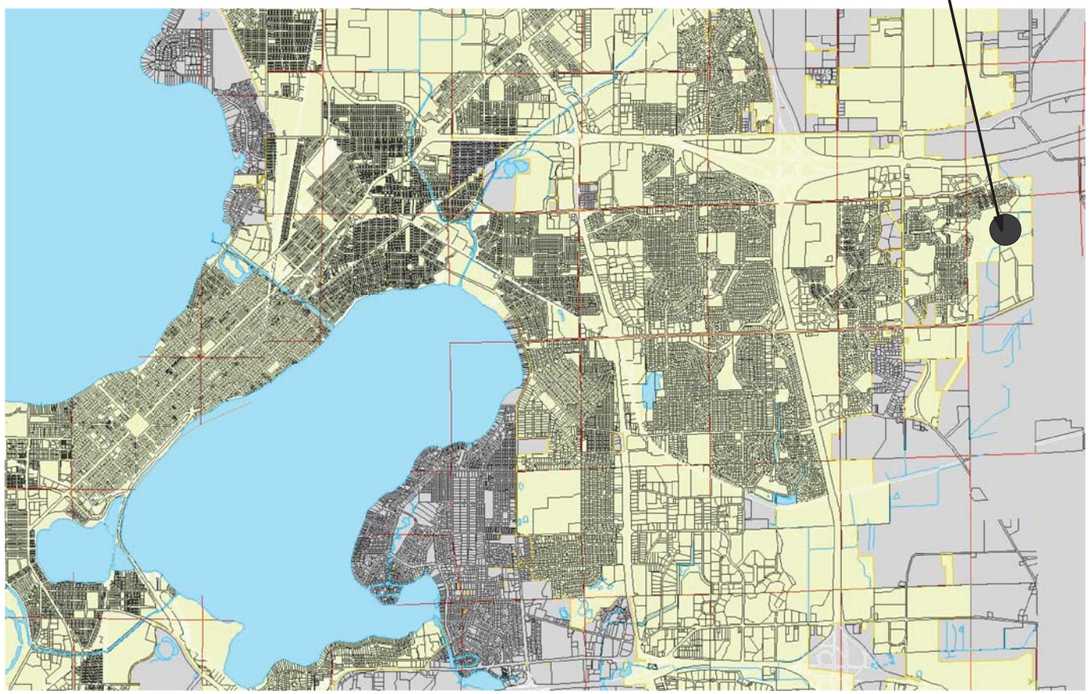
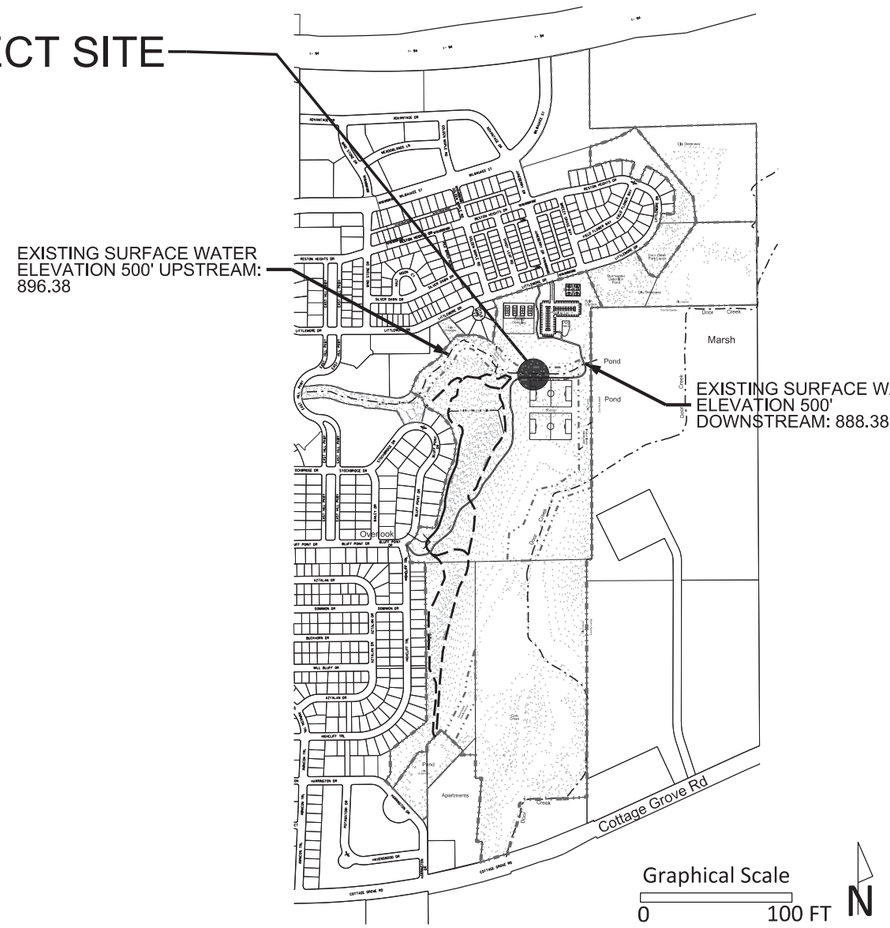
CITY OF MADISON

