

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
1835 Assembly Street, Room 865B-1
Columbia, South Carolina 29201

and

THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Office of Environmental Quality Control
Water Quality Certification and Wetlands Programs Section
2600 Bull Street
Columbia, South Carolina 29201

REGULATORY DIVISION

Refer to: P/N # 2012-00830-6F

December 1, 2014

Pursuant to Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1341), an application has been submitted to the Department of the Army and the South Carolina Department of Health and Environmental Control by

The Kroger Company
c/o Laura Belanger
Environmental Permitting Consultants, Inc.
P.O. Box 3744
Greenville, SC 29608

for a permit to place fill material in an

Unnamed Tributary of Rocky Branch and adjacent wetlands

At a location on Assembly Street, between Ferguson Road and Bluff Road, Richland County, South Carolina (Latitude 33.982411 N, Longitude 81.028269 W)

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

15 Days from the Date of this Notice,

and **SCDHEC** will receive written statements regarding the proposed work until

30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of the placement of fill material in 999 linear feet of stream and 0.18 acres of wetlands and the impoundment of 77 linear feet of stream and 0.125 acres of wetlands. In detail, the work consists of the placement of fill material in 999 linear feet and 0.18 acres of wetlands as part of the site's development. The stream proposed to be filled for site development will be relocated into a constructed channel measuring 1,297 linear feet in length. This channel will be located on the property and will tie back into the existing channel. In addition, 77 linear feet of stream and 0.125 acres of wetlands will be impounded for detention purposes. The applicant indicated they looked at several alternatives to site development that include avoidance and minimization of impacts to the streams and wetlands however, the only site development alternative that meets the applicants

REGULATORY DIVISION

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need is the proposed alternative that impacts the streams and wetlands. The applicant has provided mitigation credit calculation worksheets that indicate this project will require 4,636.5 stream credits and 2.81 wetland credits. The applicant is proposing to do permittee responsible mitigation on a site located on Tom's Creek in Richland County. The compensatory mitigation plan is still under review and the Corps has not reached a determination on the adequacy of this proposed plan. The Permittee Responsible Mitigation Plan is available upon request. The applicant has stated the project purpose is to provide needed grocery and residential space in the downtown Columbia area.

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The District Engineer will not process this application to a conclusion until such certification is received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. Persons wishing to comment or object to Water Quality Certification must submit all comments in writing to the S.C. Department of Health and Environmental Control at the above address within thirty (30) days of the date of this notice.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact habitat upstream of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended), the District Engineer has consulted the most recently available information and has determined that the project is not likely to adversely affect any Federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean

REGULATORY DIVISION

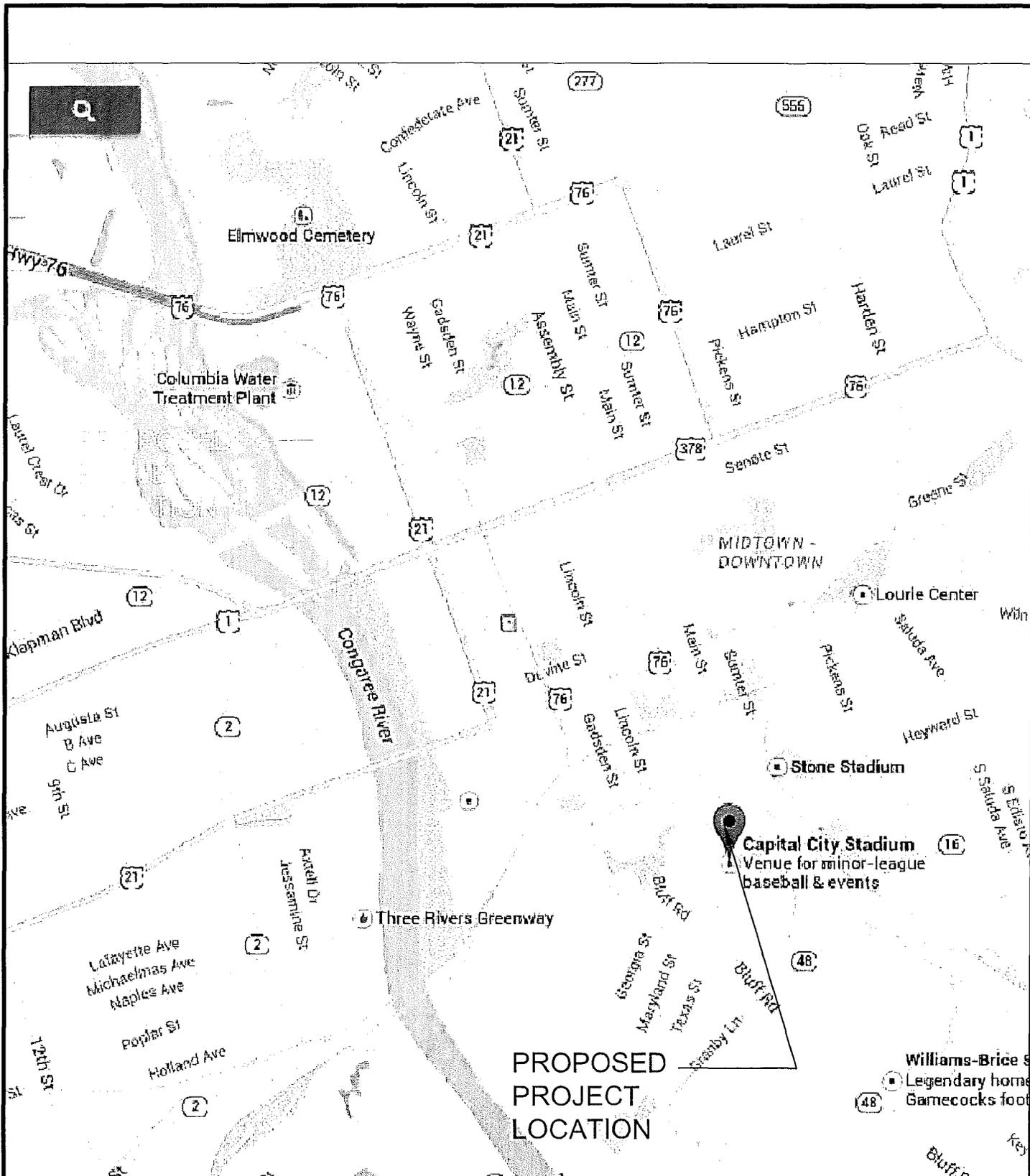
Refer to: P/N # 2012-00830-6F

December 1, 2014

Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

If there are any questions concerning this public notice, please contact Kristin Andrade at 803-253-3903.



