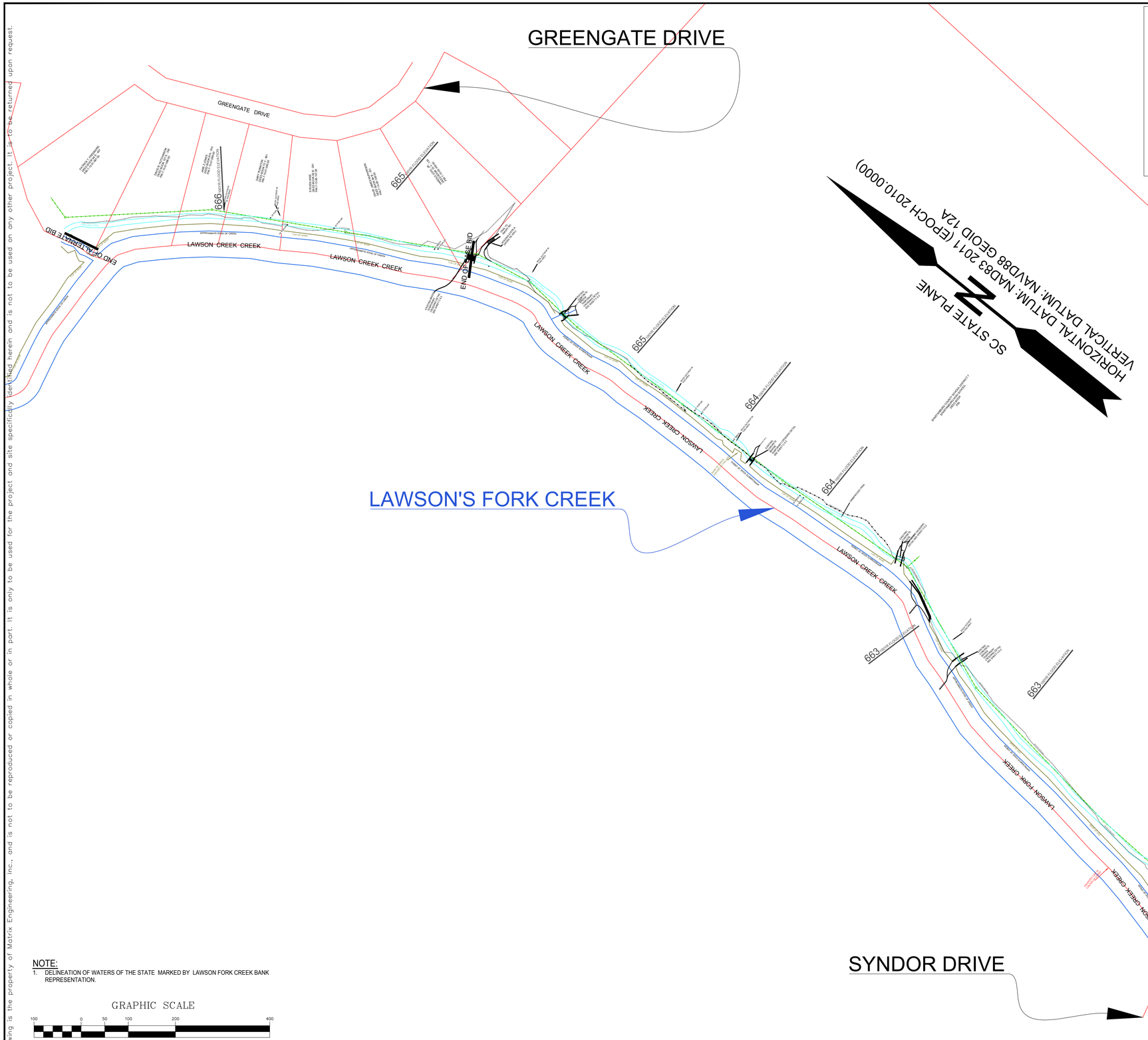

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SEWER LINE
- STORM WATER
- GAS LINE
- OVERHEAD POWER
- FENCE
- SWALE
- CURB AND GUTTER

CAUTION

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SPARTANBURG COUNTY
SCHOOL DISTRICT 7

PROPERTY ADDRESS:
SPARTANBURG, SC 29307

ENGINEER:
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912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:
LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:
7-13-01-087.00
7-13-01-088.00
7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:
1.83 ACRE

NOTE:
1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — MATRIX ENGINEERING, INC. — No. C01034

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER — No. 7982 — DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME / LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixei.com

LAND DEVELOPMENT PLAN

SCALE	AS NOTED	DWG NO	LDP
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   - Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   - Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    Wastewater from washout of concrete, unless managed by an appropriate control;
    Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
    Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

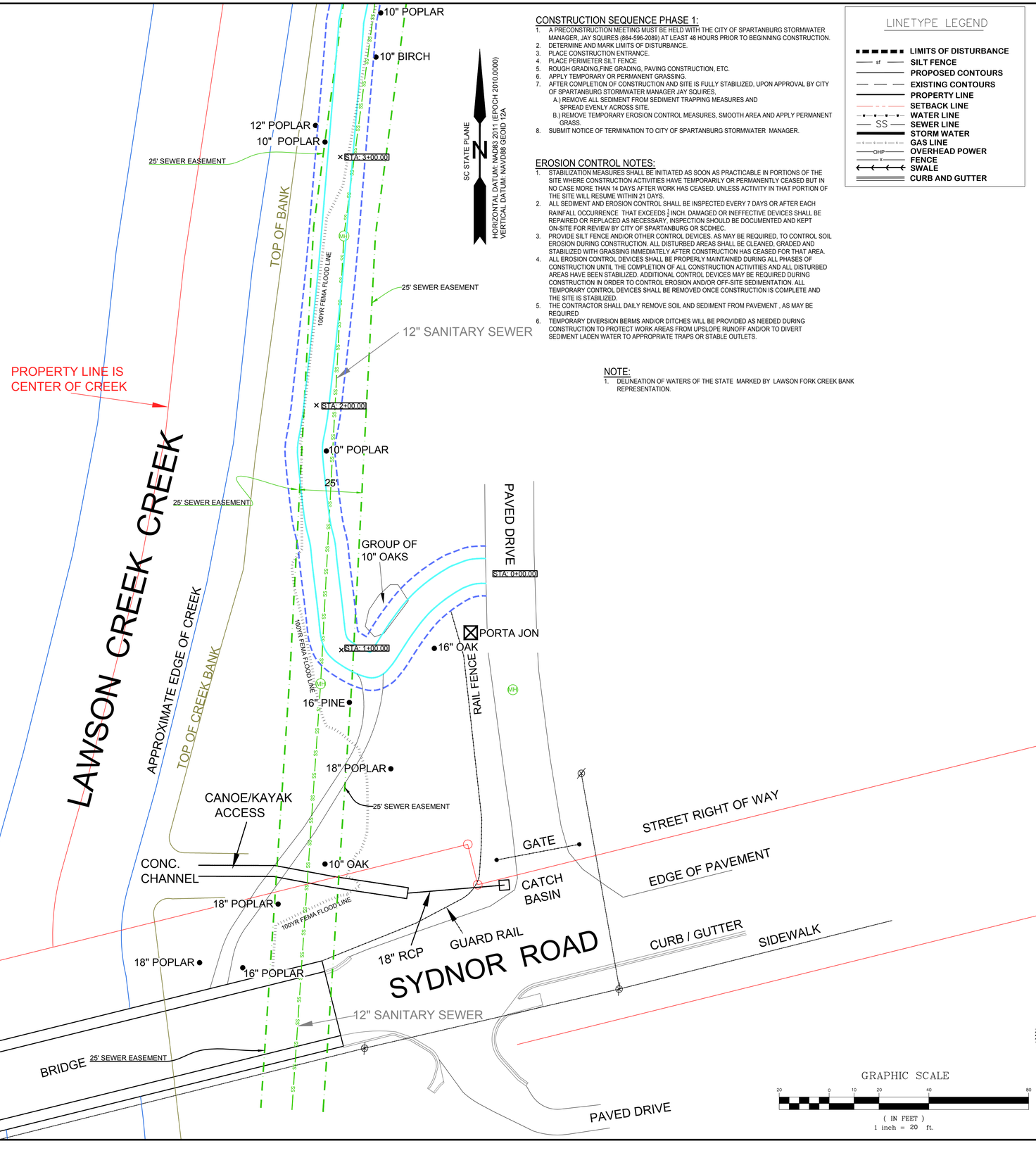
JAN 1 – MAY 1
- RYE (GRAIN) 120 LB/ACRE
- ANNUAL LESPEDEZA 50 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

MAY 1 – AUG 15
- GERMAN MILLET 40 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

AUG 15 – DEC 30
- RYE (GRAIN) 120 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25 GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY, INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- sf — SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SS — SEWER LINE
- STORM WATER
- GAS LINE
- OHP — OVERHEAD POWER
- x — FENCE
- SWALE
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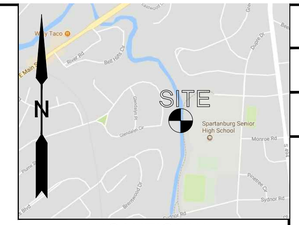

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TAX MAP NO.:

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DISTURBED AREA:

1.83 ACRE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

MATRIX ENGINEERING INC. CERTIFICATE OF AUTHORIZATION No. C01034 SOUTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER No. 7982 SOUTH CAROLINA DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	DWN
			CKD
			APP

CLIENT NAME LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixei.com

SITE PLAN

SCALE	AS NOTED	DWG NO	C-1.1
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

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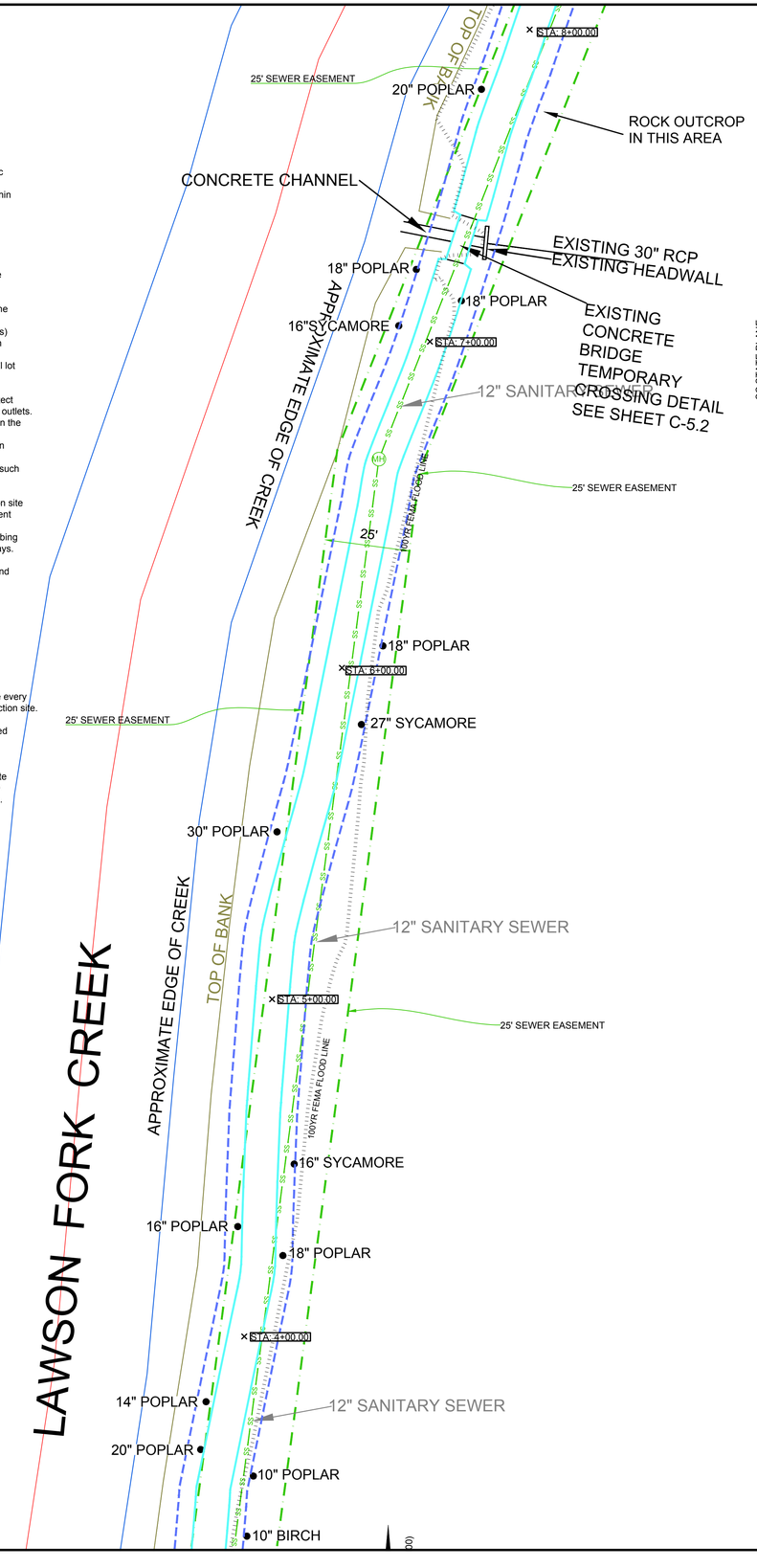

