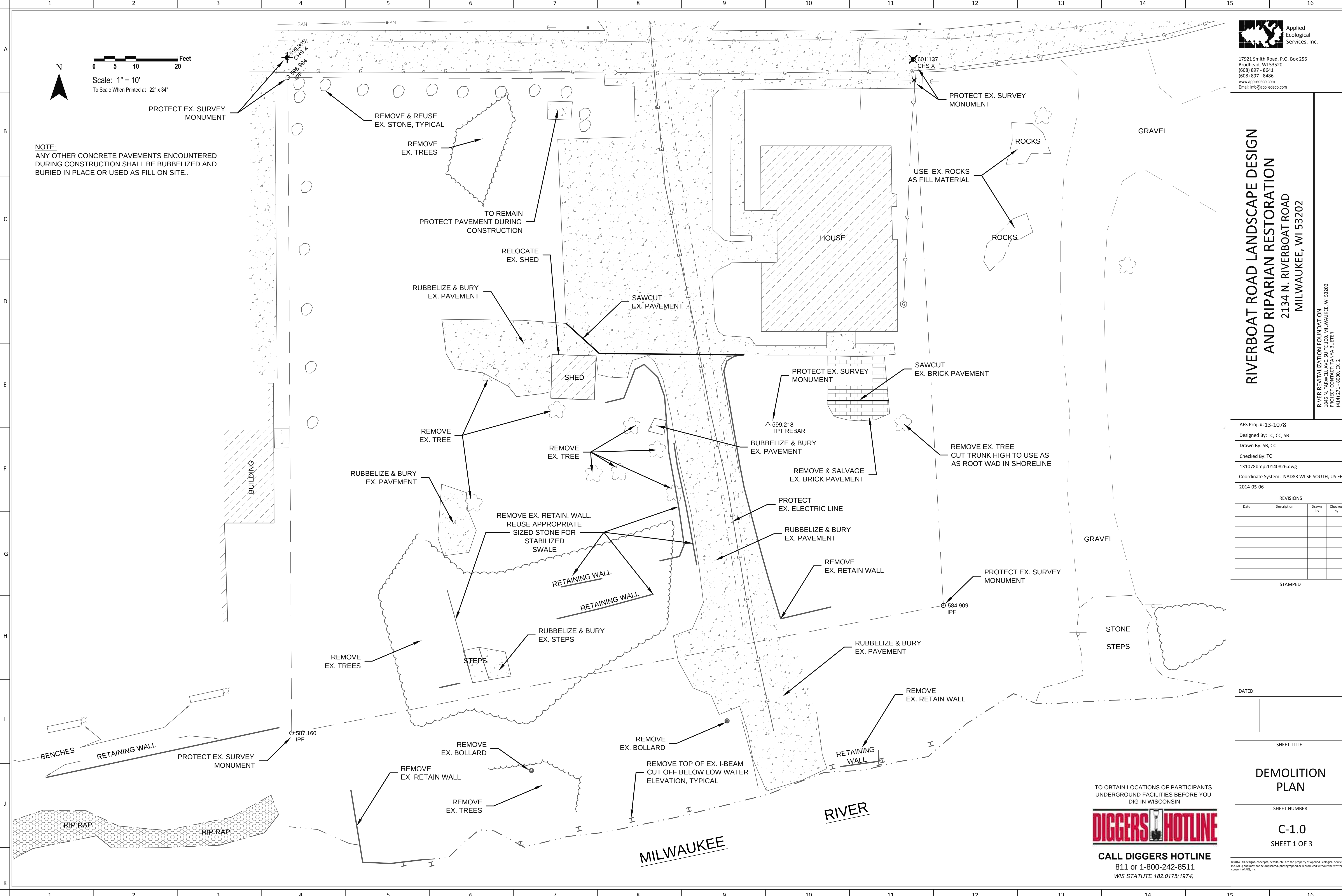




Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897 - 8641
www.appliedeco.com
Email: info@appliedeco.com

**RIVERBOAT ROAD LANDSCAPE DESIGN
AND RIPARIAN RESTORATION**
2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

RIVER REVITALIZATION FOUNDATION
1500 N. RIVERBOAT ROAD, SUITE 200
MILWAUKEE, WI 53202
PROJECT CONTACT: TANYA BUTLER
(414) 271 - 8030, EX. 2
tbutler@riverrevitalizationfoundation.org

AES Proj. #: 13-1078

Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
131078bmp20140826.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

STAMPED

DATED: _____

SHEET TITLE

**DEMOLITION
PLAN**

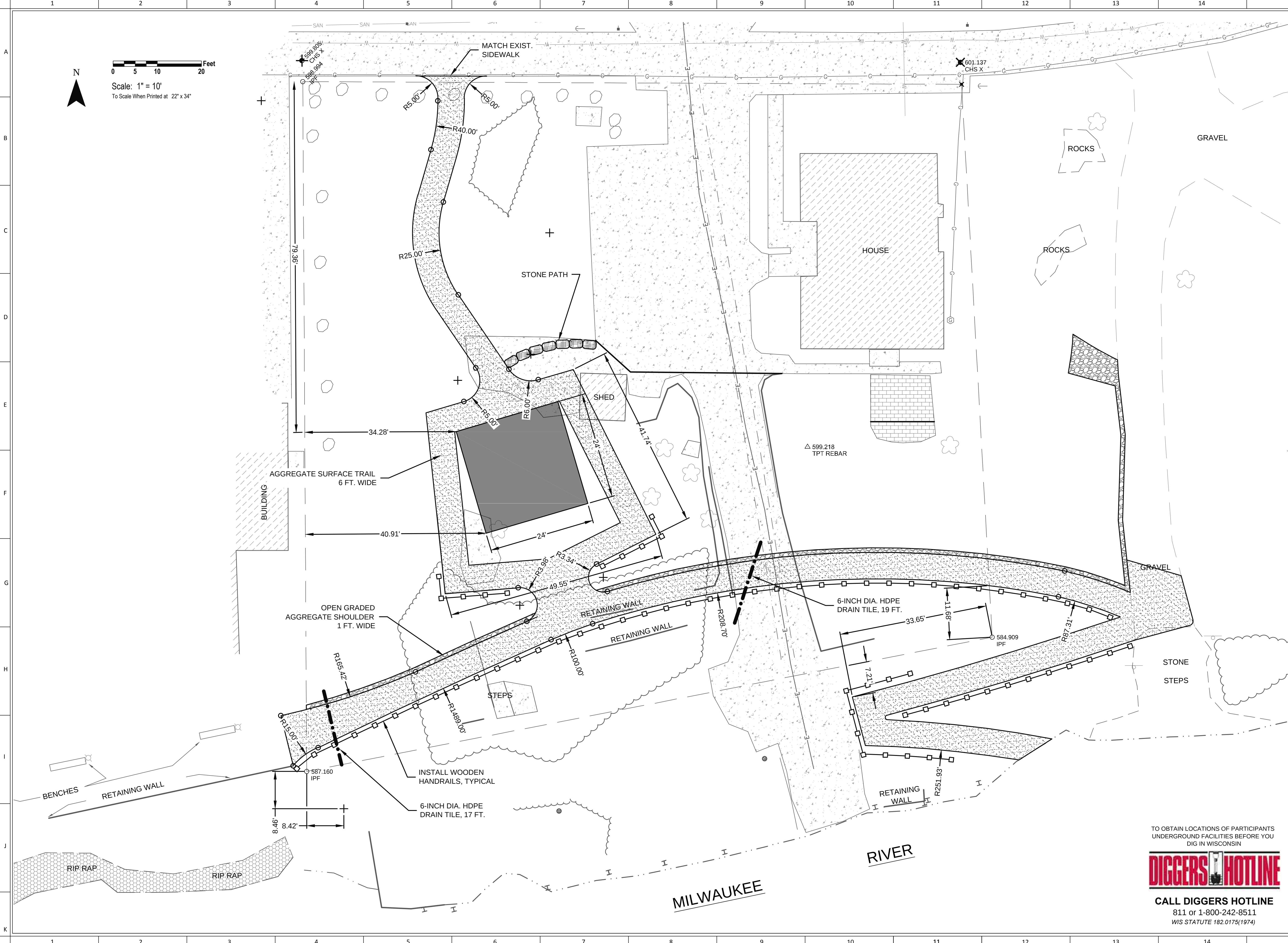
SHEET NUMBER

C-1.0
SHEET 1 OF 3

TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)



Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897-8641
(608) 897-8486
www.appliedeco.com
Email: info@appliedeco.com

RIVERBOAT ROAD LANDSCAPE DESIGN AND RIPARIAN RESTORATION

2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

AES Proj. #: 13-1078
Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
131078bmp20140826.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

STAMPED

DATED: _____

SHEET TITLE

LAYOUT PLAN

SHEET NUMBER

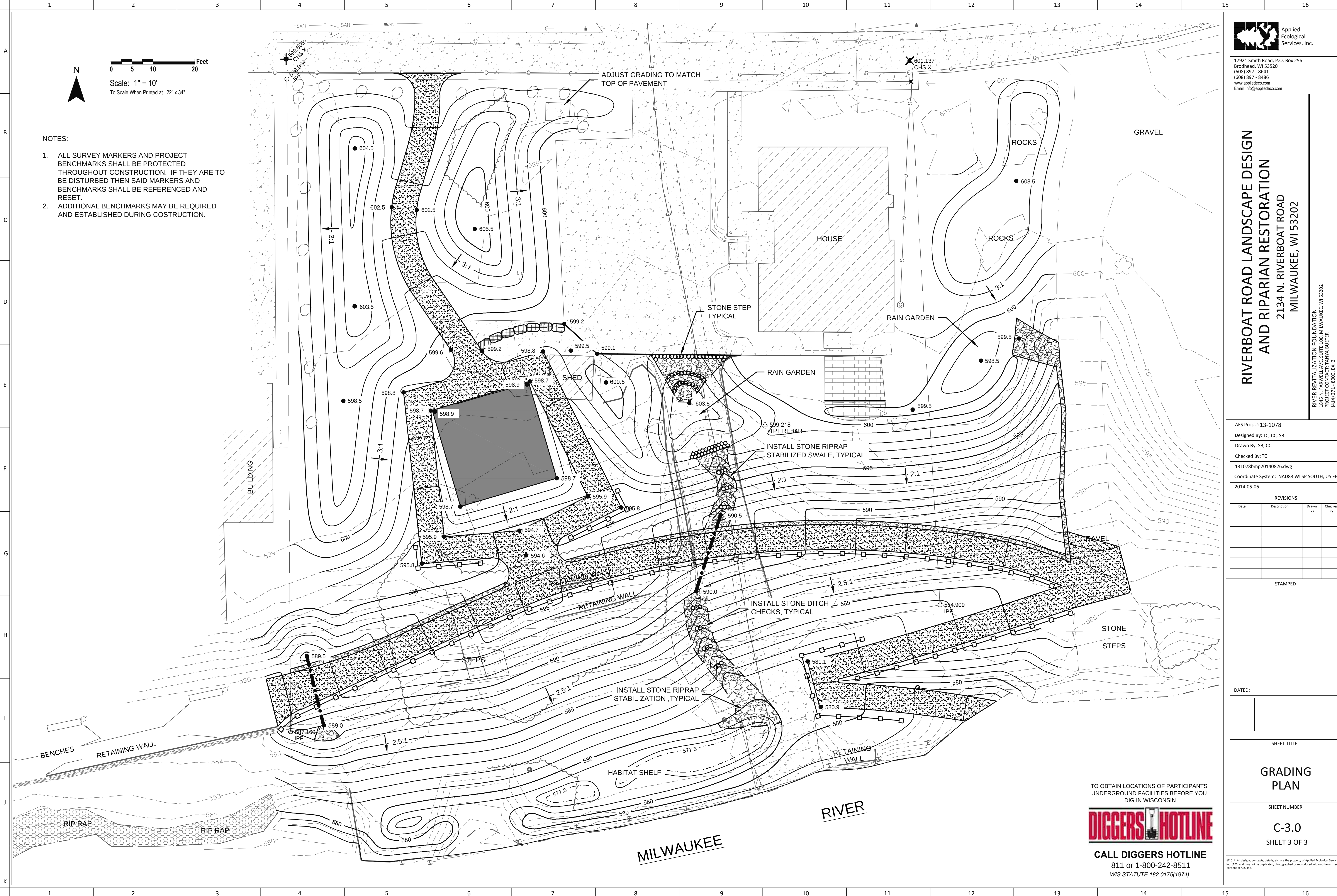
C-2.0

SHEET 2 OF 3

TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN

CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)

©2014. All designs, concepts, details, etc. are the property of Applied Ecological Services, Inc. (AES) and may not be duplicated, photographed or reproduced without the written consent of AES, Inc.



- NOTES:
1. ALL SURVEY MARKERS AND PROJECT BENCHMARKS SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. IF THEY ARE TO BE DISTURBED THEN SAID MARKERS AND BENCHMARKS SHALL BE REFERENCED AND RESET.
 2. ADDITIONAL BENCHMARKS MAY BE REQUIRED AND ESTABLISHED DURING COSTRUCTION.

Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brookfield, WI 53005
(608) 897-8641
www.appliedeco.com
Email: info@appliedeco.com

RIVERBOAT ROAD LANDSCAPE DESIGN
AND RIPARIAN RESTORATION
2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

AES Proj. #: 13-1078
Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
131078bmp20140826.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