**PROPOSED
PROJECT
LOCATION**

Source: Google Maps

P/N 2012-00830-6F

Sheet 1 of 13



GRAPHIC SCALE

1 inch = 2,000 feet

Post Office Box 3744
Greenville, SC 29603
Phone: (864) 271-3040
Fax: (864) 225-9299

DRAWN BY:	LHB
DATE:	20NOV2014
EPC PROJECT NO.:	1317

LOCATION MAP

ASSEMBLY ST.
KROGER
RICHLAND COUNTY

SHEET NO.

1

IMPACT AREA #W1
WETLAND
 FILL, 0.03 AC.
 IMPOUND, 0.02 AC.

IMPACT AREA #W2
WETLAND
 FILL, 0.15 AC.
 IMPOUND, 0.07 AC.

IMPACT AREA #W3
WETLAND
 IMPOUND, 0.035 AC.

WATERS OF THE US "D"
 WETLAND
 AREA: 1,506 S.F. = 0.035 ACRES

WATERS OF THE US "E"
 WETLAND
 AREA: 9,930 S.F. = 0.228 ACRES

WATERS OF THE US "E"
 TRIBUTARY
 71 L.F.
 AREA: 435 S.F. = 0.010 ACRES

IMPACT AREA #S1
STREAM
 MORPHO-LOGIC
 999 L.F.

IMPACT AREA #S2
STREAM
 DETENTION
 71 L.F.



123K PRELIMINARY
 MARKETPLACE FOOTPRINT
 113,531 S.F. (NET)

IS "A"
 TARY
 86 L.F.
 266 S.F.
 ACRES

RETAINING WALLS W/
 SAFETY RAILS



CREATED WETLAND

BOX CULVERT #1

BOX CULVERT #0

RETAINING WALL
 W/ SAFETY RAIL

RELOCATED
 STREAM
 CHANNEL
 1297 L.F.

P/N 2012-00830-6F

Sheet 3 of 13



GRAPHIC SCALE
 1 inch = 150 feet

PROPOSED OVERVIEW

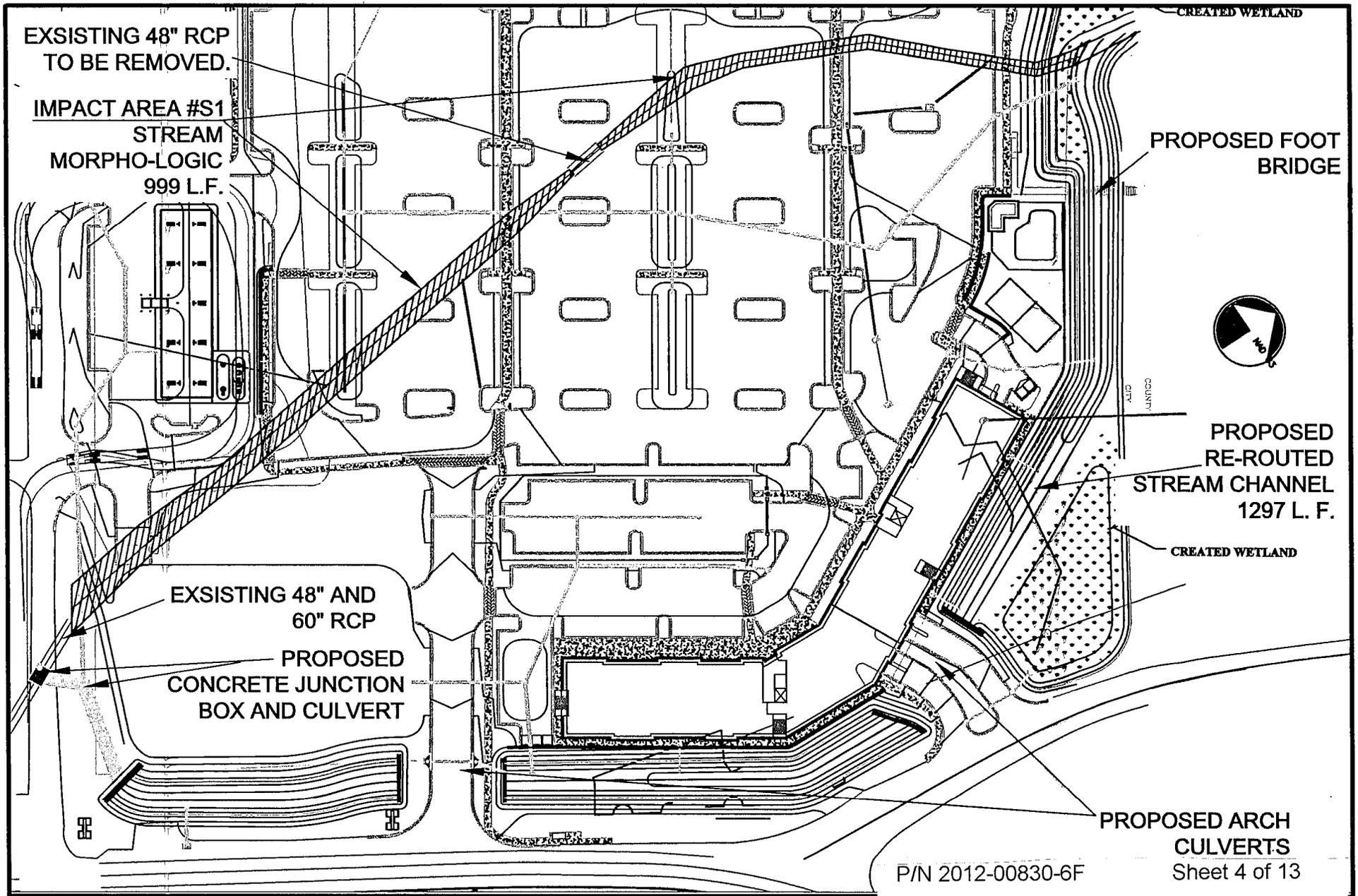
ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.

