NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.
2. FULL DEPTH SAWCUT AND REMOVE EXIST. PAVEMENT AND CURB & GUTTER TO ADJUST AND INSTALL STORM SEWER. REPLACE PAVEMENT, CURB & GUTTER.
3. CONTRACTOR SHALL RESTORE ALL OPEN AREAS WITH SOD.

LEGEND

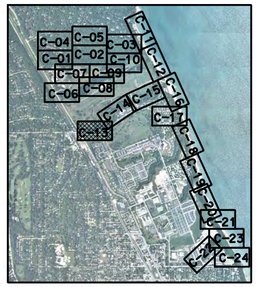
PAVEMENT REMOVE/REPLACE

DETENTION SUMMARY
STORAGE VOLUME = 5.00 AC-FT HWL SURFACE AREA = 41,500 SQ-FT HWL ELEV = 675.0 BOTTOM ELEV = 669.0

ST 1-A	ST 1-1	ST 1-2	ST 1-3	ST 1-4
5' MH TY R.D. W/CLOSED LID RIM = 675.5 IE = 672.29 (S) IE = 669.91 (N,E)	2' IN TY A W/CURB F&G RIM = 673.0 IE = 669.80	5' MH TY R.D. W/CLOSED LID RIM = 673.5 IE = 669.66	5' MH TY A W/CURB F&G RIM = 675.0 IE = 669.34	4' MH TY A W/CLOSED LID & 8" RESTRICTOR PIPE RIM = 675.0 IE = 669.00 SEE SHEET XXX FOR DETAIL

FES 1-1	FES 1-2
30" FLARED END SECTION W/GRATE IE = 669.00	12" FLARED END SECTION W/GRATE IE = 669.00

0 50' 100'
SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DWN BY: DB
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SUBMITTED BY:
PLOT SCALE:
PLOT DATE:
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME: FS506_C-113_SP.dgn
SIZE:

FORT SHERIDAN
SECTION 506

HUTCHINSON RAVINE
RESTORATION PLAN - AREA 1

SHEET IDENTIFICATION
C-13
SHEET 0 OF 0

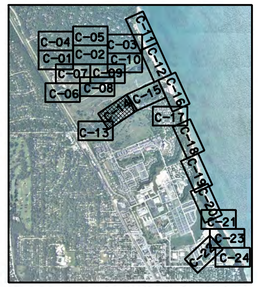
$FILEPATH$

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.

0 50' 100'

SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

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U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DATE: JAN 2013
DWN BY: DB
CKD BY:
SOLICITATION NO.:
SUBMITTED BY:
CONTRACT NO.:
PLOT SCALE:
PLOT DATE: 2/20/2013
FILE NUMBER:
SIZE:
FILE NAME: FS506_C-114_SP.dgn

FORT SHERIDAN
SECTION 506

HUTCHINSON RAVINE
RESTORATION PLAN - AREA 2

SHEET IDENTIFICATION
C-14
SHEET 0 OF 0

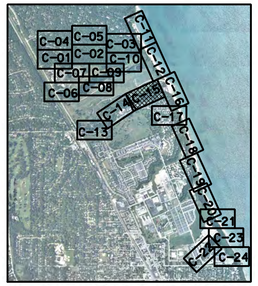
$FILEPATH$

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.

0 50' 100'

SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

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MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

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CKD BY:
SUBMITTED BY:
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FILE NAME: FS506_C-15_SP.dgn
SIZE:
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

HUTCHINSON RAVINE
RESTORATION PLAN - AREA 3

SHEET IDENTIFICATION
C-15
SHEET 0 OF 0

$FILEPATH$

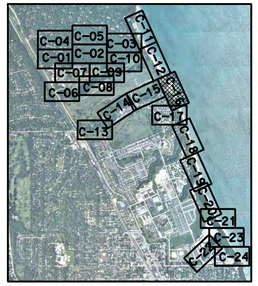
NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.

2. REFER TO SHEET C-XXX FOR BREAKWATER DETAIL.

0 50' 100'

SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	DATE	TRACKING NO.	ACTION

MARK	DESCRIPTION	DATE	TRACKING NO.	ACTION

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DATE: JAN 2013
DWN BY: DB
CKD BY:
SOLICITATION NO.:
SUBMITTED BY:
CONTRACT NO.:
PLOT SCALE:
PLOT DATE: 02/08/2013
FILE NUMBER:
SIZE:
FILE NAME: FS506_C-16_SP.dgn

FORT SHERIDAN
SECTION 506

SHORELINE RESTORATION PLAN - AREA 3

SHEET IDENTIFICATION
C-16
SHEET 0 OF 0

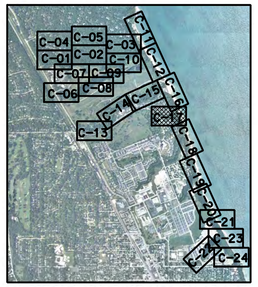
$FILEPATH$

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.
2. REFER TO SHEET C-XX FOR PLUNGE POOL DETAIL.
3. REFER TO SHEET C-XX FOR ARMOR CHANNEL DETAIL.
4. REFER TO SHEET C-XX FOR RIFFLE DETAIL.
5. REFER TO SHEET C-XXX FOR BAFFLE APRON DETAIL.
6. REFER TO SHEET C-XXX FOR SEWER OUTFALL APRON DETAIL.