STAMPED

DATED: _____

SHEET TITLE

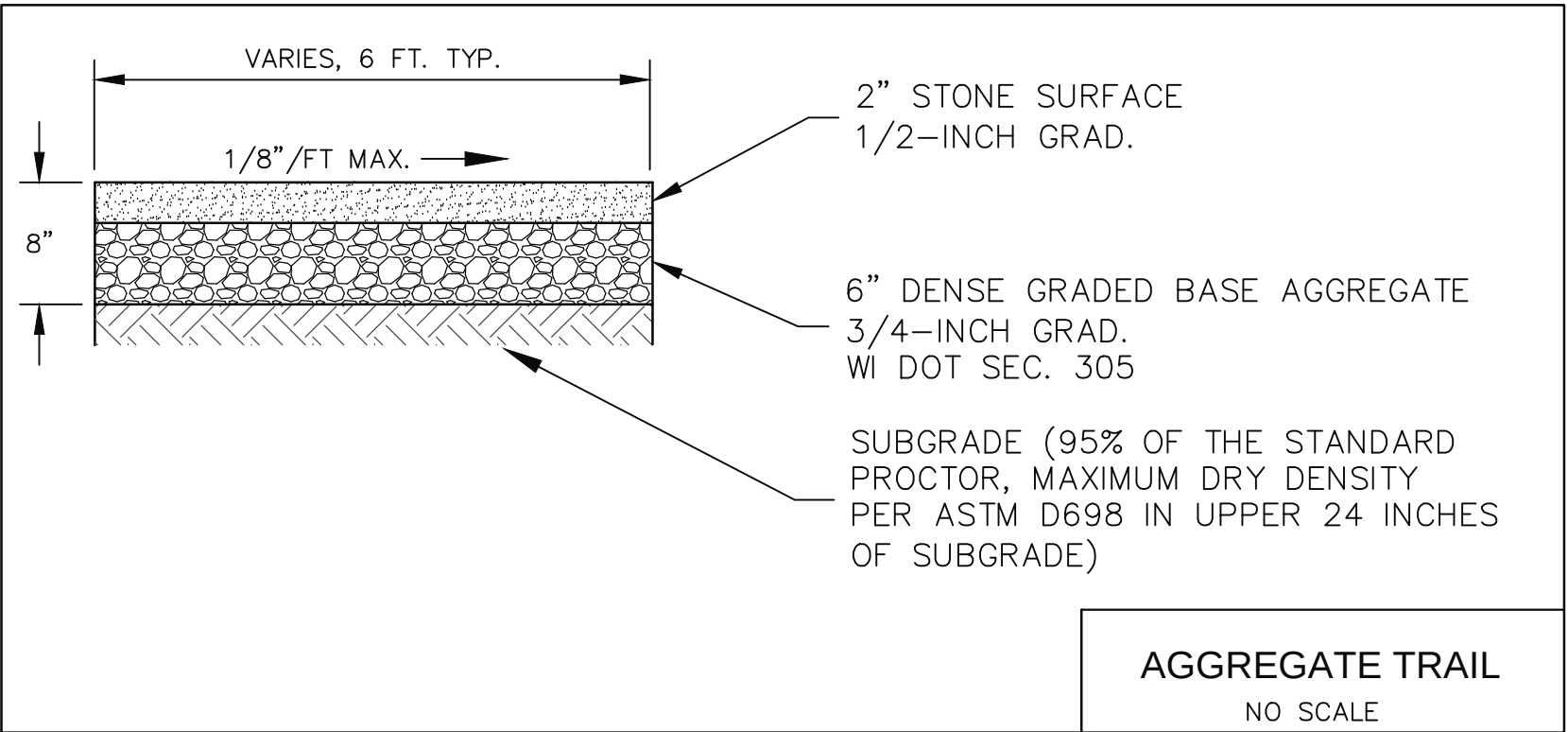
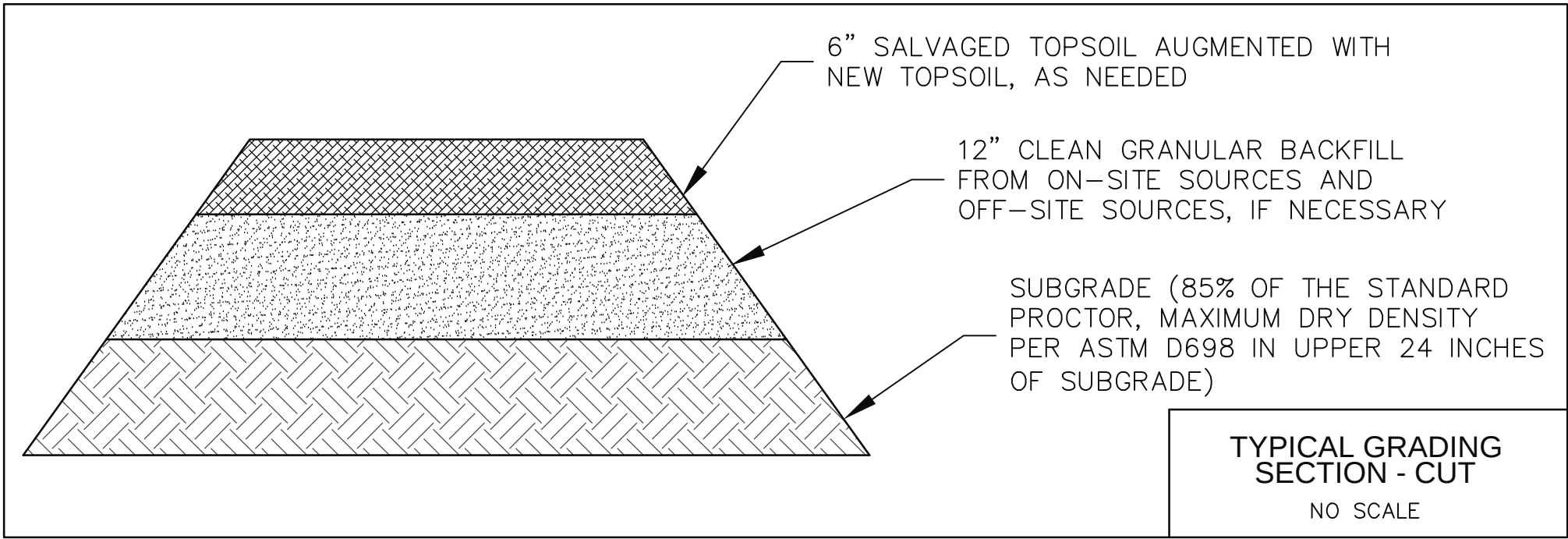
GRADING
PLAN

