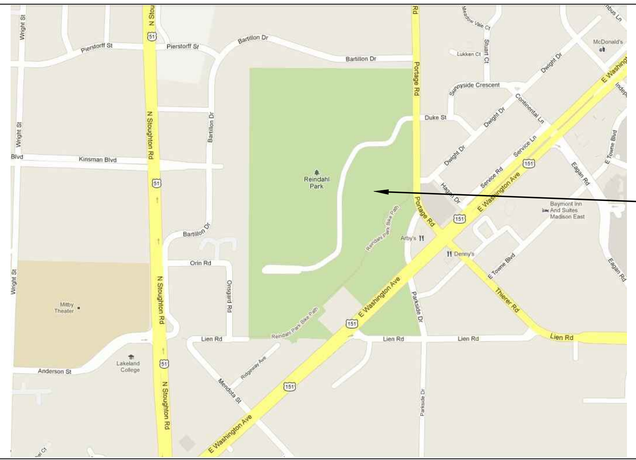
AMUND REINDAHL PARK SPLASH PAD

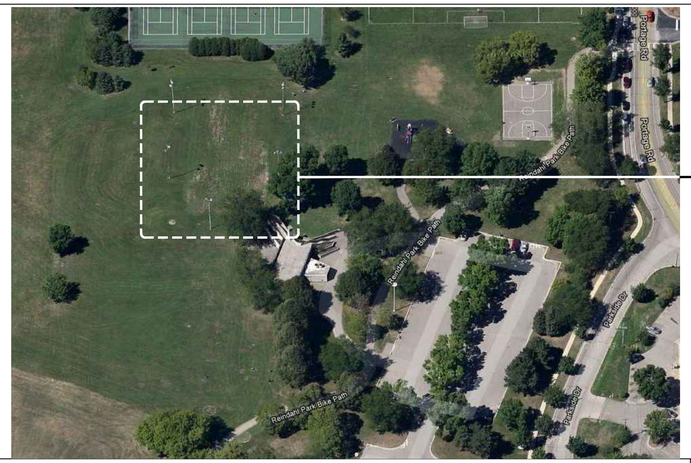
1818 PORTAGE ROAD

MADISON, WI 53704



LOCATION MAP

6
NONE



SITE PLAN

3
NONE

SHEET LIST

1
NONE

THIS SPACE NOT USED

7
NONE

THIS SPACE NOT USED

5
NONE

CONTACTS

OWNER

CITY OF MADISON
CITY-COUNTY BUILDING, RM 104
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
OWNER PROJECT REP. : SARAH LERNER
PHONE: 608-261-4281

ARCHITECT/AQUATIC DESIGN

WATER TECHNOLOGY, INC.
100 PARK AVENUE
BEAVER DAM, WI 53916
PHONE: 920-887-7375
WEB SITE: www.watertechnologyinc.com
PROJECT MANAGER: DEAN MUELLER, AIA

ENGINEER

GRAEF
1150 SPRINGHURST DRIVE, SUITE 201
GREEN BAY, WI 54304
PHONE: 920-592-9440
WEB SITE: www.graef-usa.com
ENGINEER: JEFFERY S. ROSNER, P.E.

4
NONE

BUILDING INFORMATION

2
NONE

BUILDING INFORMATION
CODE SUMMERY: (2011 WCBC - 2009 IBC/IMC)

BUILDING AREA	555 SQ. FT.
TYPE OF CONSTRUCTION	5B
OCCUPANCY	
MECHANICAL/CONCESSIONS	B

Sheet List Table

WTI
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www.watertechnologyinc.com
#12408.01

REINDAHL SPLASH PAD
1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

TITLE SHEET

TITLE SHEET

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 COVER.dwg

PARKING LOT

OVERFLOW
STAGING AREA

ASPHALT

TENNIS COURT

SOCCER FIELD

BASKETBALL COURT

HOCKEY RINK

PLAYGROUND

USE PROPOSED PATH
AS SITE ENTRANCE

NOTE:
STAGING AREAS TO BE SURROUNDED BY SAFETY FENCE. TURF THAT IS DISTURBED MUST BE REPAIRED - COST FOR SEED IS INCLUDED, BUT ALL OTHER COST IS INCIDENTAL TO CONTRACT.

PRIMARY STAGING AREA

GRAVEL

SHELTER

BIKE PATH

PARKING LOT

SKATING RINK

SURVEY NOTES

1. THE BASE SURVEY WAS PREPARED BY THE CITY OF MADISON. ALL UNDERGROUND UTILITIES AND STRUCTURES HAVE BEEN SHOWN TO A REASONABLE DEGREE OF ACCURACY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE THERETO.

2. COORDINATES ARE BASED ON THE (FILL IN SYSTEM FROM BELOW). VERTICAL DATUM IS BASED ON (FILL IN SYSTEM FROM BELOW.

COUNTY COORDINATES
COORDINATES ARE BASED THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DANE COUNTY. NORTH AMERICAN DATUM OF 1983, 2007 ADJUSTMENT (NAD83(07)). NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), USING THE WISCONSIN CONTINUALLY OPERATING REFERENCE STATIONS (WISCORS).

01 C100 EXISTING SITE PLAN
1" = 30'

0 15' 30'
SCALE: 1" = 30'

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REINDAHL SPLASH PAD

MADISON, WI

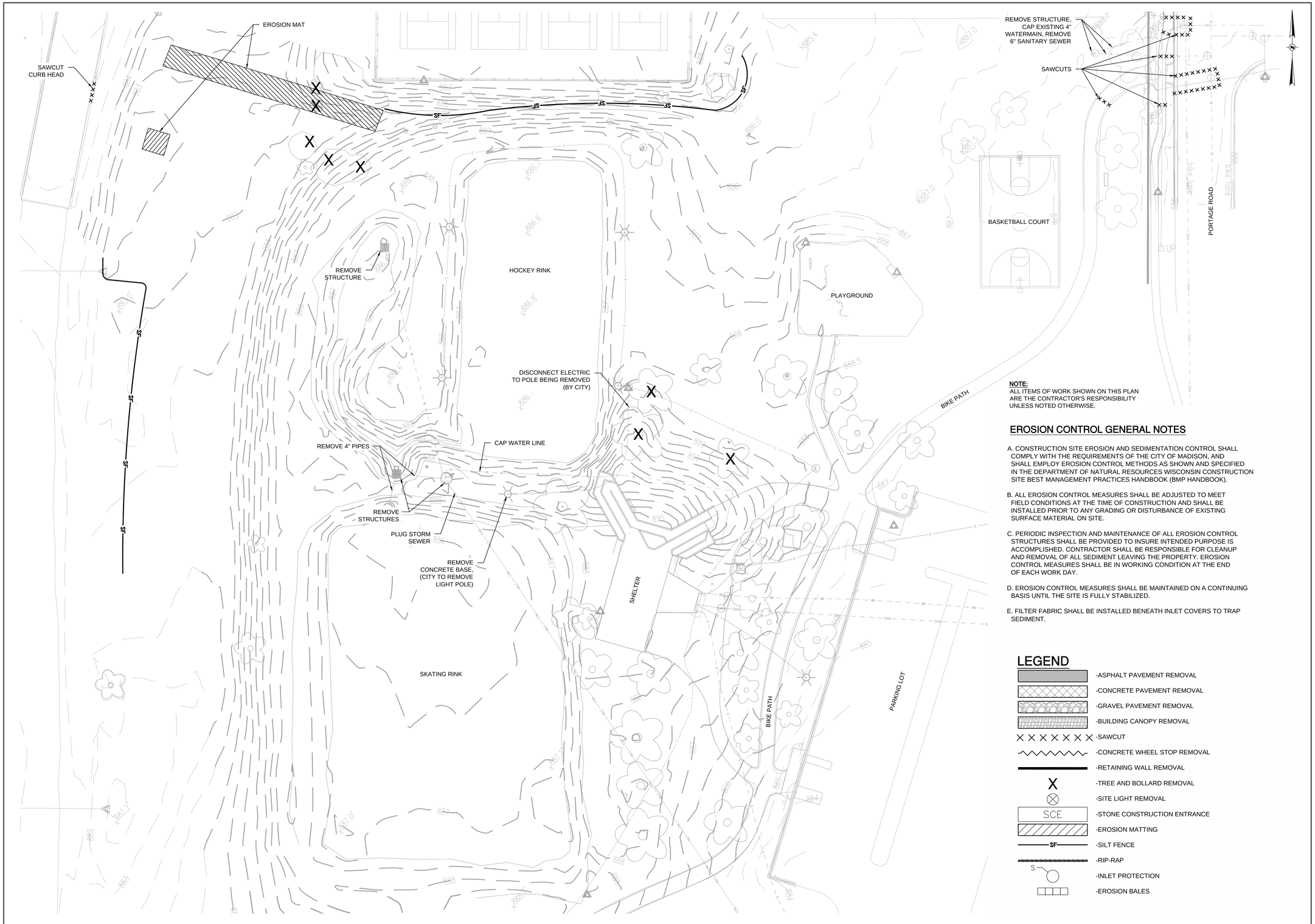
ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	KRN
CHECKED BY	WAB
PHASE	100% CD

EXISTING SITE PLAN

C100

Date: Tuesday, April 30, 2013 Plotted by: Nelson, Kara Drawing location: J:\Jobs2013\20132000\CAD\01-REINDAHL\CAD\Site\dwg\00\20132000_C100.dwg



01 C200 DEMOLITION AND EROSION CONTROL PLAN

1" = 30'

0 15' 30'

SCALE: 1" = 30'

NOTE:
ALL ITEMS OF WORK SHOWN ON THIS PLAN ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS NOTED OTHERWISE.

EROSION CONTROL GENERAL NOTES

A. CONSTRUCTION SITE EROSION AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF MADISON, AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE DEPARTMENT OF NATURAL RESOURCES WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK (BMP HANDBOOK).

B. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON SITE.

C. PERIODIC INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT LEAVING THE PROPERTY. EROSION CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORK DAY.

D. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL THE SITE IS FULLY STABILIZED.

E. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT.

LEGEND

- -ASPHALT PAVEMENT REMOVAL
- -CONCRETE PAVEMENT REMOVAL
- -GRAVEL PAVEMENT REMOVAL
- -BUILDING CANOPY REMOVAL
- -SAWCUT
- -CONCRETE WHEEL STOP REMOVAL
- -RETAINING WALL REMOVAL
- -TREE AND BOLLARD REMOVAL
- -SITE LIGHT REMOVAL
- SCE -STONE CONSTRUCTION ENTRANCE
- -EROSION MATTING
- SF -SILT FENCE
- -RIP-RAP
- S -INLET PROTECTION
- -EROSION BALES

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	KRN
CHECKED BY	WAB
PHASE	100% CD

DEMOLITION AND EROSION CONTROL PLAN

C200

GENERAL NOTES

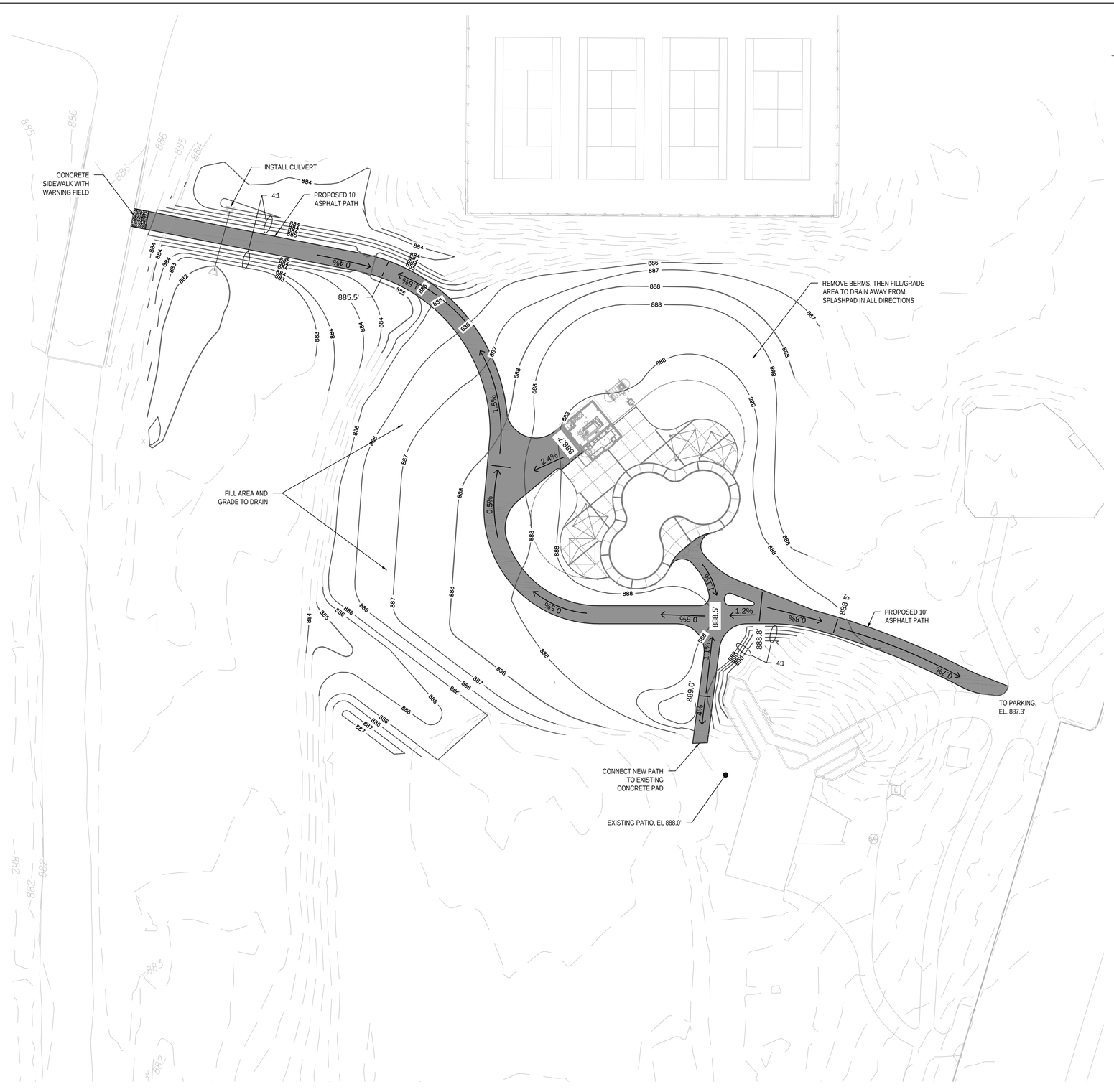
1. THE BASE SURVEY WAS PREPARED BY CITY OF MADISON. ALL UNDERGROUND UTILITIES AND STRUCTURES HAVE BEEN SHOWN TO A REASONABLE DEGREE OF ACCURACY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE THERETO.
2. CONTRACTOR SHALL VERIFY LOCATION OF PROPOSED WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING WORK.
3. NO TREE REMOVAL WITHOUT APPROVAL.
4. ALL DISTURBED AREAS NOT BEING PAVED SHALL BE REPAIRED WITH 4" TOPSOIL, FERTILIZER, SEED, AND MULCH OR EROSION MAT.

GRADING NOTES

1. ADA REGULATIONS REQUIRE A MAXIMUM SLOPE OF 1:20 (5%) ALONG THE LENGTH OF THE ACCESSIBLE ROUTE AND A MAXIMUM SLOPE OF 1:50 (2%) ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE. ADA REGULATIONS REQUIRE A MAXIMUM SLOPE OF 1:50 (2%) IN ALL DIRECTIONS WITHIN AN ADA PARKING STALL AND ADJACENT UNLOADING ZONE.
2. RIM ELEVATIONS IN CURB AND GUTTER ARE FLANGE GRADES.

LEGEND

- -EXISTING CONTOUR
- -PROPOSED CONTOUR
- -PROPOSED VERTICAL CURB
- -PROPOSED MANHOLE
- -PROPOSED CATCH BASIN
- -PROPOSED ASPHALT PAVEMENT
- -PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- -PROPOSED CONCRETE SIDEWALK
- -PROPOSED CONCRETE PAVEMENT



01 C300 SITE/GRADING PLAN

1" = 30'

0 15' 30'

SCALE: 1" = 30'

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

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PHASE	100% CD

SITE AND GRADING PLAN

C300

LEGEND

- STM — -PROPOSED STORM SEWER
- SAN — -PROPOSED SANITARY SEWER
- W — -PROPOSED WATER MAIN
- E — -PROPOSED ELECTRICAL
- EASE — -PROPOSED UTILITY EASEMENT
- -PROPOSED MANHOLE
- -PROPOSED CATCH BASIN
- -PROPOSED GATE VALVE
- -PROPOSED HYDRANT
- -PROPOSED UTILITY PLUG

NOTE:
CONTRACTOR TO DEVELOP TRAFFIC CONTROL PLAN FOR INSTALLING SANITARY SEWER AND WATER MAIN IN PORTAGE ROAD. TRAFFIC VOLUMES MAY DICTATE NIGHT WORK TO INSTALL PIPES AND REPAIR STREET.

FUTURE 10" WATER MAIN

WATER MAIN EXTENSION TO END AT PROPOSED SHUT-OFF VALVE, INSTALL 10" GATE VALVE AND BOX

INSTALL 22.5° BEND

IE = 883.00

PROPOSED 10" DUCTILE IRON WATER MAIN

IE = 882.50

INSTALL 30 LF 18" RCP WITH (2) APRON ENDWALLS

PROPOSED LOCATION FOR ELECTRICAL TRANSFORMER

PROPOSED 10" DUCTILE IRON WATER MAIN

INSTALL 22.5° BEND

EXISTING MANHOLE WEST IE = 880.81

PROPOSED 2" TYPE K COPPER WATER SERVICE TO SPLASHPAD BUILDING

PROPOSED 10" DUCTILE IRON WATER MAIN

INSTALL 45° BEND

INSTALL 10"x6" TEE

INSTALL 11.25° BEND

400'-8" @ 0.40%

PROPOSED 6" DUCTILE IRON WATER MAIN

INSTALL 10" GATE VALVE

CONNECT WATER MAIN EXTENSION TO EXISTING PIPE IN PORTAGE ROAD

4" PVC OVERFLOW, DRAIN TO DITCH

SAS A
NE IE = 882.41
SW IE = 882.50

ELECTRICAL SERVICE, BY MG&E AND CONTRACTOR

70'-6" @ 1.0%

IE = 883.20
(5.8' B.F.F.)

1" TYPE K COPPER WATER LINES TO DRINKING FOUNTAIN, AND SHOWER (TYPE K COPPER)

INSTALL 6" GATE VALVE

PROPOSED NEW HYDRANT

bike lane

bike lane

01 C500 UTILITY PLAN

1" = 30'

0 15' 30'

SCALE: 1" = 30'

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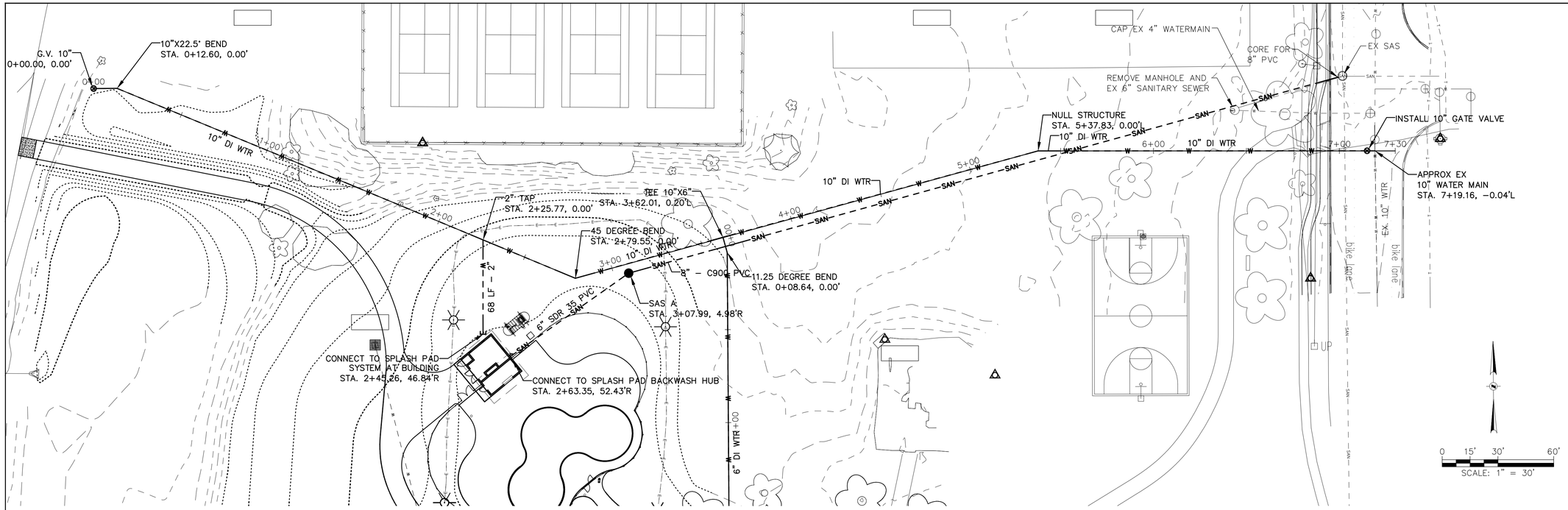
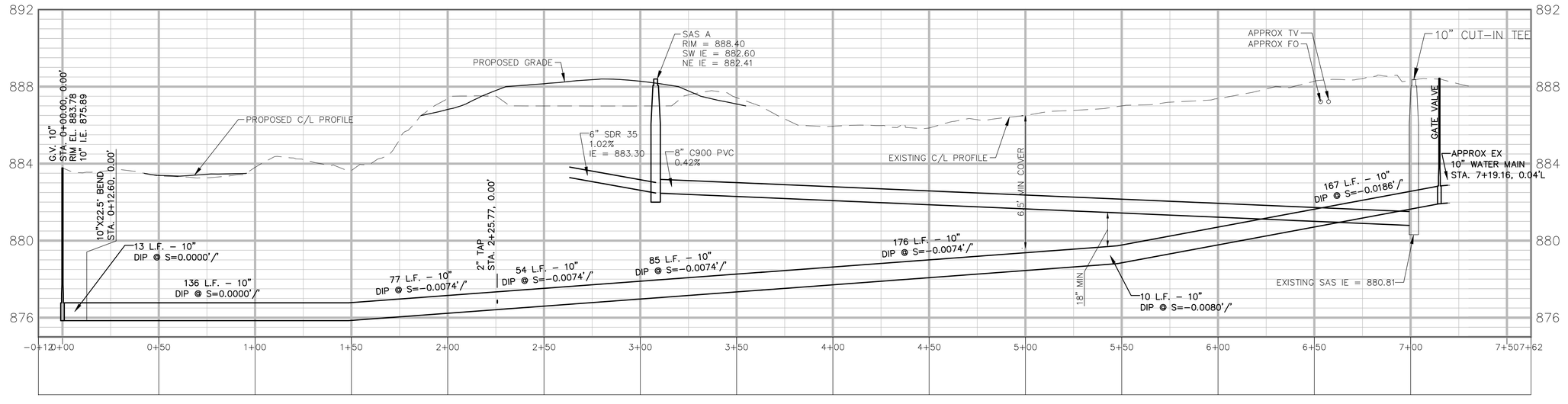
UTILITY PLAN

C500



PROPOSED WATERMAIN #1 PROFILE



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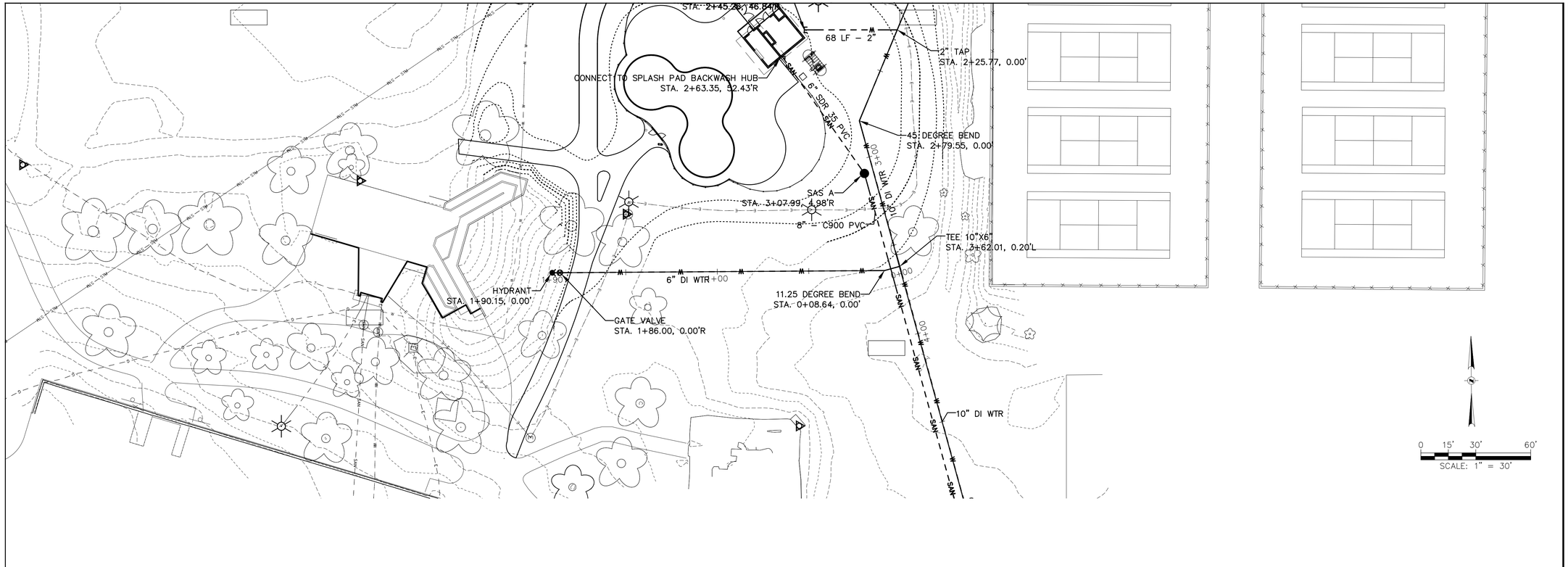
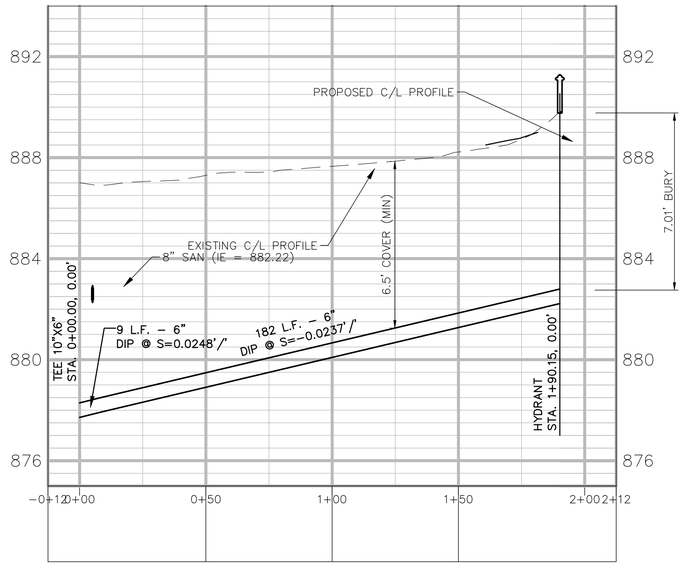
WATERMAIN & SANITARY SEWER PLAN AND PROFILE

C501



PROPOSED WATERMAIN #2 PROFILE



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MADISON, WI 53704

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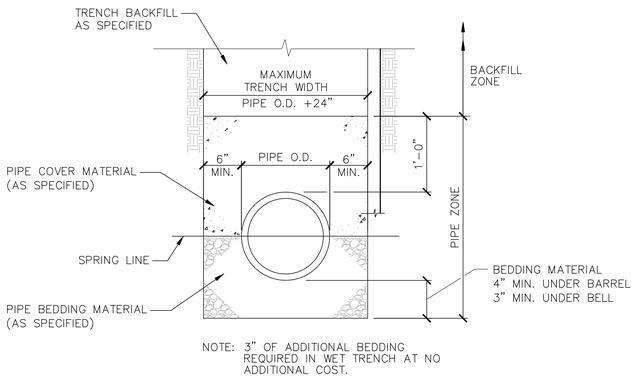
CHECKED BY	WAB
PHASE	100% CD

WATERMAIN PLAN AND PROFILE

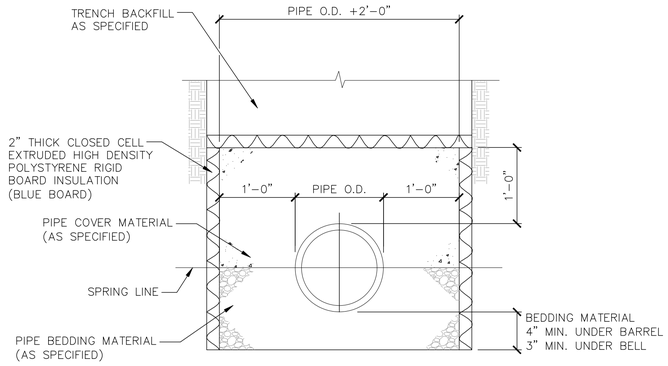
C502



NOTE: 3" OF ADDITIONAL BEDDING REQUIRED IN WET TRENCH AT NO ADDITIONAL COST.

CLASS "B" BEDDING DETAIL FOR SEWER

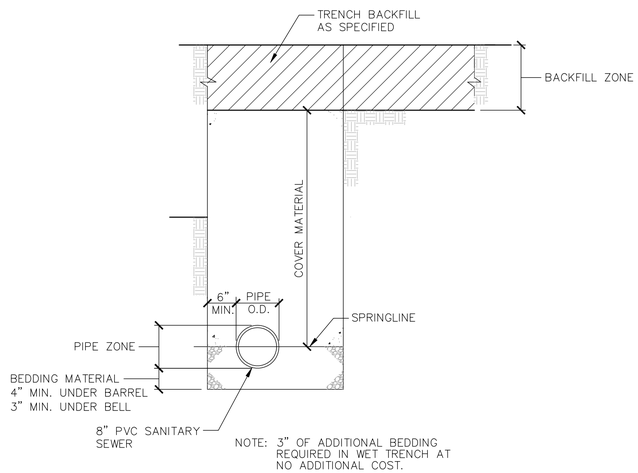
N.T.S.



NOTE: INSULATION PER DETAIL IS REQUIRED WHEREVER COVER OVER THE TOP OF PIPE IS LESS THAN 6 FEET OR WHERE SHOWN.

