

500 W. MAIN STREET

PO BOX 100

WAUNAKEE WI 53597

608-850-8500

FAX 608-849-5628

WWW.WAUNAKEE.COM/VILLAGE



July 17, 2017

Larry Palm, Executive Chairperson - Capital Area Regional Planning Commission  
City County Building - Room 362  
210 Martin Luther King Jr. Blvd.  
Madison WI 53703

**RE: Amendment of the Water Quality Management Plan for Dane County to  
revise Environmental Corridor Boundaries near the new Waunakee Public  
Library**

Dear Mr. Palm:

The Village of Waunakee has been working for the past eight years to clean up and redevelop a 6.34-acre former industrial site adjoining a Village park, one block north of Main Street. When Waunakee Alloy Casting Corporation closed in 2009 after more than 60 years in operation as a metal foundry and casting company, it left a legacy of soil contamination and vacant buildings. With help from the USEPA to remove mercury and PCB contaminants, and with assistance from Dane County to clear the site, it is now ready for its next life as home of the new Waunakee Public Library.

This site for the new library is ideally located contiguous with McWatty Park, a 2.1-acre neighborhood park adjoining Six Mile Creek at the east end of our historic downtown business district. We propose to integrate and improve both sites, as illustrated in the enclosed materials, to achieve the following benefits:

- An exceptional natural and civic amenity to enhance the success of our Central Business District, including recent and future new residential units in our downtown area
- Walking, biking and vehicle access to the library from both N. Madison St. and Pleasant Dr., to optimize access and user safety from both directions
- Completion of a segment in a planned off-street trail along Six Mile Creek through the Village, connecting more neighborhoods with a safe walking route
- Restoration of approximately 1,300 linear feet of Six Mile Creek to restore natural stream hydrology and increase the channel's habitat value while controlling invasive species
- Restoration of shoreland buffer strips near the Creek, replacing turf grass with native prairie and wetland species that can slow, filter and cool runoff from impervious surfaces before it reaches the Creek
- Removal of an underutilized basketball court and replacement of an aging playground

500 W. MAIN STREET

PO BOX 100

WAUNAKEE WI 53597

608-850-8500

FAX 608-849-5628

WWW.WAUNAKEE.COM/VILLAGE



With this application the Village respectfully requests amendment to the Water Quality Management Plan for Dane County to remove and alter area from the mapped Environmental Corridor. Access to Pleasant Dr. requires a driveway through McWatty Park on land occupied by the basketball court and playground, both of which are currently within the mapped Environmental Corridor. There will be a net increase in impervious surface within this area. The grading will allow all runoff from the impervious surface to be conveyed to stormwater facilities prior to release to Six Mile Creek. This includes the off-street path that is within the environmental corridor. The Village is confident that the other vegetative improvements in and near the Creek throughout the two properties will result a net improvement in water quality to the water shed.

The Village is very excited about this proposed enhancement to our community. Please contact me if you have any questions or concerns about this request.

Sincerely,

A handwritten signature in blue ink, which appears to read "Todd J. Schmidt", is positioned above the printed name of the Village Administrator.

Todd J. Schmidt, Village Administrator  
Village of Waunakee

September 7, 2017

Mike Rupiper  
Capital Area Regional Planning Commission  
210 Martin Luther King Jr. Blvd. Room 362  
Madison, WI 53703

RE: Waunakee Library – Major Amendment to Environmental Corridor

Dear Mr. Rupiper:

Thanks again for your assistance with the proposed Waunakee Library slated for construction on the former Waunakee Alloy Site. Your visit and walk through on June 1<sup>st</sup> was very helpful for the Village, Library Board, and AE Team. Since then, we have made significant progress on our design.

In order to complete necessary improvements, we are requesting a Major Amendment to the Environmental Corridor in order to perform the following actions:

- Grading within 30' of wetlands
- Impervious areas within 75' of wetlands
- Filling in of wetlands

In support of this request, the following documents are enclosed with this letter:

1. Existing Site Plan – Aerial
2. Existing Site Survey
3. Existing Site Photographs
4. Proposed Site Plan – Color
5. Proposed Site Plan – Environmental Setbacks
6. Concept Plan Set
7. Concept Stormwater Management Plan
8. Wetland Delineation Report
9. Trail Connectivity

In addition to the material listed above, I'd like to draw attention to some specific aspects of how this project will benefit the objectives set forth by the Capital Regional Planning Commission to protect water quality in Dane County.

- **Contaminated Site Cleanup**

The site at 201 North Madison Street currently houses the former Waunakee Alloy plant. The Village purchased this brownfield site to redevelop it for the library. The Village has retained consultants for clean up, mitigation, and/or removal of existing hazardous materials and structures. The site will become an extension of the existing adjacent McWatty Park and the recreational and multi-use path corridor proposed along Six Mile Creek.

The development of this corridor will incorporate a recreational trail for cyclists, walkers, and joggers following Six Mile Creek. The trail is intended to connect with future trail extensions to the east and west of the library site. The northeastern area of the site will accommodate relocation of the existing McWatty Park playground.

- **Stormwater Quality, Infiltration, and Peak Flow**

Redevelopment of the property will require that stormwater management facilities be incorporated into the site. A green roof along with two wet ponds will meet the required total suspended solids removal for the site. Although not required, peak flow will also naturally occur within these facilities. On the south side of the creek, the proposed parking lot will be designed with stormwater facilities that will fulfill the requirements for a new development. This will be a large improvement over existing conditions, which directs stormwater runoff into the creek without treatment.

- **Increase of Open Space**

The proposed site improvements will decrease the amount of imperviousness on the site from approximately 46% to 36%. The increase in the pervious area is over 36,000 square feet. The change of vegetation of turf grass to a vegetative buffer of native plantings along the creek will also increase the value of the pervious space.

- **Trail Connectivity**

The property to be developed has been part of planning documents for connectivity of multi-use trails since at least 2005. This redevelopment will provide a major connection point of 900' of trail that will be used by village residents to access the library, the nearby Prairie Elementary School, and adjacent neighborhoods.

- **Landscaping Improvements**

Responding to site conditions and the existing environment, the design intent is to provide a low impact development (LID) that will utilize landscaped areas to slow, treat, and infiltrate stormwater runoff before it reaches the edges of Six Mile Creek. The landscape design will provide a mixture of systems within the larger site including:



- Vegetation mitigation and restoration along the banks of Six Mile Creek
- A prairie buffer between the creek bank, recreational trail, and park's setting beyond the site
- Bioretention structures that collect, retain, and infiltrate stormwater
- Mowed lawns adjacent to and surrounding the library, parking, and drive to create recreational areas for the larger park setting
- Tree planting at parking areas and appropriate areas around the site for future shade and biodiversity
- Tree screening between the library and existing residential properties along the north and east property boundaries

Plant selection, locations, arrangements, and soil preparation will be appropriately specified for specific function and moisture conditions (wet, dry). Additional considerations will include regional tolerances, non-invasiveness, biodiversity, low maintenance, and appearance.

The vegetative buffer along the creek will be a minimum 20 feet wide and exceed that width along most of the creek. Landscape objectives for the buffer zone include the removal of existing poor quality or invasive trees and the addition of appropriate new plants as follows:

- Trees – Create an upper canopy to provide habitat for birds and other wildlife and shade for wetlands
  - Shrubs – Create a mid-story of vegetation to provide food and cover for wildlife and help prevent erosion
  - Herbaceous Plants – Create an understory and include ferns, wildflowers, and various groundcover plants
- **Sustainability and High Performance Building Systems**  
The approximate 40,000 square foot, two-story Waunakee Public Library is designed with energy efficiency and environmental sustainability in mind. An integrative design process will be used on this facility to support high-performance, cost-effective project outcomes. This integrated design process will bring the whole team to the table early on in the project to highlight opportunities, set goals, and establish roles and responsibilities for the team throughout design, construction, and into the occupancy period of the new building.

The project team will take the following steps in the Design Development phase to establish a high performance, cost-effective project:

- Building systems coordination meeting
- Site design coordination meeting

- Conceptual Energy Model
- Conceptual Daylighting Model

This process includes an early analysis of the interrelationships between building systems. Envelope requirements for the library include access to natural light and views, energy efficiency, and durability.

Key components of this concept are:

- A high Window to Wall Ratio (WWR)
  - Clear, high-performance glass to preserve view and daylight qualities (minimal tinting)
  - Exterior overhangs and a louver system to control solar gain and reduce glare
  - Varying depths of field (moderate to high) for outdoors views
  - Design that enhances views into and out of the space
  - Low impact development integrated into the site design
  - Exterior public spaces into the park and environmental corridor setting
  - Biodiverse landscaping with tree, prairie, and wetland plantings
  - Conveying a sense of time and weather (seasonality of landscape)
  - Leveraging various intensities of light and shadow that change over time to create conditions that occur in nature
    - a. Daylight from multiple angles
    - b. Controlled direct sunlight in appropriate areas
    - c. Diurnal and seasonal light
    - d. Artificial light sources and layers
- **Green Roof**

The Library is proposed to have a modular green roof system over a portion of the roof (approximately 4,150 square feet). A green roof system requires a high-quality waterproofing and root replant system, drainage system, lightweight growing medium, and plants. Benefits of the green roof include:

    - Reduction of impervious surfaces to mitigate stormwater runoff
    - Ability to absorb stormwater and release it slowly
    - A longer life-span than standard roofs
    - Helps cool the membrane and building during summer months

Green roof plantings are selected for aesthetics, drought tolerance, stormwater management, and regional appropriateness. They will include low-growing succulents, particular colorful sedums. Sedums low growth, spreading habits, drought tolerance, seasonal flowers and contrasting foliage colors, textures and forms. Additionally, an appropriate mix of herbaceous perennials and ornamental grasses may be incorporated into the planting mix.

Please review the attachments provided showing some of the items discussed on the previous pages in graphic form. If you have any questions, comments, or need additional information, please let me know at once. We look forward to your favorable consideration during your review of our request.

Sincerely,

A handwritten signature in black ink that reads "Scott Anderson". The signature is written in a cursive style with a large, stylized "S" and "A".

Scott Anderson, P.E.  
Civil Engineer  
SNYDER & ASSOCIATES, INC.

Enclosures



Existing Aerial of the Waunakee Alloy Site









Waunakee Alloy  
Existing Site Photos

Please see Sheet C1.0 – Existing Site Plan for the location of the following photos below.



#1 - At Playground area looking inside fence at existing wetland in the southeast corner.



#2 – In Pleasant Drive looking east at McWatty Park.



Waunakee Alloy  
Existing Site Photos



#3 – Another view from Pleasant Drive looking at McWatty Park.



#4 – Looking east along the existing fenceline. To the left is the Six Mile Creek Corridor.



Waunakee Alloy  
Existing Site Photos



#5 – Looking to the south at Six Mile Creek at open space.



#7 – Looking at the existing Six Mile Creek corridor.



Waunakee Alloy  
Existing Site Photos



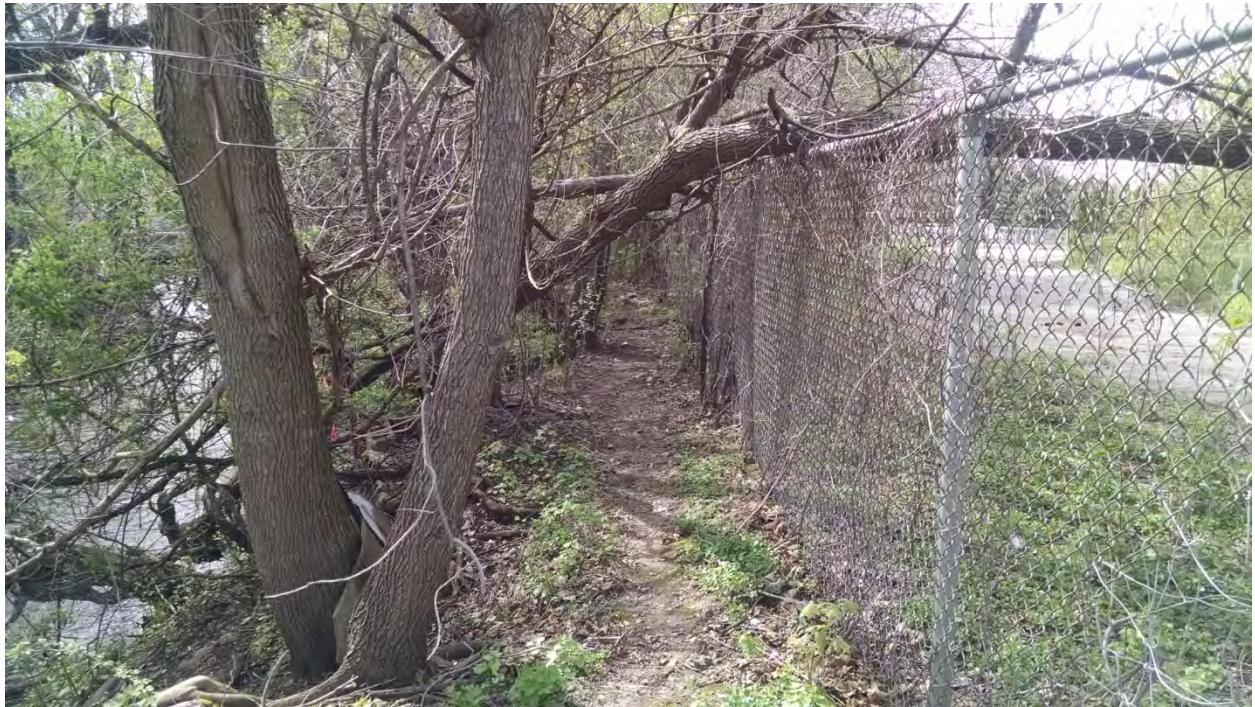
#8 – At the fenceline looking to the west towards McWatty Park.



#9 – Same spot at previous photo, looking towards the creek.



Waunakee Alloy  
Existing Site Photos



#10 – Looking west towards Madison Street with creek on left and the site on the right.



#11 – Looking southeast along Six Mile Creek, the wetland delineation flags can be seen.



Waunakee Alloy  
Existing Site Photos



#12 – Looking northwest along Six Mile Creek.



#13 – Looking northerly at the site through the fence.



Waunakee Alloy  
Existing Site Photos



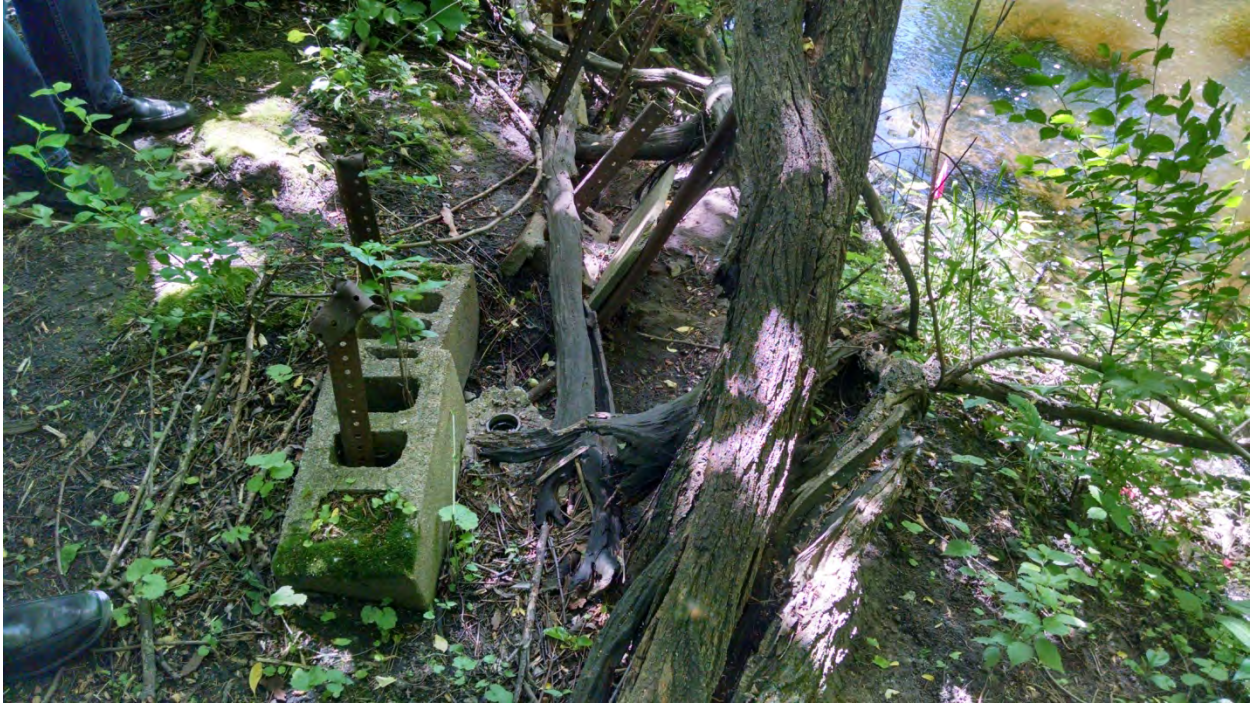
#14 – Looking over the fence into the existing site.



#15 – An example of some of the junk within the Six Mile Creek corridor.



Waunakee Alloy  
Existing Site Photos



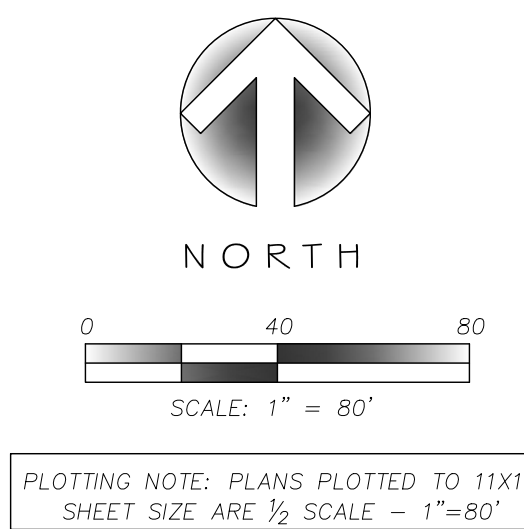
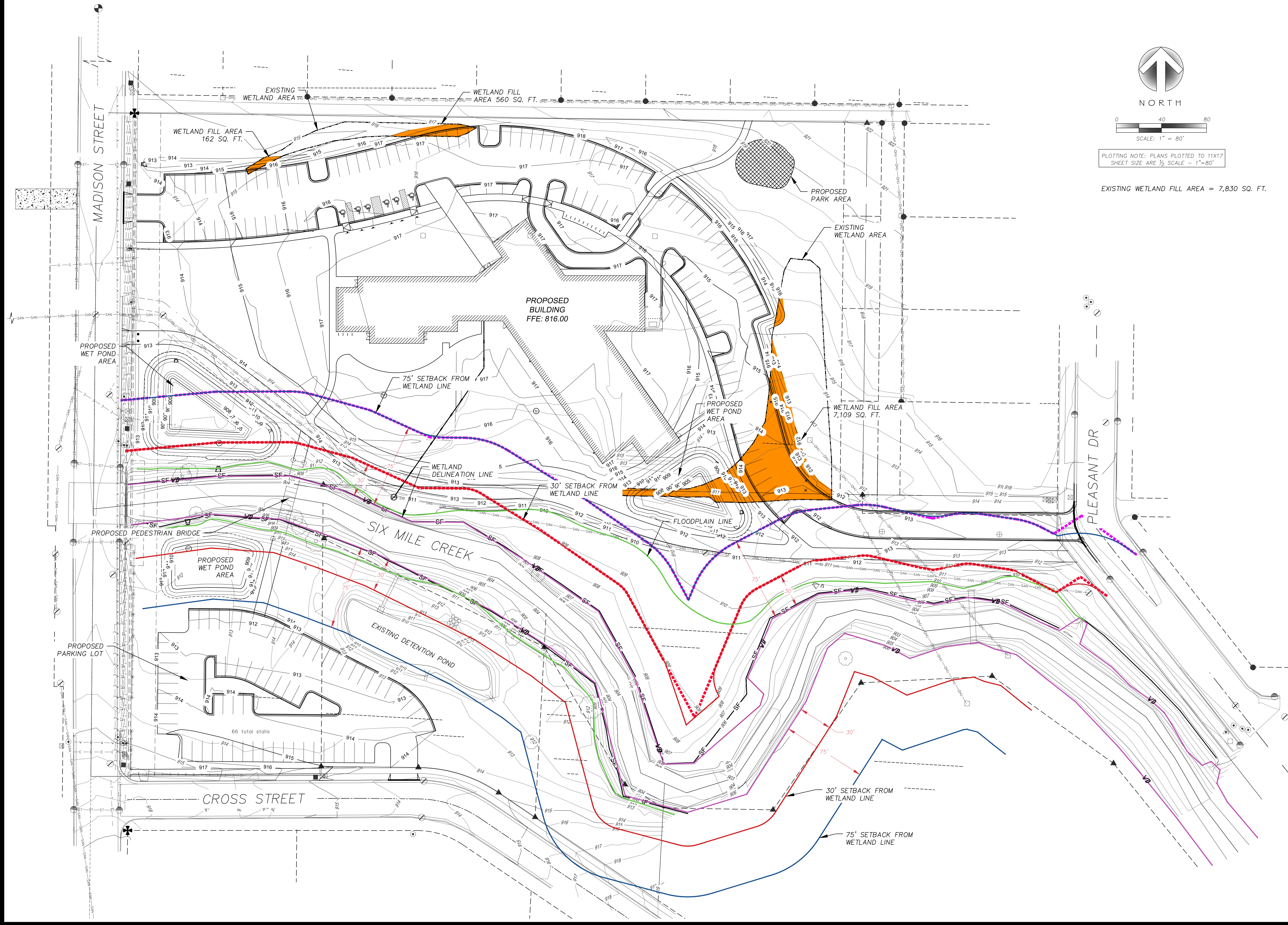
#16 – Another picture showing some junk within Six Mile Creek corridor.







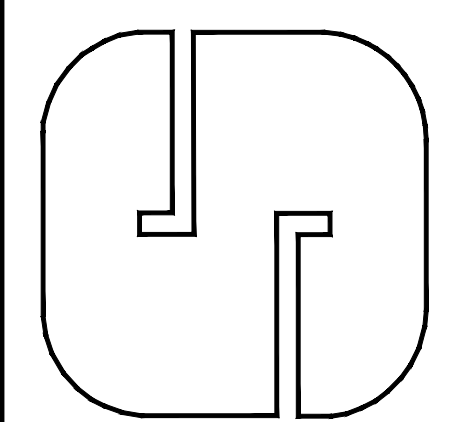
P:\PROJECTS\2014\11.01.14.20\Waunakee Library Design\Sheet Set.dwg



EXISTING WETLAND FILL AREA = 7,830 SQ. FT.