SHEET NUMBER

C-3.0
SHEET 3 OF 3

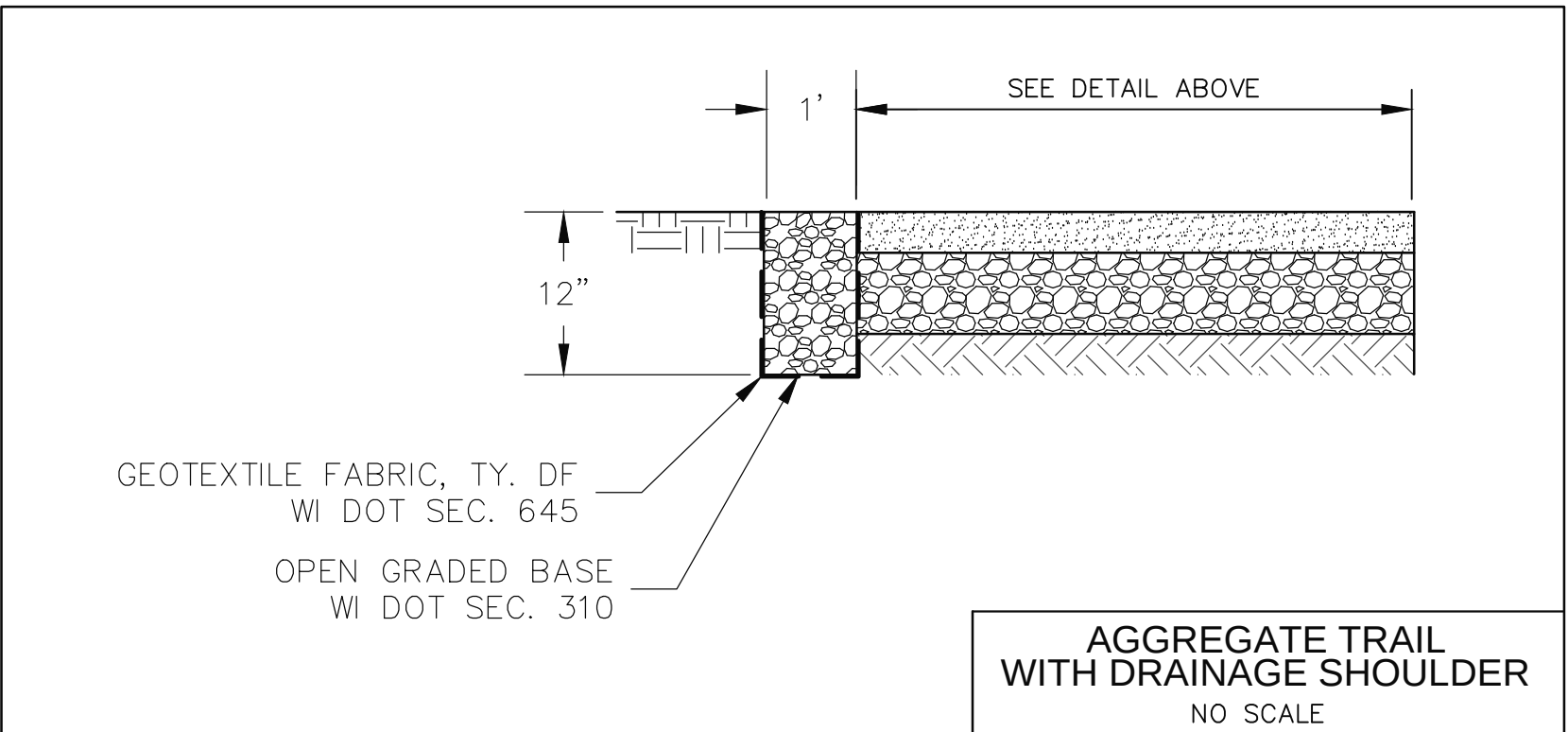
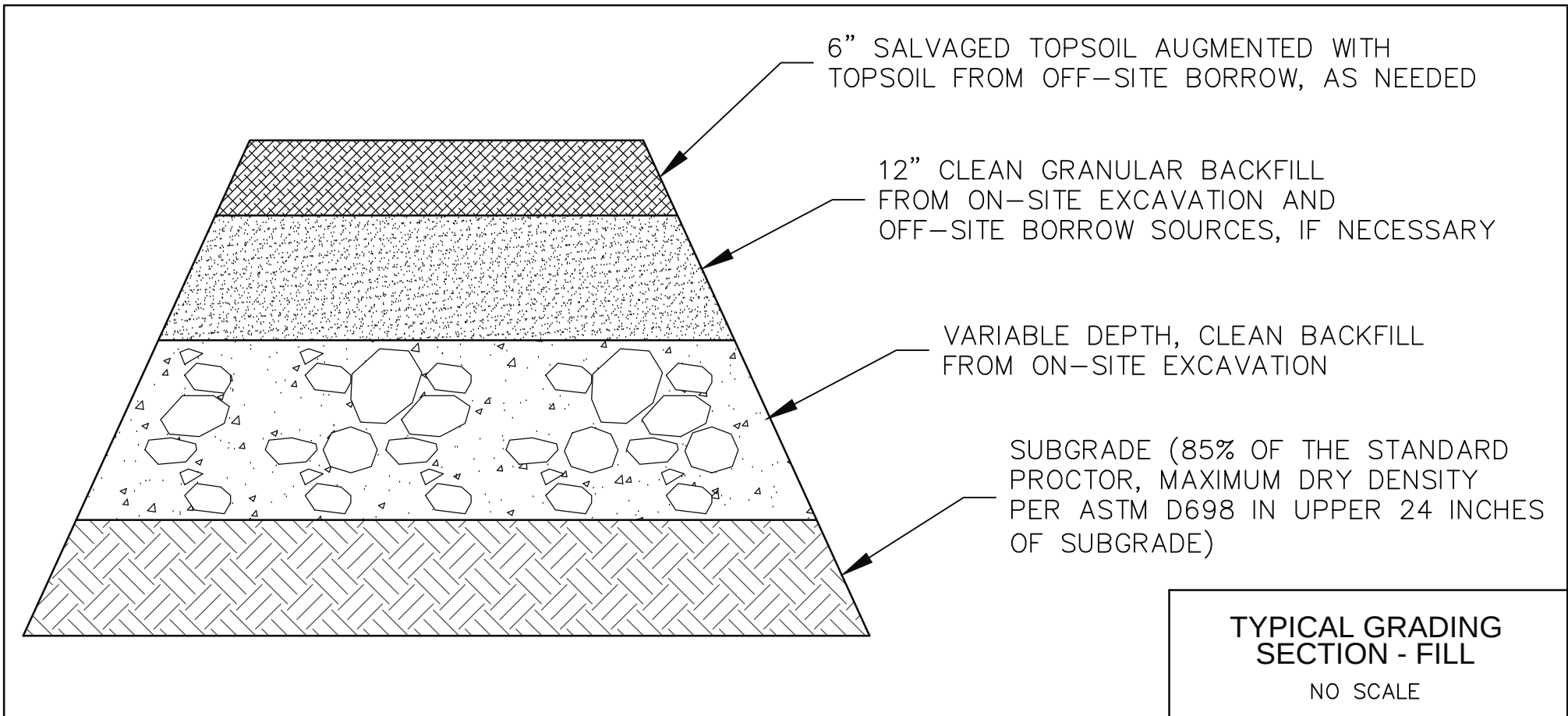
TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN
DIGGERS HOTLINE
CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)

A



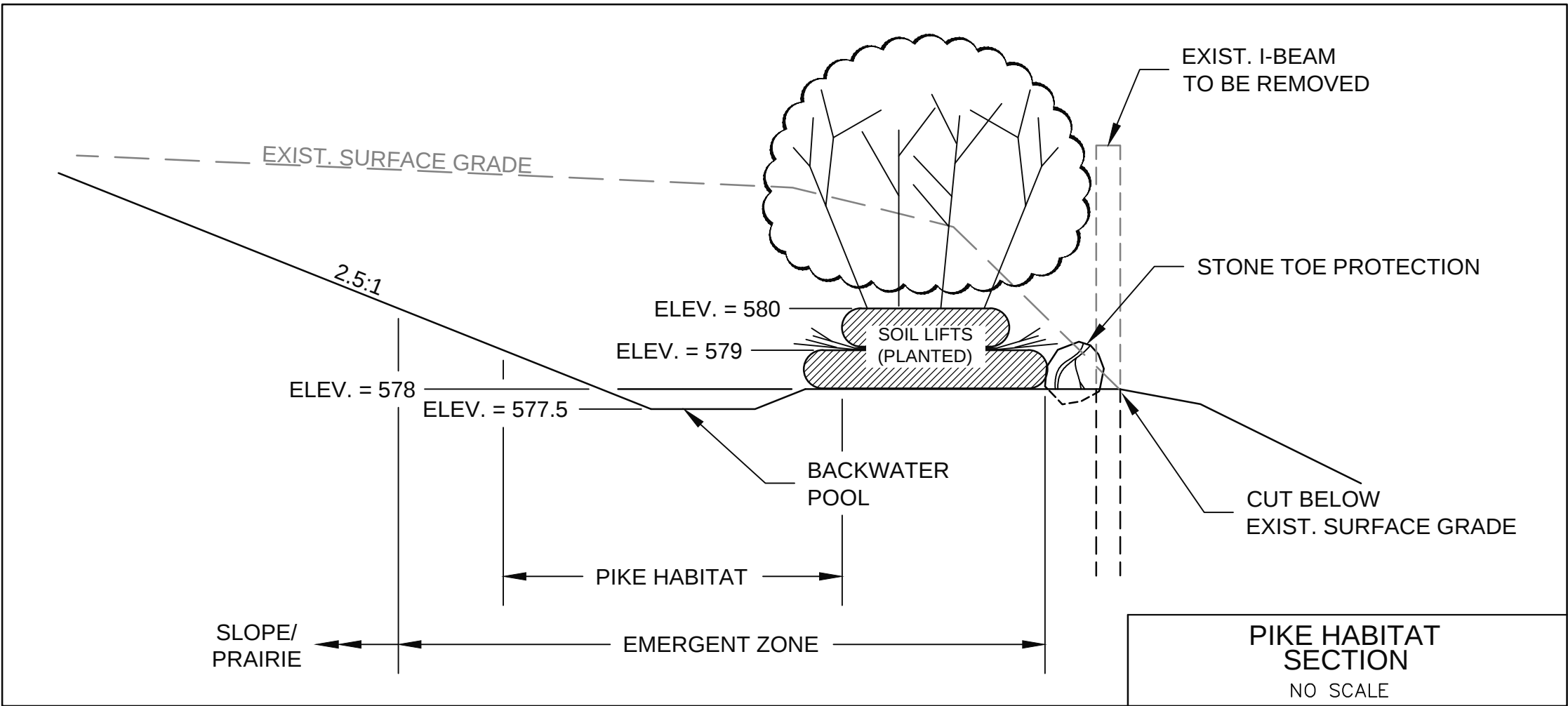
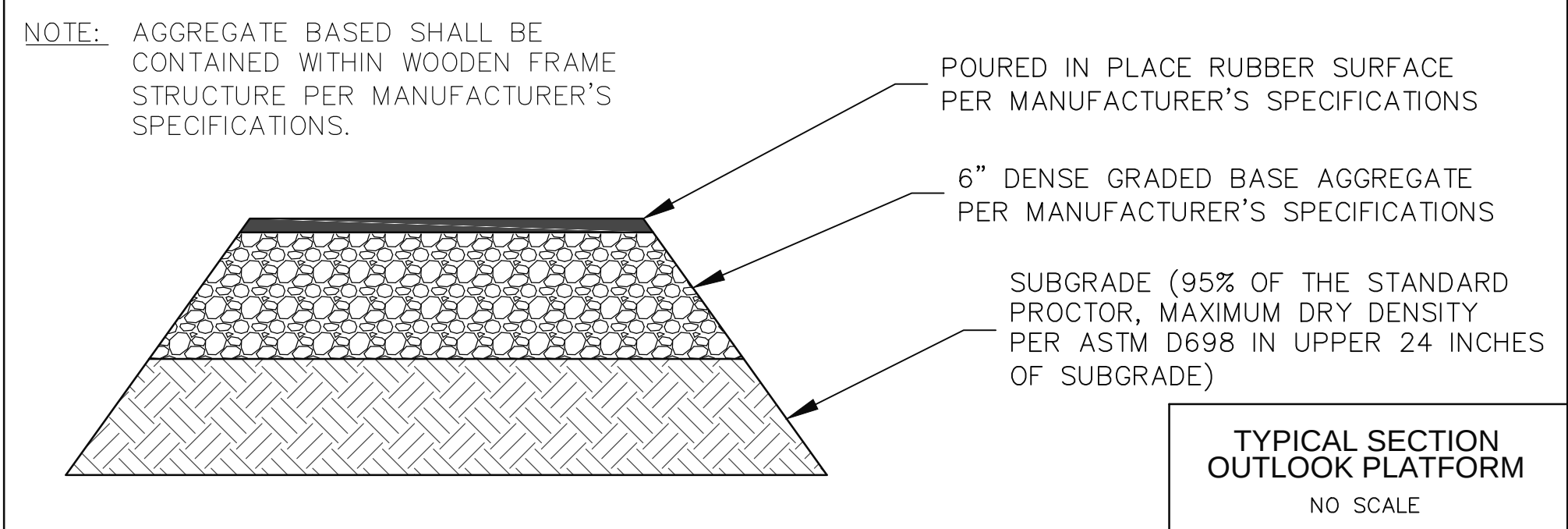
B