INSULATION DETAIL

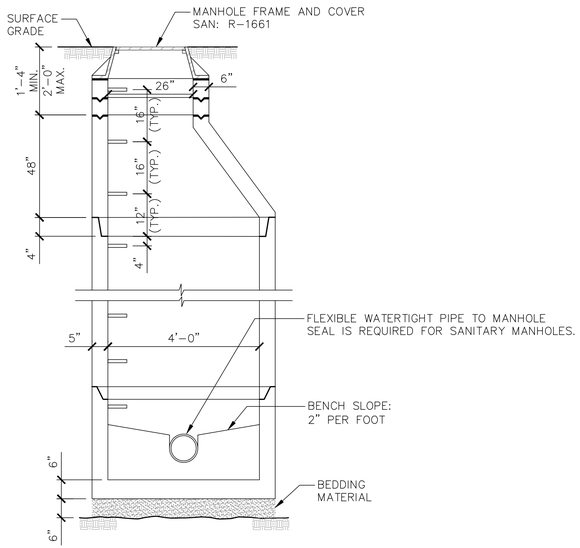
N.T.S.



NOTE: 3" OF ADDITIONAL BEDDING REQUIRED IN WET TRENCH AT NO ADDITIONAL COST.

GRAVITY SEWER TRENCH DETAIL

N.T.S.



GENERAL NOTES

PRECAST CONCRETE ADJUSTING RINGS TO BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.

CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO DESIGNATION C-478 REQUIREMENTS OF ASTM SPECIFICATIONS.

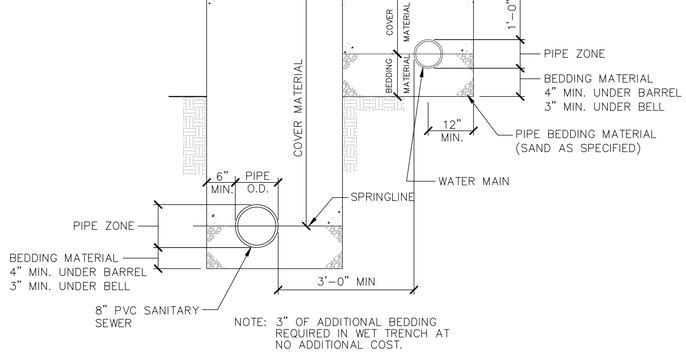
JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING RUBBER GASKETS OR BUTYL RUBBER MASTIC MATERIAL.

AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT.

6" BEDDING MATERIAL REQUIRED UNDER BASE. MANHOLES TO BE BACKFILLED WITH GRANULAR BACKFILL MATERIAL.

PRECAST MANHOLE

N.T.S.



NOTE: 3" OF ADDITIONAL BEDDING REQUIRED IN WET TRENCH AT NO ADDITIONAL COST.

PRESSURE SEWER AND WATER MAIN TRENCH DETAIL

N.T.S.

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

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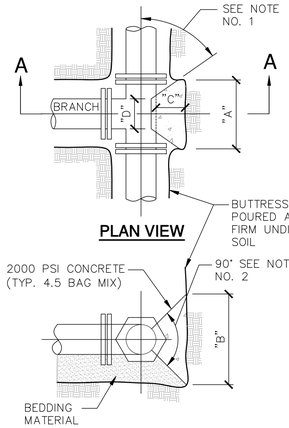
PHASE	100% CD

DETAILS - SEWER

C900



PLAN VIEW

SECTION A-A

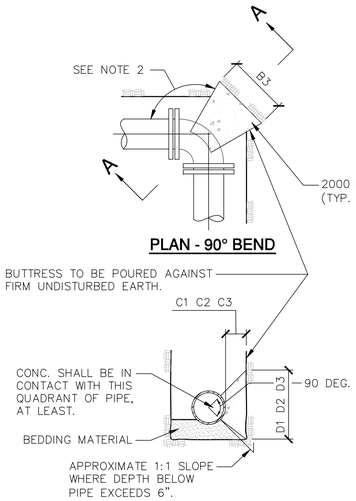
NOTES:
1. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45 DEGREES.
2. CONCRETE SHOULD BEAR ON THIS QUADRANT OF PIPE AS A MINIMUM.
3. DIMENSION "D" SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHALL NOT COVER MECHANICAL JOINTS.
4. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ. FT. AND A WATER PRESSURE OF 150 PSI.
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

BUTTRESS DIMENSIONS				
B.D.	"A"	"B"	"C"	"D"
6"	1'-3"	1'-0"	SEE NOTE NO. 1	SEE NOTE NO. 3
8"	1'-6"	1'-4"		
12"	2'-3"	2'-0"		
16"	3'-2"	2'-6"		
20"	4'-0"	3'-0"		
24"	5'-3"	3'-4"		
30"	6'-3"	4'-3"		

B.D. = BRANCH DIAMETER

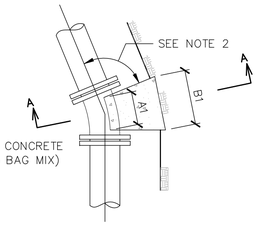
CONCRETE BUTTRESS FOR TEES

N.T.S.

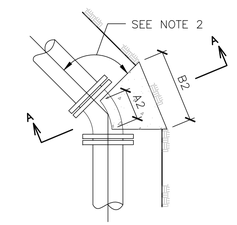


PLAN - 90° BEND

SECTION A-A



PLAN - 22-1/2° BEND



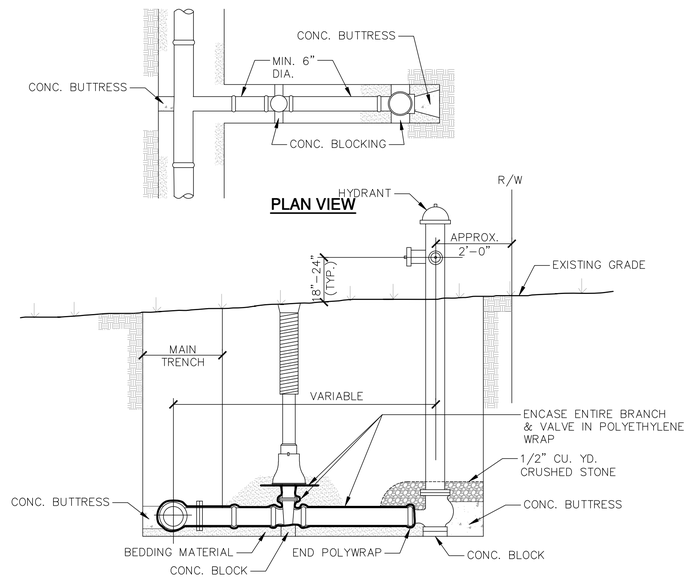
PLAN - 45° BEND

BUTTRESS DIMENSIONS						
PIPE SIZE	22-1/2° BENDS		45° BENDS		90° BENDS	
	B1	D1	B2	D2	B3	D3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES:
1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.
2. DIMENSIONS C1, C2, C3, SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45 DEGREES.
3. DIMENSIONS A1, A2, A3, SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHALL NOT COVER WITH M.J. BOLTS.
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM UNDISTURBED EARTH.
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

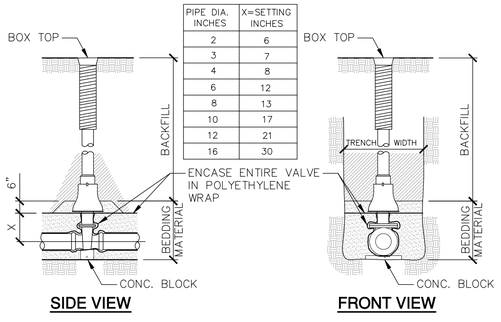
CONCRETE BUTTRESS FOR BENDS

N.T.S.



STANDARD HYDRANT SETTING

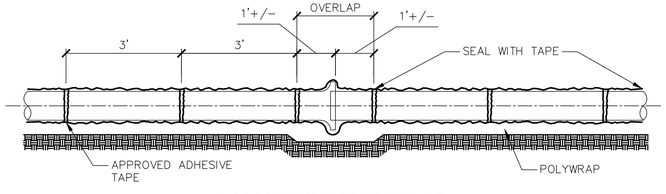
N.T.S.



PIPE DIA. INCHES	X=SETTING INCHES
2	6
3	7
4	8
6	12
8	13
10	17
12	21
16	30

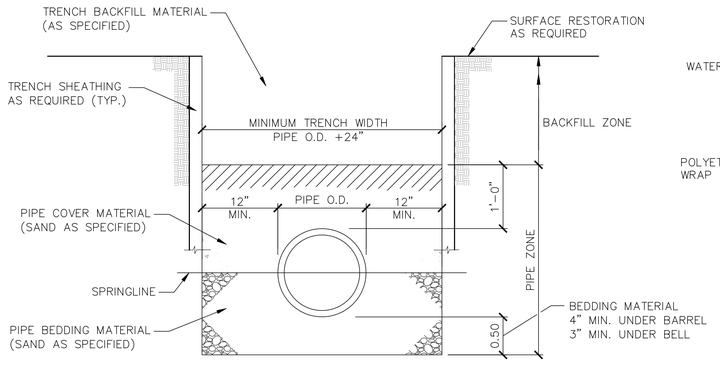
STANDARD GATE VALVE BOX SETTING DETAIL

N.T.S.



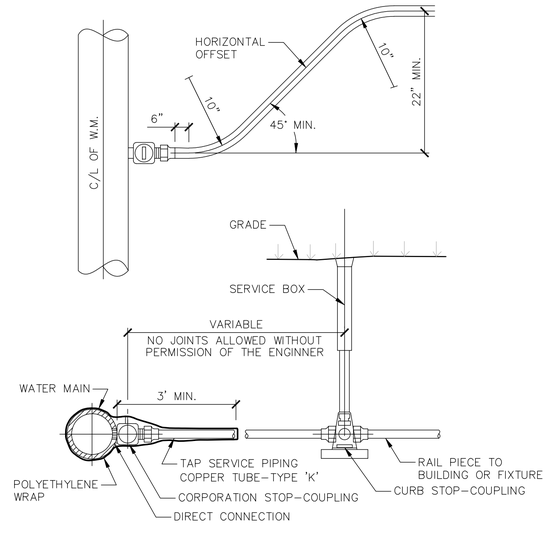
POLYETHYLENE WRAP

N.T.S.



WATER MAIN TRENCH DETAIL

N.T.S.



SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2 1/2"
1 1/4"	1 1/4"	1 1/4"	3"
1 1/2"	1 1/4"x1 1/2"	1 1/2"	3"
* 2"	1 1/2"x2"	2"	3"

* FOR A 2" SERVICE PIPE, CORP. STOP FOR A 6" WATER MAIN REQUIRES A TAP WITH A CLAMP.

SERVICE LATERAL

N.T.S.

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www.watertechnologyinc.com

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5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

REINDAHL SPLASH PAD

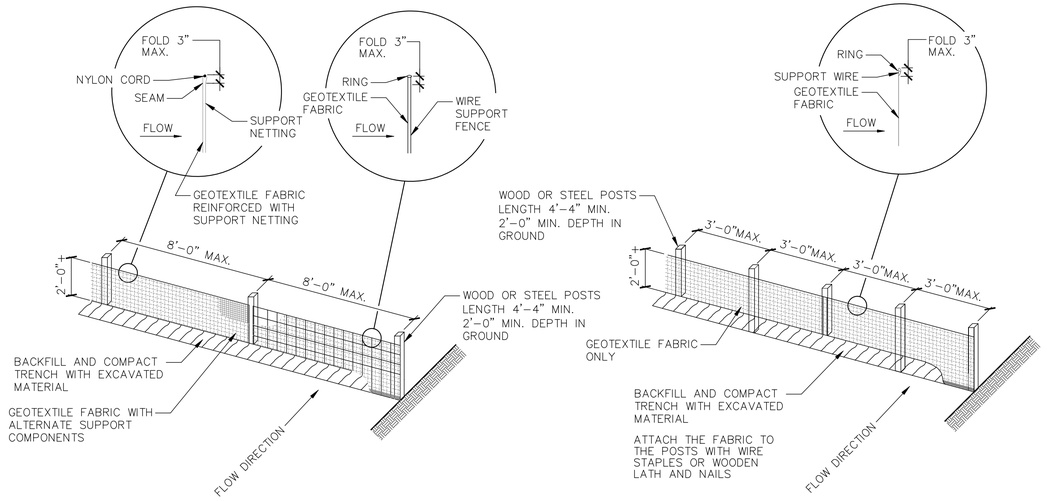
MADISON, WI

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	KRN
CHECKED BY	WAB
PHASE	100% CD

DETAILS - WATER MAIN

C901

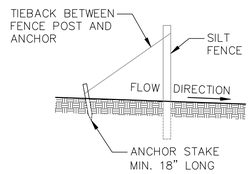


ALTERNATE "A"

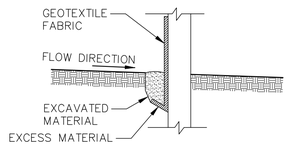
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE
N.T.S.

ALTERNATE "B"



SILT FENCE TIE BACK
N.T.S.



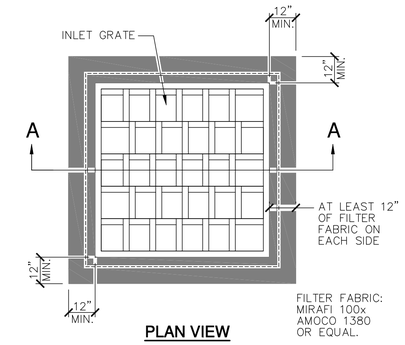
TRENCH DETAIL
N.T.S.

GENERAL NOTES:

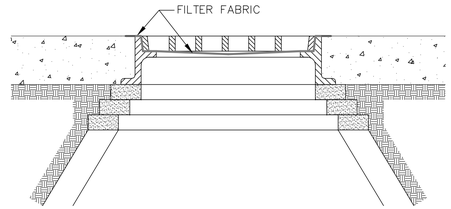
DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN DNR CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.

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

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.

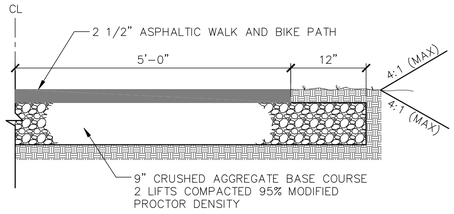


PLAN VIEW

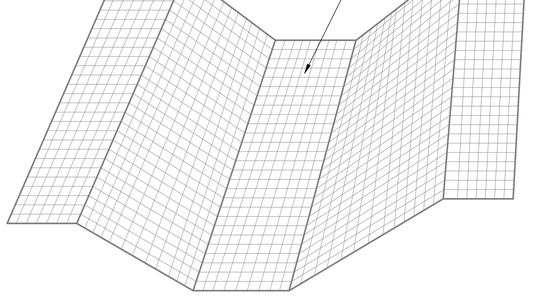


SECTION A-A

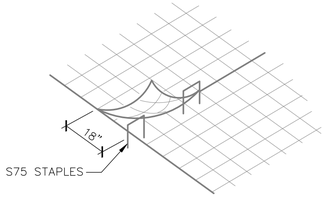
FABRIC CATCH BASIN PROTECTION
N.T.S.



TYPICAL ASPHALT PAVING SECTION FOR BIKE PATH/SIDEWALK
N.T.S.



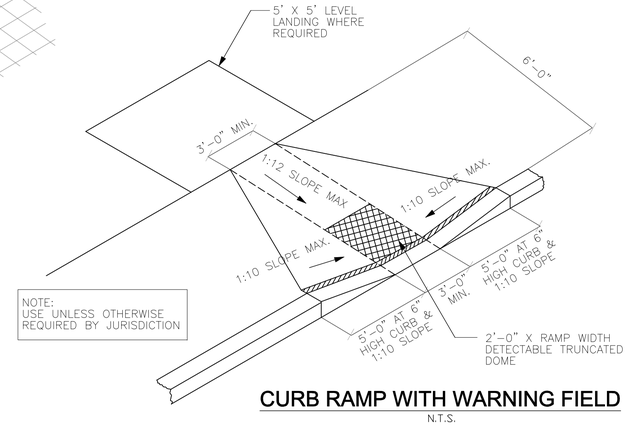
ROLL OUT STRIPS OF NETTING PARALLEL TO THE DIRECTION OF FLOW



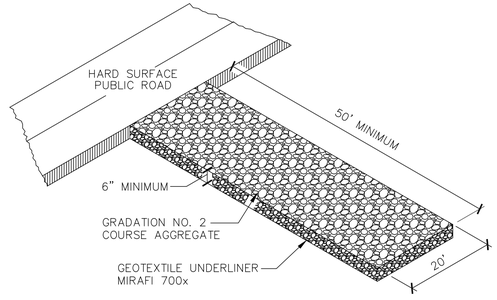
JOIN STRIPS BY ANCHORING AND OVERLAPPING

1. STAPLE PATTERN PER MANUFACTURER'S RECOMMENDATIONS

EROSION MATTING
N.T.S.



CURB RAMP WITH WARNING FIELD
N.T.S.



CRUSHED STONE CONSTRUCTION ENTRANCE
N.T.S.

WTI
WATER TECHNOLOGY INC.
100 Park Avenue
Post Office Box 614
Beaver Dam, Wisconsin 53916
Voice: 920.887.7375
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5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	KRN
CHECKED BY	WAB
PHASE	100% CD

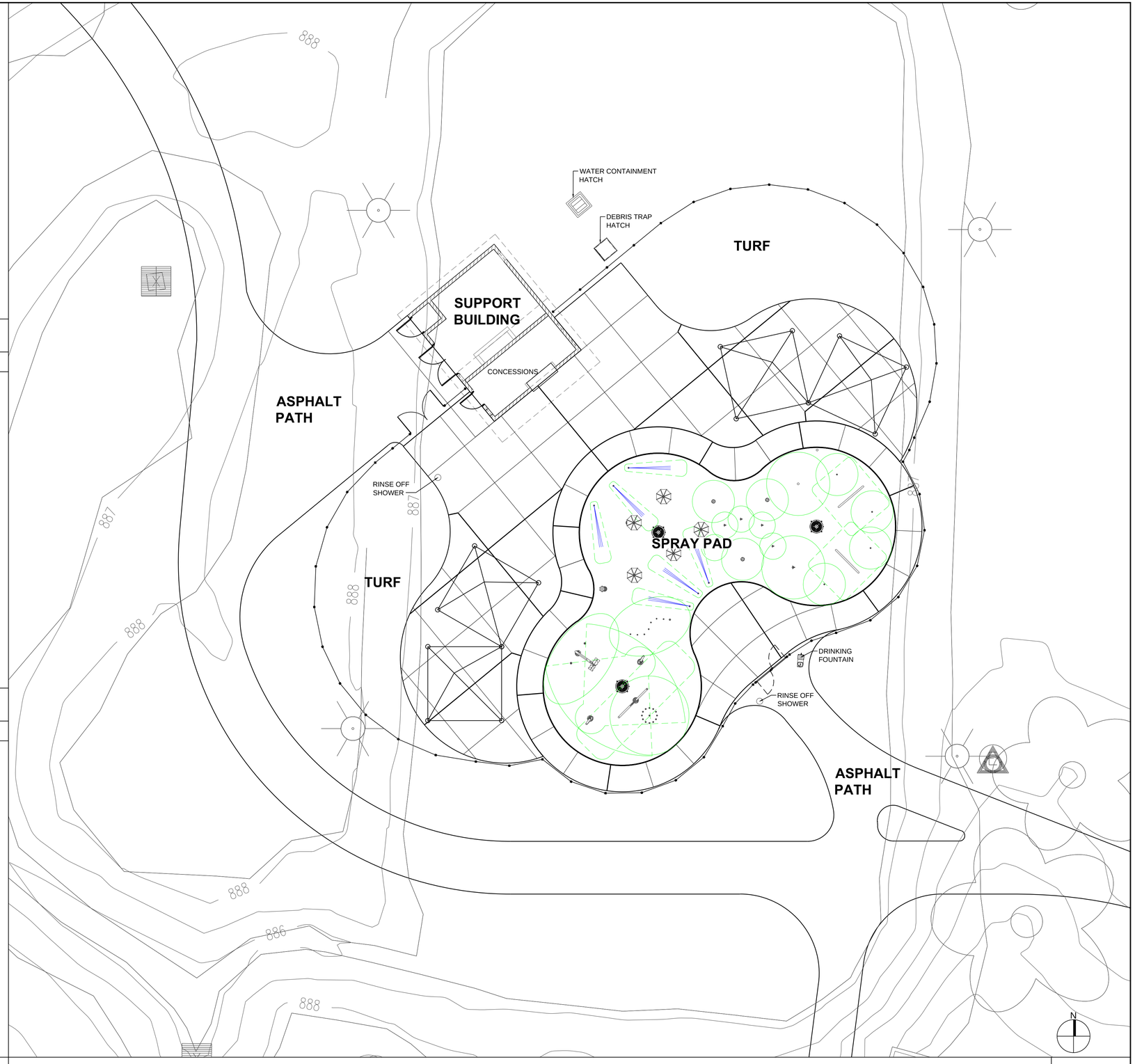
DETAILS

C902

THIS SPACE NOT USED	2
	NONE

THIS SPACE NOT USED	3
	NONE

THIS SPACE NOT USED	4
	NONE



OVERALL SITE PLAN	1
	1" = 10'-0"

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www.watertechnologyinc.com

#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

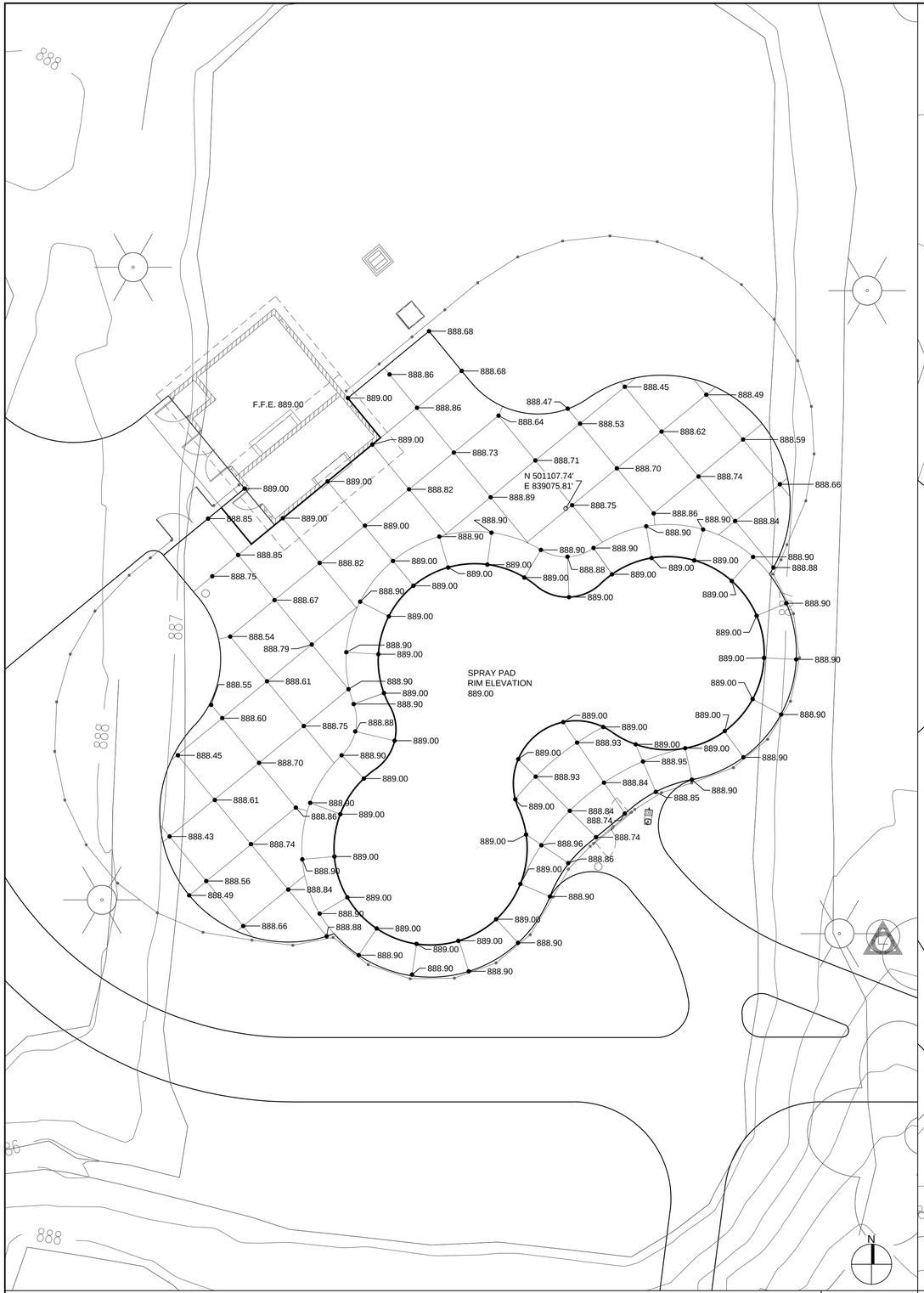
ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	---
CHECKED BY	DGM
PHASE	100% CD

OVERALL SITE PLAN

SD1.00

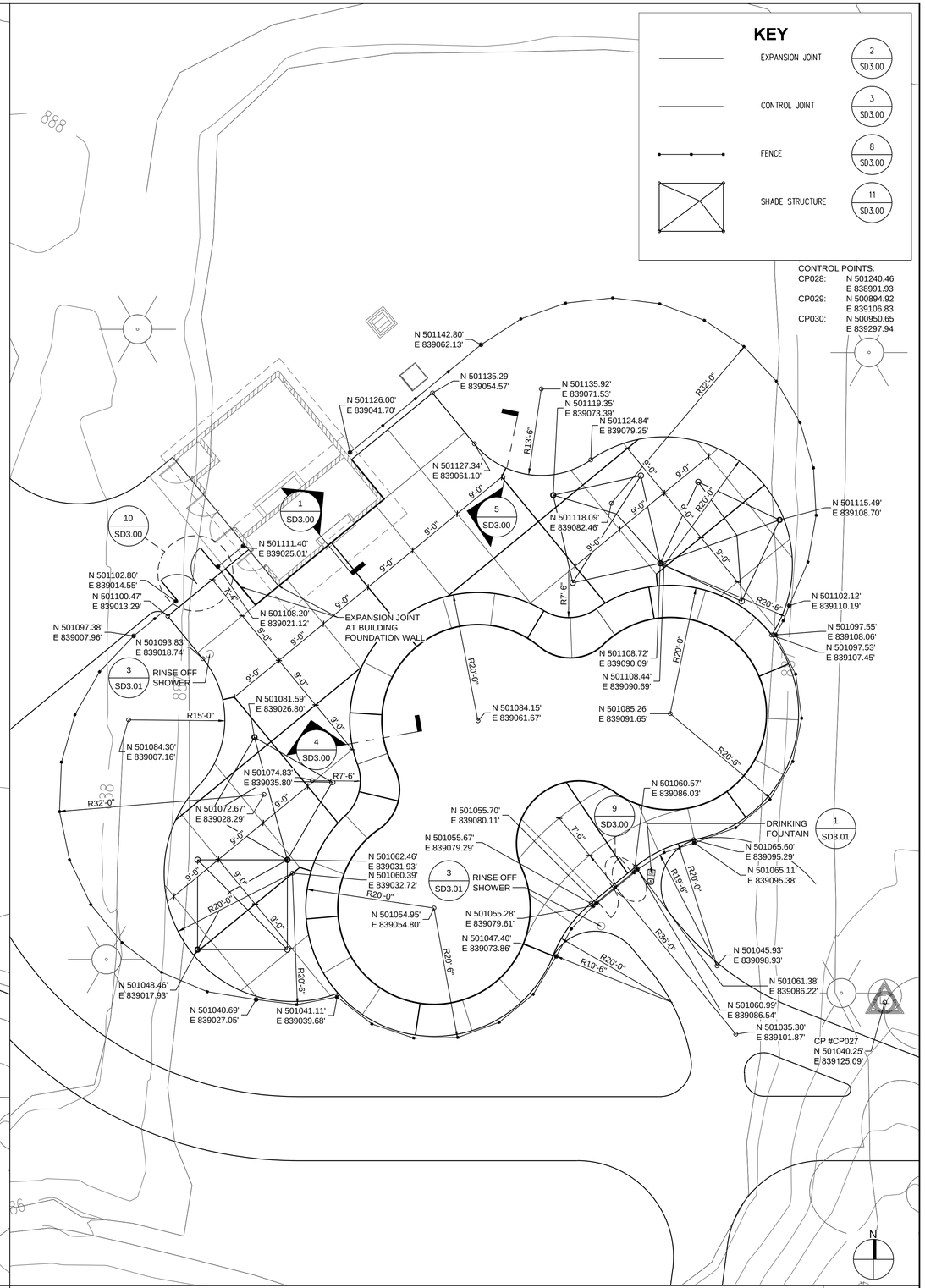
Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408 SD100.dwg



GRADING PLAN

2

1" = 10'-0"



DECK & FENCE LAYOUT

1

1" = 10'-0"

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#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

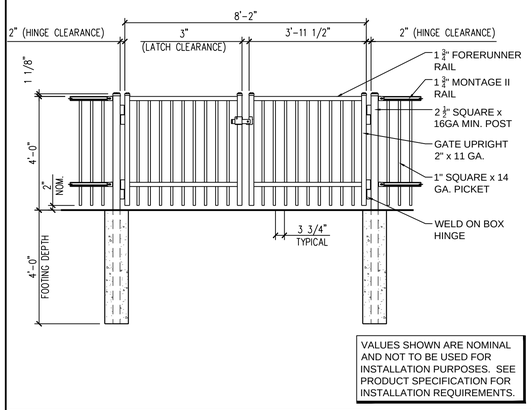
ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

GRADING PLAN AND
DECK LAYOUT

SD2.00

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408 sd200.dwg



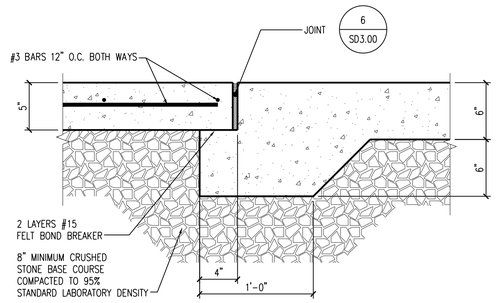
VALUES SHOWN ARE NOMINAL AND NOT TO BE USED FOR INSTALLATION PURPOSES. SEE PRODUCT SPECIFICATION FOR INSTALLATION REQUIREMENTS.

