DEPARTMENT OF ADMINISTRATIVE SERVICES

Milwaukee County

1/03/14

To: **Interested Contractors**

From: **Sean Hayes, Milwaukee County - DAS**

Project: **Menomonee River Parkway Lagoon to Wetland**

Subject: **Request for Qualifications**

Milwaukee County is seeking to pre-approve landscape / restoration contractors for work related to an upcoming wetland restoration project along the Menomonee River within Milwaukee County. Please provide the information requested below no later than 2pm, January 21st 2014.

Return qualifications to:

Sean J. Hayes, PE
Environmental Engineer
Milwaukee County DAS-FM
2711 West Wells Street
Milwaukee, WI 53208
sean.hayes@milwcnty.com
414-278-4891

Request for Qualifications
Native Wetland Restoration – Menomonee River Parkway Lagoon to Wetland
Milwaukee, Wisconsin

Project Description
Milwaukee County owns the two-acre Menomonee River Parkway Lagoon located within the Menomonee River Parkway just west and south of the location where North Menomonee River Parkway intersects with West Concordia Avenue and West Auer Avenue on the east side of the Menomonee River within the City of Milwaukee.

The lagoon is fed primarily from City of Milwaukee storm sewers. Recently, the City of Milwaukee diverted roughly ¾ of the drainage area away from the lagoon. Due to the change in drainage area, and

the existing degraded nature of the lagoon, Milwaukee County intends to convert the lagoon into native wetland habitat.

Due to the critical nature of the work and the challenging conditions of the site, Milwaukee County is seeking to pre-approve landscape restoration contractors for the critical native landscape work included in the project.

Landscape Scope of Work
The landscape work described below is the work anticipated to be included in this phase of the project and is subject to change.

- Seed matrix
- Wetland restoration and plantings
- Tree and shrub plantings
- Preparatory and ongoing weed and invasive management
- Warranty, maintenance and management through two growing seasons

Request for Qualification Schedule
- Receipt of RFQ packages 2pm, January 21, 2014
- Notification of qualified contractors January 31, 2014

Anticipated Construction Contract Schedule
- Advertisement Date: March 2014
- Contract Let Date: April 2014
- Anticipated Notice to Proceed (NTP): May 2014

Wetland Restoration Schedule
- Initial Invasive Species Control / Removals: Spring 2014
- Wetland Work: Spring - Fall 2014
- Seeding & Planting: Summer – Fall 2014
- Ongoing Management / Maintenance: Two growing seasons following final installation

Contract Documents
Contract documents will include (but may not be limited to) the following requirements:
- The entity performing the landscaping work must be pre-approved. Preapproved subcontractors will be listed in the contract documents.
- The entity performing the landscaping work must be identified within the bid package at the time of bid opening or the bid will be rejected as nonresponsive.

Wetland Restoration Work
Contract specified requirements for the landscape work will include but is not limited to the following:

- The pre-approved firm must provide the personnel as stated in its submitted RFQ package. In the event the personnel cannot be assigned as stated for reasons outside the control of the landscape firm, replacement personnel of equal qualifications must be submitted for approval by the Department.

- The contractor will be required to provide monitoring transects that will then be used by the supervising professional to determine the on-going performance of the work installed.
- The contract will include performance, warranty and maintenance criteria. Work that fails to meet these criteria will be required to be replaced or reworked until it does meet the criteria at no additional cost to the Department.

Request for Pre-Approval
Contractors seeking pre-approval to perform the landscaping work on the Menomonee River Parkway Wetland Restoration project must submit the following pre-approval information to Milwaukee County. Submittals are due on or before January 21, 2014, 2:00 PM, CST. Submittals after this time will not be accepted. Electronic submittals are not allowed.

Address or deliver submittals to:

Sean Hayes, PE
Milwaukee County DAS-FM
2711 W. Wells Street – Room 211
Milwaukee, WI 53208

Submittal Requirements
1) Experience and qualifications of proposed staff

a) Submit information on proposed staff assigned to the project. Please indicate if proposed personnel serve in more than one role on the project. Once accepted, the proposed staff listed will be considered a requirement of their pre-approval and must be provided to perform the work in order to maintain pre-approval status.

i) Experience and qualifications of project manager
(1) Individual who will be the contractor's principal in charge of all operations and be the contractor's main contact for the project.
(2) Must have at least five years of experience overseeing projects of similar scope and scale.
(3) Experience with native prairie, wetland and riparian landscape restoration installation work of similar scope and scale.
(4) Provide a list of projects that outline the following:
(a) Type if native plant community.
(b) Acreage
(c) Herbicide methods used
(d) # of crews supervised
(e) Role in ongoing management and maintenance.
(f) Experience with native prairie and riparian landscape management over a period of a minimum of two years on a single site.
(g) List, as a minimum, three owner client references familiar with the individual and provide address, phone, and email contact information for each reference.

ii) Experience and qualifications of onsite supervisor
(1) Individual who will be the contractor's principal on site person in charge of daily on site operations and be the contractors main day to day contact for the project.

