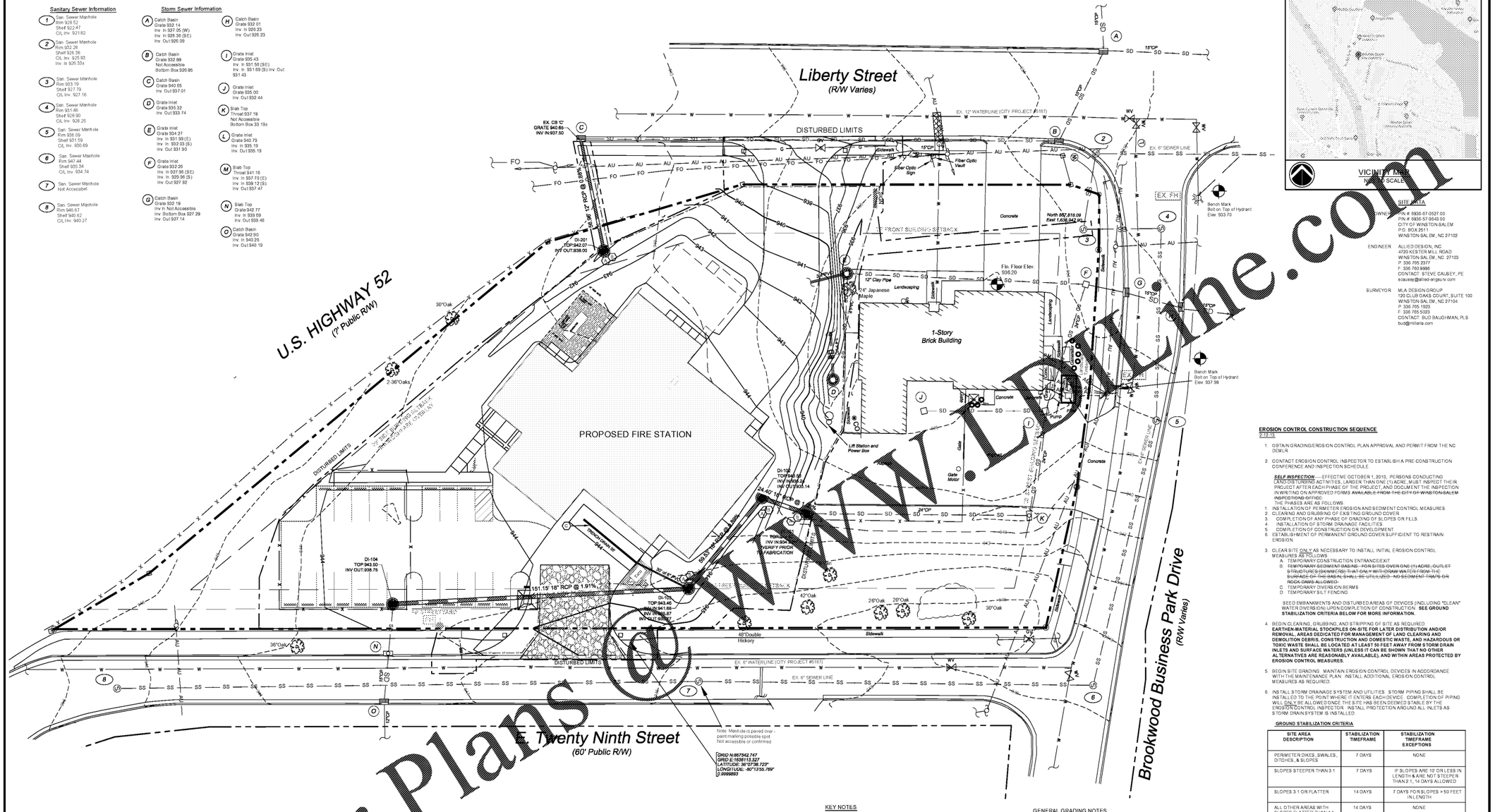

Sanitary Sewer Information

1. San. Sewer Manhole Rim 926.52 Shelf 922.47 Cit, Inv. 921.82
2. San. Sewer Manhole Rim 932.28 Shelf 926.38 Cit, Inv. 925.93 Inv. In 926.33s
3. San. Sewer Manhole Rim 933.19 Shelf 927.79 Cit, Inv. 927.16
4. San. Sewer Manhole Rim 931.46 Shelf 928.90 Cit, Inv. 928.25
5. San. Sewer Manhole Rim 936.09 Shelf 931.59 Cit, Inv. 930.69
6. San. Sewer Manhole Rim 947.44 Shelf 935.34 Cit, Inv. 934.74
7. San. Sewer Manhole Not Accessibel
8. San. Sewer Manhole Rim 946.61 Shelf 940.62 Cit, Inv. 940.27