MONTAGE II DOUBLE GATE DETAIL — 10

NONE

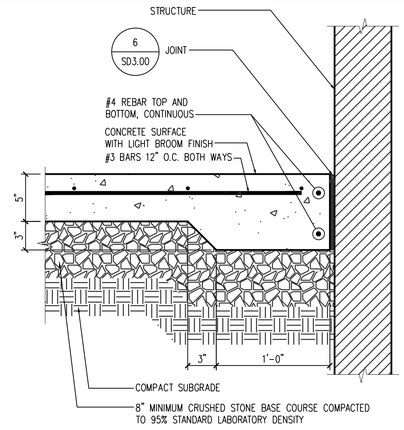
THIS SPACE NOT USED — 7

NONE



DECK AT SPRAY PAD — 4

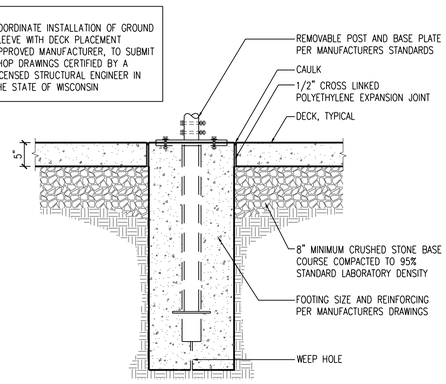
NONE



DECK AT STRUCTURE — 1

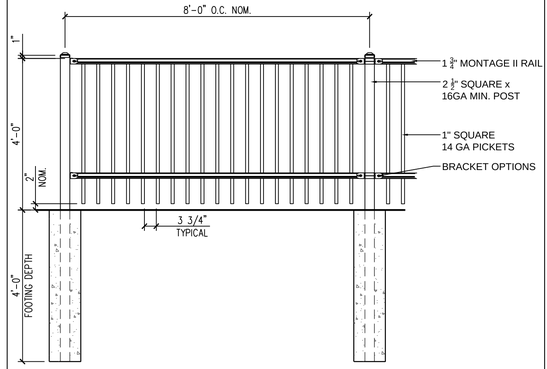
NONE

NOTES:
- COORDINATE INSTALLATION OF GROUND SLEEVE WITH DECK PLACEMENT
- APPROVED MANUFACTURER, TO SUBMIT SHOP DRAWINGS CERTIFIED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF WISCONSIN



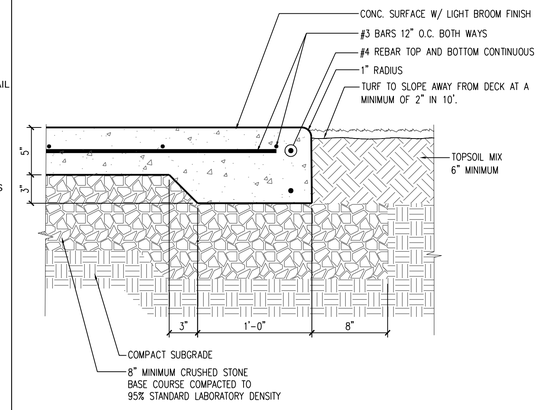
FLUSH MOUNT UMBRELLA GROUND SLEEVE — 11

NONE



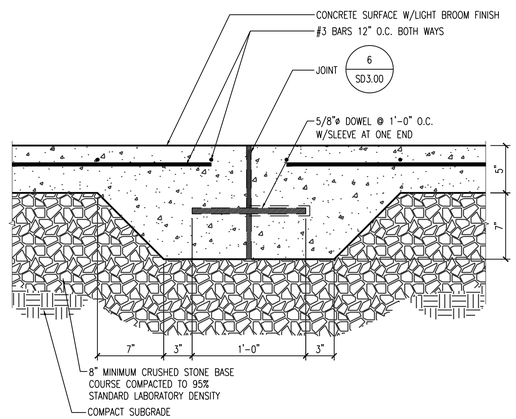
MONTAGE II FENCE DETAIL — 8

NONE



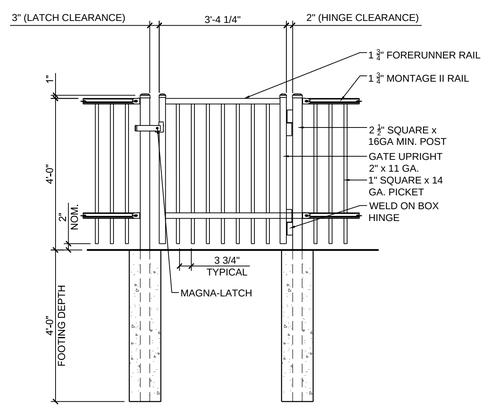
DECK AT TURF EDGE — 5

NONE



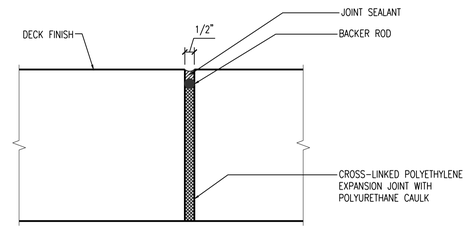
DECK EXPANSION JOINT — 2

NONE



THIS SPACE NOT USED — 12

NONE

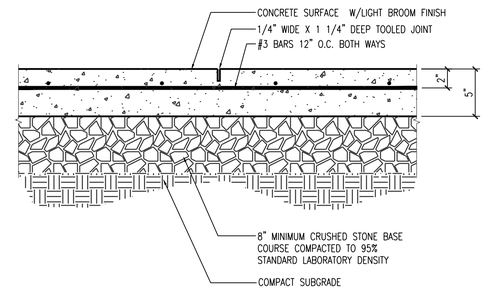


MONTAGE II SINGLE GATE DETAIL — 9

NONE

JOINT DETAIL — 6

NONE



NOTE:
CONTRACTOR TO PROVIDE SAMPLE OF FINISH FOR OWNERS APPROVAL

DECK CONTROL JOINT — 3

NONE

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www.watertechnologyinc.com

#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

DECK DETAILS

SD3.00

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408 sd300.dwg

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5705 COMMANDER DR.
P.O. BOX 587
ARLINGTON, TN 38002-0587
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PHONE: (901) 867-0039
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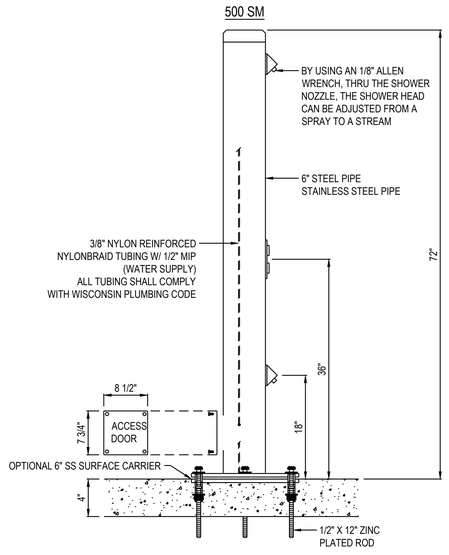


NOTES:
1. DO NOT SCALE DRAWINGS.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. PROVIDE STAINLESS STEEL SURFACE CARRIER

MODEL 500 SM
PROVIDE WITH 6" SS SURFACE CARRIER FOR SURFACE MOUNT (SM)

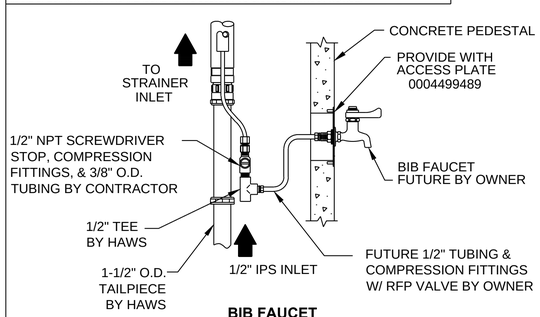
3354-10.1

SHOWER TOWER

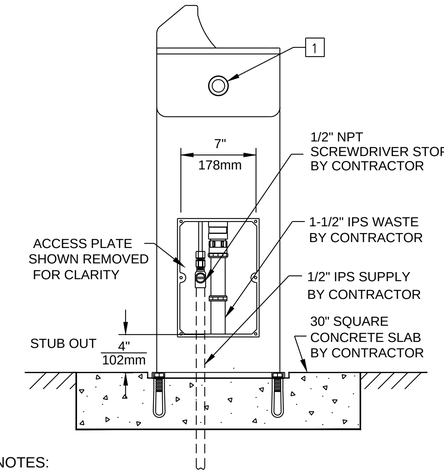
3

NONE

THIS DOCUMENT IS TRUE AND CORRECT AT TIME OF PUBLICATION. CONTINUED PRODUCT IMPROVEMENTS MAKE SPECIFICATIONS AND MEASUREMENTS SUBJECT TO CHANGE WITHOUT NOTICE.



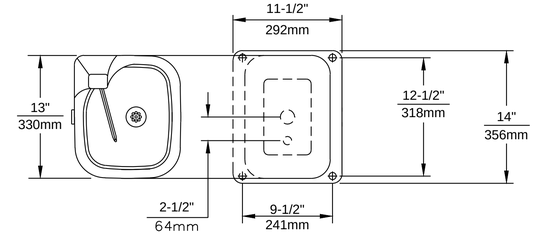
BIB FAUCET DETAIL

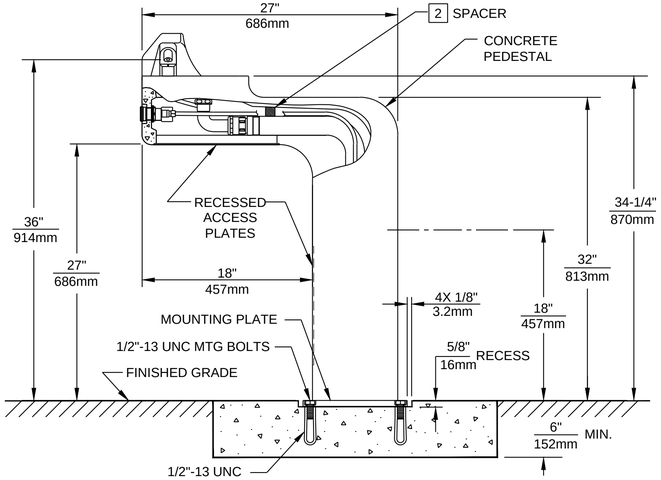


NOTES:

1 REFER TO 5874/VRK5874 OPERATION AND MAINTENANCE MANUAL FOR PUSH BUTTON AND VALVE INSTALLATION/MAINTENANCE INSTRUCTIONS.

2 SPACER IS GLUED TO WALL OF PEDESTAL, BUT MAY BE KNOCKED OFF DURING WASTE ARM ASSEMBLY REMOVAL/REPAIR. ENSURE THAT SPACER IS REPLACED TO KEEP HOSE AND WASTE ARM ALIGNED PROPERLY.





Haws®
1455 KLEPPE LANE
SPARKS, NEVADA 89431
(775) 359-4712 FAX (755) 359-7424
E-MAIL: HAWS@HAWSCO.COM
WEBSITE: WWW.HAWSCO.COM

ECN NO.	REVISED PER ECN: 4646	BY: HM
DRAWN: STH	DATE: 06/95	CHK'D.
APPROVED:	DATE:	

MODEL(S): 3177

PART NUMBER 0002077324.D
DRAWING NO. 12018A00 REV 14
SCALE: 1:13 DRAWING TYPE: INSTALLATION SIZE: A SHEET 1 OF 1

DRINKING FOUNTAIN

1

NONE

THIS SPACE NOT USED

4

NONE

THIS SPACE NOT USED

2

NONE

WTI
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100 Park Avenue
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Beaver Dam, Wisconsin 53916
Voice: 920.887.7375
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www.watertechnologyinc.com
#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

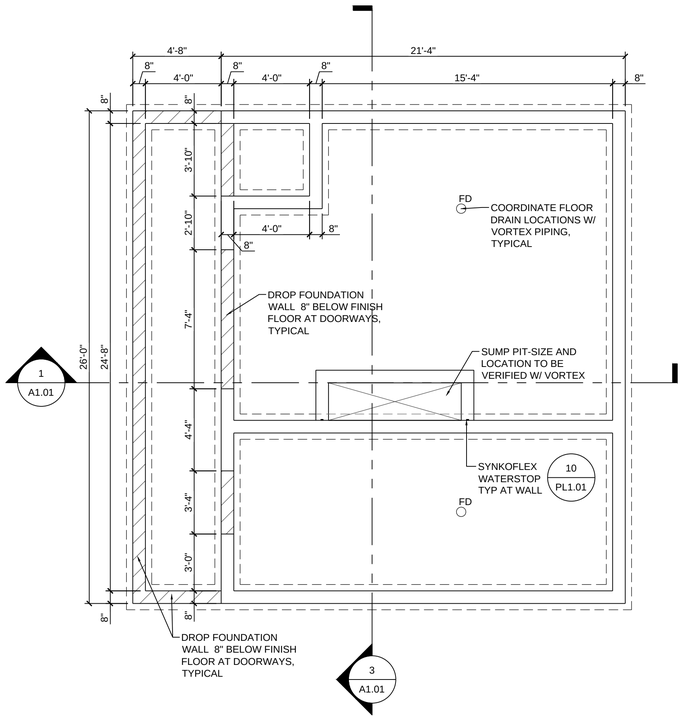
ID	DATE	DESCRIPTION

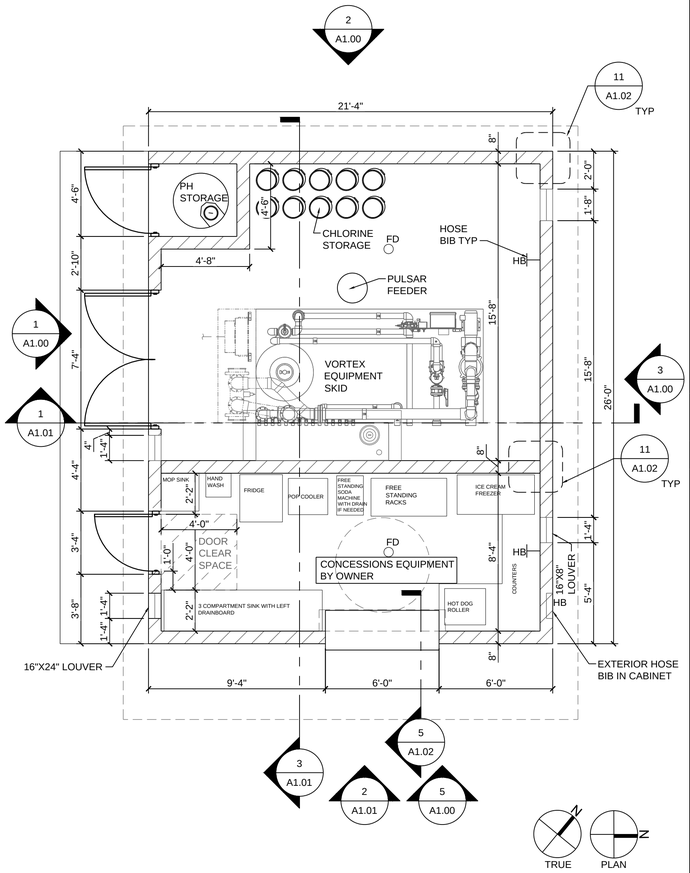
DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

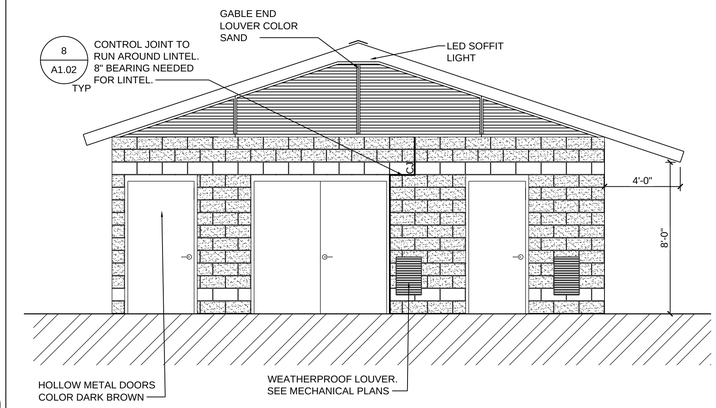
SITE DETAILS

SD3.01

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408 sd301.dwg

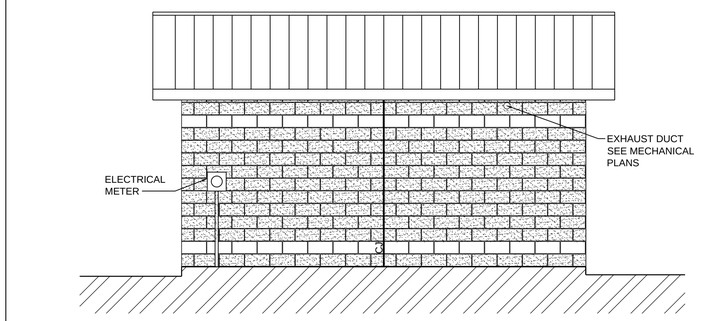


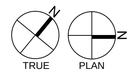




SOUTH ELEVATION — 1

1/4" = 1'-0"





MECHANICAL BUILDING FOUNDATION PLAN — 6

1/4" = 1'-0"

MECHANICAL BUILDING FLOOR PLAN — 4

1/4" = 1'-0"

WEST ELEVATION — 2

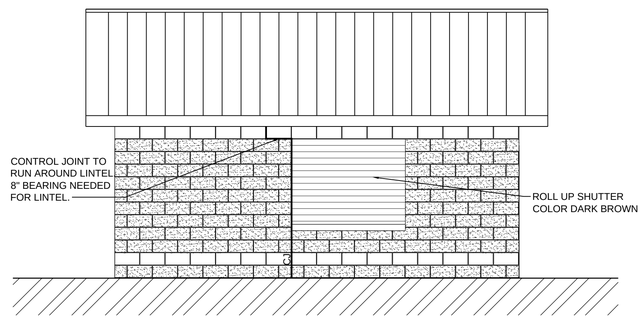
1/4" = 1'-0"

GENERAL NOTES

1	ALL DIMENSIONING IS TO CMU OR CONCRETE
2	DO NOT SCALE DRAWINGS. ID DIMENSION ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
3	THE CONTRACT DOCUMENTS CONSIST OF THE SPECIFICATION MANUAL AND DRAWINGS WHICH ARE INTENDED TO BE COMPLEMENTARY AND TO BE USED IN CONJUNCTION WITH ONE ANOTHER.
4	IF DISCREPANCIES OCCUR BETWEEN THE SPECIFICATION MANUAL AND THE DRAWINGS, NOTIFY THE ARCHITECT FOR A RESOLUTION
5	ALL EXTERIOR WALL OPENINGS BY ALL TRADES SHALL BE FLASHED AND CAULKED BY THE GC.
6	OPENINGS FOR PLUMBING, VENTILATION AND ELECTRICAL WORK IN WALLS, FLOORS, CEILING AND ROOF SHALL BE PROVIDED BY THE GC LOCATION AND SIZE SHALL BE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTORS.
7	SLOPE FLOOR SLAB TO FLOOR DRAINS. SEE FOUNDATION PLAN AND COORDINATE WITH PLUMBING. (MAX FLOOR SLOPE 1/4" PER FT.)
8	CONTRACTOR TO COORDINATE ARCHITECTURAL, POOL PLUMBING, MECHANICAL AND PLUMBING, PLANS FOR DETAILS, DIMENSIONS, ELEVATIONS, OPENINGS, INSERTS, ECT. NOTIFY ARCHITECT OF ANY VARIANCE BEFORE COMMENCING CONTRUCTION

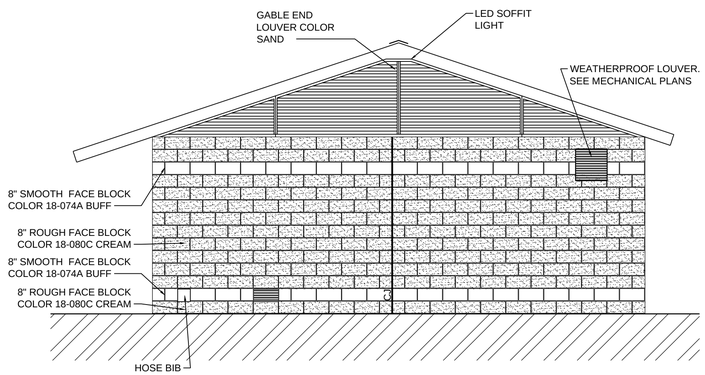
GENERAL NOTES — 7

1/4" = 1'-0"



EAST ELEVATION — 5

1/4" = 1'-0"



NORTH ELEVATION — 3

1/4" = 1'-0"

WTI
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Toll Free: 800.538.8207
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www.watertechnologyinc.com

#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

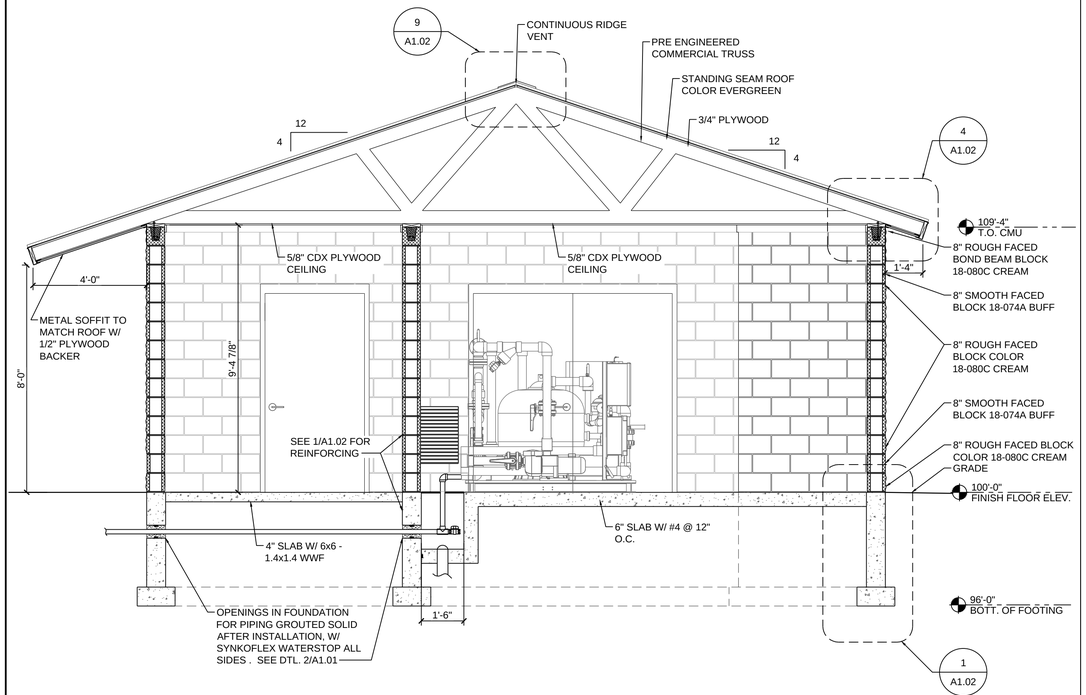
ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

BUILDING PLAN AND ELEVATIONS

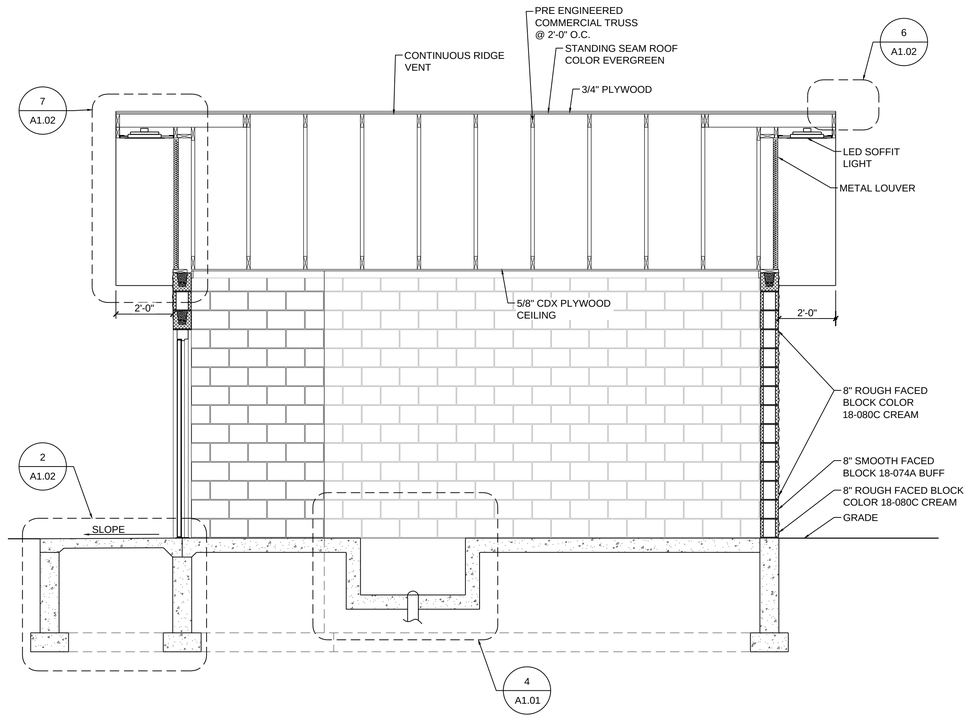
A1.00

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 A100.dwg



BUILDING SECTION — 3

3/8" = 1'-0"

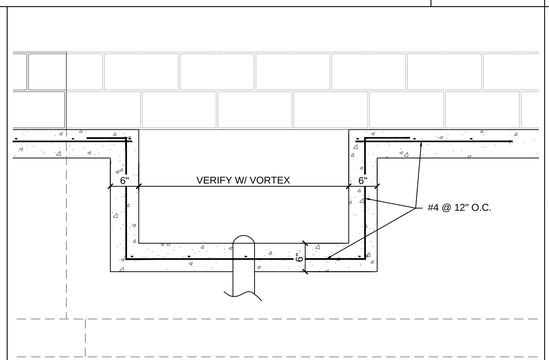


BUILDING SECTION — 1

3/8" = 1'-0"

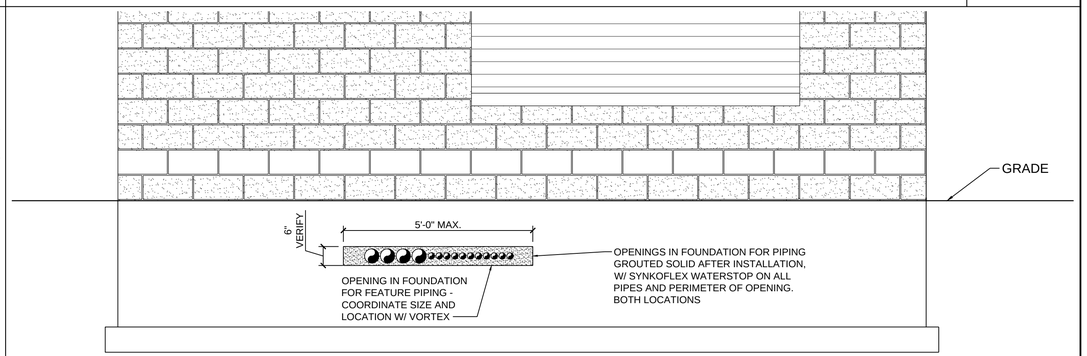
THIS SPACE NOT USED — 5

NONE



SUMP PIT — 4

3/4" = 1'-0"



EAST FOUNDATION WALL DETAIL — 2

1/2" = 1'-0"

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1818 PORTAGE ROAD
MADISON, WI 53704

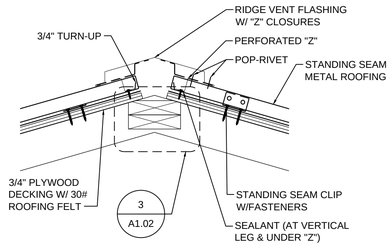
ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

BUILDING SECTIONS AND DETAILS

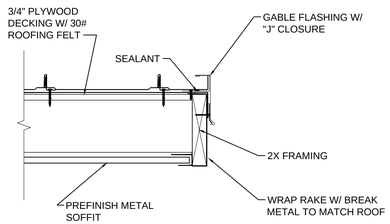
A1.01

Date: Tuesday, April 30, 2013 Plotted by: Michael Schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 A101.dwg



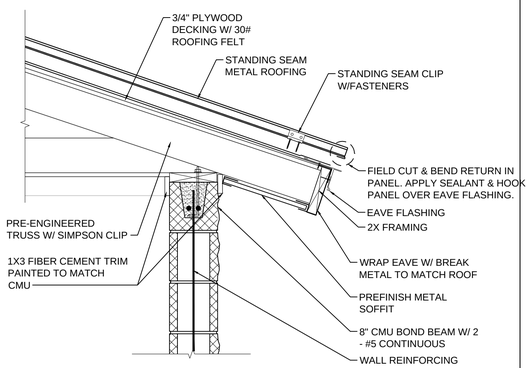
RIDGE DETAIL

9
NONE



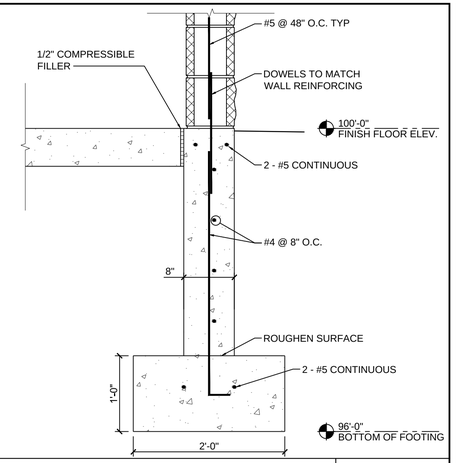
GABLE DETAIL

6
NONE



EAVE DETAIL

4
NONE



FOUNDATION DETAIL

1
NONE

CMU AT WALL INTERSECTION

10
NONE

LOUVER DETAIL

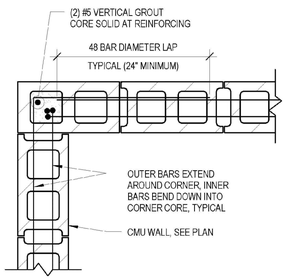
7
NONE

ROLLING SHUTTER

5
NONE

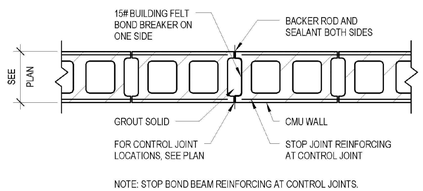
STOOP DETAIL

2
NONE



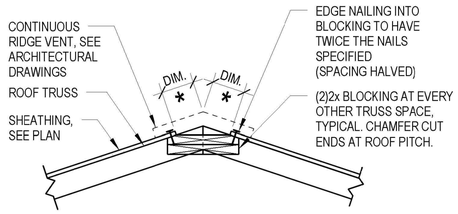
CMU AT WALL CORNER

11
NONE



CMU CONTROL JOINT

8
NONE



RIDGE DETAIL

3
NONE

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

BUILDING DETAILS

A1.02

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 A102.dwg

THIS SPACE NOT USED

4

NONE

THIS SPACE NOT USED

5

NONE

THIS SPACE NOT USED

6

NONE

DESIGN NOTES

2

NONE

THIS SPACE NOT USED

3

NONE

DESIGN SPECIFICATIONS

- DESIGN IS IN ACCORDANCE WITH THE STATE OF WISCONSIN AND THE 2009 INTERNATIONAL BUILDING CODE.
- MINIMUM 28 DAY CONCRETE CYLINDER STRENGTH SHALL BE:
  - FOOTINGS 4,000 PSI
  - SLABS ON GROUND 4,000 PSI
  - FOUNDATION WALLS 4,000 PSI
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60,M
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE II NORMAL WEIGHT UNITS.
- MORTAR SHALL CONFORM TO ASTM C270 TYPE S.
- MASONRY GROUT SHALL CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH SHALL BE F'C = 3000 PSI.
- MINIMUM COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE F'M = 1500 PSI.
- MINIMUM COMPRESSIVE STRENGTH OF REINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE F'M = 1500 PSI.
- STRUCTURAL STEEL W-SHAPES SHALL CONFORM TO ASTM A992 GRADE 50.
- STRUCTURAL STEEL PLATES, ANGLES, CHANNELS, AND OTHER ROLLED MEMBERS SHALL CONFORM TO ASTM A36.
- RECTANGULAR OR SQUARE HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- ROUND HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B.
- ASSUMED BEARING CAPACITY FOR SPREAD FOOTINGS IS 1,500 PSF.
- DESIGN LOADS:FLOOR LIVE LOADS (IBC 2009)
- MECHANICAL ROOMS 150 PSF

MINIMUM ROOF LIVE LOAD 20 PSF

ROOF SNOW LOAD (ASCE 7-05)
- OCCUPANCY CATEGORY II
- IMPORTANCE FACTOR IS = 1.0
- GROUND SNOW LOAD PG = 30 PSF
- SLOPED ROOF SNOW LOAD PS = 24 PSF
- EXPOSURE FACTOR CE = 1.0
- THERMAL FACTOR CT = 1.2

WIND LOAD (ASCE 7-05) OCCUPANCY CATEGORY
- IMPORTANCE FACTOR IW = 1.0
- BASIC WIND SPEED V = 90 MPH
- EXPOSURE C
- INTERNAL PRESSURE COEFFICIENT GCPI = +/- 0.18

SEISMIC LOAD (IBC 2009) OCCUPANCY CATEGORY
- IMPORTANCE FACTOR IE = SPECTRAL RESPONSE ACCELERATIONS SS = .084 G
  S1 = .046 G
- SPECTRAL RESPONSE COEFFICIENTS SDS = .09 G
  SD1 = .073 G
- SEISMIC RESPONSE COEFFICIENT CS = .01
- RESPONSE MODIFICATION FACTOR R = 2 SOIL SITE CLASS D
- SEISMIC DESIGN CATEGORY B
- BASIC SEISMIC FORCE RESISTING SYSTEM ORDINARY MASONRY SHEAR WALLS
- ANALYSIS PROCEDURE EQUIVALENT FORCE PROCEDURE
- DESIGN BASE SHEAR 2.4 KIPS

- RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY MASONRY SHEAR WALLS AND AND ROOF DIAPHRAGMS. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY BRACING UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL.
- ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE STRUCTURAL FRAMING AND CONNECTIONS FOR ADEQUACY DURING THE STEEL ERECTION AND CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AND ALL JOB SITE SAFETY.