(2) Must be fluent in English.
(3) Must have at least five years of experience overseeing projects of similar scope and scale.
(4) Experience with native prairie and riparian landscape restoration installation work of similar scope and scale. Provide a list of projects that outline the following:
    (a) Type of native plant community.
    (b) Acreage
    (c) Herbicide methods used
    (d) # of crews supervised
    (e) Role in ongoing management and maintenance.
    (f) Experience with native prairie and riparian landscape management over a period of a minimum of two years on a single site.
    (g) List, as a minimum, three client references familiar with the individual and provide address, phone, and email contract information for each reference.

iii) Crew members
(1) At least 50% of the crew must have at least two years of experience in native landscape restoration work.

iv) Corporate experience, Qualifications and References
(1) Provide a list of three owner project references most comparable that have been completed within the last five years. List must include projects which were both installed and managed for a minimum of two growing seasons. Provide client name, dates work was performed, contract value, brief description of contract scope, site address, owner address, phone and e-mail contact information for all references.
(2) Provide a list of the two largest restoration projects completed over the last five years, not including the three projects listed above.
(3) The information provided should focus on the landscape contractor's experience with sites not previously containing native landscapes and / or wetland environments of similar scope and scale.
(4) Provide current sites where personnel discussed in the proposal performing similar work can be observed.

Attachments

- Preliminary plans for landscaping work

Preliminary Plans for Landscaping Work

WETLAND CREATION

MENOMONEE RIVER PARKWAY LAGOON TO WETLAND

East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

SET INDEX

CIVIL

LANDSCAPE

DRAFT
FOR REFERENCE ONLY

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN. 9480 WATERTOWN PLANK RD. WAUWATOSA, WI 53226

MILWAUKEE COUNTY PARKS

CALL DIGGER'S HOTLINE (414-259-1181) AND PARKS MAINTENANCE DIVISION (414-258-2322) FOR UTILITIES LOCATION PRIOR TO START OF CONSTRUCTION