Storm Sewer Information

- A Catch Basin Grate 932.14 Inv. In 927.05 (W) Inv. In 926.36 (SE) Inv. Out 926.09
- B Catch Basin Grate 932.89 Not Accessible Bottom Box 929.85
- C Catch Basin Grate 940.65 Inv. Out 937.01
- D Grate Inlet Grate 935.32 Inv. Out 933.74
- E Grate Inlet Grate 934.27 Inv. In 931.99 (E) Inv. In. 932.03 (S) Inv. Out 931.92
- F Grate Inlet Grate 932.26 Inv. In 927.96 (SE) Inv. In. 929.96 (S) Inv. Out 927.92
- G Catch Basin Grate 932.18 Inv In Not Accessible Inv Bottom Box 927.29 Inv Out 927.14
- H Catch Basin Grate 932.01 Inv. In 926.23 Inv. Out 926.23
- I Grate Inlet Grate 935.43 Inv. In 931.56 (SE) Inv. In. 931.69 (S) Inv Out 931.43
- J Grate Inlet Grate 935.00 Inv. Out 932.44
- K Slab Top Throat 937.19 Not Accessible Bottom Box 33.19s
- L Grate Inlet Grate 940.79 Inv. In 935.19 Inv. Out 935.19
- M Slab Top Throat 941.16 Inv. In 937.70 (E) Inv. In 938.12 (S) Inv. Out 937.47
- N Slab Top Grate 942.77 Inv. In 939.69 Inv. Out 939.46
- O Catch Basin Grate 942.90 Inv. In 940.26 Inv. Out 940.19

VICINITY MAP
NOT TO SCALE

SITE DATA

OWNER: PIN # 6836-57-0527.00; PIN # 6836-57-9643.00; CITY OF WINSTON-SALEM; P.O. BOX 2511; WINSTON-SALEM, NC 27102

ENGINEER: ALLIED DESIGN, INC.; 4720 KESTER MILL ROAD; WINSTON-SALEM, NC 27103; P. 336.765.2377; F. 336.760.8986; CONTACT: STEVE CAUSLEY, PE; scausley@alliedengineering.com

SURVEYOR: MLA DESIGN GROUP; 120 CLUB OAKS COURT, SUITE 100; WINSTON-SALEM, NC 27104; P. 336.765.1923; F. 336.765.5223; CONTACT: BUD BAUGHMAN, PLS; bud@mllerla.com

KEY NOTES

(A) BRICK OR CONCRETE DROP INLET. NCDOT STANDARD 840.14 OR 840.15 WITH U.S. FOUNDRY 4139 FRAME AND 6429 GRATE

(B) TEMPORARY WIRE AND STONE DROP INLET FILTER.

(C) NEW STORM DRAINAGE TRENCH DRAIN (58 LF). NCDOT STANDARD 840.30. CAP OUTLET FOR PROTECTION FROM RUNOFF UNTIL SITE IS STABILIZED AND APPROVAL GIVEN TO OPEN DRAIN. CLEAN TRENCH DRAIN AFTER PAVING IS COMPLETE. PROVIDE 6" PVC CONNECTION TO NEARES INLET.