3

Post Office Box 3744
 Greenville, SC 29608
 Phone: (864) 271-3040
 Fax: (864) 235-9299

DRAWN BY: LHB
 DATE: 20NOV2014
 EPC PROJECT NO.: 1317

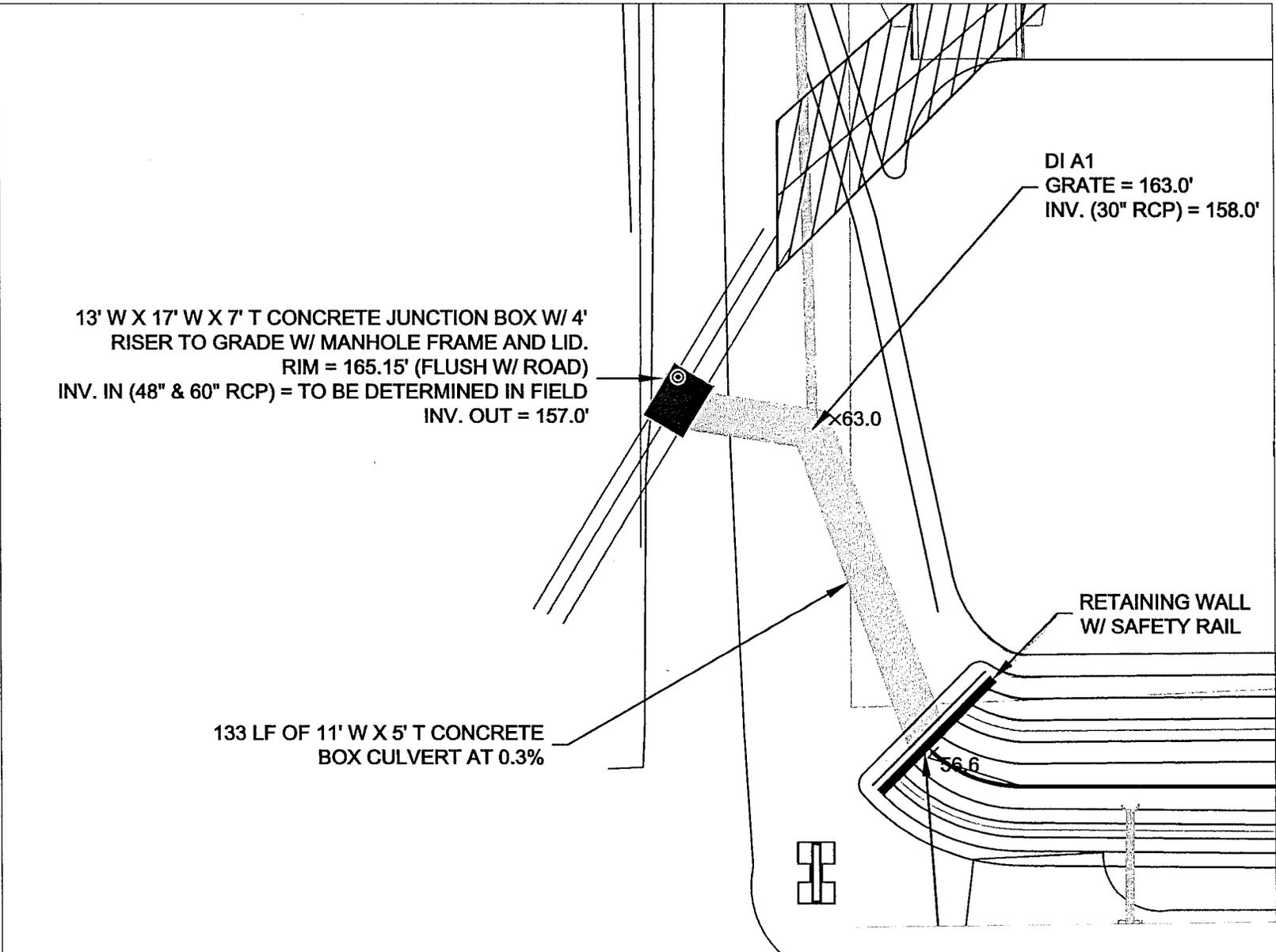


GRAPHIC SCALE
 1 Inch = 110 feet

Post Office Box: 3744 Greenville, SC 29608 Phone: (864) 271-3040 Fax: (864) 236-8298	DRAWN BY: LHB DATE: 24sep2014 EPC PROJECT NO.: 1317
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IMPACT AREA S1
 ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.
4