Project #: **P275-12615** Site #:
Building #:
Date: **12/05/2013**

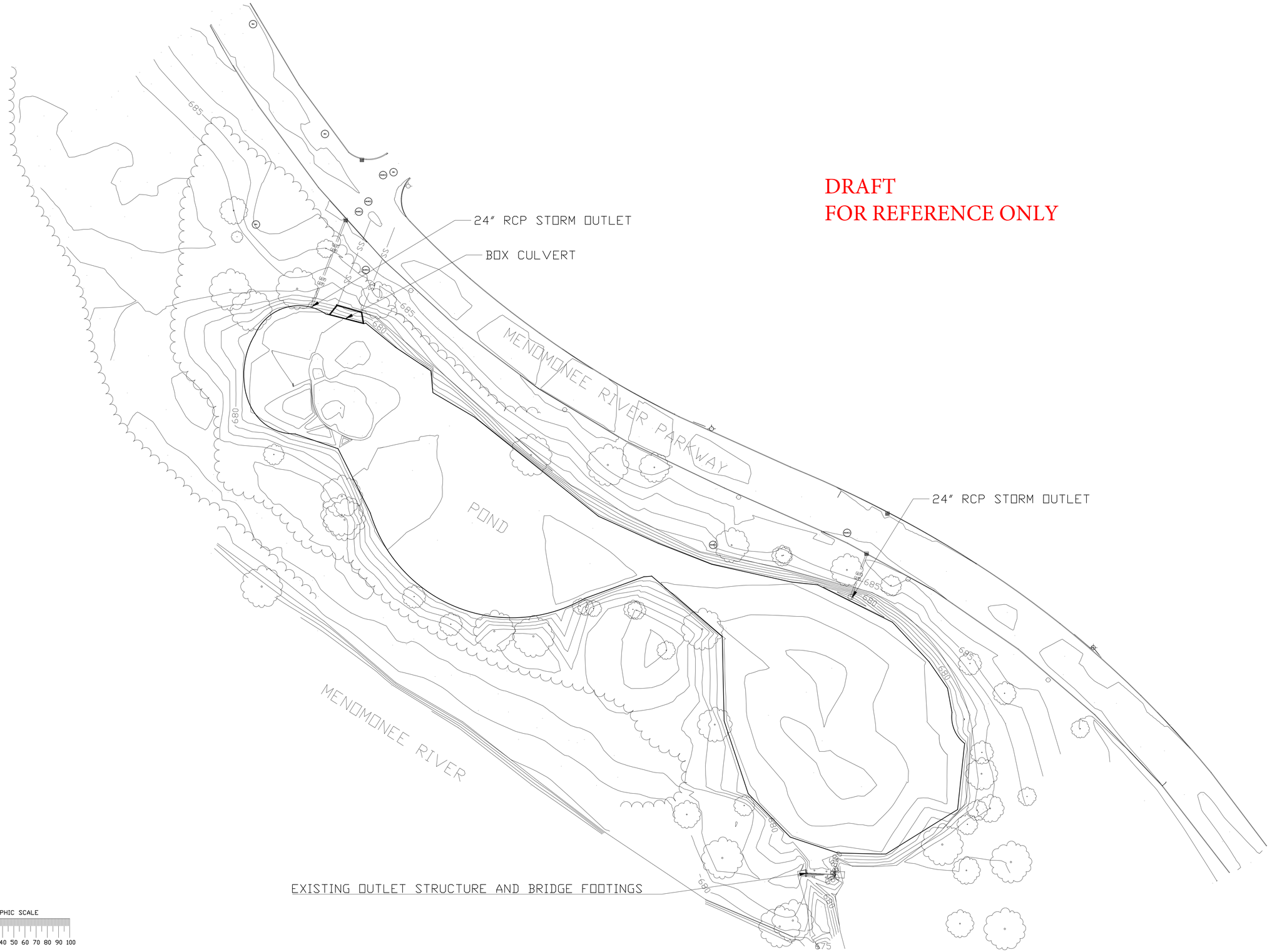
DIRECTOR, (DEPARTMENT): _____

DIRECTOR, D.A.S.: _____

PROJECT MGR./ SECTION HEAD: _____

CS.1

DRAFT
FOR REFERENCE ONLY



GRAPHIC SCALE

0 10 20 30 40 50 60 70 80 90 100

Existing Site Plan 1:40

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _ AE&ES_Ttlb_v2013.6.dwg

WETLAND CREATION

MENOMONEE RIVER PARKWAY LAGOON TO WETLAND

East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

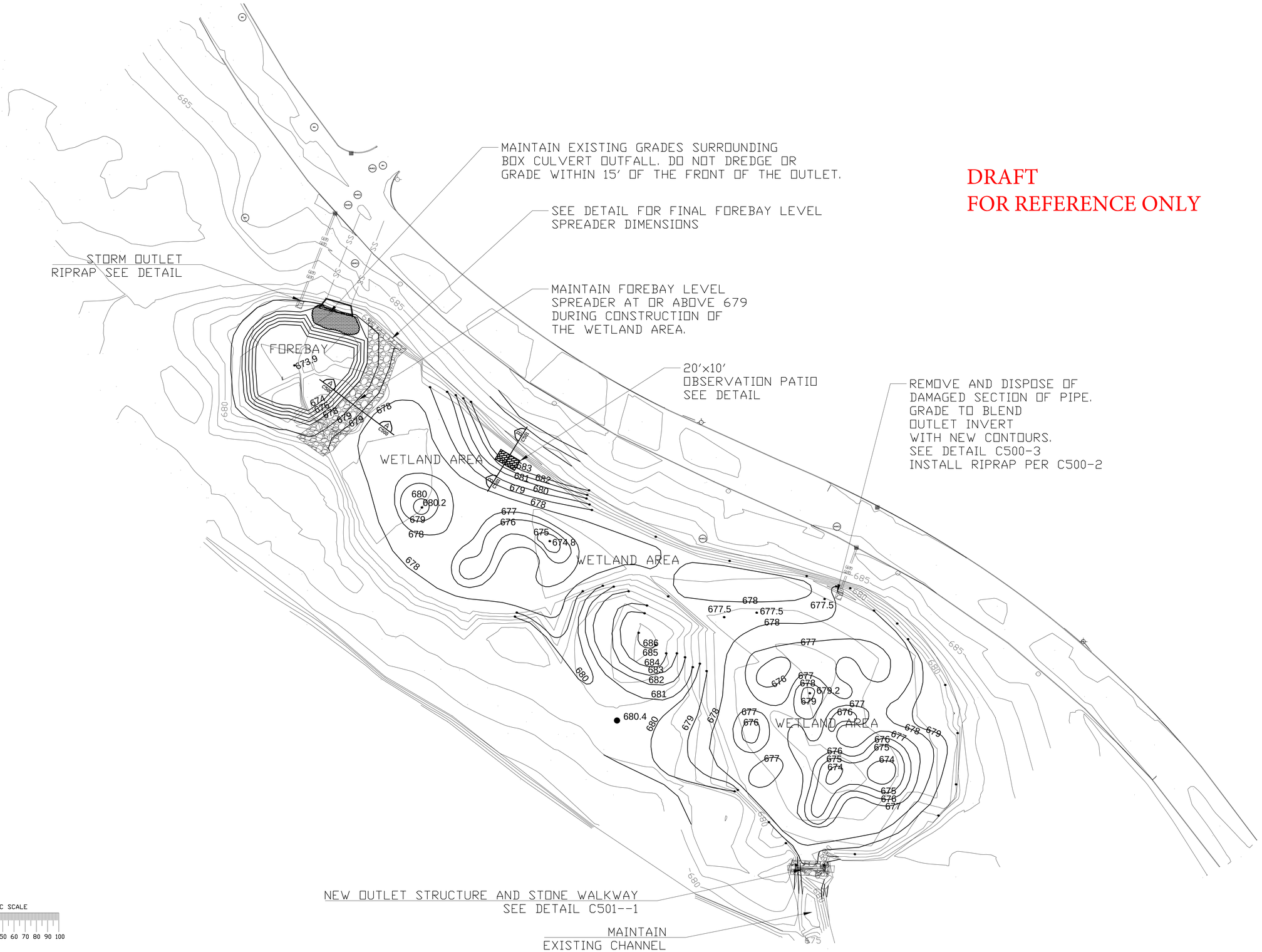
DATE:
11/08/2013

PROJECT:
P275-12615

SITE NO:
-

BUILDING NO:
-

C100



DRAFT
FOR REFERENCE ONLY

Site Plan 1:40

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _AE&ES_Ttlb_v2013.6.dwg

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD. WAUWATOSA, WI 53226

REVISIONS:

DATE: 11/08/2013
PROJECT: P275-12615
SITE NO: -
BUILDING NO: -

C101

DRAFT
FOR REFERENCE ONLY

TRACKING PAD

ABANDON MANHOLE

MAINTAIN BOULDER LAYOUT IN THIS AREA

TYPE A

FOREBAY

WETLAND AREA

TYPE A

TEMPORARY BYPASS SPILLWAY
CREST ELEVATION 677
SEE DETAIL C500-1
REMOVE UPON COMPLETION OF
WETLAND AREA
SLOPE TO DRAIN TO RIVER

SILT FENCE
SEE DETAIL C500-5

TYPE A

WETLAND AREA

TYPE B

INSTALL TEMPORARY BYPASS PIPE
OR SIMILAR AS PART OF DEWATERING .

WETLAND AREA

TRACKING PAD

TEMPORARY SEDIMENT TRAP
PER DNR TECH STD 1063

TYPE A

DEWATERING AND
SOIL STOCKPILE AREA

DEMOLITION NOTES:

1) INSTALL EROSION CONTROL MEASURES (SILT FENCE, TRACKING PAD, SED TRAP, ETC.)

2) INSTALL THE BYPASS SPILLWAY PRIOR TO DEWATERING.