# WAUNAKEE LIBRARY

## ENVIRONMENTAL EXHIBIT



116.0144.30  
C2.0

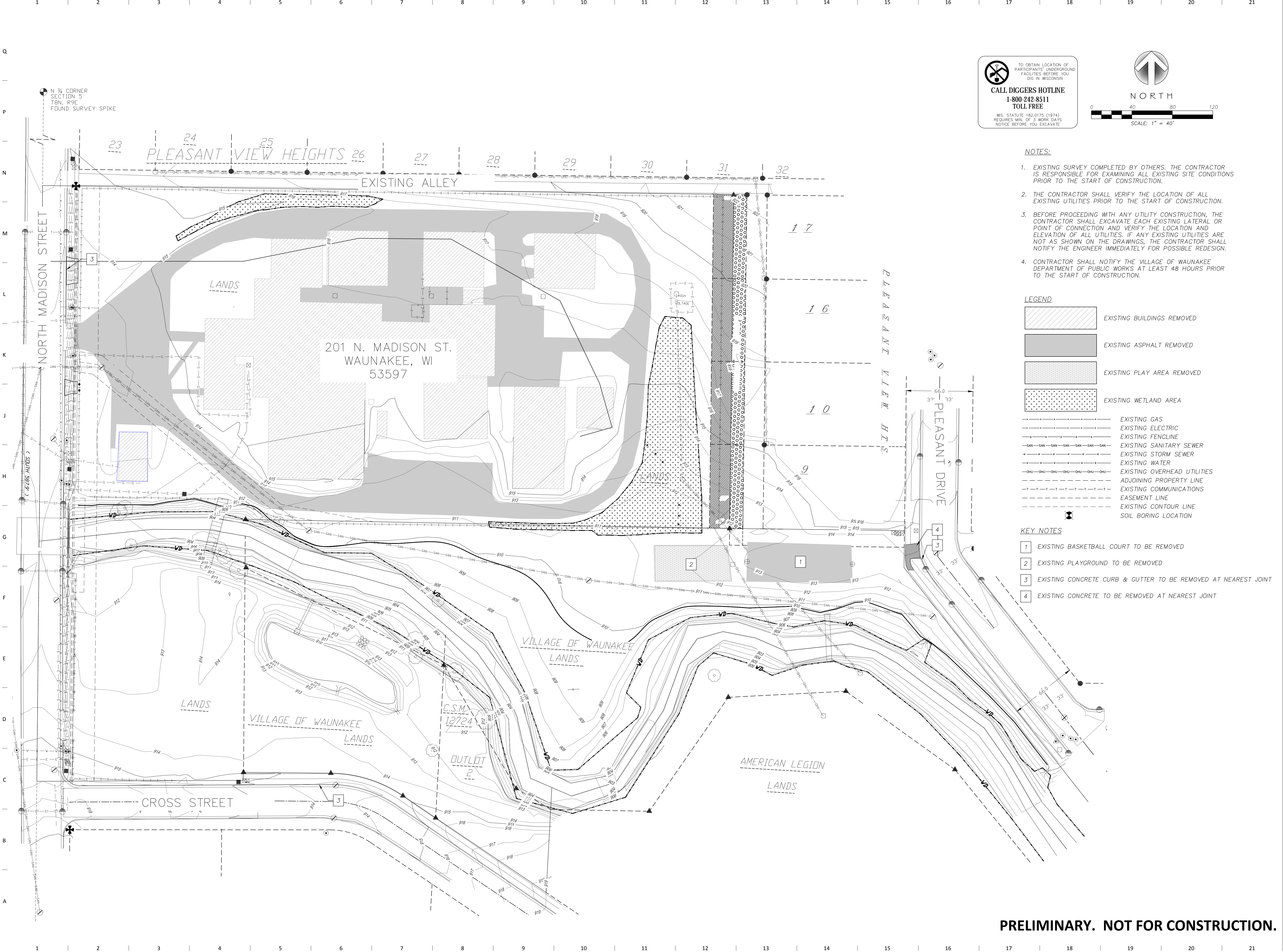
VILLAGE OF WAUNAKEE, DANE COUNTY, STATE OF WI

# SNYDER & ASSOCIATES, INC.

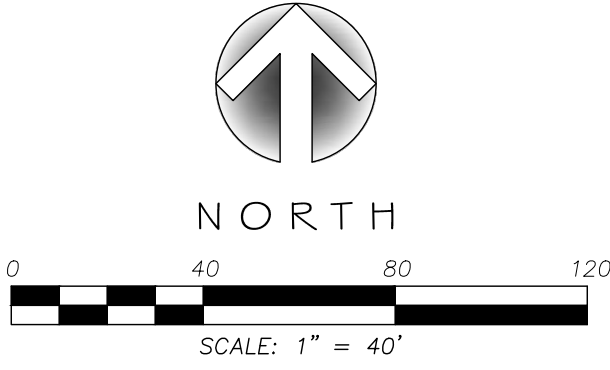
5010 VOGES ROAD  
MADISON, WISCONSIN 53718  
608-838-0444 | www.snyder-associates.com

MARK	REVISION	DATE	BY
Engineer: ENG	Checked By: CHKD	Scale: 1" = 40'	
Technician: TECH	Date: 7-13-2017	Field Bk:	
Project No:			C0.0





TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN  
**CALL DIGGERS HOTLINE**  
**1-800-242-8511**  
**TOLL FREE**  
WS. STATUTE 182.0175 (1974)  
REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE



**NOTES:**

1. EXISTING SURVEY COMPLETED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL EXISTING SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
3. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
4. CONTRACTOR SHALL NOTIFY THE VILLAGE OF WAUNAKEE DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

**LEGEND**

- EXISTING BUILDINGS REMOVED
- EXISTING ASPHALT REMOVED
- EXISTING PLAY AREA REMOVED
- EXISTING WETLAND AREA
- EXISTING GAS
- EXISTING ELECTRIC
- EXISTING FENCELINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATER
- EXISTING OVERHEAD UTILITIES
- ADJOINING PROPERTY LINE
- EXISTING COMMUNICATIONS
- EASEMENT LINE
- EXISTING CONTOUR LINE
- SOIL BORING LOCATION

**KEY NOTES**

- 1. EXISTING BASKETBALL COURT TO BE REMOVED
- 2. EXISTING PLAYGROUND TO BE REMOVED
- 3. EXISTING CONCRETE CURB & GUTTER TO BE REMOVED AT NEAREST JOINT
- 4. EXISTING CONCRETE TO BE REMOVED AT NEAREST JOINT

**PRELIMINARY. NOT FOR CONSTRUCTION.**

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:

[www.opnarchitects.com](http://www.opnarchitects.com)

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

**Waunakee Library Board**

Project

**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect

**CONFLUENCE**

900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 319-409-5401

Civil Engineer

**SNYDER AND ASSOCIATES**

5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

**IMEG**

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

**IMEG**

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

**IMEG**

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

**IMEG**

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

**Project Number**

Sheet Issue Date

**Permitting**

**09/06/2017**

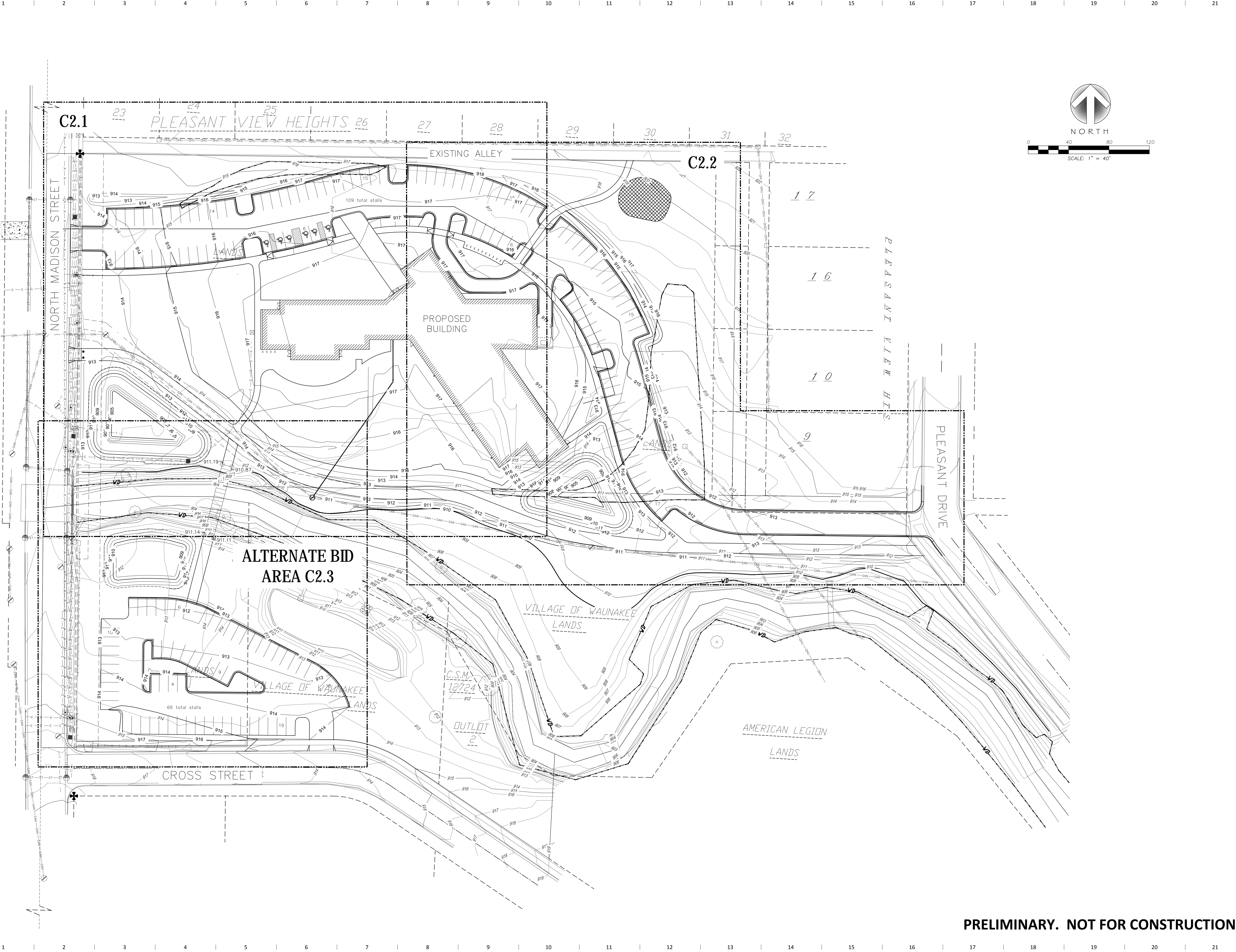
Sheet Name

**Existing Site  
Conditions/Demo Plan**

Sheet Number



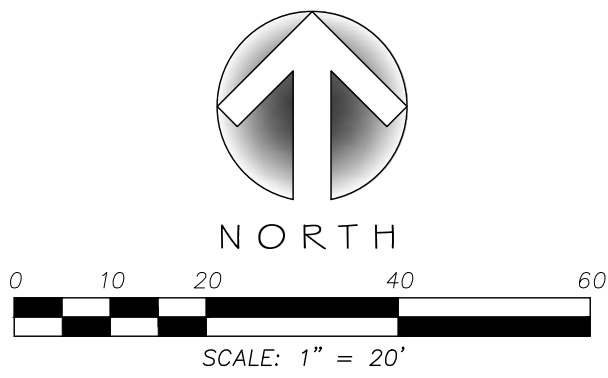
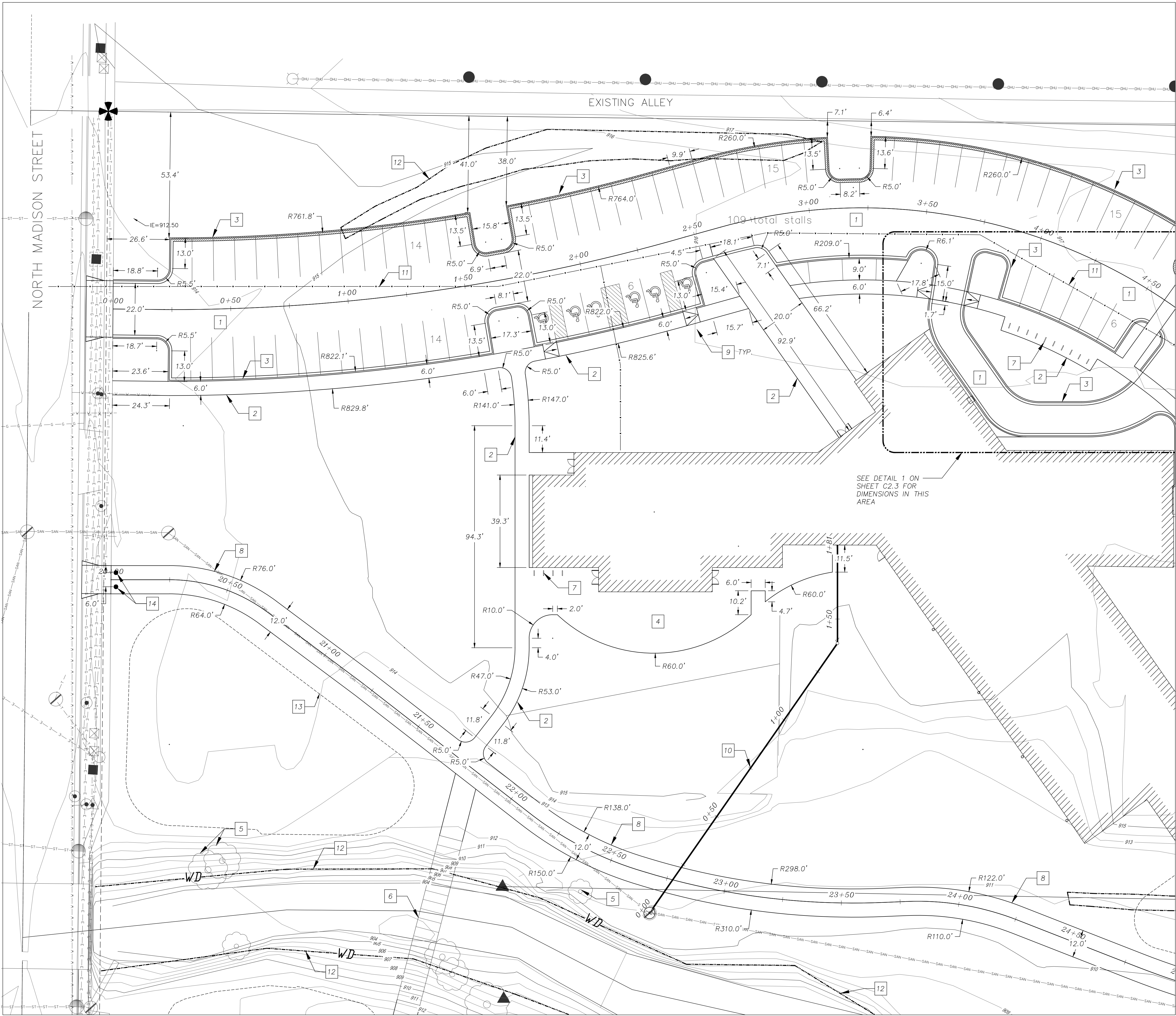
Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



PRELIMINARY. NOT FOR CONSTRUCTION.



Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



NOTES:

- 1 NEW 4" ASPHALT SURFACE
- 2 PROPOSED CONCRETE SIDEWALK
- 3 PROPOSED 18" CONCRETE CURB & GUTTER
- 4 PROPOSED CONCRETE PATIO AREA
- 5 EXISTING TREES TO BE PROTECTED DURING CONSTRUCTION
- 6 PROPOSED PEDESTRIAN BRIDGE (ALT. BID)
- 7 PROPOSED BIKE RACK
- 8 PROPOSED 12" WIDE ASPHALT PAVEMENT MULTI-USE PATH
- 9 PROPOSED HANDICAP SIGNS - SEE DETAILS 1/C6.5
- 10 PROPOSED SANITARY SEWER - SEE SHEET C5.1
- 11 PROPOSED 8" DIA. D.I. WATERMAIN
- 12 WETLAND DELINEATION LINE
- 13 PROPOSED WET POND AREA
- 14 PROPOSED 42" HIGH TUFF POST 3" FLEXIBLE POSTS WITH "NO VEHICLES SIGN"

PRELIMINARY. NOT FOR CONSTRUCTION.



301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F: www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name

Organization Description

Project

Project Name

Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES

5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG

1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

Project Number

Sheet Issue Date

Project Status

01/01/2016

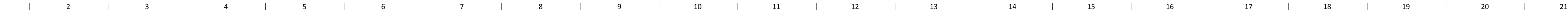
Sheet Name

Proposed

West Site Plan

Sheet Number

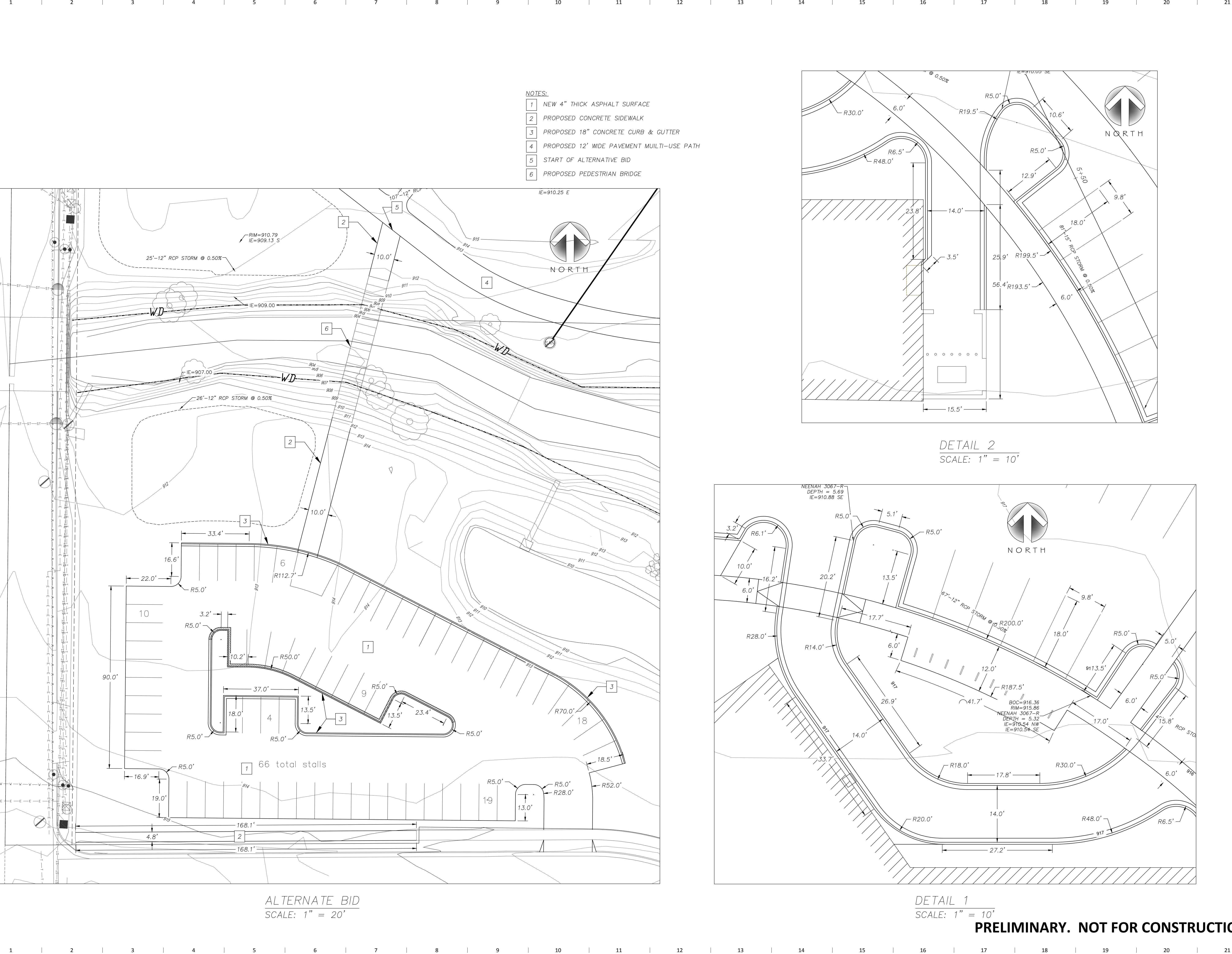




## C2.2



Q  
—  
P  
—  
N  
—  
M  
—  
L  
—  
K  
—  
J  
—  
H  
—  
G  
—  
F  
—  
E  
—  
D  
—  
C  
—  
B  
—  
A



- NOTES:
- 1 NEW 4" THICK ASPHALT SURFACE
  - 2 PROPOSED CONCRETE SIDEWALK
  - 3 PROPOSED 18" CONCRETE CURB & GUTTER
  - 4 PROPOSED 12' WIDE PAVEMENT MULTI-USE PATH
  - 5 START OF ALTERNATIVE BID
  - 6 PROPOSED PEDESTRIAN BRIDGE

DETAIL 2  
SCALE: 1" = 10'

DETAIL 1  
SCALE: 1" = 10'

PRELIMINARY. NOT FOR CONSTRUCTION.