GENERAL NOTES

EARTHWORK
- FOOTINGS SHALL BE CAST ON UNDISTURBED SUBSOIL. IF DESIGN CAPACITY IS NOT ENCOUNTERED AT THE ELEVATIONS SHOWN, FOOTINGS MUST BE LOWERED. CONSULT ARCHITECT BEFORE PROCEEDING.
- NO HOLES, TRENCHES OR DISTURBANCES OF THE SOIL SHALL BE ALLOWED WITHIN THE VOLUME DESCRIBED BY 45 DEGREE LINES SLOPING FROM THE BOTTOM EDGE OF THE FOOTING. IF SUCH ARE REQUIRED, FOOTINGS MUST BE LOWERED.
- BACKFILL EVENLY ON EACH SIDE OF FOUNDATION WALLS AND RETAINING WALLS.
- TOPSOIL AND FILL BELOW SLABS ON GROUND SHALL BE REMOVED. AGGREGATE BASE COURSE UNDER SLABS ON GROUND SHALL BE BANKRUN GRAVEL COMPACTED TO 6-INCH LAYERS.
- BACKFILL AGAINST INTERIOR FOUNDATION WALLS SHALL BE BANKRUN GRAVEL COMPACTED TO MAXIMUM 6-INCH LAYERS.
- BACKFILL AGAINST EXTERIOR FOUNDATION WALLS SHALL BE BANKRUN GRAVEL COMPACTED TO MAXIMUM 6-INCH LAYERS.
- PROVIDE MINIMUM 24 INCHES OF FREE DRAINING AGGREGATE OVER ALL DRAIN TILES AND 4 INCHES BELOW.

CONCRETE
- FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION.
- REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, UNLESS OTHERWISE NOTED
- LAP ALL WALL BARS 30 DIAMETERS UNLESS OTHERWISE DETAILED. LAP WELDED WIRE MESS 6 INCHES.
- PROVIDE COLUMN AND WALL DOWELS OF THE SAME SIZE AND NUMBER AS THE RESPECTIVE COLUMN AND WALL REINFORCING UNLESS OTHERWISE DETAILED.
- PROVIDE TWO #4 BARS AS STIRRUP CARRY BARS WHERE NO TOP STEEL IS AVAILABLE TO HOLD STIRRUPS.
- CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-08.
- SLABS ON GRADE SHALL BE CAST ALLOWING A SUFFICIENT NUMBER OF JOINTS TO ADEQUATELY CONTROL SHRINKAGE CRACKING. SAWCUTTING SHALL BE DONE AS SOON AS SAWCUT WILL NOT RAVEL CONCRETE OR WITHIN 24 HOURS MAXIMUM OF INITIAL POURING OPERATION. MAXIMUM SIZE OF PANELS SHALL BE 15 FEET BY 15 FEET. GENERALLY, JOINTS SHALL OCCUR ON COLUMN CENTERLINES.
- INTERIOR SLABS ON GRADE SHALL BE 6" INCHES THICK AND REINFORCED WITH 6X6-W2.9XW2.9 WELDED WIRE FABRIC. REINFORCING SHALL BE PLACED 2" FROM THE TOP OF THE SLAB.
- EXTERIOR SLABS ON GRADE SHALL BE 4 INCHES THICK AND REINFORCED WITH 6X6-W2.1XW2.1 WELDED WIRE FABRIC.
- ALLOW AT LEAST 24 HOURS BEFORE POURING ADJACENT WALL SECTIONS BETWEEN CONSTRUCTION JOINTS. MAXIMUM LENGTH OF POUR TO BE 40 FEET, UNLESS CRACK INDUCERS ARE USED AS DETAILED ON THE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE ARCHITECT AT LEAST 24 HOURS PRIOR TO PLACING CONCRETE.
- DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS, BEAMS, WALLS OR COLUMNS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. AIR CONTENT SHALL BE 6 PERCENT (+/-1 1/2 PERCENT).
- PIPES AND CONDUITS EMBEDDED IN OR PASSING THROUGH STRUCTURAL MEMBERS MUST BE APPROVED BY THE STRUCTURAL ENGINEER. PIPE AND CONDUITS EMBEDDED IN CONCRETE SHALL NOT BE LARGER THAN 2 INCHES IN OUTSIDE DIAMETER AT THEIR WIDEST POINT OR FITTING OR 1/3 OF THE THICKNESS OF THE SLAB, BEAM OR WALL.
- ELECTRICAL CONDUIT OR PIPES EMBEDDED IN OR PASSING THROUGH SLABS, BEAMS OR WALLS SHALL BE LOCATED AND PLACED SO THAT:
  1. THEY ARE NOT CLOSER THAN THREE DIAMETERS ON CENTER.
  2. THE CONCRETE COVER IS NOT LESS THAN 2 INCHES.
  3. THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN ANY MANNER.
- ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.
- CHAMFER ALL EXPOSED CONCRETE CORNERS.
- CONCRETE SHALL BE TESTED BY THE CONTRACTOR.
- PROPER CURING PROCEDURES SHALL BE USED FOR SLAB ON GRADE TO PREVENT CURLING.
- CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES.

CONCRETE MASONRY
- PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES", ACI 530-08, AND THE NCMA "TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION", LATEST EDITION.
- COLD WEATHER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE IMIAC "RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY AND CONSTRUCTION", LATEST EDITION.
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- MASONRY WALLS SHALL BE ADEQUATELY BRACED TO RESIST WIND FORCES UNTIL PERMANENT DESIGN SUPPORTS ARE IN PLACE AND FUNCTIONAL. BRACING SHALL BE DESIGNED BY THE CONTRACTOR.
- PROVIDE DOWELS INTO FOUNDATION THE SAME SIZE AND NUMBER AS WALL REINFORCING.
- LAP REINFORCING BARS 48 DIAMETERS.
- CONCRETE MASONRY WALLS SHALL BE REINFORCED AT EVERY OTHER BED JOINT WITH 3/16-INCH TRUSS TYPE JOINT REINFORCEMENT.
- VERTICAL BARS SHOWN ON THE DESIGN DRAWINGS SHALL BE PLACED IN A CONTINUOUS UNOBSTRUCTED CELL OF NOT LESS THAN 3 INCHES BY 4 INCHES.
- ALL BOND BEAMS AND PILASTERS SHALL BE REINFORCED AS SHOWN ON THE DESIGN DRAWINGS AND FILLED WITH GROUT.
- ALL DOOR AND WINDOW JAMBS SHALL BE GROUTED SOLID 8 INCHES WIDE UNLESS SHOWN OTHERWISE.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW BEAM REACTIONS SHALL BE 16 INCHES DEEP BY 32 INCHES LONG.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW LINTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.

WOOD FRAMING
- ERECTION OF ALL WOOD FRAMING SHALL CONFORM TO THE NATIONAL FOREST PRODUCTS ASSOCIATION DESIGN SPECIFICATIONS, AMERICAN PLYWOOD ASSOCIATION, AND THE STATE OF WISCONSIN BUILDING CODE, LATEST EDITIONS.
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ARCHITECT.
- ALL STRUCTURAL SYSTEMS RELATING TO WOOD FRAMING WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.
- LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN SPECIFICATIONS". DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY CONNECTED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.
- ROOF DECK SHALL BE 3/4-INCH APA RATED SHEATHING, EXPOSURE 1.
- WALL AND SOFFIT SHEATHING SHALL BE 1/2-INCH APA RATED SHEATHING, EXPOSURE 2. NAILING OF WALL SHEATING AND SOFFIT SHEATING SHALL BE 8D AT 6 INCHES ON CENTER AT PANEL EDGES AND 8D AT 12 INCHES ON CENTER AT INTERMEDIAT FRAMING MEMBERS.
- INSTALL ALL SHEATHING WITH THE LONG DIMENSIONS OF THE PANEL ACROSS SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL END JOINTS. ALLOW 1/8-INCH SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER.
- ALL NAILING SHALL BE CAREFULLY DRIVEN AND NOT OVERDRIVEN. THE USE OF STAPLES IS PROHIBITED.
- WALL AND ROOF SHEATHING NAILS SHALL BE HOT-DIPPED GALVANIZED.
- NAILING OF WOOD FRAMING MEMBERS SHALL CONFORM TO THE MINIMUM NAILING SCHEDULE.
- ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATIONS. WHERE POSSIBLE, ALL CUTS AND HOLES SHOULD BE COMPLETED BEFORE TREATMENT. CUTS AND HOLES DUE TO THE ON-SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENATE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTION (PER AWPA STANDARD M4).
- PREFABRICATED METAL JOIST HANGERS, HURRICANE CLIPS, HOLD-DOWN ANCHORS, AND OTHER ACCESSORIES SHALL BE AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY" OR APPROVED EQUAL. INSTALL ALL ACCESSORIES PER THE MANUFACTURER'S REQUIREMENTS. ALL STEEL SHALL HAVE A MINIMUM THICKNESS OF 0.04 INCHES (PER ASTM A653) AND BE GALVANIZED (G60 COATING).

WOOD TRUSSES
- WOOD PLATE CONNECTED TRUSSES SHALL BE DESIGNED, MANUFACTURED, AND ERECTED IN ACCORDANCE WITH THE STATE OF WISCONSIN BUILDING CODE AND THE TRUSS PLATE INSTITUTE.
- SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL TO THE ARCHITECT. THE ARCHITECT'S REVIEW WILL BE BASED ON THE CONTRACT DOCUMENTS. THE ARCHITECT'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLEY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC.
- TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS CONNECTIONS.
- ALL ROOF TRUSSES SHALL BE SECURED TO THE TOP PLATES WITH SIMPSON TYPE UPLIFT CONNECTORS PROVIDED BY THE TRUSS SUPPLIER.
- CONTRACTOR SHALL PROVIDE AND ERECT ALL BRACING, BRIDGING, AND BLOCKING REQUIRED BY THE MANUFACTURER AND THE TRUSS PLATE INSTITUTE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING OF TRUSSES UNTIL PERMANENT BRACING IS IN PLACE.
- DOUBLE 2 X 4 CONTINUOUS BLOCKING SHALL BE PROVIDED AT THE PEAK OF THE RIDGE.
- WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE FOLLOWING LOADS:
  - TOP CHORD LOADING
    - LIVE LOAD - 30 PSF (ON THE HORIZOTAL PROJECTION)
    - DEAD LOAD - 15 PSF (ON THE SURFACE AREA)
    - ADDITIONAL 5 PSF AT TRUSSES SUPPORTING INFILL FRAMING AT EXTENSIONS OF ADJOINING ROOFS
  - WIND LOADING CASE AT TRUSSES SUPPORTING INFILL FRAMING AT ADJOINING ROOFS. SEE "DESIGN SPECIFICATIONS" FOR WIND LOADING CRITERIA. NET UPLIFT = UPLIFT - 2/3 ROOF DEAD LOAD.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AS REQUIRED FOR SAFE ERECTION AND PERFORMANCE OF THE TRUSSES, THE GUIDELINES SET FORTH BY THE TRUSS PLACE INSTITUTE PUBLICATION "HIB-91 COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" SHALL BE A MINIMUM REQUIREMENT.
- TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE TRUSS MANUFACTURER.

MISCELLANEOUS
- DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BE VERIFIED AND COORDINATED PRIOR TO FABRICATION OF STRUCTURAL COMPONENTS.
- VERIFY AND COORDINATE, WITH ALL CONTRACTORS, THE LOCATION OF ALL ARCHITECTURAL AND MECHANICAL APPURTENANCES AND OPENINGS.
- EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT TZ.
- ADHESIVE ANCHORS SHALL BE HILTI HIT HY150.

GENERAL NOTES

1

NONE

- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ITEMS:
  - PRECAST CONCRETE REINFORCING AND WOOD TRUSS

WATER TECHNOLOGY INC.

100 Park Avenue
Post Office Box 614
Beaver Dam, Wisconsin 53916

Voice: 920.887.7375
Toll Free: 800.538.8207
Fax: 920.887.7999
www.watertechnologyinc.com

#12408.01

REINDAHL SPLASH PAD

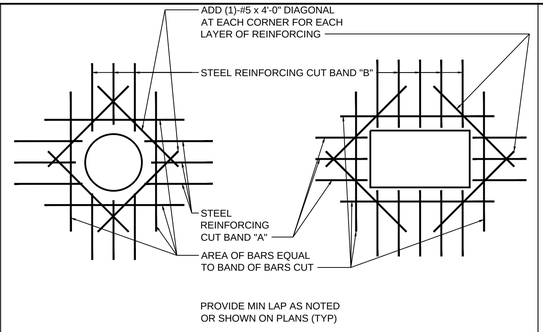
1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

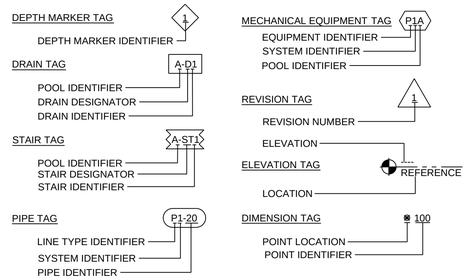
GENERAL NOTES AND DETAILS

A1.03



PROVIDE MIN LAP AS NOTED
OR SHOWN ON PLANS (TYP)

NOTES:
1. TYP FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS INCLUDING DRAINS UNLESS INDICATED OTHERWISE ON PLANS.
2. DO NOT WELD REINFORCEMENT TO PIPE SLEEVES AND INSERTS.
3. ALL OPENINGS THROUGH WATERTIGHT TANK REQUIRE WATERSTOPS.



ABBREVIATIONS

TYP - TYPICAL	NPS - NOMINAL PIPE SIZE
EJ - EXPANSION JOINT	ID - INSIDE DIAMETER
CJ - CONTROL JOINT	OD - OUTSIDE DIAMETER
SWL - STATIC WATER LEVEL	MIN - MINIMUM
OWE - OPERATING WATER ELEVATION	MAX - MAXIMUM
	TUBV - TRUE UNION BALL VALVE
FFE - FINISH FLOOR ELEVATION	TUBC - TRUE UNION CHECK VALVE
OC - ON CENTER	SCH - SCHEDULE
EW - EACH WAY	WD - WATER DEPTH
DIA - DIAMETER	NO - NORMALLY OPEN
SS - STAINLESS STEEL	NC - NORMALLY CLOSED

THIS SPACE NOT USED — 10

NONE

THIS SPACE NOT USED — 7

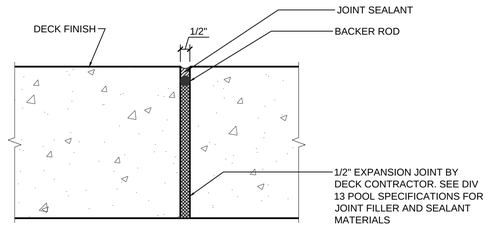
NONE

REINFORCEMENT AT OPENINGS — 4

NONE

TAG DESCRIPTIONS AND ABBREVIATIONS — 1

NONE

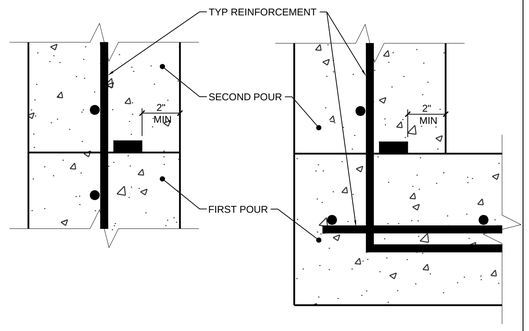


THIS SPACE NOT USED — 11

NONE

JOINT DETAIL — 8

NONE

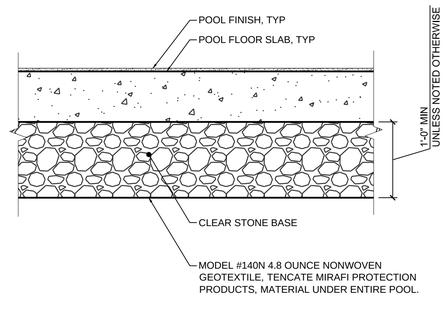


NOTE:
INSTALL WATERSTOP ON WET SIDE(S) OF REINFORCEMENT.

SYNKOFLEX WATERSTOP — 5

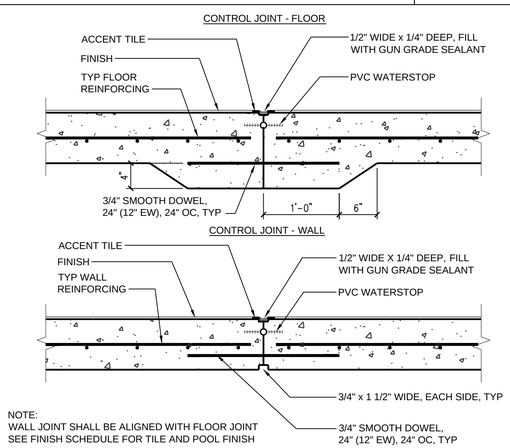
NONE

MATERIAL NOTE:
3/4" TO 1" CLEAR GRANULAR STONE WITH NO FINES PLACED IN MAX 6" THICK LIFTS.



POOL BASE — 2

NONE



NOTE:
WALL JOINT SHALL BE ALIGNED WITH FLOOR JOINT
SEE FINISH SCHEDULE FOR TILE AND POOL FINISH

THIS SPACE NOT USED — 12

NONE

THIS SPACE NOT USED — 9

NONE

CONTROL JOINT — 6

NONE

STRUCTURAL NOTES:

1. UNLESS OTHERWISE INDICATED, CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: #4's @ 8" EACH WAY CENTER OF 8" SECTIONS; #4's @ 12" EACH WAY, EACH FACE OF 12" SECTIONS. SINGLE MAT REINFORCEMENT SHALL BE AT CENTER OF SECTION, UNLESS OTHERWISE INDICATED.
2. MIN CLEARANCE FOR REINFORCEMENT BARS, UNLESS OTHERWISE INDICATED, SHALL BE 3" WHEN PLACED ON GROUND; FOR SURFACES EXPOSED TO WATER, EARTH OR WEATHER - 1 1/2" CLEARANCE FOR #5 BARS OR SMALLER AND 2" CLEARANCE FOR LARGER THAN #5's; INTERIOR SLABS- 3/4" CLEARANCE, INTERIOR BEAMS 1 1/2" CLEARANCE. 2" AROUND ALL PIPES, LIGHT NICHES, AND OTHER EMBEDDED ITEMS.
3. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL IN GENERAL, THE WALL CORNER REINFORCING SIZES AND SPACINGS SHALL BE CALLED OUT ON THE PLANS AND REFERENCED TO THESE DETAILS AND THE TYP HORIZONTAL WALL REINFORCING SHALL LAP WITH CORNER AND INTERSECTION REINFORCING.
4. UNLESS OTHERWISE INDICATED, ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS. UNLESS OTHERWISE INDICATED, CONTRACTOR MAY SPLICE CONTINUOUS SLAB BARS AT LOCATIONS OF THERE CHOOSING, EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS. ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE INDICATED, SHALL SATISFY THE FOLLOWING MIN REQUIREMENTS SHOWN BELOW.
5. DETAILS OF STRUCTURAL REINFORCEMENT INDICATED FOR A MIN SOIL BEARING PRESSURE OF 2500 PSF.

REINFORCEMENT LAP LENGTHS - DESIGN STRENGTH: CONCRETE 4000 PSI / SHOTCRETE 5000 PSI

BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
GR-60 TOP BAR	1'-7"	2'-1"	2'-7"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
GR-60 OTHER BAR	1'-3"	1'-7"	2'-0"	2'-5"	3'-6"	4'-0"	4'-6"	5'-1"	5'-7"
STANDARD HOOK DIMENSION									
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
HOOK LENGTH	0'-7"	0'-9"	1'-0"	1'-2"	1'-4"	1'-6"	1'-11"	2'-2"	2'-5"

STRUCTURAL REINFORCEMENT NOTE — 3

NONE

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#12408.01

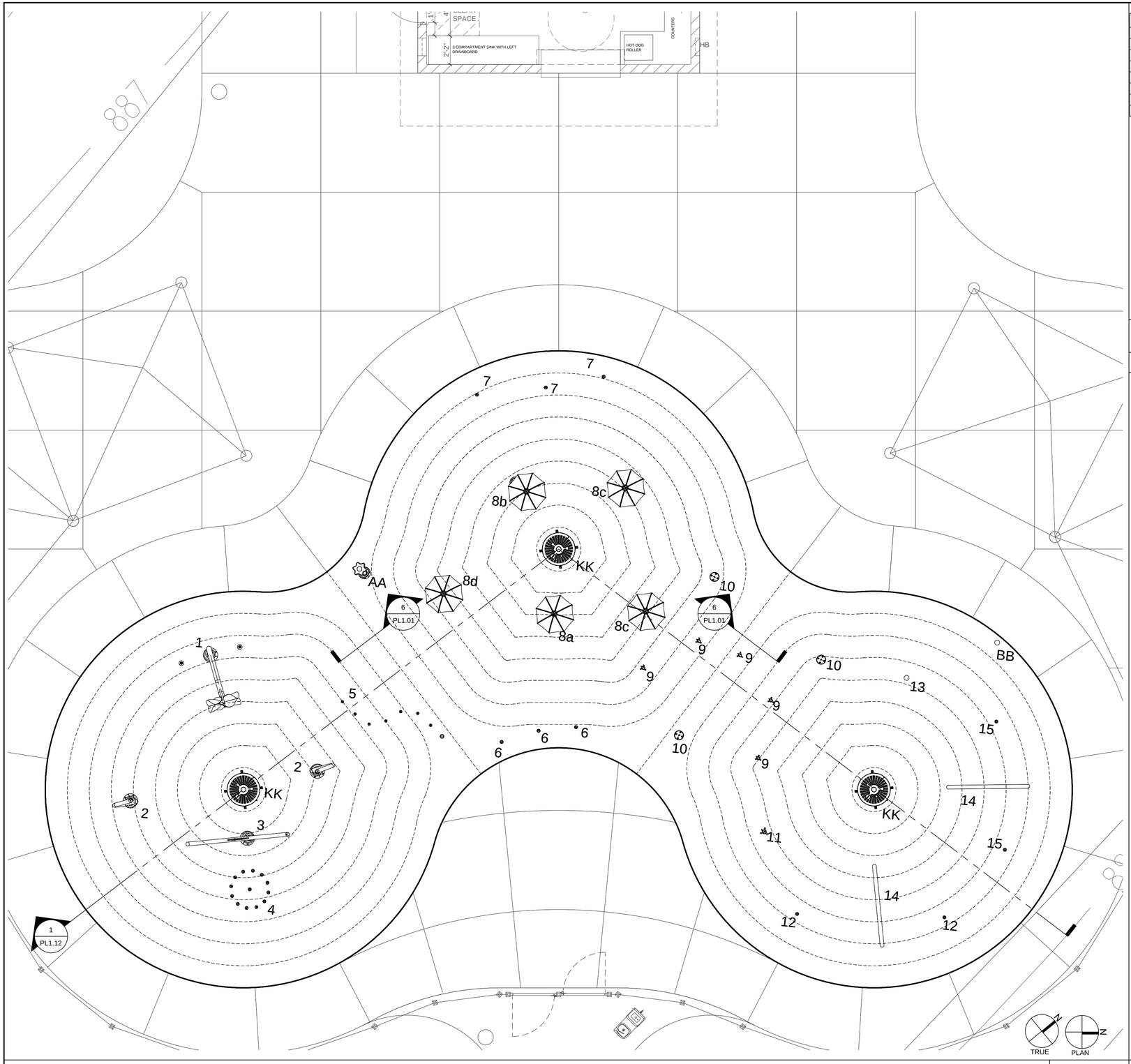
REINDAHL SPLASH PAD
1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

GENERAL DETAILS AND SCHEDULES

PL1.01



SPLASH PAD DATA		
DESCRIPTION	QTY	UNITS
SURFACE AREA	2,200	SQUARE FEET
WATER CONTAINMENT VOLUME	3,000	GALLONS
CIRCULATION RATE	100	GPM
TURNOVER	30	MINUTES
FILTRATION RATE	14.23	GPM/FT²
PATRON LOAD	146	PERSONS

SPLASH PAD DATA — 1

NONE

LEGEND-1

LINE	PRODUCT	QTY	LINE SIZE	GPM	DETAIL
1	Aqualien Power Spinner VOR-7620	1	1 1/2"	18	1/PL1.13
2	Loop No1 VOR-7719	2	1 1/2"	15	4/PL1.13
3	Bamboo No10 VOR-7730	1	1 1/2"	10	7/PL1.13
4	Team Spray No2 VOR-8061	1	1 1/2"	34	10/PL1.13
5	Team Spray No1 VOR-7640	1	1 1/2"	18	2/PL1.13
6	Directional Water Jet VOR-305	3	1 1/2"	12	5/PL1.13
7	Directional Water Jet VOR-305	3	1 1/2"	12	5/PL1.13
8	8a Ombrello Twirl No1 VOR-7446	1	1 1/2"	6	8/PL1.13
	8b Ombrello Twirl No2 VOR-7447	1		6	11/PL1.13
	8c Ombrello No2 VOR-7440	2		12	3/PL1.13
	8d Ombrello No1 VOR-7445	1		6	6/PL1.13
9	Jet Stream VOR-7512	5	1 1/2"	13	9/PL1.13
10	Aqualien Flower No1 VOR-7388	3	1 1/2"	23	12/PL1.13
11	Fountain Spray VOR-7513	1	1 1/2"	5	1/PL1.14
12	Ground Geyser VOR-301	2	1 1/2"	15	4/PL1.14
13	Aqua Dome No1 VOR-555	1	1 1/2"	14	6/PL1.14
14	Spray Loop VOR-519	2	1 1/2"	25	2/PL1.14
15	Ground Geyser VOR-301	2	1 1/2"	15	4/PL1.14

LEGEND-2

CODE	PRODUCT	QTY	LINE SIZE	DETAIL
AA	Watergarden Activator No1 VOR-612	1		9/PL1.14
BB	Foot Activator VOR-606	1		7/PL1.14
KK	Playsafe Drain No1 vor-1001.4000	3	8"	3/PL1.12

POOL A SPLASH PAD - PLAN — 3

1/8" = 1'-0"