3) ROUGH GRADE THE FOREBAY TO PROPOSED ELEVATIONS. ENSURE THE LEVEL SPREADER IS 679 OR HIGHER DURING DEWATERING AND WETLAND CONSTRUCTION. COMPLETE THIS PRIOR TO DEWATERING

4) DEWATER THE WETLAND AREA BY PUMPING OR SIPHONING CLEAN WATER OVER THE OUTLET STRUCTURE. PUMP ANY TURBID WATER (ASSUME LAST ONE-FOOT OF POND DEPTH) TO THE ROUGH GRADED FOREBAY FOR DISCHARGE THROUGH THE BYPASS CHANNEL.

5) DEMOLISH THE EXISTING OUTLET STRUCTURE AND OLD BRIDGE FOOTINGS ONCE SITE IS DEWATERED AND EROSION CONTROL IS IN PLACE.

6) CLEAR AND GRUB AREA TYPE A (TYPE A): REMOVE ALL INVASIVE VEGETATION INCLUDING, BUT NOT LIMITED TO BUCKTHORN, HONEYSUCKLE, REED CANARY GRASS, JAPANESE KNOTWEED.

7) CLEAR AND GRUB AREA TYPE B (TYPE B): REMOVE ALL VEGETATION INCLUDING STUMPS, ROOTS AND DEBRIS.

GRAPHIC SCALE
0 10 20 30 40 50 60 70 80 90 100

DEMOLISH THE CONCRETE WIER AND BRIDGE FOOTINGS
AFTER WETLAND AREA IS DEWATERED.

Demolition Plan 1:40

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _AE&ES_Ttlb_v201336.dwg

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

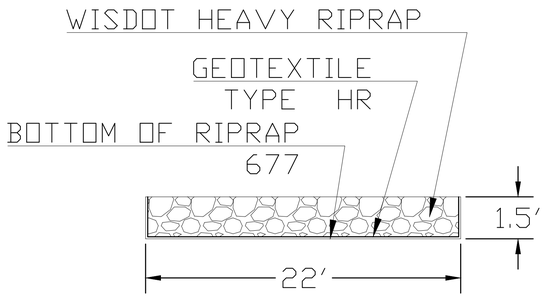
MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

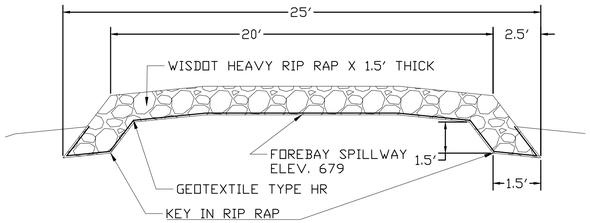
DATE: 11/08/2013
PROJECT: P275-12615
SITE NO: -
BUILDING NO: -

C102



BYPASS SPILLWAY RIPRAP DETAIL C500-1

Scale: NO SCALE

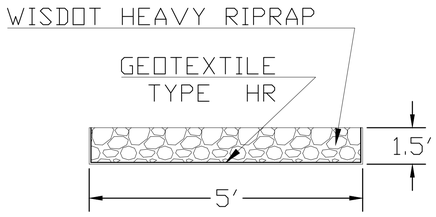


NOTE: MAINTAIN FOREBAY SPILLWAY ELEV. 679 ACROSS LENGTH OF SPILLWAY.
KEEP RIP RAP THICKNESS UNIFORM ACROSS LENGTH OF SPILLWAY.

FOREBAY SPILLWAY RIPRAP DETAIL C500-4

Scale: NO SCALE

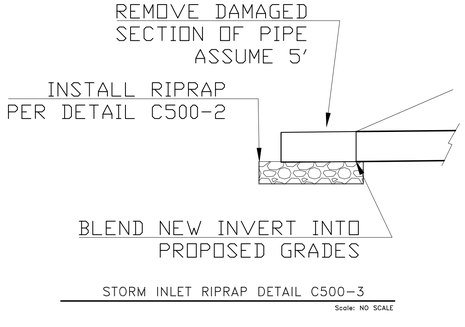
DRAFT
FOR REFERENCE ONLY



NOTE: TOTAL RIP RAP AREA 7'X5'X1.5'