P/N 2012-00830-6F

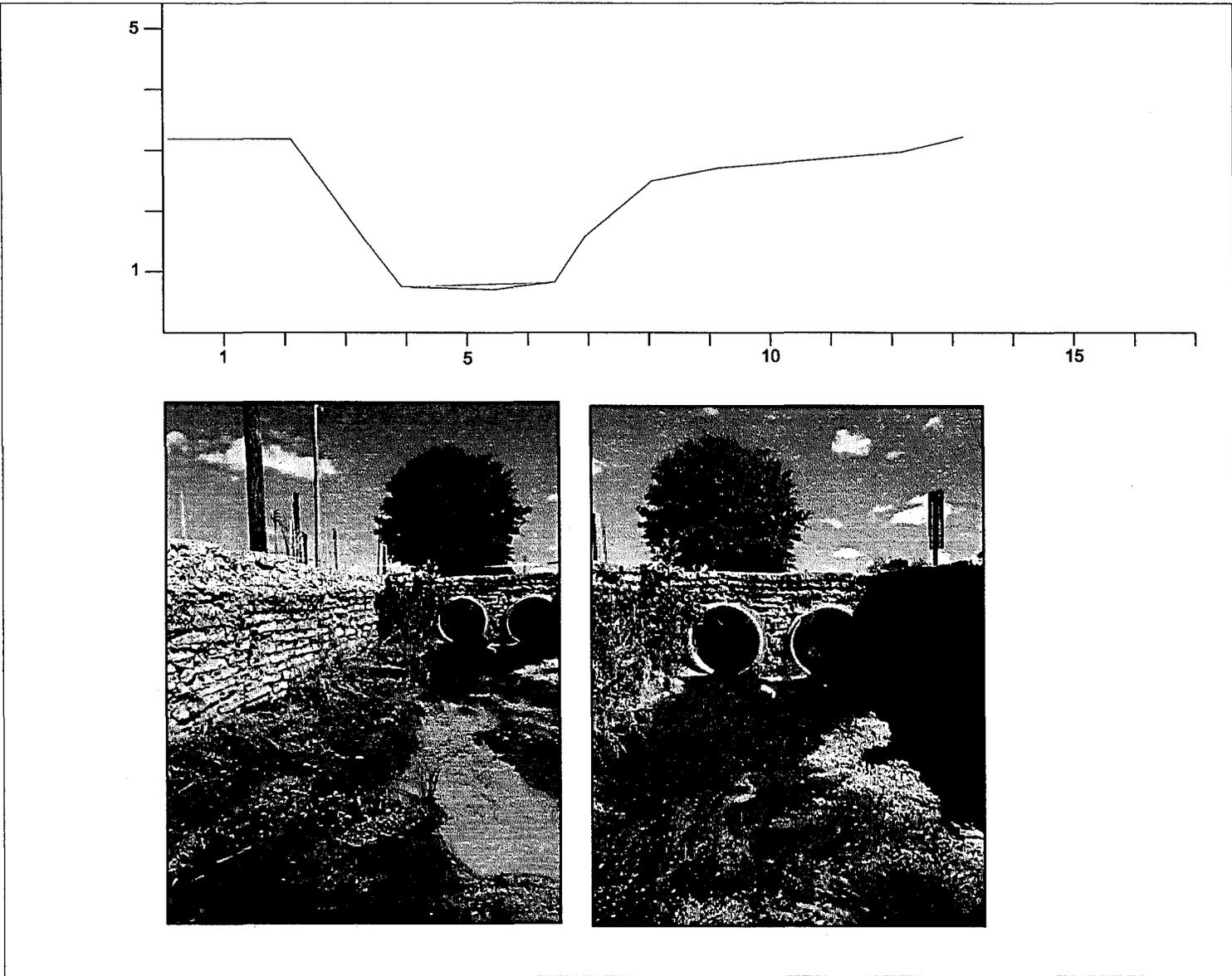
Sheet 5 of 13



GRAPHIC SCALE	
1 inch = 40 feet	
Post Office Box 3744 Greenville, SC 29608 Phone: (864) 271-3040 Fax: (864) 235-6286	DRAWN BY: LHB DATE: 24sept2014 EPC PROJECT NO.: 1317

S1 JUNCTION BOX DETAIL
 ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.
5



P/N 2012-00830-6F

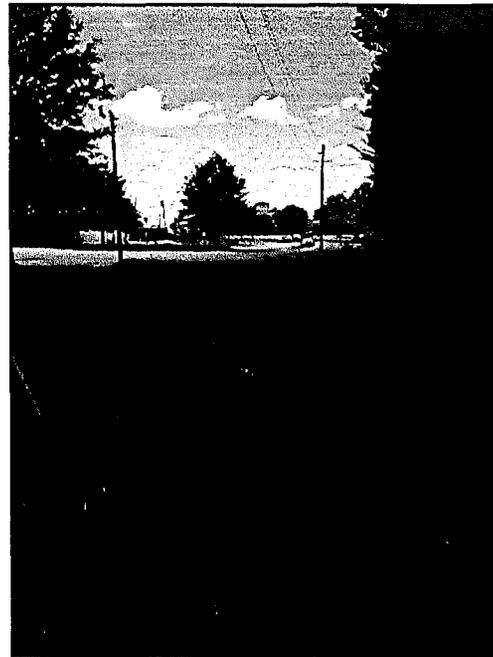
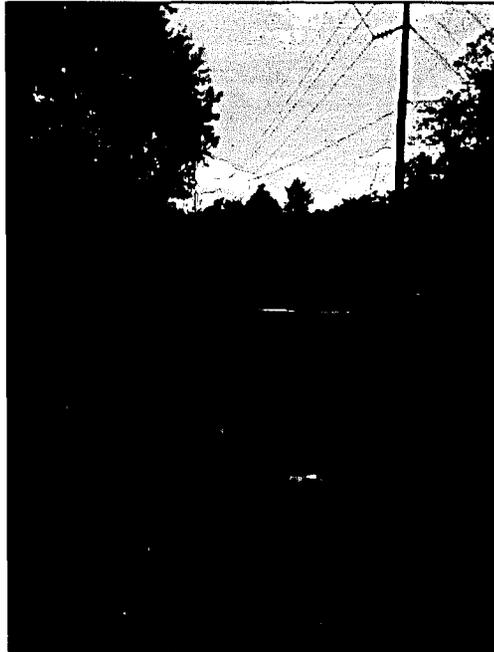
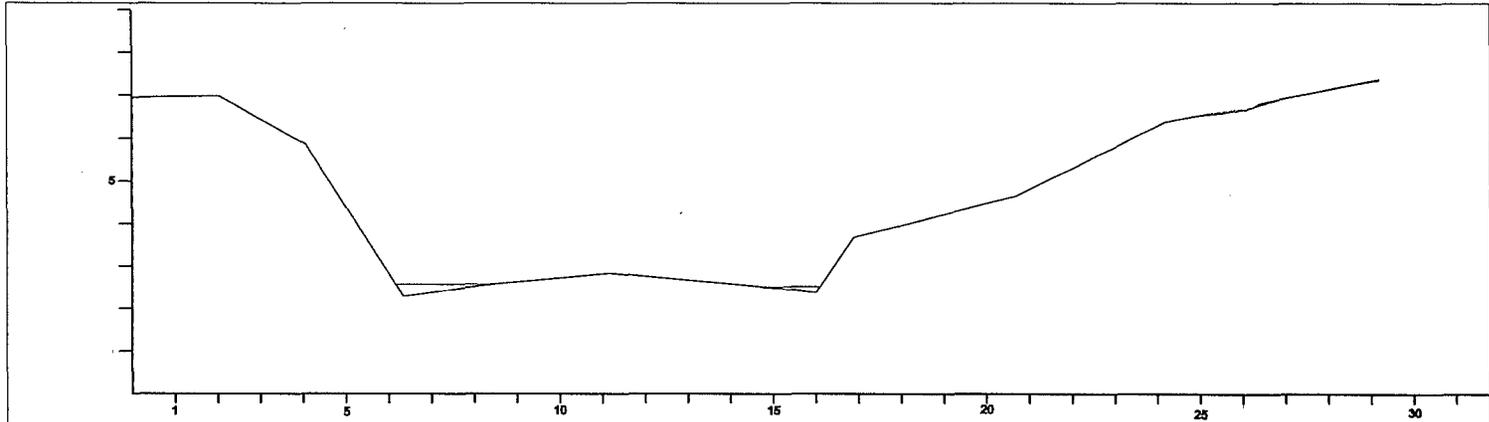
Sheet 6 of 13



GRAPHIC SCALE	
1 Inch = feet	
Post Office Box 3744 Greenville, SC 29608 Phone: (864) 271-3040 Fax: (864) 235-9299	DRAWN BY: LHB DATE: 24sept2014 EPC PROJECT NO.: 1317

S1 EXISTING CROSS SECTION
 ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.
6