CITY PARKS DIVISION
DEPARTMENT OF PUBLIC WORKS
PLAN OF PROPOSED IMPROVEMENT

INDEX OF SHEETS

DOOR CREEK CULVERT
City Project No. 53W1415
Contract No. 6871





City of Madison
Department of Public Works
PARK DIVISION

City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Revised by: SCLL	*06-01-2012*

PUBLIC WORKS PROJECT #:
6871

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:

LEGEND

- 0.5' CONTOUR
- 2' CONTOUR
- 898.0 CONTOUR ELEVATION
- EXISTING TREE
- EXISTING VEGETATION LINE

ELEVATION BENCHMARK:
FIRE HYDRANT AT
SW CORNER PARKING LOT
(350 FT NE OF PROJECT)
TOP NUT = 904.43 FT
NAVD88(PRE-2007) DATUM

EXISTING MANHOLE RIM
0.8 FT ABOVE GROUND
RIM ELEV 895.76 FT

EXISTING WATER ELEVATION 500' UPSTREAM: 896.38

EXISTING WATER
ELEVATION 500'
DOWNSTREAM:
888.38

RIM=895.76
INV=885.23

18" PVC 1999 SAN

delineated wetland

36" Silver Maple

6" Black Cherry?

3" Type?

2" Type?

2" Type?

CENTERLINE OF DITCH

EXISTING PAVED PATH

City of Madison

Department of Public Works

PARKS DIVISION

City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987

play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Approved by: DR	*03-01-2012*

PUBLIC WORKS PROJECT #:
6871

SHEET TITLE:
EXISTING CONDITIONS PLAN

SHEET NUMBER:
E-1

M:\Maps\parks\DoorCreek\2011_Culvert Crossing\2011 Culvert Crossing.dgn

LEGEND

AREA TO BE INSTALLED WITH CLASS III, TYPE C TRM AND CLASS II, TYPE B EROSION CONTROL MAT AND SEEDED WITH WETLAND RESTORATION SEED MIX.

AREA TO BE INSTALLED WITH CLASS III, TYPE C TRM AND CLASS I, URBAN TYPE A EROSION CONTROL MAT AND SEEDED WITH WETLAND RESTORATION SEED MIX.

SIDE BY SIDE REINFORCED CONCRETE BOX CULVERTS 50' IN LENGTH, NORTH BOX CULVERT IS 6'X4', SOUTH BOX CULVERT IS 6'X3'

CROSS SECTION B

CROSS SECTION C

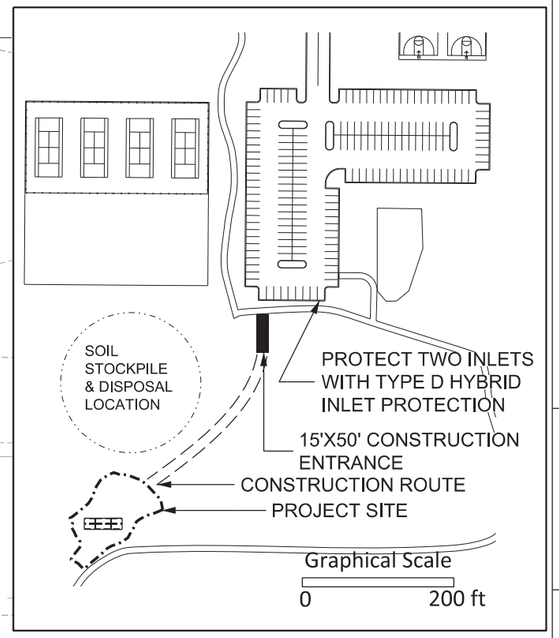
OVERFLOW DITCH W/ 3' WIDE BOTTOM

895.70

X898.00

CLEAR STONE BERM (DITCH CHECK)
PLACED DOWNSTREAM OF GRADING EXTENT.
CONSTRUCT PER CITY STANDARD DETAIL DRAWING 1.05.