ST 2-1 INLET STRUCTURE 3'x11'x7' DEEP RIM = 633.5 IE = 626.50 SEE SHEET C-XXX FOR DETAIL	ST 2-2 5' MH TY R.D. W/CLOSED LID RIM = 631.8 IE = 625.30	ST 2-3 4' MH TY A W/CLOSED LID RIM = 625.8 IE = 620.00	ST 2-4 4' MH TY A W/CLOSED LID RIM = 618.0 IE = 612.20	ST 2-5 4' MH TY A W/CLOSED LID RIM = 615.0 IE = 609.20
ST 2-6 4' MH TY A W/CLOSED LID RIM = 611.8 IE = 606.00	ST 2-7 4' MH TY A W/CLOSED LID RIM = 606.0 IE = 600.20	ST 2-8 4' MH TY A W/CLOSED LID RIM = 601.0 IE = 595.20	ST 2-9 4' MH TY A W/CLOSED LID RIM = 595.0 IE = 589.20 (W) IE = 685.70 (E)	FES 1-1 30" FLARED END SECTION W/GRATE IE = 583.00

0 50' 100'
SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

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U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
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CKD BY:
SUBMITTED BY:
PLOT SCALE:
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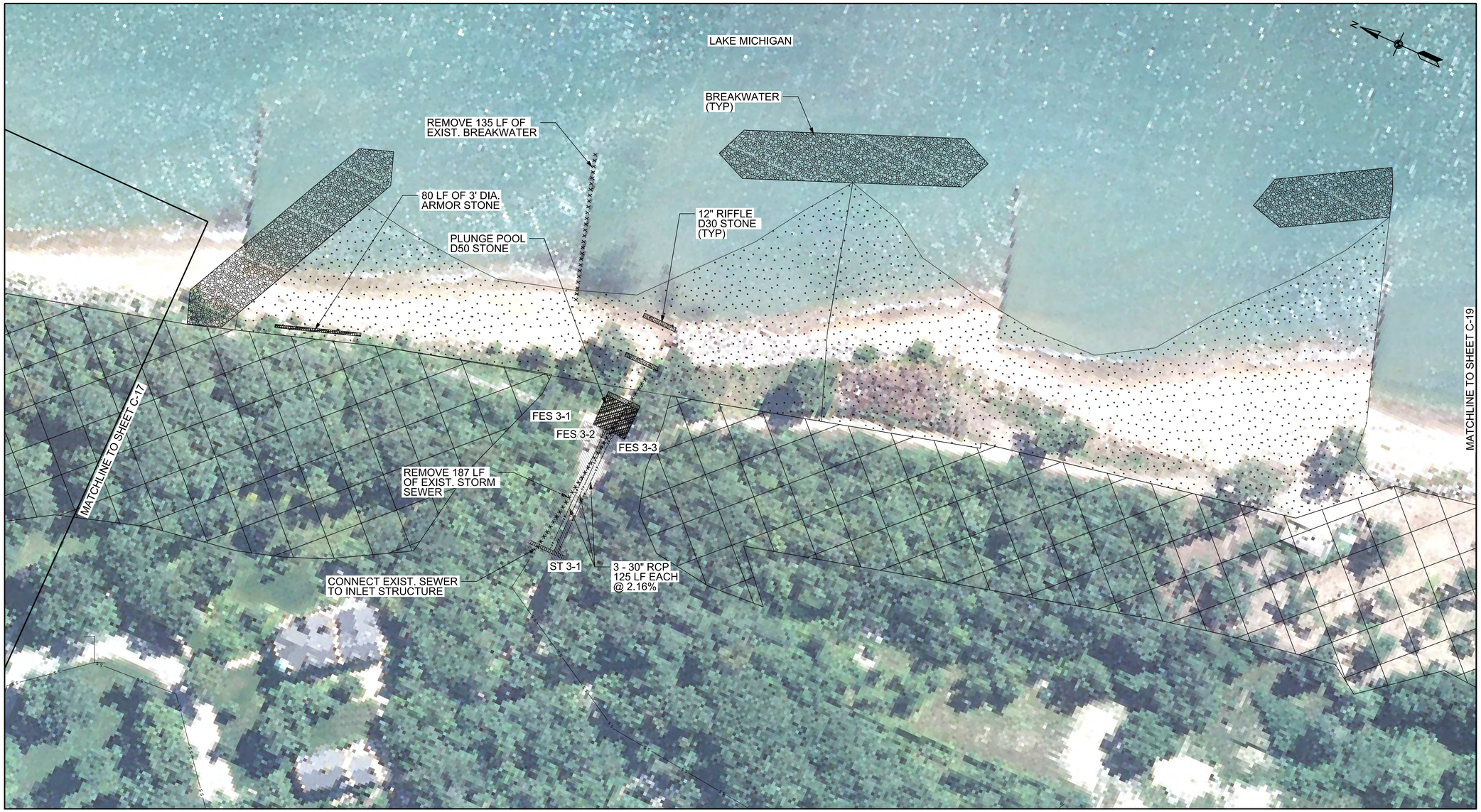
SIZE:
FILE NAME: FS506_C-117_SP.dgn
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

SCOTT RAVINE
RESTORATION PLAN

SHEET IDENTIFICATION
C-17
SHEET 0 OF 0

$FILEPATH$



NOTES:

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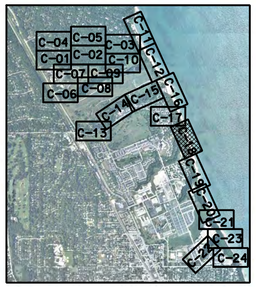
2. REFER TO SHEET C-XXX FOR BREAKWATER DETAIL.
3. REFER TO SHEET C-XXX FOR PLUNGE POOL DETAIL.
4. REFER TO SHEET C-XXX FOR RIFFLE DETAIL.

