farthest line _____

Comments: Refer to Record Drawing.

15A NCAC 18A .1950 LOCATION OF SANITARY SEWAGE SYSTEMS

(a) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

(1)	Any private water supply source, including any well or spring	100 feet;
(2)	Any public water supply source	100 feet;
(3)	Streams classified as WS-I	100 feet;
(4)	Waters classified as S.A.	100 feet, from mean high water mark;
(5)	Other coastal waters	50 feet, from mean high water mark;
(6)	Any other stream, canal, marsh, or other surface waters	50 feet;
(7)	Any Class I or Class II reservoir	100 feet, from normal pool elevation;
(8)	Any permanent storm water retention pond	50 feet, from flood pool elevation;
(9)	Any other lake or pond	50 feet, from normal pool elevation;
(10)	Any building foundation	5 feet;
(11)	Any basement	15 feet;
(12)	Any property line	10 feet;
(13)	Top of slope of embankments or cuts of 2 feet or more vertical height	15 feet;
(14)	Any water line	10 feet;
(15)	Drainage Systems:	
	(A) Interceptor drains, foundation drains, and storm water diversions	
	(i) upslope	10 feet,
	(ii) sideslope	15 feet, and
	(iii) downslope	25 feet;
	(B) Groundwater lowering ditches and devices	25 feet;
(16)	Any swimming pool	15 feet;
(17)	Any other nitrification field (except repair area)	20 feet;

(b) Ground absorption sewage treatment and disposal systems may be located closer than 100 feet from a private water supply, except springs and uncased wells located downslope and used as a source of drinking water, for repairs, space limitations, and other site-planning considerations but shall be located the maximum feasible distance and in no case less than 50 feet.

(c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe.

NW Harnett Fire Station 3
Engineered Option Permit

D. Management Program Manual

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HOMEOWNER GUIDE FOR UTILIZATION AND MAINTENANCE OF ON-SITE WASTEWATER DISPOSAL SYSTEMS

What is an On-site Wastewater Disposal System?

There are a number of different types of on-site wastewater disposal systems each designed for a specific set of site conditions. However, there are several system components that are common to most systems. These include the following:

1. A septic tank - a concrete tank that is designed to receive wastewater from the house and to provide a degree of pretreatment for the waste, chiefly through removal of some of the solids in the waste. Note that these solids accumulate over time and necessitate periodic pumping of the septic tank. Currently septic tanks are equipped with two access risers (normally constructed of concrete), which are designed to be at least 6 inches above the ground surface to prevent surface and shallow groundwater from entering the septic tank and to provide access for maintenance. **Care must be taken not to damage or cover these risers so that water inflow / infiltration can be prevented and the tank can be accessed for maintenance.**
2. In some installations, a pump tank - a concrete tank, very similar to the septic tank, which contains a pump along with the associated controls / componentry. The pump tank and pump is designed to receive effluent from the septic tank, and pump the effluent to a disposal field located at a higher elevation and/or to a pressurized distribution network in the disposal field. **The pump tank also has an access riser which must be protected in a similar manner to that indicated for the septic tank.** Servicing of the pump tank components often necessitates the assistance of a professional such as a septic tank installer or Certified Subsurface System Operator. The latter is required for operation and maintenance of certain types of systems.
3. A disposal field - a series of subsurface trenches and lines that are designed to distribute the effluent into the soil and provide for the ultimate treatment and disposal of the effluent. There are numerous variations on the design of the disposal field, related chiefly to the type of system chosen, site constraints, etc. Dependent on the type of disposal system, you may have to maintain a contract with a Certified Subsurface System Operator for operation and maintenance of your wastewater disposal system.

Utilization of Your Wastewater Disposal System

In order to obtain the maximum efficiency and life expectancy from your system, the following simple procedures must be adhered to:

1. **Practice water conservation.** This can include many practical considerations such as not leaving the water running while you brush your teeth, not overfilling the tub, limiting time in the shower, not replacing low flow fixtures with those of higher flows, over rinsing dishes (allow the dishwasher to do its job), immediate repair of any leaking fixtures, running washing machines and dishwashers only when full, etc.