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name  
Organization Description

Project

Project Name  
Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

Project Number

Sheet Issue Date

Project Status

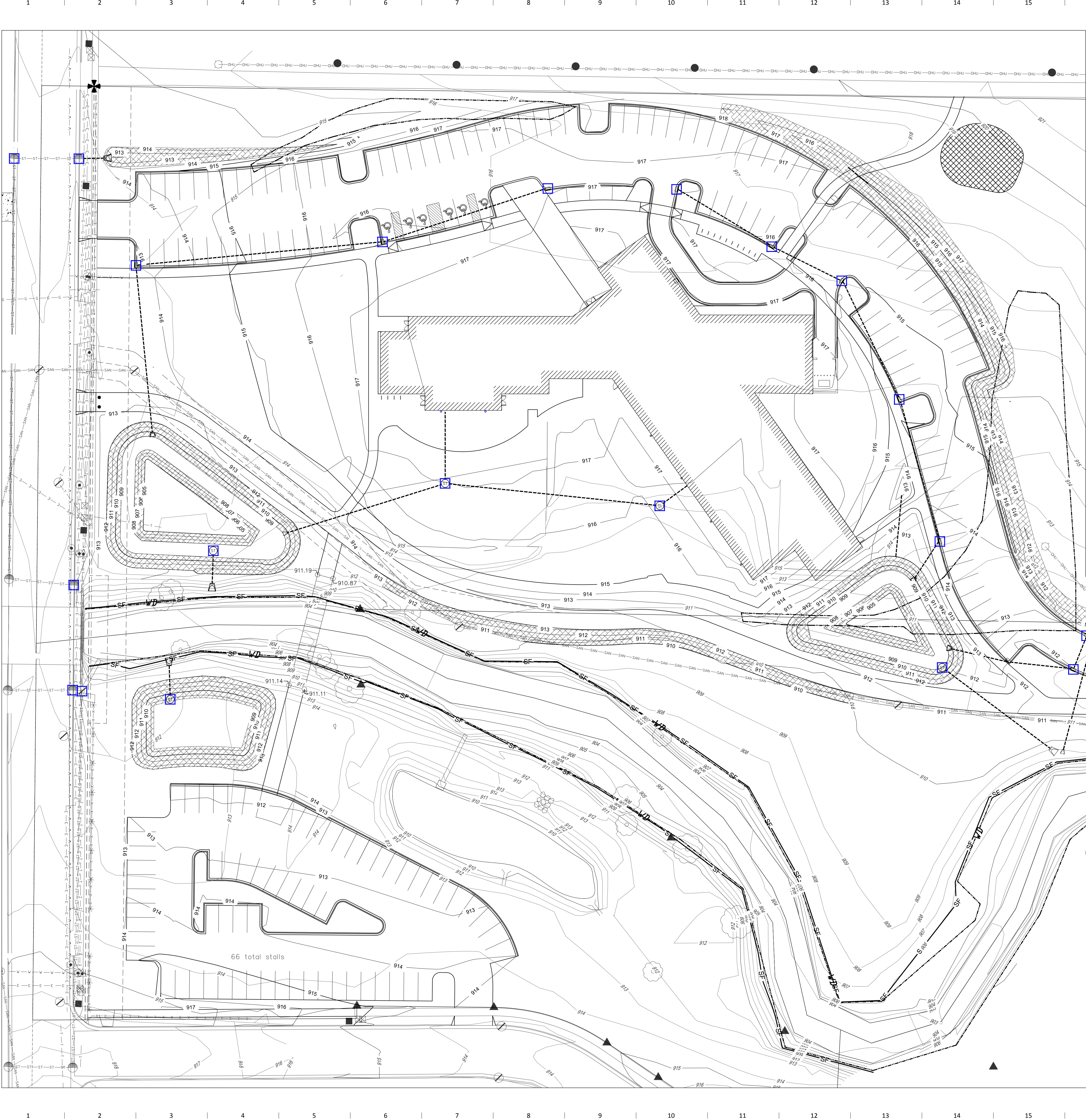
01/01/2016

Sheet Name

Alternate Site  
Plan & Details

Sheet Number



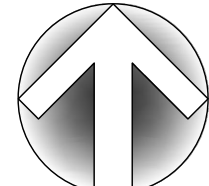





TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

**CALL DIGGERS HOTLINE**  
**1-800-242-8511**  
**TOLL FREE**

WIS. STATUTE 182.0175 (1974)  
REQUIRES MIN. OF 3 WORK DAYS  
NOTICE BEFORE YOU EXCAVATE

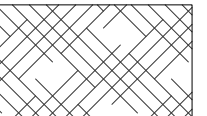


NORTH




SCALE: 1" = 30'

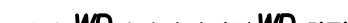
- NOTES:
- ALL SILT FENCE MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY PRIOR TO ANY SITE WORK.
  - SITE EROSION CONTROL MEASURES MUST BE IN PLACE AT ALL TIMES. SHOULD DEVICES BE REMOVED FOR WORK ACCESS, THEY SHALL BE REINSTALLED AT THE END OF EACH WORK DAY UNTIL PAVEMENTS HAVE BEEN INSTALLED AND ALL LANDSCAPE AREAS HAVE BEEN MULCHED AND SODDED. SEEDED AREAS MUST EXHIBIT MINIMUM OF 70% SOIL COVERAGE.
  - BIORETENTION BASINS SHALL BE OVER EXCAVATED AND USED FOR SEDIMENTATION BASINS DURING CONSTRUCTION. ALL SEDIMENT AND DEBRIS SHALL BE REMOVED PRIOR TO SAND, ROCK, AND ENGINEERED SOIL INSTALLATION. THE CONTRIBUTING WATERSHED TO THE BIORETENTION BASIN SHALL BE STABILIZED PRIOR TO BRINGING THE BASIN ONLINE.
  - DISTURBED AREAS TO BE GRADED AND SEEDDED BEFORE PROJECT END.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND MAINTAINING ALL EROSION CONTROL PRACTICES AS NEEDED DURING THE DURATION OF THE PROJECT.




EROSION MATTING



SF SILT FENCE



WD WETLAND DELINEATION LINE



INLET PROTECTION

PRELIMINARY. NOT FOR CONSTRUCTION.

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner  
**Waunakee Library Board**

Project  
**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect  
**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 319-409-5559

Civil Engineer  
**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

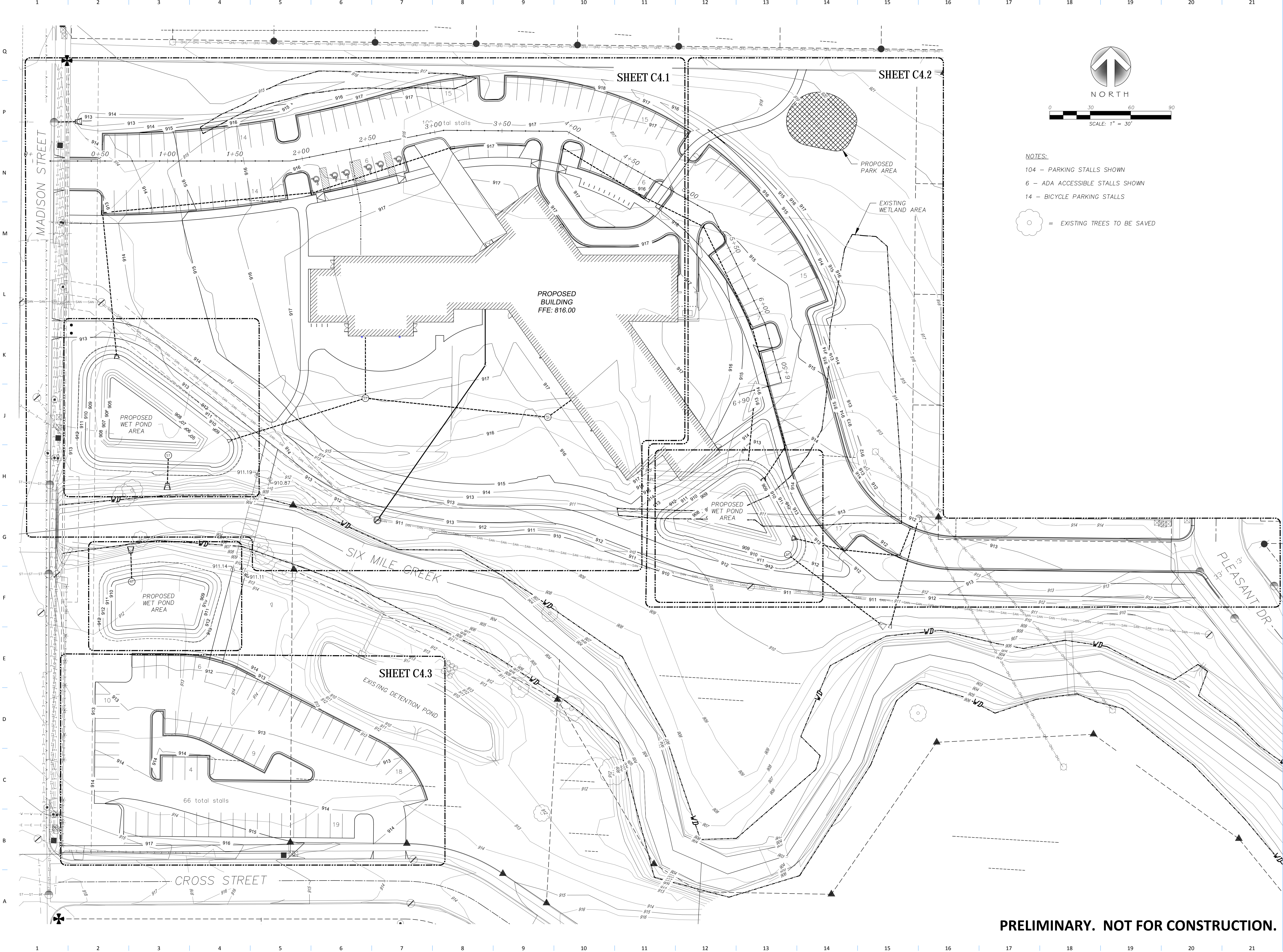
OPN Project No.  
**Project Number**

Sheet Issue Date  
**Permitting** **09/06/2017**

Sheet Name  
**Erosion Control Plan**

Sheet Number





- NOTES:
- 104 - PARKING STALLS SHOWN
  - 6 - ADA ACCESSIBLE STALLS SHOWN
  - 14 - BICYCLE PARKING STALLS
- = EXISTING TREES TO BE SAVED

PRELIMINARY. NOT FOR CONSTRUCTION.

OPN

A.R.C.H.I.T.E.C.T.S

301 N Broom St., Suite 100

Madison, WI 53703

P: 608-819-0260

F: 608-819-0260

www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

**Waunakee Library Board**

Project

**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect

**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 319-288-8559

Civil Engineer

**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

Project Number

Sheet Issue Date

Permitting

09/06/2017

Sheet Name

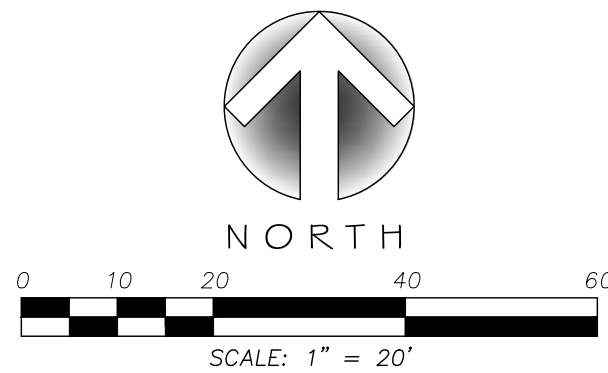
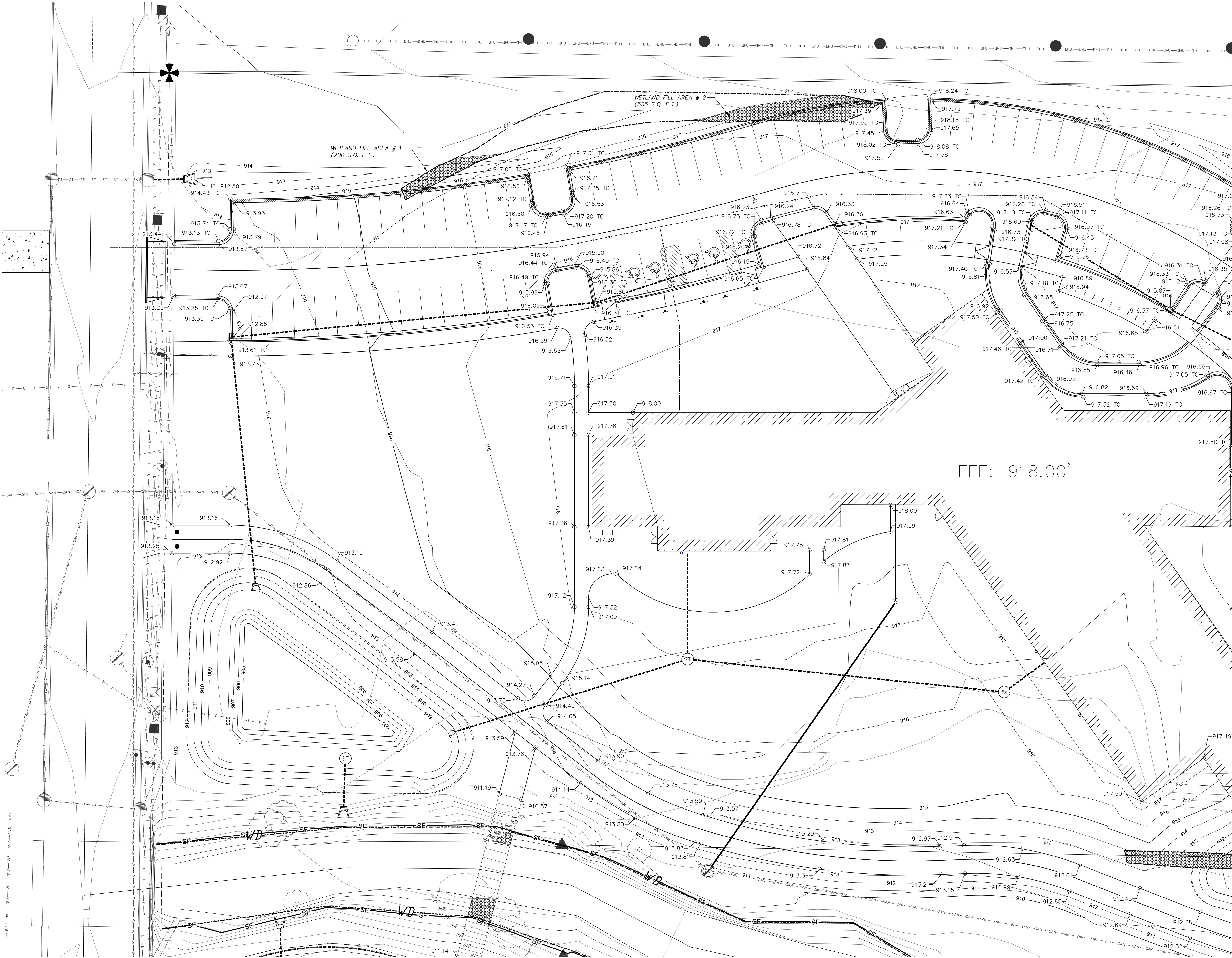
Proposed Grading Plan

Sheet Number

C4.0



Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



LEGEND	
999.99	FLOWLINE ELEVATION
999.99 TC	TOP OF CURB ELEVATION
	REJECT CURB & GUTTER
	PROPOSED WETLAND FILL AREA

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:

www.opnarchitects.com  
All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner  
**Waunakee Library Board**

Project  
**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect  
**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 319-409-5401

Civil Engineer  
**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

OPN Project No.  
**Project Number**

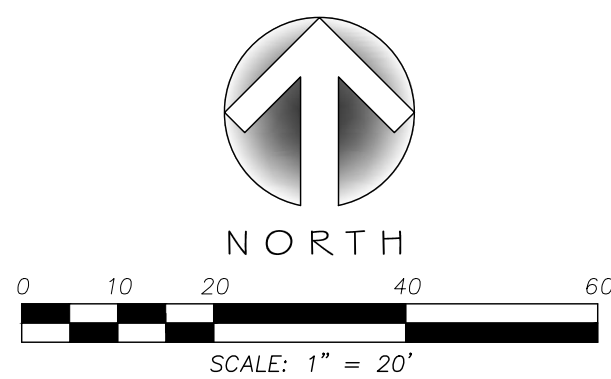
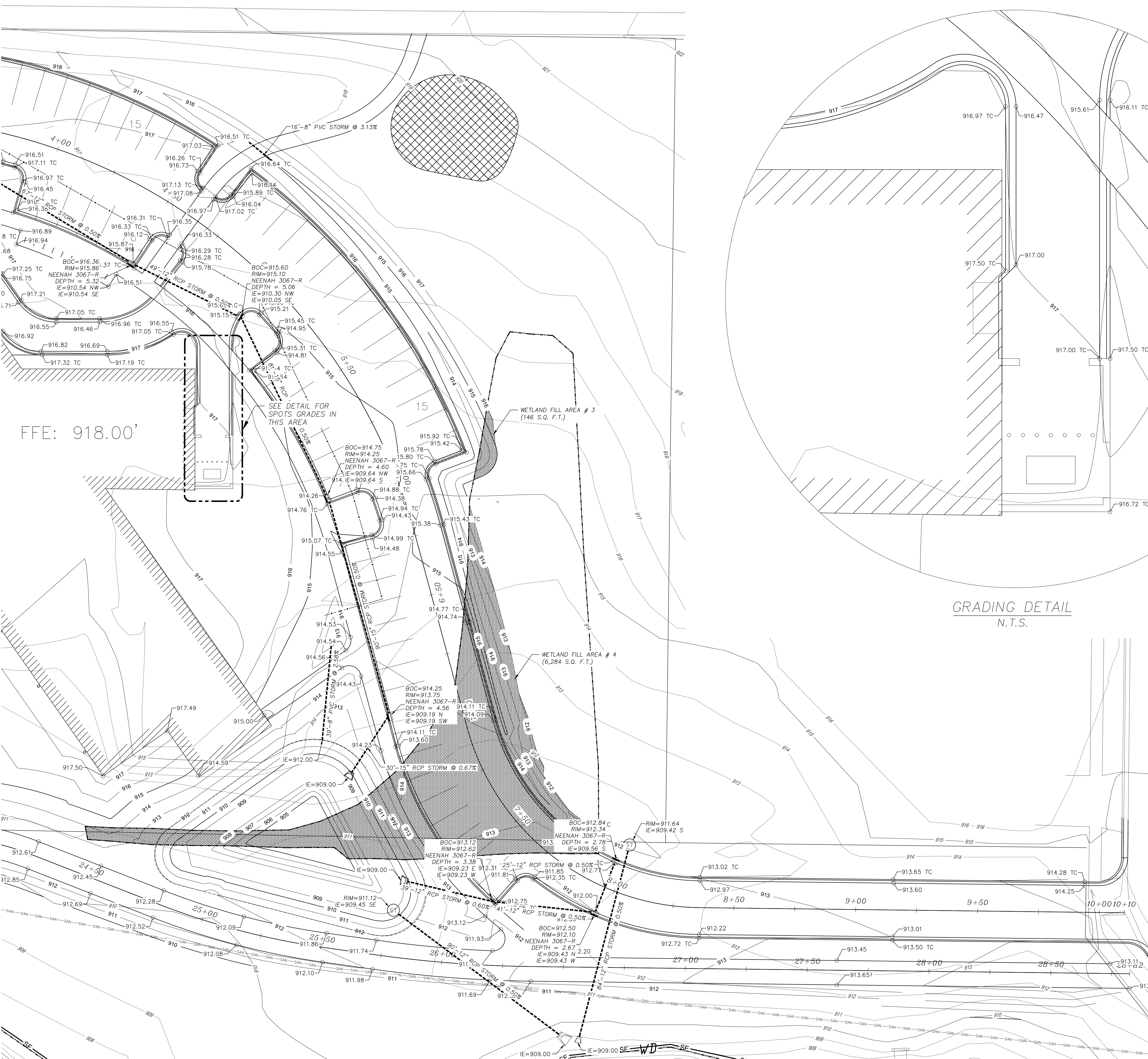
Sheet Issue Date  
**Permitting** 09/06/2017

Sheet Name  
**Proposed West Grading Plan**  
Sheet Number

PRELIMINARY. NOT FOR CONSTRUCTION.



Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



LEGEND

- 999.99 FLOWLINE ELEVATION
- 999.99 TC TOP OF CURB ELEVATION
- REJECT CURB & GUTTER
- PROPOSED WETLAND FILL AREA

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F: www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Waunakee Library Board

Project

Waunakee Library  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 315-388-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

OPN Project No.  
Project Number

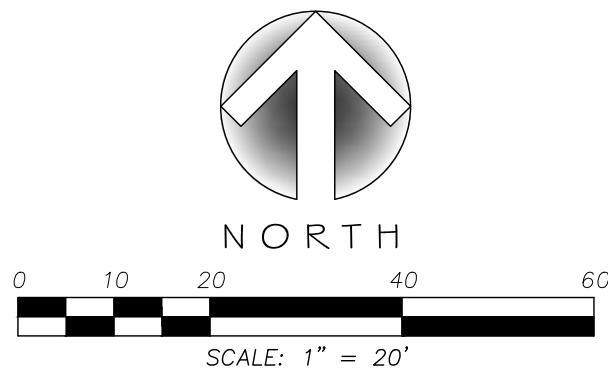
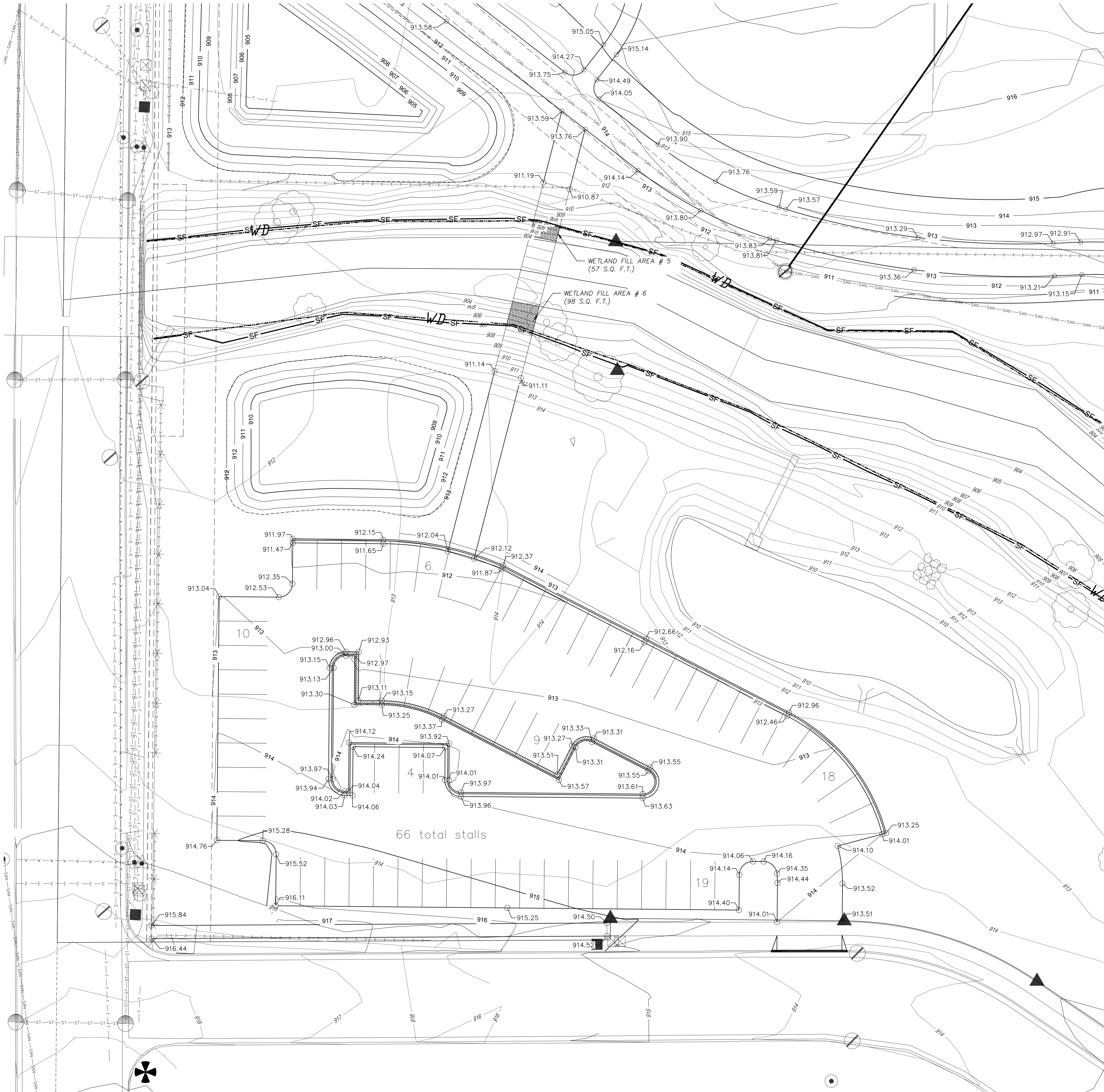
Sheet Issue Date  
Permitting 09/06/2017

Sheet Name  
Proposed East  
Grading Plan  
Sheet Number

PRELIMINARY. NOT FOR CONSTRUCTION.



Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



- LEGEND
- 999.99 FLOWLINE ELEVATION
  - 999.99 TC TOP OF CURB ELEVATION
  - REJECT CURB & GUTTER
  - PROPOSED WETLAND FILL AREA

PRELIMINARY. NOT FOR CONSTRUCTION.



