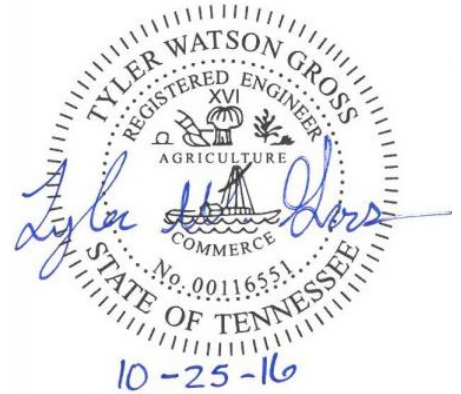


ADDENDUM NUMBER THREE

CHARLES A. BELL PARK



PROJECT: Charles A. Bell Park

BWSC JOB NUMBER: 36403-00

OWNER: City of Chattanooga
Contract Number: R-14-010-201

ENGINEER: BARGE, WAGGONER, SUMNER & CANNON, INC.
1110 Market Street
Chattanooga, Tennessee 37402

ADD. NO. 3 ISSUED DATE: October 25, 2016

BID DATE: November 1, 2016, 2:00 PM LOCAL TIME

ALL BIDS SHALL CONFORM TO THIS ADDENDUM:

This addendum is an amendment to the Bid Documents for the referenced project, and as such will be made part of the Contract Documents. Acknowledge receipt of this addendum on the Bid Proposal. Failure to do so may subject the Bidder to disqualification.

A. CONTRACT DOCUMENTS

ITEM A1: The construction completion date has been extended to **June 1st, 2017**.

ITEM A2: The Bid Opening Date has been changed to **Tuesday, November 1, 2016, 2:00 PM Local Time**.

ITEM A2: Attached are the NOC and associated SWPPP permit documents for the project.

B. QUESTIONS / CLARIFICATIONS

ITEM B1: The cost of all fees, such as tap and meter fees, associated with providing domestic and irrigation water service to the site should be included in the bid under the associated line item.

ITEM B2: QUESTION: Approximately how deep is the sanitary sewer tie-in and what kind of material and size line are we tying into?

RESPONSE: The existing sanitary sewer line is an 8" concrete pipe. The invert elevation at the tie-in location is approximately 641.8'.

ITEM B3: QUESTION: Is railroad insurance required?

RESPONSE: No railroad insurance is required.

ITEM B4: QUESTION: Do we have to get and pay for a railroad flagger?

RESPONSE: No railroad flagger is required.

ITEM B5: QUESTION: Can you provide a detail for the infiltration bed?

RESPONSE: Refer to the attached drawing - C7.01a.

ITEM B6: QUESTION: Can you give a general idea of how much structural fill material we will be responsible for hauling in, or is Wright Brothers hauling this material in?

RESPONSE: Wright Brothers is placing structural fill material for this project.

C. DRAWINGS

ITEM C1: The following Seeding Notes are to be added to Sheet L7.02:

1. Wet and Moist Meadow Native Seed mixes are to be regionally adapted ecotype seed as supplied by Roundstone Seed Company, 615-300-5847 or approved equal.
2. All seed mixes proposed within the infiltration beds are to be seeded using hand seed spreader/equipment to minimize compaction within the infiltration bed in accordance with native seed supplier recommendations.
3. A cover crop of 32 lb/ac of oats shall be added to the Wet and Moist Meadow Native Seed mixes.

ITEM C2: Sheet C1.00, Overall Site Plan: The proposed ADA ramp depicted on Sheet C1.00 on the west side of Central Avenue and East 37th Street is to be 10 feet wide.

This addendum consists of **6** Pages and **24** Drawings.

END OF ADDENDUM NO. 3

ATTACHMENTS: Acknowledgement of Receipt of Addendum No. 3 (1 Page)
Infiltration Bed Detail Drawing No. C7.01a (1 Drawing)
TDEC Notice of Coverage (3 Pages)
Stormwater Pollution Prevent Plan (SWPPP) (23 Drawings)

**ACKNOWLEDGMENT OF RECEIPT OF
ADDENDUM NUMBER 3**

Acknowledgment of receipt of Addendum Number 3 for the Charles A. Bell Park project is hereby made.

Date received: _____
Time received: _____
Printed name: _____
Signature: _____
Company: _____

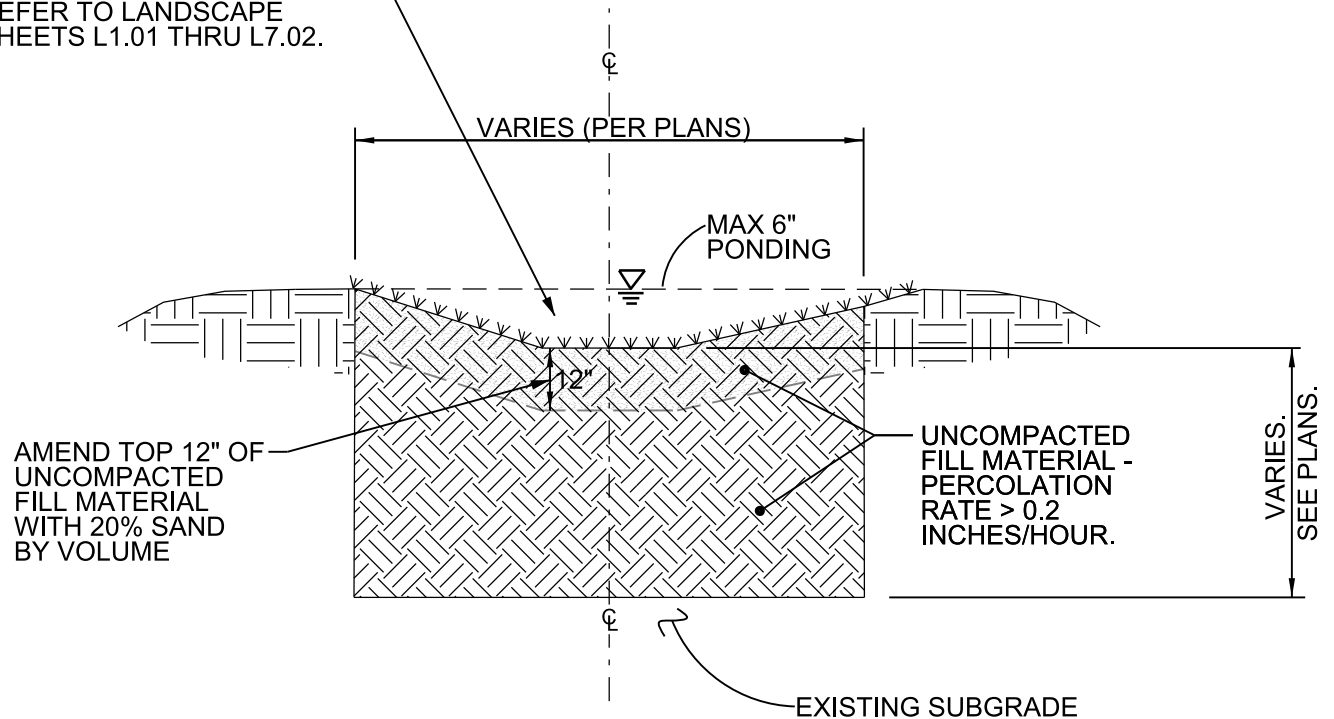
PLEASE RETURN THIS FORM TODAY

To: John Brown

Barge, Waggoner, Sumner and Cannon, Inc.

at fax number: 423.756.8477

FOR GROUND COVER AND
PLANTING INFORMATION IN
THE INFILTRATION AREAS,
REFER TO LANDSCAPE
SHEETS L1.01 THRU L7.02.



1 INFILTRATION BED DETAIL
C7.01a N.T.S.

10/21/2016
F:\36\36403\3640300\04_CAD\CIVL\LOT\3640300C701a.dgn

BWSC

1110 Market Street, Suite 200 Chattanooga, Tennessee 37402
PHONE (423) 756-3025 FAX (423) 756-8477

BARGE
WAGGONER
SUMNER &
CANNON, INC.

INFILTRATION BED DETAIL

CHARLES A. BELL PARK
THE CITY OF CHATTANOOGA
CHATTANOOGA, TENNESSEE

DRAWN BY:

TWG

CHECKED BY:

TWG

DRAWING NO.:

C7.01a

PROJECT NO.:

36403-00

DATE:

10/21/16



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102
Statewide 1-888-891-8332

September 12, 2016

Mr. Bill C. Payne
City of Chattanooga Public Works Department
1250 Market St., Ste. 2100
Chattanooga, TN 37402

Subject: **NPDES Tracking No. TNR112932**
Former Charles Bell School Site
Chattanooga, Hamilton County, Tennessee

Dear Mr. Payne:

You recently submitted a Notice of Intent (NOI) form as part of an application package to obtain coverage under a General NPDES Permit for Stormwater Discharges Associated with Construction Activity (CGP). The Division of Water Resources (the division) acknowledges receipt of the most recent version of the application for the above referenced project on September 8, 2016. After review, the application was deemed to be complete on September 12, 2016.

As the 2011 CGP has expired, your coverage authorizing stormwater discharges associated with construction activity from the above referenced project is issued under Sector AE of the Tennessee Stormwater Multi-Sector General Permit for Industrial Activities (TMSP). Compliance with the terms and conditions of the 2011 Tennessee Construction General Permit (CGP) shall be required, and will be deemed as compliance with the TMSP. The 2011 CGP and related materials are available on the division's construction stormwater webpage at <http://www.tn.gov/environment/article/permit-water-npdes-stormwater-construction-permit>.

The enclosed Notice of Coverage (NOC) summarizes the relevant information concerning your coverage, including the site name and location, receiving stream, effective date of coverage, and tracking number. The division will automatically transfer your coverage to the new CGP once it is effective, and will provide you an updated NOC reflecting the coverage transfer.

Contractor Information

You have not identified a contractor on the NOI. You must identify a primary contractor, or contractor otherwise responsible for sediment and erosion controls on the construction site, and submit a revised NOI to this office prior to beginning earth clearing operations onsite. When submitting the NOI, please include the above referenced permit tracking number.

Storm Water Pollution Prevention Plan (SWPPP)

You have submitted a Storm Water Pollution Prevention Plan (SWPPP) as required by Part 1.4.2 of the CGP. Please note that the division has not performed an engineering review of the SWPPP and does not certify whether the SWPPP adequately provides for the pollution prevention requirements at the site as described in the general permit. The division acknowledges that you have submitted a SWPPP that appears to include the required components of a SWPPP. It is the responsibility of all site operators to design, implement, and maintain measures that are sufficient to prevent pollution at the referenced site, and to remain in compliance with the terms and conditions of the general permit.

Receiving Stream not Supporting Designated Uses

The receiving stream for the construction site for which the NOI was submitted appears on the state's list for partially supporting or for not supporting a stream's designated use due to alteration in stream-side or littoral vegetative covers (habitat alteration). Since the impaired segment is located on or adjacent to the disturbed area, the division considers the potential for further degradation to the stream-side/littoral vegetative covers of the receiving stream to be significant. Therefore, Section 5.4.2. of the general permit is applicable, and requires that an average 60-foot (min. 30-foot at any measured location) natural riparian buffer zone be preserved, to the maximum extent practicable, adjacent to the receiving stream.

Annual Maintenance and Coverage Termination

Effective July 1, 2014, permit fees for the CGP have been revised. In addition to new application fee amounts, annual maintenance fees are now required for projects that exceed one year of coverage. Permittees wishing to terminate coverage must submit a completed notice of termination (NOT) form, which is available on the division's construction stormwater webpage at http://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1175.

The division will review the NOT for completeness and accuracy and, when necessary, investigate the site for which the NOT was submitted. The division will notify the applicant that either the NOT form was received and accepted, or that the permit coverage is not eligible for termination and has not been terminated. If applicable, the notification will include a summary of existing deficiencies.

We appreciate your attention to the CGP and its requirements. We believe this does make a difference to the quality of state waters. If you have any questions, please contact Micah Gravitt at (423) 634-2547 or by e-mail at Micah.Gravitt@tn.gov.

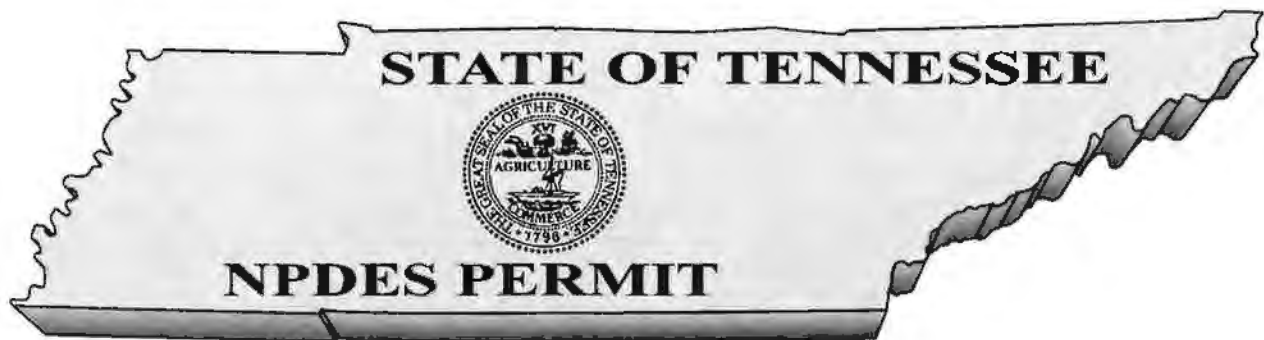
Sincerely,



Jennifer Innes
Environmental Program Manager

Enclosure: Notice of Coverage

cc: DWR, Chattanooga EFO Permit File



Tracking Number TNR112932

**NOTICE OF COVERAGE UNDER THE TENNESSEE MULTI-SECTOR GENERAL PERMIT
FOR INDUSTRIAL ACTIVITIES WITH STORMWATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION ACTIVITY**

Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.):

Name of the Construction Project: **Former Charles Bell School Site (6.4 acres)**
Master Tracking Number at the Site: **TNR112932**
Permittee Name: **City of Chattanooga**
Contractor(s): **no contractor**
is authorized to discharge: **storm water associated with construction activity**
from site located at: **3501 Central Avenue, Hamilton County**
to receiving waters named: **Chattanooga Creek**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Likely presence of threatened or endangered species in one mile radius: **NO**

Likely presence of threatened or endangered species downstream: **NO**

Additional pollution prevention requirements apply for discharges into waters which TDEC identifies as:

- **Unavailable Condition - Habitat Alteration**

- **Exceptional Tennessee Waters: NO**

Your coverage under Sector AE of the Tennessee Multi-Sector Permit (TMSP) shall become effective on **September 12, 2016**, and shall be terminated upon receipt of Notice of Termination. Compliance with the terms and conditions of the 2011 Tennessee Construction General Permit (CGP) shall be required, and will be deemed as compliance with the TMSP. The 2011 CGP and related materials are available on the division's construction stormwater webpage at <http://www.tn.gov/environment/article/permit-water-npdes-stormwater-construction-permit>.