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SC STATE PLANE
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NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
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- PROPOSED CONTOURS
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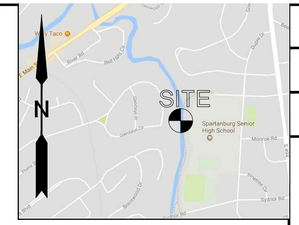

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SPARTANBURG COUNTY SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

7-13-01-087.00
7-13-01-088.00
7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

MATRIX ENGINEERING INC. No. C01034 CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY
11/14/17

REV	DATE	DESCRIPTION	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	DW
			CKD
			DWN

CLIENT NAME LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixei.com

SITE PLAN

SCALE AS NOTED	DWG NO C-1.2
DATE 4/6/17	
FILE NAME MASTER 2017-060	PROJECT NO 2017-060
	REV A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   • Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   • Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    Wastewater from washout of concrete, unless managed by an appropriate control;
    Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
    Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

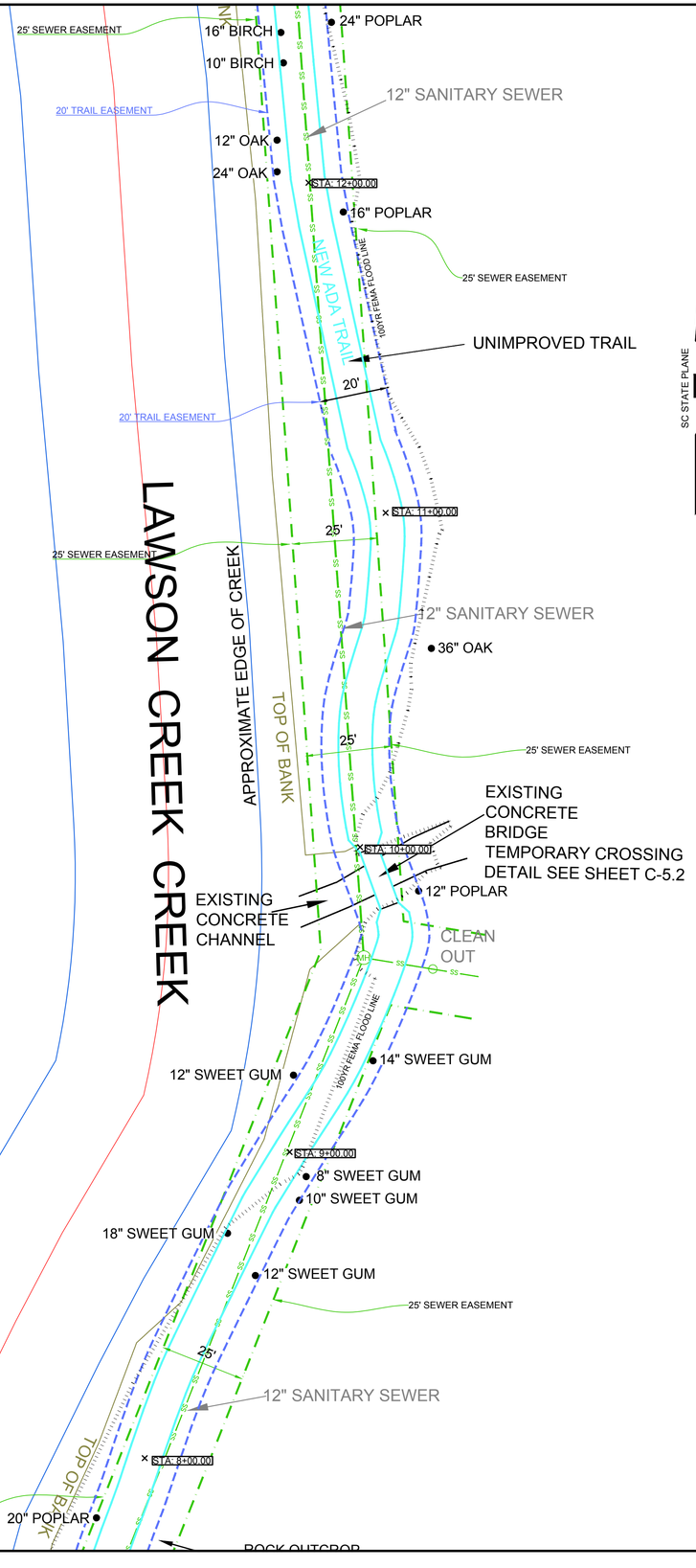
JAN 1 – MAY 1
- RYE (GRAIN) 120 LB/ACRE
- ANNUAL LESPEDEZA 50 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

MAY 1 – AUG 15
- GERMAN MILLET 40 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

AUG 15 – DEC 30
- RYE (GRAIN) 120 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25
GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL; AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



SC STATE PLANE
N
HORIZONTAL DATUM: NAD83 2011 (EPOCH 2010.0000)
VERTICAL DATUM: NAVD88 GEOID 12A

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE (sf)
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SEWER LINE (SS)
- STORM WATER
- GAS LINE
- OVERHEAD POWER (OHP)
- FENCE (x)
- SWALE
- CURB AND GUTTER

EROSION CONTROL NOTES:

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY, INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

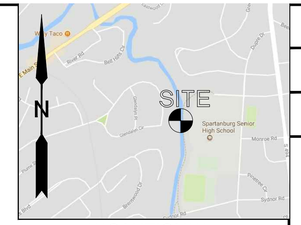
CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE.
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.



CAUTION

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3 DAYS BEFORE DIGGING CALL TOLL FREE 1-800-922-0983
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DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — MATRIX ENGINEERING INC. No. C01034 — REGISTERED PROFESSIONAL ENGINEER — No. 7982 — DON A. WORLEY
11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME, LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixel.com

SITE PLAN

SCALE	AS NOTED	DWG NO	C-1.3
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
REV	A		

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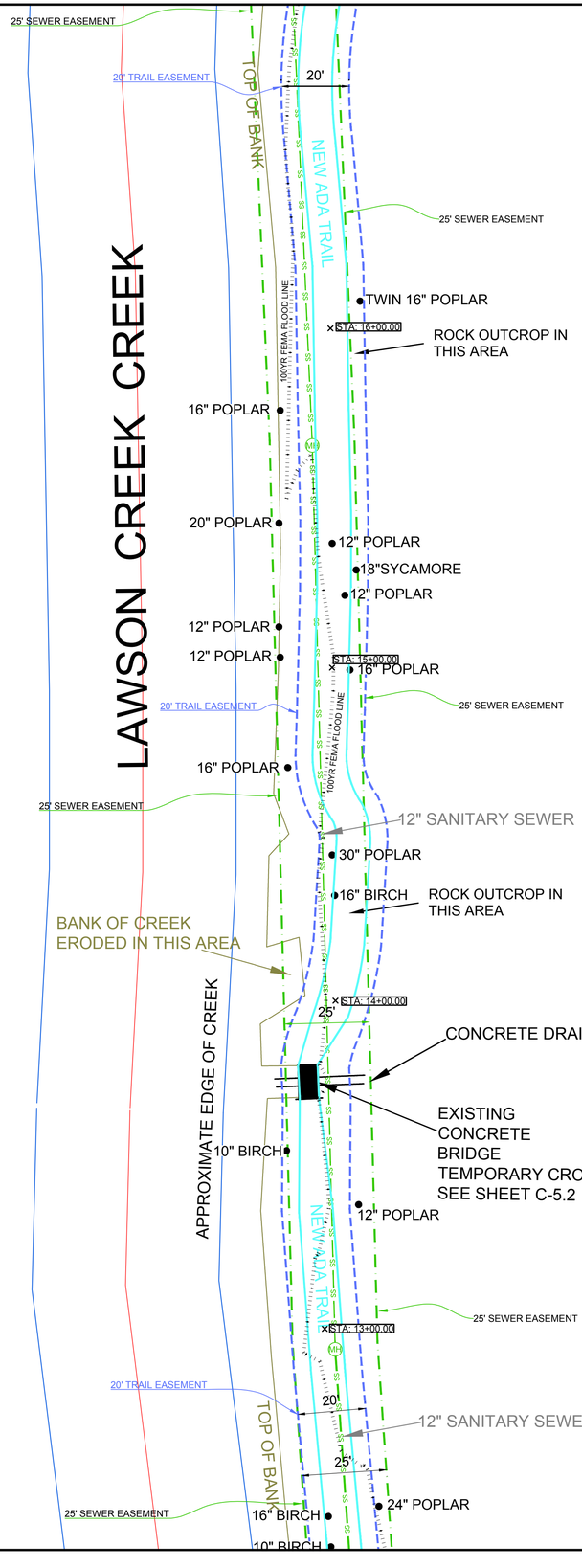

SC STATE PLANE
HORIZONTAL DATUM: NAD83 2011 (EPOCH 2010.0000)
VERTICAL DATUM: NAVD88 GEOID 12A

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
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- PROPOSED CONTOURS
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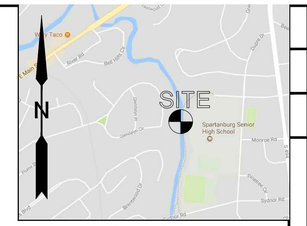

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7-13-01-087.00
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7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION MATRIX ENGINEERING INC. No. C01034

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME /LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

SITE PLAN

SCALE	AS NOTED	DWG NO	C-1.4
DATE	4/6/17		
FILE NAME MASTER 2017-060	PROJECT NO 2017-060	REV	A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   • Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   • Where construction activity on a portion of the Site is temporarily ceased, and earthdisturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once each calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    Wastewater from washout of concrete, unless managed by an appropriate control;
    Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
    Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

JAN 1 – MAY 1
- RYE (GRAIN) 120 LB/ACRE
- ANNUAL LESPEDEZA 50 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