C



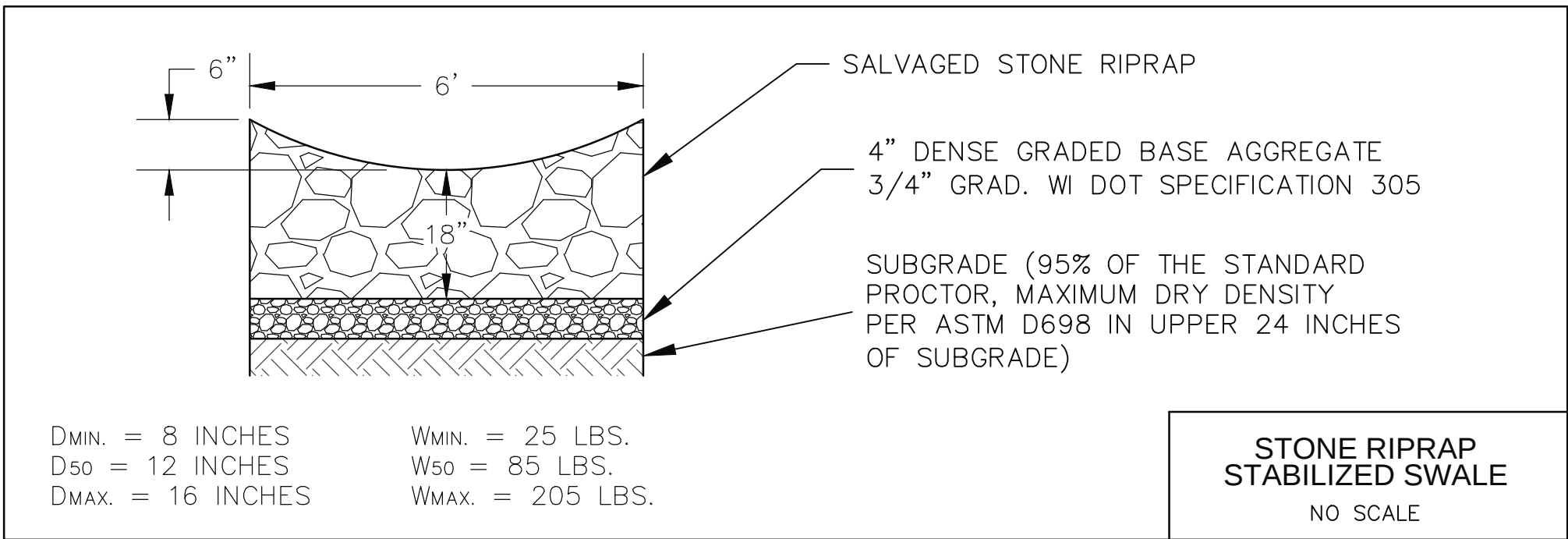
D

E



G

H



J

K



Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897 - 8641
(608) 897 - 8486
www.appliedeco.com
Email: info@appliedeco.com

**RIVERBOAT ROAD LANDSCAPE DESIGN
AND RIPARIAN RESTORATION**
2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

RIVER REVITALIZATION FOUNDATION
1500 N. RIVERBOAT ROAD, MILWAUKEE, WI 53202
PROJECT CONTACT: TANYA BLUTER
(414) 271 - 8000, EX. 2
tbluter@riverrevitalizationfoundation.org

AES Proj. #: 13-1078
Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
13-1078cst20140915_det.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

STAMPED

DATED:

SHEET TITLE

**CONSTRUCTION
DETAILS**

SHEET NUMBER

C-4.0

SHEET 1 OF 1

TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN



CALL DIGGERS HOTLINE

811 or 1-800-242-8511

WIS STATUTE 182.0175(1974)

©2014. All designs, concepts, details, etc. are the property of Applied Ecological Services, Inc. (AES) and may not be duplicated, photographed or reproduced without the written consent of AES, Inc.