GRADING LIMITS



CONSTRUCTION ENTRANCE LOCATION

NOTES:
1. ALL DISTURBED AREAS SHALL RECEIVE CLASS I URBAN TYPE A EROSION CONTROL MATTING, UNLESS OTHERWISE INDICATED FOR CLASS III TYPE C TRM.
2. ALL AREAS IDENTIFIED FOR CLASS III TYPE C TRM SHALL BE SEEDED WITH WETLAND RESTORATION SEED MIX AND COVER CROP. ALL OTHER DISTURBED AREAS SHALL BE SEEDED WITH CITY OF MADISON STANDARD SUN TERRACE MIX AND COVER CROP.
3. ALL EXCAVATED MATERIAL TEMPORARILY STOCKPILED ON SITE, SHALL HAVE SILT SOCK PLACED ALONG THE DOWNHILL SIDE OF THE STOCKPILE.

N

Graphical Scale
0 20 ft

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987
play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

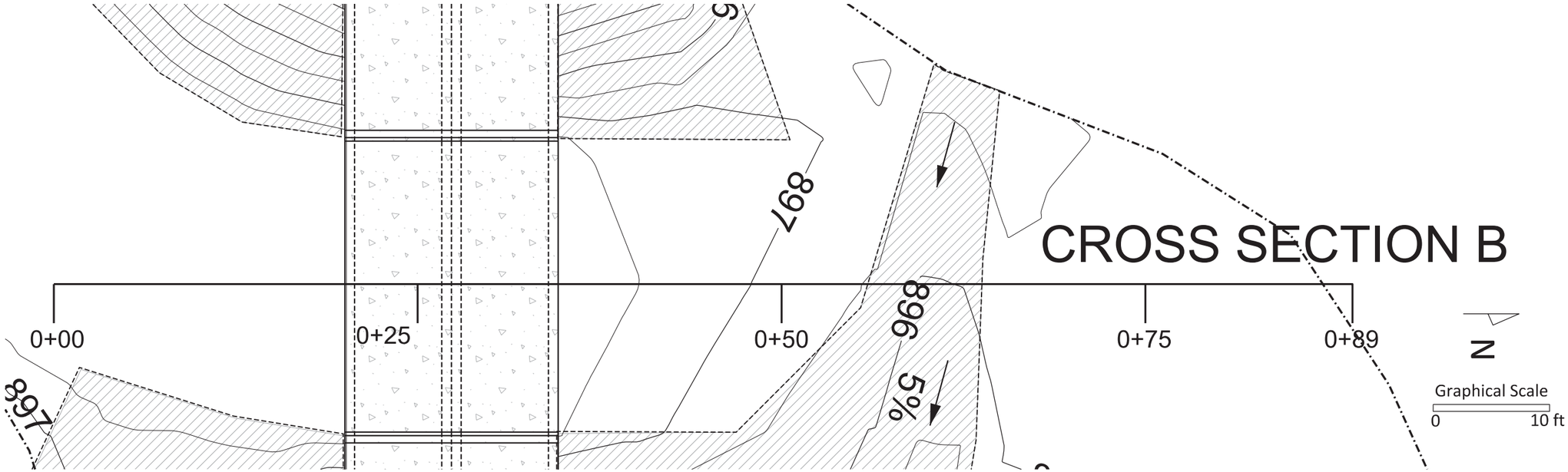
ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Revised by: SCLL	*06-01-2012*

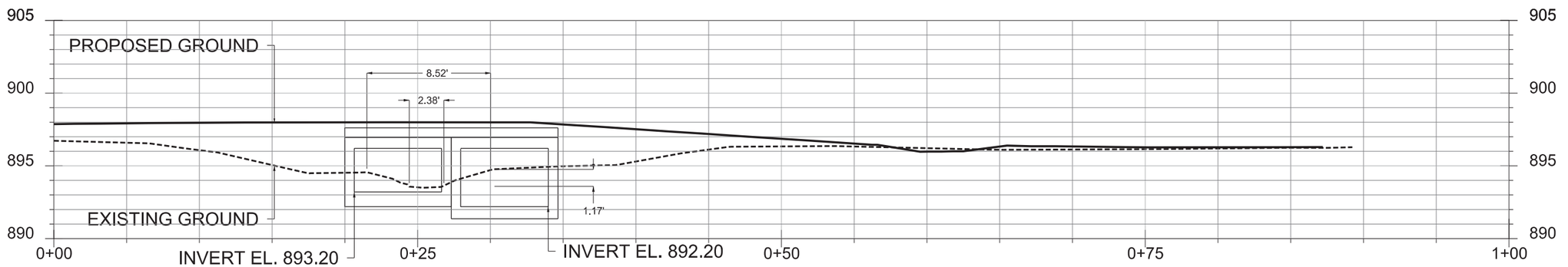
PUBLIC WORKS PROJECT #:
6871

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN

SHEET NUMBER:
G-1

M:\Maps\parks\DoorCreek\2011_ Culvert Crossing\2011 Culvert Crossing.dgn





CROSS SECTION B

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987
play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