PLAY FEATURES LEGEND — 2

NONE

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REINDAHL SPLASH PAD

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MADISON, WI 53704

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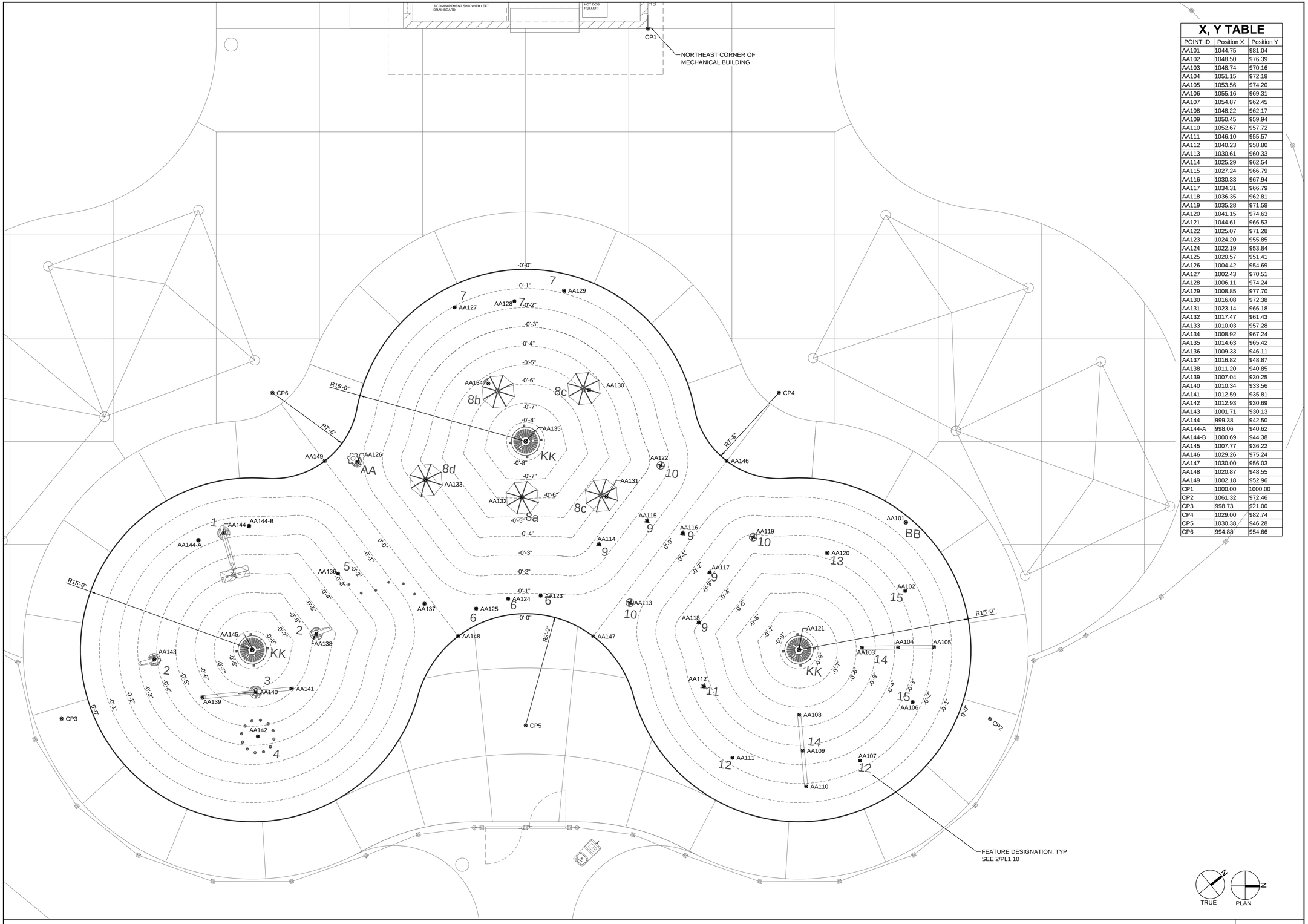
PHASE	100% CD

POOL A SPLASH PAD - PLAN

PL1.10

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL110.dwg



X, Y TABLE

POINT ID	Position X	Position Y
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AA102	1048.50	976.39
AA103	1048.74	970.16
AA104	1051.15	972.18
AA105	1053.56	974.20
AA106	1055.16	969.31
AA107	1054.87	962.45
AA108	1048.22	962.17
AA109	1050.45	959.94
AA110	1052.67	957.72
AA111	1046.10	955.57
AA112	1040.23	958.80
AA113	1030.61	960.33
AA114	1025.29	962.54
AA115	1027.24	966.79
AA116	1030.33	967.94
AA117	1034.31	966.79
AA118	1036.35	962.81
AA119	1035.28	971.58
AA120	1041.15	974.63
AA121	1044.61	966.53
AA122	1025.07	971.28
AA123	1024.20	955.85
AA124	1022.19	953.84
AA125	1020.57	951.41
AA126	1004.42	954.69
AA127	1002.43	970.51
AA128	1006.11	974.24
AA129	1008.85	977.70
AA130	1016.08	972.38
AA131	1023.14	966.18
AA132	1017.47	961.43
AA133	1010.03	957.28
AA134	1008.92	967.24
AA135	1014.63	965.42
AA136	1009.33	946.11
AA137	1016.82	948.87
AA138	1011.20	940.85
AA139	1007.04	930.25
AA140	1010.34	933.56
AA141	1012.59	935.81
AA142	1012.93	930.69
AA143	1001.71	930.13
AA144	999.38	942.50
AA144-A	998.06	940.62
AA144-B	1000.69	944.38
AA145	1007.77	936.22
AA146	1029.26	975.24
AA147	1030.00	956.03
AA148	1020.87	948.55
AA149	1002.18	952.96
CP1	1000.00	1000.00
CP2	1061.32	972.46
CP3	998.73	921.00
CP4	1029.00	982.74
CP5	1030.38	946.28
CP6	994.88	954.66

POOL A - SPLASH PAD DIMENSION PLAN | 1

1/4" = 1'-0"

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL111.dwg

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REINDAHL SPLASH PAD

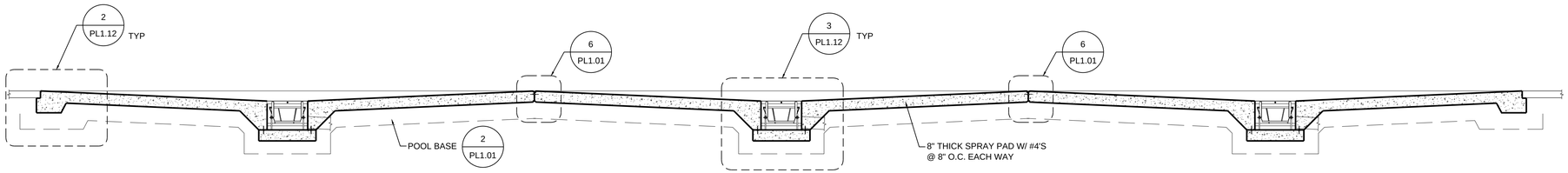
1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

POOL A - SPLASH PAD
DIMENSION PLAN

PL1.11



POOL A - SECTION

1

NONE

THIS SPACE NOT USED

8

NONE

THIS SPACE NOT USED

6

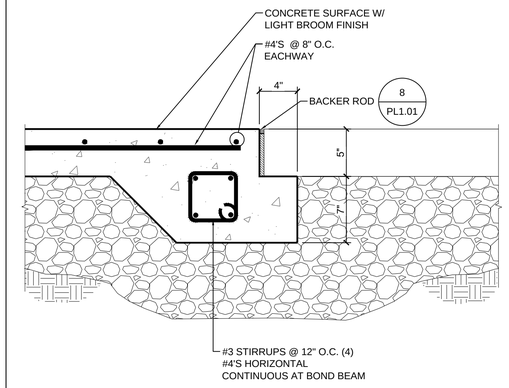
NONE

THIS SPACE NOT USED

4

NONE

SPRAYPAD AT DECK



2

NONE

THIS SPACE NOT USED

9

NONE

THIS SPACE NOT USED

7

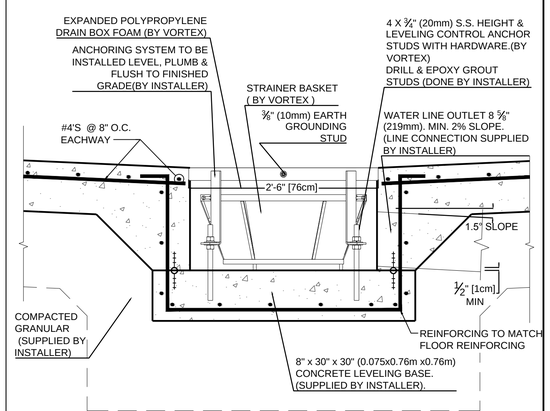
NONE

THIS SPACE NOT USED

5

NONE

PLAYSAFE DRAIN



3

NONE

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

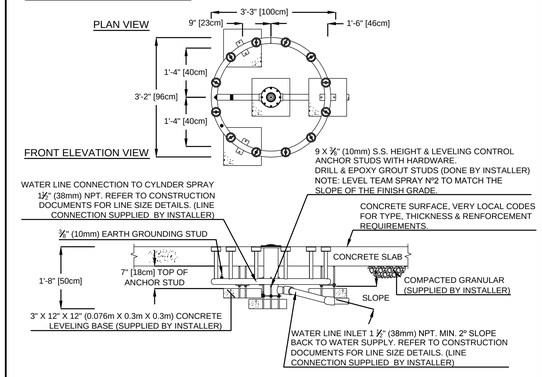
DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

POOL A - SECTION, DETAILS

PL1.12

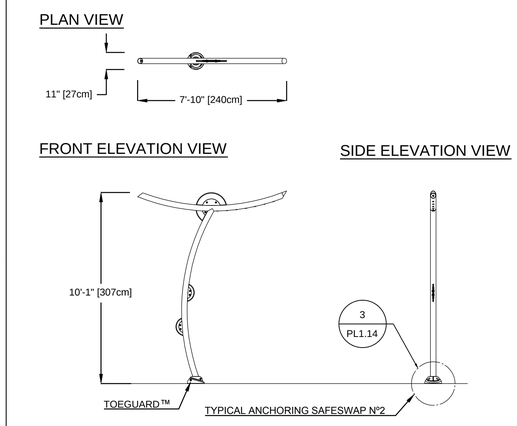
Date: Tuesday, April 30, 2013 Plotted by: Michael Schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL112.dwg

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



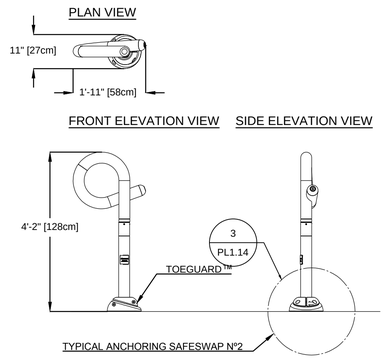
TEAM SPRAY #2 — 10

NONE



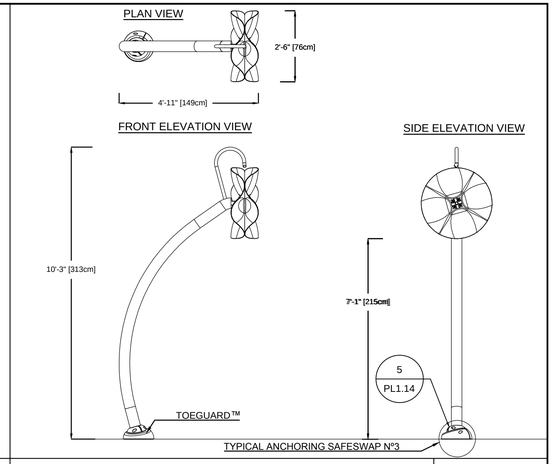
BAMBOO #10 — 7

NONE



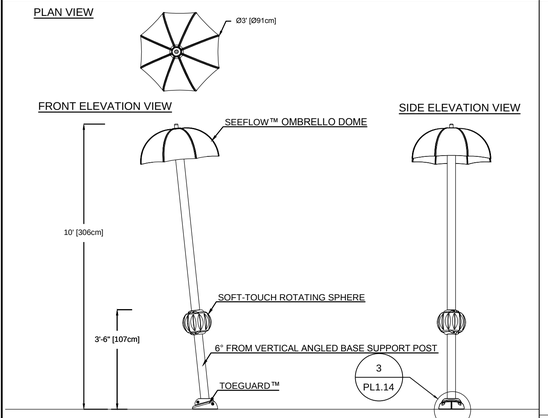
LOOP #1 — 4

NONE



AQUILIEN POWER SPINNER — 1

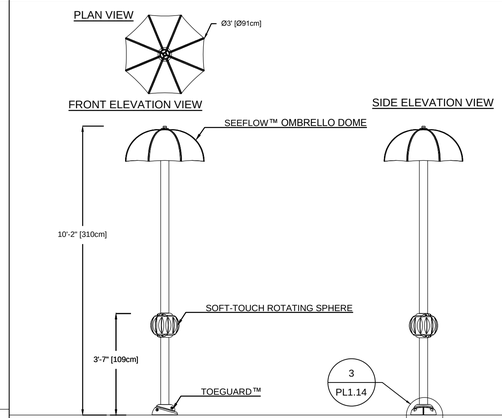
NONE



VOR-7447.200X OMBRELLO TWIRL Nº2 (Construction Detail)

OMBRELLO TWIRL #2 — 11

NONE

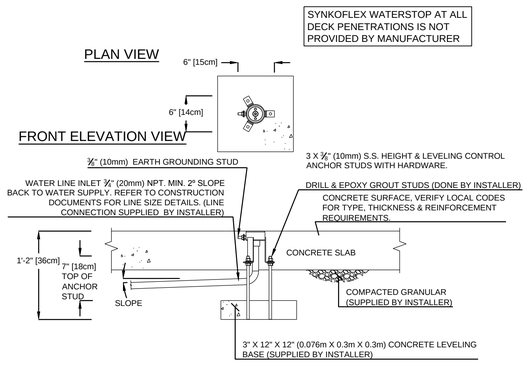


VOR-7446.200X OMBRELLO TWIRL Nº1 (Construction Detail)

OMBRELLO TWIRL #1 — 8

NONE

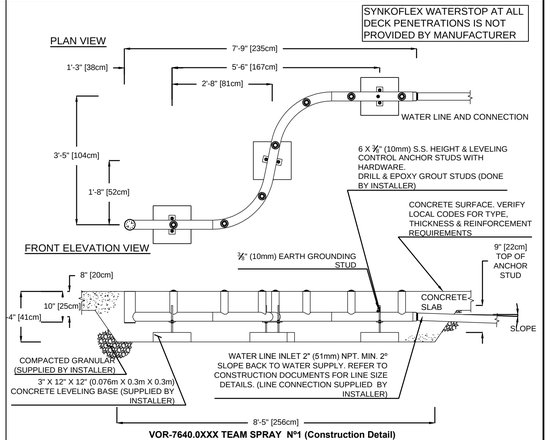
SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



DIRECTIONAL WATER JET — 5

NONE

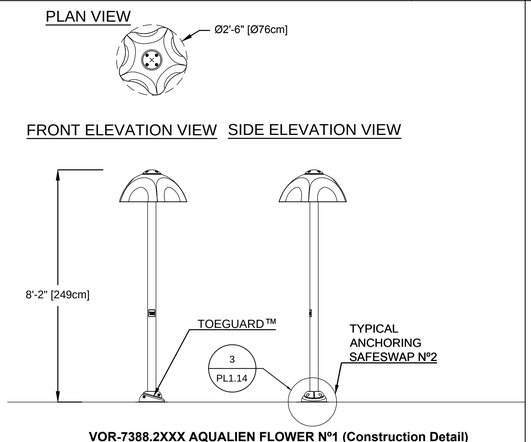
SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



VOR-7640.0XXX TEAM SPRAY Nº1 (Construction Detail)

TEAM SPRAY #1 — 2

NONE

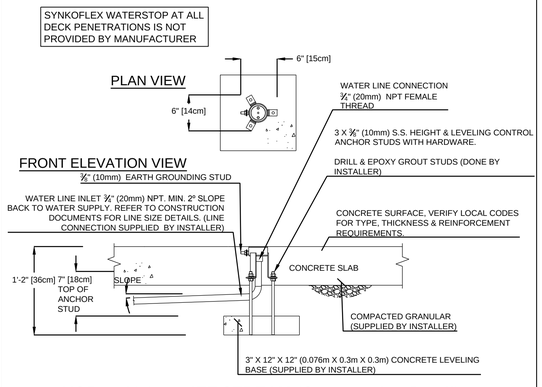


VOR-7388.2XXX AQUALIEN FLOWER Nº1 (Construction Detail)

AQUILIEN FLOWER #1 — 12

NONE

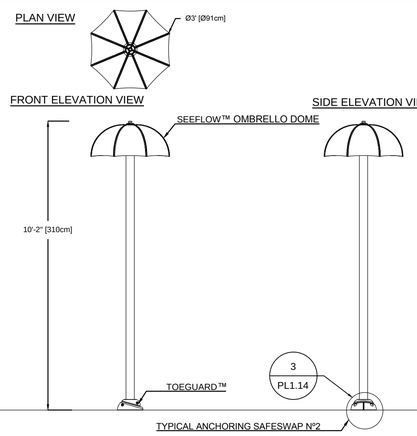
SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



VOR-7512.0xxx JET STREAM (Construction Detail)

JET STREAM — 9

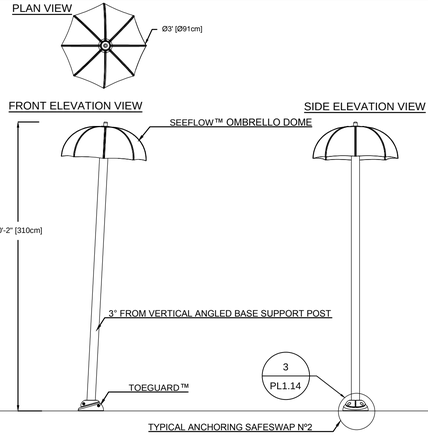
NONE



VOR-7445.2XXX OMBRELLO Nº1 (Construction Detail)

OMBRELLO #1 — 6

NONE



VOR-7440.2XXX OMBRELLO Nº2 (Construction Detail)

OMBRELLO #2 — 3

NONE

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

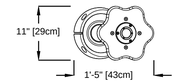
DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

WATER FEATURE DETAILS

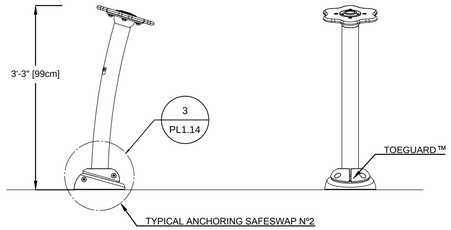
PL1.13

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL113.dwg

PLAN VIEW



FRONT ELEVATION VIEW



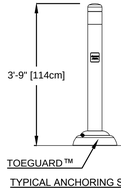
SIDE ELEVATION VIEW

WATER LINE CONNECTION REPLACED BY ELECTRICAL LINE CONNECTION. 14 AWG (2,5mm²)-2 WIRE CONDUCTOR TO BE USED FOR ELECTRICAL CONNECTION. (SUPPLIED BY INSTALLER)

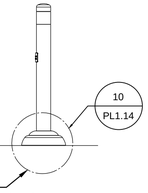
VOR-0612.2XXX WATER GARDEN ACTIVATOR N°1 (Construction Detail)

PLAN VIEW

FRONT ELEVATION VIEW



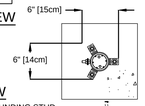
SIDE ELEVATION VIEW



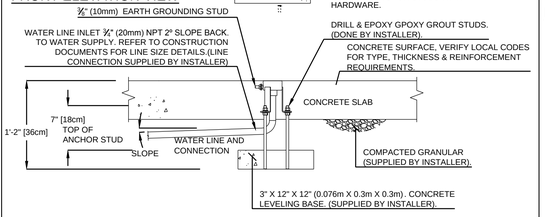
VOR-0555.2XXX AQUA DOME N°1 (Construction Detail)

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER

PLAN VIEW



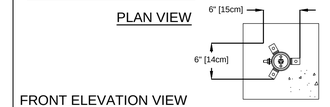
FRONT ELEVATION VIEW



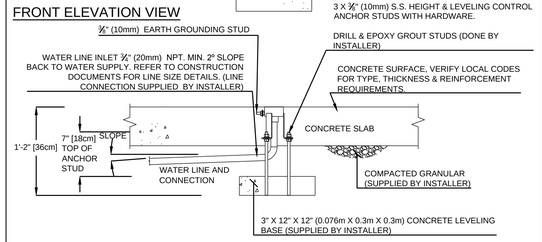
VOR-0301.4xxx GROUND GEYSER (Construction Detail)

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER

PLAN VIEW



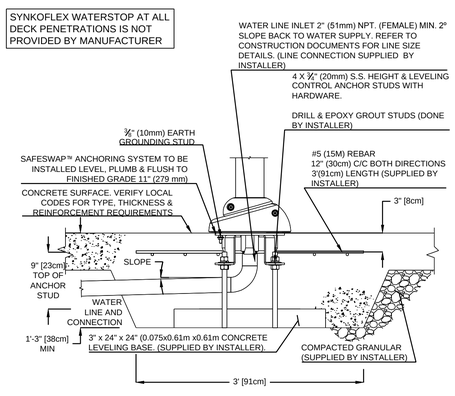
FRONT ELEVATION VIEW



VOR-7513.0XXX FOUNTAIN SPRAY (Construction Detail)

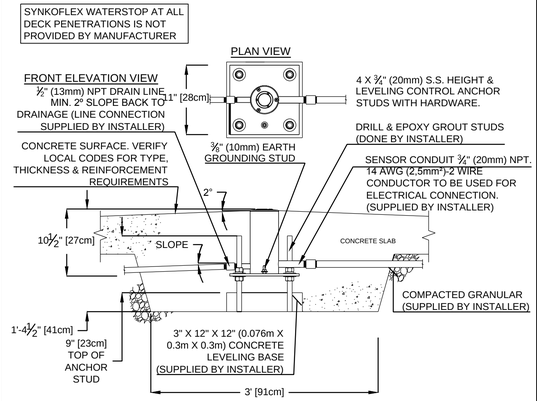
WATER GARDEN ACITVATOR #1	9	AQUA DOME	6	GROUND GEYSER	4	FOUNTAIN SPRAY	1
	NONE		NONE		NONE		NONE

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



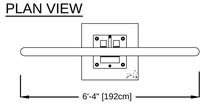
SAFESWAP N° 1 (Construction Detail) LARGE

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER

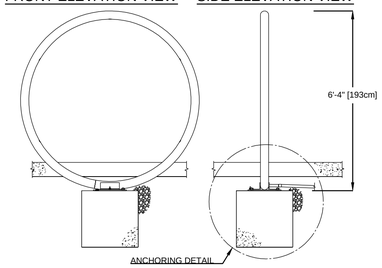


VOR-0606.0XXX FOOT ACTIVATOR (Construction Detail)

PLAN VIEW



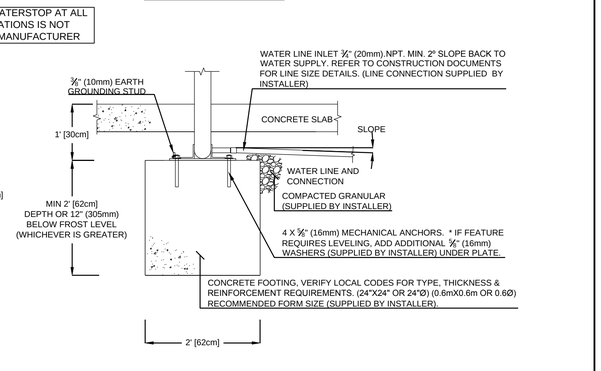
FRONT ELEVATION VIEW



SIDE ELEVATION VIEW

ANCHORING DETAIL

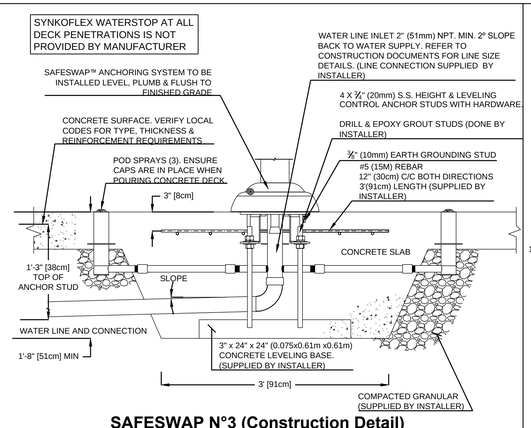
SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



VOR-0519.0XXX SPRAY LOOP (Construction Detail)

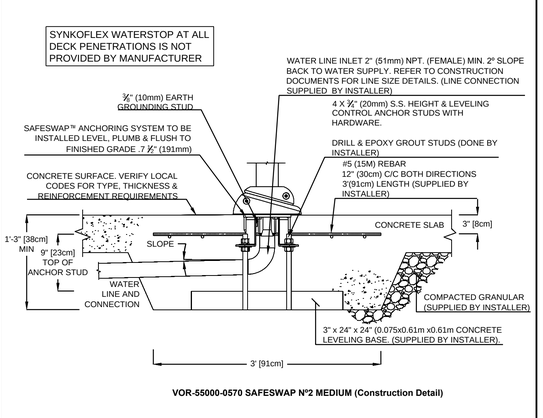
SAFE SWAP #1	10	FOOT ACTIVATOR	7	SPRAY LOOP	2
	NONE		NONE		NONE

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



SAFESWAP N°3 (Construction Detail)

SYNKOFLEX WATERSTOP AT ALL DECK PENETRATIONS IS NOT PROVIDED BY MANUFACTURER



VOR-55000-0570 SAFESWAP N°2 MEDIUM (Construction Detail)

THIS SPACE NOT USED	11	THIS SPACE NOT USED	8	SAFE SWAP #3	5	SAFE SWAP #2	3
	NONE		NONE		NONE		NONE

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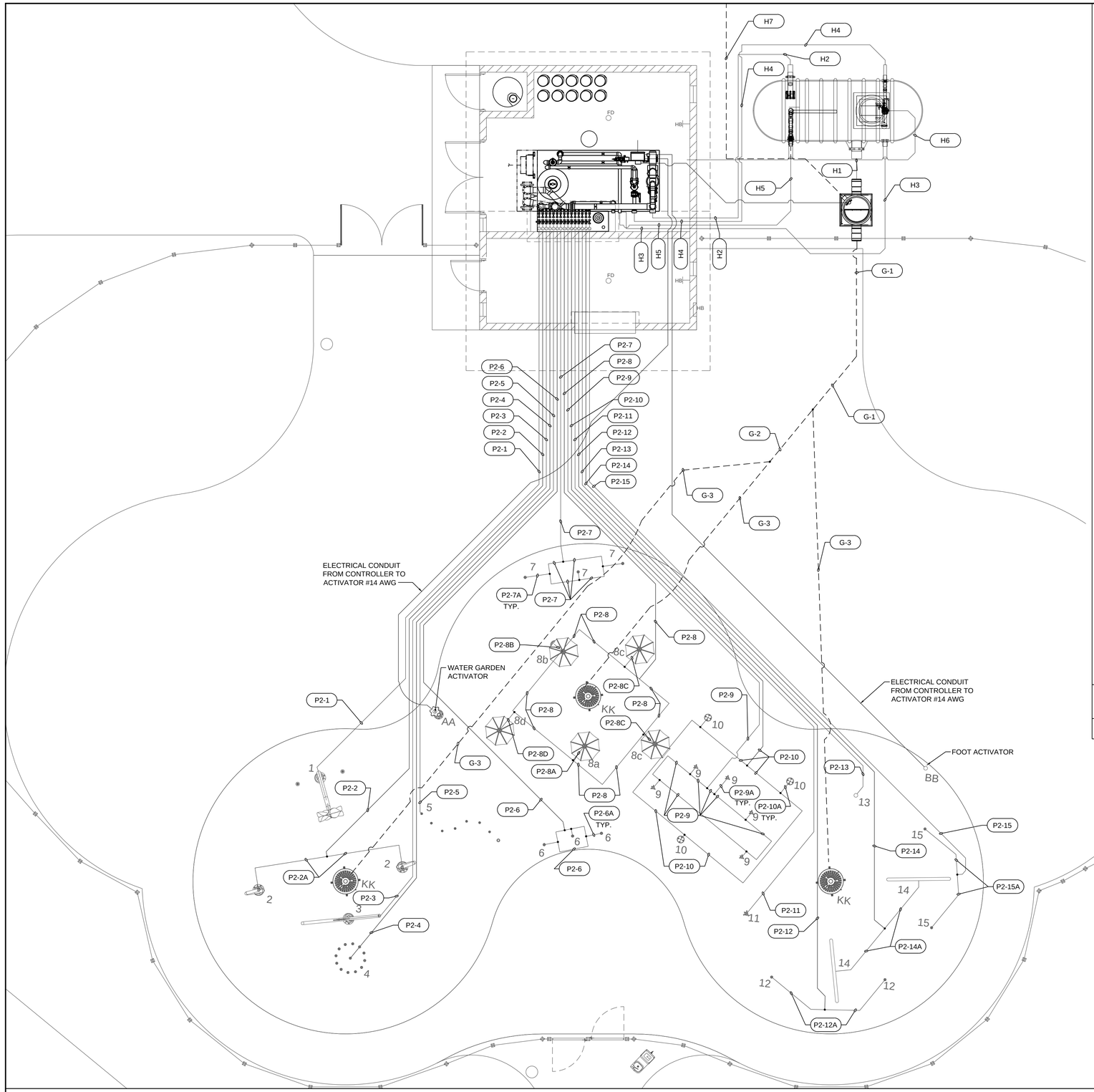
CHECKED BY	DGM
PHASE	100% CD

WATER FEATURE DETAILS

PL1.14

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL114.dwg



SPRAY PAD - PIPING PLAN | **2**

3/16 = 1'-0"

POOL A PIPE SCHEDULE

PIPE ID	TYPE	NPS (in)	FLOW (gpm)	VELOCITY (fps)	DESCRIPTION
G-1	PVC SCH 80	10	259	1.2	SPLASH PAD DRAIN
G-2	PVC SCH 80	8	173	1.2	SPLASH PAD DRAIN
G-3	PVC SCH 80	8	86	0.6	SPLASH PAD DRAIN
-	-	-	-	-	-
H1	PVC SCH 80	10	259	1.2	MAIN DRAIN RETURN
H2	PVC SCH 80	6	259	3.2	PLAY PRODUCT SUCTION OUTLET
H3	PVC SCH 80	3	158	7.9	BYPASS RETURN
H4	PVC SCH 80	4	101	2.9	FILTER PUMP SUCTION OUTLET
H5	PVC SCH 80	3	101	5.0	FILTER RETURN
H6	PVC SCH 80	1	0	0.0	FRESH WATER INLET
H7	PVC SCH 80	4	0	0.0	RAIN DIVERTER/OVERFLOW OUTLET - TERMINATE TO DAYLIGHT AT SOUTHERN TENNIS COURT DRAIN SWALE
L8	PVC SCH 80	3	105	5.2	FILTER BACKWASH
-	-	-	-	-	-
P2-1	PVC SCH 80	1.5	18	3.4	AQUALIEN POWER SPINNER
P2-2	PVC SCH 80	1.5	15	2.8	LOOP NO. 1
P2-2A	PVC SCH 80	1.5	8	1.4	LOOP NO. 1
P2-3	PVC SCH 80	1.5	10	1.9	BAMBOO NO. 10
P2-4	PVC SCH 80	1.5	34	6.4	TEAM SPRAY NO. 2 SUPPLY
P2-5	PVC SCH 80	1.5	18	3.4	TEAM SPRAY NO. 1 SUPPLY
P2-6	PVC SCH 80	1.5	12	2.2	DIRECTIONAL WATER JET SUPPLY
P2-6A	PVC SCH 80	1.5	4	0.7	DIRECTIONAL WATER JET SUPPLY
P2-7	PVC SCH 80	1.5	12	2.2	DIRECTIONAL WATER JET SUPPLY
P2-7A	PVC SCH 80	1.5	4	0.7	DIRECTIONAL WATER JET SUPPLY
P2-8	PVC SCH 80	1.5	30	5.6	OMBRELLA'S SUPPLY
P2-8A	PVC SCH 80	1.5	6	1.1	OMBRELLA TWIRL NO. 1 SUPPLY
P2-8B	PVC SCH 80	1.5	6	1.1	OMBRELLA TWIRL NO. 2 SUPPLY
P2-8C	PVC SCH 80	1.5	6	1.1	OMBRELLA NO. 2 SUPPLY
P2-8D	PVC SCH 80	1.5	6	1.1	OMBRELLA NO. 1 SUPPLY
P2-9	PVC SCH 80	1.5	13	2.4	JET STREAM SUPPLY
P2-9A	PVC SCH 80	1.5	3	0.5	JET STREAM SUPPLY
P2-10	PVC SCH 80	1.5	13	2.4	AQUALIEN FLOWER NO. 1
P2-10A	PVC SCH 80	1.5	3	0.5	AQUALIEN FLOWER NO. 1
P2-11	PVC SCH 80	1.5	5	0.9	FOUNTAIN SPRAY
P2-12	PVC SCH 80	1.5	15	2.8	GROUND GEYSER SUPPLY
P2-12A	PVC SCH 80	1.5	8	1.4	GROUND GEYSER SUPPLY
P2-13	PVC SCH 80	1.5	14	2.6	AQUA DOME NO.1
P2-14	PVC SCH 80	1.5	25	4.7	SPRAY LOOP SUPPLY
P2-14A	PVC SCH 80	1.5	13	2.3	SPRAY LOOP SUPPLY
P2-15	PVC SCH 80	1.5	15	2.8	GROUND GEYSER SUPPLY