P/N 2012-00830-6F

Sheet 7 of 13



GRAPHIC SCALE

1 Inch = feet

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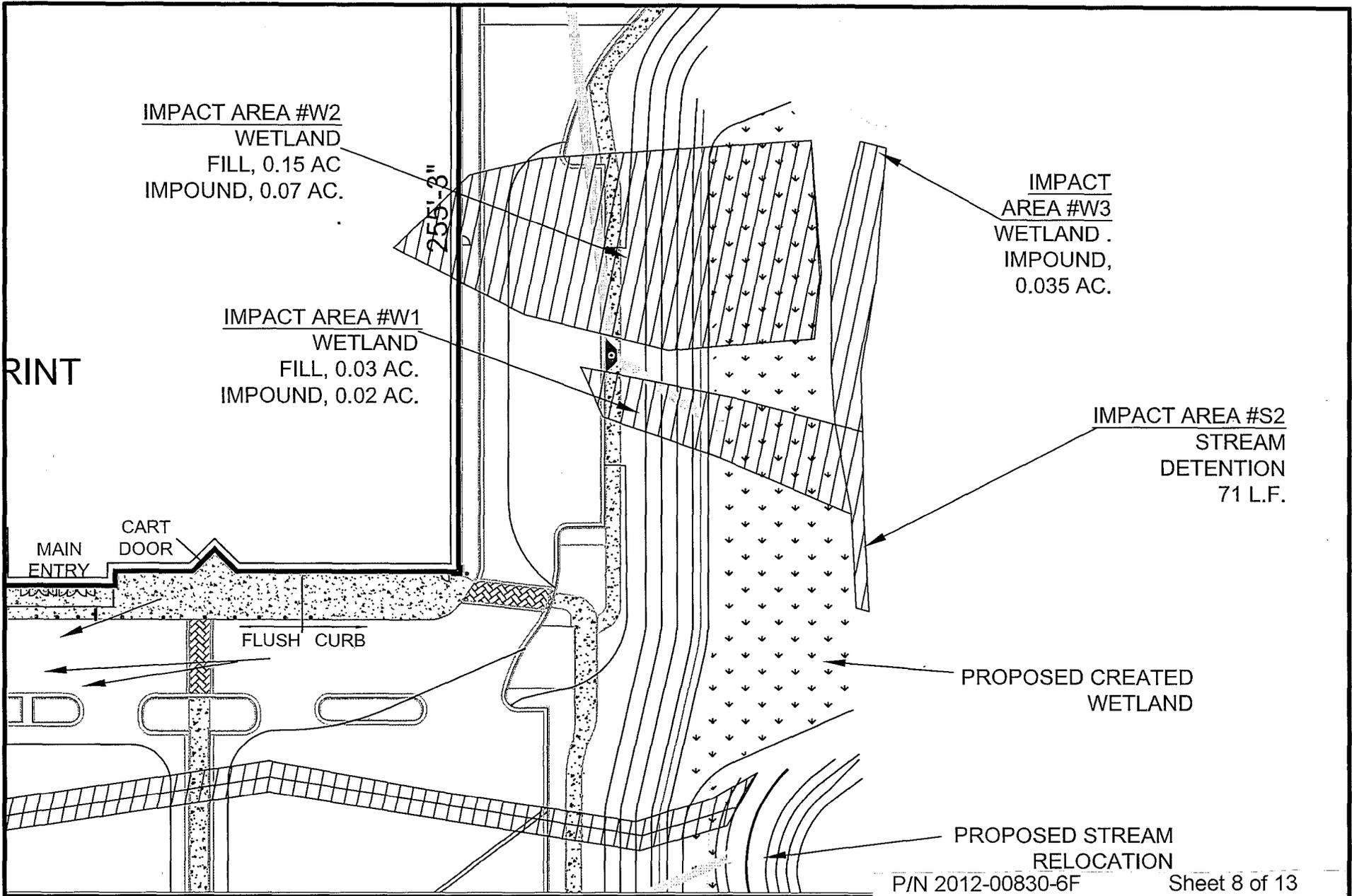
DRAWN BY:	LHB
DATE:	24sept2014
EPC PROJECT NO.:	1317

S1 EXISTING CROSS SECTION

ASSEMBLY STREET
KROGER
RICHLAND COUNTY

SHEET NO.

7



RINT

IMPACT AREA #W2
WETLAND
FILL, 0.15 AC
IMPOUND, 0.07 AC.

IMPACT AREA #W1
WETLAND
FILL, 0.03 AC.
IMPOUND, 0.02 AC.

IMPACT AREA #W3
WETLAND .
IMPOUND,
0.035 AC.

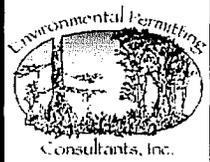
IMPACT AREA #S2
STREAM
DETENTION
71 L.F.

PROPOSED CREATED
WETLAND

PROPOSED STREAM
RELOCATION

P/N 2012-00830-6F

Sheet 8 of 13



GRAPHIC SCALE

1 inch = 50 feet

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DATE: 24sep2014
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IMPACT AREAS S2, W1, W2, AND W3

ASSEMBLY STREET
KROGER
RICHLAND COUNTY

Culvert Report

Hydroware Express Extension for Autodesk's AutoCAD's Civil 3D by Autodesk, Inc.

1,234,567, Nov 11 2014

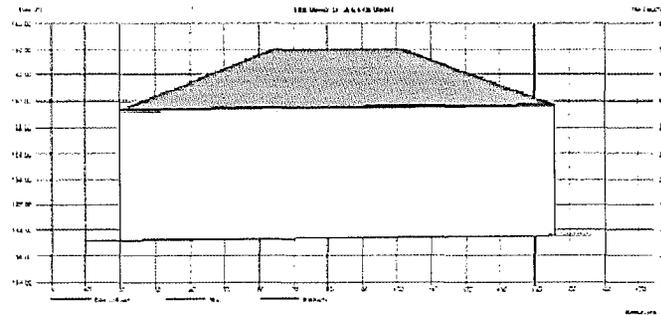
CULVERT 0 - AS CULVERT

Invert Elev Dn (ft) = 155.60
 Pipe Length (ft) = 126.00
 Slope (%) = 0.16
 Invert Elev Up (ft) = 155.00
 Rise (in) = 60.0
 Shape = Box
 Span (in) = 60.0
 No. Barrels = 2
 n-Value = 0.013
 Culvert Type = Rectangular Concrete
 Culvert Entrance = Tapered inlet throat
 Coeff. K,M,c,Y,k = 0.475, 0.667, 0.0179, 0.97, 0.2

Calculations
 Qmin (cfs) = 683.00
 Qmax (cfs) = 683.00
 Tailwater Elev (ft) = Normal

Highlighted
 Qtotal (cfs) = 683.00
 Qpipe (cfs) = 625.69
 Qoverflow (cfs) = 57.31
 Veloc Dn (ft/s) = 12.51
 Veloc Up (ft/s) = 12.51
 HGL Dn (ft) = 160.60
 HGL Up (ft) = 161.72
 Hw Elev (ft) = 163.45
 HwD (ft) = 1.53
 Flow Regime = Inlet Control

Embankment
 Top Elevation (ft) = 163.00
 Top Width (ft) = 38.00
 Crest Width (ft) = 60.00



Designed to pass the 10 year storm

CULVERT #0

P/N 2012-00830-6F

Sheet 9 of 13



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 Fax: (864) 235-9299

GRAPHIC SCALE

1 inch = feet

DRAWN BY: LHB
 DATE: 20Nov2014
 EPC PROJECT NO.: 1317

PROPOSED BOX CULVERT 0

ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.