ST 3-1 INLET STRUCTURE 3'x35'x6' DEEP W/TRENCH GRATE RIM = 591.6 IE = 585.60 (E) IE = VIF (W) SEE DETAIL SHEET C-XX	FES 3-1 30" FLARED END SECTION W/GRATE IE = 582.90 FES 3-3 30" FLARED END SECTION W/GRATE IE = 582.90	FES 3-2 30" FLARED END SECTION W/GRATE IE = 582.90

LEGEND

PAVEMENT REMOVE/REPLACE

0 50' 100'
SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

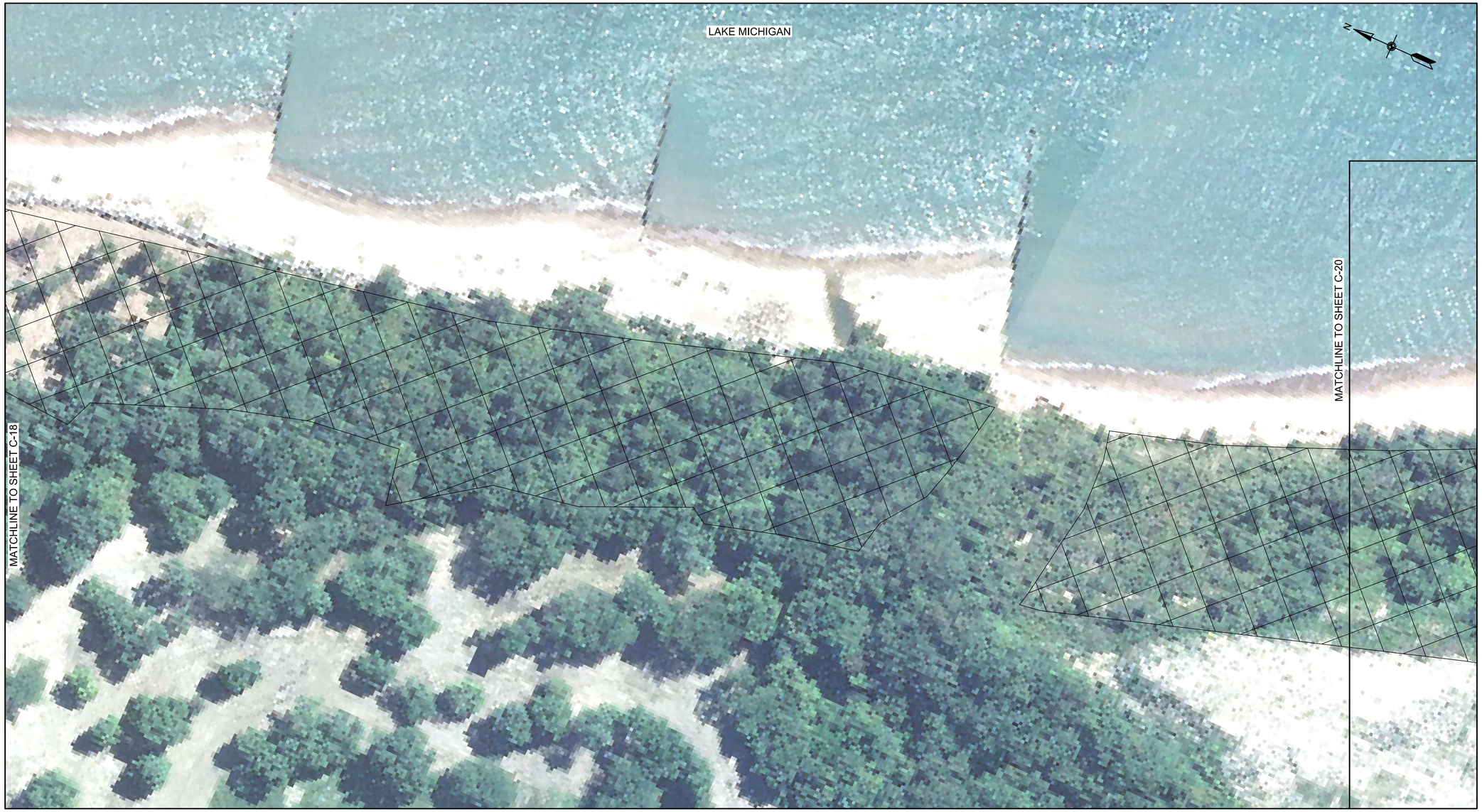
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DWN BY: DB
CKD BY:
SUBMITTED BY:
PLOT SCALE:
PLOT DATE:
SIZE:
FILE NAME: FS506_C-118_SP.dgn
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