GENERAL GRADING NOTES

1. CUT SLOPES SHALL BE A MAXIMUM OF 2:1 UNLESS OTHERWISE SHOWN. FILL SLOPES SHALL BE A MAXIMUM OF 3:1 UNLESS OTHERWISE SHOWN.
2. SPILL TYPE CURB AND GUTTER WILL BE PROVIDED WHERE REQUIRED TO ACHIEVE POSITIVE DRAINAGE AWAY FROM THE FACE OF CURB. CURB AND GUTTER CONTRACTOR SHALL REVIEW STRING LINES PRIOR TO CURB AND GUTTER PLACEMENT TO ENSURE ADEQUATE DRAINAGE IN SPILL AREAS AND AROUND ALL RADII.
3. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL EROSION CONTROL REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EROSION CONTROL PLAN APPROVAL FOR OFF-SITE BORROW OR WASTE SOURCES.
4. TOTAL SITE AREA = 1.92 ACRES.
5. TOTAL DISTURBED AREA (INITIAL PHASE) = 1.21 AC (52,746 SF).
   PHASES 1 & 2 = 1.7 AC (73,650 SF)
6. REMOVE VEGETATION, TOPSOIL, DEBRIS, UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS. PLOW, SCARIFY, BENCH, OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING MATERIAL. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS.
7. PLACE BACKFILL AND FILL MATERIALS IN 8" LIFTS. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT - *STD. PROCTOR, ASTM D 698*:
   - UNDER STRUCTURES, BUILDING SLABS & STEPS, SCARIFY AND RECOMPACT TOP 12" OF EXISTING SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 98% DRY DENSITY.
   - UNDER PAVEMENT, SCARIFY AND RECOMPACT TOP 12" OF EXISTING SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95% DRY DENSITY. *ASSHTO T99 MAY BE USED.*
   - UNDER SIDEWALKS AND WALKWAYS, SCARIFY AND RECOMPACT TOP 6" BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95% DRY DENSITY.
   - UNDER LAWN OR UNPAVED AREAS, SCARIFY AND RECOMPACT TOP 6" BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL MATERIAL AT 85% DRY DENSITY.
   - ALL TRENCH BACKFILL SHALL BE COMPACTED TO THE REQUIREMENTS LISTED ABOVE FOR THE OVERLYING CONDITION, WITH A MINIMUM COMPACTION OF 95% DRY DENSITY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
8. UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE FROM IRREGULAR SURFACE CHANGES. MEET COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING.
9. GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND OFF-SITE DISPOSAL OF EXCESS TOPSOIL AND OTHER UNSUITABLE MATERIAL.
10. REMOVE EXISTING TREES ONLY AS REQUIRED FOR PROPOSED GRADES. GRADES MAY BE ADJUSTED IN AREAS TO SAVE SPECIMEN TREES. REVIEW AND COORDINATE REMOVAL OF TREES WITH DEVELOPER/OWNER.
11. BOUNDARY, LOCATION AND TOPOGRAPHIC SURVEY INFORMATION WAS PROVIDED FROM A SURVEY COMPLETED BY ALLIED LAND SURVEYING, P.A. EXISTING CONTOURS ARE SHOWN AT 1' INTERVALS. PROPOSED CONTOURS ARE SHOWN AT 1' INTERVALS.
12. CONSTRUCTION STAKED OUT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

EROSION CONTROL CONSTRUCTION SEQUENCE
2-10-13

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL AND PERMIT FROM THE NC DEMLR.
2. CONTACT EROSION CONTROL INSPECTOR TO ESTABLISH A PRE-CONSTRUCTION CONFERENCE AND INSPECTION SCHEDULE.

   SELF INSPECTION----EFFECTIVE OCTOBER 1, 2013, PERSONS CONDUCTING LAND DISTURBING ACTIVITIES, LARGER THAN ONE (1) ACRE, MUST INSPECT THEIR PROJECT AFTER EACH PHASE OF THE PROJECT, AND DOCUMENT THE INSPECTION IN WRITING ON APPROVED FORMS ~~AVAILABLE FROM THE CITY OF WINSTON-SALEM INSPECTIONS OFFICE~~.
   THE PHASES ARE AS FOLLOWS:
   1. INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.
   2. CLEARING AND GRUBBING OF EXISTING GROUND COVER.
   3. COMPLETION OF ANY PHASE OF GRADING OF SLOPES OR FILLS.
   4. INSTALLATION OF STORM DRAINAGE FACILITIES.
   5. COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
   6. ESTABLISHMENT OF PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION.
3. CLEAR SITE ONLY AS NECESSARY TO INSTALL INITIAL EROSION CONTROL MEASURES AS FOLLOWS:
   A. TEMPORARY CONSTRUCTION ENTRANCE/EXIT
   B. ~~TEMPORARY SEDIMENT BASINS - FOR SITES OVER ONE (1) ACRE, OUTLET STRUCTURES SKIMMED TO REMOVE ONLY WITH DRAW WATER FROM THE SURFACE OF THE BASIN, SHALL BE UTILIZED. NO SEDIMENT TRAPS OR ROCK DAMS ALLOWED.~~
   C. TEMPORARY DIVERSION BERMS
   D. TEMPORARY SILT FENCING