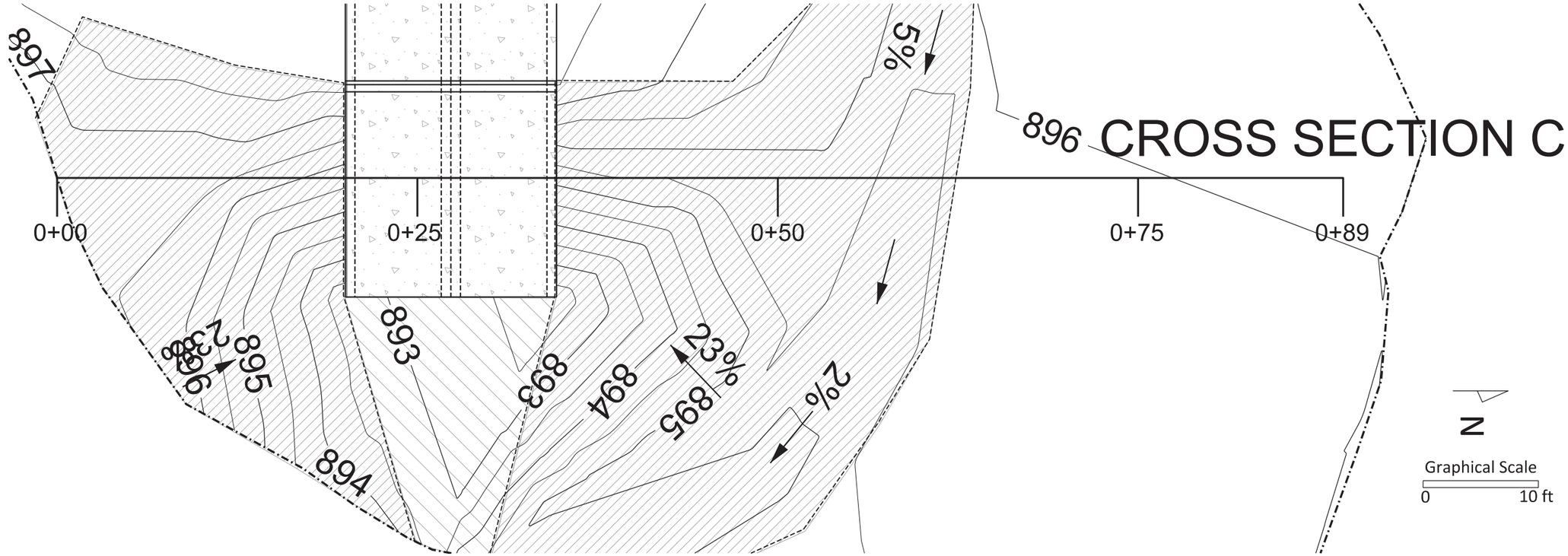
ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Revised by: SCLL	*06-01-2012*