CITY OF CHATTANOOGA, TENNESSEE

STORM WATER POLLUTION PREVENTION PLAN

CONTRACT #R-14-010

NORTH SAINT ELMO DRAINAGE

SYSTEM FILL SITE (BELL PARK)



LOCATION MAP
NOT TO SCALE

TITLE
COVER SHEET
SITE INFORMATION
EPSC NOTES AND LEGEND
STREAM BUFFER & SEED MIX NOTES
EXISTING CONDITIONS
STAGE 1 INITIAL CONDITION
STAGE 2 INTERIM CONDITION
STAGE 3 FINAL CONDITIONS
DETAIL SHEETS

DRAWING NUMBER

1
2
3
4
5
6-7
8-10
11-12
13-18

MAYOR
ANDY BERKE

CITY COUNCIL

DISTRICT 1	- CHIP HENDERSON
DISTRICT 2	- JERRY MITCHELL, VICE CHAIR
DISTRICT 3	- KEN SMITH
DISTRICT 4	- LARRY GROHN
DISTRICT 5	- RUSSELL GILBERT
DISTRICT 6	- CAROL B. BERZ
DISTRICT 7	- CHRIS ANDERSON
DISTRICT 8	- MOSES FREEMAN, CHAIR
DISTRICT 9	- YUSUF HAKEEM



TN REGISTRATION NO. 114738

MARK D. HEINZER, P.E. DATE 09/08/16
ENGINEERING MANAGER
STATE LICENSE NO. 114738

09-08-16

APPROVED FOR RELEASE DATE
WILLIAM C. PAYNE, P.E.
CITY ENGINEER

DEPARTMENT OF PUBLIC WORKS

JUSTIN C. HOLLAND, ADMINISTRATOR

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL WORK MUST BE CONSTRUCTED AND MAINTAINED IN FULL COMPLIANCE WITH THE LATEST EDITION OF THE TENNESSEE EROSION SEDIMENT CONTROL MANUAL, AS WELL AS ANY ADDITIONAL REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION AND LOCAL MUNICIPALITY. ALL STORM DRAINAGE WORK MUST BE PERFORMED IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF LOCAL AND STATE GOVERNMENTS, INCLUDING THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND OPERATIONAL PRIOR TO CLEARING OR CONSTRUCTION.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND NOI SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
4. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFFSITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER/DEVELOPER AND ALL GOVERNING BODIES FOR REVIEW AND APPROVAL.
5. THE SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN REVIEWING AUTHORITY.
6. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
7. THE SITE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES TWICE A WEEK AND SEPARATED BY AT LEAST 72 HOURS, AND BEFORE AND AFTER ANY RAINFALL EVENT OF 0.5 INCHES OR MORE OF PRECIPITATION. DURING PROLONGED RAINFALL, DAILY INSPECTIONS ARE REQUIRED. INSPECTION RECORDS SHALL BE MAINTAINED FOR AT LEAST THREE YEARS FOLLOWING CONSTRUCTION. ANY NECESSARY REPAIRS OR CLEAN-UP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MADE IMMEDIATELY. THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION SHALL BE NOTIFIED OF ANY VIOLATIONS.
8. CLEARING AND GRADING MUST BE KEPT TO THE MINIMUM NECESSARY FOR GRADING AND EQUIPMENT OPERATIONS.
9. CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF CLEARED SURFACE AREAS. GRADING ACTIVITIES MUST BE AVOIDED DURING PERIODS OF HIGHLY EROSION RAINFALL.
10. EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH-MOVING ACTIVITIES BEGIN, AND MUST BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
11. SILTS, SEDIMENTS, AND ANY OTHER CONSTRUCTION DEBRIS MUST BE KEPT FROM LEAVING THE CONSTRUCTION SITE OR ENTERING ANY STREAM CHANNELS, ROADS, OR OFFSITE AREAS.
12. STOCKPILED SOIL SHALL BE LOCATED FAR ENOUGH FROM STREAMS OR DRAINAGEWAYS SO THAT RUNOFF CANNOT CARRY SEDIMENTS DOWNSTREAM.
13. SILT FENCE AND/OR FILTER SOCKS ARE TO BE INSTALLED AT THE BOTTOM OF SLOPES AS REQUIRED BY ACTUAL FIELD CONDITIONS, WHETHER INDICATED ON THE DESIGN DRAWING OR NOT. THESE SHALL BE INSTALLED ON-GRADE (LEVEL) OR "WITH THE CONTOUR" TO PREVENT AN ACCUMULATION OF STORMWATER TO ONE SMALL AREA.
14. ANY VARIATIONS FROM THE DESIGN ON THIS DRAWING MUST BE APPROVED IN WRITING PRIOR TO CONSTRUCTION BY THE OWNER/DEVELOPER, THE CITY OF CHATTANOOGA AND ANY REQUIRED GOVERNING AGENCIES.
15. THE SITE WORK CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FROM ALL GOVERNING AGENCIES AND COMPLYING WITH ALL LAWS AND REGULATIONS.
16. UNLESS NOTED OTHERWISE, THE LOWEST FINISHED FLOOR ELEVATION OF ANY BUILDING OR STRUCTURE SHALL BE A MINIMUM OF ONE FOOT ABOVE THE TOP OF THE ROAD ABOVE THE NEAREST DOWNSTREAM STORM DRAINAGE PIPE.
17. AREAS OF FUTURE DEVELOPMENT SHALL HAVE THE EROSION AND SEDIMENT CONTROL AND STORM DRAINAGE DESIGN PERFORMED AND/OR MODIFIED AT A LATER TIME AS REQUIRED.
18. VEGETATIVE COVER SHALL NOT BE DESTROYED, REMOVED, OR DISTURBED MORE THAN SEVEN (7) CALENDAR DAYS PRIOR TO GRADING.
19. TEMPORARY SOIL STABILIZATION WITH APPROPRIATE ANNUAL VEGETATION SHALL BE APPLIED ON AREAS THAT WILL REMAIN UNFINISHED FOR MORE THAN SEVEN (7) CALENDAR DAYS.
20. PERMANENT SOIL STABILIZATION WITH PERENNIAL VEGETATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING IS COMPLETED.
21. NO OFFSITE AREAS ARE TO BE DISTURBED WITHOUT WRITTEN PERMISSION FROM THE AFFECTED PROPERTY OWNER PRIOR TO CONSTRUCTION.
22. IT IS RECOMMENDED THAT ALL DISTURBED AREAS BE TREATED WITH APPROVED POLYACRYLAMIDE PRODUCTS, INCLUDING PRODUCTS TO REDUCE EROSION AND TO REDUCE THE TURBIDITY IN SEDIMENT BASINS AND/OR DETENTION PONDS.
23. THE DEVELOPER AND/OR HIS SITE WORK CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PERMITS AND/OR APPROVALS, AS WELL AS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES, FOR THIS SITE. THIS INCLUDES NOTICE OF INTENT (NOI) FORMS WHICH MUST BE SUBMITTED A MINIMUM OF THIRTY (30) DAYS PRIOR TO THE START OF CONSTRUCTION, AND NOTICE OF TERMINATION (NOT) FORMS.
24. ALL ELEVATIONS SHOWN (BOTH EXISTING AND PROPOSED) ARE APPROXIMATE AND MUST BE FIELD-VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DEVIATIONS SHALL BE REPORTED TO THE ENGINEER.
25. ALL BOUNDARY INFORMATION SHOWN WAS OBTAINED FROM HAMILTON COUNTY GIS. THE CITY OF CHATTANOOGA HAS NOT PERFORMED A BOUNDARY SURVEY FOR THIS STORM WATER POLLUTION PREVENTION PLAN.
26. UNLESS NOTED OTHERWISE, ALL ITEMS SHOWN ARE EXISTING, EXCEPT FOR THE EROSION AND SEDIMENT CONTROL MEASURES, WHICH ARE PROPOSED.
27. EXCEPT AS NOTED, NO MAJOR AREAS OF ADDITIONAL EXCAVATION ARE EXPECTED TO BE REQUIRED ON THIS SITE.

EROSION AND SEDIMENT CONTROL CODING SYSTEM

STREAM BUFFER
DO NOT DISTURB

Buffer Zone

CE Construction Exit

F Flocculants

HYD Stabilization with Straw Mulch

IP Storm Drain Inlet Protection

LS Level Spreader

MA Rolled Erosion Control Product

MO Stabilization with Straw Mulch

MU Stabilization with Other Mulches

OP Outlet Protection

PS Stabilization with Permanent Vegetation

SF Silt Fence

SO Stabilization with Sod

ST Sediment Trap

TO Topsoiling

TS Stabilization with Temporary Vegetation

APPROXIMATE QUANTITIES

SEDIMENT/EROSION CONTROL:

(QUANTITIES MAY VARY DUE TO PHASING)

SILT FENCE (OR SOXX) 3,000± LF

FINAL STABILIZATION AREA 6.4± SF

INSTALLATION/CONSTRUCTION:

LIMITS OF DISTURBANCE 7.2± acres

FILL AREA (TOE OF FILL) 6.4± acres

FILL 27,000± CY

SITE NOTE:

THE SITE IS THE PREVIOUS CHARLES A. BELL SCHOOL. THREE CONCRETE PADS AND ASSOCIATED STAIRS AT THE NORTH END ARE TO REMAIN. FILL WILL BE APPROXIMATELY 3' FOR THE REMAINDER OF THE SITE.

THE SITE WAS PREVIOUSLY CONTAMINATED AND HAS SINCE BEEN CAPPED BY 2' OF SOIL. CAP IS TO NOT BE DISTURBED.

FILL TO BE PLACED ON THE SITE IS SOLELY FROM THE NORTH SAINT ELMO DRAINAGE SYSTEM PROJECT, NO FILL TO BE FROM OTHER PROJECTS. TWO CONTRACTORS WILL BE INVOLVED IN THE FILL, ONE WILL PLACE THE FILL, THE SECOND WILL PERFORM THE FINAL STABILIZATION.

NOTE:

Unless noted otherwise, use the standards and specifications for the above items as found in the 2012 Tennessee Erosion & Sediment Control Handbook or that of the local municipal government, whichever is more stringent. An "*" indicates items not found in the 2012 Tennessee Erosion & Sediment Control Handbook, but may be useful for various sites for erosion and sediment control purposes.



CITY OF
CHATTANOOGA

DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES. SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738

EPSC NOTES AND LEGEND

SHEET: 3 OF 18

STREAM BUFFER HIGH VISIBILITY FENCING NOTES:

1. A STREAM BUFFER IS A NON-STRUCTURAL LOW IMPACT DEVELOPMENT CONTROL ALONG A STREAM WHERE DISTURBANCE IS RESTRICTED OR PROHIBITED. SEE THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION, AUGUST 2012, SECTION "7.41 STREAM BUFFERS".
2. A STREAM BUFFER PRIMARY FUNCTION IS TO PHYSICALLY PROTECT AND SEPARATE A STREAM FROM DISTURBANCE OR ENCROACHMENT. IT IS NOT A SEDIMENT CONTROL.
3. EFFECTIVE STREAM BUFFERS CONSIST OF UNDISTURBED NATURAL VEGETATION, INCLUDING MAINTAINING THE ORIGINAL TREE LINE ALONG THE STREAM OR CHANNEL BANK.
4. CONSTRUCTION RELATED MATERIALS AND EQUIPMENT MUST BE STORED OUTSIDE THE BUFFER AREA.
5. FOR SITES THAT CONTAIN AND/OR ARE ADJACENT TO A RECEIVING STREAM DESIGNATED AS IMPAIRED OR EXCEPTIONAL TENNESSEE WATERS, A 60-FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO THE RECEIVING STREAM SHALL BE PRESERVED DURING CONSTRUCTION ACTIVITIES AT THE SITE.
6. A 30-FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO ALL STREAMS AT THE CONSTRUCTION SITE SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE.
7. INSTALL CONTROLS ALONG THE OUTER UPSTREAM EDGE OF THE STREAM BUFFER TO PREVENT INADVERTENT DISTURBANCE TO THE BUFFER. CONSIDER HIGH VISIBILITY CONTROLS, SUCH AS FENCING.
8. ENSURE THAT SEDIMENT CONTROLS ARE INSTALLED UPGRADIENT FROM THE BUFFER TO PROTECT IT FROM SEDIMENT-LADEN RUNOFF.
9. IF A BUFFER IS DISTURBED, THE BUFFER SHOULD BE RESTORED PER THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION, AUGUST 2012, SECTION 7.41 STREAM BUFFERS.
10. HIGH VISIBILITY FENCING IS INTENDED TO PREVENT DISTURBANCE OF SENSITIVE AREAS, THEIR BUFFERS, AND OTHER AREAS REQUIRED TO BE LEFT UNDISTURBED.
11. HIGH VISIBILITY PLASTIC FENCE SHALL BE:
 - 11.1. AT LEAST FOUR FEET IN HEIGHT
 - 11.2. POSTS FOR THE FENCING SHALL BE STEEL OR WOOD AND PLACED EVERY SIX FEET ON CENTER (MAXIMUM) OR AS NEEDED TO ENSURE RIGIDITY
 - 11.3. THE FENCING SHALL BE FASTENED TO THE POST EVERY SIX INCHES WITH A POLYETHYLENE TIE, (OR COMMERCIAL QUALITY NAILS OR STAPLES FOR WOODEN POSTS), OR AS RECOMMENDED BY THE MANUFACTURER OR SUPPLIER.
 - 11.4. ON LONG, CONTINUOUS LENGTHS OF FENCING, A TENSION WIRE OR ROPE SHALL BE USED AS A TOP STRINGER TO PREVENT SAGGING BETWEEN POSTS.
 - 11.5. THE FENCE COLOR SHALL BE HIGH VISIBILITY ORANGE. THE FENCE TENSILE STRENGTH SHALL BE 360 LBS./FT. USING THE ASTM D4549 TESTING METHOD.
 - 11.6. FENCES SHALL NOT BE WIRED OR STAPLED TO TREES.

13. HIGH VISIBILITY FABRIC:SHALL BE MACHINE PRODUCED, ORANGE COLORED MESH, COMPOSED OF HIGH-DENSITY POLYETHYLENE AND MAY BE MADE OF RECYCLED MATERIALS.
14. MATERIALS SHALL NOT CONTAIN BIODEGRADABLE FILLER MATERIALS THAT CAN DEGRADE THE PHYSICAL OR CHEMICAL CHARACTERISTICS OF THE FINISHED FABRIC, AND SHALL BE FULLY STABILIZED ULTRAVIOLET RESISTANT.
15. HIGH VISIBILITY FABRIC SHALL BE FURNISHED IN ONE CONTINUOUS WIDTH AND SHALL NOT BE SPLICED TO CONFORM TO THE SPECIFIED WIDTH DIMENSION.
16. WOOD POSTS SHALL BE FIR OR PINE, SHALL HAVE A MINIMUM CROSS SECTION OF 50 MM X 50 MM, AND A MINIMUM LENGTH OF 1.6 M. THE END OF THE POST TO BE EMBEDDED IN THE SOIL SHALL BE POINTED. WOOD POSTS SHALL NOT BE TREATED WITH WOOD PRESERVATIVE.
17. STEEL POSTS SHALL HAVE A "U", "T", "L" OR OTHER CROSS SECTIONAL SHAPE THAT RESISTS FAILURE BY LATERAL LOADS.
18. STEEL POSTS SHALL HAVE A MINIMUM MASS PER LENGTH OF 1.1 KG/M AND A MINIMUM LENGTH OF 1.6 M. ONE END OF THE STEEL POST SHALL BE POINTED AND THE OTHER END SHALL HAVE A HIGH VISIBILITY COLORED TOP.