BARTLETT RAVINE RESTORATION PLAN
AND
SHORELINE RESTORATION PLAN - AREA 4

SHEET IDENTIFICATION
C-18
SHEET 0 OF 0



NOTES:

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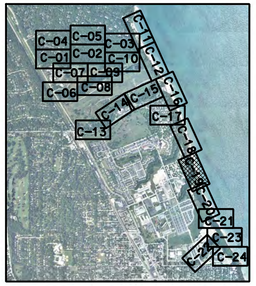
0 50' 100'

SCALE:1"=50'



KEY MAP

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Chicago District

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U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DWN BY: DB
CKD BY:
SUBMITTED BY:
PLOT SCALE:
PLOT DATE: 7/9/2013
SIZE:
FILE NAME: FS506_C-19_SP.dgn
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

SHORELINE RESTORATION PLAN - AREA 5

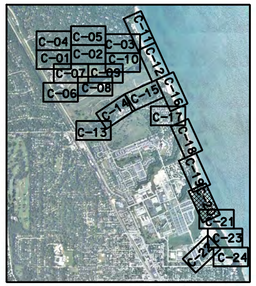
SHEET IDENTIFICATION
C-19
SHEET 0 OF 0

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.

0 50' 100'

SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL	DATE: JAN 2013
DWN BY: DB	CKD BY:
SUBMITTED BY:	SOLICITATION NO.:
	CONTRACT NO.:
PLOT SCALE:	PLOT DATE: 2/20/2013
	FILE NUMBER:
SIZE:	FILE NAME: FS506_C-120_SP.dgn

FORT SHERIDAN
SECTION 506

SHORELINE RESTORATION PLAN - AREA 6

SHEET IDENTIFICATION
C-20
SHEET 0 OF 0

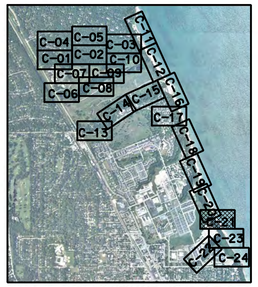
$FILEPATH$

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.

0 50' 100'

SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DATE: JAN 2013
DWN BY: DB
CKD BY:
SOLICITATION NO.:
SUBMITTED BY:
CONTRACT NO.:
PLOT SCALE:
PLOT DATE:
PROJECT:
FILE NUMBER:
SIZE:
FILE NAME: FS506_C-121_SP.dgn

FORT SHERIDAN
SECTION 506

SHORELINE RESTORATION PLAN - AREA 7

SHEET IDENTIFICATION
C-21
SHEET 0 OF 0

$FILEPATH$

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.
2. REFER TO SHEET C-XXX FOR STONE APRON DETAIL.
3. REFER TO SHEET C-XXX FOR BREAKWATER DETAIL.
4. REFER TO SHEET C-XXX FOR RIFFLE DETAIL.

ST 4-1 INLET STRUCTURE 3'x11'x7' DEEP RIM = 644.0 IE = 637.00 SEE DETAIL SHEET C-XX FOR DETAIL	ST 4-2 4' MH TY A W/CLOSED LID RIM = 640.0 IE = 634.20	ST 4-3 4' MH TY A W/CLOSED LID RIM = 635.8 IE = 630.00	ST 4-4 4' MH TY A W/CLOSED LID RIM = 633.0 IE = 627.20	ST 4-5 4' MH TY A W/CLOSED LID RIM = 633.0 IE = 626.40

ST 4-6 4' MH (DROP STRUCTURE) W/CLOSED LID RIM = 655.0 IE = XXX.XX (E) IE = 630.00 (W)	ST 4-7 4' MH TY A W/CLOSED LID RIM = 627.0 IE = 621.20	ST 4-8 4' MH TY A W/CLOSED LID RIM = 618.5 IE = 612.70	ST 4-9 4' MH TY A W/CLOSED LID RIM = 617.0 IE = 611.20	ST 4-10 4' MH TY A W/CLOSED LID RIM = 615.0 IE = 609.20	ST 4-11 4' MH TY A W/CLOSED LID RIM = 613.4 IE = 607.60

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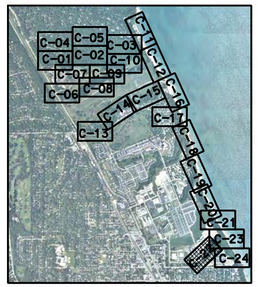
SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: ZL
DWN BY: DB
CKD BY:
SUBMITTED BY:
PLOT SCALE:
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SIZE:
FILE NAME: FS506_C-122_SP.dgn
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

SCHENCK RAVINE RESTORATION PLAN - AREA 1

SHEET IDENTIFICATION
C-22
SHEET 0 OF 0

$FILEPATH$

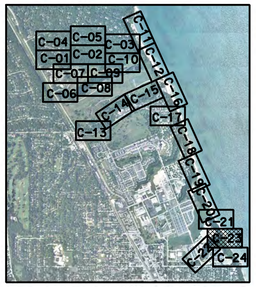
NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.
2. REFER TO SHEET C-XXX FOR SEWER OUTFALL APRON DETAIL.
3. REFER TO SHEET C-XXX FOR BREAKWATER DETAIL.
4. REFER TO SHEET C-XXX FOR RIFFLE DETAIL.
5. REFER TO SHEET C-XXX FOR RIFFLE WEIR DETAIL.