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- GERMAN MILLET 40 LB/ACRE
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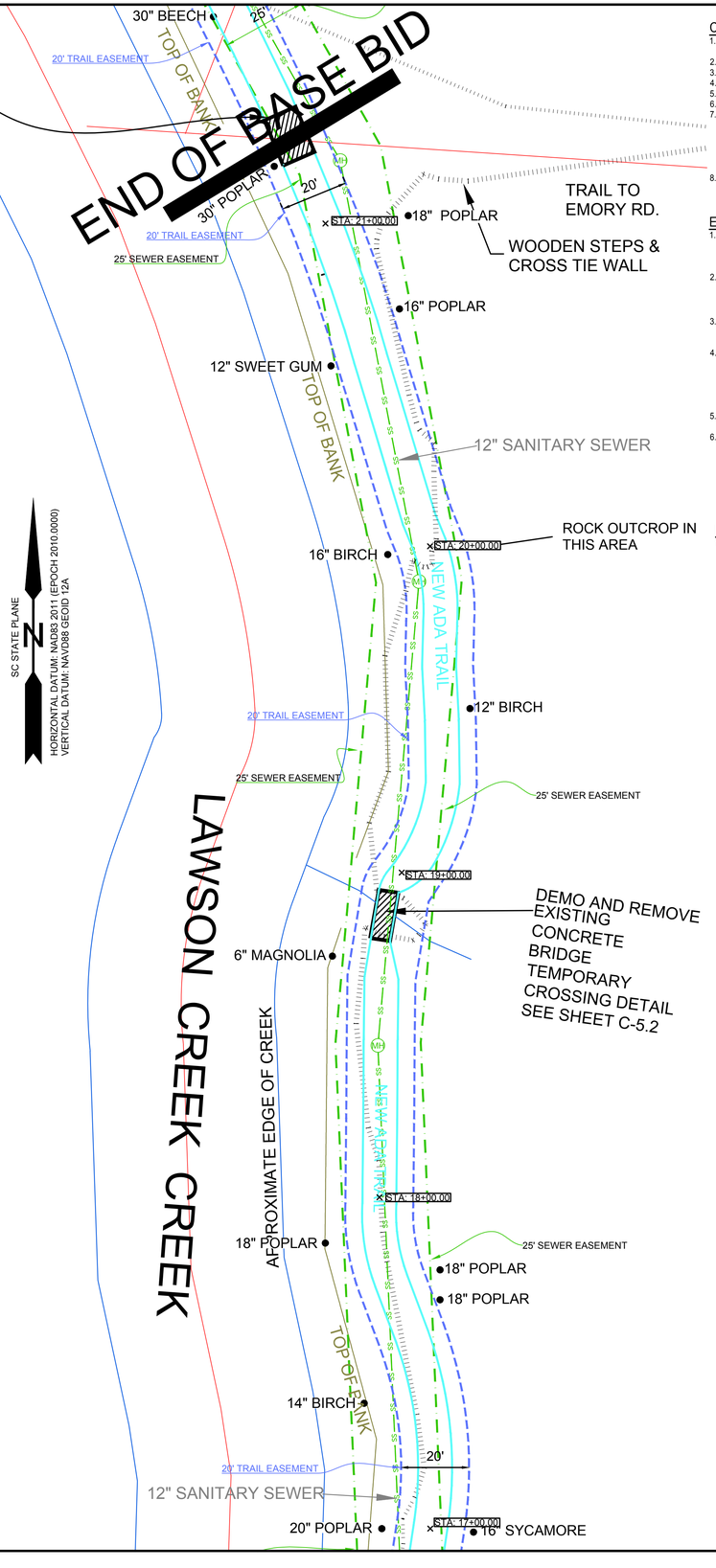
PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25
GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL; AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

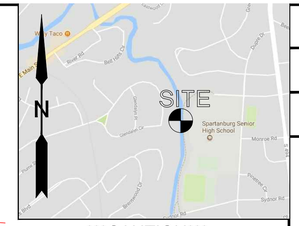
1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY, INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SEWER LINE
- STORM WATER
- GAS LINE
- OVERHEAD POWER
- FENCE
- SWALE
- CURB AND GUTTER
- EROSION EELS



CAUTION

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3 DAYS BEFORE DIGGING CALL
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A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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OWNERS:
PATRICK PREDMORE
DAVID HUTCHINSON
JAKE JONES
GARY PURINTON
STEVEN WISE
DAVID McPHERSON
HAROLD JOYE JR.
SPARTANBURG COUNTY SCHOOL DISTRICT 7

PROPERTY ADDRESS:
SPARTANBURG, SC 29307

ENGINEER:
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TEL: 864-583-6274

SURVEYOR:
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SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:
7-13-01-087.00
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DISTURBED AREA:
1.83 ACRE

SOUTH CAROLINA LICENSED ENGINEERING CERTIFICATE OF AUTHORIZATION MATRIX ENGINEERING INC. No. C01034

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME, LOCATION, & DESCRIPTION

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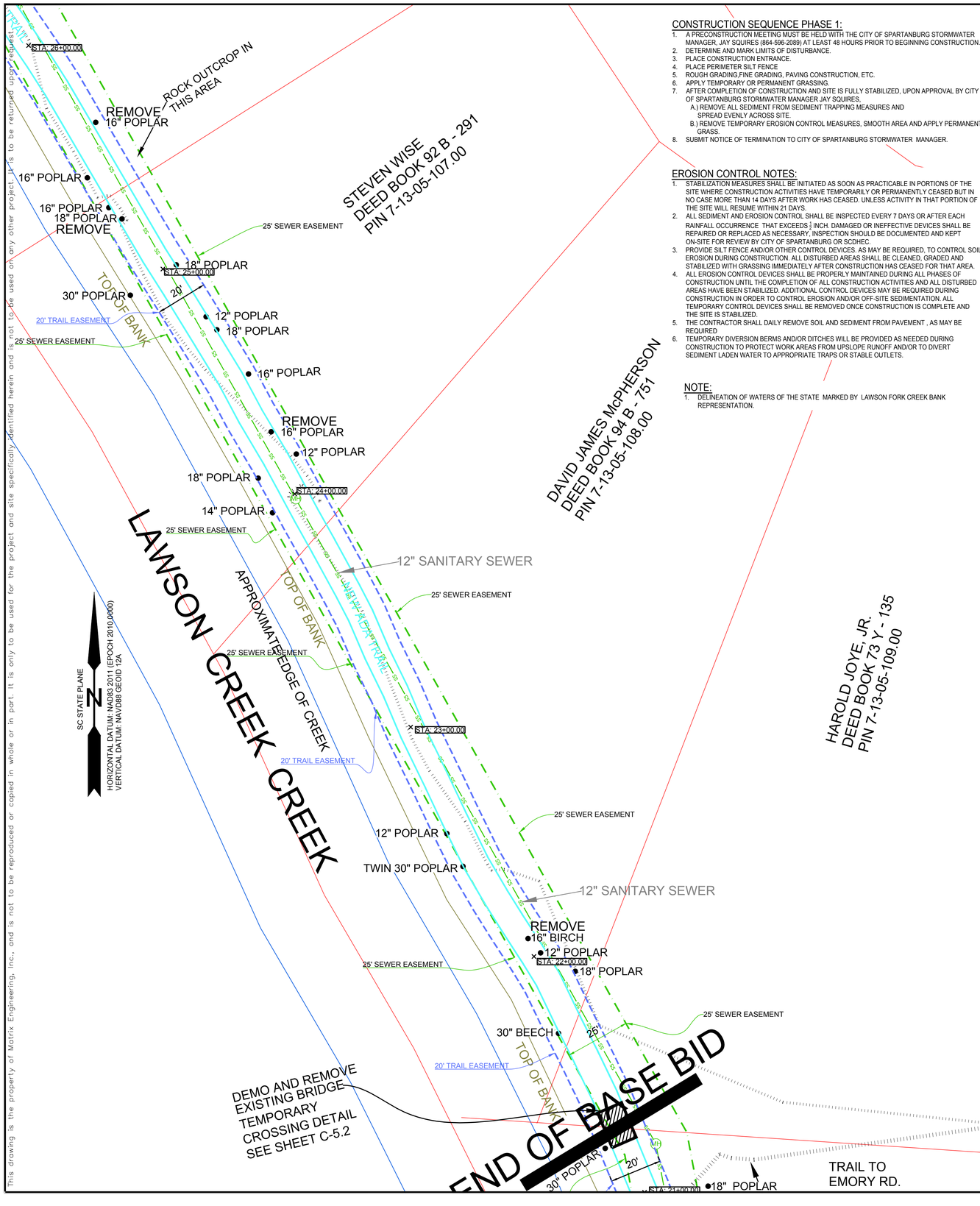
(864)583-6274
29302
dworley@matrixei.com

SITE PLAN

SCALE	AS NOTED	DWG NO	C-1.5
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
REV	A		



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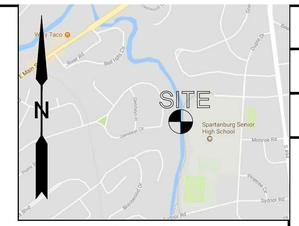
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



CAUTION

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SPARTANBURG COUNTY
SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

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TAX MAP NO.:

7-13-01-087.00
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DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA — MATRIX ENGINEERING INC. No. C01034 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 7982 — JASON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION
A	11-14-2017	ISSUED FOR PERMITTING REVIEW

DWN JS | CKD DW | APP DW

CLIENT NAME /LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

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SITE PLAN

SCALE: AS NOTED	DWG NO: C-1.6
DATE: 4/6/17	
FILE NAME: MASTER 2017-060	PROJECT NO: 2017-060
	REV: A

PIN 7-13-01-087.00

12" SANITARY SEWER
25' SEWER EASEMENT

END OF ALTERNATE BID

STA: 29+75.00

25'
20'

NEW ADA TRAIL

25' SEWER EASEMENT

12" SANITARY SEWER

STA: 29+00.00
30" POPLAR

TOP OF BANK

CREEK

TOP OF BANK

25' SEWER EASEMENT

16" POPLAR

20" POPLAR

STA: 28+00.00

16" POPLAR

24" POPLAR

25' SEWER EASEMENT

20' TRAIL EASEMENT

20" POPLAR

12" BIRCH

STA: 27+00.00

18" POPLAR

ROCK OUTCROP IN THIS AREA

APPROXIMATE EDGE OF CREEK

25' SEWER EASEMENT

14" BIRCH

16"BIRCH

NEW ADA TRAIL

STA: 26+00.00

ROCK OUTCROP IN THIS AREA

16" POPLAR

16" POPLAR

16" POPLAR
18" POPLAR

25' SEWER EASEMENT

18" POPLAR
STA: 25+00.00

30" POPLAR

20'

12" POPLAR
18" POPLAR

20' TRAIL EASEMENT

25' SEWER EASEMENT

TOP OF BANK

LAWSON CREEK CREEK

DAVID B. HUTCHINSON
DEED BOOK 107 S - 342
PIN 7-13-01-088.00

JAKE Z.JONES
DEED BOOK 97A - 910
PIN 7-13-01-089.00

GARY PURINTON
DEED BOOK 72 V - 951
PIN 7-13-01-090.00

STEVEN WISE
DEED BOOK 92 B - 291
PIN 7-13-05-107.00

GREENGATE DRIVE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

JAN 1 – MAY 1
RYE (GRAIN) 120 LB/ACRE
ANNUAL LESPEDEZA 50 LB/ACRE
MULCH (STRAW) 4000 LB/ ACRE
AGRICULTURAL LIMESTONE 2000 LB/ ACRE
FERTILIZER 10–10–10 500 LB/ACRE

MAY 1 – AUG 15
GERMAN MILLET 40 LB/ACRE
MULCH (STRAW) 4000 LB/ ACRE
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FERTILIZER 10–10–10 500 LB/ACRE

AUG 15 – DEC 30
RYE (GRAIN) 120 LB/ACRE
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PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25
GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA- MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.

CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

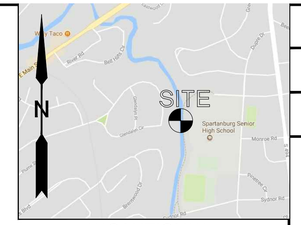
1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY, INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE (sf)
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SEWER LINE (SS)
- STORM WATER
- GAS LINE
- OVERHEAD POWER (OHP)
- FENCE (x)
- SWALE
- CURB AND GUTTER



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DAVID McPHERSON
HAROLD JOYE JR.
SPARTANBURG COUNTY
SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

7-13-01-087.00
7-13-01-088.00
7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

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• Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
Wastewater from washout of concrete, unless managed by an appropriate control;
Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
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SOUTH CAROLINA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS — MATRIX ENGINEERING INC. — No. C01034

SOUTH CAROLINA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS — No. 7982 — DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME, LOCATION, & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

SITE PLAN

SCALE	AS NOTED	DWG NO	C-1.7
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SILT FENCE (sf)
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SEWER LINE (SS)
- STORM WATER
- GAS LINE
- OVERHEAD POWER (OHP)
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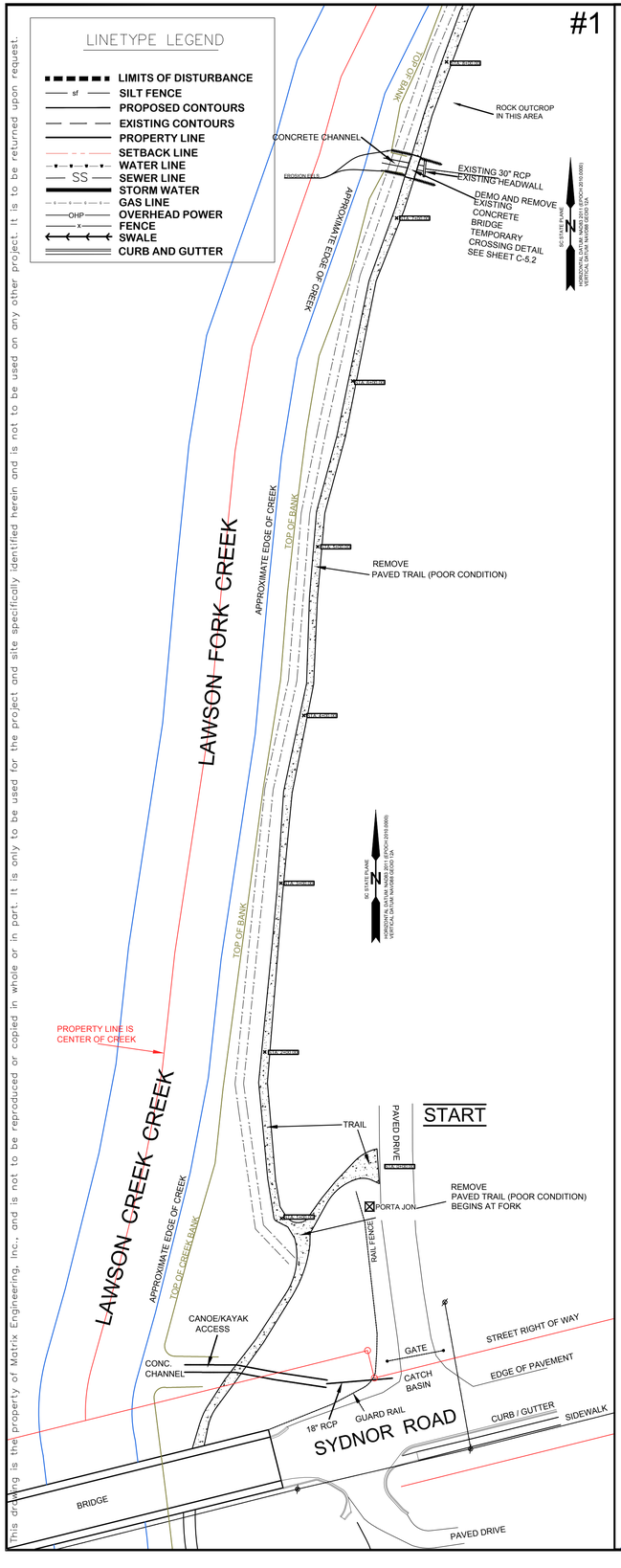
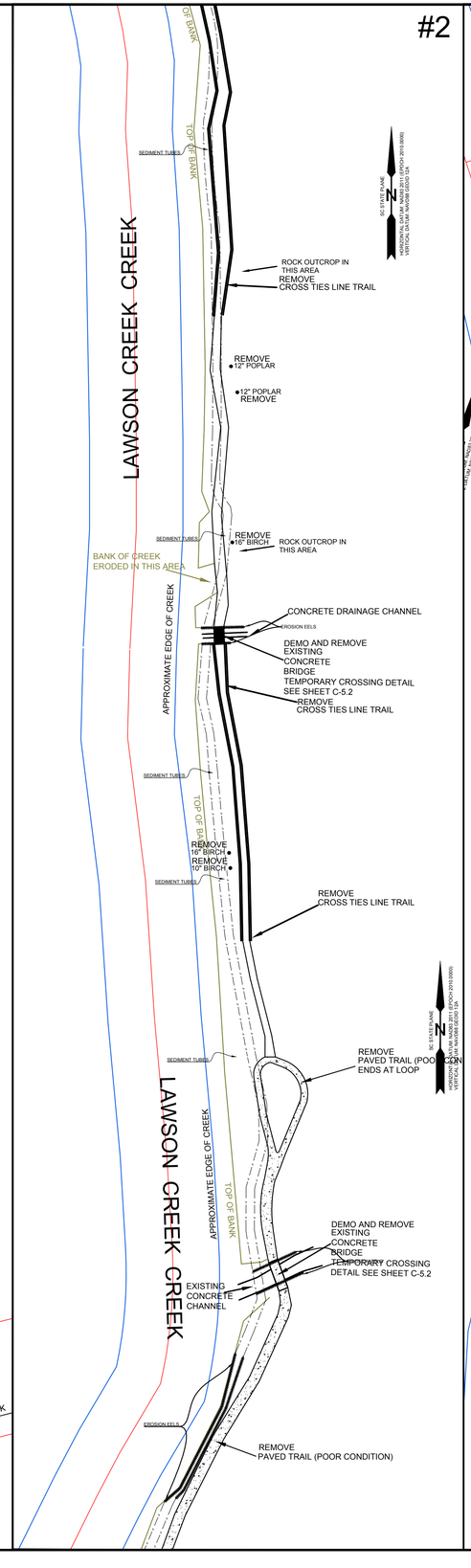
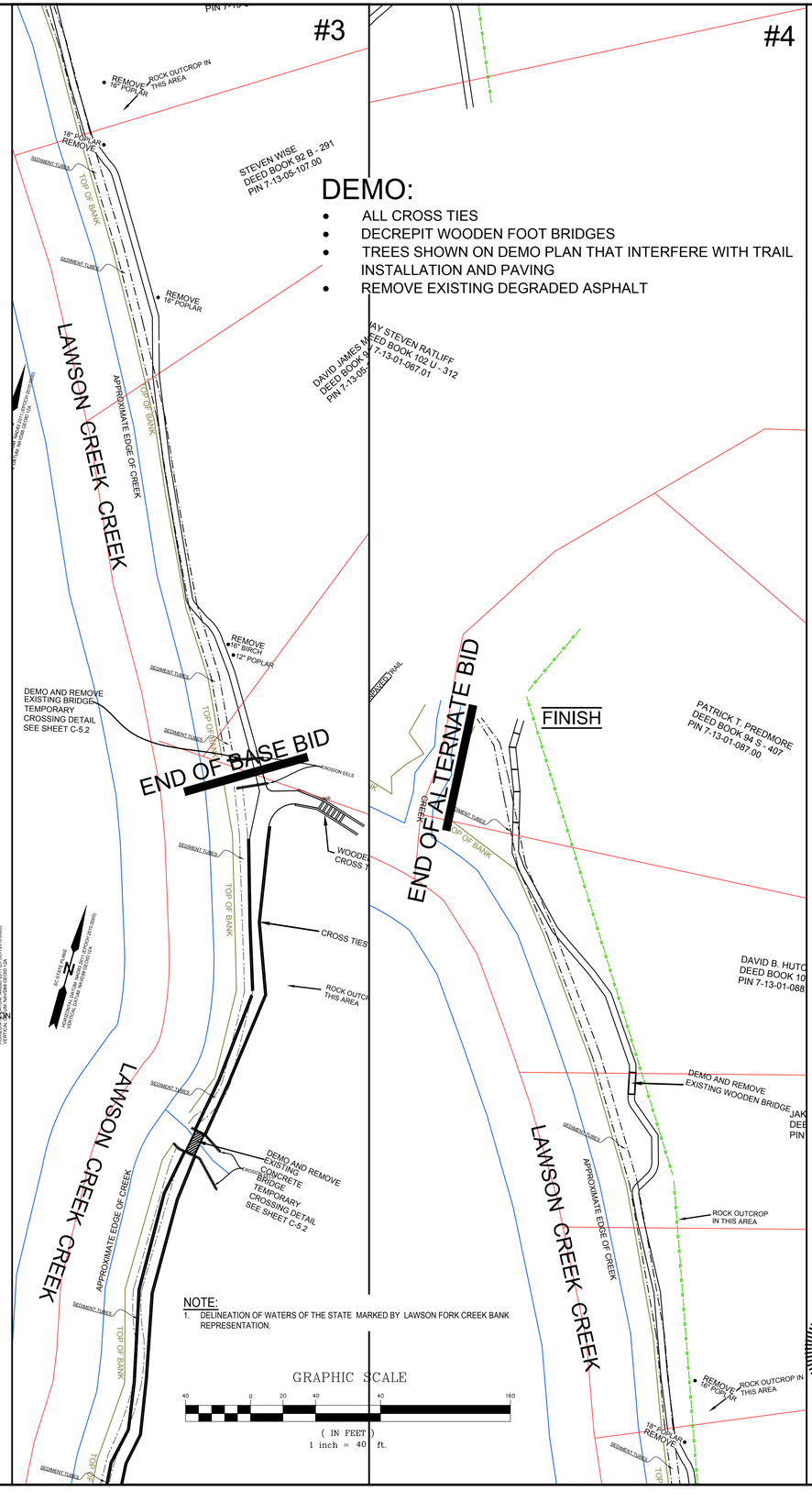
- CURB AND GUTTER





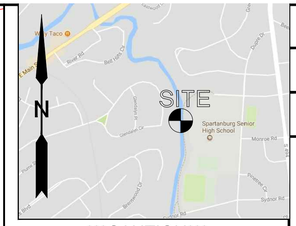


DEMO:

- ALL CROSS TIES
- DECREPIT WOODEN FOOT BRIDGES
- TREES SHOWN ON DEMO PLAN THAT INTERFERE WITH TRAIL INSTALLATION AND PAVING
- REMOVE EXISTING DEGRADED ASPHALT

NOTE:
1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



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DISTURBED AREA:
1.83 ACRE

MATRIX ENGINEERING, INC. — No. C01034 — EXPIRATION OF AUTHORIZATION 06/30/2018
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER — No. 7982 — DON A. WORLEY
11/14/17

REV	DATE	DESCRIPTION	DWN	APP
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CLIENT NAME, LOCATION, & DESCRIPTION
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AT
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FOR
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SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