   SEED EMBANKMENTS AND DISTURBED AREAS OF DEVICES (INCLUDING "CLEAN" WATER DIVERSION) UPON COMPLETION OF CONSTRUCTION. **SEE GROUND STABILIZATION CRITERIA BELOW FOR MORE INFORMATION.**
4. BEGIN CLEARING, GRUBBING, AND STRIPPING OF SITE AS REQUIRED. **EARTHEN MATERIAL STOCKPILES ON-SITE FOR LATER DISTRIBUTION AND/OR REMOVAL, AREAS DEDICATED FOR MANAGEMENT OF LAND CLEARING AND DEMOLITION DEBRIS, CONSTRUCTION AND DOMESTIC WASTE, AND HAZARDOUS OR TOXIC WASTE SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS (UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE), AND WITHIN AREAS PROTECTED BY EROSION CONTROL MEASURES.**
5. BEGIN SITE GRADING. MAINTAIN EROSION CONTROL DEVICES IN ACCORDANCE WITH THE MAINTENANCE PLAN. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED.
6. INSTALL STORM DRAINAGE SYSTEM AND UTILITIES. STORM PIPING SHALL BE INSTALLED TO THE POINT WHERE IT ENTERS EACH DEVICE. COMPLETION OF PIPING WILL ONLY BE ALLOWED ONCE THE SITE HAS BEEN DEEMED STABLE BY THE EROSION CONTROL INSPECTOR. INSTALL PROTECTION AROUND ALL INLETS AS STORM DRAIN SYSTEM IS INSTALLED.

GROUND STABILIZATION CRITERIA

SITE AREA DESCRIPTION	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, & SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH & ARE NOT STEEPER THAN 2:1, 14 DAYS ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES > 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE

7. PRIOR TO THE CONTRACTOR DEMOBILIZING FROM THE SITE (AT APPROXIMATELY 45 DAYS PRIOR TO DEMOBILIZATION), THE FINANCIALLY RESPONSIBLE PARTY (OR THE DESIGNEE) WILL NOTIFY JOE FOGARTY (CITY OF WINSTON-SALEM STORMWATER ENGINEER 336-747-6951) AND THE DESIGNATED EROSION CONTROL INSPECTOR OF THEIR ANTICIPATED DATE TO LEAVE THE SITE. AN ON-SITE INSPECTION WILL BE CONDUCTED PRIOR TO THE LEAVE DATE BY MR. FOGARTY AND THE DESIGNATED EROSION CONTROL INSPECTOR TO MAKE CERTAIN ALL ACTION ITEMS HAVE BEEN ADDRESSED BY THE CONTRACTOR.
8. CONTINUE TO MAINTAIN EROSION CONTROL MEASURES UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER ALL DISTURBED AREAS AND SITE HAS BEEN STABILIZED. REMOVE EROSION CONTROL MEASURES ONLY AFTER FINAL INSPECTION AND APPROVAL BY INSPECTOR.

EROSION CONTROL MAINTENANCE PLAN
2-10-13

1. INSPECT ALL SEDIMENTATION AND EROSION CONTROL DEVICES FOR STABILITY AND FUNCTION EACH WEEK AND FOLLOWING EACH RAINFALL EVENT.
2. REMOVE SILT/SEDIMENT FROM TEMPORARY DEVICES WHEN ACCUMULATED VOLUME HAS REACHED 50% CAPACITY.
3. REMOVE ACCUMULATED SILT/SEDIMENT FROM BEHIND TEMPORARY SEDIMENT FENCE WHEN DEPTH EXCEEDS APPROXIMATELY 0.5'. REPAIR AND REPLACE SILT FENCE AS NECESSARY.
4. SEED AND STABILIZE TEMPORARY DIVERSION BERMS IMMEDIATELY AFTER CONSTRUCTION. INCLUDE "CLEAN" WATER DIVERSION BERMS. RE-GRADE/REPAIR BERMS AS REQUIRED.
5. CONTRACTOR SHALL APPOINT AN ON-SITE INSPECTOR AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH THE PROVISIONS OF THE GENERAL NPDES STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES.

GRAPHIC SCALE

30 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 023450 KEVIN DAVIS 12-FEB-21

City of Winston-Salem
FIRE STATION 3
WINSTON-SALEM ◦ NORTH CAROLINA

GRADING AND EROSION CONTROL PLAN

DRAWN
CHECKED
COMM. 1904
DATE 02-12-21
REVISION 03-12-21

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