ST 4-12	ST 4-13	ST 4-14	ST 4-15	ST 4-16
4' MH TY A W/CLOSED LID RIM = 611.0 IE = 605.20	4' MH TY A W/CLOSED LID RIM = 607.0 IE = 601.20	4' MH TY R.D. W/CLOSED LID RIM = 588.0 IE = 583.30	4' MH (DROP STRUCTURE) W/CLOSED LID RIM = 651.0 IE = 639.90 (W) IE = 617.00 (S)	UNDERGROUND DETENTION VAULT 24'x75'x8' DEEP RIM = 651.0 IE = 646.56 (NW) VIF IE = 647.03 (SW) VIF IE = 640.00

FES 4-1
18" FLARED END SECTION W/GRATE IE = 583.00

0 50' 100'
SCALE:1"=50'



KEY PLAN

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

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CKD BY:
SUBMITTED BY:
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SIZE:
FILE NAME: FS506_C-123_SP.dgn
DATE: JAN 2013
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

FORT SHERIDAN
SECTION 506

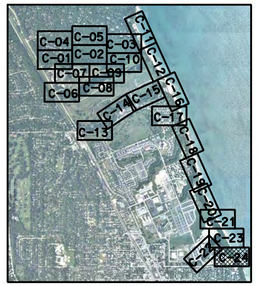
SCHENCK RAVINE RESTORATION PLAN - AREA 2 AND SHORELINE RESTORATION PLAN - AREA 8

SHEET IDENTIFICATION
C-23
SHEET 0 OF 0

NOTES:

1. DEPICTION OF RESTORATION MEASURES ARE MEANT ONLY AS A GUIDE. CONTRACTOR SHALL PROVIDE PLAN OF RESTORATION WORK INCLUDED IN VARIOUS APPROVED SUBMITTALS REQUIRED UNDER SPECIFICATIONS.
2. REFER TO SHEET C-XXX FOR BREAKWATER DETAIL.

0 50' 100'
SCALE:1"=50'



KEY MAP

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

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DWN BY: DB
CKD BY:
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SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

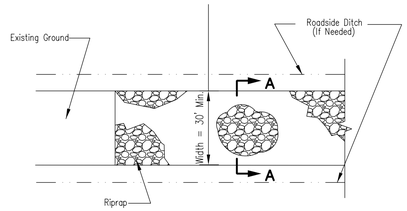
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

FORT SHERIDAN
SECTION 506

SHORELINE RESTORATION PLAN - AREA 9

SHEET IDENTIFICATION
C-24
SHEET 0 OF 0

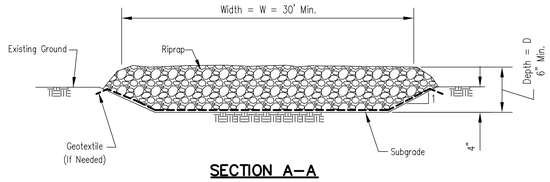
$FILEPATH$



PLAN VIEW

NOTES:

1. Rock shall meet one of the following IDOT coarse aggregate gradations, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
2. See plans for construction road location, D and W dimensions.
3. Minimum width is 14 feet for one-way traffic and 20 feet for two-way traffic. Two-way traffic widths shall be increased a minimum of 4 feet for trailer traffic. Depending on the type of vehicle or equipment, speed, loads, climatic and other conditions under which vehicles and equipment operate an increase in the minimum widths may be required.
4. Roadway shall follow the contour of the natural terrain to the extent possible.
5. Geotextile (non-woven) minimum criteria:
   - Weight of Geotextile (oz/sq.yd.)_____6
   - Tensile strength (lb) ASTM D 4632_____180
   - Elongation at failure (%) ASTM D 4632_____? 50
   - Puncture (lb) ASTM D 4833_____80
   - Ultraviolet light (% residual tensile strength) ASTM D 4355_____min 70
   - Apparent opening size (AOS) ASTM D 4751_____max 40 sieve
   - Permittivity sec^{-1} ASTM D 4491_____min 0.70
6. Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.



SECTION A–A

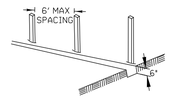
Date ___ 3/10
Designed M. SANCHEZ
Drawn ___
Checked ___
Approved ___

CONSTRUCTION ROAD STABILIZATION

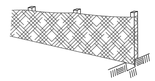
NRCS Natural Resources Conservation Service United States Department of Agriculture

File No. IL-ENG-58
Drawing No.
Sheet 1 of 1

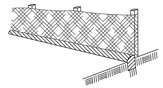
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS



2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH

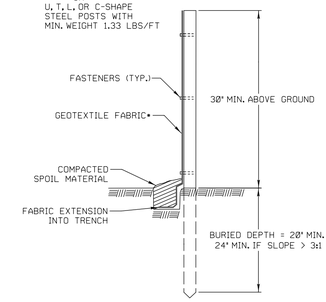


3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS



Requirements	Test Methods	Wire Backed Supported Silt Fence *	Unsupported Silt Fence Geotextile Elongation >=50%	Unsupported Silt Fence Geotextile Elongation <50% *
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100lbs
Permittivity [1]	ASTM D 4491	0.05 sec^{-1}	0.05 sec^{-1}	0.05 sec^{-1}
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		