SEED MIX

	Zone	Best	Marginal	Mix (lb./acre PLS)
Region III	Mountains Steep Slopes >2,500 ft.	July 25-Aug 15 Mar 20-Apr20	July 15-Aug 30 Mar 5-May15	KY 31 Fescue (100) Kobe Lespedeza (20) Korean Lespedeza (10) Redtop (5)
	Mountains Steep Slopes <2,500 ft.	Aug15-Sept 1 Mar 1-Apr 1	July 25-Sept 15 Mar 1-May10	
	Shallow Soils >2,500 ft.	July 25-Aug 15 Mar 20-Apr20	July 15-Aug 30 Mar 5-May15	KY 31 Fescue (40) Korean Lespedeza (10) Redtop (10)
	Shallow Soils <2,500 ft.	Aug15-Sept 1 Mar 1-Apr 1	July 25-Sept 15 Mar 1-May10	Crown Vetch (10)
	Soils>6in moderate slopes>2,500ft.	July 25-Aug 15 Mar 20-Apr20	July 15-Aug 30 Mar 5-May15	KY 31 Fescue (60) Kobe Lespedeza (15) Korean Lespedeza (15)
	Soils>6in moderate slopes<2,500ft.	Aug15-Sept 1 Mar 1-Apr 1	July 25-Sept 15 Mar 1-May10	
	Roadside Channels >2,500ft.	July 25-Aug 15 Mar 20-Apr20	July 15-Aug 30 Mar 5-May15	KY 31 Fescue (150) Italian ryegrass (35) Smooth Broomgrass (20)
	Roadside Channels <2,500ft.	Aug15-Sept 1 Mar 1-Apr 1	July 25-Sept 15 Mar 1-May10	
	Temporary Seeding Summer	May 1-Sept 15	April 15-Oct 1	German Millet (30) Sudangrass (40)
	Temporary Seeding Winter	Oct 31-Feb 15	Oct15-Mar 1	Annual ryegrass (40) Foxtail millet (30)



**CITY OF
CHATTANOOGA**

**DEPARTMENT OF
PUBLIC WORKS**

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738




STREAM BUFFER/SEED MIX

SHEET: 4 OF 18

S:\Stormwater Projects\R-14-010 Bell Park\SWPPP\R14010-SWPPP.dwg Sep 08, 2016 - 8:59am, lpadgett



NOTES:

-  100-YEAR FLOOD PLAIN
-  500-YEAR FLOOD PLAIN
-  FLOODWAY IN ZONE AE

FLOODPLAINS AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON THE FLOOD INSURANCE RATE MAPS (FIRM) PANEL NUMBERS 47065C0343G DATED FEBRUARY 3, 2016.



CITY OF CHATTANOOGA
DEPARTMENT OF PUBLIC WORKS

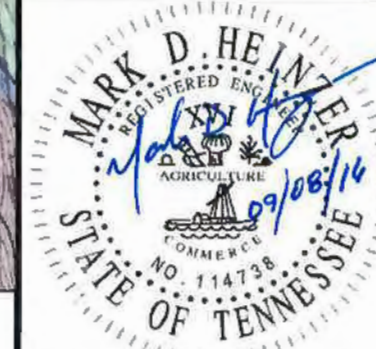
ADMINISTRATOR:
JUSTIN C. HOLLAND

CITY ENGINEER:
WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES.	SIG.
0				

**N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN**

CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM



TN REGISTRATION NO. 114738
EXISTING OVERALL SITE


N.T.S.

S:\Stormwater Projects\R-14-010 Bell Park SWPPP\R14010-SWPPP.dwg Sep 08, 2016 - 9:00am, kpodgett

EPSC STAGE 1 INITIAL CONDITIONS:

- DELINEATE STREAM BUFFER WITH HIGH VISIBILITY FENCING AND/OR SIGNAGE ALONG THE OUTERMOST EDGE OF BUFFER, PER NOTES SHEET 4
- INSTALL EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES (INLET PROTECTION, SILT FENCE/SOCK, CONSTRUCTION ENTRANCE, OUTLET PROTECTION)



CITY OF
CHATTANOOGA

DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES. SIG.

0

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

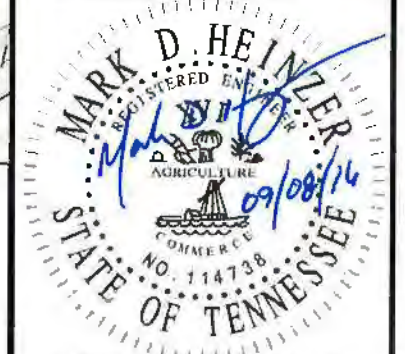
CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738

STAGE 1 INITIAL PLAN

SHEET: 6 OF 18

EPSC EROSION CONTROL NOTES:

- SILT — SILT FENCE (OR, FILTREXX SILT SOCK)
- LIMITS — LIMITS OF CONSTRUCTION
- TOE — TOE OF FILL PAD SLOPE

CONSTRUCTION ENTRANCE (SCHEMATIC, INSTALL AS NECESSARY PER PHASE)

PERMANENT SEED MIX TO CONFORM TO TDOT REGION 3 SEED MIX TABLE, SHEET 4.

CONTRACTOR SHALL ADHERE TO CITY OF CHATTANOOGA BMP MANUAL AND THE TDEC 2012 TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.

SITE NOTE:

THE SITE IS THE PREVIOUS CHARLES A. BELL SCHOOL. THREE CONCRETE PADS AND ASSOCIATED STAIRS AT THE NORTH END ARE TO REMAIN.

THE SITE WAS PREVIOUSLY CONTAMINATED AND HAS SINCE BEEN CAPPED BY 2' OF SOIL. CAP IS TO NOT BE DISTURBED.

FILL TO BE PLACED ON THE SITE IS SOLELY FROM THE NORTH SAINT ELMO DRAINAGE SYSTEM PROJECT, NO FILL TO BE FROM OTHER PROJECTS. TWO CONTRACTORS WILL BE INVOLVED, ONE WILL PLACE THE FILL, THE SECOND WILL PERFORM THE FINAL STABILIZATION.

DEPICTED IS THE COMPLETION FOR THE ENTIRE SITE (7.3± ACRES LIMITS DISTURBANCE, 6.4± ACRES TOE OF FILL). THE RECEIVING STREAM IS CHATTANOOGA CREEK, AN IMPAIRED WATERBODY. DUE TO THE CONTAMINATED SOIL, A SEDIMENT BASIN WILL NOT BE ABLE TO BE IMPLEMENTED. IN ORDER TO MINIMIZE DISTURBED AREAS AT ONE TIME, THE AREA WILL BE FILLED IN A MAXIMUM OF 3 ACRE PHASES WHICH WILL BE STABILIZED PRIOR TO MOVING TO THE NEXT PHASE OF FILL.

0 80' 160'
SCALE: 1"=80'



CITY OF CHATTANOOGA

DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES. SIG.

0				

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

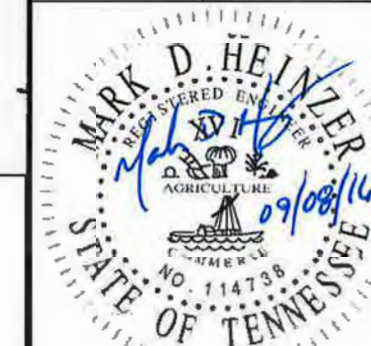
CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



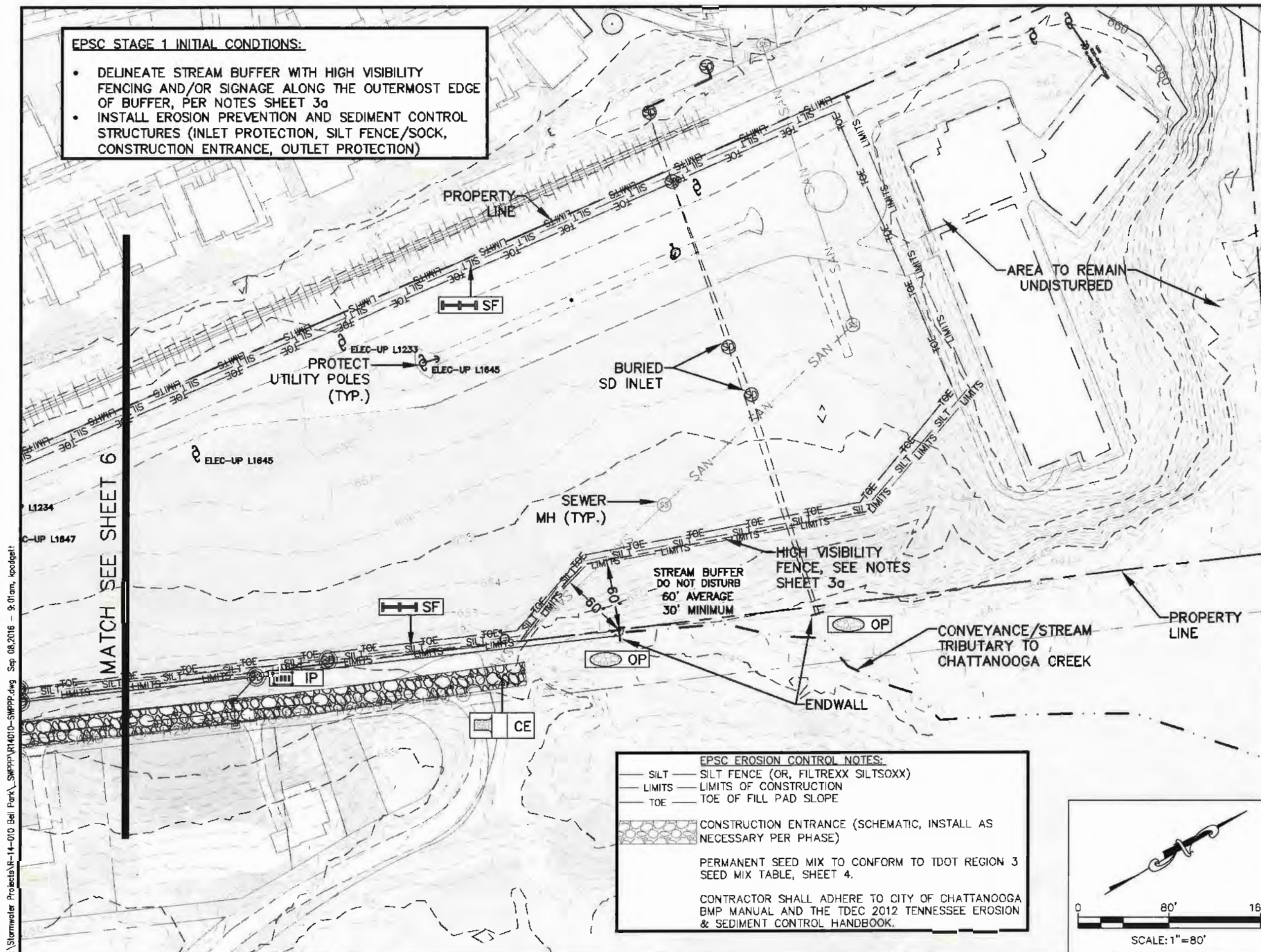
TN REGISTRATION NO. 114738

STAGE 1 INITIAL PLAN

SHEET: 7 OF 18

EPSC STAGE 1 INITIAL CONDITIONS:

- DELINEATE STREAM BUFFER WITH HIGH VISIBILITY FENCING AND/OR SIGNAGE ALONG THE OUTERMOST EDGE OF BUFFER, PER NOTES SHEET 3a
- INSTALL EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES (INLET PROTECTION, SILT FENCE/SOCK, CONSTRUCTION ENTRANCE, OUTLET PROTECTION)



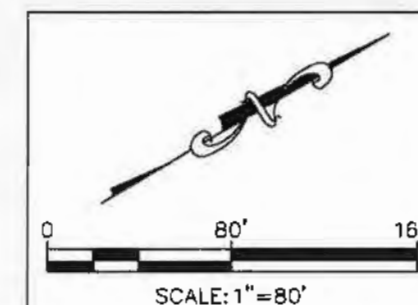
EPSC EROSION CONTROL NOTES:

- SILT — SILT FENCE (OR, FILTREXX SILT SOCK)
- LIMITS — LIMITS OF CONSTRUCTION
- TOE — TOE OF FILL PAD SLOPE

CONSTRUCTION ENTRANCE (SCHEMATIC, INSTALL AS NECESSARY PER PHASE)

PERMANENT SEED MIX TO CONFORM TO TDOT REGION 3 SEED MIX TABLE, SHEET 4.

CONTRACTOR SHALL ADHERE TO CITY OF CHATTANOOGA BMP MANUAL AND THE TDEC 2012 TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.

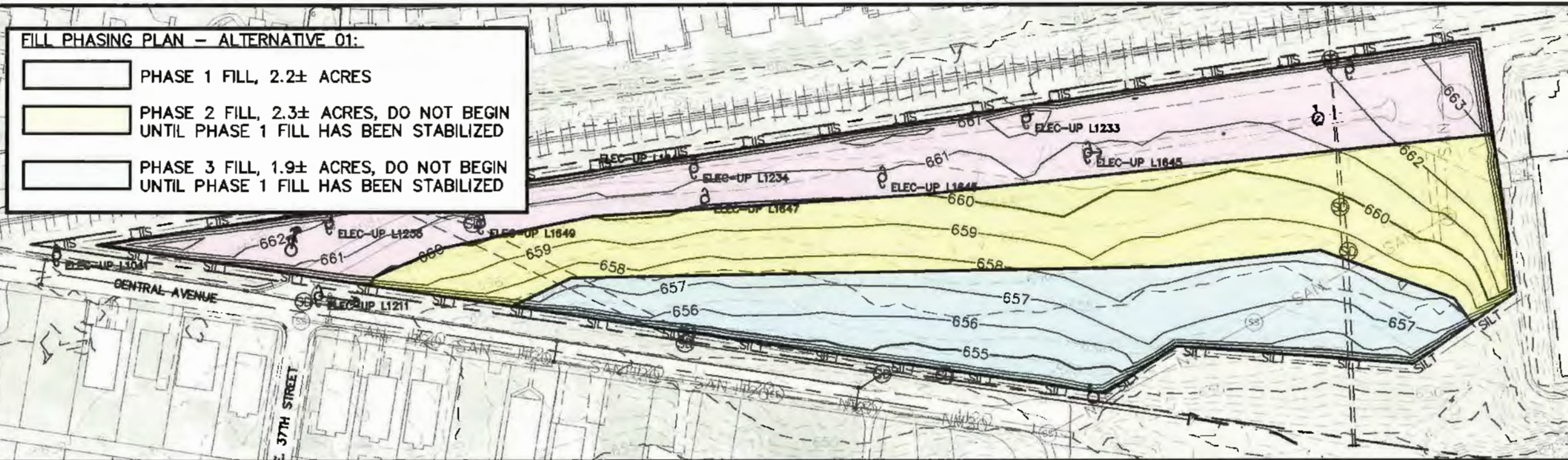


FILL PHASING PLAN - ALTERNATIVES:

MAXIMUM 3 ACRES TO BE FILLED AT ONE TIME. BELOW ARE OPTIONS FOR PHASES. CONTRACTOR TO DETERMINE BEST PHASING FOR ACCESS/BEST EPSC PRACTICES.