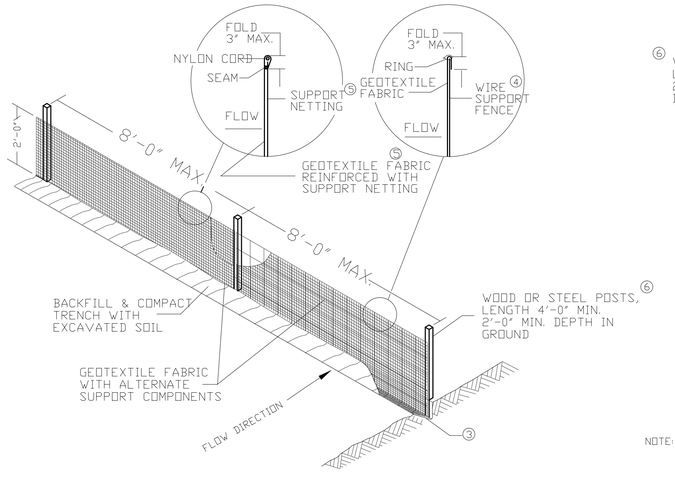
STORM INLET RIPRAP DETAIL C500-2

Scale: NO SCALE

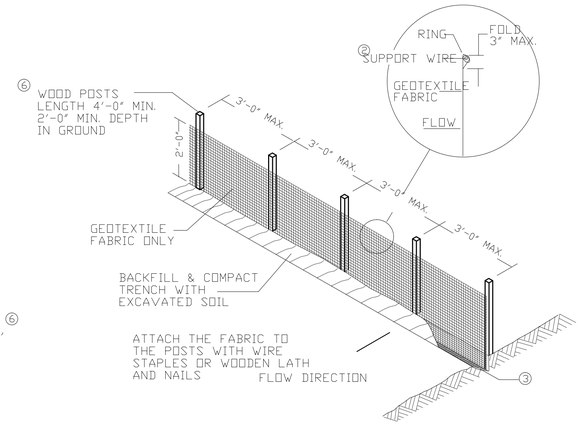


STORM INLET RIPRAP DETAIL C500-3

Scale: NO SCALE

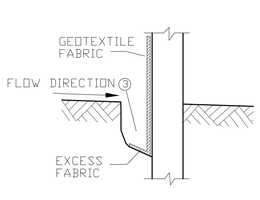


ALTERNATE "A"

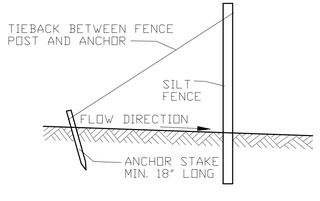


ALTERNATE "B"

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS
MAY BE REQUIRED IN UNSTABLE SOILS



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE C500-5

Scale: NO SCALE

GENERAL SILT FENCE NOTES

DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

① CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.

③ EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

④ WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.

⑤ GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4 " OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

⑥ STEEL POSTS SHALL BE STUDDED 'TEE' OR 'U' TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1 1/2 " X 3 1/2 " EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1 1/8 " X 1 1/8 " OAK OR HICKORY.

ALTERNATES A & B ARE EQUAL AND EITHER MAY BE USED.

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh
Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

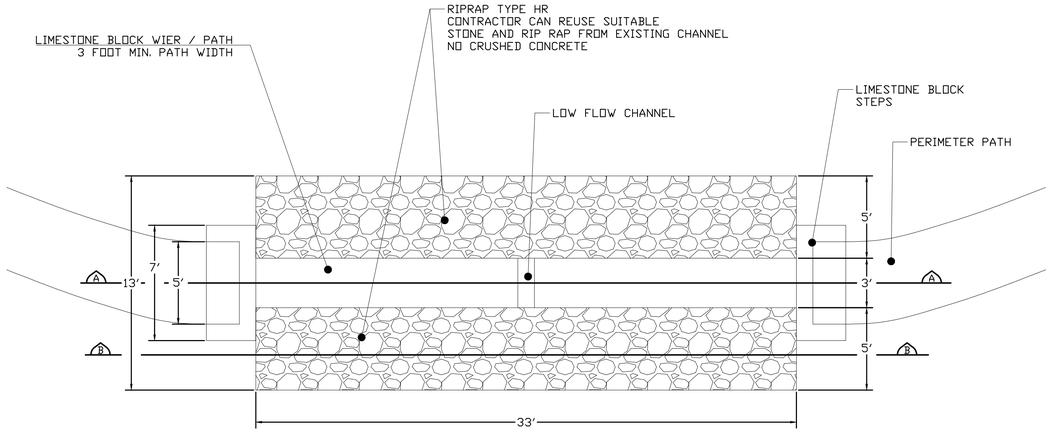
Milwaukee County Dept. of Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