A

B

C

D

E

F

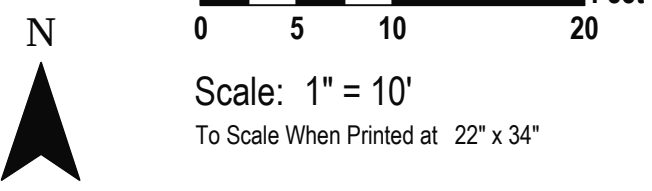
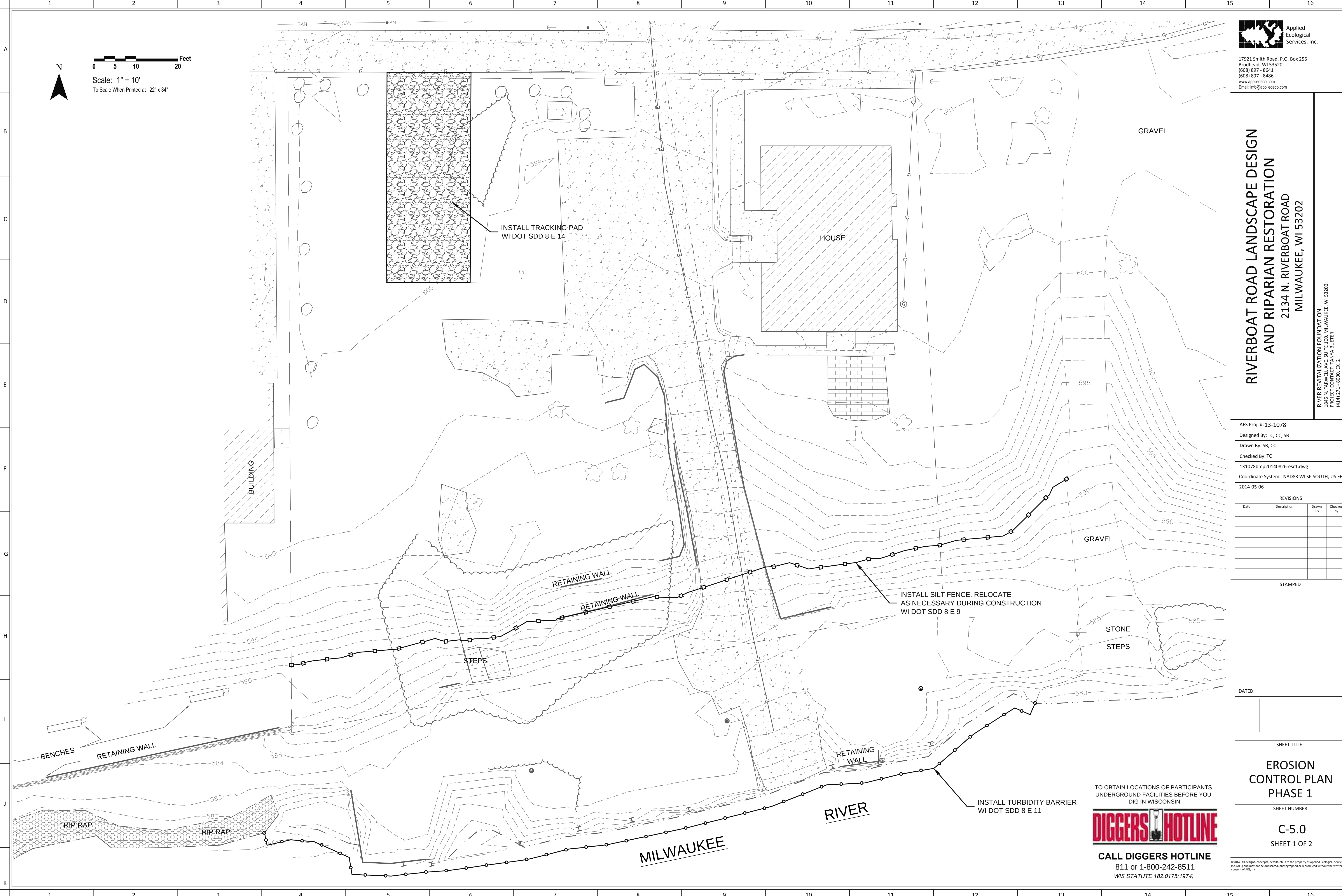
G

H

I

J

K



Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897 - 8641
(608) 897 - 8486
www.appliedeco.com
Email: info@appliedeco.com

**RIVERBOAT ROAD LANDSCAPE DESIGN
AND RIPARIAN RESTORATION**
2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

AES Proj. #: 13-1078
Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
131078bmp20140826-esc1.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

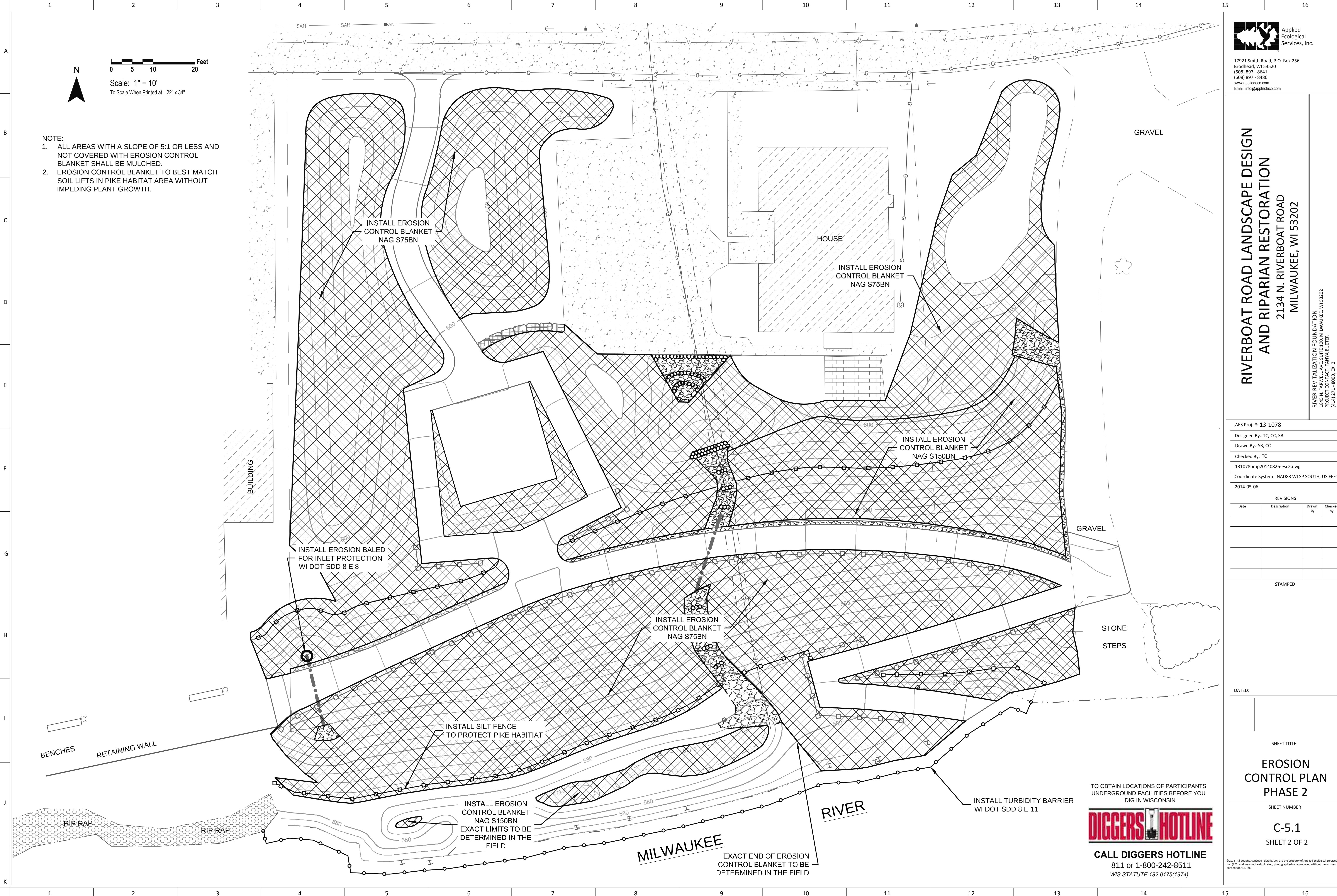
STAMPED

DATED: _____

SHEET TITLE
**EROSION CONTROL PLAN
PHASE 1**
SHEET NUMBER
C-5.0
SHEET 1 OF 2

TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN
DIGGERS HOTLINE
CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)

©2014. All designs, concepts, details, etc. are the property of Applied Ecological Services, Inc. (AES) and may not be duplicated, photographed or reproduced without the written consent of AES, Inc.