9

Channel Report

Hydralow Express Extension for AutoCAD/Civil 3D® by Autodesk, Inc.

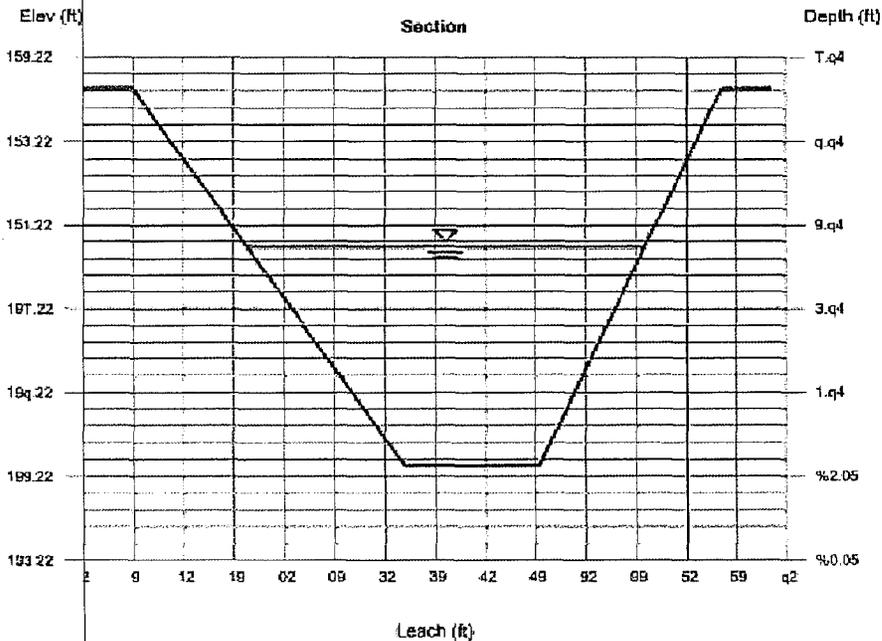
Monday, Nov 11 2014

CHANNEL 1

Trapezoidal
Bottom Width (ft) = 13.42
Side Slopes (z:1) = 3.22, 0.22
Motal Depth (ft) = 1.22
Invert Elev (ft) = 199.05
Slope (G) = 2.14
N%-value = 2.209

Calculations
Compute by: Vnown-K
Vnown K (cfs) = 503.22

Highlighted
Depth (ft) = 9.00
K (cfs) = 503.22
Area (sbf) = 130.2q
-stocity (ft/s) = 4.19
Wetted /erim (ft) = 41.9Q
Crit Depth, P_c (ft) = 3.4q
Mop Width (ft) = 3T.92
EYG (ft) = 9.52



Culvert Report

Hydralow Express Extension for AutoCAD/Civil 3D® by Autodesk, Inc.

Tuesday, Nov 11 2014

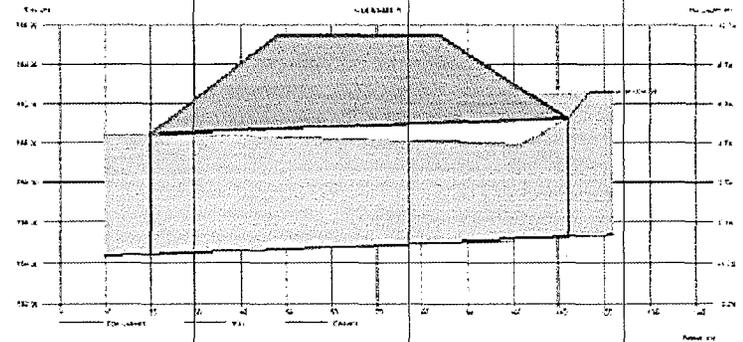
CULVERT 1

Invert Elev Dn (ft) = 154.50
Pipe Length (ft) = 92.00
Slope (%) = 0.83
Invert Elev Up (ft) = 155.26
Rise (in) = 72.0
Shape = Box
Span (in) = 72.0
No. Barrels = 2
n-Value = 0.013
Culvert Type = Rectangular Concrete
Culvert Entrance = Tapered inlet throat
Coeff. K,M,o,Y,k = 0.475, 0.667, 0.0179, 0.97, 0.2

Embankment
Top Elevation (ft) = 165.50
Top Width (ft) = 38.00
Crest Width (ft) = 60.00

Calculations
Qmin (cfs) = 683.00
Qmax (cfs) = 683.00
Tailwater Elev (ft) = Crown

Highlighted
Qtotal (cfs) = 683.00
Qpipe (cfs) = 683.00
Coverlap (cfs) = 0.00
Veloc Dn (ft/s) = 9.49
Veloc Up (ft/s) = 12.25
HGL Dn (ft) = 160.50
HGL Up (ft) = 159.91
Hw Elev (ft) = 162.67
Hw/D (ft) = 1.23
Flow Regime = Inlet Control



Designed to pass the 10 year storm

P/N 2012-00830-6F

Sheet 10 of 13



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Phone: (864) 271-3040
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GRAPHIC SCALE

1 inch = feet

DRAWN BY: LHB
DATE: 20Nov2014
EPC PROJECT NO.: 1317

PROPOSED BOX CULVERT 1

ASSEMBLY STREET
KROGER
RICHLAND COUNTY

SHEET NO.

10

Channel Report

Hydraulics Express Extension for AutoCAD® AutoCAD® Civil 3D® by Autodesk, Inc.