POOL A PIPE SCHEDULE | **1**

NONE

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

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DATE	04/30/2013
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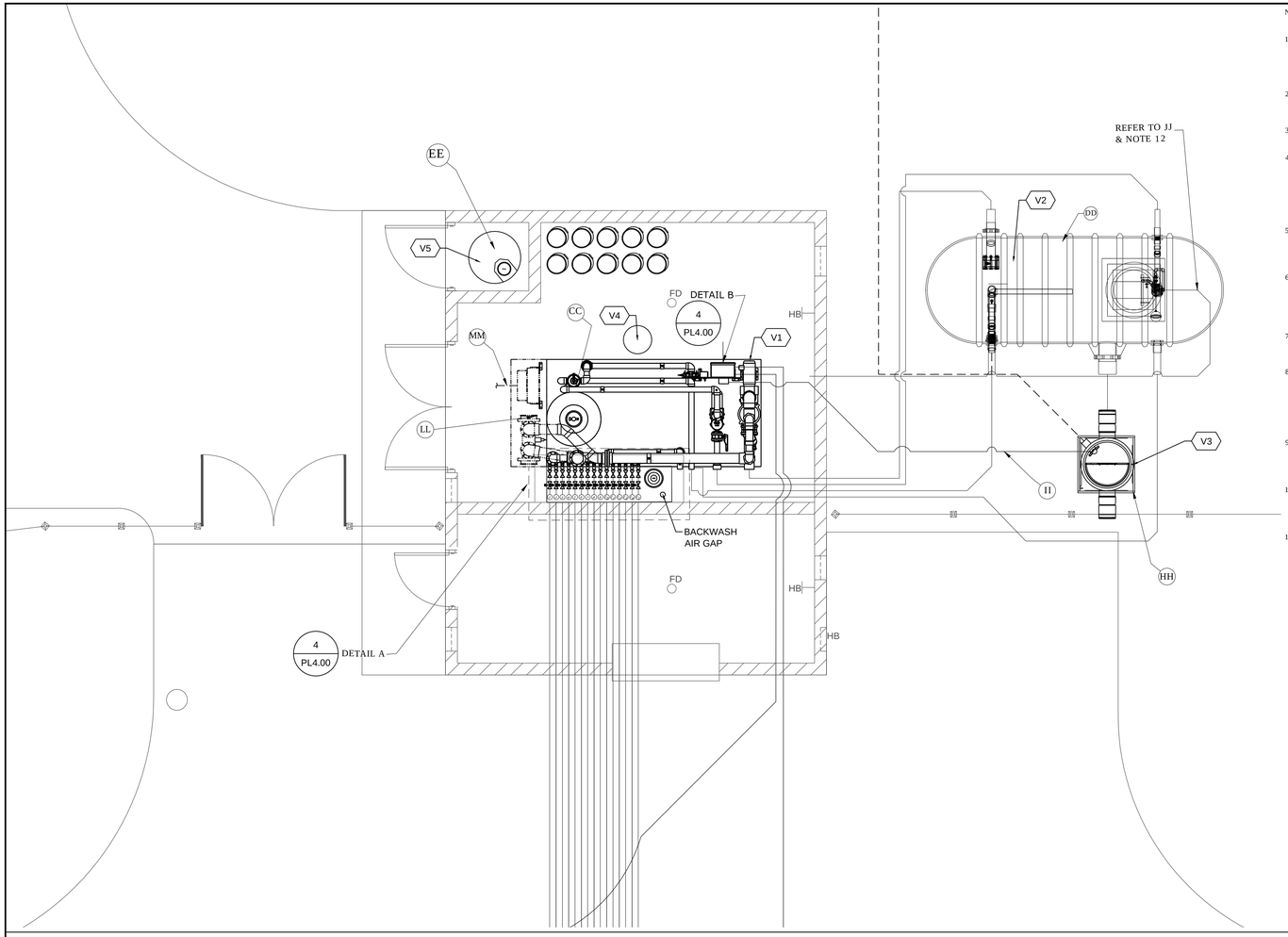
PHASE	100% CD

POOL A - PIPING AND DETAILS

PL3.00

Date: Tuesday, April 30, 2013 Plotted by: Michael Schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL300.dwg



NOTE:

1. FOR PLAY PRODUCT & WATER QUALITY MANAGEMENT SYSTEM INSTALATION DETAILS REFER TO INSTALL DRAWINGS.SKID MOUNTED EQUIPMENT AND STUB UP LOCATIONS TO BE FINALIZED PRIOR TO CONSTRUCTION.
2. SPLASHPAD ACTIVITY DECK & DRAIN LINES ARE TO HAVE A 1-2% SLOPE TO OPTIMIZE DRAINAGE.
3. ALL PIPING TO FEATURES ARE TO HAVE A 1-2% SLOPE FOR WINTERIZATION.
4. ALL LINE SIZING FROM LEGEND 1 ASSUMES A MAXIMUM DISTANCE OF 100 FEET BETWEEN THE WATER DISTRIBUTION MANIFOLD AND THE FURTHEST PLAY PRODUCT. DISTANCES ABOVE 100 FEET MAY REQUIRE AN INCREASE IN LINE SIZING. CONTRACTOR TO COORDINATE WITH VORTEX.
5. ALL PIPING BETWEEN THE DECK DRAINS, PLAY PRODUCTS AND PLAYSAFE DRAIN No1 WATER CONTAINMENT SYSTEM ARE TO BE SCHEDULE 80 PVC.
6. LINES FROM PLAYSAFE DRAIN No1 SHALL BE 8" AND SHALL COMBINE INTO A 10" LINE. LINE ROUTING TO BE DETERMINED ON SITE BY CONTRACTOR.
7. FINAL LOCATION OF PLAYSAFE DRAIN No1 AND LINE ROUTING ARE TO BE DETERMINED BY CONTRACTOR
8. WHEN CONNECTING MULTIPLE PLAY PRODUCTS TO ONE FEEDER LINE, THE JUNCTION POINT (SPLIT OR T) SHALL BE PLACED IN THE MID POINT BETWEEN EACH PLAY PRODUCT. FAILURE TO DO SO MAY RESULT IN UNEQUAL SPRAY EFFECTS BETWEEN PLAY PRODUCTS.
9. WIRING FROM THE CONTROLLER TO EACH ACTIVATOR SHALL BE #14 AWG. A TOTAL OF TWO (2) CONDUCTORS PER ACTIVATOR.
10. ALL CONNECTIONS TO THE CONTROLLER SHALL BE PERFORMED USING AN APPROVED NEMA 4X CONNECTOR.
11. TOTAL COMBINED FLOW CAPACITY OF PLAY PRODUCT IS 259 GPM.

MECHANICAL EQUIPMENT SCHEDULE

DRAWING	ID TAG	DESCRIPTION	QTY.	BASIS OF DESIGN
4/4	V1	FILTRATION	1	VORTEX WATER QUALITY MANAGEMENT SYSTEM
4/4	V2	WATER CONTAINMENT TANK	1	VORTEX WATER CONTAINMENT SYSTEM
4/4	V3	DEBRIS TRAP	1	VORTEX DEBRIS TRAP
4/4	V4	CHLORINE SYSTEM	1	VORTEX PULSAR SYSTEM
4/4	V5	PH SYSTEM	1	VORTEX ACID FEED SYSTEM

EQUIPMENT SCHEDULE

1

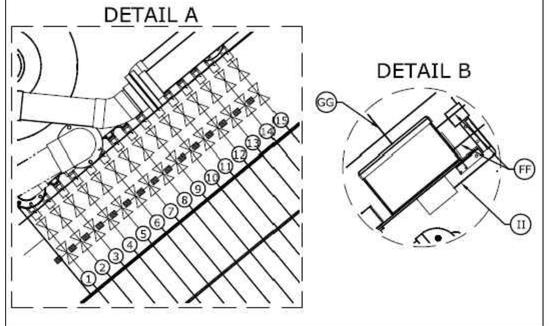
NONE

CODE	PRODUCT	QTY	PROVIDED BY
CC	Water Quality Management System VOR-204765.5000		VORTEX
DD	Water Containment System (3000 GAL) VOR-5311.0000		VORTEX
EE	Chemical Reservoir	1	VORTEX
FF	Electrical Conduit from Controller to Activator; 2 Conductors#14 AWG	2	CONTRACTOR
GG	Main Power, 230 VAC 3 Phase, 60Hz See WQMS Installation Drawing		CONTRACTOR
HH	Debris Trap with Rain Diverter VOR-5322		VORTEX
II	Electrical Conduit from Rain Diverter Junction Box to Rain Diverter; 4 Conductors#14 AWG		CONTRACTOR
JJ	Makeup Water Line		CONTRACTOR
LL	UV SYSTEM VOR-44100.0008		VORTEX
MM	UV Power, 230 VAC 3 Phase, 60Hz See UV Installation Drawing		CONTRACTOR
	Ball Valve	15	VORTEX
	Solenoid Valve	15	VORTEX
	Backflow Preventor		CONTRACTOR

MECHANICAL PLAN

3

1/4" = 1'-0"



THIS SPACE NOT USED

6

NONE

THIS SPACE NOT USED

5

NONE

MECHANICAL DETAILS

4

NONE

EQUIPMENT LEGEND

2

NONE

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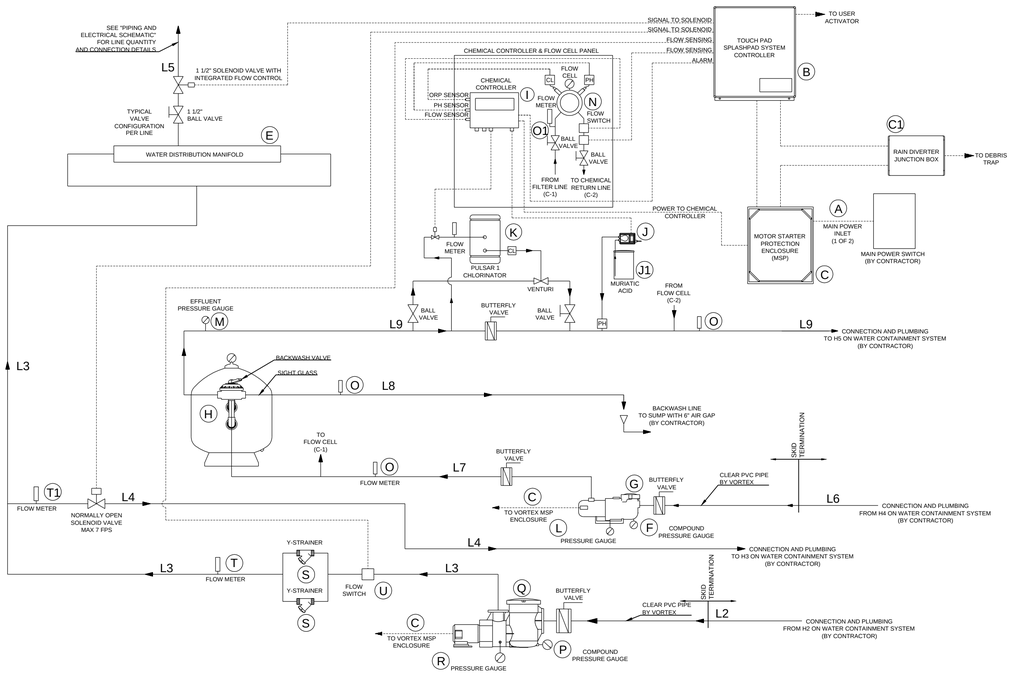
PHASE	100% CD

MECHANICAL PLAN, EQUIPMENT LIST AND DETAILS

PL4.00

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL400.dwg



VOR-2040765.5000R01 WATER QUALITY MANAGEMENT SYSTEM

WATER QUALITY MANAGEMENT SYSTEM

ALL EQUIPMENT SHOWN SHALL BE PROVIDED BY VORTEX ON THEIR EQUIPMENT SKID, UNLESS LISTED A BY CONTRACTOR. SKID INTALLATIONSHALL BE BY CONTRACTOR

3

NONE

WATER QUALITY MANAGEMENT SYSTEM SPECIFICATIONS				
ITEM	ITEM	PROVIDED BY	DESCRIPTION	QTY
		GENERAL		
A	MAIN ELECTRICAL POWER	CONTRACTOR	230 VAC, 45 AMPS, THREE PHASE, 60 Hz.	1
B	SPLASHPAD SYSTEM CONTROLLER	VORTEX	26 OUTPUT TOUCH SCREEN INTERFACE CONTROLLER. PREWIRED TO ALL SKID MOUNTED COMPONENTS. USER PROGRAMMABLE OPERATIONAL HOUR TIME CLOCK AND SPLASHPAD SPRAY SEQUENCES. INCLUDE FACTORY PRESET SPRAY SEQUENCE. EQUIPMENT AND ALARM FAILSAFES.	1
C	MOTOR STARTER PROTECTION ENCLOSURE	VORTEX	MOTOR STARTERS AND OVERLOAD RELAYS. INDIVIDUAL CONTROL FOR EACH PUMP.	1
C1	RAIN DIVERTER JUNCTION BOX	VORTEX	PREWIRED TO SYSTEM CONTROLLER & MOTOR STARTER PROTECTION ENCLOSURE. CONTROL VALVE FOR RAIN DIVERTER IN DEBRIS TRAP.	1
D	WQMS SKID BASE	VORTEX	FIBER REINFORCED POLYMER COMPOSITE 72" WIDE X 144" LONG.	1
E	WATER DISTRIBUTION MANIFOLD	VORTEX	15 VALVES DISTRIBUTION MANIFOLD, PREWIRED TO ALL SOLENOIDS. WITH BALL VALVES.	1
		FILTRATION AND CHEMICAL TREATMENT LOOP		
F	COMPOUND GAUGE	WINTER INSTRUMENTS / VORTEX	COMPOUND GAUGE, 0-30" Hg / 0-60 PSI	1
G	FILTRATION PUMP	PENTAIR, WHISPERFLO, WFK-12 / VORTEX	3 HP, SELF PRIMING PUMP, THREE PHASE 230V, 127 GPM @ 70 FT HD, 141 GPM @ 60 FT HD, 10.4 AMPS FLA @ 230V. NSF CERTIFIED.	1
H	SAND FILTER	PENTAIR, TRITON, TR-140C / VORTEX	7.06 SQ. FT, 141 GPM @ 20 GPM/SQ FT, 106 GPM @ 15 GPM/SQ. FT, 36" DIAMETER, BACKWASH VALVE INCLUDED. NSF CERTIFIED.	1
I	CHEMICAL CONTROLLER	BECS TECHNOLOGY, BECSYS3 / VORTEX	ORP AND PH CONTROL WITH HIGH / LOW READING ALARM. NSF 50 CERTIFIED.	1
J	PERISTALTIC PUMP	BLUE-WHITE IND, A1N20A-6T / VORTEX	UP TO 24GPD FEED CAPACITY, NSF CERTIFIED.	1
J1	CHEMICAL RESERVOIR	VORTEX	DOUBLE WALL 50 GAL. POLYETHYLENE TANK. 26.5" DIA. x 38" H. 40 CFR CERTIFIED.	1
K	CHLORINE FEED SYSTEM	PULSAR 1 CHLORINATOR / VORTEX	CALCIUM HYPOCHLORITE AUTOMATIC CHLORINATOR. NSF CERTIFIED.	1
L	PRESSURE GAUGE	WINTER INSTRUMENTS / VORTEX	PRESSURE GAUGE, 0-60 PSI	1
M	EFFLUENT PRESSURE GAUGE	WINTER INSTRUMENTS / VORTEX	PRESSURE GAUGE, 0-60 PSI	1
N	FLOW SWITCH	HARWILL / VORTEX	FLOW SWITCH, 24V	2
O	FLOW METER	BLUE-WHITE IND, F-300 SERIES / VORTEX	3" PIPE FLOW METER, 40-140 GPM READING	3
O1	FLOW METER	BLUE-WHITE IND, F-400 SERIES / VORTEX	3/8" PIPE FLOW METER, 0.2-2 GPM READING	1
		PLAY PRODUCT LOOP		
P	COMPOUND GAUGE	WINTER INSTRUMENTS / VORTEX	COMPOUND GAUGE, 0-30" Hg / 0-60 PSI	1
Q	PLAY PRODUCT PUMP	PENTAIR, EQ SERIES, EQK750 / VORTEX	7.5 HP, SELF PRIMING PUMP, THREE PHASE 230V, 335 GPM @ 70 FT HD, 390 GPM @ 60 FT HD, 18.2 AMPS FLA @ 230V. NSF CERTIFIED.	1
R	PRESSURE GAUGE	WINTER INSTRUMENTS / VORTEX	PRESSURE GAUGE, 0-60 PSI	1
S	Y-STRAINER	SPEARS / VORTEX	4" PVC STRAINER WITH MESH BASKET	2
T	FLOW METER	BLUE-WHITE IND, F-300 SERIES / VORTEX	6" PIPE FLOW METER, 250-1050 GPM READING	1
T1	FLOW METER	BLUE-WHITE IND, F-300 SERIES/ VORTEX	3" PIPE FLOW METER, 80-300 GPM READING	1
U	FLOW SWITCH	IFM EFECTOR/ VORTEX	FLOW SWITCH, 24V	1

LINE SIZE CONNECTION CHART				
BY	FROM	TO	ITEM	SIZE
VORTEX	PLAY PRODUCT PUMP Q	WATER DISTRIBUTION MANIFOLD E	L3	6" / 4"(2)
VORTEX	FILTRATION PUMP G	SAND FILTER H	L7	3"
CONTRACTOR	WATER CONTAINMENT SYSTEM H2	PLAY PRODUCT PUMP Q	L2	6"
CONTRACTOR	LINE L3	WATER CONTAINMENT SYSTEM H4	L4	3"
CONTRACTOR	WATER DISTRIBUTION MANIFOLD E	PLAY PRODUCTS	L5	SEE SHEET 3
CONTRACTOR	WATER CONTAINMENT SYSTEM H4	FILTRATION PUMP G	L6	4"
CONTRACTOR	SAND FILTER H	SANITARY SEWER SYSTEM	L8	3"
CONTRACTOR	SAND FILTER H	WATER CONTAINMENT SYSTEM H5	L9	3"

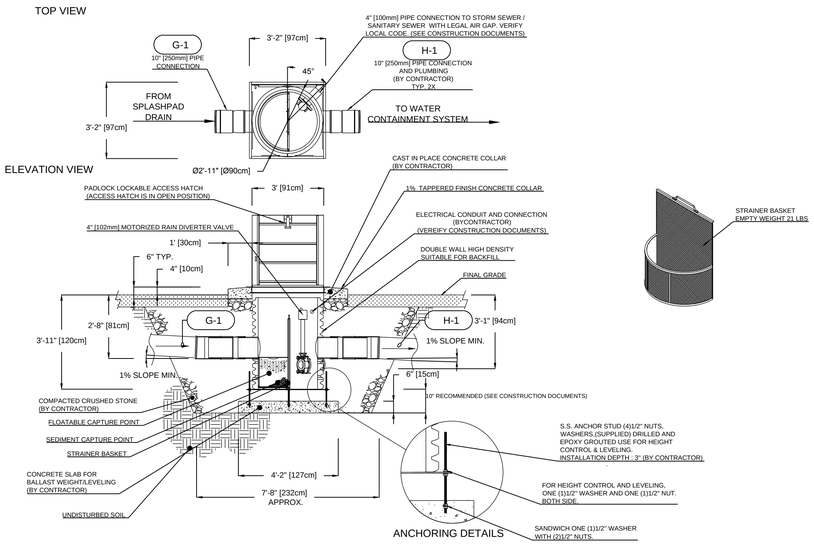
NOTE: REFER TO VORTEX' WATER QUALITY MANGEMENT SYSTEM AND VORTEX' WATER CONTAINMENT SYSTEM FOR PIPE SIZES. BETWEEN THE TWO SYSTEMS, PUT THE LESSER OF THE TWO PIPE SIZE. IF THE WATER CONTAINMENT SYSTEM IS NOT BY VORTEX, REFER TO VORTEX' WATER QUALITY MANAGEMENT SYSTEM FOR PIPE SIZE.

VOR-2040765.5000R01 WATER QUALITY MANAGEMENT SYSTEM

WATER QUALITY MANAGEMENT SYSTEM

4

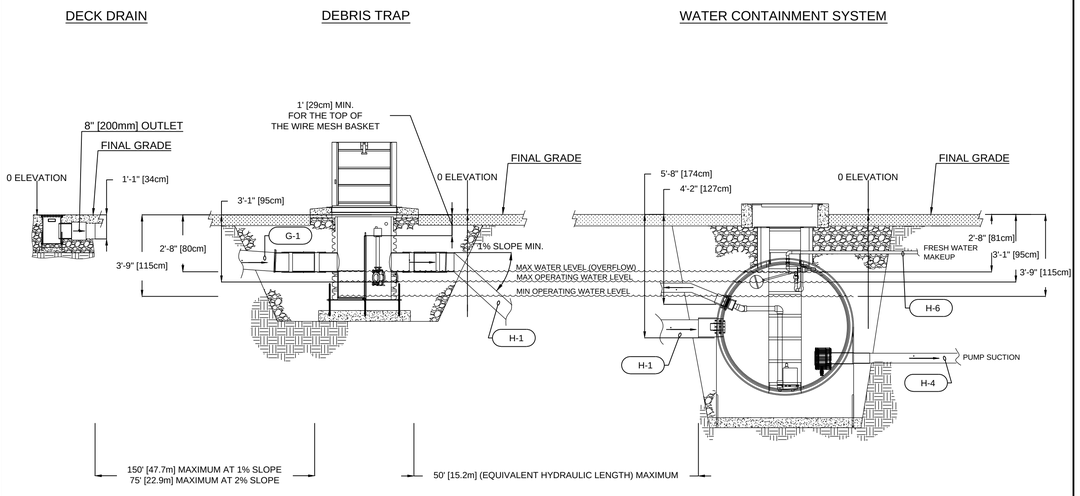
NONE



DEBRIS TRAP HDPE WITH RAIN DIVERTER

1

NONE



NOTES:
1. ALL DRAINAGE LINES ARE GRAVITY FEED. 1% SLOPE MIN, 2% SUGGESTED.

DEBRIS TRAP HDPE WITH RAIN DIVERTER AND WATER CONTAINMENT SYSTEM

2

NONE

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www.watertechnologyinc.com

#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

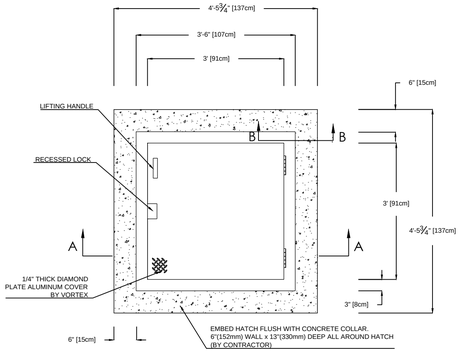
DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

REFERENCE DRAWINGS BY VORTEX

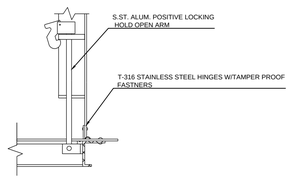
PL4.01

Date: Tuesday, April 30, 2013 Plotted by: Michael schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL4.01.dwg

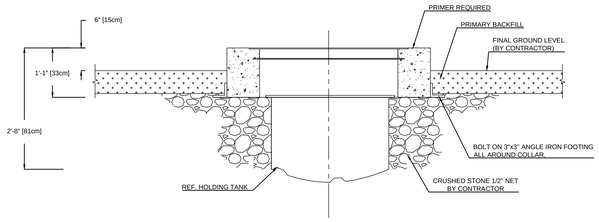
PLAN VIEW



NOTE: COVER SHOWN IN OPEN POSITION.



SECTION B-B



SECTION A-A

VOR-5311.0000R07 WATER CONTAINMENT SYSTEM 3000G

WATER CONTAINMENT SYSTEM 3000G | 3 | NONE

VOR-5311.0000R07 WATER CONTAINMENT SYSTEM 3000G

The 3000-gallon tank shall be a pre-fabricated unit designed to safely store the water used for the facility. The tank shall be pre-assembled at the factory and shall include the following connections: one 10” inlet for main drain, one 6” feature pump suction outlet , one 3” return inlet from feature pump, one 4” filter pump suction outlet, one 3” filtration return inlet, one 1” inlet for freshwater and one 4” outlet for overflow/discharge. The tank shall also include a water level detection system and one access hatch with ladder. It shall include the following:

Tank
- 3000 gallon capacity
- Fiberglass
- Single wall
- Ø 73”, ~193” long
- Fiberglass ladder included

Anchor
- Anchoring straps with hardware
- U-bolt type embedded in concrete

Access hatch
- Aluminum access hatch
- Hinged and pad-locked, with aluminum frame and SS hardware

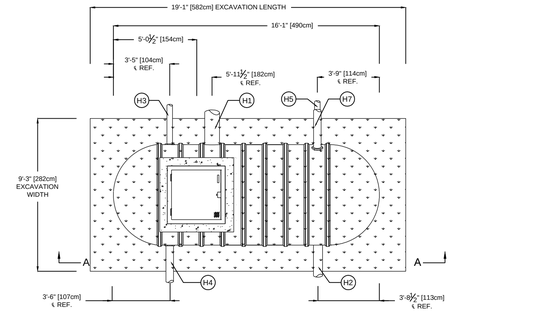
Level control
- Float valve connected to make up water line
- Polypropylene anti corrosion valve
- Inlet size 1”, outlet size 1”
- Maximum working pressure 100 psi

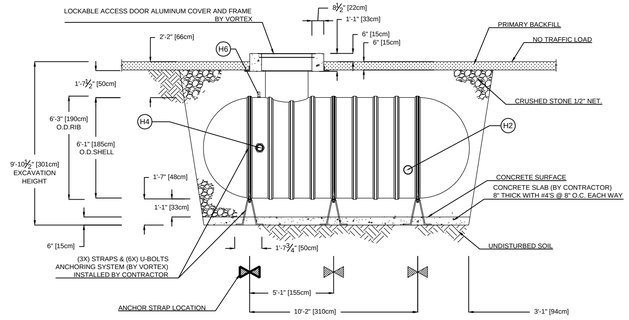
Inlets
- 10” inlet for main drain
- 3” inlet for feature return
- 3” inlet for filtration return
- 1” inlet for freshwater

Outlets
- 6” outlet for play product pump
- 4” outlet for filter pump
- 4” outlet for overflow / discharge

VOR-5311.0000R07 WATER CONTAINMENT SYSTEM 3000G

WATER CONTAINMENT SYSTEM 3000G -PROVIDED YB VRTEX INSTALLED BY CONTRACTOR | 4 | NONE



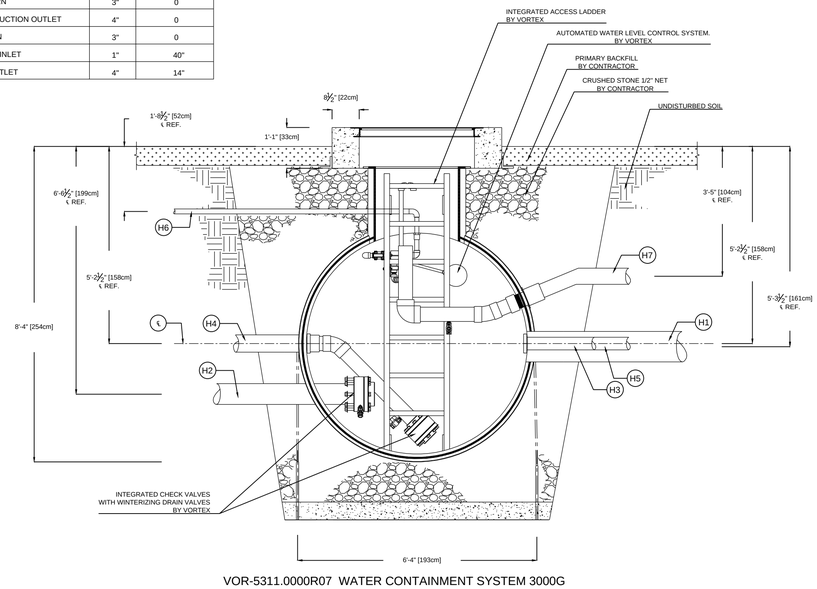


SECTION A-A

VOR-5311.0000R07 WATER CONTAINMENT SYSTEM 3000G

WATER CONTAINMENT SYSTEM 3000G -PROVIDED YB VRTEX INSTALLED BY CONTRACTOR | 1 | NONE

LINE	DESCRIPTION	SIZE	HEIGHT FROM C/L
H 1	MAIN DRAIN RETURN	10"	-1"
H 2	PLAY PRODUCT SUCTION OUTLET	6"	-16"
H 3	BYPASS RETURN	3"	0
H 4	FILTER PUMP SUCTION OUTLET	4"	0
H 5	FILTER RETURN	3"	0
H 6	FRESH WATER INLET	1"	40"
H 7	OVERFLOW OUTLET	4"	14"



VOR-5311.0000R07 WATER CONTAINMENT SYSTEM 3000G

WATER CONTAINMENT SYSTEM 3000G -PROVIDED YB VRTEX INSTALLED BY CONTRACTOR | 2 | NONE

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#12408.01

REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI 53704

ID	DATE	DESCRIPTION

DATE	04/30/2013
PROJECT NO.	12408.01
DRAWN BY	MLS
CHECKED BY	DGM
PHASE	100% CD

REFERENCE DRAWING BY VORTEX

PL4.02

Date: Tuesday, April 30, 2013 Plotted by: Michael Schommer Drawing location: p:\2012\12408.01 wi madison\Drawings\12408.01 PL4.02.dwg