NOTE: Washing machines generate significant volumes of wastewater. As a result, laundry activities should be spread over the week as opposed to accumulating all of laundry until the weekend.

2. **Do not utilize your wastewater disposal system as a trash can by dumping nondegradables down your drains or toilet.** These include cigarette butts, sanitary products, grease, plastics, disposable diapers, etc. Avoid use of garbage disposals. Do not retrofit garbage disposals unless the system is specifically permitted for their use. Also, do not dump harmful chemicals down the drain. These include petroleum products, paint, paint thinner, pesticides, antifreeze, etc.

Maintenance of Your Wastewater Disposal System

Every wastewater disposal system requires maintenance in order to function properly. The specific maintenance required is related to the type of system. The following are general considerations that apply to all systems.

1. **Protect your wastewater disposal system components including the tanks, access risers, disposal field and associated components.** Do not drive or park on any portion of the system. The area over the disposal field should be left undisturbed with the grass cover being maintained as you would your lawn. Location of trees and shrubs on or in close proximity to the disposal field is not recommended since roots may clog or damage your drain lines. Additionally, great care must be exercised when considering the addition of any structure(s) to the site. The location of any appurtenances cannot encroach on the installation or repair areas for your system. It is not recommended that irrigation systems be located in proximity to the disposal system since their construction can cause system damage and/or result in additional hydraulic load on the disposal field.
2. **Protect the system from excess surface and shallow groundwater.** The land surface on and around the wastewater disposal system should be landscaped to shed rainfall and runoff and prevent ponding. Be sure that foundation drains, runoff from roofs and drives, etc. are diverted away from the disposal system.
3. **Regularly have the septic tank / pump tank pumped and cleaned by a permitted septage hauler.** Although the necessary frequency of pumping varies with the household and system, most tanks need **pumping at a frequency of 3-5 years** and at any time solids occupy one-fourth to one-third of the septic tank liquid depth.

Note that all septic tanks being currently installed incorporate an effluent filter within the outlet compartment of the septic tank. This filter is to be cleaned anytime the septic tank is pumped. If plumbing becomes sluggish, this filter should be checked. If filter service is found to be necessary, the tank is to pumped, the filter cleaned and the filter reinstalled.

4. **Be alert to warning signs that your system may not be functioning properly.** These include sewage surfacing over the disposal system, sewage backups / slow draining in the house, lush growth over the disposal system, sewage odors, etc.
5. **Do not make or allow repairs to your system unless all necessary permits are obtained from the Local County Department of Environmental Services.**
6. **Commercial additives for septic tank systems** - It has generally not been demonstrated that these additives enhance the function of septic systems or reduce the need for tank pumping and other necessary maintenance.
7. **Special maintenance considerations** - As already alluded to, some of the more complex wastewater disposal systems require that you retain / maintain the services of a Certified Wastewater System Operator in order to comply with Laws and Rules and maintain a valid operation permit for your system. In the Local County this maintenance requirement should be recorded with Register of Deeds if applicable.

Where Do I Obtain Information and Assistance?

If you are purchasing a new home, you should request a copy of your wastewater system permit from the builder / seller along with information regarding any special maintenance requirements. You may also obtain information and assistance from the **Local County Department of Environmental Services**.