17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897 - 8641
(608) 897 - 8486
www.appliedeco.com
Email: info@appliedeco.com

RIVERBOAT ROAD LANDSCAPE DESIGN AND RIPARIAN RESTORATION

2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

RIVER REVITALIZATION FOUNDATION
PROJECT CONTACT: TANYA BLUETTER
(414) 271 - 8000, EX. 2
tblueter@riverrevitalizationfoundation.org

AES Proj. #: 13-1078

Designed By: TC, CC, SB

Drawn By: SB, CC

Checked By: TC

131078bmp20140826-esc2.dwg

Coordinate System: NAD83 WI SP SOUTH, US FEET

2014-05-06

REVISIONS

Date	Description	Drawn by	Checked by

STAMPED

DATED:

SHEET TITLE

EROSION CONTROL PLAN PHASE 2

SHEET NUMBER

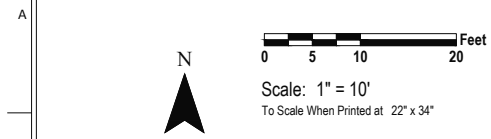
C-5.1
SHEET 2 OF 2

TO OBTAIN LOCATIONS OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE YOU
DIG IN WISCONSIN



CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)

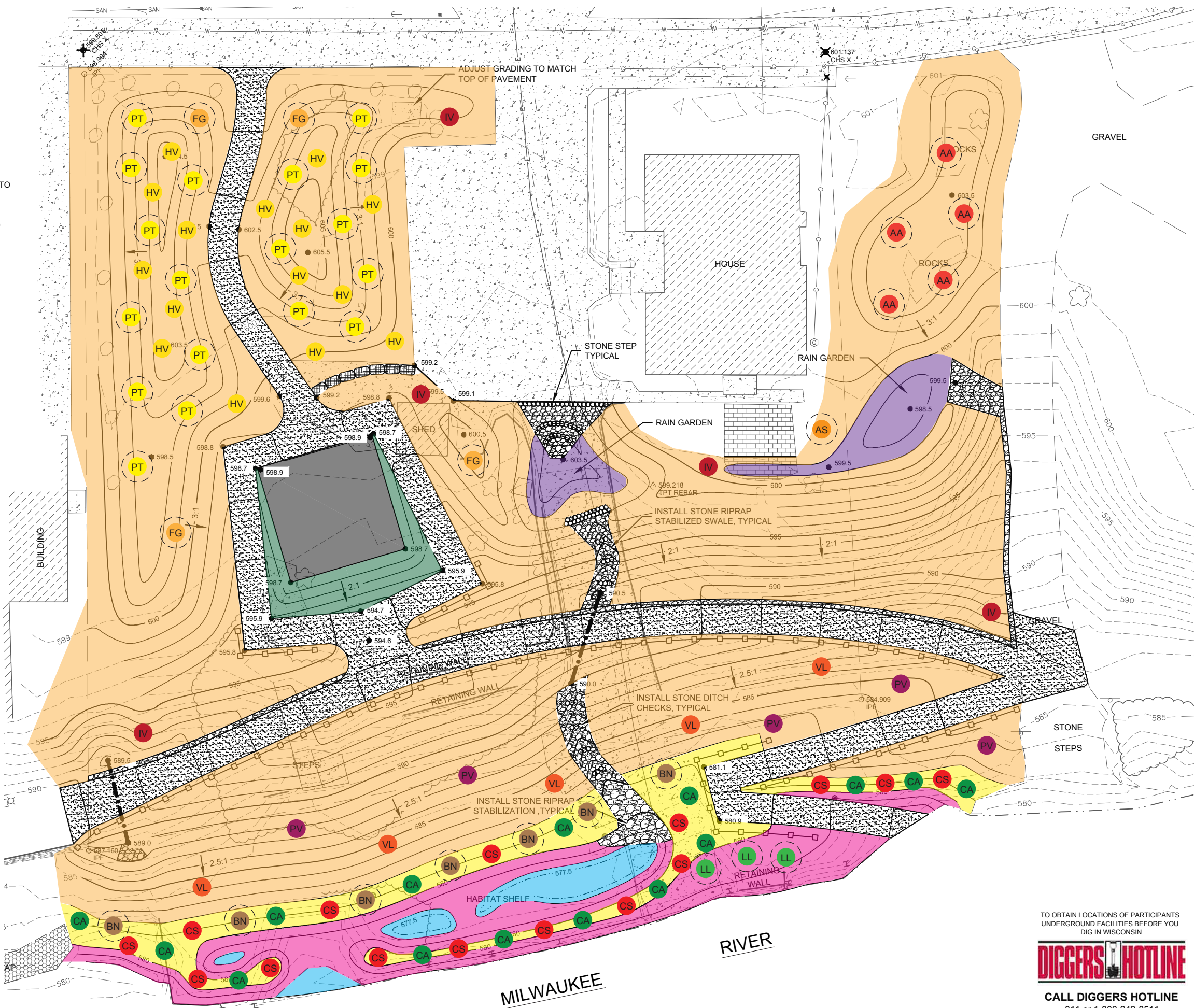
©2014. All designs, concepts, details, etc. are the property of Applied Ecological Services, Inc. (AES) and may not be duplicated, photographed or reproduced without the written consent of AES, Inc.



- NOTES:
1. ALL SURVEY MARKERS AND PROJECT BENCHMARKS SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. IF THEY ARE TO BE DISTURBED THEN SAID MARKERS AND BENCHMARKS SHALL BE REFERENCED AND RESET.
 2. ADDITIONAL BENCHMARKS MAY BE REQUIRED AND ESTABLISHED DURING COSTRUCTION.

PLANTING PLAN:

- CA BUTTONBUSH
- CS RED OSIER DOGWOOD
- HV WITCH-HAZEL
- IV WINTERBERRY
- PV CHOKECHERRY
- VL NANNYBERRY
- AS SUGAR MAPLE
- AA DOWNY SERVICEBERRY
- BN RIVER BIRCH
- FG AMERICAN BEECH
- LL TAMARACK
- PT QUAKING ASPEN
- OVERLOOK PLUGS
- RAIN GARDEN PLUGS
- DRY PRAIRIE SEED MIX
- WET PRAIRIE SEED MIX
- EMERGENT PLUGS
- HABITAT PLUGS



Applied Ecological Services, Inc.
17921 Smith Road, P.O. Box 256
Brodhead, WI 53520
(608) 897-8641
(608) 897-8486
www.appliedeco.com
Email: info@appliedeco.com

RIVERBOAT ROAD LANDSCAPE DESIGN AND RIPARIAN RESTORATION
2134 N. RIVERBOAT ROAD
MILWAUKEE, WI 53202

RIVER REVITALIZATION FOUNDATION
1845 N. FARWELL AVE. SUITE 100, MILWAUKEE, WI 53202
PROJECT CONTACT: TANYA BUETER
(414) 271-8800, EX. 2
tbueter@riverrevitalizationfoundation.org

AES Proj. #: 13-1078
Designed By: TC, CC, SB
Drawn By: SB, CC
Checked By: TC
131078bmp20140826.dwg
Coordinate System: NAD83 WI SP SOUTH, US FEET
2014-05-06

REVISIONS			
Date	Description	Drawn by	Checked by

STAMPED

DATED:

SHEET TITLE

PLANTING PLAN

SHEET NUMBER

L-1.0

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
811 or 1-800-242-8511
WIS STATUTE 182.0175(1974)

Date: Updated 24 Sept 14 by srz/wcc

Scientific name	Common Name	Oz./Acre	Total lbs./Acre
Grasses & Sedges:			
<i>Andropogon gerardii</i>	Big bluestem	60.6	
<i>Carex vulpinoidea</i>	Brown fox sedge	1.5	
<i>Leersia oryzoides</i>	Rice cut grass	1.9	
<i>Scirpus atrovirens</i>	Dark green rush	1.0	
<i>Panicum virgatum</i>	Switch grass	43.6	
Total Grasses & Sedges		108.6	6.8
Forbs:			
<i>Asclepias incarnata</i>	Swamp milkweed	5.8	
<i>Aster novae-angliae</i>	New England aster	1.4	
<i>Echinacea purpurea</i>	Purple coneflower	7.9	
<i>Eryngium yuccifolium</i>	Rattlesnake master	9.8	
<i>Helenium autumnale</i>	Sneezeweed	0.7	
<i>Lobelia cardinalis</i>	Cardinal flower	0.2	
<i>Penstemon digitalis</i>	Foxglove Beard tongue	0.4	
<i>Physostegia virginiana</i>	False dragonhead	4.2	
<i>Ratibida pinnata</i>	Yellow coneflower	2.1	
<i>Rudbeckia hirta</i>	Black-eyed Susan	1.2	
<i>Silphium laciniatum</i>	Compass plant	37.3	
<i>Solidago riddellii</i>	Riddell's goldenrod	1.4	
Total Forbs		72.4	4.5
Total Grasses, Sedges, Forbs		181.0	11.3
Temporary Cover Crop:			
<i>Avena sativa</i>	Common oats	320.0	20.0
<i>Elymus canadensis</i>	Canada wild rye	32.0	2.0