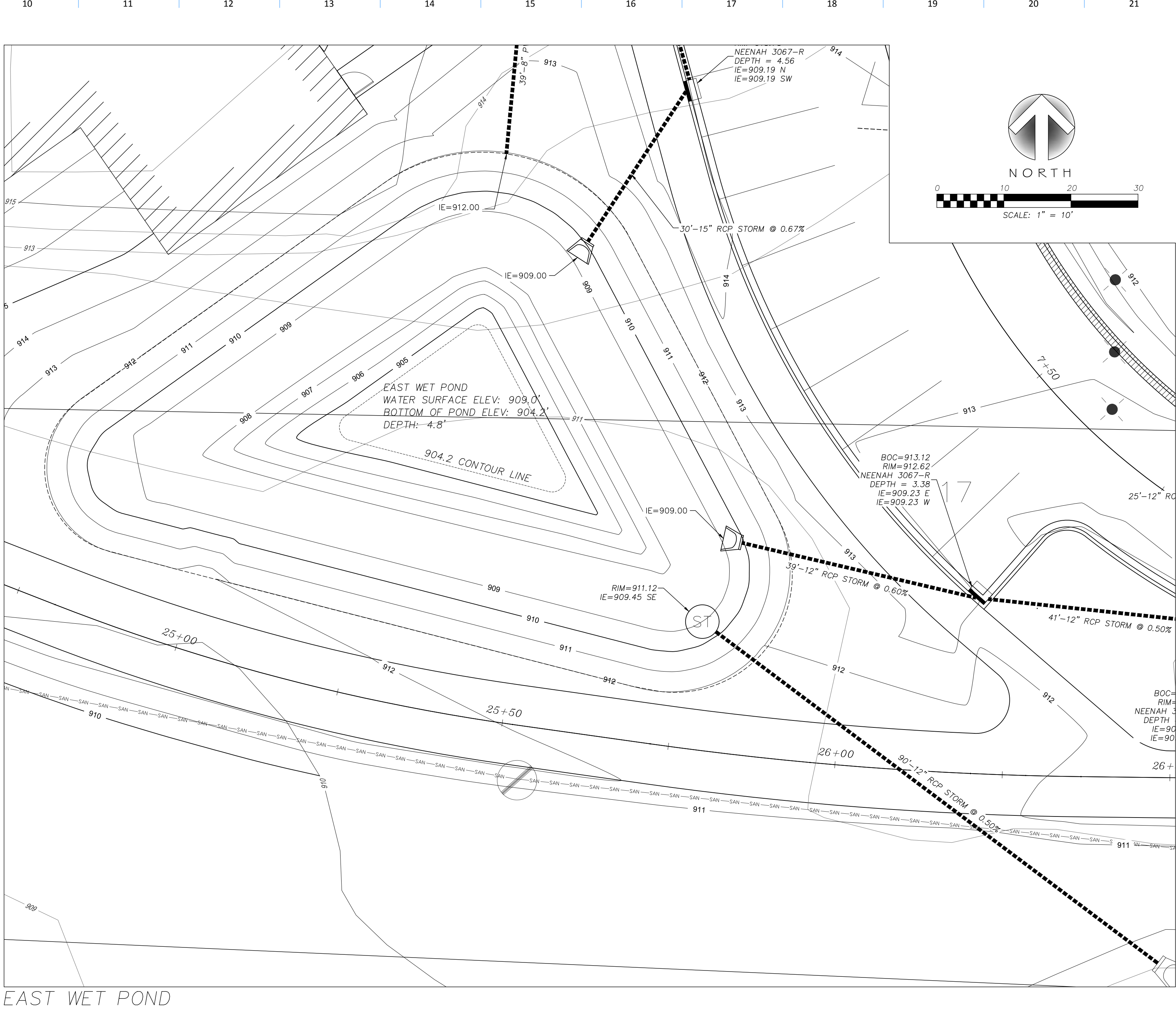
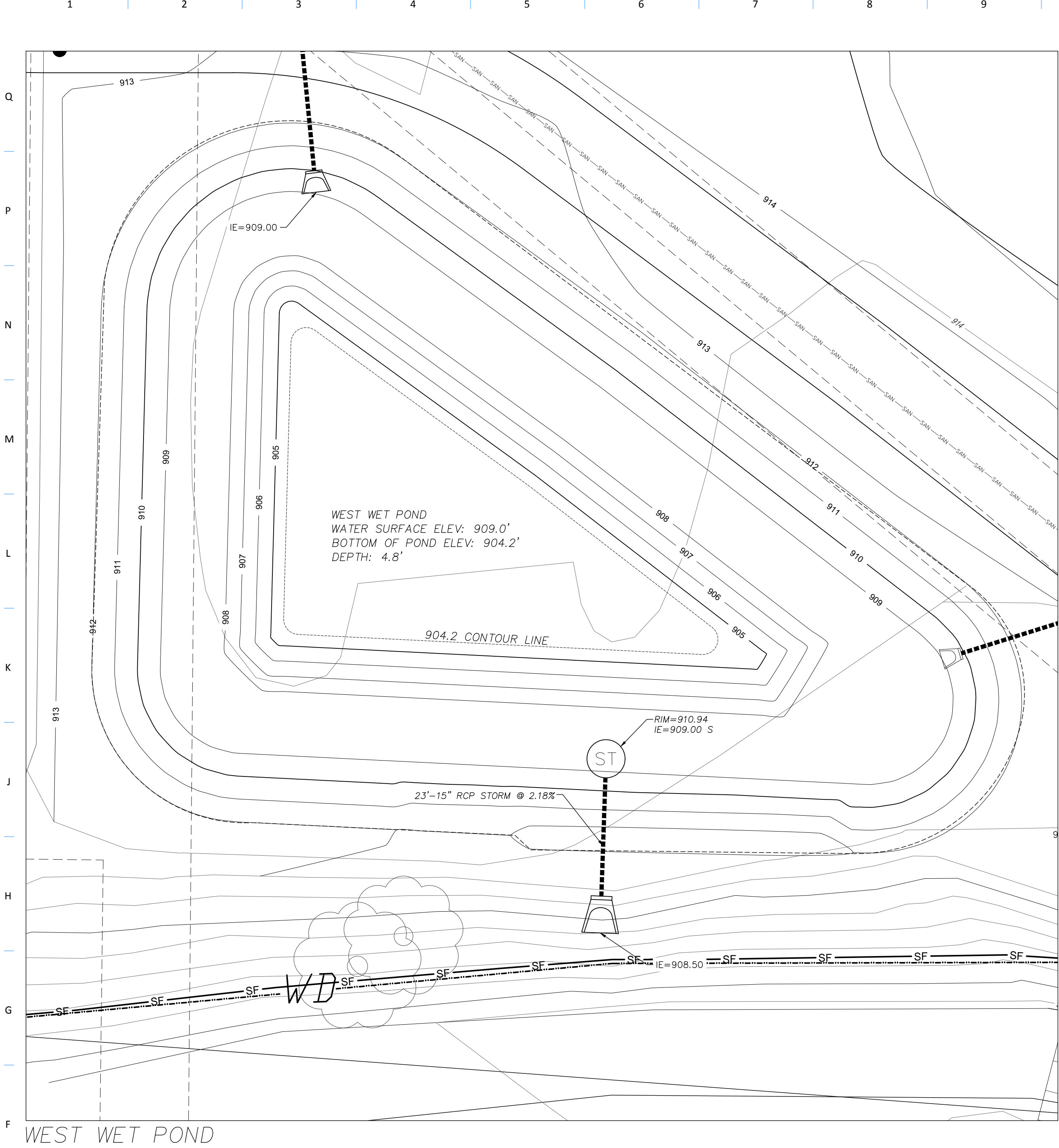
301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com  
All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.  
© 2017 OPN Architects, Inc.  
Owner  
**Waunakee Library Board**  
Project  
**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect  
**CONFLUENCE**  
900 2ND ST. SE, SUITE 304  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 315-288-8559  
Civil Engineer  
**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445  
Structural Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601  
Mechanical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601  
Electrical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601  
Technology Consultant  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

OPN Project No.  
**Project Number**  
Sheet Issue Date  
**Permitting** **09/06/2017**  
Sheet Name  
**Alternate Site Grading Plan**  
Sheet Number





OPN  
ARCHITECTS

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name  
Organization Description

Project

Project Name  
Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

Project Number

Sheet Issue Date

Project Status

01/01/2016

Sheet Name

Proposed  
Pond Detail

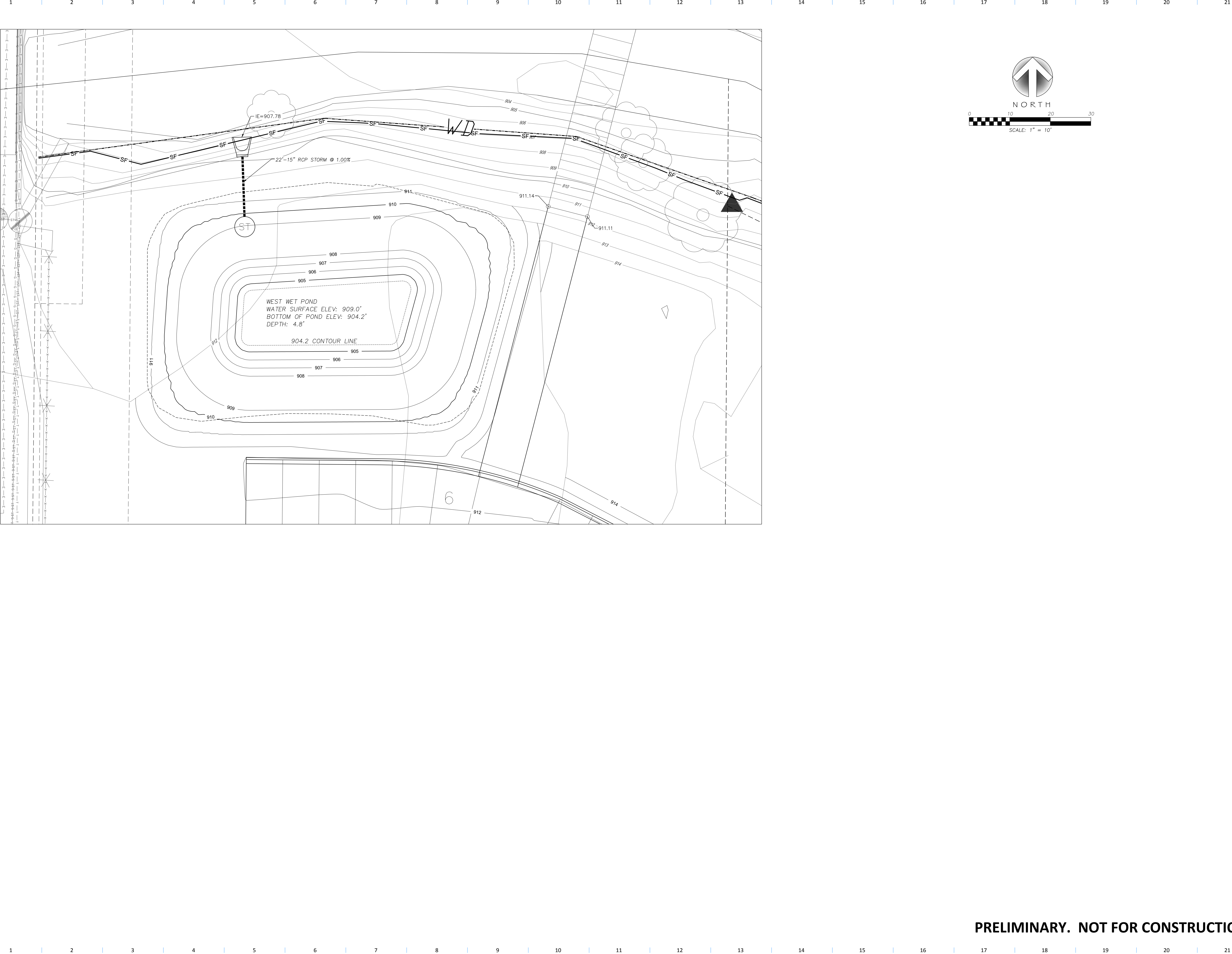
Sheet Number

C4.4



PRINTED:

Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



PRELIMINARY. NOT FOR CONSTRUCTION.

OPN  
ARCHITECTS

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name  
Organization Description

Project

Project Name  
Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision  
Date

OPN Project No.  
Project Number

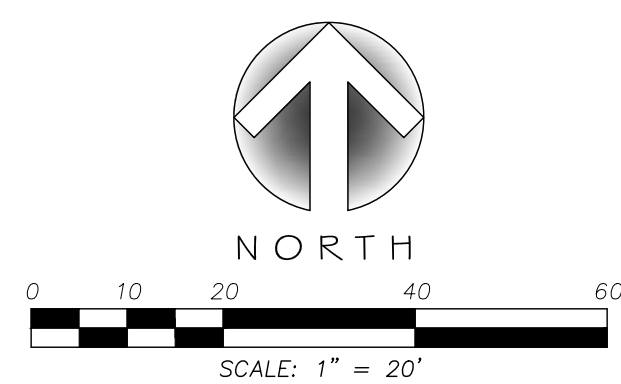
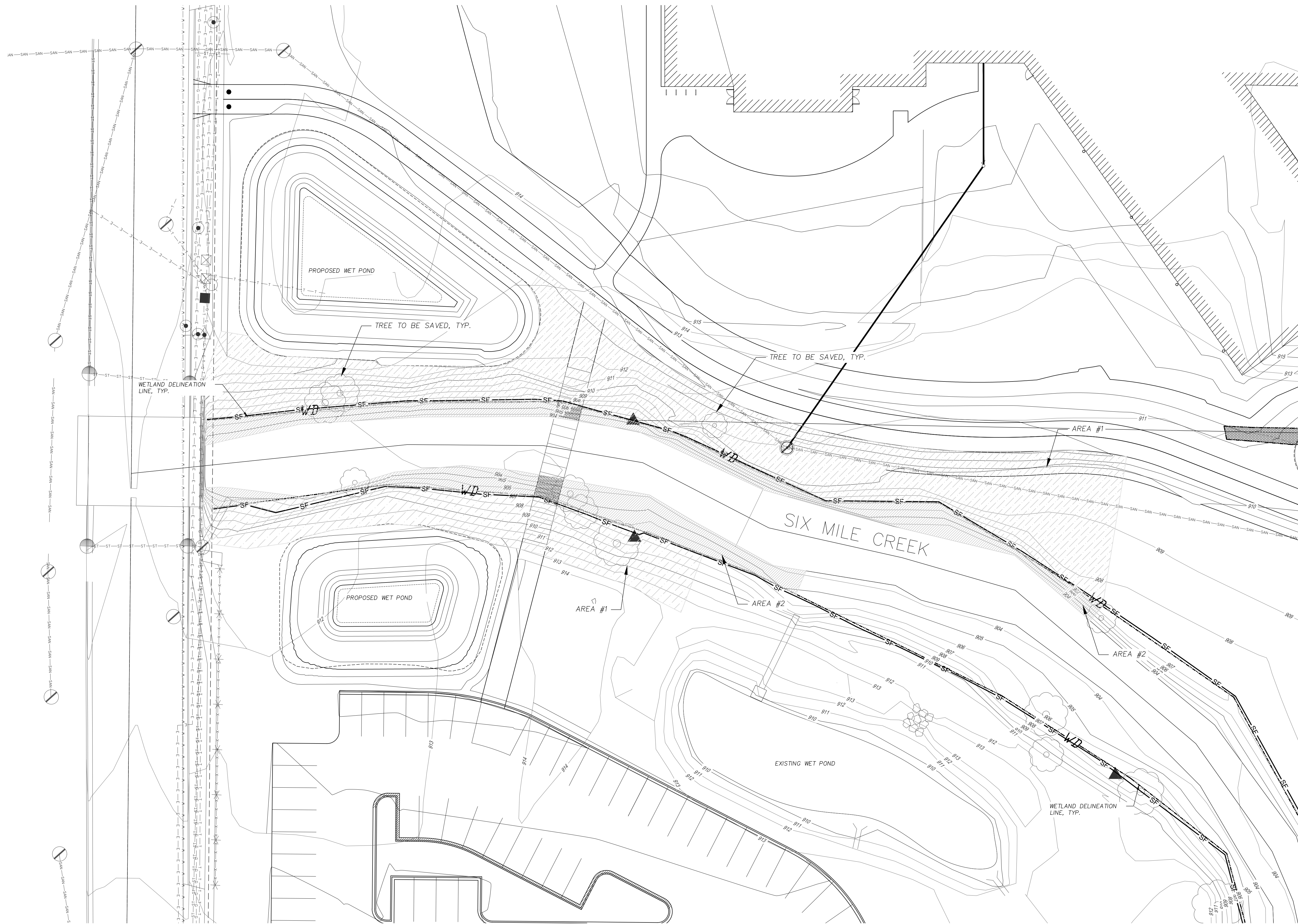
Sheet Issue Date  
Project Status  
01/01/2016

Sheet Name  
Alternate  
Pond Detail

Sheet Number

C4.5





AREA #1  
NORTH OF SIX MILE CREEK: 10,623 SQ FT  
SOUTH OF SIX MILE CREEK: 3,910 SQ FT  
TOTAL AREA: 14,533 SQ FT

AREA #2  
NORTH OF SIX MILE CREEK: 2,343 SQ FT  
SOUTH OF SIX MILE CREEK: 1,979 SQ FT  
TOTAL AREA: 4,322 SQ FT

AREA #1  
AREA BETWEEN WETLAND DELINEATION  
LINE AND GRADING LIMITS.

ALL WOODY VEGETATION, SHRUBS, AND TREES (EXCEPT NOTED) WILL BE CUT AND STUMPS REMOVED. AREA WILL BE PREPPED AND PLANTED WITH NATIVE VEGETATION.

AREA #2

AREA BETWEEN ORDINARY HIGH WATER  
MARK AND WETLAND DELINEATION LINE

ALL WOODY VEGETATION, SHRUBS, AND TREES (EXCEPT NOTED) WILL BE CUT OFF AT GROUND. NO GRUBBING, STUMPS WILL BE LEFT IN GROUND. NO DISTURBANCE OF WETLAND AS A PART OF THESE ACTIVITIES.

**OPN**  
ARCHITECTS

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F.  
[www.opnarchitects.com](http://www.opnarchitects.com)