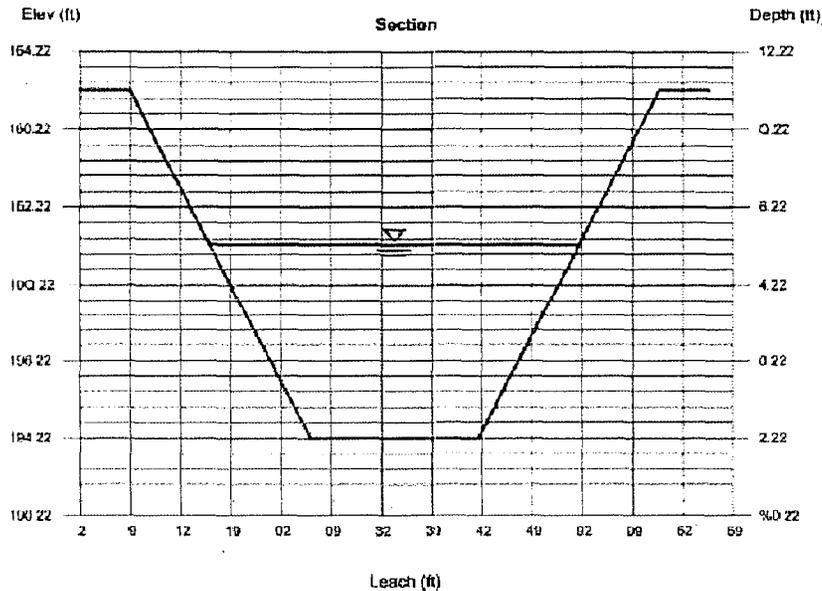
Monday, Nov 11 02:14

CHANNEL 2

Trapezoidal
 Bottom Width (ft) = 16.72
 Side Slopes (z:1) = 0.22, 0.22
 Metal Depth (ft) = 1.22
 Invert Elev (ft) = 194.22
 Slope (S) = 2.14
 N%-value = 2.209

Calculations
 Compute by: V_{known} K
 V_{known} K (cfs) = 603.22

Highlighted
 Depth (ft) = 9.24
 K (cfs) = 603.22
 Area (sqft) = 134.17
 Velocity (ft/s) = 9.26
 Wetted Perim (ft) = 37.04
 Crit Depth, P_c (ft) = 3.08
 Mop Width (ft) = 36.06
 EYG (ft) = 9.44



Culvert Report

Hydraulics Express Extension for AutoCAD® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Nov 11 02:14

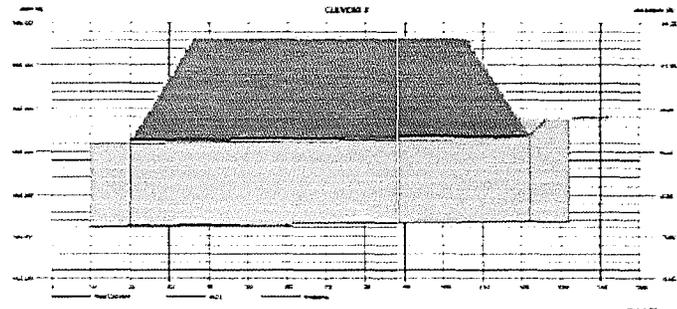
CULVERT 2

Invert Elev Dn (ft) = 163.72
 Pipe Length (ft) = 120.22
 Slope (%) = 2.09
 Invert Elev Up (ft) = 154.22
 Rise (in) = 70.2
 Shape = Box
 Span (in) = 70.2
 No. Barrels = 0
 n-Value = 2.213
 Culvert Type = Rectangular Concrete
 Culvert Entrance = Mapped Inlet Throat
 Coeff. T,K,c,Y,k = 2.475, 2.667, 2.2179, 2.97, 2.0

Embankment
 Mop Elevation (ft) = 167.22
 Mop Width (ft) = 69.22
 Crest Width (ft) = 62.22

Calculations
 Q_{min} (cfs) = 683.22
 Q_{max} (cfs) = 683.22
 Mailwater Elev (ft) = Normal

Highlighted
 Q_{total} (cfs) = 683.22
 Q_{pipe} (cfs) = 683.22
 Covertop (cfs) = 2.22
 Veloc Dn (ft/s) = 9.75
 Veloc Up (ft/s) = 9.76
 HGL Dn (ft) = 159.54
 HGL Up (ft) = 159.83
 Hw Elev (ft) = 161.40
 Hw/D (ft) = 1.04
 Flow Regime = Inlet Control



Designed to pass the 10 year storm

P/N 2012-00830-6F

Sheet 11 of 13



GRAPHIC SCALE

1 inch = feet

Post Office Box 3744
 Greenville, SC 29608
 Phone: (864) 271-3040
 Fax: (864) 235-9289

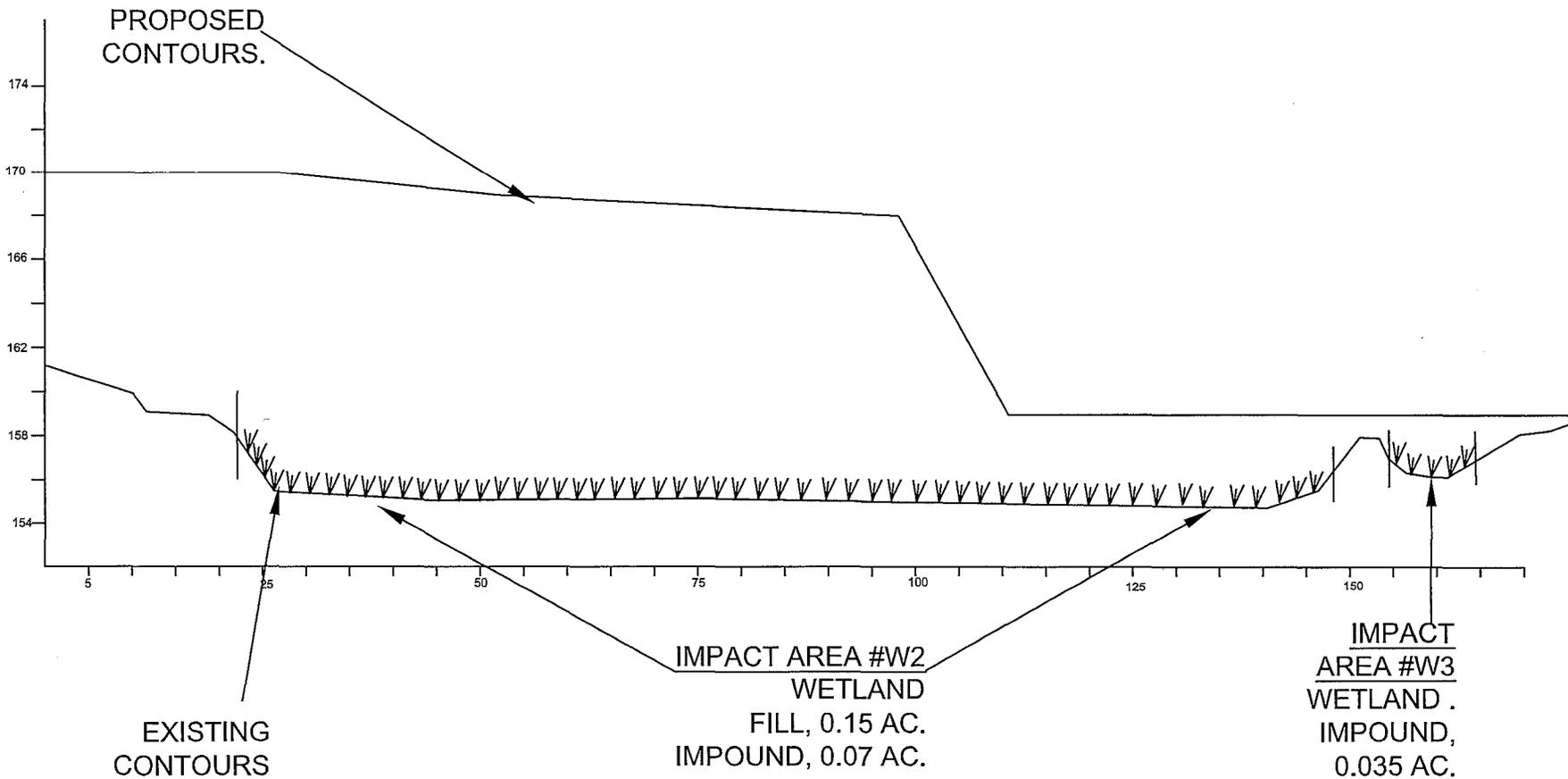
DRAWN BY: LHB
 DATE: 20Nov2014
 EPC PROJECT NO.: 1317