PUBLIC WORKS PROJECT #:
6871

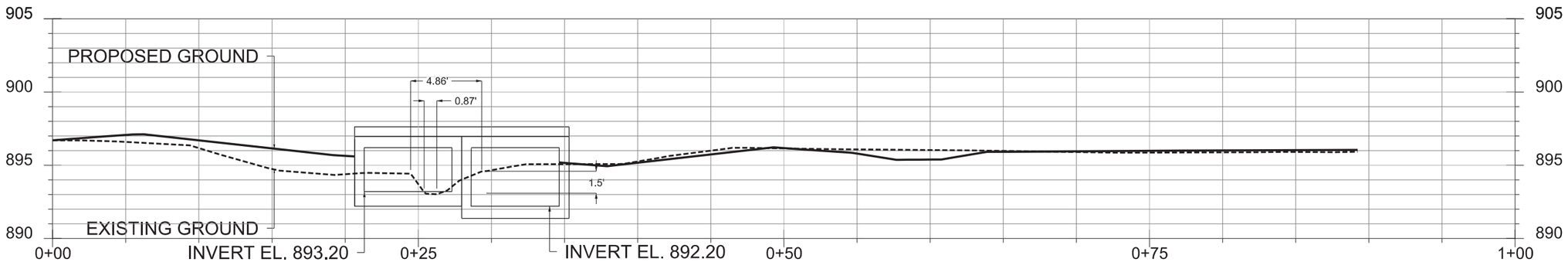
SHEET TITLE:
CROSS SECTION B

SHEET NUMBER:
S-1

M:\Maps\parks\DoorCreek\2011_ Culvert Crossing\2011 Culvert Crossing.dgn



CROSS SECTION C



CROSS SECTION C

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987

play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

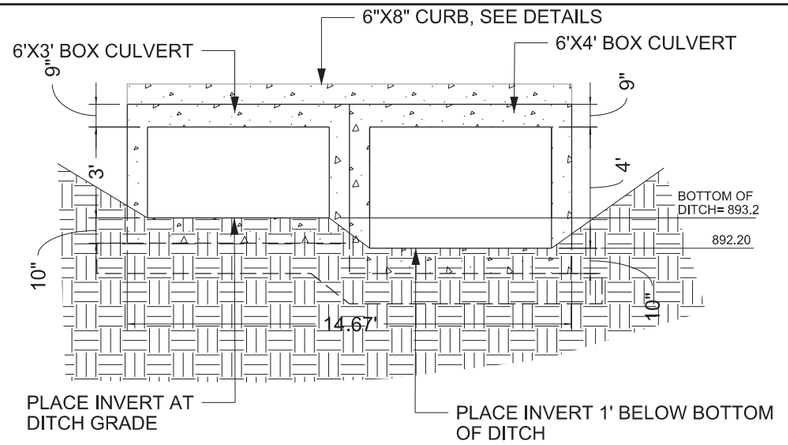
ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Approved by:	
Revised by: SCLL	*06-01-2012*

PUBLIC WORKS PROJECT #:
6871

SHEET TITLE:
CROSS SECTION C

SHEET NUMBER:
S-2

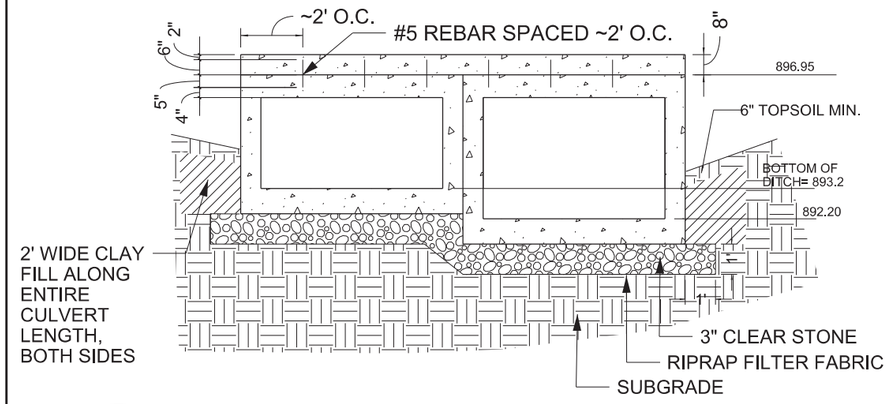
M:\Maps\parks\DoorCreek\2011_ Culvert Crossing\2011 Culvert Crossing.dgn



1 / D-1 END VIEW OF BOX CULVERTS, LOOKING WEST

SCALE: 1"=5'

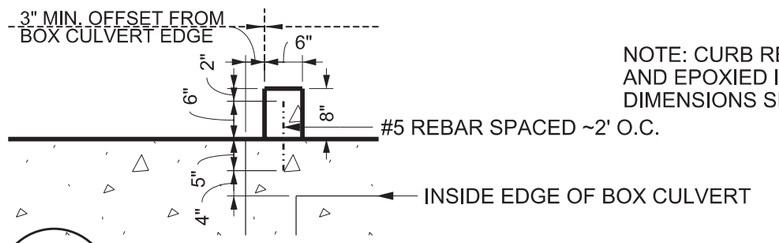
Ø 5'



2 / D-1 CROSS SECTION AT PATH CROSSING

LOOKING WEST; SCALE: 1"=5'

Ø 5'

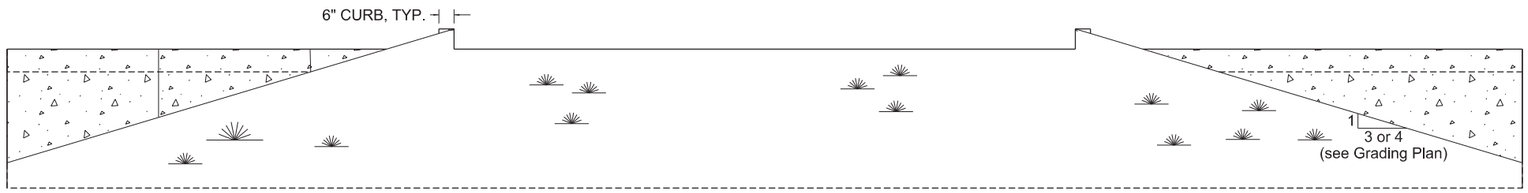


NOTE: CURB REBAR SHALL BE DOWELED AND EPOXIED INTO BOX CULVERT AT DIMENSIONS SHOWN.