Date: Updated 29 Sept 14 by srz/wcc

Scientific name	Common Name	Oz./Acre	Total lbs./Acre
Grasses:			
<i>Andropogon scoparius</i>	Little bluestem	198.0	
<i>Bouteloua curtipendula</i>	Side oats gramma	55.8	
Total Grasses		253.8	15.9
Forbs:			
<i>Asclepias tuberosa</i>	Butterfly weed	19.9	
<i>Aster laevis</i>	Smooth blue aster	3.6	
<i>Coreopsis lanceolata</i>	Sand coreopsis	8.7	
<i>Echinacea pallida</i>	Pale purple coneflower	41.8	
<i>Monarda fistulosa</i>	Wild bergamot	0.9	
<i>Penstemon digitalis</i>	Foxglove Beard tongue	0.8	
<i>Petalostemum purpurea</i>	Purple prairie clover	8.7	
<i>Ratibida pinnata</i>	Yellow coneflower	2.8	
<i>Rudbeckia hirta</i>	Black-eyed Susan	1.6	
<i>Silphium integrifolium</i>	Rosinweed	8.7	
<i>Solidago rigida</i>	Stiff goldenrod	1.5	
<i>Tradescantia ohiensis</i>	Spiderwort	17.6	
Total Forbs		99.0	6.2
Total Grasses & Forbs		352.8	22.0
Temporary Cover Crop:			
<i>Lolium multiflorum</i>	Annual Ryegrass	160.0	10.0

PLANTING SCHEDULE - SHORELINE AND HABITAT RESTORATION								
Code	Scientific Name	Common Name	Size	Root	Cond.	Qty.	Spacing	Notes
	DECIDUOUS TREES							
BN	<i>Betula nigra</i>	River birch	2" Cal.	B&B or Container	Full	7	AS	approx 20' O.C., offset from rootwads
	SHRUBS							
CA	<i>Cephalanthus occidentalis</i>	Buttonbush	3' Ht.	Container	Full	15	AS	stagger w/ dogwood approx 4' O.C.
RC	<i>Cornus sericea</i>	Red osier dogwood	3' Ht.	Container	Full	15	AS	stagger w/ buttonbush approx 4' O.C.
	PERENNIAL PLUGS - EMERGENT							
AC	<i>Acorus calamus</i>	Sweet flat	32 Plug	Container	Full	125	2' O.C.	0" to 6" below NWL
CV	<i>Carex vulpinoidea</i>	Brown fox sedge	32 Plug	Container	Full	125	2' O.C.	6" above to 3" below NWL
IV	<i>Iris virginica</i>	Blue flag iris	32 Plug	Container	Full	125	2' O.C.	6" above to 3" below NWL
SP	<i>Spartina pectinata</i>	Prairie cordgrass	32 Plug	Container	Full	125	1' O.C.	up to 3" below NWL
	PERENNIAL PLUGS - HABITAT							
SV	<i>Scirpus validus</i>	Softstem bulrush	32 Plug	Container	Full	100	2' O.C.	between 1' and 2' below NWL
	AS = AS SHOWN							

PLANTING SCHEDULE - SLOPES, BERMS, OVERLOOK, and RAIN GARDENS								
Code	Scientific Name	Common Name	Size	Root	Cond.	Qty.	Spacing	Notes
	DECIDUOUS TREES							
AS	<i>Acer saccharum</i>	Sugar maple	3" Cal.	B&B or Container	Full	1	AS	This one is meant to be a showy tree, so 3"Cal. if possible, 2" cal. if needed.
AA	<i>Amelanchier arborea</i>	Downy serviceberry	2" Cal.	B&B or Container	Full	5	AS	1" Cal. are acceptable as well, goal is to have stems (multi-stem) at least as tall as a person
FG	<i>Fagus grandifolia</i>	American beech	2" Cal.	B&B or Container	Full	4	AS	1" Cal. are acceptable as well, goal is to have stems at least as tall as a person
LL	<i>Larix laricina</i>	Tamarack	3 Gallon	Container	Full	3	AS	Adjust placement as necessary in field
PT	<i>Populus tremuloides</i>	Quaking aspen	2" Cal.	B&B or Container	Full	18	AS	1" Cal. and multi-stem are acceptable as well, goal is to make a small aspen glade with stems at least as tall as a person
	SHRUBS							
HV	<i>Hemamelis virginiana</i>	American witch-hazel	Gallon	Container	Full	15	AS	
IV	<i>Ilex verticillata</i>	Winterberry	Gallon	Container	Full	5	AS	
PV	<i>Prunus virginiana</i>	Chokecherry	Gallon	Container	Full	5	AS	
VL	<i>Viburnum lentago</i>	Nannyberry	Gallon	Container	Full	5	AS	

								NOTE: Use 1/3 plants in west rain garden (parking lot) and 2/3 plants in east rain garden. Plug through blanket used for this portion of planting. Use mulch if determined necessary in field.
	PERENNIAL PLUGS - RAIN GARDEN							
	<i>Acorus calamus</i>	Sweet flag	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Carex vulpinoidea</i>	Brown fox sedge	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Chelone glabra</i>	Turtlehead	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Iris virginica</i>	Blue flag iris	32 Plug	Container	Full	60	1.5' O.C.	Plant away from shoulders, in LOWEST area of rain garden.
	<i>Liatris spicata</i>	Marsh blazing star	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Mimulus ringins</i>	Monkey flower	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Physostegia virginiana</i>	Obedient plant	32 Plug	Container	Full	30	1.5' O.C.	Intermix with other species throughout.
	<i>Phlox glaberrima</i>	Marsh phlox	32 Plug	Container	Full	15	1.5' O.C.	Intermix with other species throughout.
	<i>Schizachyrium scoparium</i>	Little bluestem	32 Plug	Container	Full	60	1.5' O.C.	Plant along UPPER SHOULDER (outer 2-3') of rain garden.
	PERENNIAL PLUGS - OVERLOOK							NOTE: Mulch planting bed to 3" deep with shredded hardwood mulch. Taper away from plant stems.
	<i>Baptisia alba</i>	White wild indigo	32 Plug	Container	Full	20	6' O.C.	Intermix evenly in the REAR HALF of the planting beds.
	<i>Dalea candida</i>	White prairie clover	32 Plug	Container	Full	60	1.5' O.C.	Intermix EVENLY THROUGHOUT with purple prairie clover and wild lupine.
	<i>Dalea purpurea</i>	Purple prairie clover	32 Plug	Container	Full	60	1.5' O.C.	Intermix EVENLY THROUGHOUT with white prairie clover and wild lupine.
	<i>Eryngium yuccifolium</i>	Rattlesnake master	32 Plug	Container	Full	30	4' O.C.	Intermix evenly throughout the planting beds staying AWAY FROM THE FRONT 1/3 OF THE BEDS.
	<i>Lupinus perennis</i>	Wild lupine	32 Plug	Container	Full	60	1.5' O.C.	Intermix EVENLY THROUGHOUT with white prairie clover and purple prairie clover.
	<i>Sporobolus herterolepis</i>	Prairie dropseed	Quart	Container	Full	90	2' O.C.	Plant these first , EVENLY THROUGHOUT the planting beds. All other species will be intermixed in the remaining space between/among the prairie dropseed.