PROPOSED BOX CULVERT 2

ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.

11



P/N 2012-00830-6F

Sheet 12 of 13



GRAPHIC SCALE

1 inch = feet

Post Office Box 3744
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Fax: (864) 235-6299

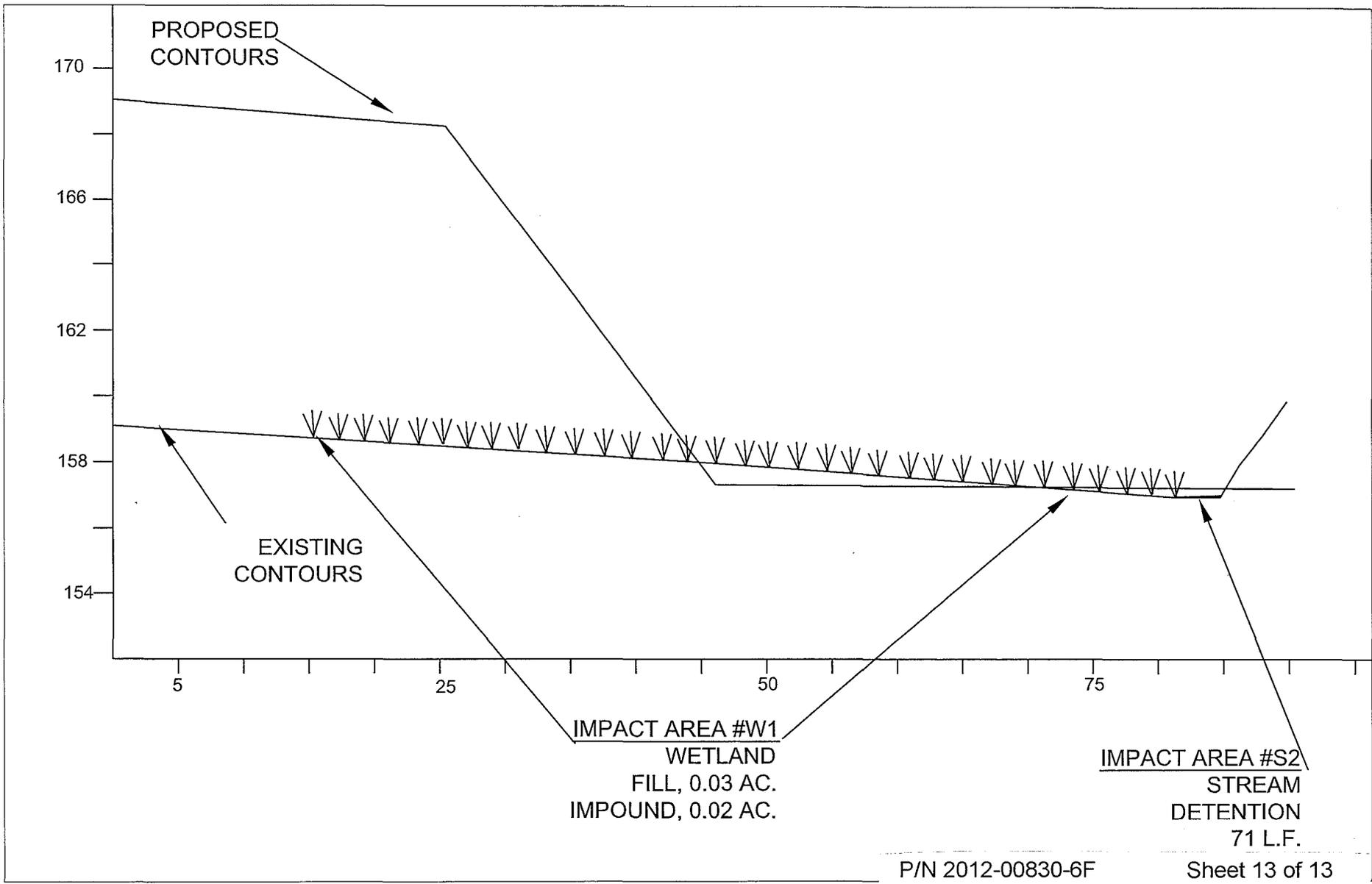
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DATE:	20NOV2014
EPC PROJECT NO.:	1317

W2 AND W3 CROSS SECTION

ASSEMBLY STREET
KROGER
RICHLAND COUNTY

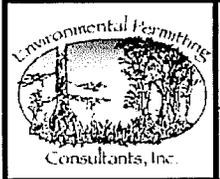
SHEET NO.

12



P/N 2012-00830-6F

Sheet 13 of 13



GRAPHIC SCALE	
1 inch = feet	
Post Office Box 3744 Greenville, SC 29608 Phone: (864) 271-3040 Fax: (864) 235-9299	DRAWN BY: LHB DATE: 20NOV2014 EPC PROJECT NO.: 1317

W1 AND s2 CROSS SECTION
 ASSEMBLY STREET
 KROGER
 RICHLAND COUNTY

SHEET NO.
13