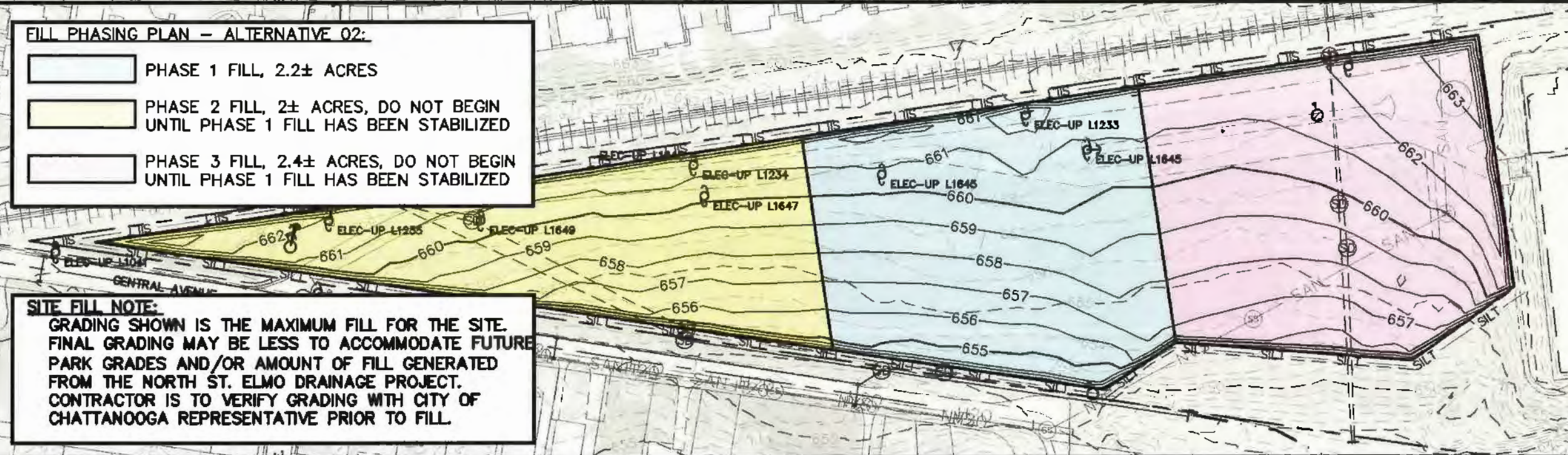
FILL PHASING PLAN - ALTERNATIVE 01:

- PHASE 1 FILL, 2.2± ACRES
- PHASE 2 FILL, 2.3± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED
- PHASE 3 FILL, 1.9± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED



FILL PHASING PLAN - ALTERNATIVE 02:

- PHASE 1 FILL, 2.2± ACRES
- PHASE 2 FILL, 2± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED
- PHASE 3 FILL, 2.4± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED

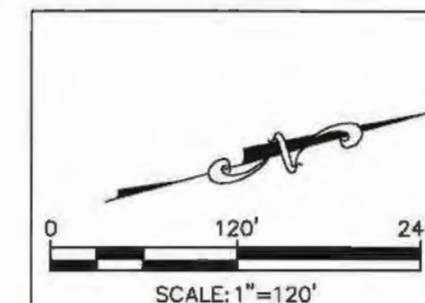


SITE FILL NOTE:

GRADING SHOWN IS THE MAXIMUM FILL FOR THE SITE. FINAL GRADING MAY BE LESS TO ACCOMMODATE FUTURE PARK GRADES AND/OR AMOUNT OF FILL GENERATED FROM THE NORTH ST. ELMO DRAINAGE PROJECT. CONTRACTOR IS TO VERIFY GRADING WITH CITY OF CHATTANOOGA REPRESENTATIVE PRIOR TO FILL.

EPSC PHASE 2 INTERIM CONDITIONS:

- RAISE STRUCTURES (STORMDRAIN AND/OR SEWER) IN AREA TO BE FILLED TO FINAL FILL ELEVATION.
- INSTALL ADDITIONAL EPSC STRUCTURES (INLET PROTECTION FOR PREVIOUSLY BURIED STRUCTURES, ADDITIONAL SILT FENCE/STOCK; MO, MU, TS IF/AS NEEDED)
- FILL SITE IN 3 ACRE MAXIMUM PHASES. THE TOTAL UNSTABILIZED DISTURBED AREA SHOULD NEVER EXCEED 3 ACRES. EACH PHASE OF FILL TO HAVE FINAL STABILIZATION IMPLEMENTED PRIOR TO MOVING TO THE NEXT PHASE.
- STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE ON PORTIONS OF A PHASE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED, NO MORE THAN 14 DAYS.
- NOT ALL PRACTICES SHOWN MUST BE IMPLEMENTED, AND NOT ALL POTENTIAL PRACTICES ARE SHOWN. USE THE BEST PRACTICE FOR THE CURRENT CONDITIONS



**CITY OF
CHATTANOOGA**

**DEPARTMENT OF
PUBLIC WORKS**

ADMINISTRATOR:
JUSTIN C. HOLLAND

CITY ENGINEER:
WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES	SIG.
0				

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM

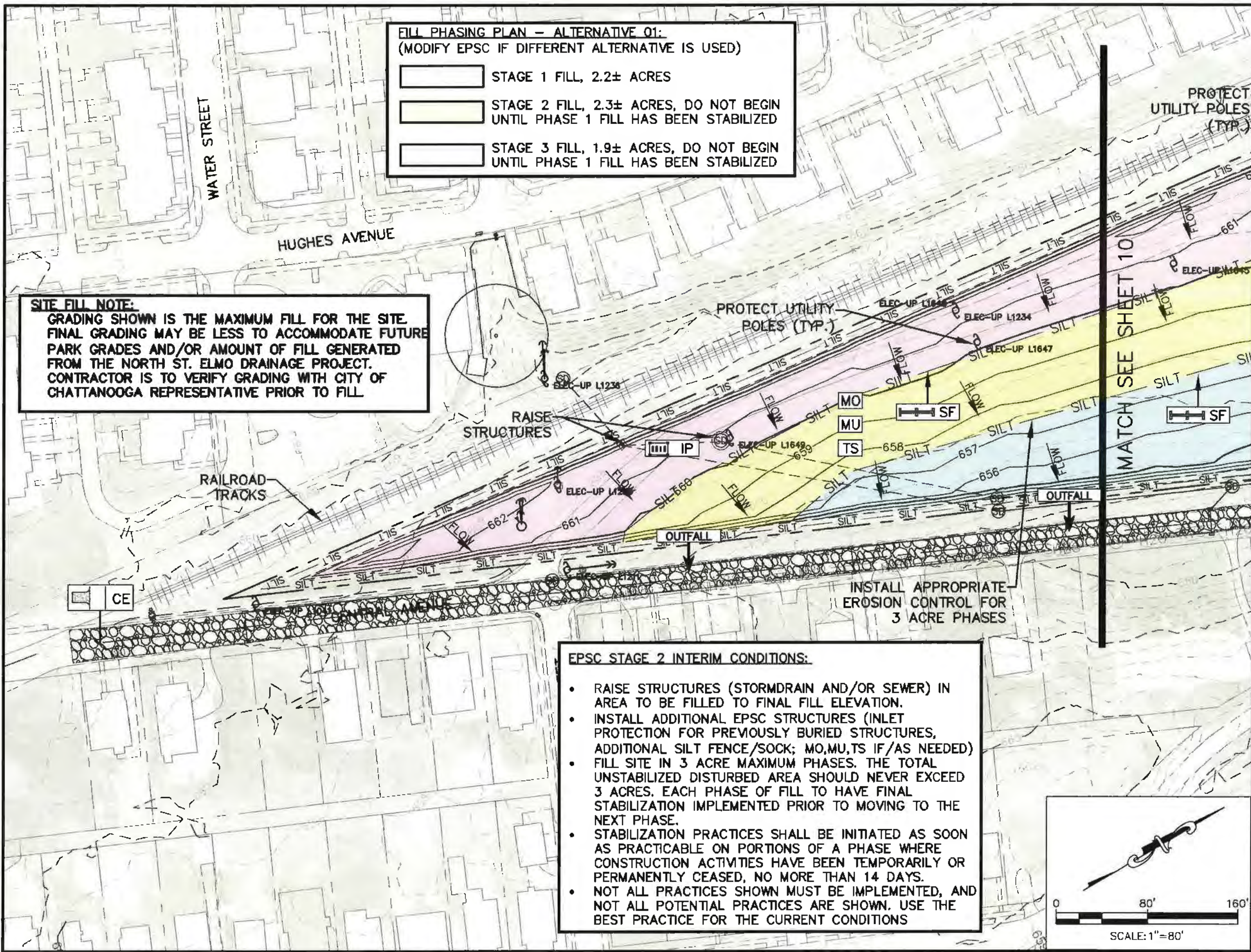


TN REGISTRATION NO. 114738

STAGE 2 INTERIM PLAN

SHEET: 8 OF 18

S:\Stormwater Projects\R-14-010 Bell Park\SWPPP\R14010-SWPPP.dwg Sep 08, 2016 - 9:37am, kpodgett

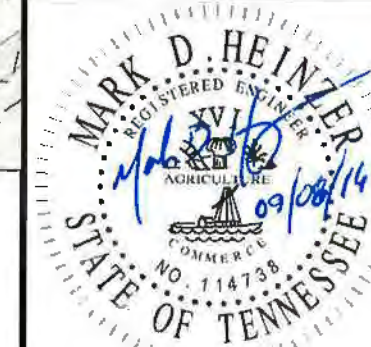


**CITY OF
CHATTANOOGA**
DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:				
JUSTIN C. HOLLAND				
CITY ENGINEER:				
WILLIAM C. PAYNE, P.E.				
NO.	DATE	REVISION	DES.	SIG.
0				

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM



TN REGISTRATION NO. 114738
STAGE 2 INTERIM PLAN
SHEET: 9 OF 18

FILL STAGING PLAN:

- STAGE 1 FILL, 2.4± ACRES
- STAGE 2 FILL, 2.2± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED
- STAGE 3 FILL, 2± ACRES, DO NOT BEGIN UNTIL PHASE 1 FILL HAS BEEN STABILIZED

SITE FILL NOTE:

GRADING SHOWN IS THE MAXIMUM FILL FOR THE SITE. FINAL GRADING MAY BE LESS TO ACCOMMODATE FUTURE PARK GRADES AND/OR AMOUNT OF FILL GENERATED FROM THE NORTH ST. ELMO DRAINAGE PROJECT. CONTRACTOR IS TO VERIFY GRADING WITH CITY OF CHATTANOOGA REPRESENTATIVE PRIOR TO FILL.



CITY OF CHATTANOOGA

DEPARTMENT OF PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES SIG.

0				

N. SAINT ELMO DRAINAGE EROSION PREVENTION AND SEDIMENT CONTROL PLAN

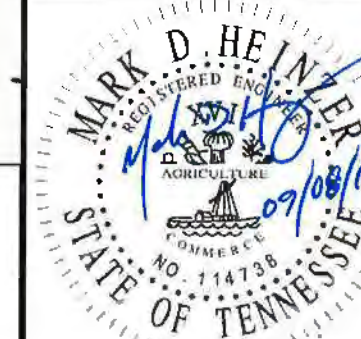
CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



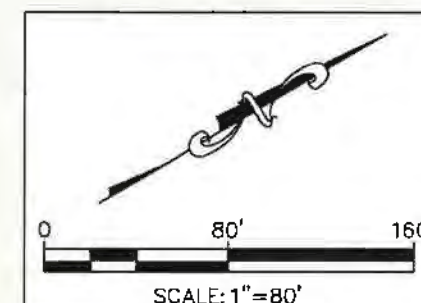
TN REGISTRATION NO. 114738

STAGE 2 INTERIM PLAN

SHEET: 10 OF 18

EPSC STAGE 2 INTERIM CONDITIONS:

- RAISE STRUCTURES (STORMDRAIN AND/OR SEWER) IN AREA TO BE FILLED TO FINAL FILL ELEVATION.
- INSTALL ADDITIONAL EPSC STRUCTURES (INLET PROTECTION FOR PREVIOUSLY BURIED STRUCTURES, ADDITIONAL SILT FENCE/SOCK; MO,MU,TS IF/AS NEEDED)
- FILL SITE IN 3 ACRE MAXIMUM PHASES. THE TOTAL UNSTABILIZED DISTURBED AREA SHOULD NEVER EXCEED 3 ACRES. EACH PHASE OF FILL TO HAVE FINAL STABILIZATION IMPLEMENTED PRIOR TO MOVING TO THE NEXT PHASE.
- STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE ON PORTIONS OF A PHASE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED, NO MORE THAN 14 DAYS.
- NOT ALL PRACTICES SHOWN MUST BE IMPLEMENTED, AND NOT ALL POTENTIAL PRACTICES ARE SHOWN. USE THE BEST PRACTICE FOR THE CURRENT CONDITIONS



EPSC STAGE 3 FINAL CONDITIONS:

- FINAL STABILIZATION
- UNSTABILIZED DISTURBED AREA SHOULD NEVER EXCEED 3 ACRES. EACH PHASE OF FILL TO HAVE FINAL STABILIZATION IMPLEMENTED PRIOR TO MOVING TO THE NEXT PHASE.
- STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE ON PORTIONS OF A PHASE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED, NO MORE THAN 14 DAYS.
- NOT ALL PRACTICES SHOWN MUST BE IMPLEMENTED, AND NOT ALL POTENTIAL PRACTICES ARE SHOWN. USE THE BEST PRACTICE FOR THE CURRENT CONDITIONS
- AFTER FINAL STABILIZATION IS ACHIEVED, SILT FENCING AND/OR SOXX TO BE REMOVED



CITY OF
CHATTANOOGA

DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO. DATE REVISION DES SIG.

0				

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738

STAGE 3 FINAL CONDITIONS

SHEET: 11 OF 18

SITE FILL NOTE:

GRADING SHOWN IS THE MAXIMUM FILL FOR THE SITE. FINAL GRADING MAY BE LESS TO ACCOMMODATE FUTURE PARK GRADES AND/OR AMOUNT OF FILL GENERATED FROM THE NORTH ST. ELMO DRAINAGE PROJECT. CONTRACTOR IS TO VERIFY GRADING WITH CITY OF CHATTANOOGA REPRESENTATIVE PRIOR TO FILL.

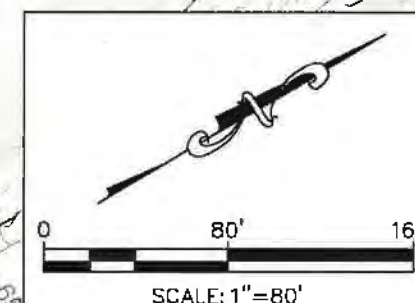
EPSC EROSION CONTROL NOTES:



FINAL STABILIZATION AREA; PERMANENT SEED VEGETATION AREA MIX TO CONFORM TO TDOT REGION 3 SEED MIX TABLE, SHEET 4.

CONTRACTOR SHALL ADHERE TO CITY OF CHATTANOOGA BMP MANUAL AND THE TDEC 2012 TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.

PERMANENT VEGETATION OF THE ENTIRE SITE SHOULD BE SOUGHT AS MUCH AS POSSIBLE



EPSC EROSION CONTROL NOTES:



FINAL STABILIZATION AREA; PERMANENT SEED VEGETATION AREA MIX TO CONFORM TO TDOT REGION 3 SEED MIX TABLE, SHEET 4.