NW Harnett Fire Station 3
Engineered Option Permit

E. On-site Wastewater Contractor's Signed Statement

MacConnell & Associates, P.C.
501 Cascade Pointe Lane, Suite 103
Cary, North Carolina 27513

P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
Fax: (919) 319-6510

David Brantley & Sons, Inc.
37 Pine Ridge Rd.
Zebulon, NC 27597

August 22, 2023

Mr. Oliver Tolksdorf, R.E.H.S, L.S.S.
Harnett County Department of Environmental Services
307 Cornelius Harnett Blvd.
Lillington, NC 27546

Re: US HWY 401 N – NW Harnett Fire Station 3 – Bobbitt Design Build, Inc.
Conventional Gravity System - EOP – Certification
MacConnell & Associates, P.C. Project No.: A21203.00

Dear Mr. Tolksdorf:

I certify that the above referenced project was installed with due care and to acceptable construction standards. The installation was contructed in conformance to the original construction documents. Any minor modifications were approved by the Engineer as noted on the record drawings. I trust that this letter meets your requirements for approving this system. Thank you.

Sincerely,

Shane Brantley

cc: Gary MacConnell, P.E.
Bobbitt Design Build, Inc.

NW Harnett Fire Station 3
Engineered Option Permit

F. Statement Pursuant to 15A NCAC 18A. 1938(h)

8/28/2023

MacConnell & Associates, P.C.
501 Cascade Pointe Lane, Suite 103
Cary, North Carolina 27513

P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
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MacCONNELL & Associates, P.C.
"Engineering Today For Tomorrow's Future"

501 Cascade Pointe Lane
Suite 103
Cary, NC 27513
www.macconnellandassoc.com

August 28, 2023

Mr. Oliver Tolksdorf, R.E.H.S, L.S.S.
Harnett County Department of Environmental Services
307 Cornelius Harnett Blvd.
Lillington, NC 27546

Re: US HWY 401 N – NW Harnett Fire Station 3 – Bobbitt Design Build, Inc.
Conventional Gravity System - EOP – Certification
MacConnell & Associates, P.C. Project No.: A21203.00

Dear Mr. Tolksdorf:

Upon inspection and start-up of the system of the above referenced system, I certify that the above referenced project was installed with due care and to acceptable construction standards, pursuant to 15A NCAC 18A .1938(h). The installation was constructed in conformance to the original construction documents with any approved minor modifications noted on the record drawings. I trust that this letter meets your requirements for approving this system. Thank you for your continued assistance, and if you have any questions, please do not hesitate to call me (919) 467-1239.

Sincerely,

NORTH CAROLINA PROFESSIONAL SEAL 17069 ENGINEER GARY S. MACCONNELL

Gary S. MacConnell, P.E.
President

8/28/2023

cc: Bobbitt Design Build, Inc.
Shane Brantley, David Brantley and Sons

NW Harnett Fire Station 3
Engineered Option Permit

Item 2. Notarized Letter Documenting Owner's Acceptance of System from the PE

MacConnell & Associates, P.C.
501 Cascade Pointe Lane, Suite 103
Cary, North Carolina 27513

P.O. Box 129
Morrisville, North Carolina 27560

Phone: (919) 467-1239
Fax: (919) 319-6510

November 2, 2023

Mr. Oliver Tolksdorf, R.E.H.S, L.S.S.
Harnett County Department of Environmental Services
307 Cornelius Harnett Blvd.
Lillington, NC 27546

Re: US HWY 401 N – NW Harnett Fire Station 3 – Bobbitt Design Build, Inc.
Conventional Gravity System - EOP – Certification
MacConnell & Associates, P.C. Project No.: A21203.00

Dear Mr. Tolksdorf:

I certify that NW Harnett Fire Station 3 is accepting the above referenced project from the Engineer: MacConnell & Associates, P.C. I trust that this letter meets your requirements for our acceptance of this system. Thank you.

Sincerely,

Chris Prince

Chris Prince
Chief

cc: Gary S. MacConnell, PE, MacConnell & Associates, P.C.

Acknowledgement

I certify that Chris Prince personally appeared before me this day, acknowledging to me that he ~~of~~ she signed the foregoing document.

Date: November 4 2023

Christine L. Byrd

Christine L. Byrd, Notary Public

My commission expires:

July 29 2028

CHRISTINE L. BYRD
NOTARY PUBLIC
My Commission Expires
July 29, 2028
JOHNSTON COUNTY, NC