DEMOLITION PLAN

SCALE	AS NOTED	DWG NO	C-2
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

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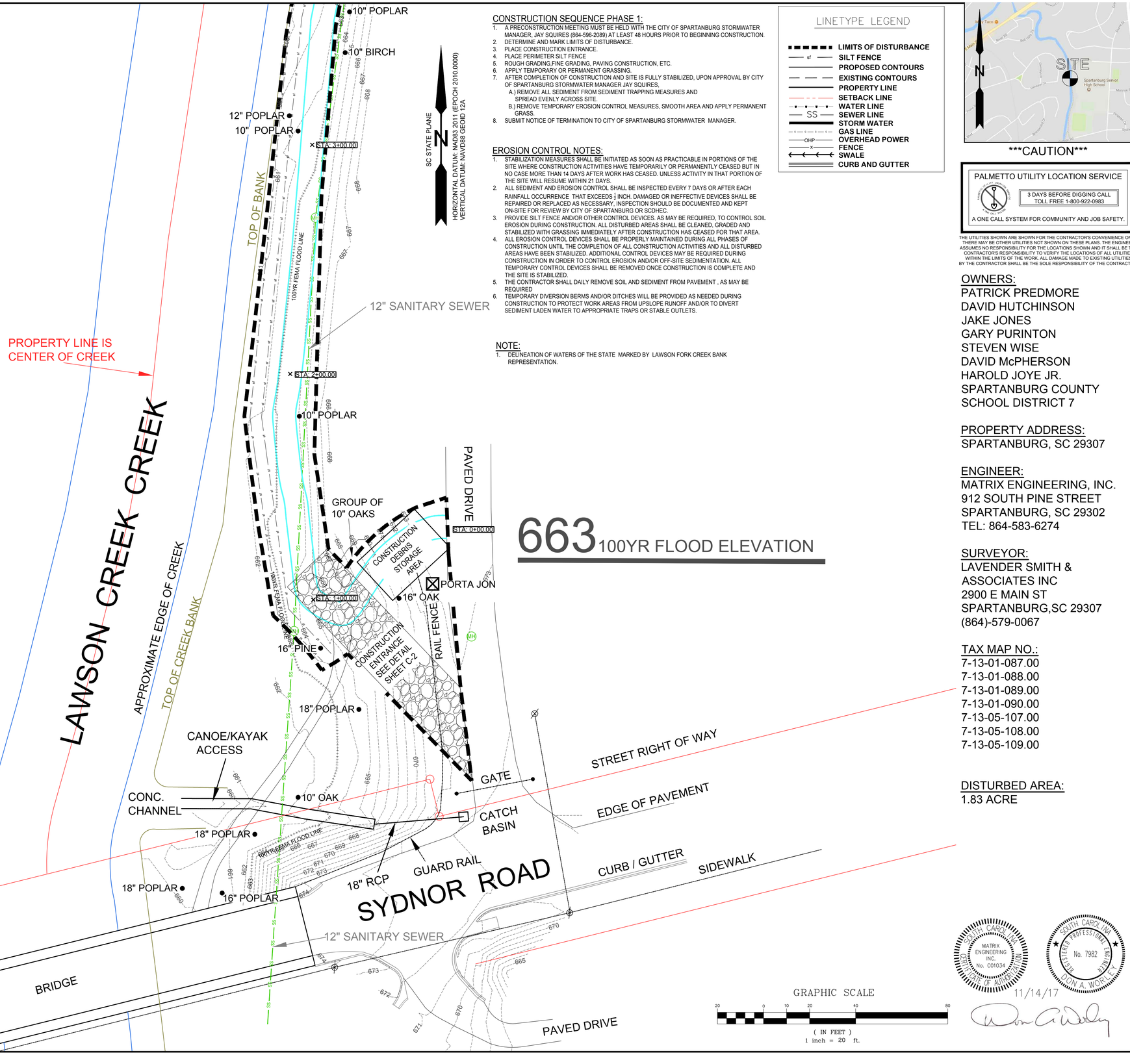

663 100YR FLOOD ELEVATION

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
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   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
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2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY, INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SF — SILT FENCE
- PROPOSED CONTOURS
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- PROPERTY LINE
- SETBACK LINE
- WATER LINE
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- GAS LINE
- OHP — OVERHEAD POWER
- X — FENCE
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- CURB AND GUTTER

CAUTION

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3 DAYS BEFORE DIGGING CALL TOLL FREE 1-800-922-0983
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SPARTANBURG COUNTY SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

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912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

7-13-01-087.00
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DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA MATRIX ENGINEERING INC. No. C01034 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION			
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DWN	DW
				CKD	DW
					APP

CLIENT NAME LOCATION & DESCRIPTION
RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE: AS NOTED	DWG NO: C-3.1
DATE: 4/6/17	
FILE NAME: MASTER 2017-060	PROJECT NO: 2017-060
	REV: A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   - Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   - Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    Wastewater from washout of concrete, unless managed by an appropriate control;
    Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
    Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

JAN 1 – MAY 1
- RYE (GRAIN) 120 LB/ACRE
- ANNUAL LESPEDEZA 50 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

MAY 1 – AUG 15
- GERMAN MILLET 40 LB/ACRE
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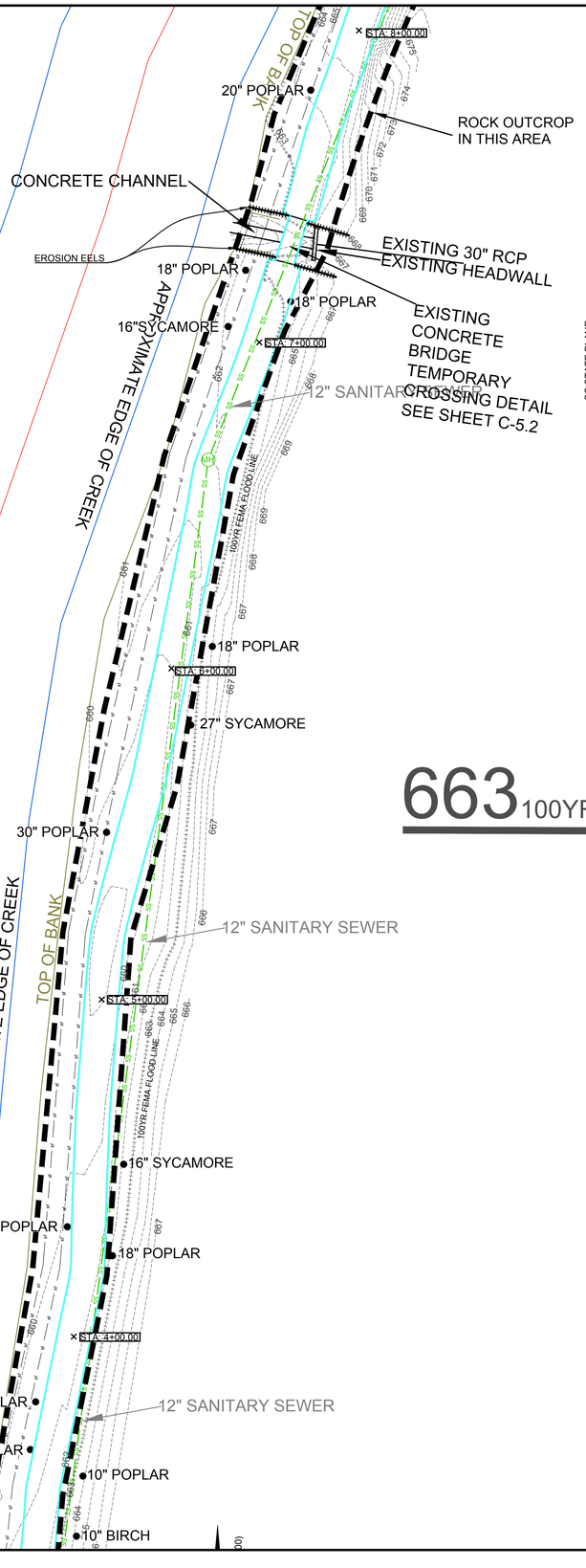
PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25
GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10, LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



663 100YR FLOOD ELEVATION

CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
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SC STATE PLANE HO VEI

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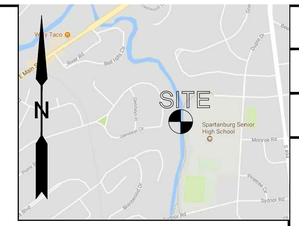
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



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REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME /LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

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(864)583-6274
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE	AS NOTED	DWG NO	C-3.2
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
REV	A		

SCDHEC STANDARD NOTES:

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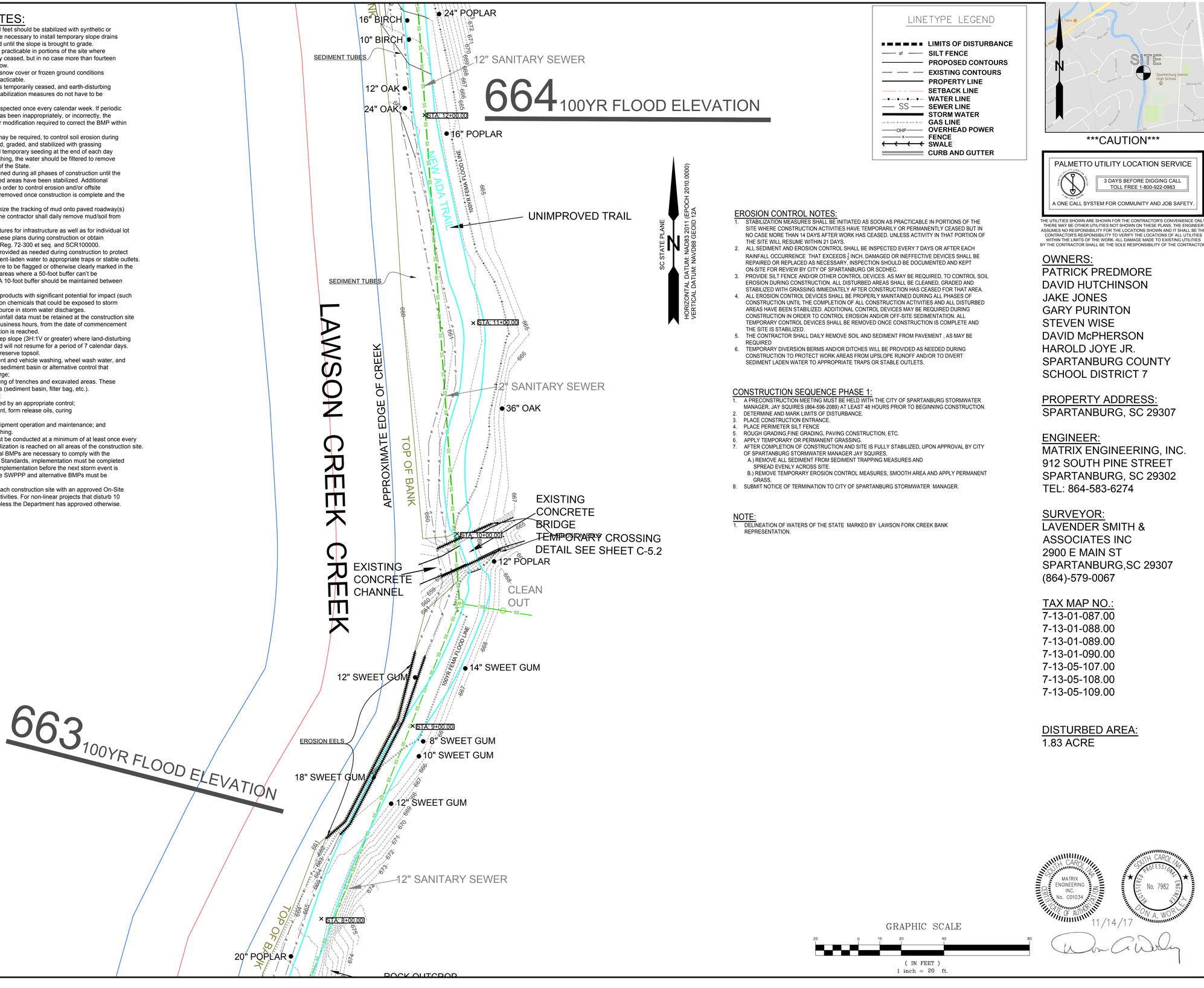

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- PROPOSED CONTOURS
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CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE.
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
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7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

CAUTION

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TOLL FREE 1-800-922-0983
A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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GARY PURINTON
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DAVID McPHERSON
HAROLD JOYE JR.
SPARTANBURG COUNTY SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

7-13-01-087.00
7-13-01-088.00
7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION MATRIX ENGINEERING INC. No. C01034

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME, LOCATION, & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixel.com

GRADING & EROSION CONTROL PLAN

SCALE	AS NOTED	DWG NO	C-3.3
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   - Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   - Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    Wastewater from washout of concrete, unless managed by an appropriate control;
    Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
    Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
    Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

GRASSING SPECIFICATIONS

TEMPORARY GRASS:

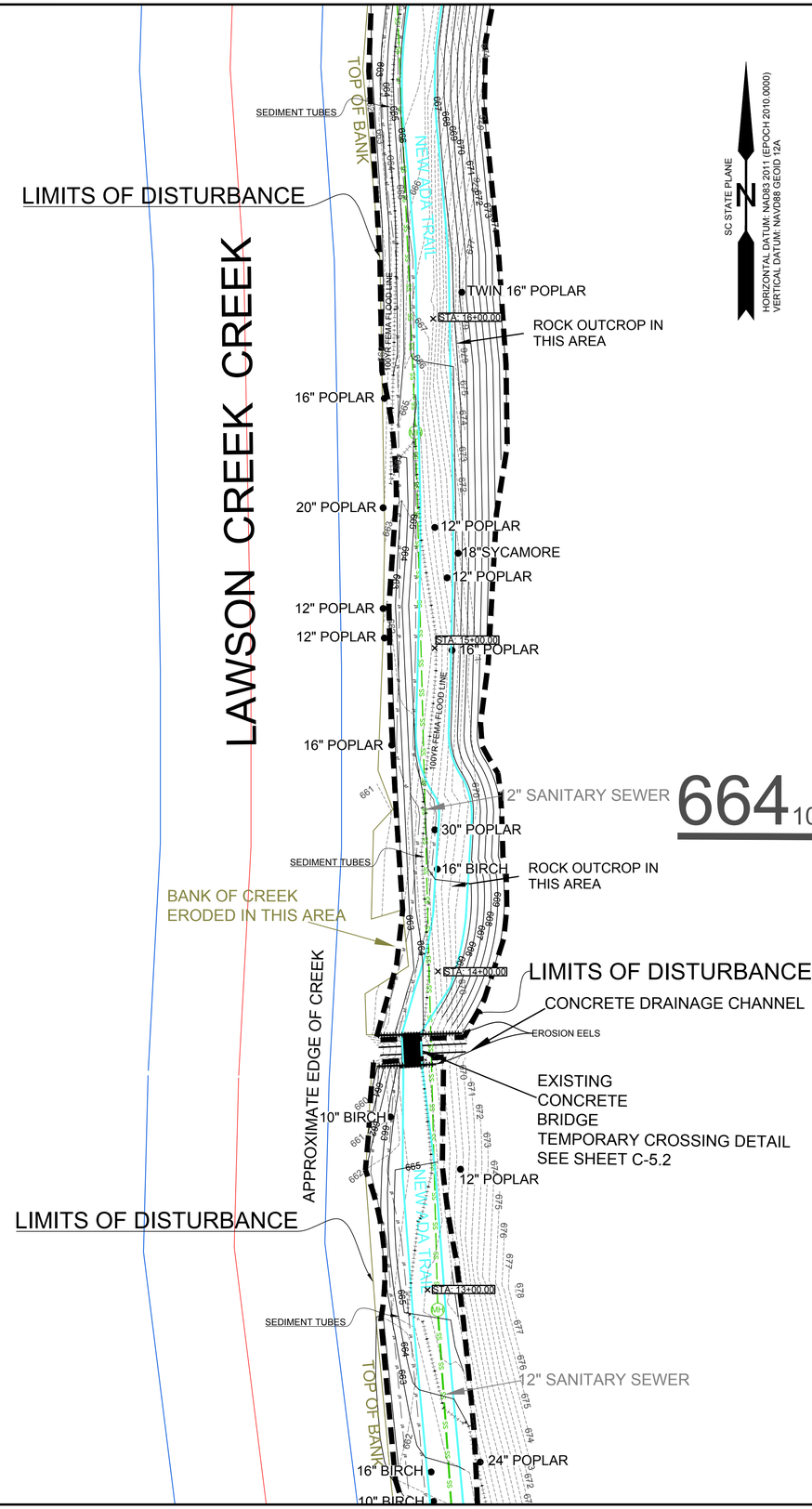
JAN 1 – MAY 1
- RYE (GRAIN) 120 LB/ACRE
- ANNUAL LESPEDEZA 50 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

MAY 1 – AUG 15
- GERMAN MILLET 40 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

AUG 15 – DEC 30
- RYE (GRAIN) 120 LB/ACRE
- MULCH (STRAW) 4000 LB/ ACRE
- AGRICULTURAL LIMESTONE 2000 LB/ ACRE
- FERTILIZER 10–10–10 500 LB/ACRE

PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25
GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE, LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



SC STATE PLANE
N
HORIZONTAL DATUM: NAD83 2011 (EPOCH 2010.0000)
VERTICAL DATUM: NAVD88 GEOID 12A

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SF — SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SS — SEWER LINE
- STORM WATER
- GAS LINE
- OHP — OVERHEAD POWER
- X — FENCE
- SWALE
- CURB AND GUTTER

CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
   A.) REMOVE ALL SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND SPREAD EVENLY ACROSS SITE.
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8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
2. ALL SEDIMENT AND EROSION CONTROL SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY. INSPECTION SHOULD BE DOCUMENTED AND KEPT ON-SITE FOR REVIEW BY CITY OF SPARTANBURG OR SCDHEC.
3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES. AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER CONSTRUCTION HAS CEASED FOR THAT AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. THE CONTRACTOR SHALL DAILY REMOVE SOIL AND SEDIMENT FROM PAVEMENT , AS MAY BE REQUIRED
6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

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(IN FEET)
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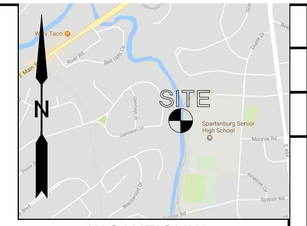

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SPARTANBURG COUNTY
SCHOOL DISTRICT 7

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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW

CLIENT NAME LOCATION & DESCRIPTION
RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE	AS NOTED	DWG NO	C-3.4
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized by biomatric or vegetative mats, in addition to hydroseeding. It may be necessary to utilize temporary swale drains during construction. Temporary berms may be needed until the slope is properly established.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
● Where stabilization by the 14th day is precluded by snow cover or by frozen ground conditions stabilization measures must be initiated as soon as practicable.
● Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
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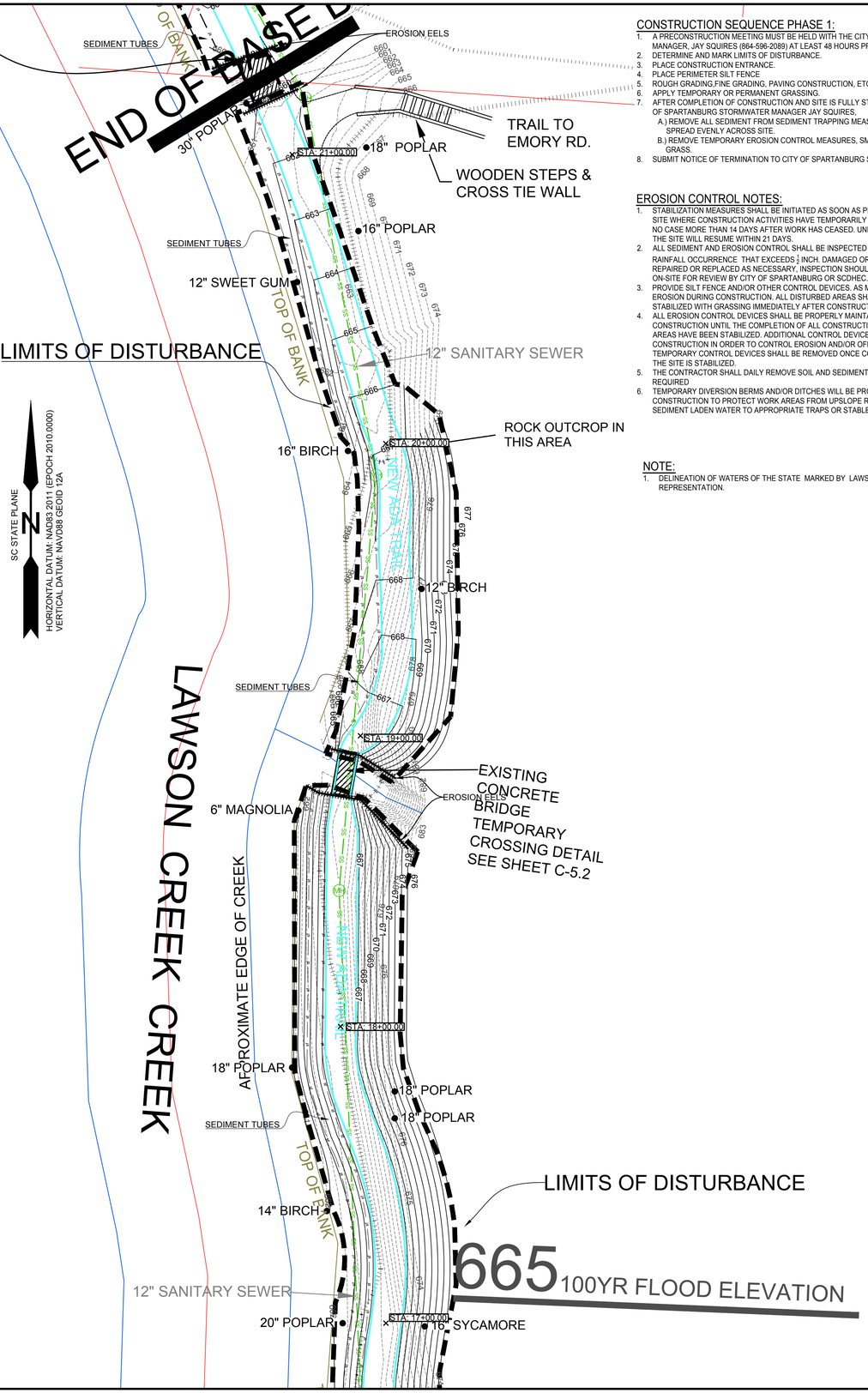

GRAPHIC SCALE
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1 inch = 20 ft.

CONSTRUCTION SEQUENCE PHASE 1:

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2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
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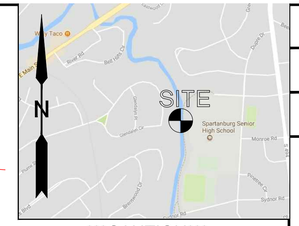
NOTE:

1. DELINEATION OF WATERS OF THE STATE MARKED BY LAWSON FORK CREEK BANK REPRESENTATION.

LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SF — SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SS — SEWER LINE
- STORM WATER
- GAS LINE
- OHP — OVERHEAD POWER
- X — FENCE
- SWALE
- CURB AND GUTTER



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DAVID McPHERSON
HAROLD JOYE JR.
SPARTANBURG COUNTY
SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

7-13-01-087.00
7-13-01-088.00
7-13-01-089.00
7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

MATRIX ENGINEERING, INC. No. C01034 — CERTIFICATE OF AUTHORIZATION — SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER — No. 7982 — DON A. WORLEY — SOUTH CAROLINA
11/14/17