POSTS - CHOICE OF:
1.2" X 1.2" NOMINAL HARDWOOD POSTS
2.6" X 2.6" NOMINAL NO.2 SOUTHERN PINE
OR
U.T.L. DR C-SHAPE STEEL POSTS WITH MIN. WEIGHT 1.33 LBS/FT



- NOTE: OPTIONAL WIRE SUPPORT
- MIN. 30" HEIGHT
- MIN. 14 GAUGE WIRE
- MIN. 6 HORIZ. WIRES
- MIN. 6' VERTICAL SPACING

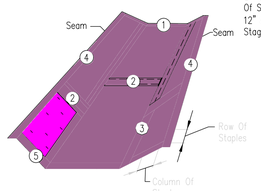
REVISIONS	DATE
ORIG. by LCSMC	4/21/08
Update Text	7/15/11

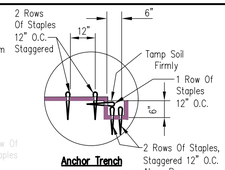
LakeCounty Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: JUNE 20, 2008

PERIMETER EROSION BARRIER INSTALLATION

LC2051



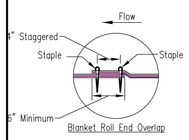


Anchor Trench

DETAIL 1

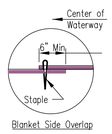
NOTES:

1. Install erosion control blanket (ECB) over waterway: Waterway Width_____ft
   ECB width _____ft
   length _____ft
   Sta. _____ to _____
2. The erosion control blanket shall consist of a machine produced mat of curled wood or coconut fibers, shall have an expected material life of a least 12 months, shall be new and unused, shall be furnished in rolls, and shall meet the minimum requirements stated in Table 1 below. Alternative material may be used as long as the expected material life is at least 12 months.
3. Prepare soil prior to installing erosion control blanket, including seeding, fertilizing, and lime application.
4. The erosion control blanket shall be placed in firm contact with the soil and not be allowed to bridge over surface irregularities. The blanket shall not be stretched.
5. Start laying the blankets by rolling center blanket in the direction of flow, centered on the centerline of waterway. There shall not be an overlap of blankets at the center of the waterway.
6. The erosion control blanket shall be anchored, overlapped, and stapled according to manufacturer's instructions. If no manufacturer's instructions are available, install the blanket as follows:
   a. Staples shall be "U" shaped, 0.12 in diameter wire or greater (#11 gauge). See Staple Detail for dimensions.
   b. Bury upstream end of blanket in a trench 6 inch wide by 6 inch deep and stapled in staggered rows across the width as shown in Detail 1.
   c. For joining ends of rolls, overlap end of upslope blanket a minimum of 6 inches over downslope blanket (shingle style). Use a double row of staggered staples 4 inches apart, as shown in Detail 2.
   d. Blankets on side slopes shall overlap a minimum 6 inches over the blanket below (shingle style). Staple overlap at 12 inch intervals. See Detail 3.
   e. The outer edge along sides of the blanket shall be stapled every 12 inches. See Detail 4.
   f. Staples are to be placed alternately in columns (in the direction of the waterway) 2 feet apart and in rows (across the waterway) 3 feet apart, throughout the area covered by erosion blanket.
   g. Downstream (terminal) end of blanket shall be stapled with a double row of staggered staples 12 inches apart. See Detail 5.



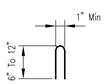
Blanket Roll End Overlap

DETAIL 2



Blanket Side Overlap

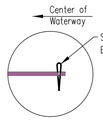
DETAIL 3



STAPLE DETAIL

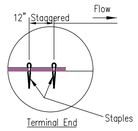
TABLE 1. MINIMUM REQUIREMENTS FOR EROSION CONTROL BLANKET

(See Note 2)	Coconut Blanket	Wood Fiber Blanket
Type of Fiber	100% coconut fibers	100% curled wood fibers
Weight, lbs/sq. yd	0.50	0.63
Fiber Length	N/A	80% of fibers > 6 in.
Fiber Dimensions	N/A	0.021 in. x 0.042 in.
Netting Netting Required ? 9 Yes 9 No	Cover Top and bottom of blanket with a max. 5/8" x 5/8" opening size netting, bound to the mat on max. 1.5" centers.	Cover Top and bottom of blanket with a max. 5/8" x 5/8" opening size netting



Blanket Side Edge

DETAIL 4



Terminal End

DETAIL 5

Not To Scale

Date ___ 7/11
Designed M. SANCHEZ
Drawn ___
Checked ___
Approved ___

EROSION BLANKET INSTALLATION DETAILS

NRCS Natural Resources Conservation Service United States Department of Agriculture

File No. IL ENG-61
Drawing No.
Page 1 of 1
Sheet of

US Army Corps of Engineers
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: | DATE:
DWN BY: | CKD BY: | SOLICITATION NO.:
SUBMITTED BY: | CONTRACT NO.:
PLOT SCALE: | PLOT DATE: 7/19/2013 | FILE NUMBER:
SIZE: | FILE NAME: FS506_C-501_DT.dgn