CONTRACTOR SHALL ADHERE TO CITY OF CHATTANOOGA BMP MANUAL AND THE TDEC 2012 TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.

PERMANENT VEGETATION OF THE ENTIRE SITE SHOULD BE SOUGHT AS MUCH AS POSSIBLE



CITY OF CHATTANOOGA

DEPARTMENT OF PUBLIC WORKS

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES.	SIG.
0				

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738

STAGE 3 FINAL CONDITIONS

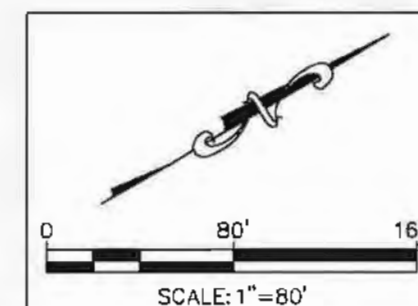
SHEET: 12 OF 18

SITE FILL NOTE:

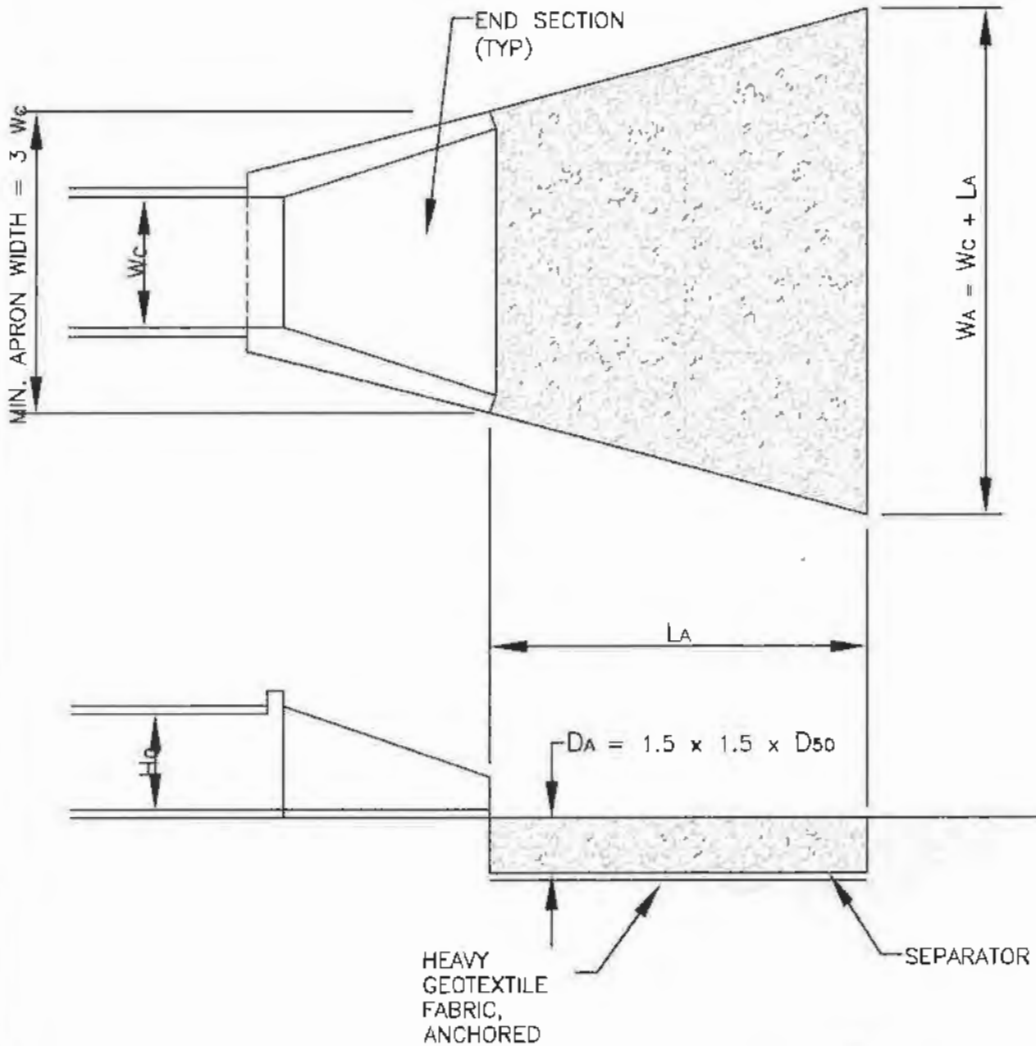
GRADING SHOWN IS THE MAXIMUM FILL FOR THE SITE. FINAL GRADING MAY BE LESS TO ACCOMMODATE FUTURE PARK GRADES AND/OR AMOUNT OF FILL GENERATED FROM THE NORTH ST. ELMO DRAINAGE PROJECT. CONTRACTOR IS TO VERIFY GRADING WITH CITY OF CHATTANOOGA REPRESENTATIVE PRIOR TO FILL.

EPSC STAGE 3 FINAL CONDITIONS:

- FINAL STABILIZATION
- UNSTABILIZED DISTURBED AREA SHOULD NEVER EXCEED 3 ACRES. EACH PHASE OF FILL TO HAVE FINAL STABILIZATION IMPLEMENTED PRIOR TO MOVING TO THE NEXT PHASE.
- STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE ON PORTIONS OF A PHASE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED, NO MORE THAN 14 DAYS.
- NOT ALL PRACTICES SHOWN MUST BE IMPLEMENTED, AND NOT ALL POTENTIAL PRACTICES ARE SHOWN. USE THE BEST PRACTICE FOR THE CURRENT CONDITIONS
- AFTER FINAL STABILIZATION IS ACHIEVED, SILT FENCING AND/OR SOXX TO BE REMOVED

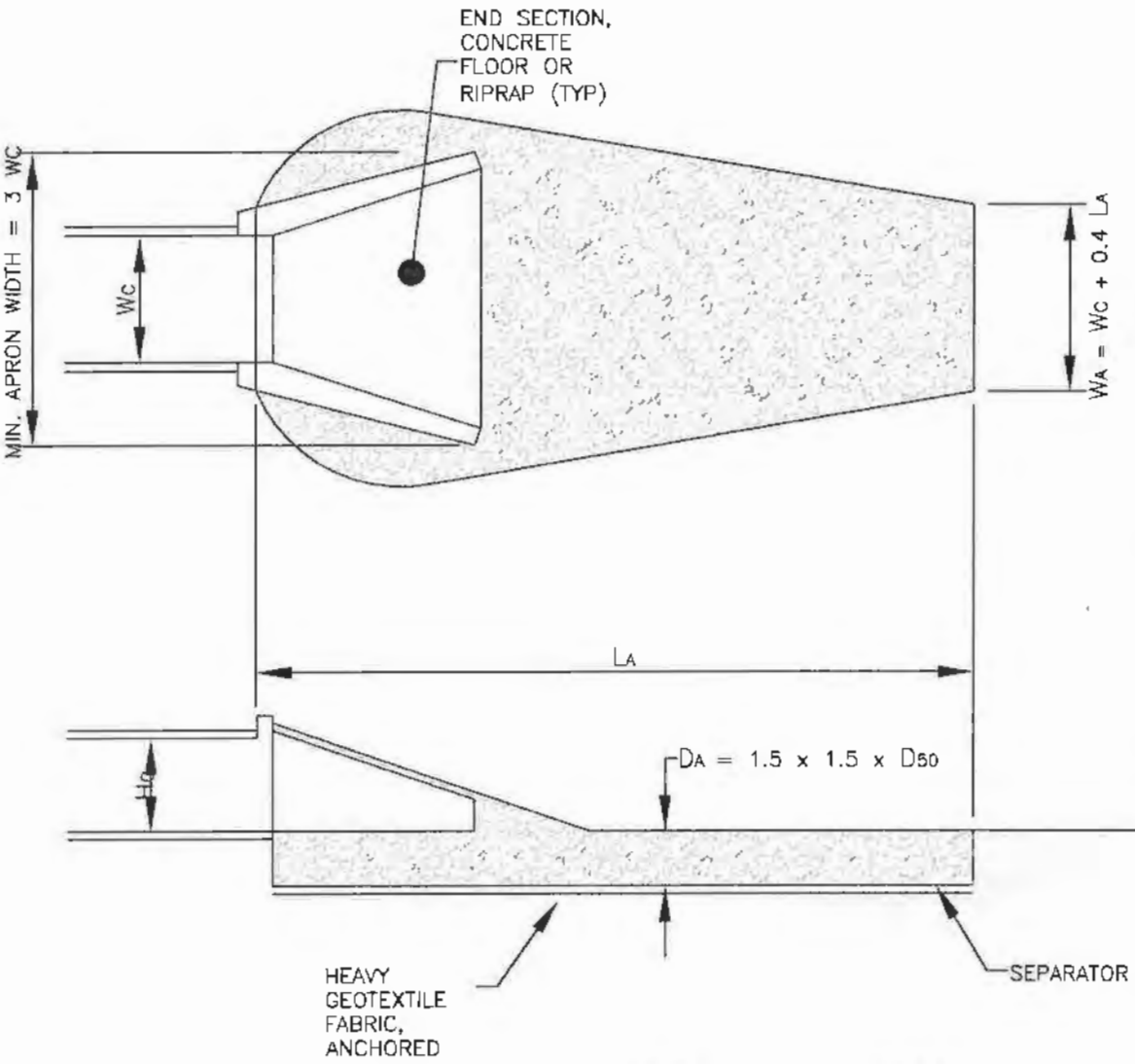


OUTLET PROTECTION DETAIL (TDEC 7.23)



TAILWATER $< 0.5 H_c$ AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)

- H_c = HEIGHT OF CULVERT
 W_c = WIDTH OF CULVERT
 L_a = LENGTH OF RIP-RAP APRON
 W_a = WIDTH OF RIP-RAP APRON AT END
 D_{50} = MEDIAN RIP-RAP SIZE
 D_{max} = MAXIMUM SIZE OF RIP-RAP
 $= 1.5 D_{50}$
 D_a = DEPTH OF RIP-RAP APRON
 $= 1.5 D_{max}$
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET



TAILWATER $> 0.5 H_c$ AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)



CITY OF CHATTANOOGA
DEPARTMENT OF PUBLIC WORKS

ADMINISTRATOR:
JUSTIN C. HOLLAND
CITY ENGINEER:
WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES.	SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM

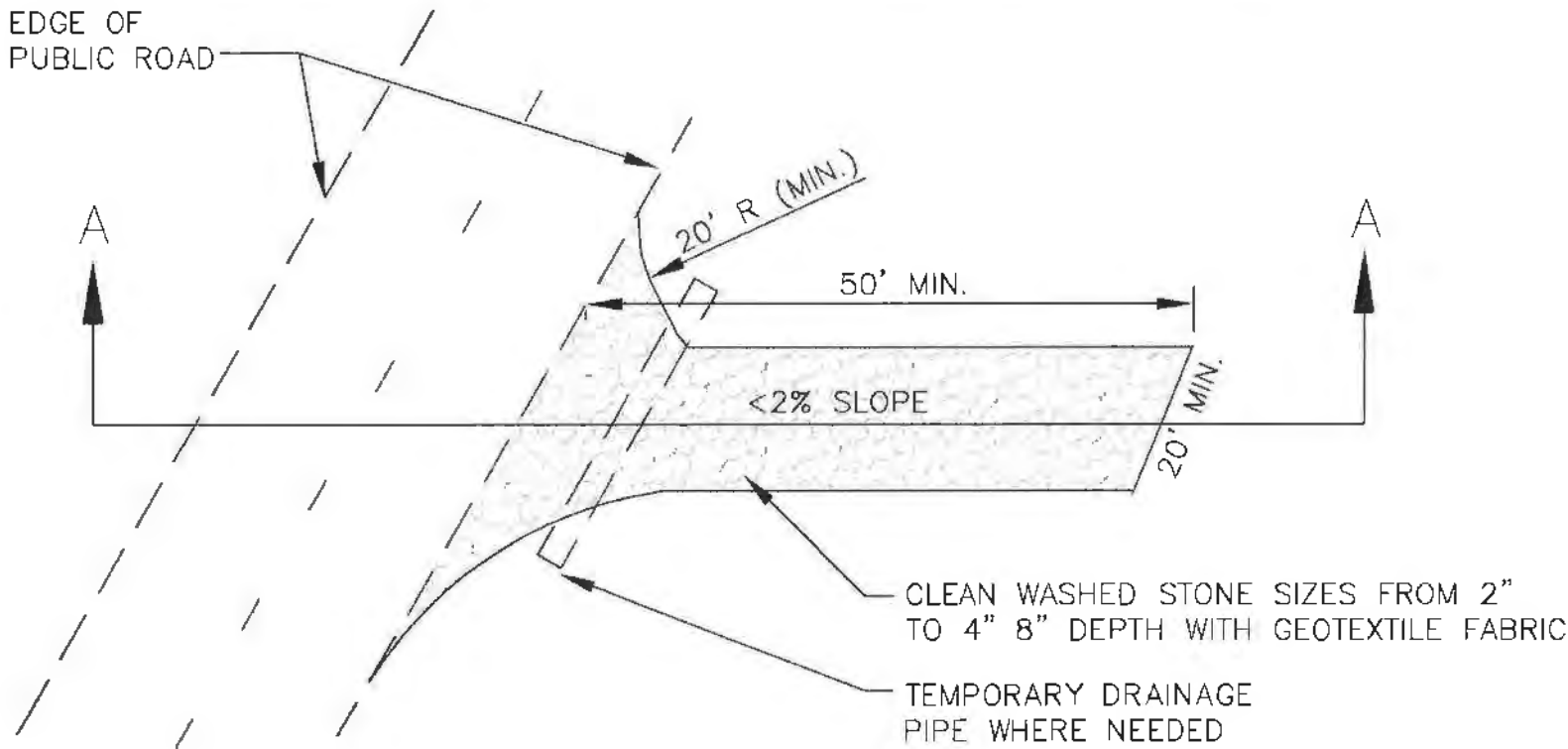


TN REGISTRATION NO. 114738

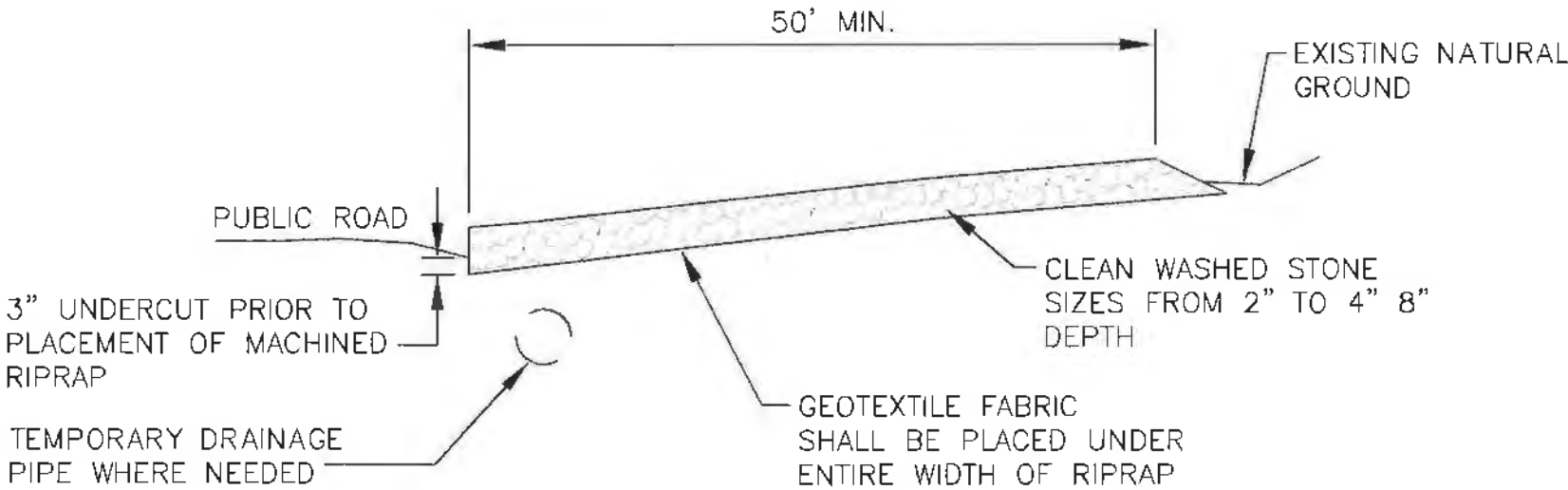
DETAIL SHEET

SHEET: 13 OF 18

CONSTRUCTION EXIT DETAIL (TDEC 7.28)



PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD



SECTION A-A



CITY OF
CHATTANOOGA
DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:				
JUSTIN C. HOLLAND				
CITY ENGINEER:				
WILLIAM C. PAYNE, P.E.				
NO.	DATE	REVISION	DES.	SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

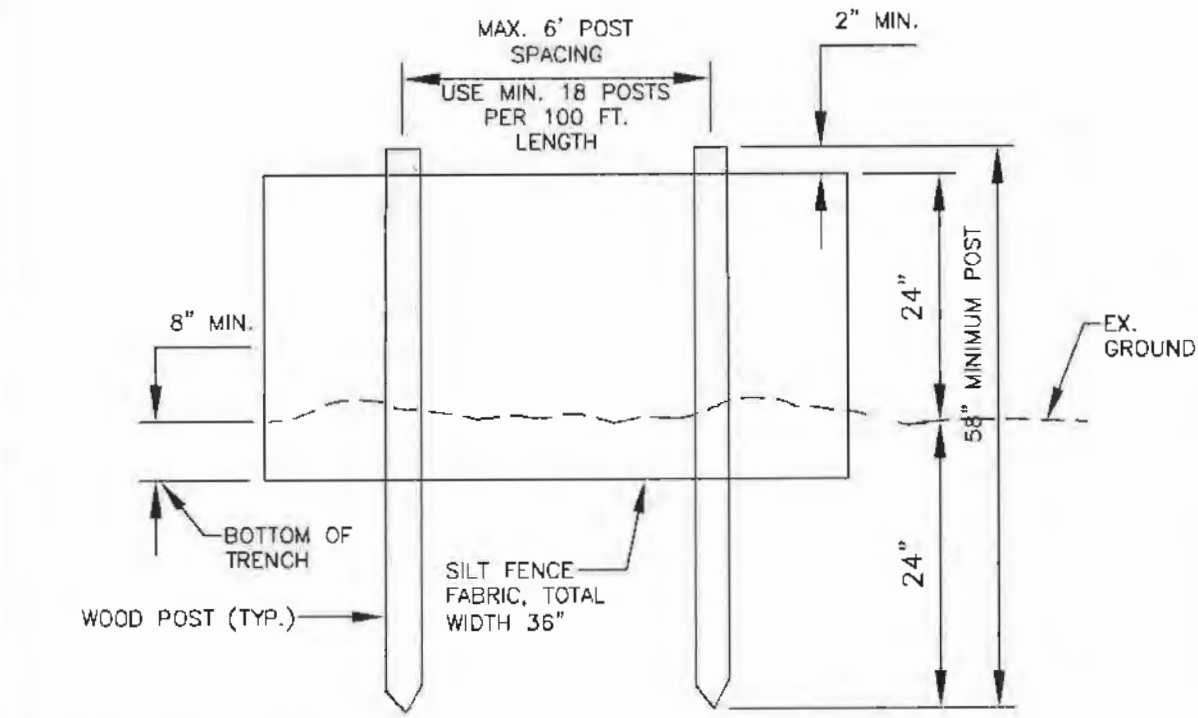
CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM



TN REGISTRATION NO. 114738

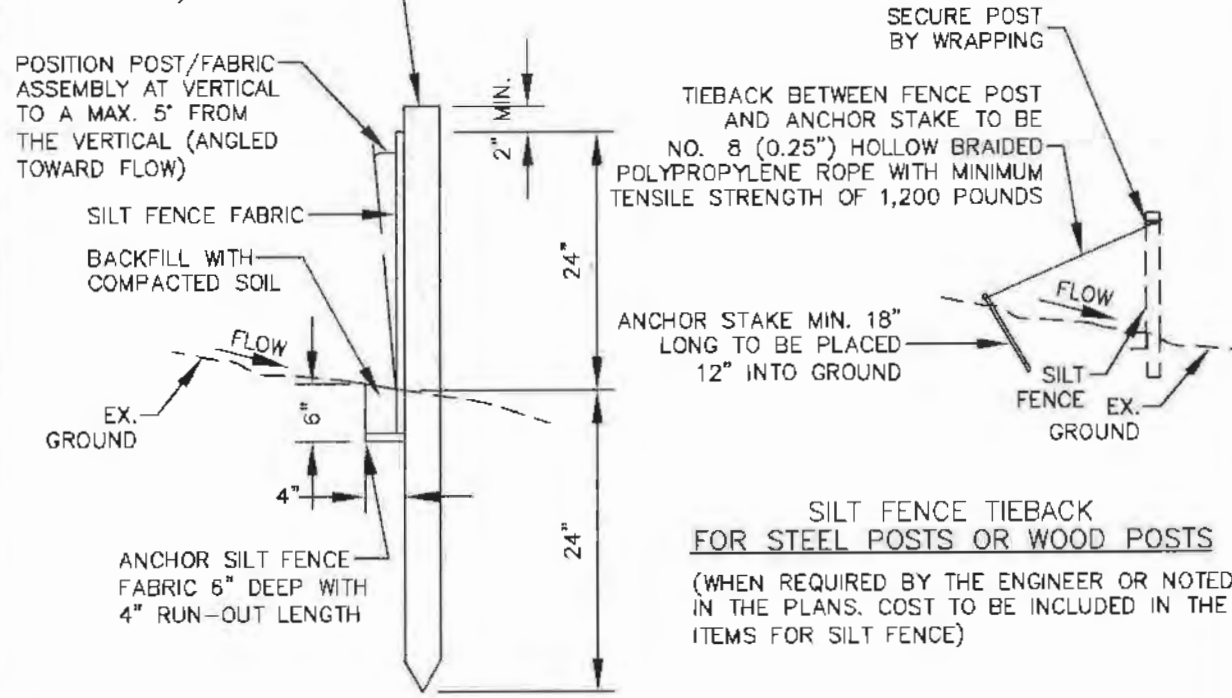
DETAIL SHEET

SILT FENCE DETAIL (TDEC 7.34)



ELEVATION VIEW

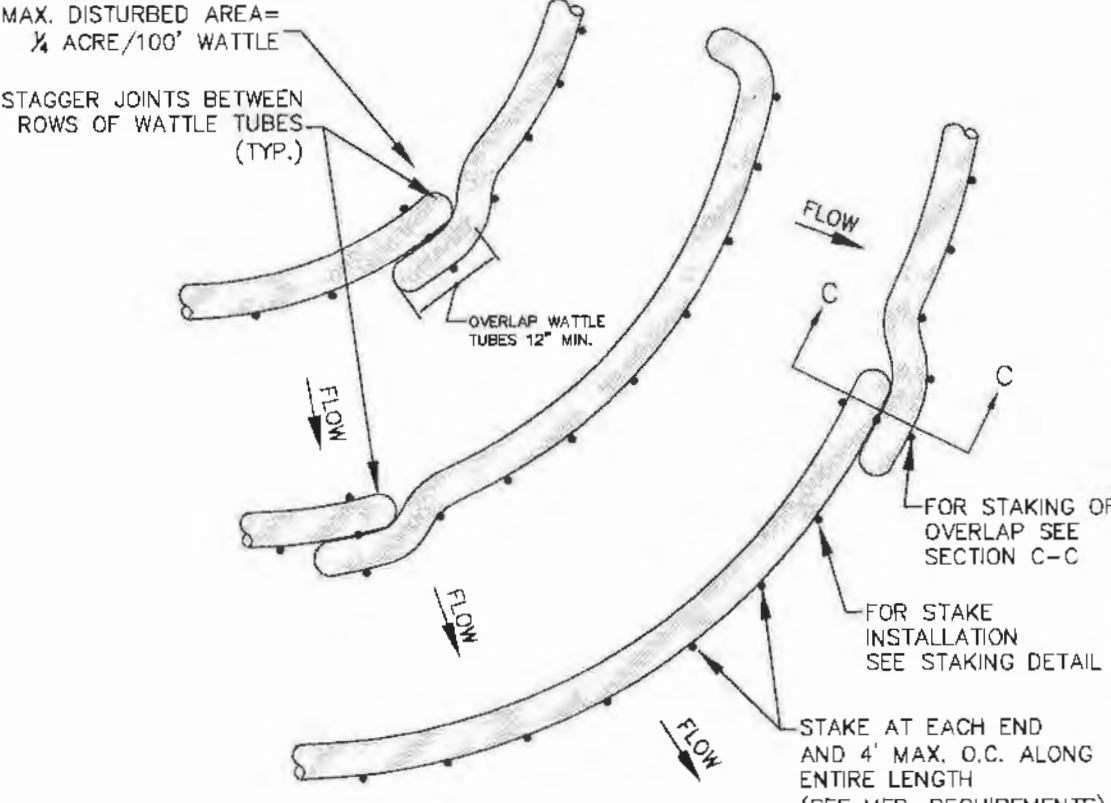
MIN 2.25"(NOM.) x 2.25"(NOM.)
- (1.75" ACTUAL x 1.75" ACTUAL)
(3.06 SQ. IN.) HARDWOOD POST
(OAK OR HICKORY) OR MIN.
1.25 LB./FT. STEEL POST
(STD. "I" OR
"U" SECTION) - LENGTH 58"



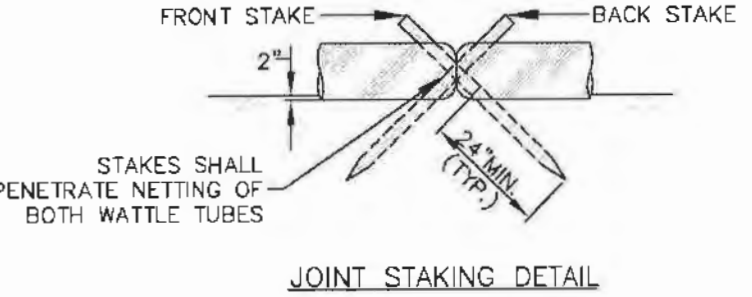
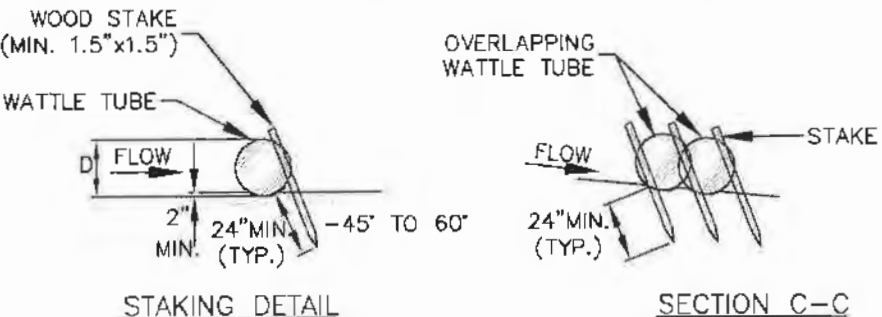
SECTIONAL VIEW

SILT FENCE TIEBACK FOR STEEL POSTS OR WOOD POSTS
(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS, COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE)

TUBES AND WATTLES DETAIL (TDEC 7.37)



PLAN VIEW FOR SLOPE APPLICATION



CITY OF CHATTANOOGA
DEPARTMENT OF PUBLIC WORKS

ADMINISTRATOR:
JUSTIN C. HOLLAND

CITY ENGINEER:
WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES.	SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM



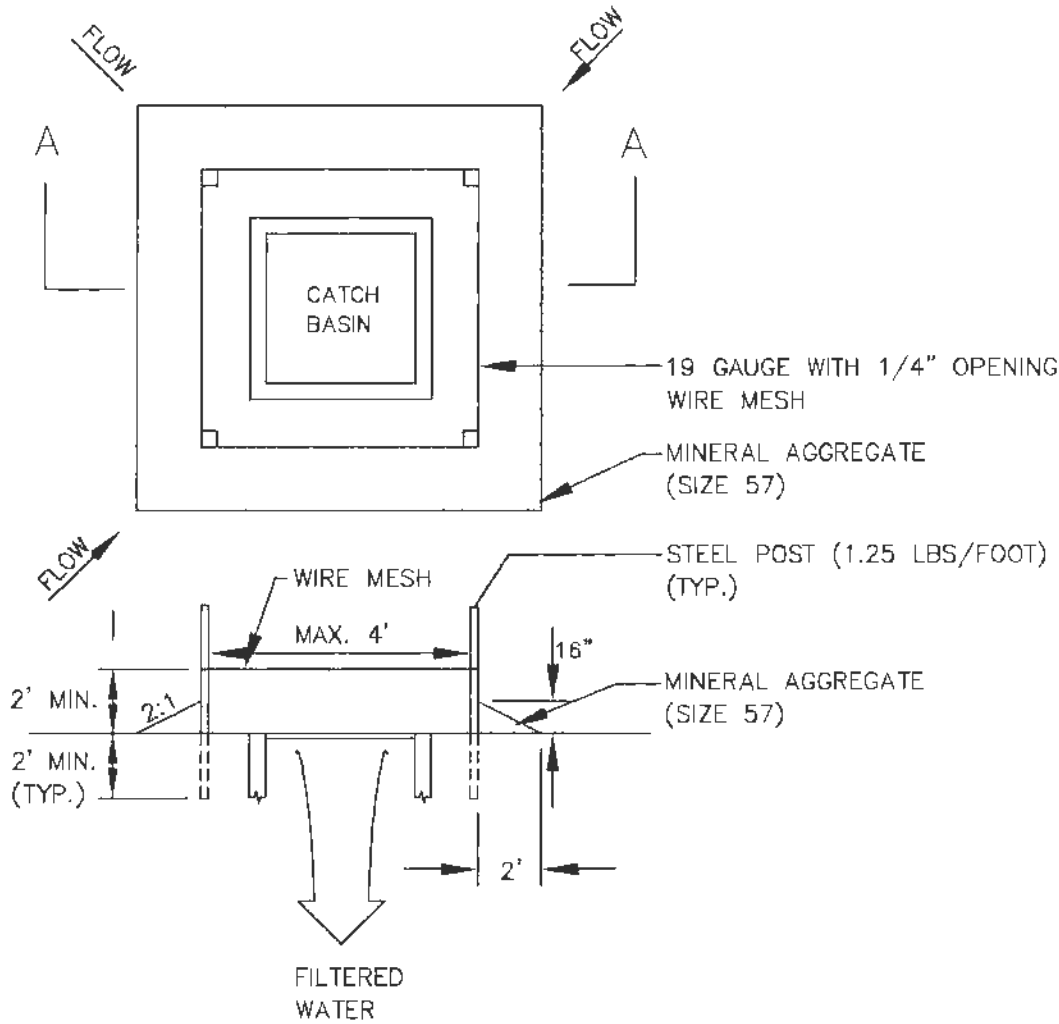
TN REGISTRATION NO. 114738

DETAIL SHEET

S:\Stormwater Projects\R-14-010-Bell Park\SWPPP\R14010-SWPPP.dwg Sep 08, 2016 - 9:45am, kpodgett