3 / D-1 CURB DETAIL

SCALE: 1"=2'

Ø 2'



4 / D-1 SIDE VIEW OF 6'X3' BOX CULVERT

SCALE: 1"=5'

Ø 5'

M:\Maps\parks\DoorCreek\2011_Culvert Crossing\Boxculvertendsection.dgn

City of Madison
Department of Public Works
PARK DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987

play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: SCL	03-01-2012
Revised by:	

PUBLIC WORKS PROJECT #:

6871

SHEET TITLE:

BOX CULVERT DETAILS

SHEET NUMBER:

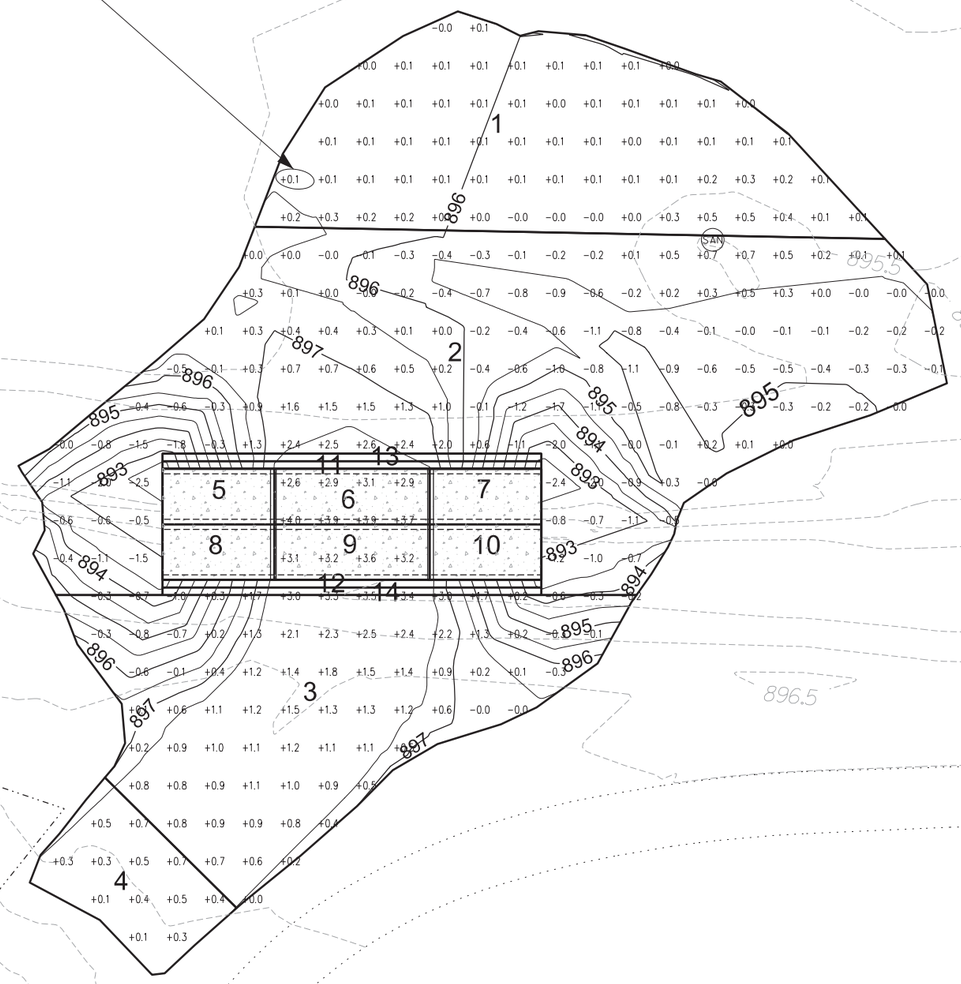
D-1

LEGEND

-## OVERALL GRADE CHANGE EXISTING TO PROPOSED FINISH (+ = FILL, - = CUT)

NOTES:

1. THIS PLAN SHEET IS FOR INFORMATIONAL PURPOSES ONLY TO INFORM THE CONTRACTOR OF HOW EARTHWORK QUANTITIES WERE CALCULATED. THE IDENTIFICATION NUMBERS IN THIS PLAN CORRESPOND WITH IDENTIFICATION NUMBERS IN THE EARTHWORK TABLE ON SHEET X-2.
2. AREAS 1 AND 4 WERE ASSUMED TO HAVE NO TOPSOIL STRIPPING.
3. AREAS 11 & 12 ADJACENT TO CULVERT HAVE STONE BASE BELOW CULVERT & CLAY BACKFILL.
4. AREAS 13 & 14 ADJACENT TO 11 & 12 HAVE CLAY BACKFILL.