**www.opnarchitects.com**

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

**Waunakee Library Board**

Project

**Waunakee Library**  
201 N. Madison Street  
Waunakee, WI 53597

Landscape Architect

**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8359

Civil Engineer

**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision	Date
----------	------

Date \_\_\_\_\_

OPN Project No

**Project Number**

Sheet Issue Date

## Permitting

09/06/2017

Sheet Name

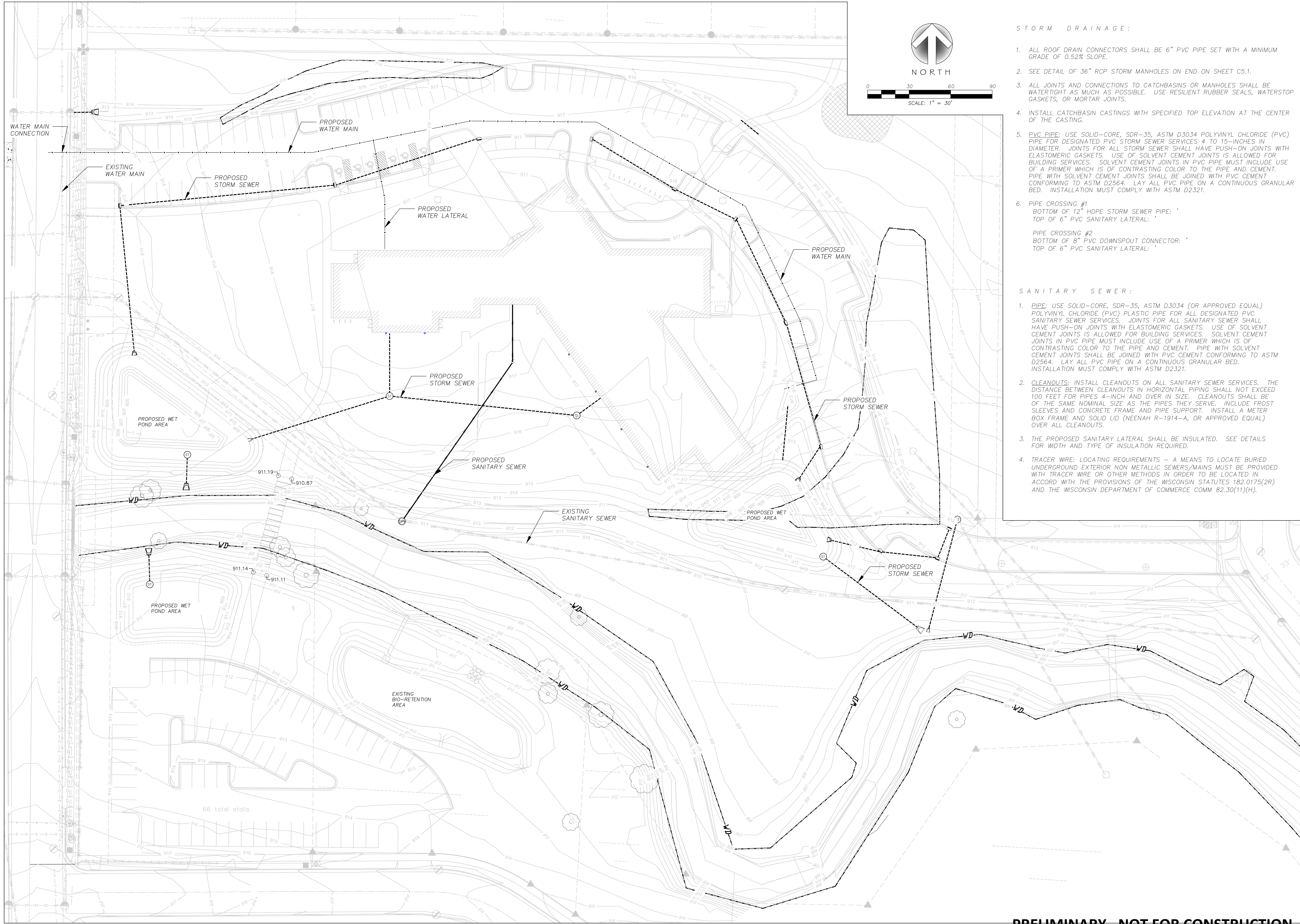
## Creek Vegetation Plan

Sheet Number

**PRELIMINARY. NOT FOR CONSTRUCTION.**

## C4.6

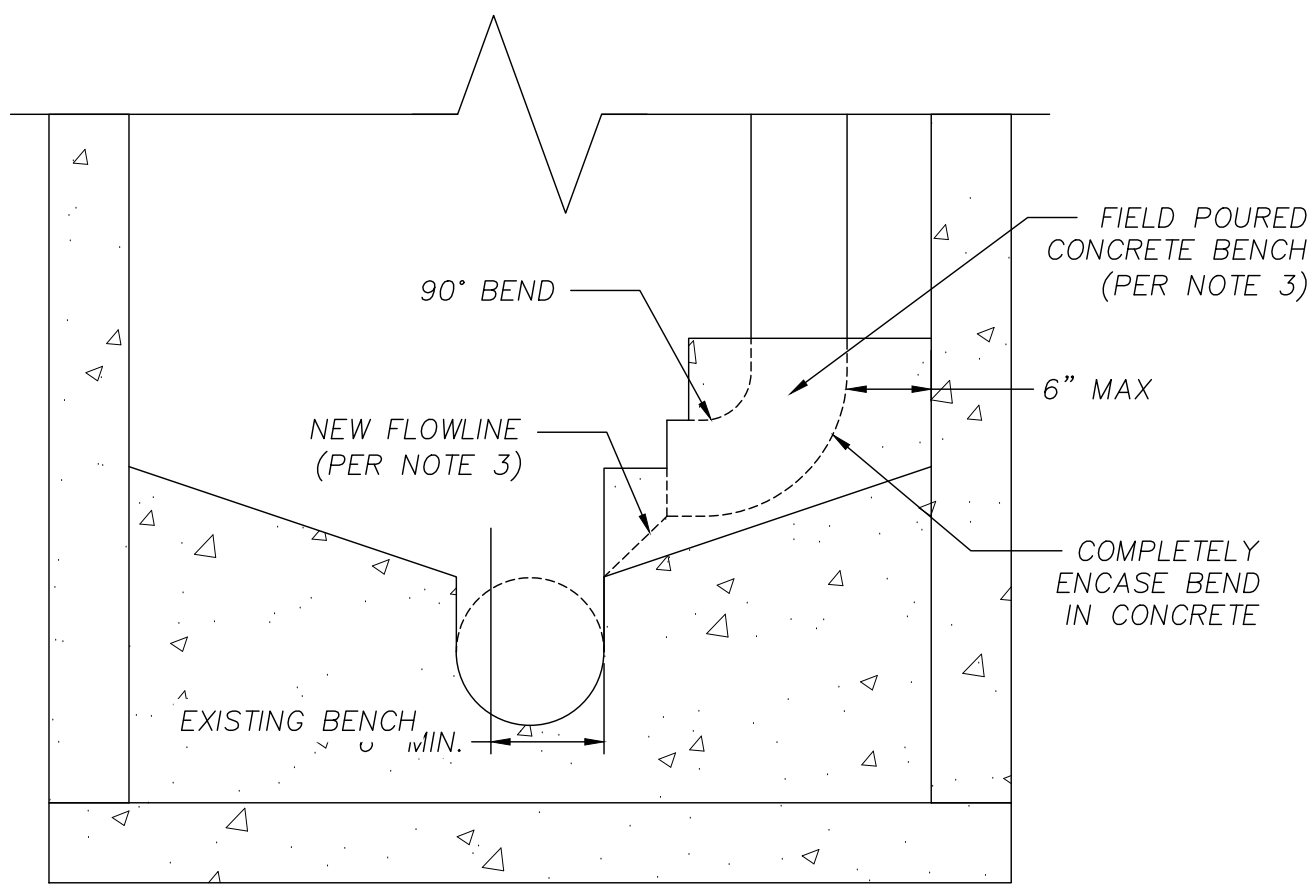
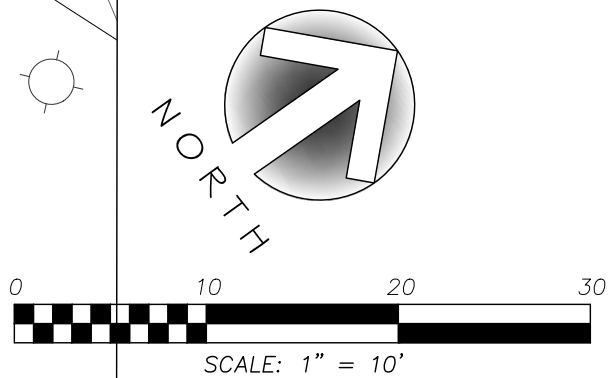
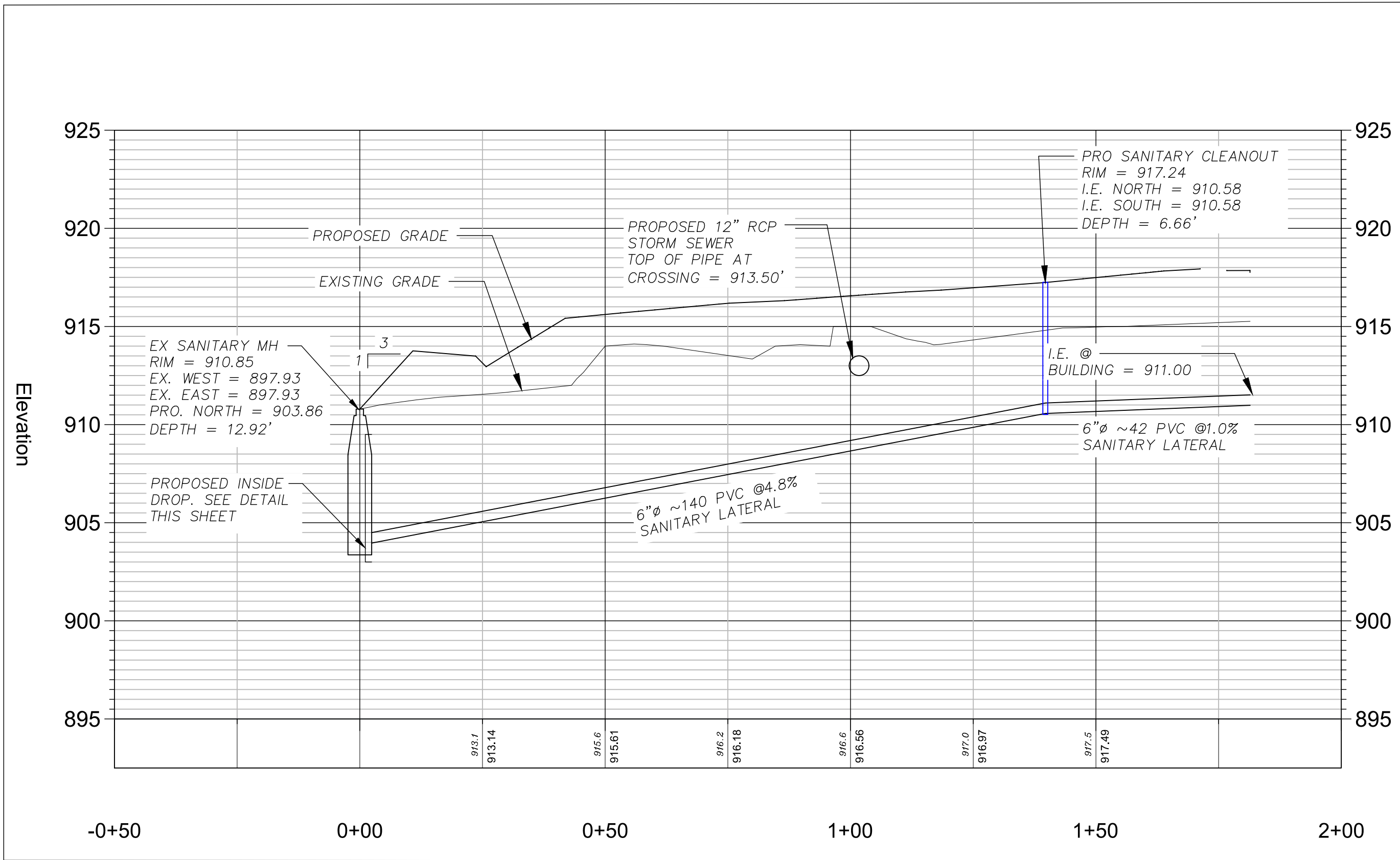




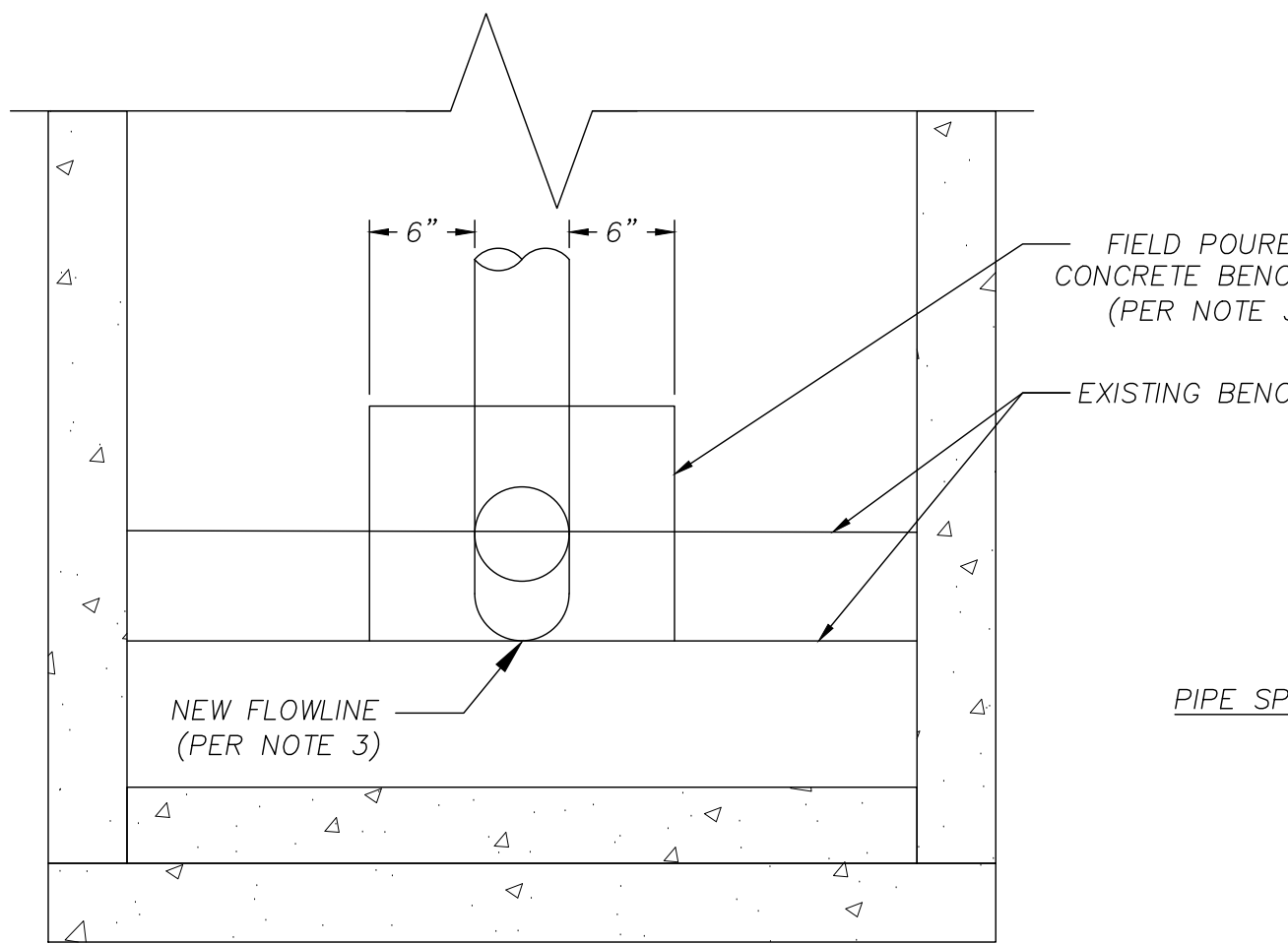
PRELIMINARY. NOT FOR CONSTRUCTION.



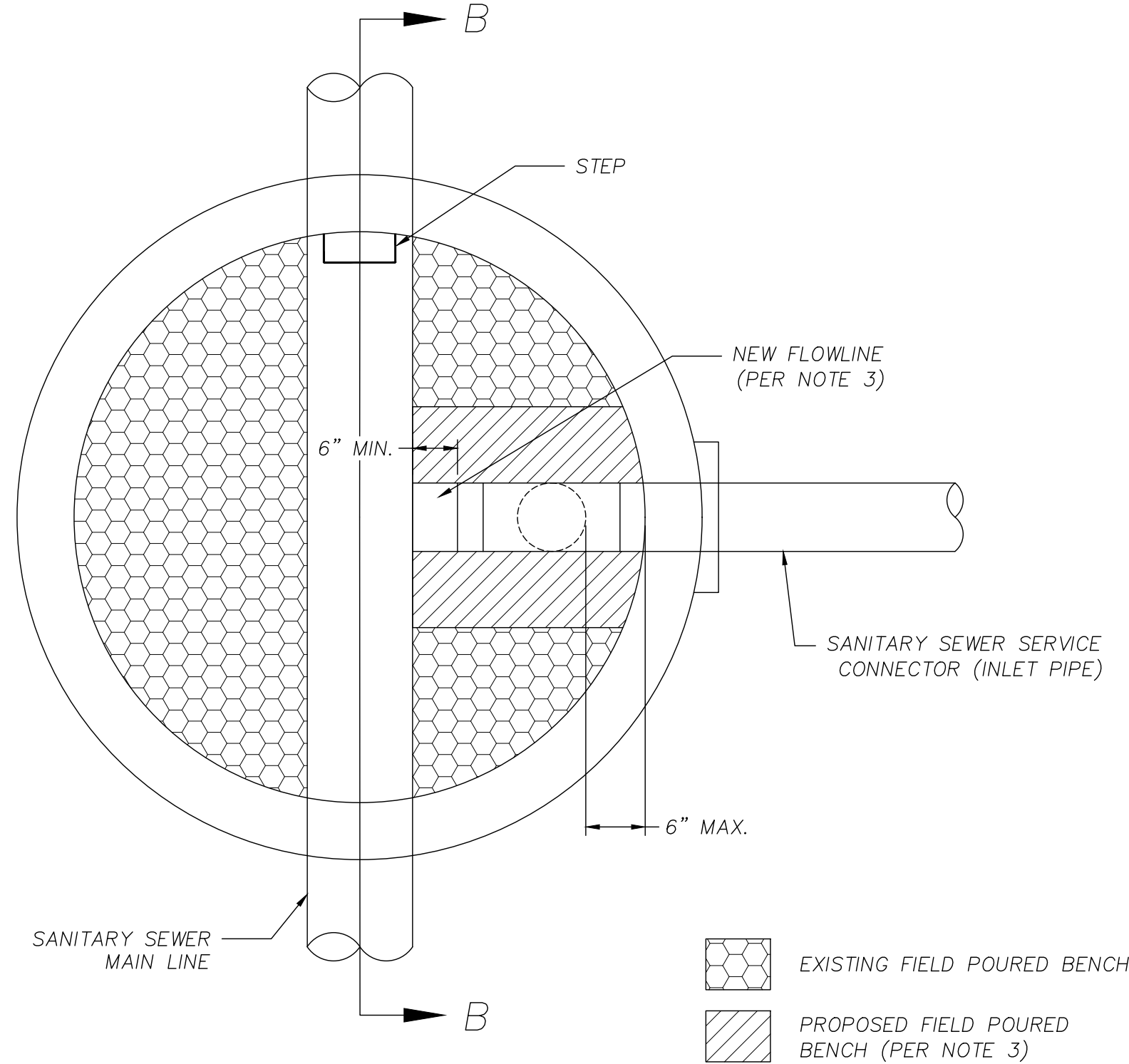
Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



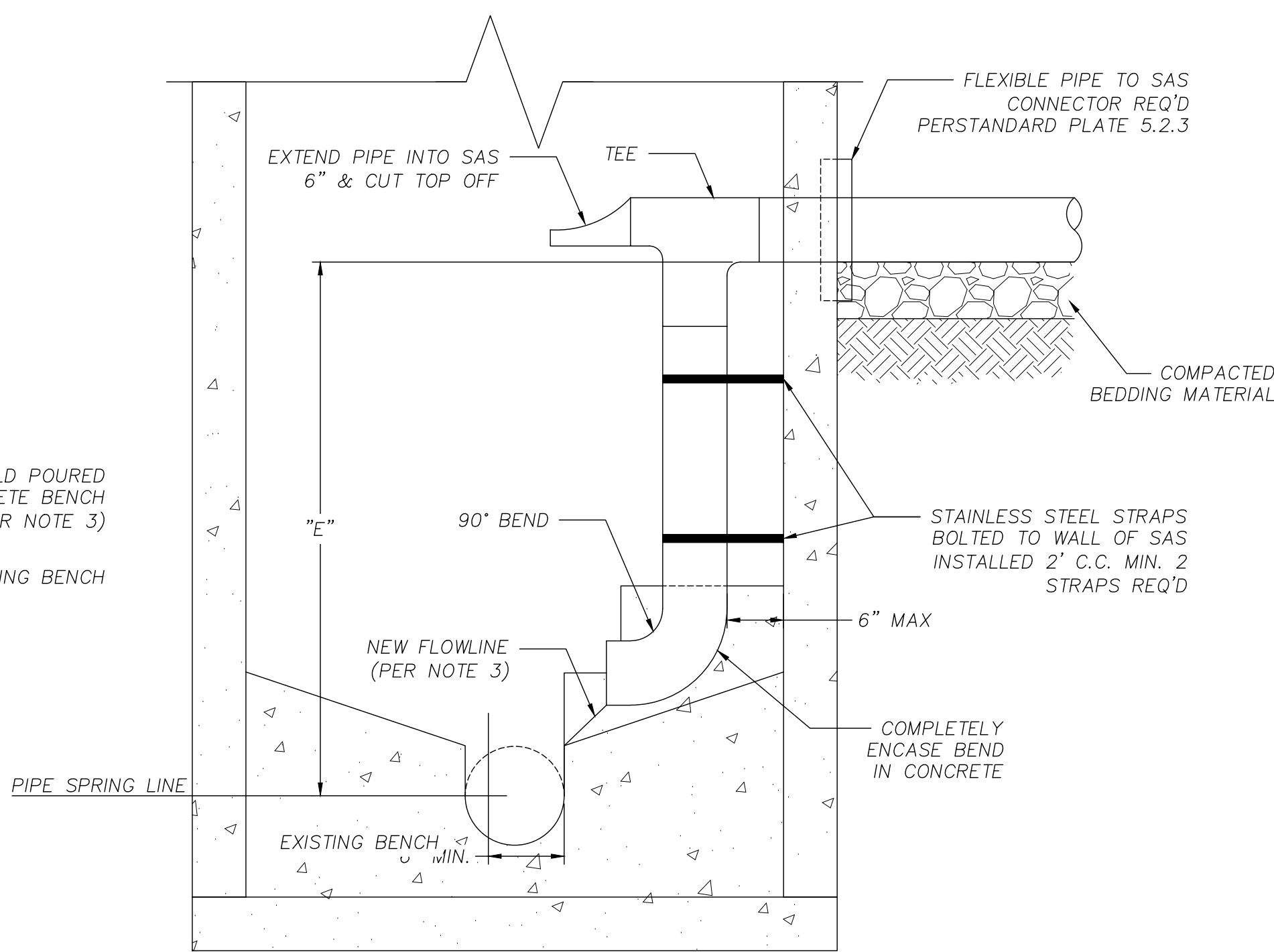
SIDE VIEW



SECTION A-A



TOP VIEW



SECTION B-B

PRELIMINARY. NOT FOR CONSTRUCTION.

NOTES:

1. INSIDE DROP INLETS SHALL BE USED ONLY WHERE SITE CONDITIONS MAKE AN OUTSIDE DROP CONNECTION INFEASIBLE TO CONSTRUCT. THIS DETERMINATION SHALL BE MADE BY THE ENGINEER IN THE FIELD. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR INSTALLATION OF THE INSIDE DROP INLET FROM THE ENGINEER PRIOR TO CONSTRUCTION.
2. DROP INLET SHALL BE BUILT WHEN "E" IS GREATER THEN 24" AND THE INLET PIPE DIAMETER IS 6" OR LESS. INLET PIPES GREATER THAN 6" SHALL HAVE AN OUTSIDE DROP CONNECTION PER STANDARD DETAIL DRAWING 5.7.2 "E" SHALL BE MEASURED FROM THE INVERT OF THE INCOMING PIPE TO THE SPRINGLINE OF THE OUTGOING SEWER.
3. ENCASE INLET PIPE IN CONCRETE FROM THE EXISTING BENCH TO FIRST JOINT ABOVE THE 90° BEND. FORM NEW SMOOTH FLOWLINE FROM PIPE END TO MAIN CHANNEL. ROUGH BRUSH FINISH ALL OTHER SURFACES OF THE NEW CONCRETE ENCASEMENT.

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F: www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name  
Organization Description

Project

Project Name  
Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

OPN Project No.