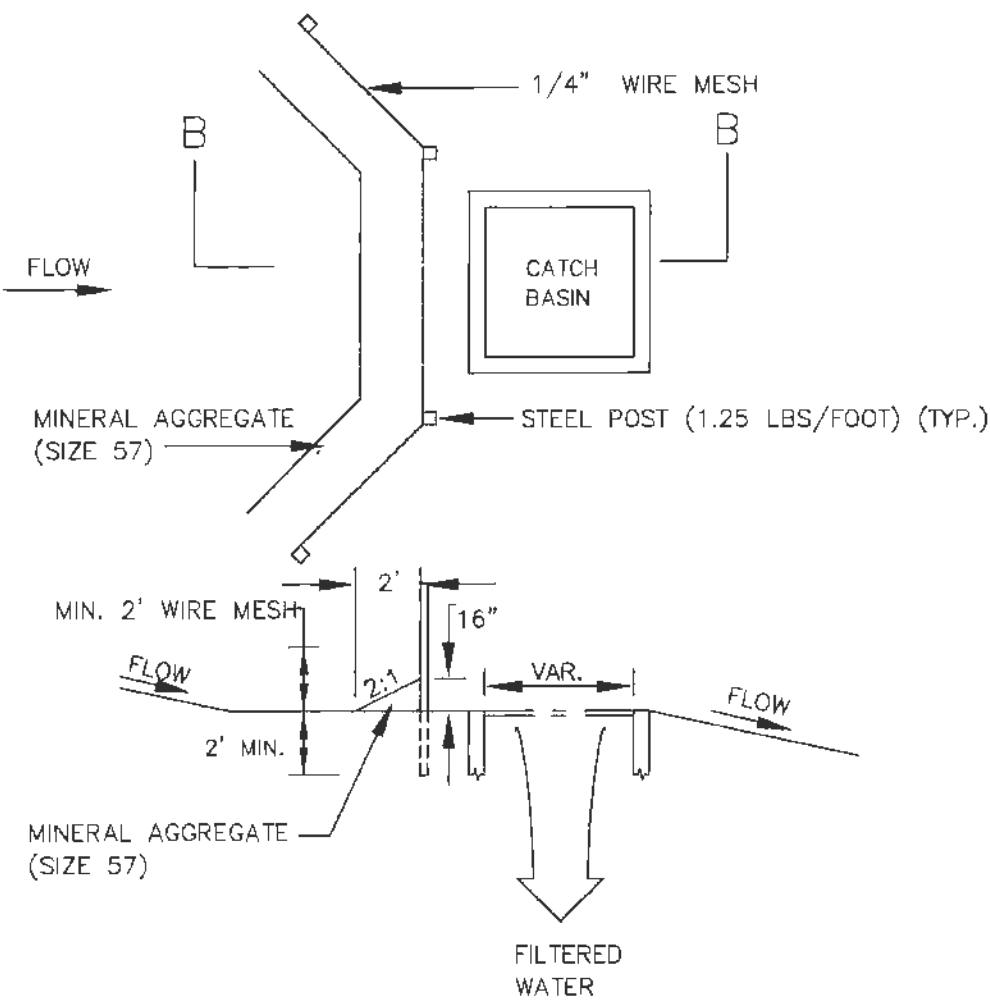
INLET PROTECTION DETAIL (TDEC 7.35)

HARDWARE CLOTH AND GRAVEL INLET PROTECTION



SECTION A-A

HARDWARE CLOTH AND GRAVEL INLET PROTECTION (FLOW FROM ONE SIDE)



SECTION B-B



CITY OF
CHATTANOOGA
DEPARTMENT OF
PUBLIC WORKS

ADMINISTRATOR:
JUSTIN C. HOLLAND
CITY ENGINEER:
WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES.	SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT#	R-14-010
SCALE:	AS SHOWN
DRAWN:	KLP
DESIGN:	DLM/MDH
CHECKED:	DLM



S:\Stormwater Projects\R-14-010 Bell Park\SWPPP\R14010-SWPPP.dwg Sep 08,2016 - 9:45am, kprodgett

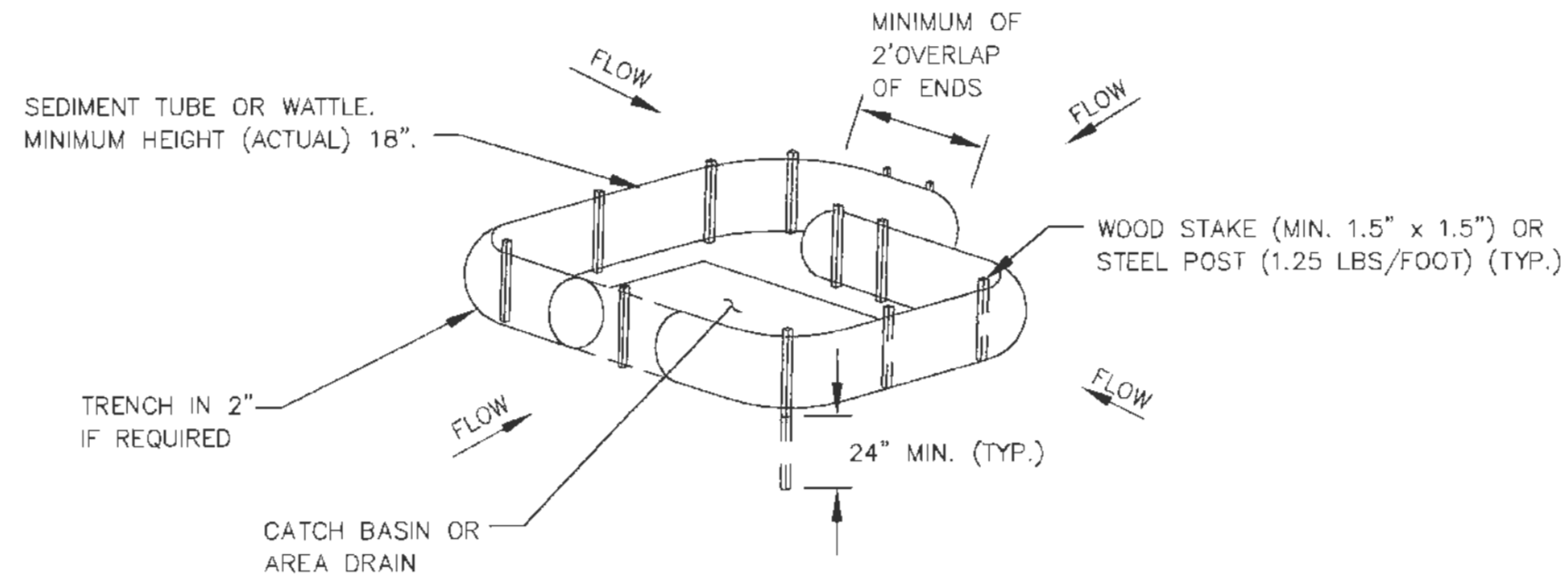


S:\Stormwater Projects\R-14-010 Bell Park\SWPPP\R14010-SWPPP.dwg Sep 08,2016 - 9:45am, kprodgett

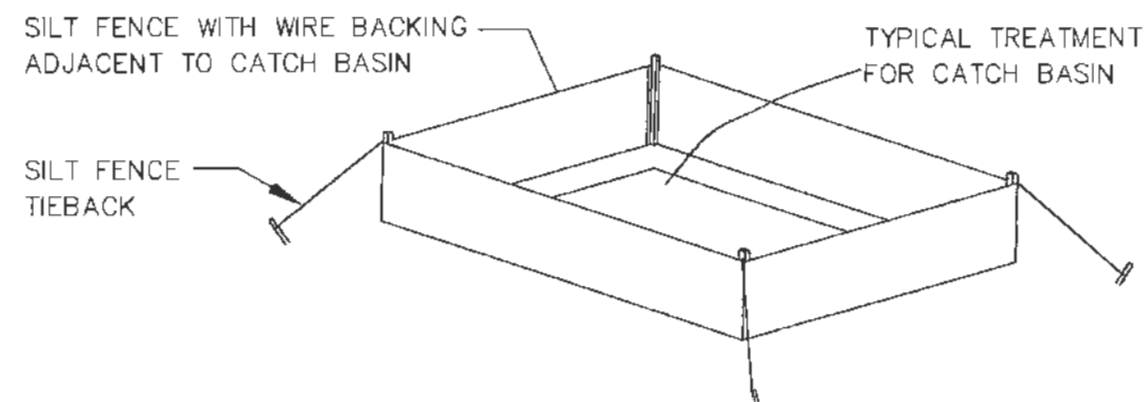


INLET PROTECTION DETAIL (TDEC 7.35)

CATCH BASIN PROTECTION (TYPE D)



CATCH BASIN PROTECTION (TYPE E)



**CITY OF
CHATTANOOGA**

**DEPARTMENT OF
PUBLIC WORKS**

ADMINISTRATOR:

JUSTIN C. HOLLAND

CITY ENGINEER:

WILLIAM C. PAYNE, P.E.

NO.	DATE	REVISION	DES	SIG.

N. SAINT ELMO DRAINAGE
EROSION PREVENTION AND
SEDIMENT CONTROL PLAN

CONTRACT# R-14-010

SCALE: AS SHOWN

DRAWN: KLP

DESIGN: DLM/MDH

CHECKED: DLM



TN REGISTRATION NO. 114738

DETAIL SHEET

SHEET: 18 OF 18

CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

1. SWPPP REQUIREMENTS (3.0)

- 1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING CERTIFICATIONS (3.1.1)?
YES ☒ NO ☐ (CHECK ALL THAT APPLY BELOW)
1.1.1. ☐ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
1.1.2. ☒ TDEC LEVEL II
- 1.2. DOES THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (SEDIMENT BASINS, ETC.) (3.1.1)? YES ☒ NO ☐
IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT?
☒ YES ☐ NO
- 1.3. DO THE PROJECT STORMWATER OUTFALLS DISCHARGE INTO THE FOLLOWING (5.4.1)? YES ☒ NO ☐ (CHECK ALL THAT APPLY BELOW)
1.3.1. ☒ IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
1.3.2. ☐ TENNESSEE KNOWN EXCEPTIONAL WATERS
IF YES, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? (5.4.1.b)
☒ YES ☐ NO ☐ N/A; AND
IF YES, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? (5.4.1.b)
☒ YES ☐ NO ☐ N/A

2. SITE DESCRIPTION (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.g): REFER TO PLAN SHEET 4
- 2.2. PROJECT DESCRIPTION (3.5.1.a):
TITLE: North St. Elmo Drainage System Fill Site
COUNTY: HAMILTON COUNTY
LOCATION: 3501 Central Avenue, Chattanooga TN, 37410
- 2.3. SITE MAP(S) (3.5.1.g): REFER TO FIGURE 1 – USGS QUADRANGLE MAP
- 2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d):
Refer to Figure 1 – USGS quadrangle map.
The proposed fill site was previously a school, existing concrete pads and stairs are at the north end. A dirt road traverses north/south along the west of the site, beginning at the southeast from Central Avenue, and ending at the northern concrete pad.
The tract is triangular, bounded by a railway along the west, and residential neighborhoods southeast and west (of the rail); to the south it is residential and commercial; to the north and northeast it is undeveloped with open fields and woods.
Typically, the site drains westerly to easterly at approximately 1%-4% for the majority of the site. The terrain slopes from the concrete pads to the north and east at approximately 15%-25%.
A stormdrain system in Central Avenue (east of site) conveys runoff via piping and inlets. The pipe outlets into a channel/potential stream which conveys the drainage approximately 1,600 feet to Chattanooga Creek.
- 2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY)
2.5.1. ☒ CLEARING AND GRUBBING
2.5.2. ☐ EXCAVATION
2.5.3. ☒ CUTTING AND FILLING
2.5.4. ☒ FINAL GRADING AND SHAPING
2.5.5. ☒ UTILITIES
2.5.6. ☐ OTHER (DESCRIBE):
- 2.6. TOTAL PROJECT AREA (3.5.1.c): 11.3 +/- ACRES
- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 7.2 +/- ACRES
IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW AND IN THE PLANS (3.5.3.1.k)?
☐ YES ☐ NO ☒ N/A
- 2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES ☐ NO ☒
IF YES, DESCRIBE AND LIST THE CORRESPONDING PLAN SHEET: _____

2.9. SOIL PROPERTIES (3.5.1.e)(4.1.1)

SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
COLBERT-URBAN LAND COMPLEX (CdC)	D	75.7	0.43
NEWARK SILT LOAM (Ne)	B/D	24.3	0.43

2.10. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1.f)

2.10.1 NOTE: CURVE NUMBER CONSERVATIVELY ESTIMATED FOR EXISTING CONDITIONS USING TYPE D SOILS THROUGHOUT ENTIRE SITE. DUE TO THE NATURE OF FILL SITES, THE TYPE(S) OF SOILS BROUGHT IN CAN VARY SIGNIFICANTLY. TO BE CONSERVATIVE, TYPE D SOILS WILL BE ASSUMED FOR POST FILL CONDITIONS.

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS			
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	CURVE NUMBER
IMPERVIOUS (conc. pads)	0.8	7	98
PERVIOUS (open space, fair, D)	10.5	93	84
WEIGHTED CURVE NUMBER =			85

RUNOFF COEFFICIENTS FOR POST-FILL CONDITIONS			
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	CURVE NUMBER
IMPERVIOUS (conc. pads)	0.8	7	98
PERVIOUS (open space, good, grass>75%, D)	10.5	93	80
WEIGHTED CURVE NUMBER =			82

3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a):

STAGE	DESCRIPTION
1 INITIAL	INSTALL STABILIZED CONSTRUCTION EXIT(S);
	INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEETS FROM SITE;
	DELINEATE STREAM BUFFER WITH FENCING;
	INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) MEASURES;
2 INTERIM	CLEAR AND GRUB SITE (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING ACTIVITIES);
	RAISE STRUCTURES (STORM AND SEWER) TO FILL ELEVATION, INSTALL EPSC MEASURES;
	FILL IN THREE (3) ACRE MAXIMUM AREAS (CONTINUOUS BASIS UNTIL FINAL ELEVATIONS PER PLAN), FINAL STABILIZATION PRIOR TO NEXT PHASE;
	STABILIZE DISTURBED AREAS WHERE FILL ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED WITHIN 14 DAYS
3 FINAL	ESTABLISH FINAL GRADES OF FILL;
	STABILIZE ALL DISTURBED AREAS WITHIN 14 DAYS OF FINAL GRADING;
	COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, ETC.);
	REMOVE TEMPORARY EPSC PRACTICES FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70% PERMANENT VEGETATIVE COVER;
	RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES

4. STREAM, OUTFALL, WETLAND, TMOL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS? YES ☐ NO ☒

4.1.2. RECEIVING STREAMS (3.5.1.j)

RECEIVING STREAM INFORMATION			
NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	KNOWN EXCEPTIONAL QUALITY WATERS (YES OR NO)
STR-1	CHATTANOOGA CREEK	YES	NO

NOTE: CHANNEL FROM NE OF SITE TO CHATTANOOGA CREEK (APPROXIMATELY 1,500 FEET FROM SITE)
SUBWATERSHED (HUC 14): 06020001001873
WATERBODY ID: TN060200011244_1000
WATER QUALITY ASSESSMENT STATUS FOR REPORTING YEAR 2012 – THE OVERALL STATUS OF THIS WATERBODY IS IMPAIRED: FISH AND AQUATIC LIFE – IMPAIRED; RECREATION - IMPAIRED

4.1.3. ARE BUFFER ZONES REQUIRED? YES ☒ NO ☐ (4.1.2, 5.4.2)

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) N/A

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER

☒ 60-FEET FOR IMPAIRED AND EXCEPTIONAL WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET)

☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET)


4.1.4. ARE THERE BUFFER ZONE EXEMPTIONS? YES ☐ NO ☐ N/A ☒ (4.1.2.1)

4.2. OUTFALL INFORMATION:

A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL QUALITY WATER (3.5.3.3)

4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL QUALITY WATER (5.4.1.f).
Due to this being part of the Brownfield Program, there will not be a sediment pond. A phasing plan will be used, where the maximum disturbed fill area is 3 acres. Prior to moving to the next fill phase, the current phase must be stabilized.