DATE: 11/08/2013
PROJECT: P275-12615
SITE NO: -
BUILDING NO: -

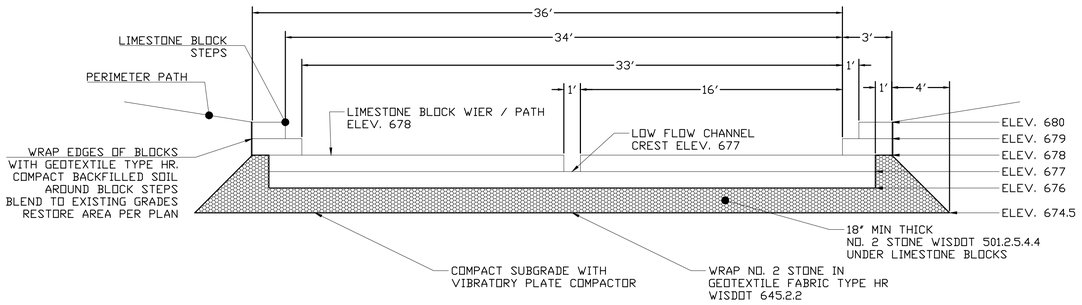
Civil Details A

C500



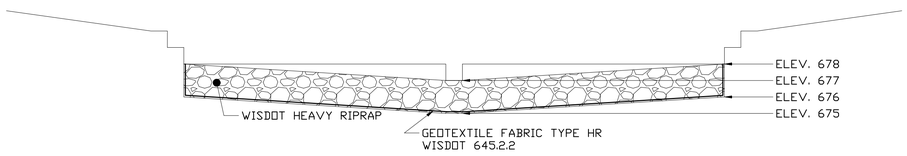
OUTLET STRUCTURE PLAN VIEW C501-1

Scale: NO SCALE



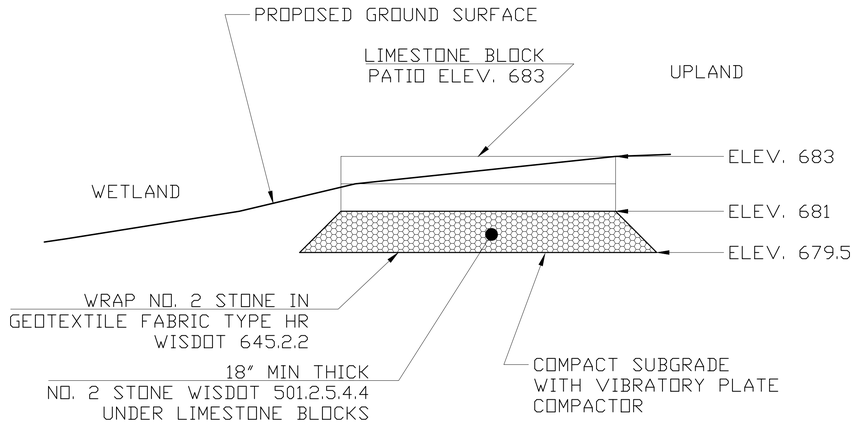
OUTLET STRUCTURE SECTION VIEW A-A

Scale: NO SCALE



OUTLET STRUCTURE SECTION VIEW RIPRAP B-B

Scale: NO SCALE



OBSERVATION PATIO DETAIL C501-B-B

Scale: NO SCALE

NOTES:

1. MINIMUM SIZE FOR THE LIMESTONE BLOCKS USED IS 3' WIDE X 4' LONG X 1' THICK (EXCEPTION: TOP STEP OF OUTLET STRUCTURE IS 2' WIDE)

2. LIMESTONE BLOCK WEIR / PATH SURFACE SURFACE SHALL BE FLAT, HAVING NO LESS THAN 3" ELEVATION DIFFERENCE BETWEEN ANY POINTS 12" OR LESS APART.

3. LIMESTONE BLOCKS SHALL BE STACKED IN A STABLE FASHION. BLOCKS SHALL NOT SHIFT OR ROCK UNDER A PERSONS WEIGHT OR UNDER NORMAL FLOW CONDITIONS.

DRAFT
FOR REFERENCE ONLY

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _AE&ES_Tlb_v2013.6.dwg

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

DATE: 11/08/2013
PROJECT: P275-12615
SITE NO: -
BUILDING NO: -

Civil Details B

C501

EXISTING CATCH BASIN OR INLET

EXISTING DRINKING FOUNTAIN

EXISTING MANHOLE

MANHOLE TO ABANDON

EXISTING LIGHTPOLE

EXISTING WATER VALVE

EXISTING FENCE

PROPOSED FENCE

EXISTING UNDERGROUND WATER LINE

EXISTING UNDERGROUND ELECTRIC LINE

PROPOSED UNDERGROUND ELECTRIC LINE

EXISTING UNDERGROUND LIGHTING

EXISTING STORM SEWER

700 EXISTING CONTOURS

700 PROPOSED CONTOURS

PROPOSED TREE / SHRUB

MAINTAIN EXISTING GRADES

EXISTING PAVEMENT

EXISTING CURBFACE

EXISTING SANITARY SEWER

PROPOSED CATCH BASIN OR AREA DRAIN

EXISTING CONIFEROUS TREE

SURVEY CONTROLE POINT

SILT FENCE

LIMITS OF CONSTRUCTION

SITE ACCESS

HAYBALE DITCH CHECK

CLEAR AND GRUB AREA TYPE A

CLEAR AND GRUB AREA TYPE B

TRACKING PAD

RIPRAP

SEED TYPE 2

SEED TYPE 3

DRAFT
FOR REFERENCE ONLY

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _ AE&ES_Ttlb_v2013.6.dwg

WETLAND CREATION

MENOMONEE RIVER PARKWAY LAGOON TO WETLAND

East Side of the Menomonee River, 600 Feet North of Burleigh Street. Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

DATE:
11/08/2013

PROJECT:
P275-12615

SITE NO:
-

BUILDING NO:
-

Schedules - Legends - Symbols - Notes

C600

DRAFT
FOR REFERENCE ONLY

LANDSCAPE NOTES:

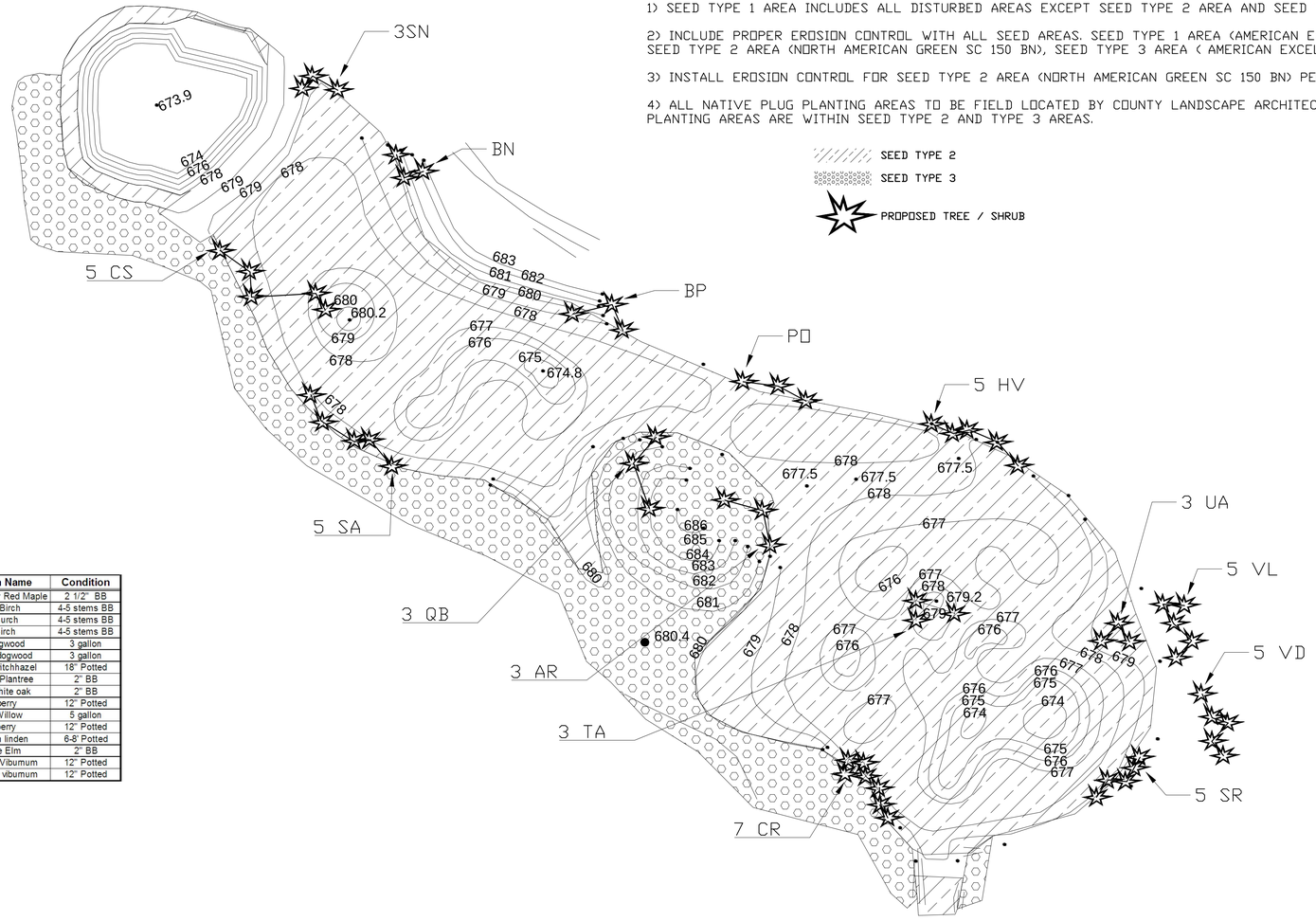
1) SEED TYPE 1 AREA INCLUDES ALL DISTURBED AREAS EXCEPT SEED TYPE 2 AREA AND SEED TYPE 3 AREA.

2) INCLUDE PROPER EROSION CONTROL WITH ALL SEED AREAS. SEED TYPE 1 AREA (AMERICAN EXCELSIOR NET FREE MATTING), SEED TYPE 2 AREA (NORTH AMERICAN GREEN SC 150 BN), SEED TYPE 3 AREA (AMERICAN EXCELSIOR NET FREE MATTING).

3) INSTALL EROSION CONTROL FOR SEED TYPE 2 AREA (NORTH AMERICAN GREEN SC 150 BN) PER DETAILS L500-1 AND L500-2

4) ALL NATIVE PLUG PLANTING AREAS TO BE FIELD LOCATED BY COUNTY LANDSCAPE ARCHITECT AFTER SEEDING. ASSUME ALL PLANTING AREAS ARE WITHIN SEED TYPE 2 AND TYPE 3 AREAS.

SEED TYPE 2
SEED TYPE 3
PROPOSED TREE / SHRUB



Numbers	Abrev.	Latin Name	Common Name	Condition
3	AR	Acer rubrum "October Glory"	October Glory Red Maple	2 1/2" BB
3	BA	Betula alleghaniensis	Yellow Birch	4-5 stems BB
3	BN	Betula nigra	River Burch	4-5 stems BB
3	BP	Betula pumila var. grandulifera	Bog Birch	4-5 stems BB
7	CR	Cornus racemosa	Grey dogwood	3 gallon
5	CS	Cornus stolonifera	Red twig dogwood	3 gallon
5	HV	Hammemalis virginiana	Common witchhazel	18" Potted
6	PO	Plantnus occidentalis	American Plantree	2" BB
3	QB	Quercus bicolor	Swamp white oak	2" BB
5	SA	Symnocarppus albus	Snowberry	12" Potted
3	SN	Salix nigra	Black Willow	5 gallon
5	SR	Sambucus racemosa	Elderberry	12" Potted
3	TA	Tilia americana	American linden	6-8' Potted
3	UA	Ulmus american 'chinensis'	Chinese Elm	2" BB
5	VD	Vibumum dentatum	Arrowwood Vibumum	12" Potted
5	VL	Vibumum lentago	Nannyberry vibumum	12" Potted