Project Number

Sheet Issue Date

Project Status

01/01/2016

Sheet Name

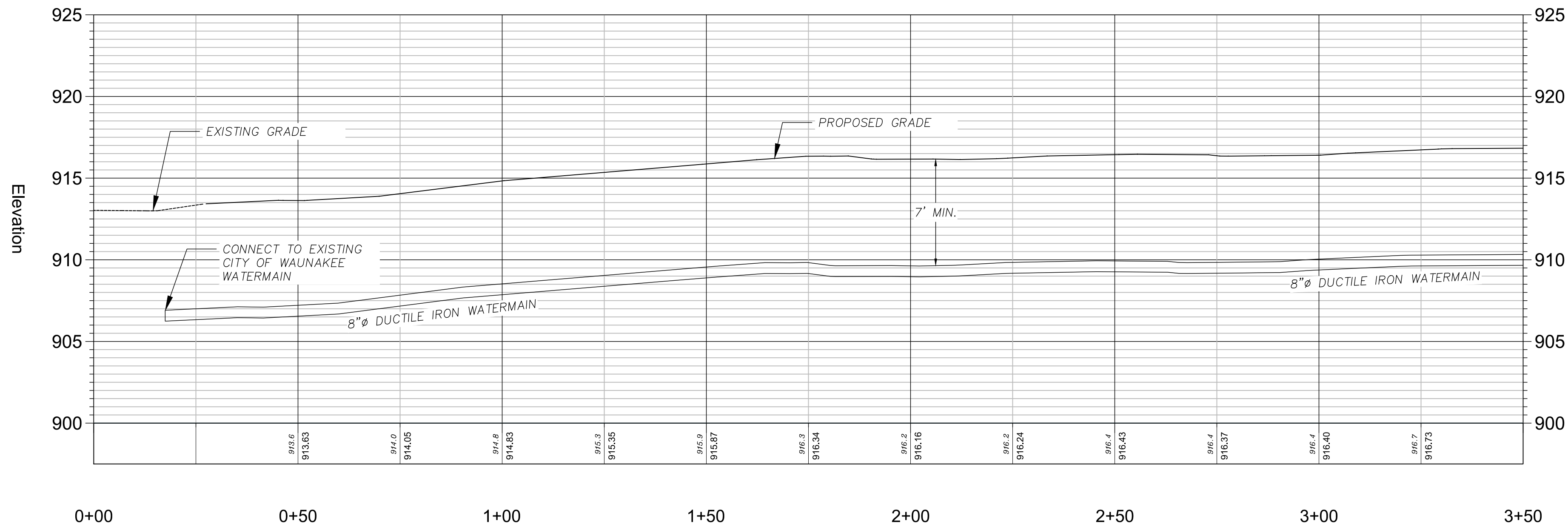
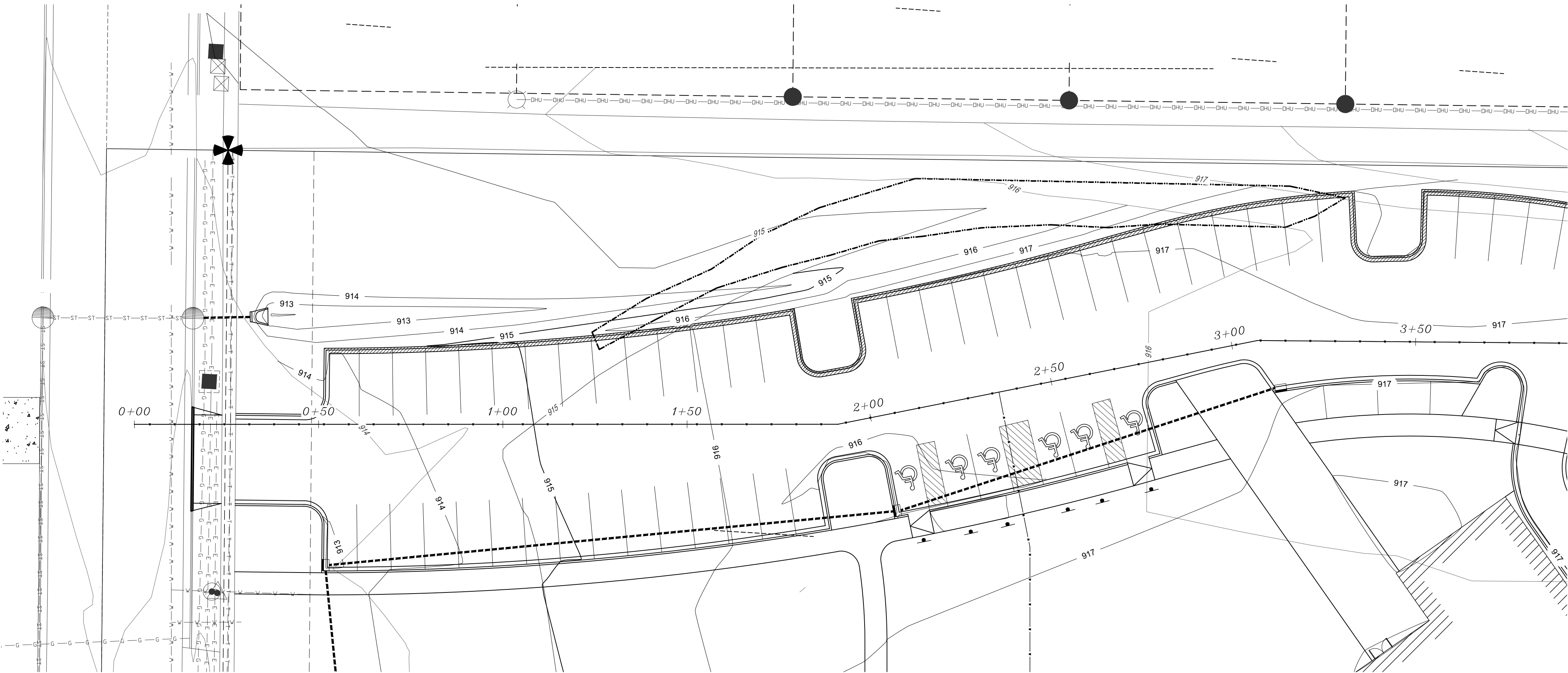
Sanitary  
Sewer Plan

Sheet Number



PRINTED:

Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



PRELIMINARY. NOT FOR CONSTRUCTION.



301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
[www.opnarchitects.com](http://www.opnarchitects.com)  
All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.  
© 2017 OPN Architects, Inc.

Owner  
**Client Name**  
Organization Description

Project  
**Project Name**  
Project Address

Landscape Architect  
**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer  
**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant  
**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision Date

OPN Project No.  
**Project Number**

Sheet Issue Date  
**Project Status** 01/01/2016

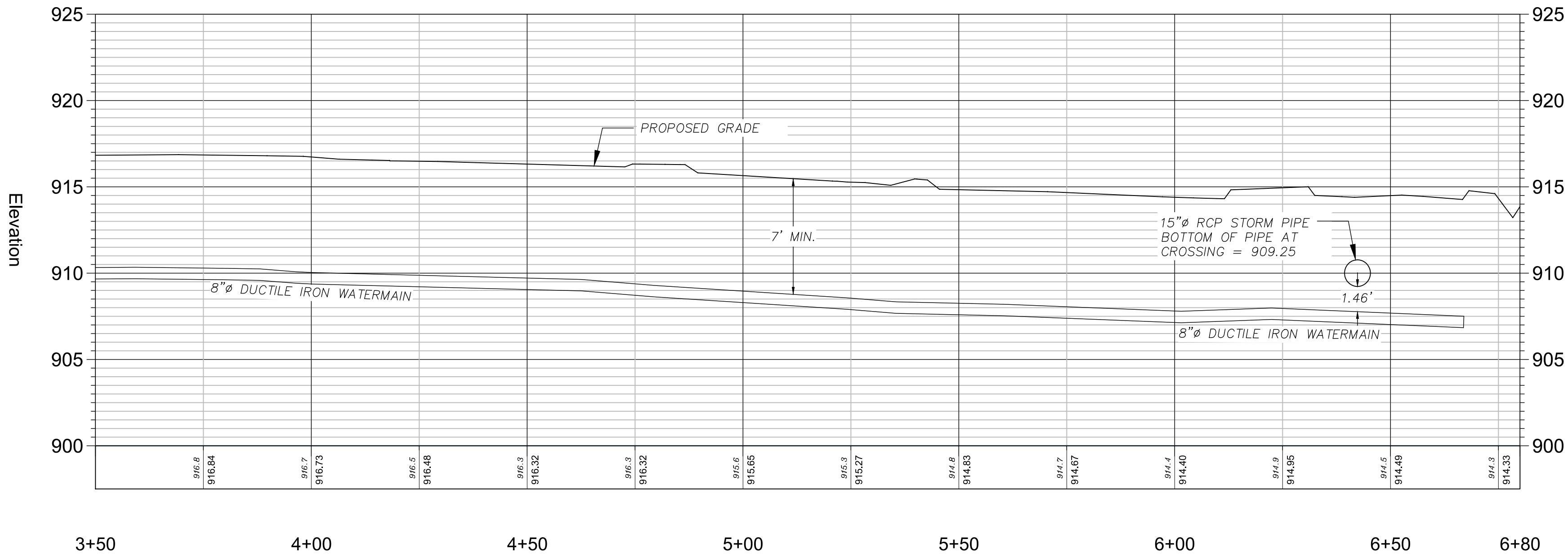
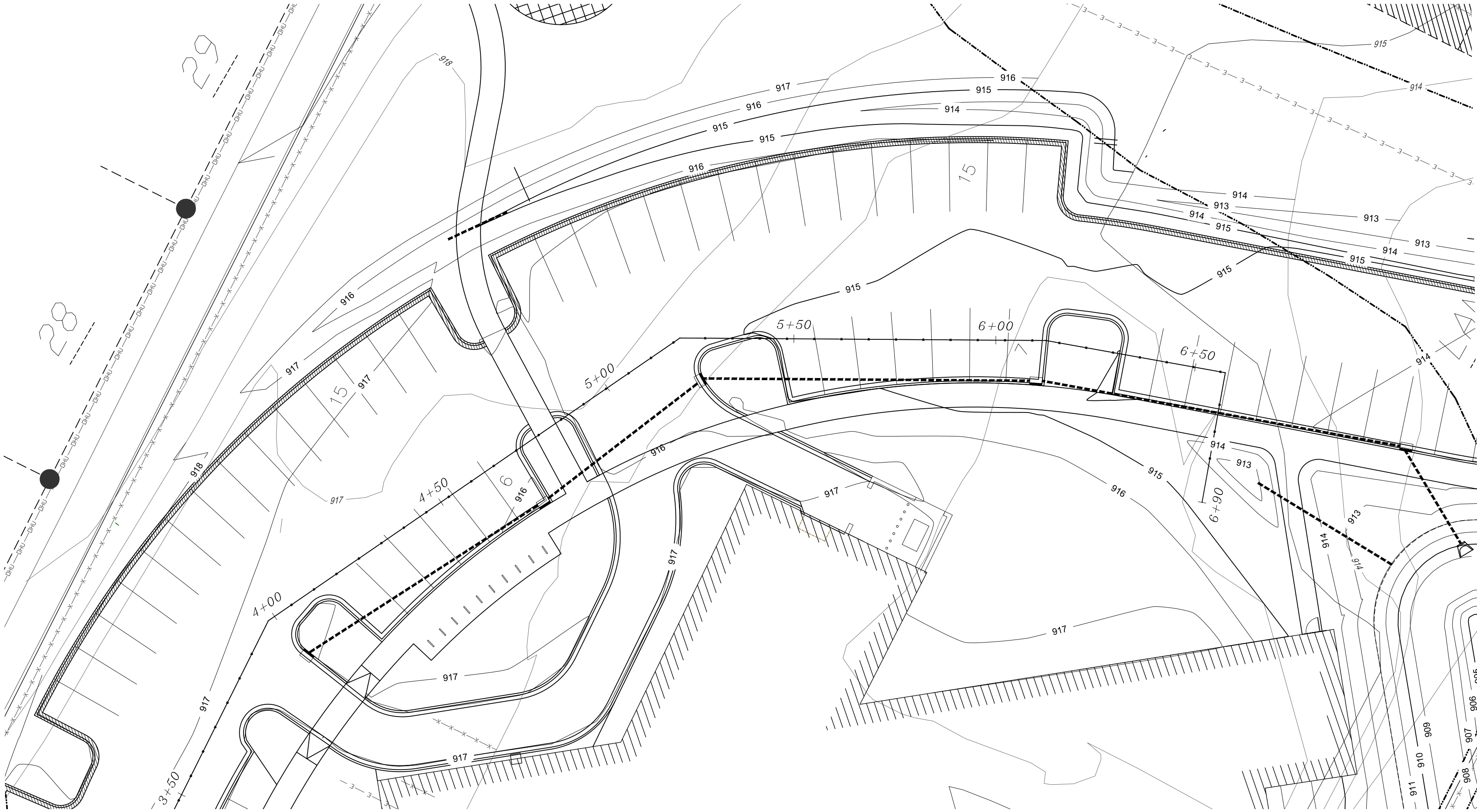
Sheet Name  
**Water Main  
West Plan**  
Sheet Number

C5.2



PRINTED:

Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



PRELIMINARY. NOT FOR CONSTRUCTION.



301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com  
All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner  
Client Name  
Organization Description

Project  
Project Name  
Project Address

Landscape Architect  
CONFLUENCE  
900 2ND ST. SE, SUITE 304  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer  
SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer  
IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer  
IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer  
IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant  
IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision  
Date

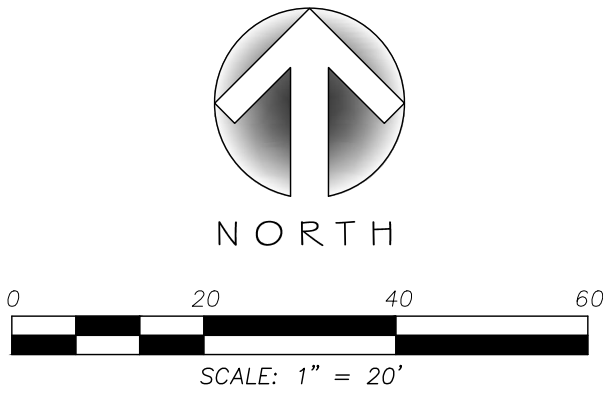
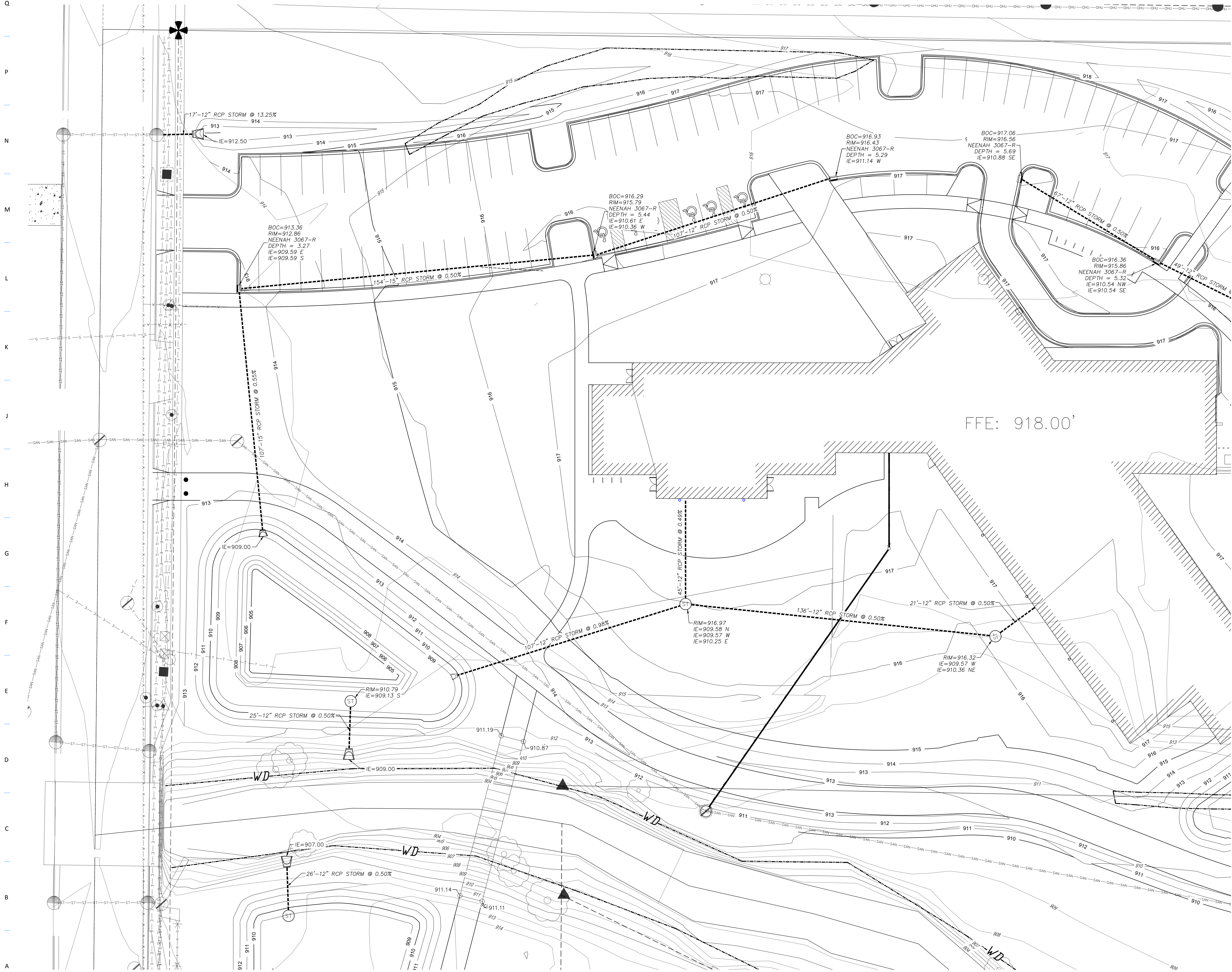
OPN Project No.  
Project Number

Sheet Issue Date  
Project Status  
01/01/2016

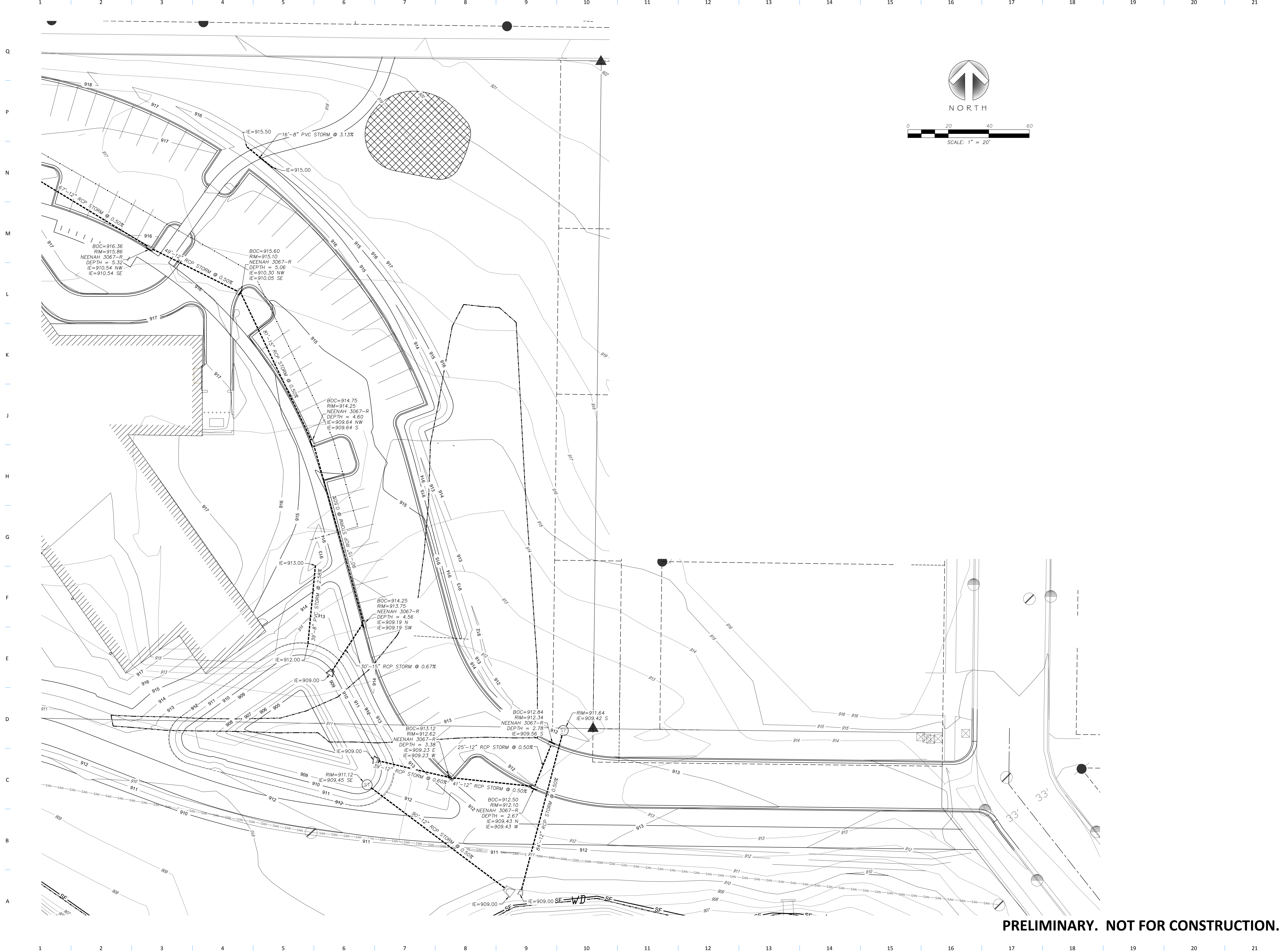
Sheet Name  
Water Main  
East Plan  
Sheet Number