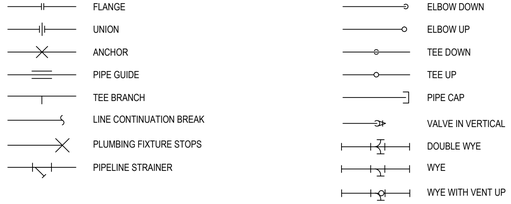
PLUMBING SYMBOLS, ABBREVIATIONS, SCHEDULES & SHEET INDEX

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

PLUMBING ABBREVIATIONS

A	-	AIR	LAV	-	LAVATORY
AFF	-	ABOVE FINISHED FLOOR	LBS.	-	POUNDS
AFG	-	ABOVE FINISHED GRADE	LB/HR	-	POUNDS PER HOUR
ALT	-	ALTERNATE			
AP	-	ACCESS PANEL	MAX	-	MAXIMUM
APPROX.	-	APPROXIMATELY	MB	-	MOP BASIN
ARCH	-	ARCHITECTURAL	MBH	-	THOUSANDS OF BTU PER HOUR
AVG	-	AVERAGE	MC	-	MECHANICAL CONTRACTOR
AW	-	ACID WASTE	MEP	-	MECHANICAL, ELECTRICAL AND PIPING
			MER	-	MECHANICAL EQUIPMENT ROOM
BFF	-	BELOW FINISHED FLOOR	MEZZ	-	MEZZANINE
BLDG	-	BUILDING	MFR	-	MANUFACTURER
BOT	-	BOTTOM	MH	-	MANHOLE
BOP	-	BOTTOM OF PIPE	MIN.	-	MINIMUM
BT	-	BATHTUB	MISC	-	MISCELLANEOUS
BTU	-	BRITISH THERMAL UNITS	MTD	-	MOUNTED
BTUH	-	BRITISH THERMAL UNITS PER HOUR	MTG	-	MOUNTING
BV	-	BALANCING VALVE			
			NA	-	NOT APPLICABLE
CAP	-	CEILING ACCESS PANEL	NIC	-	NOT IN CONTRACT
CC	-	CAPPED CONNECTION	NO	-	NUMBER
CFH	-	CUBIC FEET PER MINUTE	NPS	-	NOMINAL PIPE SIZE
CFM	-	CUBIC FEET PER HOUR	NTS	-	NOT TO SCALE
CL	-	CENTERLINE			
CLG	-	CEILING	OC	-	ON CENTER
CLV	-	CLEAR WATER VENT	OD	-	OUTSIDE DIAMETER
CLW	-	CLEAR WATER WASTE	OFCI	-	OWNER FURNISHED, CONTRACTOR INSTALLED
CO	-	CLEANOUT	OFOI	-	OWNER FURNISHED, OWNER INSTALLED
COND	-	CONDUCTOR			
CONT	-	CONTRACTOR	P	-	PUMP
CTR	-	CENTER	PC	-	PLUMBING CONTRACTOR
CU	-	COPPER	PCF	-	POUNDS PER CUBIC FOOT
CV	-	CHECK VALVE	PD	-	PRESSURE DROP
CW	-	COLD WATER	PH	-	PHASE
CWFU	-	COLD WATER FIXTURE UNITS	PLBG	-	PLUMBING
CWS	-	COLD WATER SOFT	POC	-	POINT OF CONNECTION
			PP	-	POLYPROPYLENE
DD	-	DRAIN DECK	PPH	-	POUNDS PER HOUR
DET	-	DETAIL	PRV	-	PRESSURE RELIEF VALVE
DFU	-	DRAINAGE FIXTURE UNITS	PSF	-	POUNDS PER SQUARE FOOT
DIA	-	DIAMETER	PSI	-	POUNDS PER SQUARE INCH
DIM	-	DIMENSION	PSIA	-	POUNDS PER SQUARE INCH ABSOLUTE
DN	-	DOWN	PSIG	-	POUNDS PER SQUARE INCH GAUGE
DS	-	DOWNSPOUT	PVC	-	POLYVINYL CHLORIDE
DT	-	DRAIN TILE			
DTR	-	DRAIN TILE RECEIVER	RD	-	ROOF DRAIN
DWG.	-	DRAWING	REC	-	RECESSED
DW	-	DISH WASHER	RF	-	ROOF
			RI	-	ROUGH-IN
E	-	EXISTING	RPZ	-	REDUCED PRESSURE ZONE VALVE
EEW	-	EMERGENCY EYEWASH	RV	-	RELIEF VALVE
ELEV	-	ELEVATION			
EM	-	EMERGENCY	S	-	SLOPE
EQUIP	-	EQUIPMENT	SCH	-	SCHEDULE
ES	-	EMERGENCY SHOWER	SH	-	SHOWER
ET	-	EXPANSION TANK	SHT	-	SHEET
ETR	-	EXISTING TO REMAIN	SOG	-	SLAB ON GRADE
EWC	-	ELECTRIC WATER COOLER	SPEC	-	SPECIFICATION
EWH	-	ELECTRIC WATER HEATER	SQ	-	SQUARE
EXST	-	EXISTING	SS	-	SERVICE SINK
			S/S	-	STAINLESS STEEL
F	-	FUTURE	STD	-	STANDARD
FCO	-	FLOOR CLEANOUT			
FD	-	FLOOR DRAIN	T&P	-	TEMPERATURE AND PRESSURE
FFE	-	FINISHED FLOOR ELEVATION	TBR	-	TO BE REMOVED
FLR	-	FLOOR	TD	-	TRENCH DRAIN
FP	-	FIREPROOF	TDFU	-	TOTAL DRAIN FIXTURE UNITS
FPM	-	FEET PER MINUTE	TEMP	-	TEMPERATURE
FPS	-	FEET PER SECOND	TOP	-	TOP OF PIPE
FS	-	FLOOR SINK	TOS	-	TOP OF SLAB
F&T	-	FLOAT AND THERMOSTATIC	T STAT	-	THERMOSTAT
FT	-	FEET	TWFU	-	TOTAL WATER FIXTURE UNITS
FTG	-	FOOTING	TYP	-	TYPICAL
FU	-	FIXTURE UNITS			
			UNO	-	UNLESS OTHERWISE NOTED
G	-	GAS			
GAL	-	GALLON	V	-	VENT
GC	-	GENERAL CONTRACTOR	VB	-	VACCUM BREAKER
GPM	-	GALLONS PER MINUTE	VB	-	VALVE IN BOX
GPH	-	GALLONS PER HOUR	VTR	-	VENT THRU ROOF
HB	-	HOSE BIBB	W	-	WASTE
HD	-	HUB DRAIN	W/	-	WITH
HP	-	HORSE POWER	W/O	-	WITHOUT
HVAC	-	HEATING, VENTILATING & AIR CONDITIONING	WHA	-	WATER HAMMER ARRESTOR
HW	-	HOT WATER	WCO	-	WALL CLEANOUT
HWFU	-	HOT WATER FIXTURE UNITS	WC	-	WATER CLOSET
HWR	-	HOT WATER RETURN	WF	-	WASH FOUNTAIN
			WH	-	WATER HEATER
ID	-	INSIDE DIAMETER	WM	-	WASHING MACHINE
IE	-	INVERT ELEVATION	WSFU	-	WATER SUPPLY FIXTURE UNITS
IN	-	INCHES	WG	-	WATER GAUGE
KO	-	KNOCK-OUT	YCO	-	YARD CLEAN OUT

PIPE FITTINGS



PIPING SYSTEM LABELS

WATER PIPING SYSTEMS:

- COLD WATER
- HOT WATER
- HOT WATER RETURN
- NP — NON-POTABLE WATER
- F — FIRE PROTECTION

WASTE AND VENT SYSTEMS:

- CWV — CLEARWATER VENT
- CWW — CLEARWATER WASTE
- OD — OVERFLOW DRAIN LINE
- ST — STORM
- SSD — SUBSOIL DRAIN LINE
- UNDERFLOOR FOR WASTE OR SOIL, SUBSOIL, STORM & FORCE MAIN
- SANITARY VENT
- SAN — WASTE OR SOIL LINE

SITE PIPING SYSTEMS:

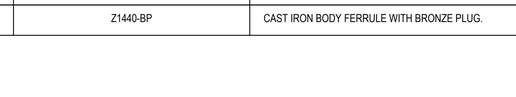
- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE

DENTAL PIPING SYSTEMS:

- CA — COMPRESSED AIR
- VAC — VACUUM

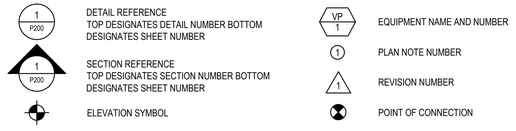
NOTE:
(X) PRIOR TO SYSTEM TYPE DENOTES EXISTING PIPING
(F) PRIOR TO SYSTEM TYPE DENOTES FUTURE PIPING

DRAINS AND CLEANOUTS



PIPE VALVES AND SPECIALTIES

REFERENCE SYMBOLS



PLUMBING DRAIN AND CLEANOUT SCHEDULE

TAG	MANUFACTURER	MODEL NO.	REMARKS
FD-1	ZURN	Z415-B	CAST IRON BODY, ADJUSTABLE STRAINER HEAD, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SQUARE NICKEL BRONZE TOP.
FCO	ZURN	Z1400-BP	CAST IRON BODY, ADJUSTABLE FLOOR CLEANOUT WITH NICKEL BRONZE TOP AND GAS AND WATER-TIGHT ABS TAPERED BRONZE PLUG (USE IN FINISHED AREAS).
YCO	ZURN	Z1440-BP	CAST IRON BODY FERRULE WITH BRONZE PLUG. PROVIDE WITH FROST SLEEVE AND HEAVY DUTY WATER TIGHT TOP.
WCO	ZURN	Z1468	ROUND STAINLESS STEEL WALL ACCESS COVER WITH SECURING SCREW, BRONZE RAISED HEX HEAD PLUG.
CO	ZURN	Z1440-BP	CAST IRON BODY FERRULE WITH BRONZE PLUG.

PLUMBING SHEET INDEX

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Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

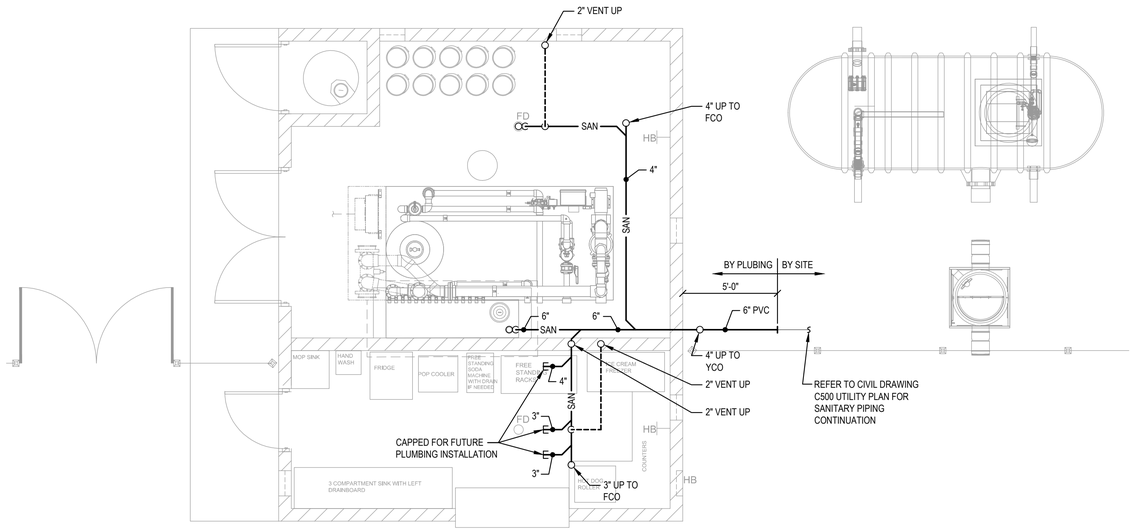
REINDAHL SPLASH PAD
1818 PORTAGE ROAD
MADISON, WI

ID	DATE	DESCRIPTION

DATE	4/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	MHS
CHECKED BY	RAK
PHASE	100%CD

PLUMBING SYMBOLS, ABBREVIATIONS, SCHEDULES AND SHEET INDEX

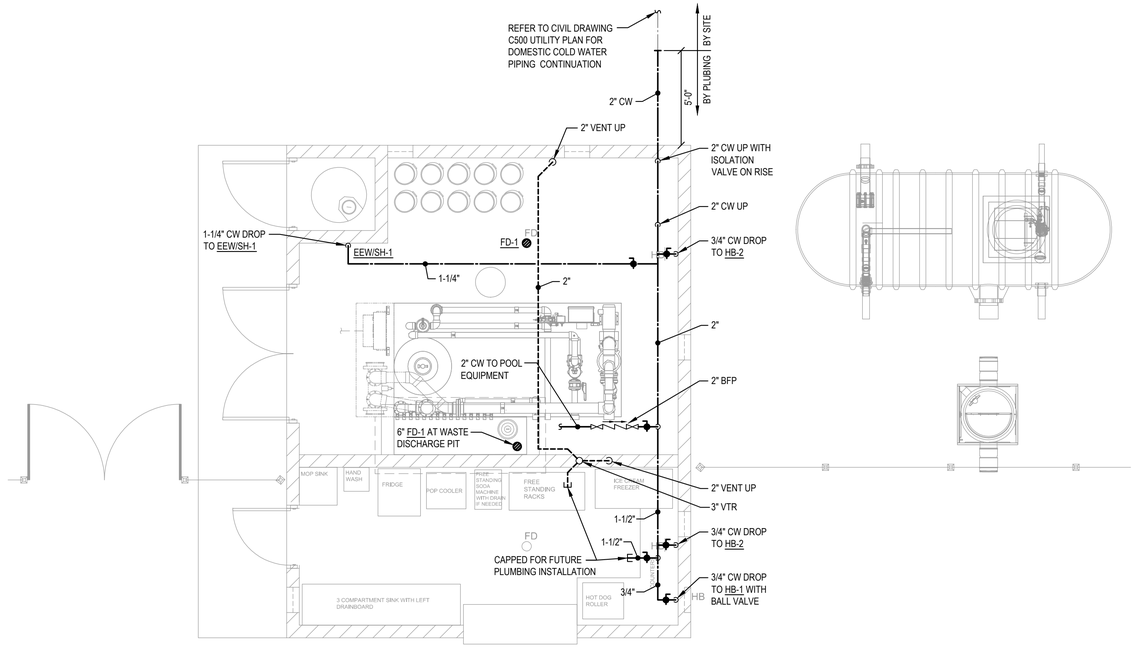
P000



1 P100 **PLUMBING BELOW FLOOR PLAN**

SCALE: 1/4"=1'-0"

TRUE NORTH PLAN NORTH



2 P100 **PLUMBING ABOVE FLOOR PLAN**

SCALE: 1/4"=1'-0"

TRUE NORTH PLAN NORTH

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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI

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DRAWN BY	MHS
CHECKED BY	RAK
PHASE	100%CD

PLUMBING FLOOR PLAN AND DETAILS

P100

Date: Monday, April 29, 2013 Plotted by: Selm, Marcin H. Drawing location: L:\Jobs2013\20132000-01\CAD\Plumbing\dgn\00\P100.dwg

UTILITY TRENCH EXCAVATION, BACKFILL AND COMPACTION

PART 1 - GENERAL

REFERENCES
ASTM International (American Society for Testing and Materials)
ASTM C518 - Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
ASTM C578 - Specification for Rigid, Cellular Polystyrene Thermal Insulation.
ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort 12,400 ft.-lbf/ft3.

PART 2 - PRODUCTS

BEDDING AND BACKFILL MATERIALS
Crushed Stone Backfill: Type A1.
Site Excavated Material (Spoil) Backfill: Type S1.
Verify fill materials to be reused are acceptable.

PART 3 - EXECUTION

SITE VERIFICATION AND FIELD MEASUREMENTS
Verify that survey benchmark and intended elevations for the Work are as shown on Drawings.

SAWING AND BREAKING PAVEMENT
Saw concrete pavement, slabs, or bases to a minimum 1/2 of depth of existing pavement, slab, or base prior to removal.
Saw Cut full depth before removal.
Cut pavements evenly along edges of excavation prior to their removal in such a way as to avoid excessive removal or ragged, uneven edges.
Contractor shall be solely responsible for any damage caused thereby.

PREPARATION
Maintain and protect existing utilities remaining, which pass through work area.
Protect above and below grade utilities that are to remain.
Cut out soft areas of subgrade not capable of in situ compaction. Backfill with Type A9 fill and compact to density equal to or greater than requirements for subsequent backfill material.

TRENCH EXCAVATION
Excavate subsoil required for installation of utility.
Excavate trenches at top of pipe to a maximum width based on dimension of outside diameter of pipe plus 24 inches to enable installation of pipe and to allow inspection.
Width at top of pipe may be increased with prior approval of Engineer/Architect to allow for stringers and sheathing when required.
Provide pipe laid in open-cut trench with 6-inch minimum clearance between outside face of pipe barrel and face of sheathing or sidewall of trench.
Maximum width of trench at ground surface shall not exceed width of trench at top of pipe by more than 2 feet without prior request to Engineer/Architect, unless it is specifically allowed on Drawings.
Place excavated material stored along trench excavation a minimum distance back from edge of trench. Determine distance by angle of repose of trench material to prevent surcharging of trench wall material leading to potential shearing of trench wall and collapse of trench.
Contractor shall immediately remove and dispose of excavated material which is not to be used as trench backfill, unless directed otherwise by Contract Documents.
Contractor shall maintain all finished excavations free of water or sewage during Work.
Hand trim excavation. Remove loose matter.
Correct unauthorized excavation and over-excavated areas at no cost to Owner.

TRENCH BEDDING
Keep trench bottom free of water prior to placement of bedding and laying of pipe.
Place and shape bedding material to pipe, to a minimum depth of three inches under bell and four inches under spigot and compact to 95 percent modified Proctor density.
Support pipe during placement and compaction of bedding material.
Bring bedding and cover material over top of pipe to a minimum compacted depth of 12 inches, compact to specified density.
Where sand is used for cover material, compact sand with portable plate compactor to a depth of twelve inches in two lifts of six inches each for initial cover over pipe.

TRENCH BACKFILLING
Backfill trenches with materials and to contours and elevations shown on Drawings.
Place specified backfill in loose lift layers. Use compaction equipment that will achieve desired compaction requirements.
Systematically backfill to allow for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.
Employ a placement method that does not disturb or damage pipe in trench.
Maintain optimum moisture content of backfill materials to attain required compaction density.
Remove surplus backfill materials from site.
Leave fill material stockpile areas completely free of excess fill materials.

MECHANICAL COMPACTION
Mechanically compact backfill by means of a tamping roller, sheepsfoot roller, pneumatic tire roller, vibrating roller, or other mechanical tampers. Impact, free-fall, or "stomping" type compaction equipment shall not be allowed.
Flooding or jetting of backfill for compaction purposes shall not be allowed.
Place material for mechanically compacted backfill in lifts, which, prior to compaction, shall not exceed thickness specified below for type of compaction equipment used:
Vibratory equipment including vibratory plate, vibratory smooth-wheel rollers, and vibratory pneumatic-tired rollers: maximum lift thickness two (2) feet.
Rolling equipment, including sheepsfoot (both vibratory and non-vibratory), grid, smooth-wheel (non-vibratory), pneumatic-tired (non-vibratory), and segmented wheels: maximum lift thickness one (1) foot.
Hand-directed mechanical tampers: maximum lift thickness of six (6) inches.

TOLERANCES
Top Surface of Backfill: Plus or minus one inch from required elevations.

PLUMBING SYSTEM OUTLINE SPECIFICATION

PART 1 - GENERAL

SCOPE
Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

Plumbing includes interior sanitary waste and vent, storm/clearwater drainage, subsoil/foundation drain, and domestic water supply. This section includes the following topics:

The contractor shall follow Architectural plans and scope documents for type of systems, materials and equipment to use.

The scope documents, along with local regulations and codes, shall be the basis for the plumbing design and construction.

The contractor shall calculate, size and select systems as defined by the scope documents. This shall include coordination with other trade contractors.

GENERAL PROVISIONS
The plumbing systems shall be designed and installed in conformance with Illinois Plumbing Code and Local Requirements.

Fees, permits and inspections shall be obtained and paid for. Included are fees for water and sanitary sewer utilities. Impact fees shall be coordinated with and be paid for by the Owner.

Submit the quantity of shop drawings as specified by Architect. Include wiring diagrams of electrically powered equipment.

Submit shop drawings for materials and equipment prior to ordering/purchasing any materials. Allow ample time for review and coordination with other divisions of work.

Submit materials, fixtures, and equipment for record purposes and for operation and maintenance manual preparation. Provide the Owner with (2) hard cover ring type binders entitled "Operating and Maintenance Manual" for materials, fixtures, and equipment used on the project.

At the completion of the project, the contract drawings shall be adjusted to become accurate as-built drawings. Tracings and AutoCAD files of the as-built drawings shall be turned over to the Owner's representative.

Verify the location and size of existing plumbing services which are relevant to the installation of new services.

Bear costs to cut and patch walls, floors, roof, and ceiling affected by new plumbing work.

Work shall be warranted for one year after date of acceptance.

Coordinate electrical connections and power and control wiring requirements.

Keep premises free from waste materials.

Pipe sleeves or openings shall be set for pipes passing through new masonry or concrete walls and floors. Sleeves for piping at exterior penetrations above and below grade shall be Schedule 40 black steel pipe and shall extend through the construction. Provide flanges for supporting sleeves through existing construction as applicable.

The annular space between drilled or sleeved holes and pipes passing through exterior walls or below grade foundation walls shall be sealed with a "Link_Seal" as manufactured by the Thunderline Corporation. "Link_Seal" shall consist of ASTM D2000 EPDM rubber compound interlocking links, Delvin pressure plates and corrosion resistant fasteners. Provide schedule 40 pipe sleeve with anchor collar at wall penetration.

Coordinate the location of sleeves, openings, chases, and furred spaces with the other Contractors. Provide sleeves, hangers and inserts that are to be built into the structure during the progress of construction.

Sleeves shall extend 1 inch above the finished floor. In mechanical rooms and other areas where water may accumulate, sleeves shall extend 2 inches above the finished floor.

Grout openings through concrete or masonry, including space between sleeves and walls of floors, with Dow 8640 or 8641 sealant.

Piping penetrating smoke or fire separations shall not violate the integrity of the separation. Where penetrations occur through fire rated walls or floors, "Link_Seal Pyro_Pac" shall be used, which is rated for 3 hour fire resistance by ASTM E_119_76. "Pyro-Pac" shall consist of two individual sealing units consisting of fire_resistant silicon links, steel pressure plates, and corrosion resistant fasteners.

The space above suspended ceilings may be return plenum to move air to the Air Handling Units. Properly protect plastic and other combustible materials installed in the plenum space.

Provide pipe hangers or strut connected to structural elements to support piping.

Identify piping systems with labels or stencils. Include valve tags for shutoff valves.

Excavate trenches for installation of piping.

Provide 6 inches of sand or pea gravel for pipe bedding. Backfill around pipe to 12 inches above pipe with sand or pea gravel.

Refer to to Utility Trench Excavation, Backfill and Compaction spec section. Backfill trenches with sand or gravel to rough grade elevation under paved surfaces. Backfill trenches with common excavation material for areas with grass.

When trenching extends beyond construction limit lines, restore surface to original condition.

When replacing concrete, install dowels using #5 rebar in all areas where concrete demolition has occurred.

UNIT PRICES
When submitting costs for the project, provide a list of man hour rates. These rate prices shall reflect the cost the contractor shall either add or deduct from his base price. The Owner shall decide to install or delete plumbing fixtures or equipment and their associated piping on an individual basis.

ASBESTOS ABATEMENT
Asbestos abatement shall be by the GC. If asbestos is encountered, the Contractor shall notify the GC. The GC shall properly remove the asbestos material so the Contractor can continue his work.

DEMOLITION
Where piping is removed and not reconnected with new work, ends of existing services shall be capped as if they were new work.

Plumbing contractor shall identify piping, fixtures, and equipment for removal by demolition contractor. Pipe, fixtures, equipment, and associated insulation and similar items demolished, abandoned, or deactivated shall be removed from the site except as noted otherwise by the Owner. Designated equipment shall be turned over to the Owner for their use at a place and time so designated. The condition of material, fixtures, and equipment that is to be reused shall be maintained to that existing before work began.

OCCUPANCY REQUIREMENTS
Verify the planned occupancy and phasing of the building prior to design and construction. Pricing shall reflect these requirements to the extent that plumbing systems must be installed, located, segregated, operational, or planned to reflect phasing and partial occupancy requirements.

DESIGN CRITERIA

SANITARY DRAIN AND VENT

Minimum Slope: 1/4 in/ft (through 2 inch pipe)
1/8 in/ft (3 inch and greater pipe) Minimum Velocity: 2 feet/sec

DOMESTIC WATER

Uniform Pressure Loss Method of Sizing.
Maximum Velocity: 8 ft/sec
Maximum Pressure: 80 lb/in2
Hot Water System Temperature: 120 °F

SYSTEM DESCRIPTIONS

SANITARY DRAIN AND VENT
Provide a gravity drainage system for waste discharge from plumbing fixtures and floor drains. The various fixture drains shall collect in the existing building drain that slopes the south corner exterior wall out of the building to connect with the sanitary lateral from the municipal sanitary sewer in the street.

Provide a sanitary vent system to protect the traps. The vents shall connect to a header pipe and terminate through the roof at various locations and connect into existing header pipes at various locations.

WATER DISTRIBUTION
Connect a domestic line to the existing 2" domestic cold water service ran within the building at various locations. Distribute domestic cold water using a horizontal distribution system at the ceiling structural joists. Connect cold water to water heaters, plumbing fixtures, and equipment. Provide cross connection prevention devices for each connection.

Hot water shall be generated in electric water heaters on each level. The water heater shall be located in the Janitor's Closet. Distribute hot water to the lavatories and janitor receptor sink.

PART 2 - PRODUCTS

SANITARY DRAIN AND VENT

PIPE AND FITTINGS
Cast iron, soil or no-hub, service weight, ASTM A74 or CISPI 301, with rubber gasket ASTM C564.

PVC, Schedule 40, ASTM D-1784 or cellular core, ASTM F-891 with PVC_DWV socket fittings, ASTM D_2665 with PVC solvent cement, ASTM D-2564. (NOTE:PVC is not allowed in return air plenums - follow local building code for use above floor)

DRAINS AND CLEANOUTS
By Josam, J.R. Smith, Sioux Chief, Wade, Watts, or Zurn. Refer to Plumbing Equipment Schedule on drawings for specific items.

TESTING
Hydrostatic test sanitary piping to 10 feet water column with no leaks.

DOMESTIC WATER DISTRIBUTION

PIPE AND FITTINGS

WATER SERVICE
Ductile iron pipe, mechanical or push on joint, thickness class 53 conforming to AWWA C-151 with standard thickness cement mortar lining AWWA C-104; ductile iron or gray iron mechanical joint cement mortar lined fittings, Class 250, AWWA C110; ductile iron restrained joint compact fittings, class 350, AWWA C-153; rubber gasket joints with non-toxic gasket lubricant, AWWA C-111. Joints shall have ASTM A506 steel clamps and straps for restraints with ASTM A307 steel bolts and ASTM A575 steel rods.

Cast iron water pipe conforming to AWWA C106_75 with cast iron fittings conforming to AWWA C110_77 standards.

PVC plastic pipe, Class 100 (DR 25) conforming to AWWA C900. Provide Class 150 (DR 18) or Class 200 (DR 14) as dictated by municipal water supplies.

Optional Material for Piping 2-inch and Smaller:
Seamless copper water tube, (ASTM B88), Type K, annealed (soft) with cast brass flared fittings (ASTM B62).

Valves For Water Service:
Valves for water service and street main shall have ends suited or adaptors shall be provided for proper installation in the lines. Valves shall meet local munical standards or in the absence of standards the following requirements:

Valves three_inches and larger shall be iron body, bronze mounted, double disc, gate valves conforming to FS WW_V_58B Type I, Class I, or AWWA C500. They shall open in the same direction as those used by the local water department. Valve stems shall terminate in 2-inch wrench nuts. Furnish two keys.

Service Valve Box:
Valve boxes shall meet local standards or in the absence of local standards shall comply with the following requirements. Boxes shall be approved "Buffalo Pattern", cast iron (ASTM A48, Class 20), adjustable shaft type, finished with two coats of coal_tar mastic. The lids of boxes shall bear the work "Water" or the letter "W". Furnish two keys for bolt in service box lids.

Pipe Covering:
Cover ferrous pipe, fittings and valves with loose covering of 8-mil thick, black polyethylene film, ASTM C105, Class C, secured with polyethylene tape.

Interior Above Ground:
Copper tube, Type L, hard temper, ASTM Specification B88, Wrought copper sweat fittings and 95/5 solder joints tin_antimony, or other lead free solder.

Wrought copper or cast bronze fittings, grooved ends, joined with mechanical couplings, rubber gasket seal, Victaulic style 606.

Copper press fittings, ASTM B16.18 or ASTM B16.22, EPDM O-ring by Viega.

COMPRESSED AIR AND VACUUM PIPING
Copper tube, Type L, hard temper, ASTM Specification B88, Wrought copper sweat fittings and 95/5 solder joints tin_antimony, or other lead free solder.

SHUTOFF VALVES
Ball valve, bronze body, two piece, conventional port, Nibco, Series 585.

BALANCING VALVES
Bell & Gossett "Circuit Setter" bronze body balancing valve with sweat or threaded ends, calibrated brass orifice, integral adjustment knob with calibrated scale, memory stop indicator, drain tapping and differential pressure metering connections.

CHECK VALVES
Swing check, bronze body, resilient seat, Nibco, Series 413.

WATER PRESSURE REDUCING VALVES
Bronze body, diaphragm operated, with an integral thermal expansion bypass valve, inlet union, stainless steel strainer, renewable monel or stainless steel seat, and adjustable reduced pressure range, 300 psig at 160 degrees F. Pre-set for scheduled pressure.

A. W. Cash, Conbraco, Watts, Wilkins Or Substitutions to be approved before submitting bids.

TESTING
Test water piping before connecting fixtures with hydrostatic pressure of 100 psi without loss of pressure for at least two hours.

DISINFECTING
Provide chlorine disinfecting. Test for presence of disinfecting agent at remote locations to ensure the disinfecting agent has reached throughout the domestic water systems. Other disinfecting methods may be used with prior approval of the Architect and local authorities.

Test for bacteria after disinfecting and domestic water system is flushed.

WATER HAMMER ARRESTORS
ASSE 1010; sized in accordance with PDI WH-201, precharged piston type construction of hard drawn Type K copper, threaded bass adapter, brass piston with o-ring seals, FDA approved silicone lubricant, suitable for operation in temperature range 35 to 150 degrees F, maximum 250 psig working pressure, 1500 psig surge pressure. Watts series 15.