REV	DATE	DESCRIPTION
A	11-14-2017	ISSUED FOR PERMITTING REVIEW

DW APP
DW CKD
JS DWN

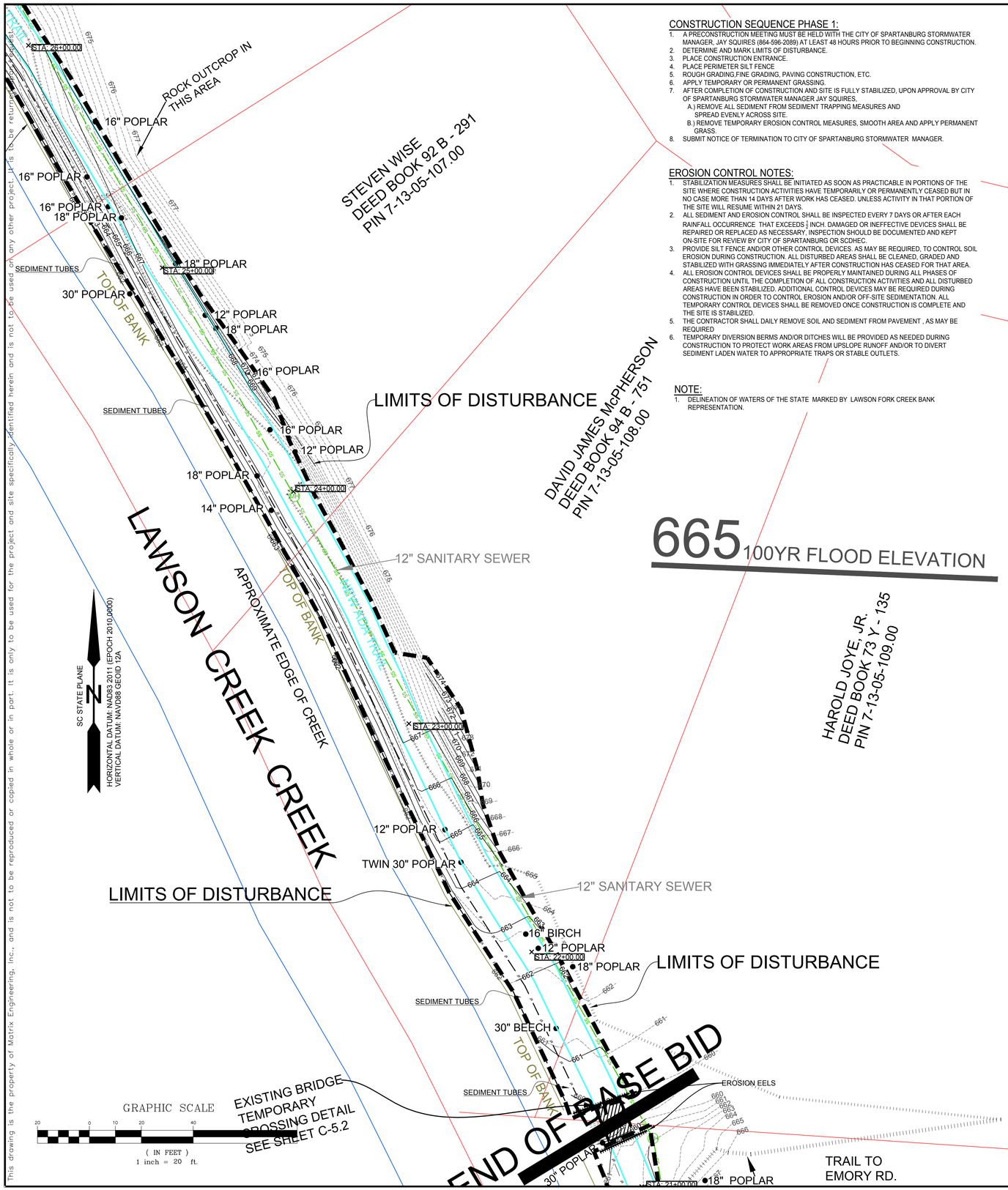
CLIENT NAME LOCATION & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA
(864)583-6274
29302
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE	AS NOTED
DATE	4/6/17
FILE NAME	MASTER 2017-060
PROJECT NO	2017-060
DWG NO	C-3.5
REV	A



CONSTRUCTION SEQUENCE PHASE 1:

1. A PRECONSTRUCTION MEETING MUST BE HELD WITH THE CITY OF SPARTANBURG STORMWATER MANAGER, JAY SQUIRES (864-596-2089) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. PLACE CONSTRUCTION ENTRANCE.
4. PLACE PERIMETER SILT FENCE
5. ROUGH GRADING,FINE GRADING, PAVING CONSTRUCTION, ETC.
6. APPLY TEMPORARY OR PERMANENT GRASSING.
7. AFTER COMPLETION OF CONSTRUCTION AND SITE IS FULLY STABILIZED, UPON APPROVAL BY CITY OF SPARTANBURG STORMWATER MANAGER JAY SQUIRES,
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   B.) REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY PERMANENT GRASS.
8. SUBMIT NOTICE OF TERMINATION TO CITY OF SPARTANBURG STORMWATER MANAGER.

EROSION CONTROL NOTES:

1. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED BUT IN NO CASE MORE THAN 14 DAYS AFTER WORK HAS CEASED. UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.
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NOTE:

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LINETYPE LEGEND

- LIMITS OF DISTURBANCE
- SF — SILT FENCE
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPERTY LINE
- SETBACK LINE
- WATER LINE
- SS — SEWER LINE
- STORM WATER
- GAS LINE
- OHP — OVERHEAD POWER
- X — FENCE
- SWALE
- CURB AND GUTTER

SCDHEC STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
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3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
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11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
Wastewater from washout of concrete, unless managed by an appropriate control;
Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
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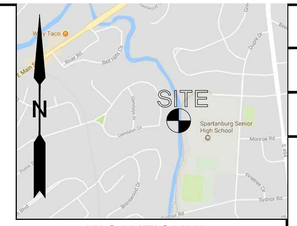

CAUTION

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3 DAYS BEFORE DIGGING CALL
TOLL FREE 1-800-922-0983
A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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1.83 ACRE

SOUTH CAROLINA PROFESSIONAL ENGINEER MATRIX ENGINEERING INC. No. C01034 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 7982 DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION
A	11-14-2017	ISSUED FOR PERMITTING REVIEW

DRN | CKD | APP

CLIENT NAME, LOCATION & DESCRIPTION:
RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE: AS NOTED	DWG NO: C-3.6
DATE: 4/6/17	
FILE NAME: MASTER 2017-060	PROJECT NO: 2017-060
	REV: A

PIN 7-13-01-087.00

12" SANITARY SEWER

END OF ALTERNATE BID

STA: 29+75.00

NEW ADA TRAIL

SEDIMENT TUBES

TOP OF BANK

CREEK

STA: 29+00.00

30" POPLAR

12" SANITARY SEWER

DAVID B. HUTCHINSON
DEED BOOK 107 S - 342
PIN 7-13-01-088.00

16" POPLAR

20" POPLAR

STA: 28+00.00

16" POPLAR

LIMITS OF DISTURBANCE

24" POPLAR

JAKE Z.JONES
DEED BOOK 97A - 910
PIN 7-13-01-089.00

666 100YR FLOOD ELEVATION

20" POPLAR

12" BIRCH

STA: 27+00.00

78" POPLAR

ROCK OUTCROP IN THIS AREA

LIMITS OF DISTURBANCE

SEDIMENT TUBES

14" BIRCH

16"BIRCH

LAWSON CREEK CREEK

APPROXIMATE EDGE OF CREEK

GARY PURINTON
DEED BOOK 72 V - 951
PIN 7-13-01-090.00

NEW ADA TRAIL

STA: 26+00.00

ROCK OUTCROP IN THIS AREA

16" POPLAR

16" POPLAR

16" POPLAR

18" POPLAR

LIMITS OF DISTURBANCE

STEVEN WISE
DEED BOOK 92 B - 291
PIN 7-13-05-107.00

SEDIMENT TUBES

STA: 25+00.00

18" POPLAR

30" POPLAR

TOP OF BANK

12" POPLAR

18" POPLAR

GREENGATE DRIVE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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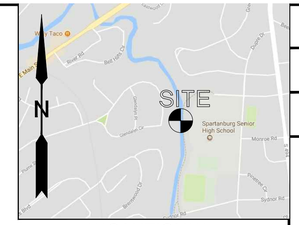

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SCHOOL DISTRICT 7

PROPERTY ADDRESS:

SPARTANBURG, SC 29307

ENGINEER:

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SC 29302
TEL: 864-583-6274

SURVEYOR:

LAVENDER SMITH & ASSOCIATES INC
2900 E MAIN ST
SPARTANBURG,SC 29307
(864)-579-0067

TAX MAP NO.:

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7-13-01-090.00
7-13-05-107.00
7-13-05-108.00
7-13-05-109.00

DISTURBED AREA:

1.83 ACRE

SOUTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION — MATRIX ENGINEERING INC. No. C01034

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER — No. 7982 — DON A. WORLEY

11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

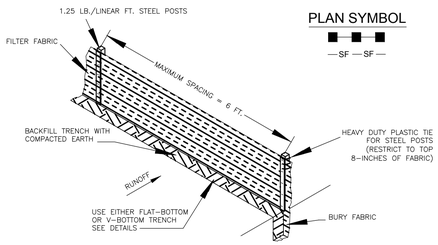
CLIENT NAME, LOCATION, & DESCRIPTION:
RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

GRADING & EROSION CONTROL PLAN

SCALE	AS NOTED	DWG NO	C-3.7
DATE	4/6/17		
FILE NAME	MASTER 2017-060	PROJECT NO	2017-060
		REV	A

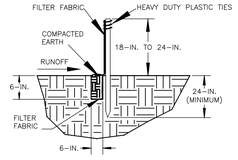
SILT FENCE INSTALLATION



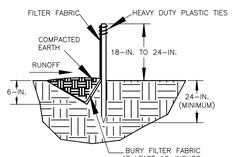
PLAN SYMBOL

—SF—SF—

FLAT-BOTTOM TRENCH DETAIL



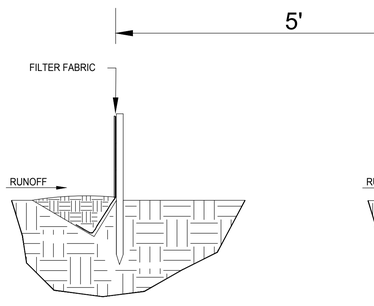
V-SHAPED TRENCH DETAIL



SILT FENCE - GENERAL NOTES

1. Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
2. Maximum sheet or overland flow path length to the silt fence shall be 100–feet.
3. Maximum slope steepness (normal (perpendicular) to the fence line) shall be 2:1.
4. Silt fence joints, when necessary, shall be completed by one of the following options:
   - Wrap each fabric together at a support post with both ends fastened to the post, with a 1–foot minimum overlap;
   - Overlap silt fence by installing 3–feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy–duty plastic ties; or,
   - Overlap entire width of each silt fence roll from one support post to the next support post.
5. Attach filter fabric to the steel posts using heavy–duty plastic ties that are evenly spaced within the top 8–inches of the fabric.
6. Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
7. Install Silt Fence Checks (Tie–Backs) every 50–100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

South Carolina Department of Health and Environmental Control	
SILT FENCE	
STANDARD DRAWING NO. SC–03	Page 1 of 2
NOT TO SCALE	FEBRUARY 2014 DATE



MATRIX ENGINEERING INC.
DOUBLE ROW SILT FENCE
NOT TO SCALE AUGUST 2017 DATE

SILT FENCE - POST REQUIREMENTS

1. Silt Fence posts must be 48–inch long steel posts that meet, at a minimum, the following physical characteristics:
   - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
   - Include a standard "T" section with a nominal face width of 1.38–inches and a nominal "T" length of 1.48–inches.
   - Weigh 1.25 pounds per foot (± 8%)
2. Posts shall be equipped with projections to aid in fastening of filter fabric.
3. Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17–square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
4. Install posts to a minimum of 24–inches. A minimum height of 1– to 2–inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
5. Post spacing shall be at a maximum of 6–feet on center.

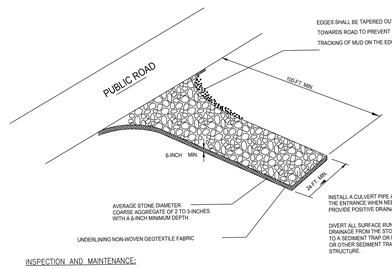
SILT FENCE - FABRIC REQUIREMENTS

1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
   - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
   - Free of any treatment or coating which might adversely alter its physical properties after installation;
   - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
   - Have a minimum width of 36–inches.
2. Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
3. 12–inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
5. Filter Fabric shall be installed at a minimum of 24–inches above the ground.