		BELL PARK FILL SITE 3501 CENTRAL AVE, CHATTANOOGA, TN 37410 HAMILTON COUNTY, TENNESSEE	
DRAWN BY: KLP DATE: AUGUST 2016		CHECKED BY: MDH DATE: AUGUST 2016	
PROJECT NO.: R-14-010		SHEET NO.: 1	

4.2.3. OUTFALL TABLE (3.5.1.d, 5.4.1.f)

4.2.3.1. NOTE: EACH PHASE, THE OUTFALL WILL BE ALONG THE EASTERLY PROPERTY, VIA SHEET FLOW AND THE SILT FENCE.

OUTFALL INFORMATION					
OUTFALL LABEL	SLOPE (%)	DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	SUB-OUTFALL (e.g. A, B, C)†	RECEIVING NATURAL RESOURCE NAME OR LABEL
OUT-01	1-33	7	YES (PHASING)	n/a	CONVEYANCE TO CHATTANOOGA CREEK

†NOTE: SUB-OUTFALLS ARE DEFINED AS OUTFALLS THAT DISCHARGE WITHIN THE PROJECT AND DO NOT DIRECTLY DISCHARGE OFF ROW OR INTO WATERS OF THE STATE.

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED THROUGH THE PROJECT SO THAT THE OFF-SITE RUN-ON WILL NOT FLOW OVER DISTURBED AREAS WITHIN THE ROW, THUS SEPARATING NON-PROJECT RUN-OFF FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA TO ANY ONE OUTFALL? YES ☒ NO ☐

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? YES ☒ NO ☐ Phasing, due to contaminated soil cap

4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.g, 5.4.1.f)? YES ☒ NO ☒ There is not a concentrated outfall, sheet flow along length of easterly property

4.2.7. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)? YES ☒ NO ☐

4.3. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? YES ☐ NO ☒

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

4.4.1. IS THIS PROJECT LOCATED IN A WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION? YES ☐ NO ☒
There is TMDL for Dioxins and PCB's, not siltation

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)? YES ☐ NO ☒ N/A ☐

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION? YES ☐ NO ☐ N/A ☒

4.4.4. IF YES, HAS A SUMMARY OF THE CONSULTATION (LETTER) BEEN INCLUDED WITH THE SWPPP DOCUMENTATION? YES ☐ NO ☐ N/A ☒
Included is a copy of the TMDL for dioxins and PCBs.

4.5. ECOLOGY INFORMATION (3.5.5.e)

ARE THERE STATE OR FEDERALLY LISTED SPECIES LOCATED WITHIN THE PROJECT AREA? SPECIAL NOTES ARE REQUIRED TO DESCRIBE MEASURES NECESSARY TO PREVENT "TAKING" OF LEGALLY PROTECTED STATE OR FEDERALLY LISTED THREATENED OR ENDANGERED AQUATIC FAUNA AND/OR CRITICAL HABITAT.

YES ☐ NO ☒ NO NOTES REQUIRED ☐

IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED.

5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3)

5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION. (4.1.1)

5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS AND STREAM BANKS. (4.1.1)

5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED ACCORDING TO THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (3.5.3.3)? YES ☒ NO ☐

5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (3.5.3.3, 5.4.1.a).

5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS? (3.5.1.n) YES ☒ NO ☐

5.6. HAVE PHASED EPSC PLANS BEEN PREPARED FOR THE PROJECT? (3.5.2)

YES ☒ NO ☐ (IF YES, CHECK ONE BELOW)

5.6.1. PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO PHASES OF EPSC PLANS)

5.6.2. ☒ PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE PHASES OF EPSC PLANS)

5.7. IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.4.1.a)? YES ☐ NO ☒

5.8. HAVE STEEP SLOPES (GREATER THAN 35%) BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE? (3.5.3.2) (10 "STEEP SLOPE")

YES ☒ NO ☐ Slopes are 3:1 maximum

5.9. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE RESEARCHED, APPLIED IN ACCORDANCE WITH MANUFACTURE'S GUIDELINES AND FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).

5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO REFERENCED STANDARDS.

5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING US COE SECTION 404, TDEC ARAP, AND TVA PERMITS.

5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY CONTROLS PROVIDING EQUIVALENT LEVEL OF TREATMENT (FILTRATION) (4.14)

5.13. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS MUST USE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT, UNLESS INFEASIBLE. (4.1.7)

5.14. STABILIZATION PRACTICES

PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED. (3.5.3.1.h)

5.15. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE. (3.5.3.2)

5.16. STEEP SLOPES (3.5.3.2)

STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR STEEPER REGARDLESS OF HEIGHT. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

6. CONSTRUCTION SUPPORT ACTIVITIES - BORROW AND WASTE AREAS (1.2.2)(3.5.3.1.g)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS. CONTRACTOR IS ALSO RESPONSIBLE FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR SPOIL PILES.

7. MAINTENANCE AND INSPECTION

7.1. INSPECTION PRACTICES (3.5.8)

7.1.1. INSPECTORS MUST HAVE SUCCESSFULLY COMPLETED THE TDEC FUNDAMENTALS OF EROSION AND SEDIMENT CONTROL COURSE (TDEC

LEVEL 1) AND MAINTAIN THE CERTIFICATION. A COPY OF THE INSPECTOR'S CERTIFICATION SHOULD BE KEPT ON SITE. (3.5.8.1)

7.1.2. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART. (3.5.8.2.a)

7.1.3. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC.) WITH WRITTEN NOTIFICATION TO THE LOCAL ENVIRONMENTAL FIELD OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION. (3.5.8.2.a)

7.1.4. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED. (3.5.8.2.b)

7.1.5. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, US COE AND TVA SECTION 26a PERMITS WHERE APPLICABLE) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE. (10)

7.1.6. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION. (3.8.5.2.e AND 3.8.5.2.f)

7.1.7. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED. (10 "INSPECTOR") (3.5.1.n)

7.1.8. INSPECTIONS WILL BE DOCUMENTED ON THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM PROVIDED IN APPENDIX C OF THE CGP AND INCLUDE THE SCOPE OF THE INSPECTION, NAME(S), TITLE AND TN EPSC CERTIFICATION NUMBER OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, CURRENT APPROXIMATE DISTURBED ACREAGE AT TIME OF INSPECTION, CHECKLIST (NOC, SWPPP, RAIN GAUGE, SITE CONTACT INFORMATION, ETC.) AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP. (3.5.8.2.g)

7.1.9. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

7.1.10. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.


7.1.11. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION DOCUMENTATION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES. (3.8.5.2.h)

7.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)

THE PROJECT SUPERVISOR/CONTRACTOR MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT SUPERVISOR/CONTRACTOR AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST SUBMIT WRITTEN AUTHORIZATION TO THE LOCAL TDEC EFO.

7.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)

7.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER. NECESSARY REPAIRS OR MAINTENANCE WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT AND IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED. IN A CASE WHERE THE ACTIVITY IS DEEMED IMPRACTICABLE, ANY SUCH CONDITIONS WILL BE DOCUMENTED (3.5.8.2.e).

		BELL PARK FILL SITE 3501 CENTRAL AVE, CHATTANOOGA, TN 37410 HAMILTON COUNTY, TENNESSEE	
		STORM WATER POLLUTION PREVENTION PLAN	
DRAWN BY: KLP	CHECKED BY: MDH	PROJECT NO.: R-14-010	SHEET NO.: 2
DATE: AUSUT/2016	DATE: AUGUST 2016		

- 7.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)
- 7.3.3. SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, AND OTHER CONTROLS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%. (3.5.3.1.e)
- 7.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.
- 7.3.5. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF OF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED. (3.5.3.1.f)
- 7.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.
- 7.3.7. THE PROJECT SUPERVISOR OR THEIR DESIGNEE AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

8. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS REQUIRED:

YES ☒ NO ☐

9. STORMWATER MANAGEMENT (3.5.4)

9.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE SHOWN ON THE PLANS AND NOTED AS PERMANENT.

9.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.f, 3.5.4):

RIP-RAP OUTLET PROTECTION; CHECK DAMS; STABILIZATION MEASURES

9.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

9.3.1. CONSTRUCTION MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- 9.3.1.1. ☐ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
- 9.3.1.2. ☐ CONCRETE WASHOUT
- 9.3.1.3. ☒ CONCRETE AND CORRUGATED METAL PIPES
- 9.3.1.4. ☒ MINERAL AGGREGATES, ASPHALT
- 9.3.1.5. ☒ EARTH
- 9.3.1.6. ☐ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
- 9.3.1.7. ☒ ROCK
- 9.3.1.8. ☐ CURING COMPOUND
- 9.3.1.9. ☐ EXPLOSIVES
- 9.3.1.10. ☐ OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2. WASTE MATERIALS (3.5.5.b)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

9.3.3. HAZARDOUS WASTE (3.5.5.c) (7.9)

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

9.3.4. SANITARY WASTE (3.5.5.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

9.3.5. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- 9.3.5.1. ☐ FERTILIZERS AND LIME
- 9.3.5.2. ☒ PESTICIDES AND/OR HERBICIDES
- 9.3.5.3. ☒ DIESEL AND GASOLINE
- 9.3.5.4. ☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED THIS SWPPP.

10. NON-STORMWATER DISCHARGES (3.5.9)

10.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT (CHECK ALL THAT APPLY):

- 10.1.1. ☐ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER
- 10.1.2. ☒ WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES SITE
- 10.1.3. ☒ WATER USED TO CONTROL DUST (3.5.3.1.n)
- 10.1.4. ☐ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE
- 10.1.5. ☐ UNCONTAMINATED GROUNDWATER OR SPRING WATER
- 10.1.6. ☐ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS
- 10.1.7. ☐ OTHER:

10.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE.

10.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

10.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

10.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.h)?

YES ☐ NO ☒

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER.

11. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)

11.1. SPILL PREVENTION (3.5.5.c)

11.1.1. MATERIAL MANAGEMENT

11.1.1.1. HOUSEKEEPING

ONLY PRODUCTS NEEDED WILL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S

RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

11.1.1.2. HAZARDOUS MATERIALS

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL PH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

11.1.1.3. PRODUCT SPECIFIC PRACTICES

11.1.1.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.


11.1.1.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

11.1.1.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

11.1.1.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET ON THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

11.2. SPILL MANAGEMENT

11.2.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.

		BELL PARK FILL SITE 3501 CENTRAL AVE, CHATTANOOGA, TN 37410 HAMILTON COUNTY, TENNESSEE	
		STORMWATER POLLUTION PREVENTION PLAN	
DRAWN BY: KLP	CHECKED BY: MDH	PROJECT NO.: R-14-010	SHEET NO.: 3
DATE: AUGUST 2016	DATE: AUGUST 2016		

- 11.2.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.
- 11.2.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.
- 11.2.4. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- 11.2.5. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.
- 11.2.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.
- 11.2.7. IF OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
- 11.2.8. IF A SPILL OCCURS THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM.
- 11.2.9. SPILL RESPONSE EQUIPMENT WILL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.
- 11.3. SPILL NOTIFICATION (5.1)
WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:
- 11.3.1. A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND
- 11.3.2. CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.
- 11.3.3. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

12. RECORD-KEEPING

12.1. REQUIRED RECORDS

CONTRACTOR OR THEIR DESIGNEE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (6.2.1):

- 12.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR
- 12.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE
- 12.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED
- 12.1.4. RECORDS OF TWICE WEEKLY EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES
- 12.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS
- 12.1.6. COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION
- 12.1.7. RAINFALL MONITORING PLAN (3.5.3.1.o)

12.1.7.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

12.1.7.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT THE PROJECT SITE, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC). ALTERNATIVELY, A REFERENCE SITE MAY BE USED. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

12.1.7.3. METHODS

12.1.7.3.1. RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

12.1.7.3.2. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

12.1.7.3.3. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES).

12.1.7.3.4. IF, IN THE EVENT THAT THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

12.1.7.3.5. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

12.2. KEEPING PLANS CURRENT (3.4)

CONTRACTOR OR THEIR DESIGNEE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

- 12.2.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;
- 12.2.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING

POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

12.2.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

12.2.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

12.2.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS; OR

12.2.6. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION)

12.3. MAKING PLANS ACCESSIBLE

12.3.1. CONTRACTOR WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION. CONTRACTOR WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE. (6.2)

12.3.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, CONTRACTOR OR THEIR DESIGNEE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):

12.3.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

12.3.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

12.3.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

12.3.2.4. THE LOCATION OF THE SWPPP.

12.3.3. ALL INFORMATION DESCRIBED IN SECTION 10.3.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

12.4. NOTICE OF TERMINATION (8.0)

12.4.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, CONTRACTOR WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE LOCAL ENVIRONMENTAL FIELD OFFICE.

12.4.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:

12.4.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND

12.4.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND



DRAWN BY: KLP
DATE: AUGUST 2016

CHECKED BY: MDH
DATE: AUGUST 2016

PROJECT NO.: R-14-010

SHEET NO.: 4

BELL PARK FILL SITE
3501 CENTRAL AVE, CHATTANOOGA, TN 37410
HAMILTON COUNTY, TENNESSEE


STORM WATER POLLUTION
PREVENTION PLAN

- 12.4.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
- 12.4.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
- 12.4.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
- 12.4.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
- 12.4.2.7 ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

12.5. RETENTION OF RECORDS (6.2)
THE PERMITTEE WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

13. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.



AUTHORIZED PERSONNEL SIGNATURE (3.3.1)

WILLIAM C. PAYNE, P.E.

PRINTED NAME

CITY ENGINEER

TITLE

08-25-16

DATE

14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ON-SITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS.

AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

15. ENVIRONMENTAL PERMITS (9.0)

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT

ENVIRONMENTAL PERMITS			
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*
TDEC ARAP	YES		
CORPS OF ENGINEERS (COE)	NO		
TVA 26A	NO		
TDEC CGP	YES	PENDING	
OTHER:	N/A		