PPP Industries, Sioux Chief Manufacturing Company, Tyler Pipe/Wade Division, Watts Water Technologies or approved equal prior to submitting bids.

TRAP PRIMER VALVES
Bronze body, O-ring seals, integral threaded outlet vacuum breaker, adjustable, in conformance with ANSII/ASSE 1018.

Ancon - Watts Water Technologies, PPP Industries, Jay R. Smith Manufacturing Company, Tyler Pipe/Wade Division, or approved equal prior to submitting bids.

INSULATION
Insulate horizontal storm piping above ground. Insulate domestic water piping.

Insulate traps and supplies on ADA lavatories and sinks.

ACCEPTABLE MANUFACTURERS
Armstrong, Halstead , Johns-Manville, Knauf, or Owens_Corning.

GLASS FIBER INSULATION
Manville Micro-Lok meeting ASTM C547; rigid molded, non-combustible, "K" Value: 0.23 at 75 F, maximum service temperature: 850 F, with vapor Retarder Jacket: AP-T Plus White Kraft paper reinforced with glass fiber yarn and bonded to aluminum foil, secure with self-sealing longitudinal laps and butt strips or AP_Jacket with outward clinch expanding staples or vapor barrier mastic as needed.

Connection:
Waterproof vapor retarder adhesive; Halstead Contact Adhesive.

UV-Protection:
Outdoor protective coating; Armstrong Protective Coating.

MINIMUM INSULATION THICKNESS

	PIPE SIZE				
SYSTEMS	1" OR LESS	1 ¼" TO 2"	2 ½" TO 4"	5" AND UP	
Storm Drain	---	---	1"	1"	
Domestic Cold Water	½"	½"	1"	1"	
Domestic Hot Water	1"	1"	1-½"	1-½"	
Domestic Hot Water Return	1"	1"	1-½"	1-½"	

Insulate domestic water supply piping and P-trap below lavatory and exposed sinks to provide handicapped accessibility.

PLUMBING FIXTURES
Refer to Schedule for specific items. Substitutions to be approved before submitting bids.

EMERGENCY EQUIPMENT
Refer to Schedule for specific items. Substitutions to be approved before submitting bids.

DRAINS, TRAPS, STOPS, AND SUPPLIES
Brass Craft, Chicago Faucet, Dearborn, EBC, Keeney, Kohler, McGuire, or Zurn. Substitutions to be approved before submitting bids.

BACKFLOW PREVENTION DEVICES
Refer to Schedule for specific items. Substitutions to be approved before submitting bids.

PLUMBING EQUIPMENT
Refer to Schedule for specific items. Substitutions to be approved before submitting bids.

WATER HEATERS :
Natural Gas:
Instantaneous type, gas-fired, insulated and jacketed, T&P relief valve, drain valve manufactured by Rinnia or equal.

Heater shall be furnished with a water pressure gauge and an A.S.M.E. pressure-temperature relief valve of size to relieve total BTU input of the coil.

CIRCULATING PUMP
Pump shall be manufactured by Armstrong, Bell & Gossett, Taco, or Thrush.

Pump shall be 120 volt, single phase, 3450 RPM, in_line bronze pump, with brass impeller.

Time Control:
Time controls shall be manufactured by Paragon Electric Co. or equivalent. Provide a 120 VAC electronic programmable time controller for each circulating pump. Unit shall include seven day, 365 day per year programmable features and rechargeable battery backup; Paragon Electric Co. model number EC72.

Motor Starter:
Starters shall be manufactured by Allen_Bradley, Cutler-Hammer, G.E., or Square D. Provide a single phase manual motor starter switch for starting and controlling each pump, with internal overload protection, general purpose enclosure, neon pilot light and HAND-OFF-AUTO selector switch; Allen_Bradley Model 600_TAX142.

WATER SOFTENERS
Manufacturers: Basis of design - Culligan Water Treatment
Amtrol Water Treatment Technologies.
Capital Water Softener, Inc.
CustomCare Water Technologies, Inc
Hellenbrand, Inc.
Water-Right., Inc.
Tanks: Fiberglass reinforced mineral tank constructed of molded high-density polyethylene inner shell reinforced by exterior fiberglass winding and epoxy resin. NSF approved and rated for 150 psig Mount slotted or lateral hub PVC distributor in tank with underbedding gravel
Mineral:High capacity ion exchange mineral, FDA approved, Sybron/Ionac, Rohm & Haas, Resintech, or Puralite. Uniform beads rated for removal of 30,000 grains of hardness as calcium carbonate when regenerated with 15lbs. of salt. Design for minimum 50 percent resin bed freeboard.
Valve: Top mount brass valve with motor drive, hydraulically balanced piston, seal and spacers, adjustable brine flow control, backwash flow control, adjustable capacity, and regeneration settings. Provide bypass ball valve arrangement.
Controls: Factory wired and tested controls with transformer and labeled terminal block for twin alternating consisting of the following.
7-Day Time Clock.
Mechanical Demand Meter Delayed Regeneration.
Mechanical Demand Meter Immediate Regeneration.
Electronic Meter and 480 Microprocessor with LED Display for Delayed Regeneration.
Electronic Meter and 480 Microprocessor with LED Display for Immediate Regeneration.
Systemax Microprocessor Controller with LED Display.
Brine Tank: High density polyethylene brine tank with high salt platform, PVC brine measuring and float valve, PVC injector. Contractor to provide initial salt fill.
Ratings: Maximum 10 MG/L hardness leakage, 110 degrees F maximum operating temperature, 30-100 psig operating pressure, 120/60/1 electrical.
Accessories:Flexible braided stainless steel pipe connectors for tanks over 24-inch diameter. Inlet and outlet sampling valves, inlet and outlet pressure gauges with shutoff valve. Resin defoulant system with chemical metering pump, tubing and 4 month supply of chemical cleaner for iron and bacteria fouling.

PRESSURE TANK
Manufacturer:
Amtrol Well-X-Trol Model WX-456-C

System requires one tank equipped with shutoff valves, drain valves, pressure relief, and air pressure test gauge asymbels.
Tank: Galvanized steel, tested and stamped in accordance with ASME SEC. VIII; pressurized heavy duty butyl diaphragm type with integral floor stand; tapping for installation of piping and accessories:
1. Tank Volume: 422 Gal.
2. Discharge: 3" Discharge

PART 3 - EXECUTION

GENERAL
Install plumbing systems in accordance with Wisconsin Plumbing Code and Local Requirements. Electrical requirements and connections to be coordinated with the Electrical Contractor. Coordinate locations of drains with Mechanical Contractor for condensate piping by Mechanical Contractor.

FACILITY WATER DISTRIBUTION
Install pipe, fittings and joints with reference standards, manufacturer's recommendations, recognized industry practices and required piping as shown on drawing.

In all cases, consult drawings for exact location of pipe spaces, ceiling heights, door and window openings, or other architectural details before installing piping.

Do not route piping through transformer vaults or above transformers, panelboards, or switchboards, including required service space for this equipment, unless piping is serving this equipment.

Maintain minimum required horizontal or vertical, water on top, distance between water piping and sanitary sewer piping per Illinois Uniform Plumbing Code. Where water piping crosses a sanitary sewer, provide minimum required vertical clearance and installation requirements per code.

Perform hydrostatic leak tests, follow recognized industry practices for performing the test.

After installation of all plumbing fixtures prior to occupancy, plumbing contractor to make sure all fixtures are operating properly by simultaneously flush and operating all fixtures valves at once to verify proper operation of facility water distribution system.

SANITARY AND STORM/CLEARWATER DRAIN AND VENT SYSTEMS INSTALLATION
Connect drain and vent piping to each fixture and piece of equipment and install required piping as shown on drawings. Provide necessary fittings and hardware to make required offsets and transitions.

Changes in direction of drainage piping shall be made by the appropriate use of 45 degree wyes, long or short sweep 1/4 bends, 1/6, 1/8, 1/16 bends or combination.

Fittings shall be installed to make for the least possibility of stoppage. Horizontal drainage piping less than 3 inches shall be pitched a minimum of 1/4 inch per foot or run. Piping 3" to 10" shall be pitched a minimum of 1/8" per foot of run.

When running drain piping below a footing and parallel to it, piping shall be at least one foot greater in distance away from footing than below its bottom. Where possible, run sewers at centerpoint between two parallel footings and maintain above mentioned distances at a minimum. When running drain piping under a footing, disturb as little of the soil under footing as possible. Provide concrete fill under footings where excavations wider than 18" are required.

When running drain piping through a footing, provide a steel pipe sleeve with 2" thick minimum compressible wrap.

Verify invert elevations and building elevations prior to installation.

Connect to drains, fixtures, and equipment.

Perform final leak tests per recognized industry practices for performing the test and follow local or state requirements.

After installation of all plumbing fixtures prior to occupancy, plumbing contractor to make sure all fixtures are draining properly by simultaneously flush and operating all fixtures valves at once to verify proper operation of facility sanitary sewerage.

Clean and flush all sewer piping by means of a power sewer snake to street connection.

VENT FLASHING
Vent pipes passing through roof.

DRAINS AND CLEANOUTS
Set floor drains, roof drains, and cleanouts level and plumb adjusted to finished floor elevation or finished wall location. Locate where serviceable. Allow minimum of 18-inc clearance around cleanouts for rodding.

Lubricate threaded cleanout plugs with graphite and oil, teflon tape, or waterproof grease. Install trap primer connections where indicated. Provide deep seal traps on floor drains.

WTI
WATER TECHNOLOGY INC.
100 Park Avenue
Post Office Box 614
Beaver Dam, Wisconsin 53916
Voice: 920.887.7375
Toll Free: 800.538.8207
Fax: 920.887.7999
www.watertechnologyinc.com

#12408.01

GRÄEF
5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

REINDAHL SPLASH PAD
1818 PORTAGE ROAD
MADISON, WI

ID	DATE	DESCRIPTION

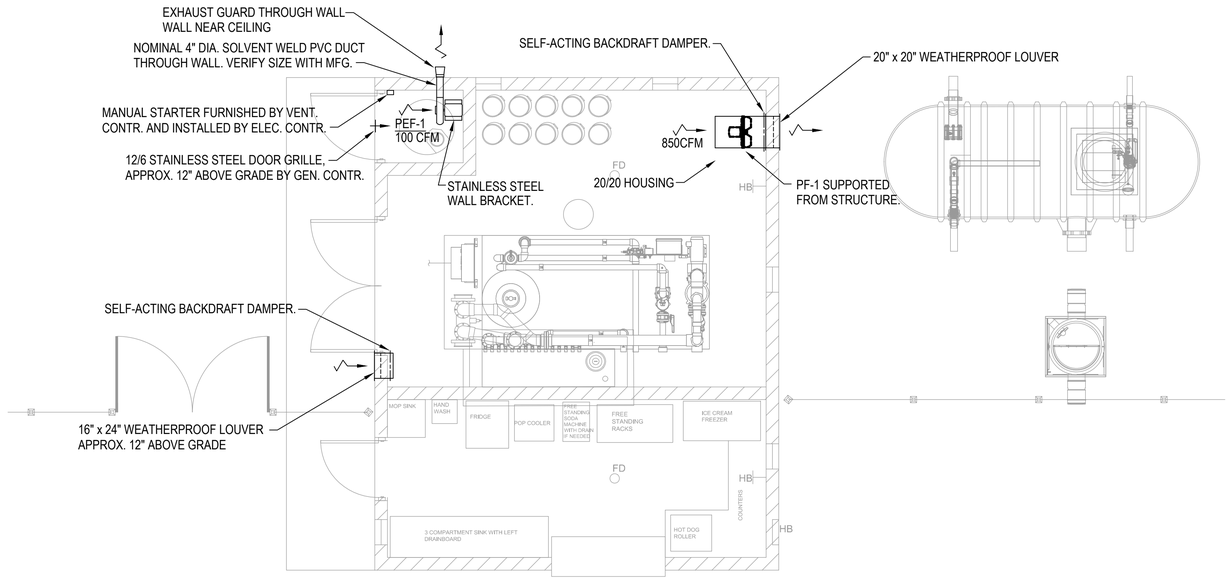
DATE	4/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	MHS
CHECKED BY	RAK
PHASE	100%CD

PLUMBING SPECIFICATIONS

P900

GENERAL NOTES:

1. PROPELLER FAN (PF-1): GREENHECK MODEL S1-14-440-B6, 850 CFM AT 0.30" WC STATIC PRESSURE, 1/6 HP. 120V/60 HZ/1 PH. UNIT SHALL BE DIRECT DRIVE COMPLETE WITH SELF-ACTING BACKDRAFT DAMPER, AND HOUSING WITH INLET GUARD. THE FAN SHALL RUN CONTINUOUSLY DURING SPLASH PARK OCCUPANCY SEASON. SEE ELECTRICAL DRAWING FOR STARTER.
2. WEATHERPROOF LOUVERS: GREENHECK MODEL EDK-402, ALUMINUM, 4" THICK, DRAINABLE HEAD, K BLADES MINIMUM 54% FREE AREA WITH INSECT SCREEN AND INTAKE SELF-ACTING BACKDRAFT DAMPER.
3. PLASTIC EXHAUST FAN (PEF-1): ,PLASTEC VENTILATION, INC. MODEL 15, 1/4 HP, 120V/60/1 PH, 100 CFM AT 0.20" W. C. STATIC PRESSURE CONSTRUCTED OF ALL HIGH DENSITY POLYPROPYLENE WITH STAINLESS STEEL SUPPORT BRACKETED TO WALL, POLYPROPYLENE EXHAUST GUARD AND MANUAL STARTER (LOCKABLE). TURN STARTER OVER TO ELEC. CONTRACTOR FOR INSTALLATION.



1 / M100 MECHANICAL FLOOR PLAN

SCALE: 1/4"=1'-0"

TRUE NORTH PLAN NORTH

WTI
WATER TECHNOLOGY INC.
100 Park Avenue
Post Office Box 614
Beaver Dam, Wisconsin 53916
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REINDAHL SPLASH PAD

1818 PORTAGE ROAD
MADISON, WI

ID	DATE	DESCRIPTION

DATE	4/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	MHS
CHECKED BY	SDH
PHASE	100%CD

MECHANICAL FLOOR PLAN, DETAILS AND SCHEDULES

M100

Date: Tuesday, April 30, 2013 Plotted by: Heaton, Steve Drawing location: L:\Jobs2013\20132000-01\CAD\Mechanical\dgn\00\M100.dwg

ELECTRICAL SYMBOLS AND ABBREVIATIONS

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN DRAWINGS AND MAY NOT APPLY TO CURRENT PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED ON DRAWINGS.

EQUIPMENT AND PANELBOARDS

TRANSFORMER
- PAD MOUNTED

METER

PANELBOARD
- SURFACE MOUNTED
- (SEE SCHEDULE)

POWER POLE
- (X) INDICATES CIRCUIT
- DEVICES AS INDICATED ON DRAWINGS AND / OR IN SPECIFICATION

WIRING DEVICES

DUPLEX RECEPTACLE
- MOUNTED 1'-6" AFF, UOI
- (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDS AS INDICATED ON DRAWINGS)
- (Y) INDICATES TYPE:
  (D) DEDICATED
  (DD) DOUBLE DUPLEX
  (GFI) GROUND FAULT INTERRUPTING
  (WP) WEATHERPROOF

DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPLASH OR HEIGHT AS NOTED
- (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDS AS INDICATED ON DRAWINGS)

SPECIAL PURPOSE OUTLET
- (X) INDICATES DEVICE IDENTIFICATION (SEE EQUIPMENT SCHEDULE)

MOTOR CONNECTION
- (X) INDICATES MOTOR IDENTIFICATION (SEE EQUIPMENT SCHEDULE)

GENERAL SYMBOLS

DETAIL REFERENCE
- TOP DESIGNATES DETAIL NUMBER
- BOTTOM DESIGNATES SHEET NUMBER

DETAIL COVERAGE AREA

EQUIPMENT REFERENCE
- TOP DESIGNATES EQUIPMENT TYPE:
  (LP) LIGHTING PANEL
  (MDP) MAIN DISTRIBUTION PANEL
  (MSB) MAIN SWITCHBOARD PANEL
  (PP) POWER PANEL
  (RC) RELAY CABINET
  (RP) RECEPTACLE PANEL
  (T) TRANSFORMER
- BOTTOM DESIGNATES EQUIPMENT ID

LINETYPE LEGEND

- ITEMS SHOWN ON PLANS AS THIN, SOLID BLACK LINES ARE EXISTING TO REMAIN
- ITEMS SHOWN ON DEMOLITION PLANS AS THICK, DASHED BLACK LINES ARE EXISTING TO BE DEMOLISHED
- ITEMS SHOWN ON PROPOSED PLANS AS THICK, SOLID BLACK LINES ARE NEW
- ITEMS SHOWN ON PLANS AS THIN DASHDOT BLACK LINES ARE FUTURE

RACEWAYS AND BOXES

J — JUNCTION BOX

TELECOMMUNICATIONS

TELEPHONE / DATA OUTLET (ROUGH-IN ONLY)

LIGHTING FIXTURES

- SURFACE MOUNTED
- RECESS MOUNTED
- WALL MOUNTED
- SUSPENDED, PENDENT, CHAIN, STEM, OR CABLE HUNG
- POLE MOUNTED WITH ARM
- POST TOP MOUNTED
- IN-GROUND OR IN-FLOOR MOUNTED
- SINGLE HEAD SPOT OR FLOOD
- DOUBLE HEAD SPOT OR FLOOD
- STRIP OR UNDER CABINET

- SURFACE MOUNTED ACCENT
  - CHEVRON INDICATES DIRECTION OF ILLUMINATION
- RECESS MOUNTED ACCENT
  - CHEVRON INDICATES DIRECTION OF ILLUMINATION
- EMERGENCY BATTERY UNIT
  - DUAL LIGHTING HEADS
- EMERGENCY BATTERY REMOTE
  - SINGLE LIGHTING HEAD
- EMERGENCY BATTERY REMOTE
  - DUAL LIGHTING HEADS
- EXIT LIGHT FIXTURE
  - CEILING MOUNTED
  - SHADING INDICATES FACE(S)
  - ARROW(S) AND FACE(S) AS INDICATED ON DRAWINGS
- EXIT LIGHT FIXTURE
  - END MOUNTED
  - SHADING INDICATES FACE(S)
  - ARROW(S) AND FACE(S) AS INDICATED ON DRAWINGS

LIGHTING FIXTURE DESIGNATIONS

SHADING INDICATES FIXTURE FULLY WIRED TO EMERGENCY OR NIGHT LIGHTING CIRCUIT

PARTIAL SHADING INDICATES FIXTURE PARTIALLY WIRED TO EMERGENCY OR NIGHT LIGHTING CIRCUIT

A-1b

LIGHT FIXTURE DESIGNATION
- (A) INDICATES FIXTURE TYPE (SEE SCHEDULE)
- (1) INDICATES CIRCUIT NUMBER (PANEL BOUNDS AS INDICATED ON DRAWINGS)
- (b) INDICATES CONTROL DESIGNATION (IF NOT INDICATED, CONTROLLED VIA SWITCH AT ROOM ENTRY)

TYPICAL AT EACH FIXTURE LOCATION
- ca — CONTACTOR DESIGNATION (SEE SCHEDULE) CONTROLLED VIA CONTACTOR
- dal — DIMMER CHANNEL CABINET DESIGNATION CONTROLLED VIA ELECTRONIC DIMMING SYSTEM
- oa — SPECIFIC DEVICE DESIGNATION CONTROLLING CIRCUIT OR PORTION OF CIRCUIT OCCUPANCY SENSOR CONTROLLED
- ra — RELAY DESIGNATION CONTROLLING CIRCUIT OR PORTION OF CIRCUIT LOW VOLTAGE RELAY CONTROLLED VIA RELAY CABINET
- ta — TIME CLOCK DESIGNATION (SEE SCHEDULE) TIME CLOCK CONTROLLED

LIGHTING CONTROL

SWITCH
- MOUNTED 3'-8" AFF, UOI
- (a) INDICATES SWITCH DESIGNATION
- SINGLE POLE, UOI
- (X) INDICATES SWITCH TYPE:
  (2) TWO POLE
  (3) THREE WAY
  (4) FOUR WAY
  (DLS) DUAL LEVEL SWITCH
  (TS) TIMED
  (P) WITH PILOT LIGHT

OCCUPANCY SENSOR
- CEILING MOUNTED
- (X) INDICATES TYPE (SEE SPECIFICATIONS))

OCCUPANCY SENSOR
- WALL MOUNTED 3'-8" AFF, UOI
- (X) INDICATES TYPE (SEE SCHEDULE)

C — CONTACTOR
- (X) INDICATES TYPE (SEE SCHEDULE)

T — TIME CLOCK
- (X) INDICATES TYPE (SEE SCHEDULE)

PC — PHOTOCELL
- (X) INDICATES TYPE (SEE SCHEDULE)

PANELBOARD SCHEDULE: RP/A

VOLTAGE:	208/120	MAIN TYPE:	MLO	BUS MATERIAL:	COPPER
PHASE/WIRE:	3P / 4W	MAIN RATING:	225 AMPS	BUS RATING:	225 AMPS
SVC. ENTRANCE LABEL:	NO	TVSS	NO	ENCLOSURE:	NEMA 1
MINIMUM AIC:	42,000 AMPS	FEED-THRU LUGS:	YES	200% NEUTRAL:	NO
IS SERIES RATED ALLOWED	NO	MOUNTING:	SURFACE	PANELBOARD TYPE:	BRANCH CIRCUIT

CCT#	LOAD TYPE	LOAD DESCRIPTION	VA	TRIP / POLE			TRIP / POLE	VA	LOAD TYPE	LOAD DESCRIPTION	CCT#
1	R	RECEPTACLE	540	20/1	A	A	X	4,804	E		2
3	R	RECEPTACLE	360	20/1	B	B	65/3	4,804	E	SPO1	4
5	L	LIGHTING	280	20/1	C	C	X	4,804	E		6
7	L	LIGHTING	280	20/1	A	A	X	3,003	E		8
9	L	LIGHTING	94	20/1	B	B	40/3	3,003	E	SPO2	10
11		SPARE		20/1	C	C	X	3,003	E		12
13		SPARE		20/1	A	A	20/1	696	M	PF1	14
15		SPARE		20/1	B	B					16
17		SPARE		20/1	C	C					18
19		SPARE		20/1	A	A					20
21		SPARE		20/1	B	B					22
23		SPARE		20/1	C	C					24
25		SPARE		20/1	A	A					26
27		SPARE		20/1	B	B					28
29		SPARE		20/1	C	C					30
31		SPARE		20/1	A	A					32
33		SPARE		20/1	B	B					34
35		SPARE		20/1	C	C					36
37		SPARE		20/1	A	A					38
39		SPARE		20/1	B	B					40
41		SPARE		20/1	C	C					42

ABBREVIATIONS:		PHASE	A	B	C	TOTAL CONNECTED (VA):	25,671
ST	= SHUNT TRIP		9,323	8,261	8,087	TOTAL CONNECTED (A):	71.26
GFCI	= GROUND FAULT CIRCUIT INTERRUPTOR	LOAD TYPE ABBREVIATIONS				TOTAL DEMAND (VA):	25,671
HACR	= HEATING AND AIR-CONDITIONING RATED	R = RECEPTACLE	M = MOTOR			TOTAL DEMAND (A):	71.26
HB	= HANDLE-BLOCKING DEVICE	L = LIGHTING	LM = LARGEST MOTOR				
		E = EQUIPMENT	K = KITCHEN				

ELECTRICAL SHEET INDEX

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5126 West Terrace Drive,
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REINDAHL SPLASH PAD
1818 PORTAGE ROAD
MADISON, WI

ID	DATE	DESCRIPTION

DATE	4/30/2013
PROJECT NO.	2013-2000.01
DRAWN BY	MME
CHECKED BY	HMC
PHASE	100%CD

ELECTRICAL SYMBOLS, ABBREVIATIONS AND SHEET INDEX

E000

Date: Monday, April 29, 2013 Plotted by: Carroll, Heather Drawing location: L:\Jobs2013\2013200-01\CAD\Electrical\dgn\00\E000.dwg

MOTOR STARTER SCHEDULE

GENERAL NOTES:

A. OBTAIN SUPPLIERS SHOP DRAWINGS / WIRING DIAGRAMS TO VERIFY LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
B. FURNISH HACR TYPE BREAKERS FOR ALL HVAC EQUIPMENT
C. ELECTRICAL CONTRACTOR SHALL INSTALL ALL STARTS AND DISCONNECTS AND PROVIDE ALL WIRING AND CONDUIT NEEDED FOR COMPLETE SYSTEM
D. ALL MOTORS SHALL BE PROVIDED WITH A DISCONNECT SWITCH LOCATED PER NEC REQUIREMENTS.

EQUIPMENT NUMBER	LOAD	VOLT	PHASE	LOCATION	DESCRIPTION	FED FROM		BREAKER		BRANCH WIRING				SEE NOTES
						PANEL	CKT	SIZE	POLE	#	SIZE	GND	CONDUIT	
PF1	1/5HP	120	1	-	PROPELLER FAN 1	RP/A	14	20	1	2	12	12	3/4"	1

MOTOR STARTER SCHEDULE NOTES:

1. ELECTRICAL CONTRACTOR SHALL PROVIDE STARTER.

SPECIAL PURPOSE OUTLET SCHEDULE

#	SERVING	LOC	FEED FROM		BREAKER		WIRING				VOLT	PHASE	LOAD	SEE NOTE
			PANEL	CIRCUIT	SIZE	POLE	#	SIZE	GND	COND				
1	WATER QUALITY MANAGEMENT SYSTEM	-	RP/A	2,4,6	65	3	3	#4	#8	1-1/4"	208	3	40A	
2	UV SYSTEM	-	RP/A	8,10,12	20	3	3	#10	#10	3/4"	208	3	25A	
3	WATER HEATER	-	RP/A											

SPECIAL PURPOSE OUTLET SCHEDULE NOTES:

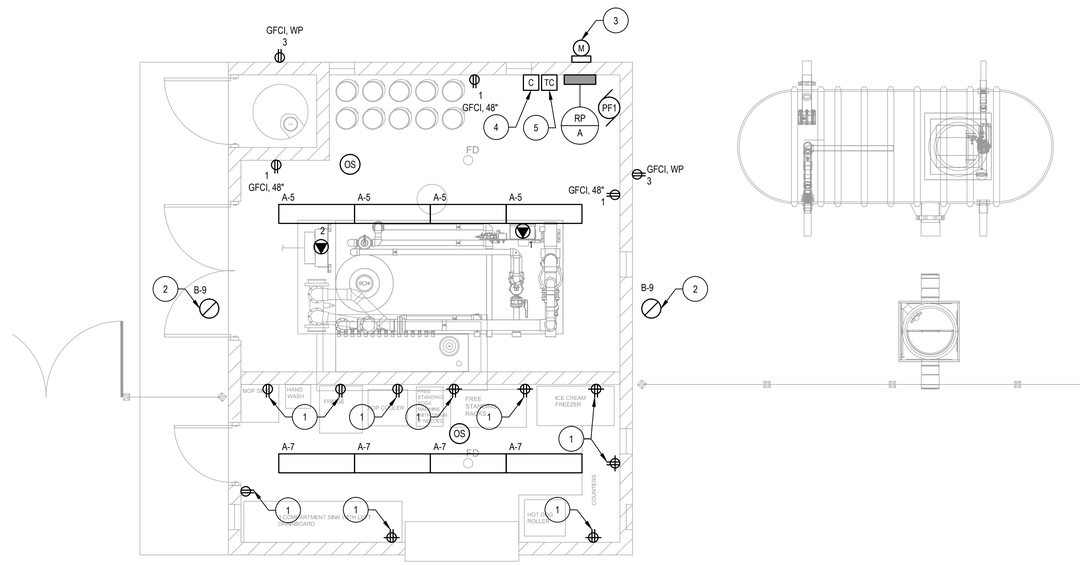
LIGHTING FIXTURE SCHEDULE

NOTE: SEE SPECIFICATIONS SECTIONS FOR ADDITIONAL INFORMATION REGARDING LIGHTING FIXTURE AND INSTALLATION REQUIREMENTS. PROVIDE OPTIONS AND ACCESSORIES REFERENCED BY THE COLUMN TITLED "OPTIONS/ACCESSORIES". MANUFACTURERS LISTED AS ACCEPTABLE SHALL MEET ALL REQUIREMENTS AND FEATURES INDICATED. ACCEPTABLE MANUFACTURERS MUST MEET THE PHOTOMETRIC PERFORMANCE OF THE LISTED UNIT.

ABBREVIATIONS: DW = DRY WALL; ES = EXPOSED STRUCTURE; LG = LAY-IN GRID; P = PENDANT; PL = PLASTER; PO = POLE; R = RECESS; S = SURFACE; W = WALL MOUNTED; V = VARIES

DES	LAMP DATA		DESCRIPTION	LIGHTING FIXTURE		VOLT	MOUNT	CEILING TYPE	FIXTURE DEPTH	OPTIONS/ ACCESSORIES	ACCEPTABLE MANUFACTURERS	SEE NOTE
	#	TYPE		MANUFACTURER	CATALOG SERIES							
A	2	32WT8	SECURITY SURFACE LUMINAIRE	FAIL-SAFE	FCT-X-232-120-80/86-LE3-SF3	120	S					
B	-	LED	RECESSED SOFFIT LUMINAIRE	BETALED	SFT-304-5M-RM-04-D-350-IC	120	R					
C	2	32WT8	FLOURESCENT CORNER SECURITY LUMINAIRE	FAIL-SAFE	FCC-X-232-120-80/86-LE3-SF3	120	W					

LIGHTING FIXTURE SCHEDULE NOTES:



1 / E100 ELECTRICAL FLOOR PLAN

SCALE: 1/4"=1'-0"

TRUE NORTH PLAN NORTH

GENERAL NOTES:

1.) ALL CIRCUITS TO BE FED FROM PANEL "RP/A", UOI. SEE PANEL SCHEDULE FOR FURTHER DETAILS.

SHEET NOTES:

1. PROVIDE ROUGH IN ONLY.
2. LIGHT FIXTURE SHALL BE RECESSED INTO SOFFIT. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL PROVIDE 225A 208/120V 3-PHASE, 4-WIRE APPROVED METER SOCKET. COORDINATE EXACT REQUIREMENTS WITH LOCAL UTILITY.
4. CONTRACTOR SHALL PROVIDE ELECTRICALLY HELD LIGHTING CONTRACTOR SQUARE D MODEL LG40 OR APPROVED EQUAL.
5. CONTRACTOR SHALL PROVIDE ELECTRONIC ASTRONOMICAL TIME CLOCK IN AN INTERMATIC MODEL ET8215C OR APPROVED EQUAL.

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ELECTRICAL FLOOR PLAN, DETAILS AND SCHEDULES

E100