N

Graphical Scale

0 20 ft

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987
play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Revised by: SCLL	*06-01-2012*

PUBLIC WORKS PROJECT #:

6871

SHEET TITLE:

DESIGN COMPUTATIONS PLAN

SHEET NUMBER:

X-1

M:\Maps\parks\DoorCreek\2011_ Culvert Crossing\2011 Culvert Crossing.dgn

NOTE: REFER TO SHEET X-2 FOR CORRESPONDING AREA IDENTIFICATION NUMBERS.

DOOR CREEK CULVERT - Earthwork Quantities

City of Madison, WI Public Works Contract #6871

Date Revised: 6/14/2012

Notes:

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Area ID# groups

Grp	ID#	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac-tored volume (cu ft)	Unfac-tored volume (cu yd)	Expan-sion Factor (%)	Factored (Uncom-pacted) Volume (cu yd)
GG	1	Topsoil Excavate	Strip Topsoil to meet proposed topsoil grade	Existing	Pro	1625	varies	2	0.1	0%	0.1
GG	1	Topsoil Place	Place Topsoil to meet proposed topsoil grade	Existing	Pro	1625	varies	-185	-6.9	0%	-6.9
GG	2	Subsoil Excavate	Excavate Subsoil to 6in below proposed topsoil	Ex-4in	Pro-6in	3495	varies	1840	68.1	0%	68.1
GG	2	Subsoil Place	Place Subsoil to 6in below proposed topscil	Ex-4in	Pro-6in	3495	varies	-542	-20.1	0%	-20.1
GG	2	Topsoil Excavate	Strip topsoil (assumed 4in)			3495	0.33	1165	43.1	0%	43.1
GG	2	Topsoil Place	Place 6in topsoil			3495	-0.50	-1748	-64.7	0%	-64.7
GG	3	Subsoil Excavate	Excavate Subsoil to 6in below proposed topsoil	Ex-4in	Pro-6in	1732	varies	183	6.8	0%	6.8
GG	3	Subsoil Place	Place Subsoil to 6in below proposed topscil	Ex-4in	Pro-6in	1732	varies	-1295	-48.0	0%	-48.0
GG	3	Topsoil Excavate	Strip topsoil (assumed 4in)			1732	0.33	577	21.4	0%	21.4
GG	3	Topsoil Place	Place 6in topsoil			1732	-0.50	-866	-32.1	0%	-32.1
GG	4	Topsoil Place	Place Topsoil to meet proposed topsoil grade	Existing	Pro	342	varies	-118	-4.4	0%	-4.4
GC	5	Stone Place	Place 12in of 3in-clear stone beneath culvert			108	-1.00	-108	-4.0	0%	-4.0
GC	5	Subsoil Excavate	Excavate Subsoil to elevation 890.37	Ex-4in	890.37ft elev	108	varies	410	15.2	0%	15.2
GC	5	Topsoil Excavate	Strip topsoil (assumed 4in)			108	0.33	36	1.3	0%	1.3
GC	6	Stone Place	Place 12in of 3in-clear stone beneath culvert			150	-1.00	-150	-5.6	0%	-5.6
GC	6	Subsoil Excavate	Excavate Subsoil to elevation 890.37	Ex-4in	890.37ft elev	150	varies	590	21.9	0%	21.9
GC	6	Topsoil Excavate	Strip topsoil (assumed 4in)			150	0.33	50	1.9	0%	1.9
GC	6	Topsoil Place	Place topsoil on path above north culvert	CulvertTop	Pro	150	varies	-124	-4.6	0%	-4.6
GC	7	Stone Place	Place 12in of 3in-clear stone beneath culvert			108	-1.00	-108	-4.0	0%	-4.0
GC	7	Subsoil Excavate	Excavate Subsoil to elevation 890.37	Ex-4in	890.37ft elev	108	varies	423	15.7	0%	15.7
GC	7	Topsoil Excavate	Strip topsoil (assumed 4in)			108	0.33	36	1.3	0%	1.3
GC	8	Stone Place	Place 12in of 3in-clear stone beneath culvert			108	-1.00	-108	-4.0	0%	-4.0
GC	8	Subsoil Excavate	Excavate Subsoil to elevation 891.37	Ex-4in	891.37ft elev	108	varies	269	10.0	0%	10.0
GC	8	Topsoil Excavate	Strip topsoil (assumed 4in)			108	0.33	36	1.3	0%	1.3
GC	9	Stone Place	Place 12in of 3in-clear stone beneath culvert			150	-1.00	-150	-5.6	0%	-5.6
GC	9	Subsoil Excavate	Excavate Subsoil to elevation 891.37	Ex-4in	891.37ft elev	150	varies	357	13.2	0%	13.2
GC	9	Topsoil Excavate	Strip topsoil (assumed 4in)			150	0.33	50	1.9	0%	1.9
GC	9	Topsoil Place	Place topsoil on path above south culvert	CulvertTop	Pro	150	varies	-130	-4.8	0%	-4.8
GC	10	Stone Place	Place 12in of 3in-clear stone beneath culvert			108	-1.00	-108	-4.0	0%	-4.0
GC	10	Subsoil Excavate	Excavate Subsoil to elevation 891.37	Ex-4in	891.37ft elev	108	varies	248	9.2	0%	9.2
GC	10	Topsoil Excavate	Strip topsoil (assumed 4in)			108	0.33	36	1.3	0%	1.3
SP	11	Clay Place	Place clay along culvert sides	891.37ft elev	Pro-6in	50	varies	-208	-7.7	0%	-7.7
SP	11	Stone Place	Place 12in of 3in-clear stone beneath culvert out 1ft from edge			50	-1.00	-50	-1.9	0%	-1.9
SP	11	Subsoil Excavate	Excavate Subsoil to elevation 890.37	Ex-4in	890.37ft elev	50	varies	214	7.9	0%	7.9
SP	11	Topsoil Excavate	Strip topsoil (assumed 4in)			50	0.33	17	0.6	0%	0.6
SP	11	Topsoil Place	Place 6in topsoil			50	-0.50	-25	-0.9	0%	-0.9
SP	12	Clay Place	Place clay along culvert sides	892.37ft elev	Pro-6in	50	varies	-179	-6.6	0%	-6.6
SP	12	Stone Place	Place 12in of 3in-clear stone beneath culvert out 1ft from edge			50	-1.00	-50	-1.9	0%	-1.9
SP	12	Subsoil Excavate	Excavate Subsoil to elevation 891.37	Ex-4in	891.37ft elev	50	varies	142	5.3	0%	5.3
SP	12	Topsoil Excavate	Strip topsoil (assumed 4in)			50	0.33	17	0.6	0%	0.6
SP	12	Topsoil Place	Place 6in topsoil			50	-0.50	-25	-0.9	0%	-0.9
SP	13	Clay Place	Place clay along culvert sides	891.37ft elev	Pro-6in	50	varies	-209	-7.7	0%	-7.7
SP	13	Subsoil Excavate	Excavate Subsoil to elevation 891.37	Ex-4in	891.37ft elev	50	varies	165	6.1	0%	6.1
SP	13	Topsoil Excavate	Strip topsoil (assumed 4in)			50	0.33	17	0.6	0%	0.6
SP	13	Topsoil Place	Place 6in topsoil			50	-0.50	-25	-0.9	0%	-0.9
SP	14	Clay Place	Place clay along culvert sides	892.37ft elev	Pro-6in	50	varies	-182	-6.7	0%	-6.7
SP	14	Subsoil Excavate	Excavate Subsoil to elevation 892.37	Ex-4in	892.37ft elev	50	varies	94	3.5	0%	3.5
SP	14	Topsoil Excavate	Strip topsoil (assumed 4in)			50	0.33	17	0.6	0%	0.6
SP	14	Topsoil Place	Place 6in topsoil			50	-0.50	-25	-0.9	0%	-0.9