SILT FENCE - INSPECTION & MAINTENANCE

1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24–hours after each rainfall even that produces 1/2–inch or more of precipitation.
3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie–backs and/or reinstall silt fence, as necessary.
7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
8. Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control	
SILT FENCE	
STANDARD DRAWING NO. SC–03	PAGE 2 of 2
GENERAL NOTES	FEBRUARY 2014 DATE



INSPECTION AND MAINTENANCE:

INSPECT CONSTRUCTION ENTRANCES EVERY SEVEN (7) CALENDAR DAYS, OR AFTER HEAVY USE. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY THE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

SCALE: NONE

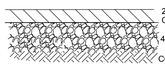
GRASSING SPECIFICATIONS

TEMPORARY GRASS:

JAN 1 – MAY 1	
RYE (GRAIN)	120 LB/ACRE
ANNUAL LESPEDEZA	50 LB/ACRE
MULCH (STRAW)	4000 LB/ ACRE
AGRICULTURAL LIMESTONE	2000 LB/ ACRE
FERTILIZER 10–10–10	500 LB/ACRE
MAY 1 – AUG 15	
GERMAN MILLET	40 LB/ACRE
MULCH (STRAW)	4000 LB/ ACRE
AGRICULTURAL LIMESTONE	2000 LB/ ACRE
FERTILIZER 10–10–10	500 LB/ACRE
AUG 15 – DEC 30	
RYE (GRAIN)	120 LB/ACRE
MULCH (STRAW)	4000 LB/ ACRE
AGRICULTURAL LIMESTONE	2000 LB/ ACRE
FERTILIZER 10–10–10	500 LB/ACRE

PERMANENT GRASS:

FEBRUARY 1 – MARCH 31, AUGUST 20 – OCTOBER 25 GRASS SHALL BE PROVIDED FOR ALL DISTURBED AREAS. FERTILIZER SHALL BE COMMERCIAL TYPE 10–10–10. LIME SHALL BE AGRICULTURAL GRADE GROUND LIMESTONE, CONTAINING AT LEAST 34% MAGNESIUM CARBONATE. SEED SHALL BE BERMUDA, MINIMUM 90% PURITY AND 80% GERMINATION. AREAS TO BE GRASSED SHALL BE SCARIFIED CULTIVATED TO A DEPTH OF 3 INCHES, WITH ALL CLODS OR CLUMPS BROKEN UP AND FOREIGN MATERIAL AND DEBRIS REMOVED. FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 1000 LB/ACRE. LIME SHALL BE APPLIED AT A MINIMUM RATE OF 3000 LB/ACRES. FERTILIZER AND LIME SHALL BE THOROUGHLY WORKED INTO THE SOIL, AND THE SURFACE RAKED SMOOTH BEFORE APPLYING SEED. SEED SHALL BE APPLIED EVENLY AT THE MINIMUM RATE OF 130 LB/ACRE AND RAKED IN LIGHTLY. SEEDED AREAS SHALL BE DRESSED SMOOTH, THEN MULCH (STRAW) APPLIED AT 4000 LB/ACRE. AREAS SHALL BE SPRAYED WITH EMULSION TO BIND SEED AND PREVENT EROSION, IMMEDIATELY AFTER SEEDING.



PAVING DETAIL

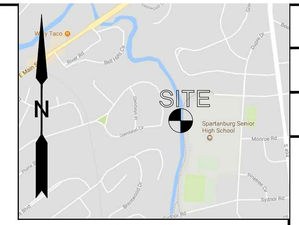
SCALE: NONE

STANDARD NOTES:

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
   -Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
   -Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.

Standard Notes
February 2017

13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
   -Wastewater from washout of concrete, unless managed by an appropriate control;
   -Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   -Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.



CAUTION

PALMETTO UTILITY LOCATION SERVICE

3 DAYS BEFORE DIGGING CALL TOLL FREE 1-800-922-0983

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.

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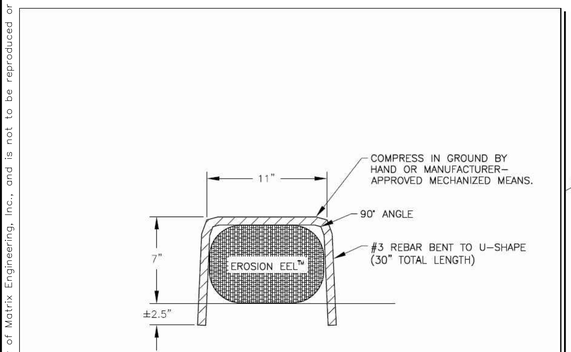
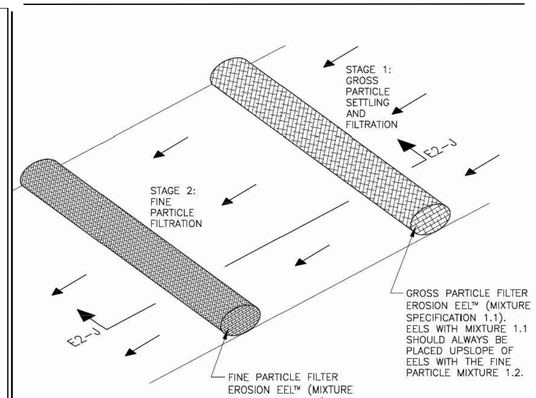
DISTURBED AREA:

1.83 ACRE

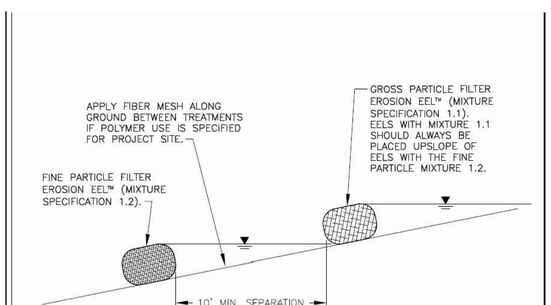
EROSION EEL INSTALLATION DETAILS



DETAIL E2–G: REBAR PIN DETAIL – OPTIONAL/IN ADDITION TO T–POSTS
N.T.S.



DETAIL E2–I: ISOMETRIC VIEW – TREATMENT TIER APPROACH FOR SHEET FLOW EROSION
N.T.S.



DETAIL E2–J: SECTION E2–J – TREATMENT TIER APPROACH FOR SHEET FLOW EROSION
N.T.S.

MATRIX ENGINEERING INC. CERTIFICATE OF AUTHORIZATION No. C01034 SOUTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER No. 7982 SOUTH CAROLINA

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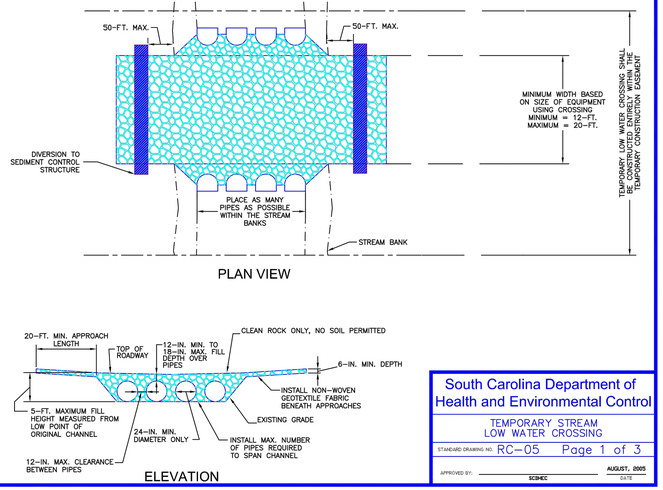
NOTES AND DETAILS

SCALE	AS NOTED	DWG NO	C–5.1
DATE	4/6/17		
FILE NAME	MASTER 2017–060	PROJECT NO	2017–060
		REV	A



PLAN VIEW

ELEVATION

South Carolina Department of Health and Environmental Control

TEMPORARY STREAM
LOW WATER CROSSING

STANDARD DRAWING NO. RC-05 Page 1 of 3

APPROVED BY: SCDHEC — DATE: AUGUST, 2005

TEMPORARY STREAM LOW WATER CROSSING

Prior to constructing a temporary stream crossing, the owner/person financially responsible for the project must submit an Application for Permit to Construct Across or Along a Stream to the South Carolina Department of Health and Environmental Control (SC DHEC). Temporary stream crossings require authorization. Refer to the US Army Corps of Engineers and SCDHEC nationwide 401 and 404 regulations for information on permitting requirements.

Installation:

Crossings shall be installed prior to any other activities.

Pump-around diversions shall be installed and maintained prior to any excavation and during the installation of the crossing.

Crossings shall be placed in temporary construction easements only.

The temporary waterway crossing shall be at right angles to the stream. Where approach conditions dictate, the crossing may vary 15 degrees from a line drawn perpendicular to the centerline of the stream at the intended crossing location. However every effort shall be taken to install the crossing perpendicular to the stream. All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.

A water diverting structure such as a dike or swale shall be constructed (across the roadway on both roadway approaches) 50-feet (maximum) on either side of the waterway crossing. This will prevent roadway surface runoff from directly entering the waterway. The 50-feet is measured from the top of the waterway bank. The flow captured in these dikes and swales shall be directed to a sediment trapping structure. If the roadway approach is constructed with a reverse grade away from the waterway, a separate diverting structure is not required.

Streambank clearing shall be kept to a minimum. Do not excavate rock bottom streambeds to install the crossing. Lay the culvert pipes on the streambed "as is" when applicable. Place as many pipes as possible within the low area of the stream. Place remaining pipes required to cross the stream on the existing stream bottom.

The maximum number of pipes as possible should be placed within the stream banks with a maximum spacing of 12-inches between pipes. The minimum sized pipe culvert that may be used is 24-inches.

The length of the culvert shall be adequate to extend the full width of the crossing, including side slopes. The slope of the culvert shall be at least 0.25 feet per foot.

Coarse aggregate of clean limestone riprap with a 6-inch D50 stone or greater will be used to form the crossing. The depth of stone cover over the culvert shall be equal to ½ the diameter of the culvert or 12-inches, whichever is greater but no greater than 18-inches.

South Carolina Department of Health and Environmental Control

TEMPORARY STREAM
LOW WATER CROSSING

STANDARD DRAWING NO. RC-05 Page 2 of 3

APPROVED BY: SCDHEC — DATE: AUGUST, 2005

TEMPORARY STREAM LOW WATER CROSSING

Installation:

All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.

The approaches to the structure shall consist of clean stone or concrete fill only with a minimum thickness of 6-inches. The minimum approach length shall be 20-feet and the width shall be equal to the width of the structure.

Inspection and Maintenance:

Inspect crossings every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation. Check the structure integrity and for excessive sediment deposition and replace fill stone as needed.

Clean mud and/or sediment from the roadway and do not allow it to enter the stream.

The structure shall be removed when it is no longer required to provide access to the construction area. During removal, leave stone and geotextile fabric for approaches in place. Place fill over the approaches as part of the stream bank restoration operation.

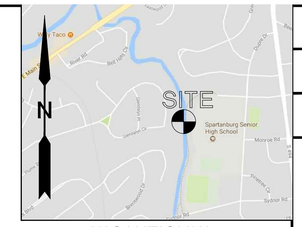
A temporary culvert crossing should be in place no longer than 24-months.

South Carolina Department of Health and Environmental Control

TEMPORARY STREAM
LOW WATER CROSSING

STANDARD DRAWING NO. RC-05 Page 3 of 3

APPROVED BY: SCDHEC — DATE: AUGUST, 2005



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11/14/17

REV	DATE	DESCRIPTION	DWN	CKD	APP
A	11-14-2017	ISSUED FOR PERMITTING REVIEW	JS	DW	DW

CLIENT NAME, LOCATION, & DESCRIPTION

RIVER BIRCH TRAIL EXTENSION
AT
SYDNOR ROAD
FOR
PARTNER FOR ACTIVE LIVING
SPARTANBURG, SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE ST.
SPARTANBURG, SOUTH CAROLINA 29302
(864)583-6274
dworley@matrixei.com

NOTES AND DETAILS

SCALE: AS NOTED	DWG NO: C-5.2
DATE: 4/6/17	
FILE NAME: MASTER 2017-060	PROJECT NO: 2017-060
	REV: A