GRAPHIC SCALE
0 10 20 30 40 50 60 70 80 90 100

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _AE&ES_Ttlb_v2013.6.dwg

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

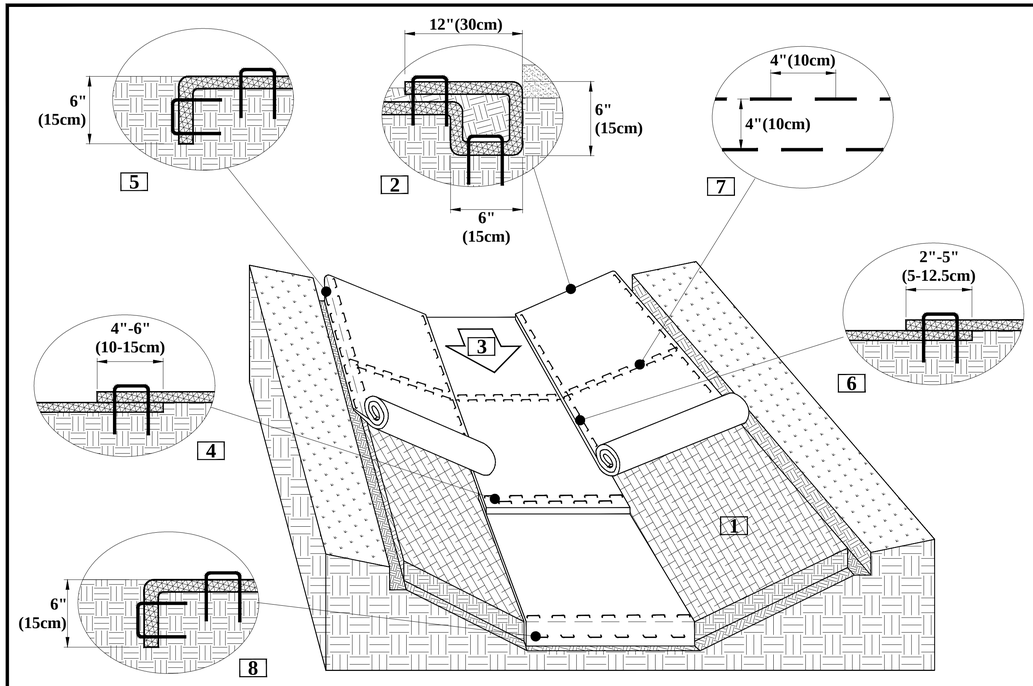
Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD WAUWATOSA, WI 53226

REVISIONS:

DATE:
11/08/2013
PROJECT:
P275-12615
SITE NO:
-
BUILDING NO:
-

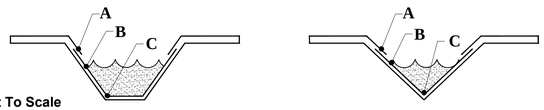
Landscape Site Plan

L100



CRITICAL POINTS

A. Overlaps and Seams
B. Projected Water Line
C. Channel Bottom/Side Slope Vertices



Drawing Not To Scale

NOTES:

*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

**In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

Tensar. NORTH AMERICAN GREEN®

5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.tensarnagreen.com

Disclaimer:

The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

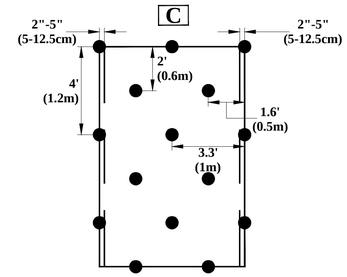
Drawn on: 3-16-11

WETLAND INSTALLATION DETAIL ENTIRE SEED TYPE 2 AREA

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the channel by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12"(30cm) of RECPs extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPs with a row of staples/stakes approximately 12"(30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.
3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. Place consecutive RECPs end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
5. Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes approximately 12"(30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPs must be overlapped approximately 2"-5" (5-12.5cm) (Depending on RECPs type) and stapled.
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 4"(10cm) apart and 4"(10cm) on center over entire width of the channel.
8. The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.

EROSION CONTROL MAT INSTALLATION WITHIN WETLAND L500-1

Scale: NO SCALE

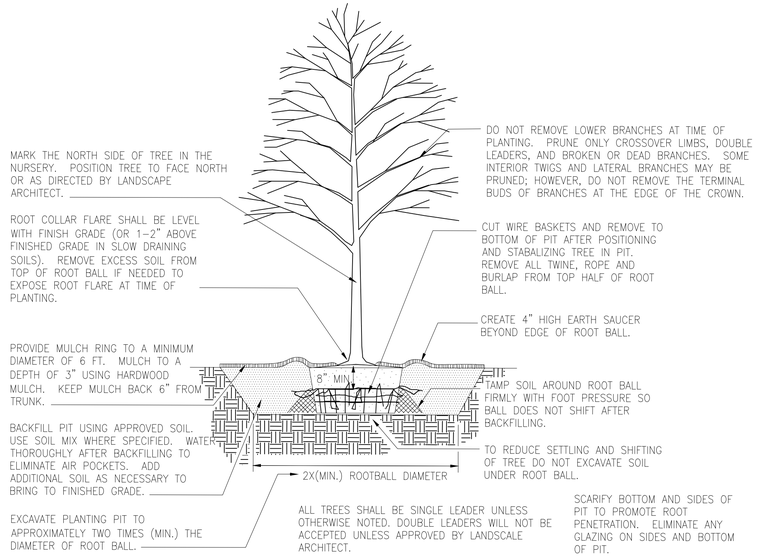


1.7 Staples per SQ.YD.

EROSION CONTROL MAT WITHIN WETLAND STAPLE PATTERN L500-2

Scale: NO SCALE

DRAFT
FOR REFERENCE ONLY



NOTES

1. SEE STAKING DETAILS FOR PROPER STAKING OF TREES.
2. WRAPPING OF TREE TRUNKS IS DISCOURAGED. WRAP ONLY UPON APPROVAL OF LANDSCAPE ARCHITECT. SEE WRAPPING DETAIL.

TREE PLANTING DETAIL C500-3

NOT TO SCALE

WETLAND CREATION
MENOMONEE RIVER PARKWAY LAGOON TO WETLAND
East Side of the Menomonee River, 600 Feet North of Burleigh Street, Wauwatosa, WI, 53222

MILWAUKEE COUNTY PARKS

Milwaukee County Dept. of Parks Parks, Recreation and Culture
PLANNING & DEVELOPMENT DIVISION
PARKS ADMIN 9480 WATERTOWN PLANK RD. WAUWATOSA, WI 53226

REVISIONS:

DATE: 11/08/2013
PROJECT: P275-12615
SITE NO: -
BUILDING NO: -

Landscape Details

L500

O:\EXPDOC\PROJECTS\P275\12615-Menomonee River Parkway Wetland\Plans\P275_Menomonee River Parkway Lagoon _ AE&ES_Tlb_v2013.6.dwg