C5.3





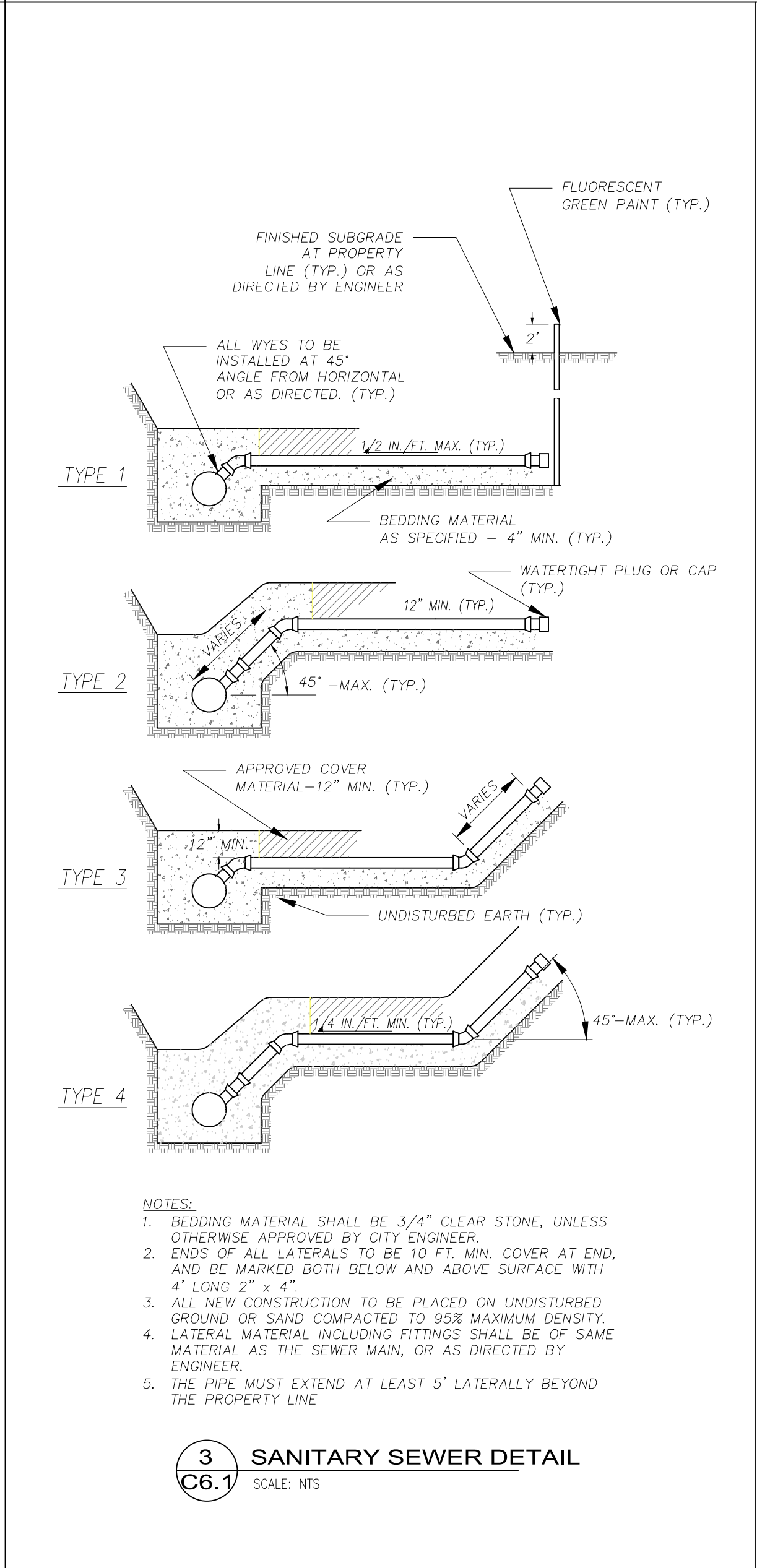
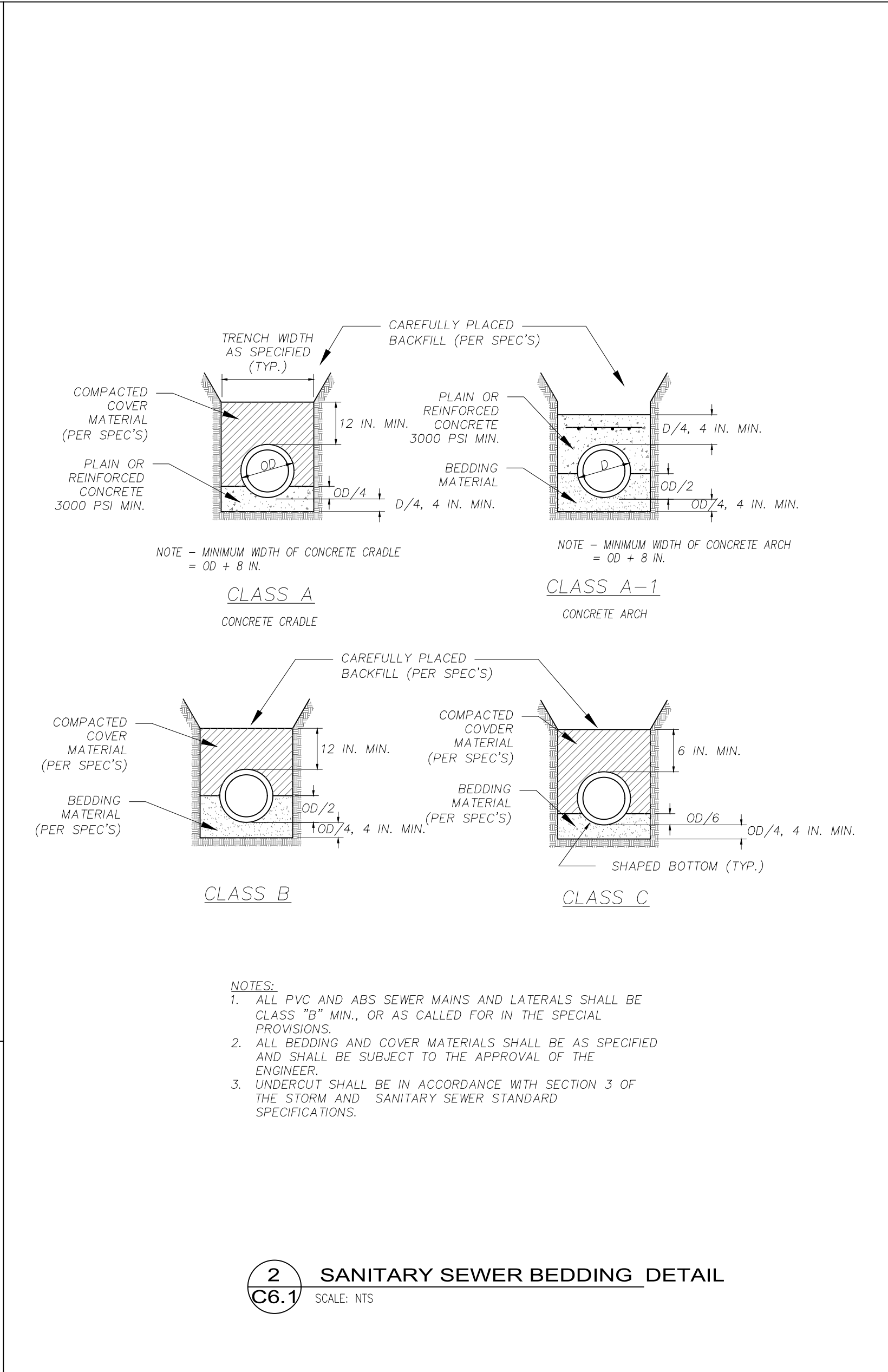
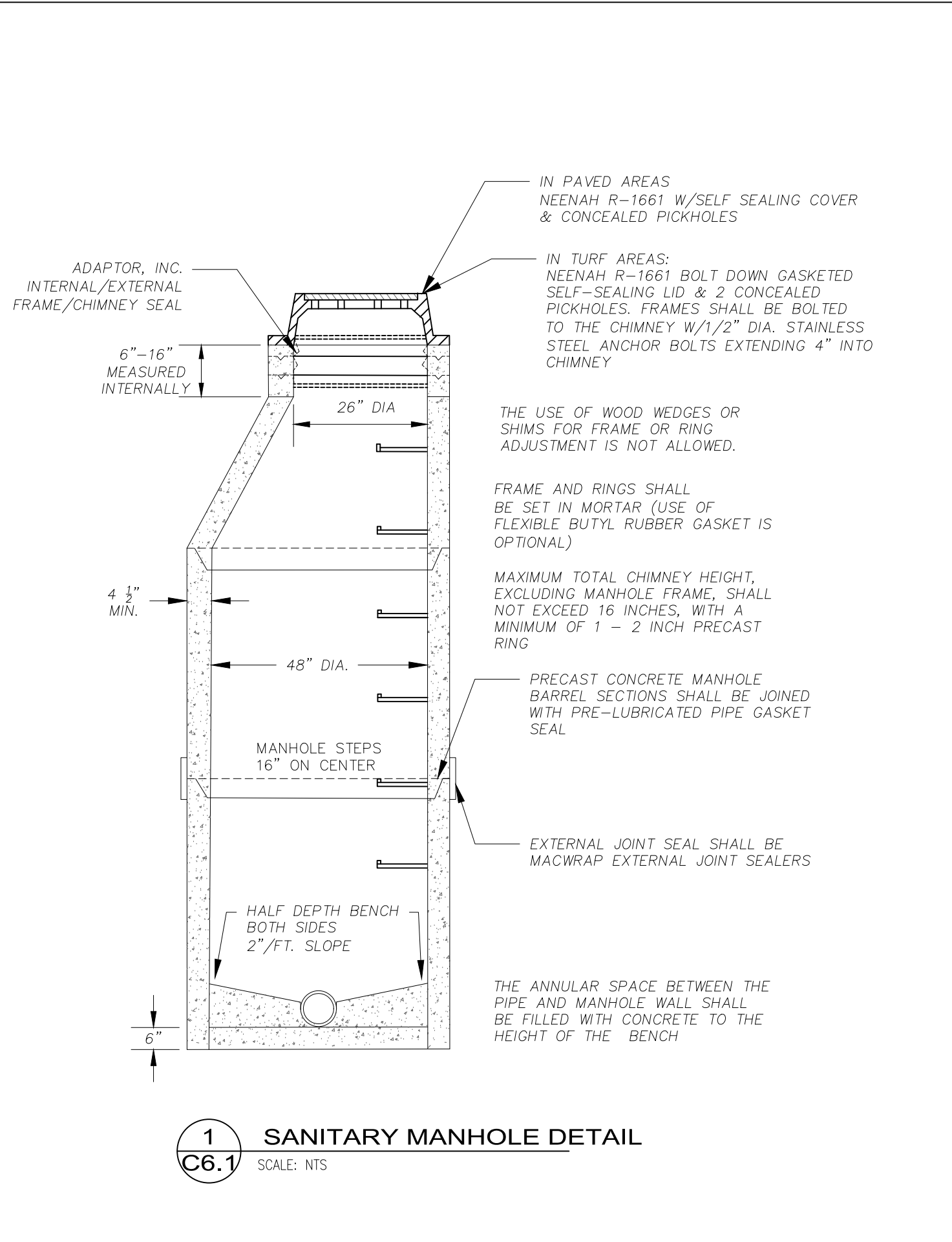












### SANITARY SEWER NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION SPS 382-384, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER CONSTRUCTION IN WISCONSIN, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
3. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
4. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS.
5. PROPOSED SANITARY SEWER, WATER MAIN, AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. STORM SEWER CONNECTING TO EXTERIOR DOWN SPOUTS SHALL BE PER DETAILS ON THE ARCHITECTURAL PLANS. THE EXACT LOCATION OF ALL DOWN SPOUTS SHALL BE PER THE ARCHITECTURAL PLANS.
6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS:  
SANITARY SEWER SHALL BE PVC IN ACCORDANCE WITH ASTM 3034, SDR-35 AND BEDDED WITH CLASS C BEDDING.  
BEDDING: 8" TO 1 1/2" CLEAR STONE  
COVER: 8" TO 1 1/2" CLEAR STONE

TRACER WIRE SHALL BE INSTALLED WITH ALL NEW LATERALS. TRACER WIRE BOXES SHALL BE PROVIDED AND LOCATED 3.5' BEHIND THE BACK OF CURB. "SEWER" SHALL BE STAMPED IN THE LID OF THE ACCESS BOX. TRACER WIRE SHALL EXTEND TO THE RIGHT OF WAY.

ALL LATERAL ENDS SHALL BE MARKED WITH A TREATED 4" X 4" POST AND THE TOP OF THE POST SHALL BE PAINTED GREEN. LATERAL END SHALL BE CAPPED WITH A GLOUED ON CAP.

LATERALS ARE NOT ALLOWED TO BE CONNECTED DIRECTLY INTO A MANHOLE.

ALL SANITARY MANHOLE CASTINGS SHALL BE NEENAH R-1550 WITH TYPE B NON-ROCKING LIDS AND CONCEALED PICK HOLES.

SANITARY MANHOLES SHALL HAVE EXTERNAL CHIMNEY SEALS.

ALL MANHOLE JOINTS SHALL BE WRAPPED WITH GATOR WRAP OR APPROVED EQUAL. EXCAVATED MATERIAL FROM THE TRENCH NOT SUITABLE FOR BACKFILL AS DEEMED BY THE PUBLIC SERVICES DIRECTOR SHALL BE HAULED OFF-SITE AND SELECT TRENCH BACKFILL WILL BE REQUIRED.

ALL SANITARY SEWER MAINS WILL BE REQUIRED TO BE TELEVISED. 2 COPIES OF THE TELEVISIONING REPORT AND DVD SHALL BE PROVIDED TO THE PUBLIC SERVICES DIRECTOR. MANDRELL TESTING IS ALSO REQUIRED ON ALL SANITARY SEWER. LOW PRESSURE AIR TESTS ARE REQUIRED ON ALL SANITARY SEWER CONSTRUCTION.

ALL MANHOLES INSTALLED OUTSIDE OF THE RIGHT-OF-WAY SHALL HAVE A RIM ELEVATION A MINIMUM OF 1' ABOVE THE PROPOSED GROUND AND BE MARKED WITH A TREATED 4" X 4" POST AND HAVE A SIGN WITH THE WORDS "SANITARY SEWER" ATTACHED TO THE POST.

LATERAL DEPTH AT THE RIGHT-OF-WAY SHALL NOT EXCEED 12' WITHOUT PROPER JUSTIFICATION. VARIANCES FROM THIS MAP BE APPROVED BY THE PUBLIC SERVICES DIRECTOR.

ADJUSTMENT RINGS SHALL HAVE A MINIMUM HEIGHT OF 4" AND A MAXIMUM HEIGHT OF 12". ADJUSTMENT RINGS SHALL BE POLYETHYLENE PLASTIC UNLESS OTHERWISE APPROVED. MAINTAIN A MINIMUM SEPARATION OF 8' OF HORIZONTAL SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER.

SANITARY MANHOLES SHALL BE CONSTRUCTED WITH STEPS.

- 7. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER AND WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY.
- 8. PRIOR TO FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
- 10. TRACER WIRE SHALL BE INSTALLED ON ALL BURIED NON-METALLIC SANITARY SEWERS, PRIVATE SANITARY INTERCEPTOR MAIN SEWERS, STORM BUILDING SEWERS, AND PRIVATE STORM INTERCEPTOR MAIN SEWERS THAT DISCHARGE TO MUNICIPAL MAINS. TRACER WIRE SHALL BE A MINIMUM OF 18-GAUGE, INSULATED, SINGLE-CONDUCTOR COPPER WIRE OR EQUIVALENT. TRACER WIRE COLOR SHALL BE BLUE FOR POTABLE WATER, GREEN FOR SANITARY SEWER, AND BROWN FOR STORM SEWER.

FERNCO CONNECTOR

PVC WYE

EXISTING SANITARY PIPE

PVC PIPE

FLOW

**NOTES:**

REMOVE EXISTING SANITARY SEWER PIPE AS NEEDED TO INSTALL WYE CONNECTION

**6**  
**C6.1** **SANITARY CONNECTION DETAIL**  
SCALE: NTS

# OPN ARCHITECTS

301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F: [www.opnarchitects.com](http://www.opnarchitects.com)

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

**Client Name**  
Organization Description

Project

**Project Name**  
Project Address

Landscape Architect

**CONFLUENCE**  
900 2ND ST. SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 315-288-8559

Civil Engineer

**SNYDER AND ASSOCIATES**  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

**IMEG**  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision	Date
----------	------

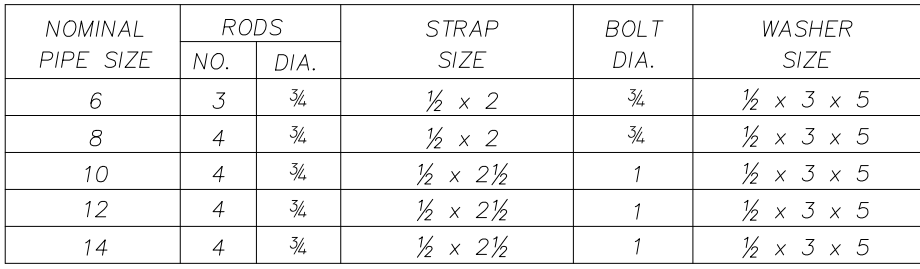
OPN Project No.  
**Project Number**

Sheet Issue Date  
**Project Status** **01/01/2016**

Sheet Name  
**Sanitary Sewer Details**

Sheet Number

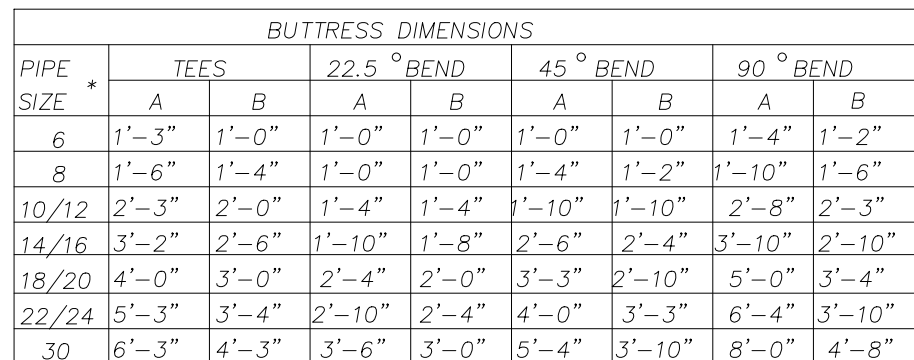




# 1 OFFSET AND RODDING DETAIL



2 STANDARD HYDRANT DETAIL  
C6.2 SCALE: NTS



4 BUTTRESS DETAIL  
C6.2 SCALE: NTS



1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

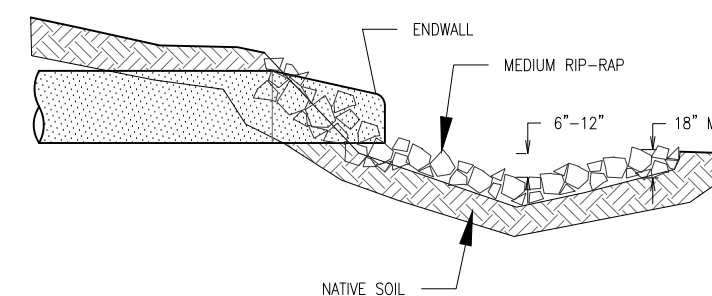
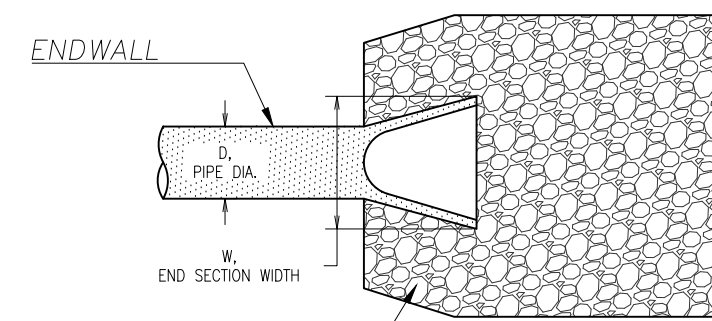


### STORM SEWER NOTES

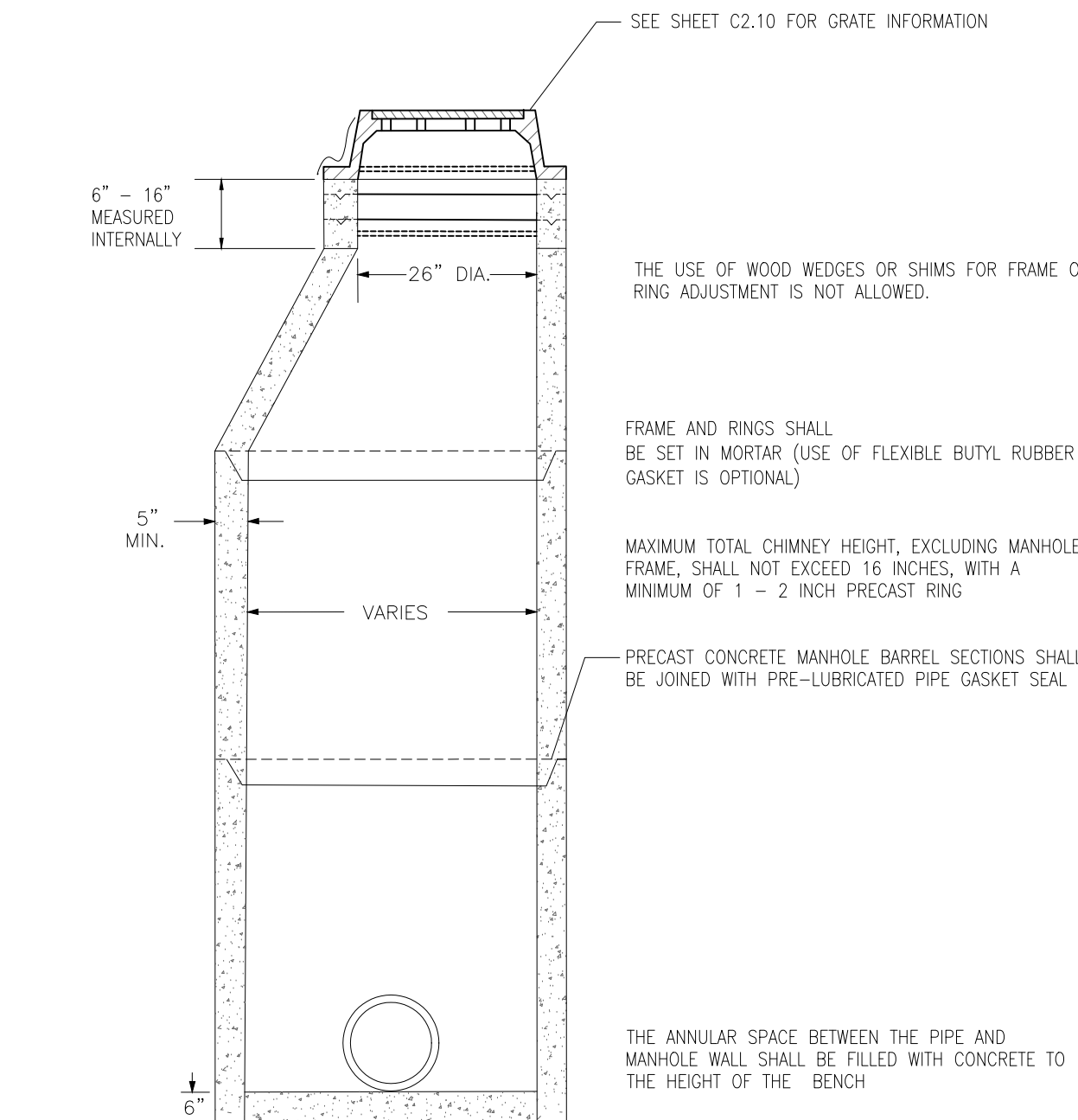
1. STORM SEWER AND STORMWATER MANAGEMENT SHALL BE AS FOLLOW:

- STORM SEWER SHALL BE REINFORCED CONCRETE PIPE. STORM SEWER PIPE BEDDING SHALL BE GRADATION 1, 2, OR 3 ER THE CIT Y OF SUN PRAIRIE STANDARD SPECIFICATIONS. MINIMUM COVER FOR ALL STORM SEWER SHALL BE 2'. EXCAVATED MATERIAL FROM THE TRENCH NOT SUITABLE FOR BACKFILL AS DEEMED BY THE VILLAGE ENGINEER SHALL BE HAULED OFF-SITE AND SELECT TRENCH BACKFILL WILL BE REQUIRED.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER AND WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY.
- PRIOR TO FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
- A MAXIMUM OF 9" OF ADJUSTING RINGS IS ALLOWED AND A MINIMUM OF 4" IS REQUIRED. ADJUSTMENTS TO INLETS AND MANHOLES MAY REQUIRE ADDITIONAL WORK INCLUDING BUT NOT LIMITED TO; ADDING, REMOVING, AND/OR REPLACING MANHOLE/INLET BARREL SECTIONS TO MEET THE CITY STANDARDS FOR MINIMUM AND MAXIMUM ADJUSTMENTS.
- NEW CHIMNEY SEALS WILL BE REQUIRED IF EXISTING CHIMNEY SEALS ARE DAMAGED DURING MANHOLE ADJUSTMENT.