DOOR CREEK CULVERT - Earthwork Quantities

City of Madison, WI Public Works Contract #

Date Revised: 6/14/2012

Summary of stone (gravel) and soil quantities in the Bid Table.

Preliminary Computation Summary

Positive volumes are cuts (material available), negative volumes are fills

Row Labels	Sum of Unfac-tored volume (cu yd)
Clay Place	-29
Stone Place	-31
Subsoil Excavate	183
Subsoil Place	-68
Topsoil Excavate	76
Topsoil Place	-121
Grand Total	**10.1**

Reorganized into Bid Table Items:

Subsoil Excavate	= Bid Item #20101 Excavation Cut
Subsoil Place	= Bid Item #20101 Excavation Cut
Topsoil Excavate	= Bid Item #20221 Topsoil & Bid Item #20222 Topsoil (Import)
Topsoil Place	= Bid Item #20221 Topsoil & Bid Item #20222 Topsoil (Import)
Stone Place (only culvert portion shown above)	= Bid Item #20217 Clear Stone
Clay Place	= Bid Item #20206 Select Fill - Clay

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987
play MADISON PARKS

PROJECT:

DOOR CREEK PARK TRAIL CULVERT

DOOR CREEK PARK
7035 LITTLEMOORE DR
MADISON, WI 53718

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: SCLL	*03-01-2012*
Revised by: SCLL	*06-01-2012*

PUBLIC WORKS PROJECT #:

6871

SHEET TITLE:

DESIGN COMPUTATIONS TABLE

SHEET NUMBER:

X-2

M:\Maps\parks\DoorCreek\2011_ Culvert Crossing\2011 Culvert Crossing.dgn