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

FORT SHERIDAN
SECTION 506

CONSTRUCTION DETAILS - EROSION CONTROL

SHEET IDENTIFICATION
C-25
SHEET 0 OF 0

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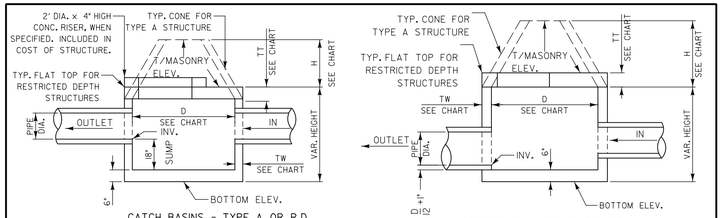


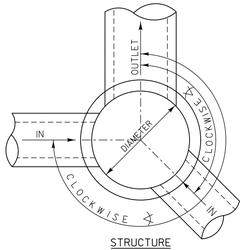
CATCH BASINS - TYPE A OR R.D.

SEE IDOT STD. 602001 & 602601

MANHOLES - TYPE A OR R.D.

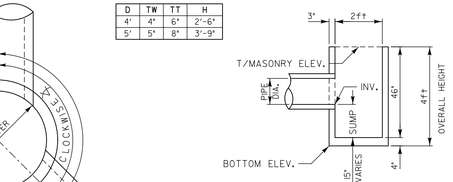
SEE IDOT STD. 602401 & 602601

D	TW	TT	H
4'	4'	6'	2'-6"
5'	5'	8"	3'-9"



STRUCTURE OPENING LAYOUT

SEE "SCHEDULE OF DRAINAGE STRUCTURES" LC0000 Sheet 3



CATCH BASIN - TYPE C

SEE IDOT STD. 602011

SCALE: N.T.S

REVISIONS	DATE

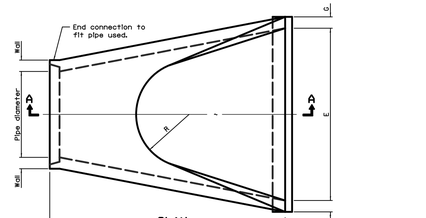
LakeCounty
Division of Transportation

APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

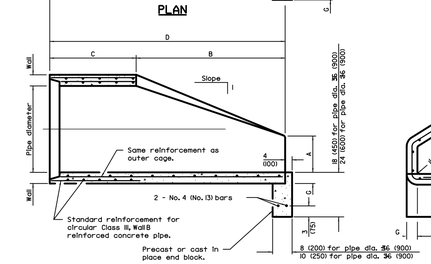
MATERIALS LETTING
DRAINAGE STRUCTURE
DETAIL

SHEET 1 OF 3

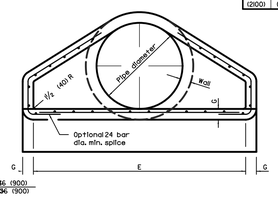
LC00001



PLAN



SECTION A-A



END VIEW

PIPE DIA.	APPROX. DIT. Ibs. (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12 (300)	530 (240)	2 (50)	4 (102)	24 (610)	4'-0 13/16" (1,241 m)	6'-0 7/16" (1,851 m)	24 (610)	2 (50)	9 (229)	1:2.4
15 (375)	740 (335)	2¼ (57)	6 (152)	27 (686)	3'-10" (1,168 m)	6'-1" (1,854 m)	30 (762)	2¼ (57)	11 (280)	1:2.4
18 (450)	990 (450)	2½ (64)	9 (229)	27 (686)	3'-10" (1,168 m)	6'-1" (1,854 m)	36 (914)	2½ (64)	12 (305)	1:2.4
21 (525)	1280 (580)	2¾ (70)	9 (229)	35 (889)	3'-6" (1,067 m)	6'-1" (1,854 m)	36 (914)	2¾ (70)	13 (330)	1:2.4
24 (600)	1520 (690)	3 (76)	9½ (241)	3'-7½" (1,105 m)	30 (762)	6'-6½" (1,867 m)	4'-0" (1,219 m)	3 (76)	14 (356)	1:2.5
27 (675)	1930 (875)	3¼ (83)	10½ (267)	4'-0" (1,219 m)	25½ (648)	6'-8½" (2,032 m)	4'-6" (1,372 m)	3¼ (83)	14½ (368)	1:2.4
30 (750)	2190 (995)	3½ (89)	12 (305)	4'-6" (1,371 m)	19¾ (502)	6'-11¾" (2,127 m)	5'-0" (1,524 m)	3½ (89)	15 (381)	1:2.5
33 (825)	3200 (1450)	3¾ (95)	13½ (343)	4'-10½" (1,486 m)	39¼ (997)	8'-10¼" (2,692 m)	5'-6" (1,676 m)	3¾ (95)	17½ (445)	1:2.5
36 (900)	4600 (2100)	4 (102)	15 (381)	5'-3" (1,6 m)	34¾ (883)	8'-10¾" (2,692 m)	6'-0" (1,829 m)	4 (102)	20 (508)	1:2.5
42 (1050)	5380 (2440)	4½ (114)	21 (533)	5'-3" (1,6 m)	35 (889)	8'-2" (2,489 m)	6'-6" (1,981 m)	4½ (114)	22 (559)	1:2.5
48 (1200)	6550 (2970)	5 (127)	24 (610)	6'-0" (1,829 m)	26 (660)	8'-2" (2,489 m)	7'-0" (2,134 m)	5 (127)	22 (559)	1:2.5
54 (1350)	8240 (3740)	5½ (140)	27 (686)	5'-5" (1,651 m)	35 (889)	8'-4" (2,54 m)	7'-6" (2,286 m)	5½ (140)	24 (610)	1:2.0
60 (1500)	8730 (3960)	5 (152)	35 (889)	5'-0" (1,524 m)	39 (991)	8'-3" (2,515 m)	8'-0" (2,438 m)	5 (127)	*	1:1.9
66 (1650)	10710 (4860)	6½ (165)	30 (762)	6'-0" (1,829 m)	27 (686)	8'-3" (2,515 m)	8'-6" (2,591 m)	5½ (140)	*	1:1.7
72 (1800)	12520 (5680)	7 (178)	36 (914)	6'-6" (1,981 m)	21 (533)	8'-3" (2,514 m)	9'-0" (2,743 m)	6 (152)	*	1:1.8
78 (1950)	14770 (6700)	7½ (191)	36 (914)	7'-6" (2,286 m)	21 (533)	9'-3" (2,819 m)	9'-6" (2,896 m)	6½ (165)	*	1:1.8
84 (2100)	18160 (8240)	8 (203)	36 (914)	7'-6½" (2,299 m)	21 (533)	9'-3½" (2,832 m)	10'-0" (3,048 m)	6½ (165)	*	1:1.6

* Radius as furnished by manufacturer

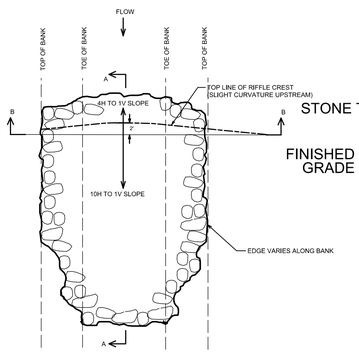
GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

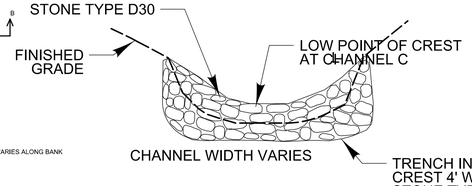
PRECAST REINFORCED CONCRETE FLARED END SECTION

IDOT STANDARD 542301-03



RIFFLE PLAN VIEW

N.T.S.

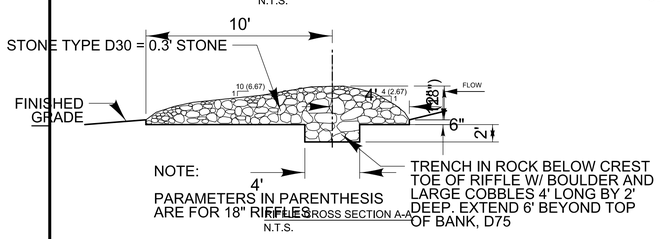


RIFFLE CROSS SECTION B-B (LOOKING UPSTREAM)

N.T.S.

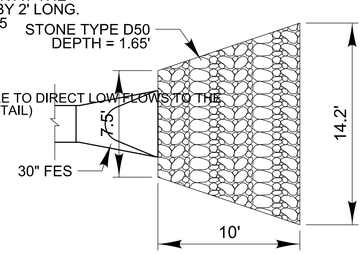
RIFFLE NOTES:

RIFFLE CREST SHALL HAVE A SLIGHT CURVATURE TO DIRECT LOW FLOWS TO THE CENTER OF THE RIFFLE (SEE PLAN VIEW FOR DETAIL)

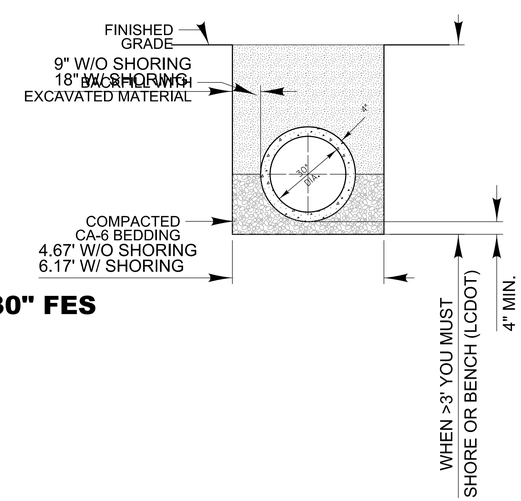


RIFFLE CROSS SECTION A-A

N.T.S.



STONE APRON AT 30" FES



STONE WEIGHT IN LBS	PERCENT LIGHTER BY WEIGHT
36-15	100
11-7	50
5-2	15
LESS THAN 2	

STONE DIAMETER IN INCHES

D100 - 18 - INCHES
D75 - 9 INCHES
D50 - 6 INCHES
D25 - 3 INCHES

US Army Corps of Engineers
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: | DATE:
DWN BY: | CKD BY: | SOLICITATION NO.:
SUBMITTED BY: | CONTRACT NO.:
PLOT SCALE: 1:1 | PLOT DATE: 7/29/2013 | FILE NUMBER:
SIZE: | FILE NAME: FS506_C-502_DT.dgn

FORT SHERIDAN
SECTION 506

DETAIL

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C-502
SHEET 0 OF 0

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