RIP-RAP OUTLET PROTECTION					
STRUCTURE NUMBER	PIPE DIAMETER (INCHES)	DIMENSIONS		CUBIC LENGTH (L)	WIDTH (W)
		INCHES	FEET		
F.E.S. - 1	24	40.50	4	40	6
OUTLET 1	24	35.76	12	20	6
OUTLET 2	36	14.97	6	29	9
12" EQUALIZING PIPE	36	22.01	6	31	9
INLET BASIN 2	12	2.55	2	12	3
PIPE	24	19.83	6	17	6
PIPE	34" X 53" ELLIP	90.99	6	36	27

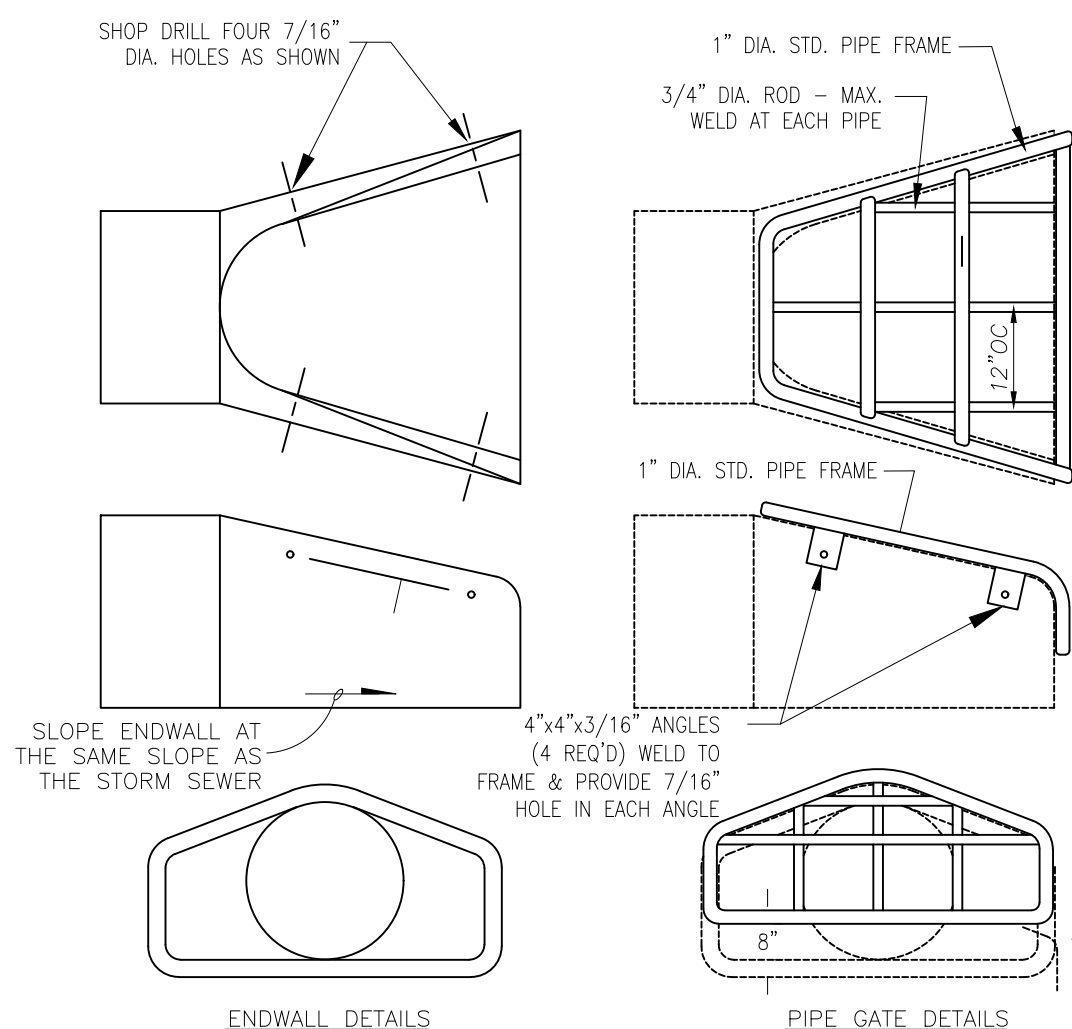


5 ENDWALL RIP-RAP DETAIL  
SCALE: NTS



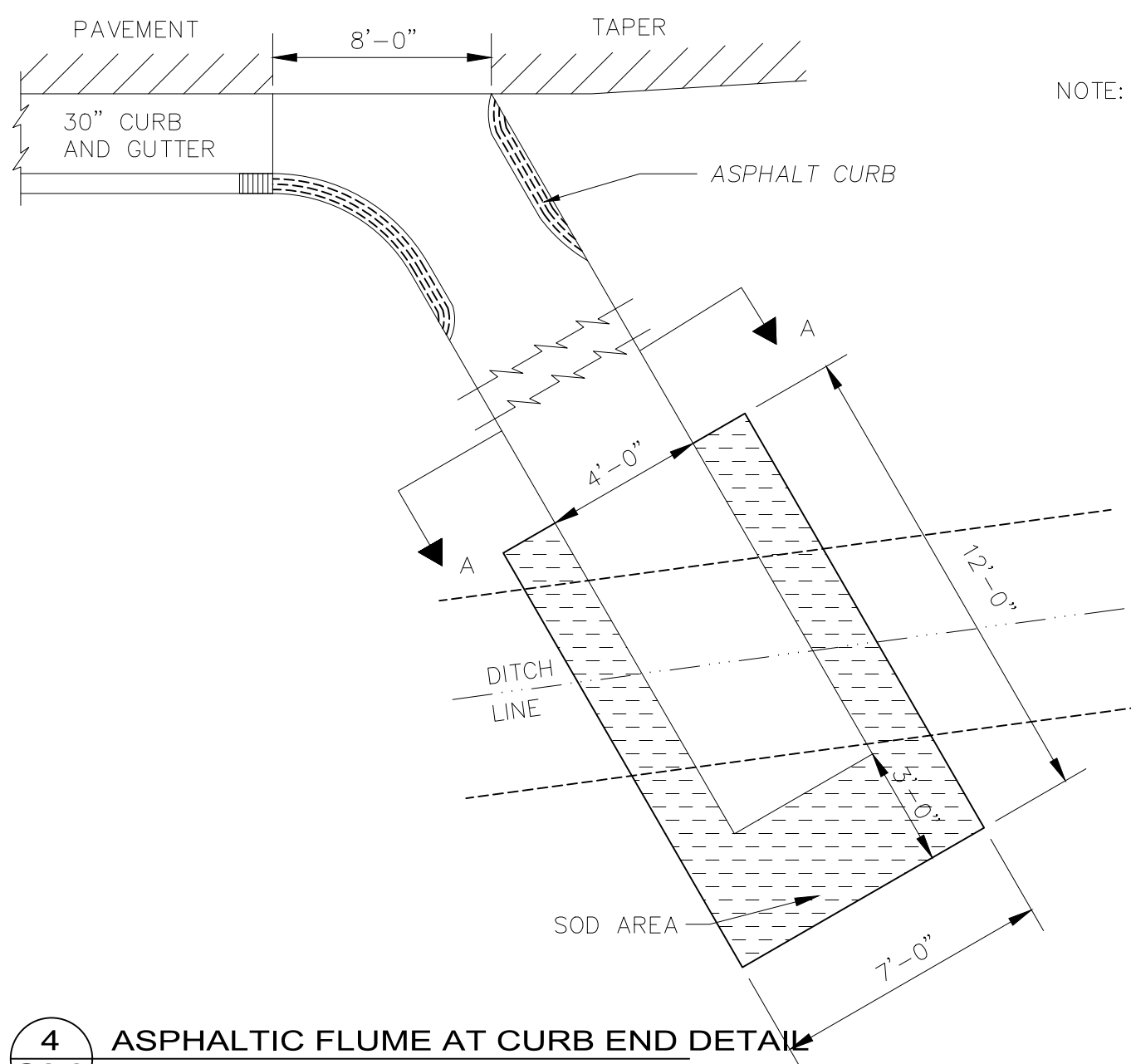
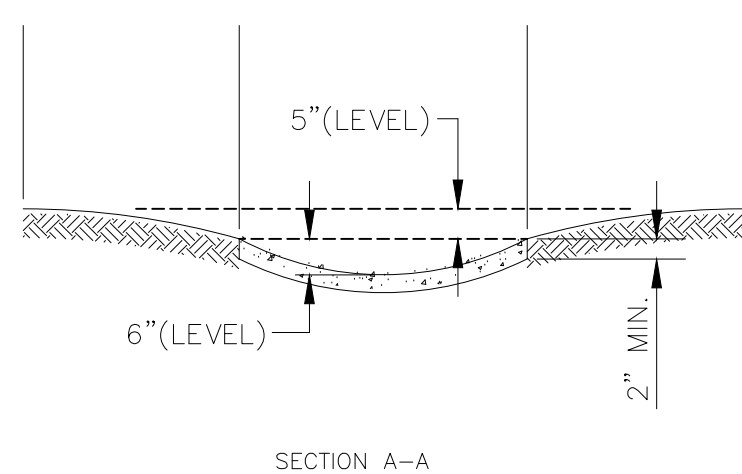
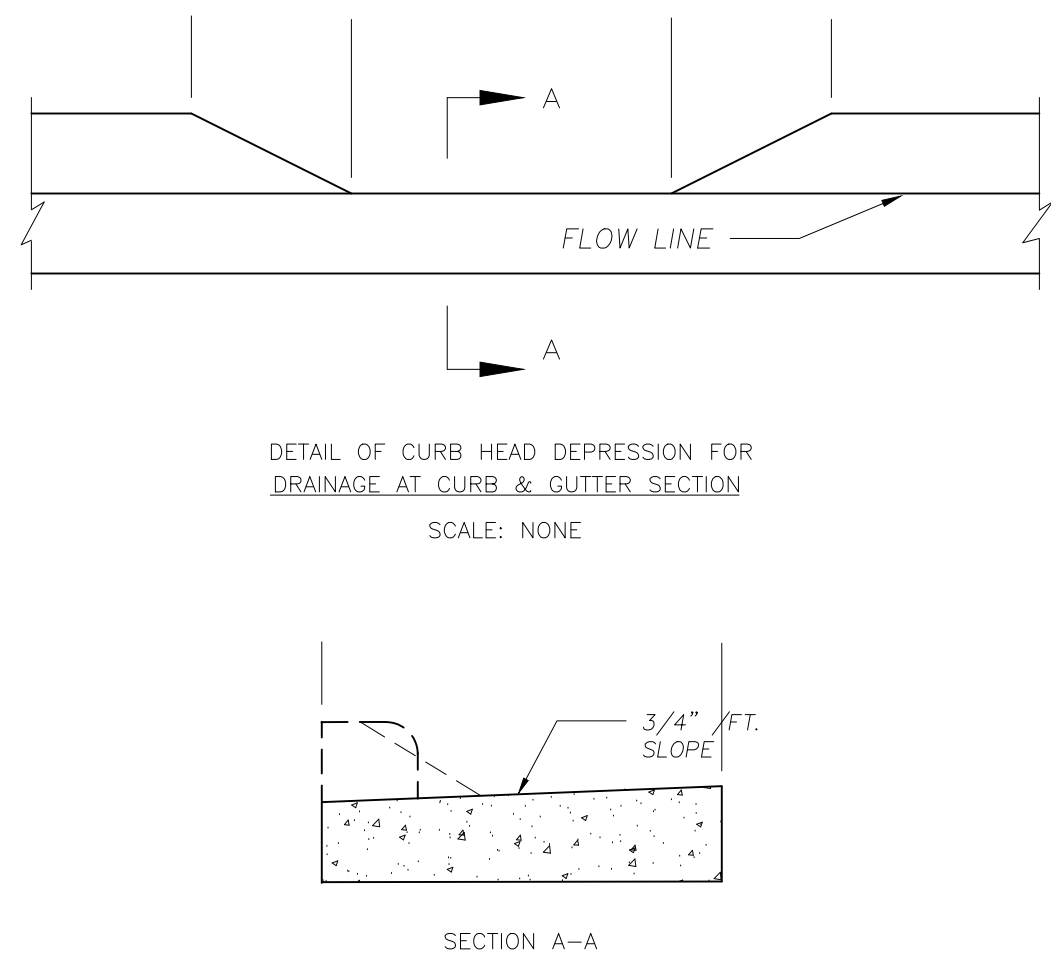
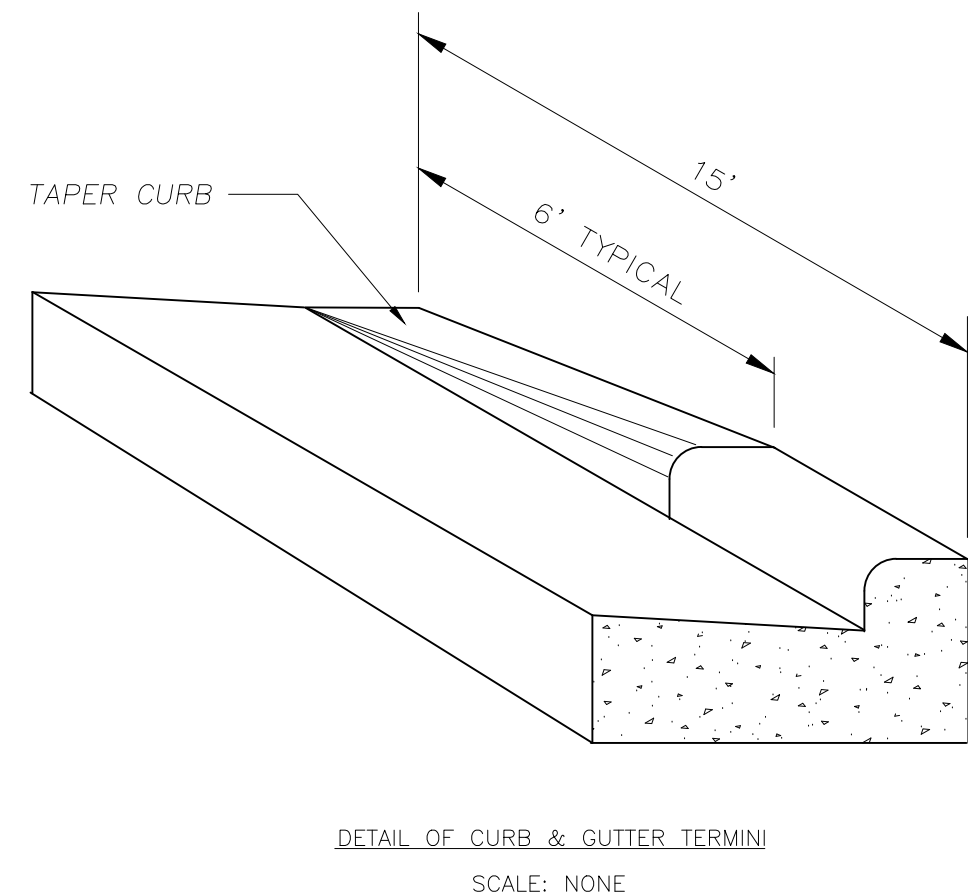
- NOTES
- FOR STRUCTURES LESS THAN 5.0' DEEP A PRECAST REINFORCED CONCRETE FLATTOP IS REQUIRED.
- WALL THICKNESS SHALL BE 5" FOR 48" MANHOLE AND 6" FOR 60" MANHOLE.

3 STORM SEWER MANHOLE DETAIL  
SCALE: NTS

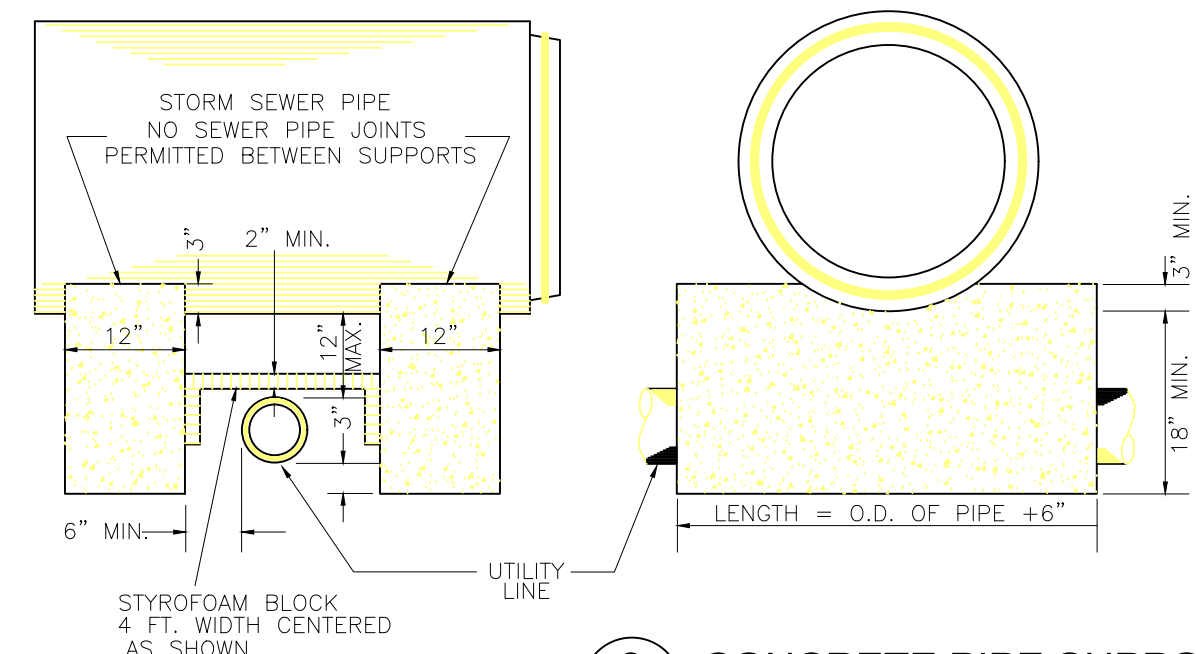


- NOTES:
- THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.
- PAINTING SPECIFICATIONS:
- THE PIPE GATE SHALL RECEIVE THE FOLLOWING PREPARATION & PAINTING. THE FIRST COAT SHALL BE RUS-OLEUM X-60 RED BARE METAL PRIMER OR APPROVED EQUAL. THE SECOND COAT SHALL BE RUS-OLEUM 960 ZINC CHROMATE PRIMER OR APPROVED EQUAL. THE THIRD COAT SHALL BE RUS-OLEUM 1282 HIGH GLOSS METAL FINISH OR APPROVED EQUAL.
- PREPARATION STEPS:
- BARE METAL SURFACES - TREAT WITH THE THREE-COAT PAINTING SYSTEM LISTED AFTER A THOROUGH SCRAPPING, WIRE BRUSHING & CLEANING.
  - EACH COAT OF PAINT SHALL BE APPLIED OVER THE ENTIRE GATE SURFACE.
  - ALLOW 24-48 HOURS DRYING TIME AT 60° OR ABOVE BETWEEN COATS.

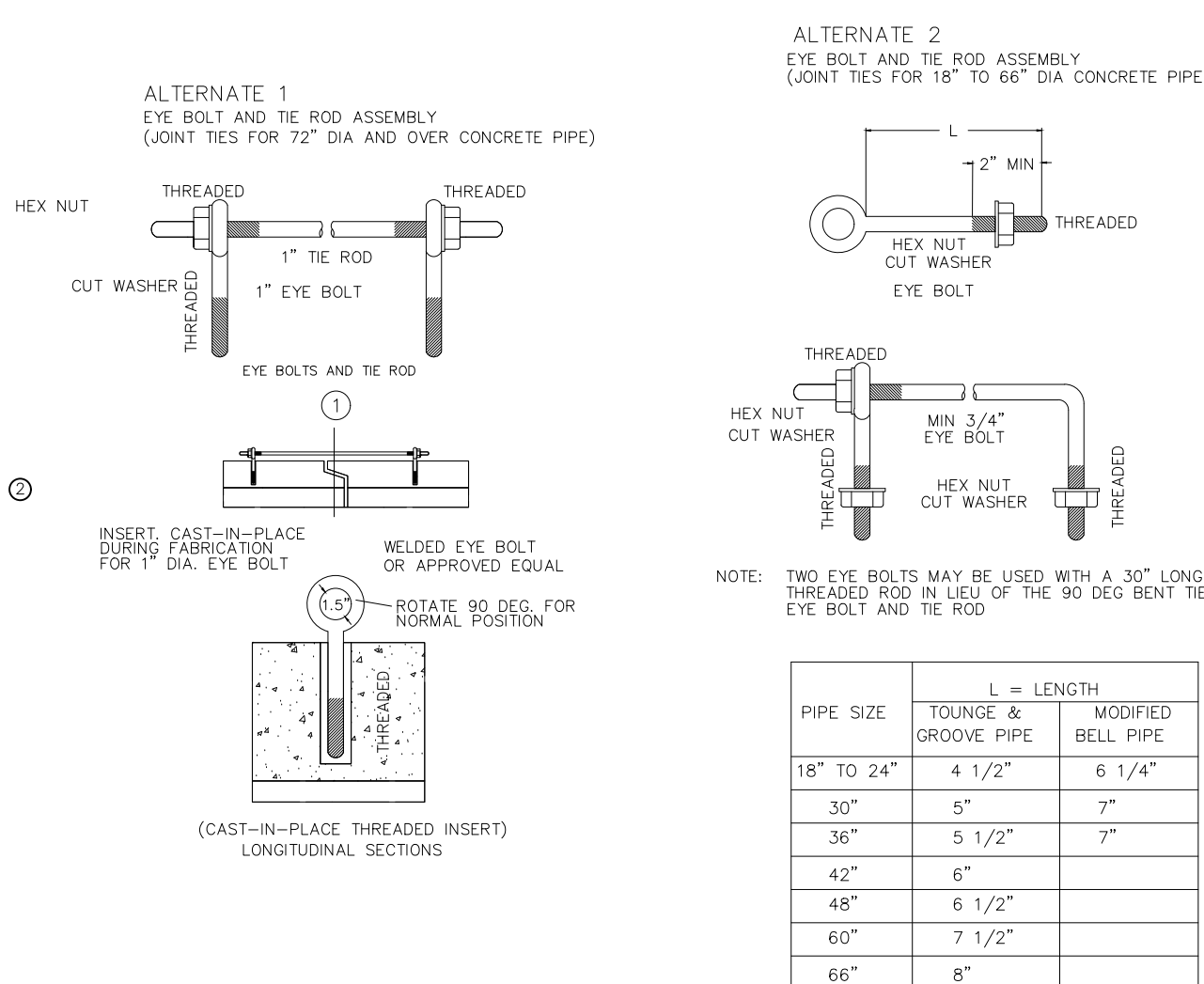
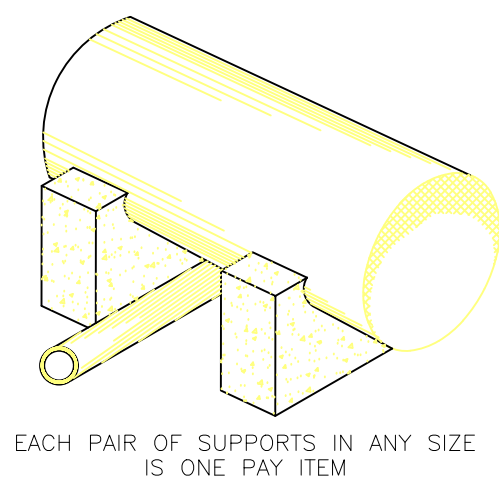
2 STANDARD ENDWALL DETAILS  
SCALE: NTS



4 ASPHALTIC FLUME AT CURB END DETAIL  
SCALE: NTS



6 CONCRETE PIPE SUPPORT  
SCALE: NTS



7 CONCRETE PIPE JOINT TIES  
SCALE: NTS



PRINTED:

Q

P

N

M

L

K

J

H

G

F

E

D

C

B

A



301 N Broom St., Suite 100  
Madison, WI 53703  
P: 608-819-0260  
F:  
www.opnarchitects.com

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by OPN Architects, Inc. as instruments of service shall remain the property of OPN Architects, Inc. OPN Architects, Inc. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

© 2017 OPN Architects, Inc.

Owner

Client Name  
Organization Description

Project

Project Name  
Project Address

Landscape Architect

CONFLUENCE  
900 2ND ST., SE, SUITE 104  
CEDAR RAPIDS, IA 52401  
P. 319-409-5401  
F. 515-288-8559

Civil Engineer

SNYDER AND ASSOCIATES  
5010 VOGES RD.  
MADISON, WI 53718  
P. 608-838-0444  
F. 608-838-0445

Structural Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Mechanical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Electrical Engineer

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Technology Consultant

IMEG  
1800 DEMING WAY, SUITE 200  
MIDDLETON, WI 53562  
P. 608-223-9600  
F. 608-223-9601

Revision

Date

OPN Project No.

Project Number

Sheet Issue Date

Project Status 01/01/2016

Sheet Name

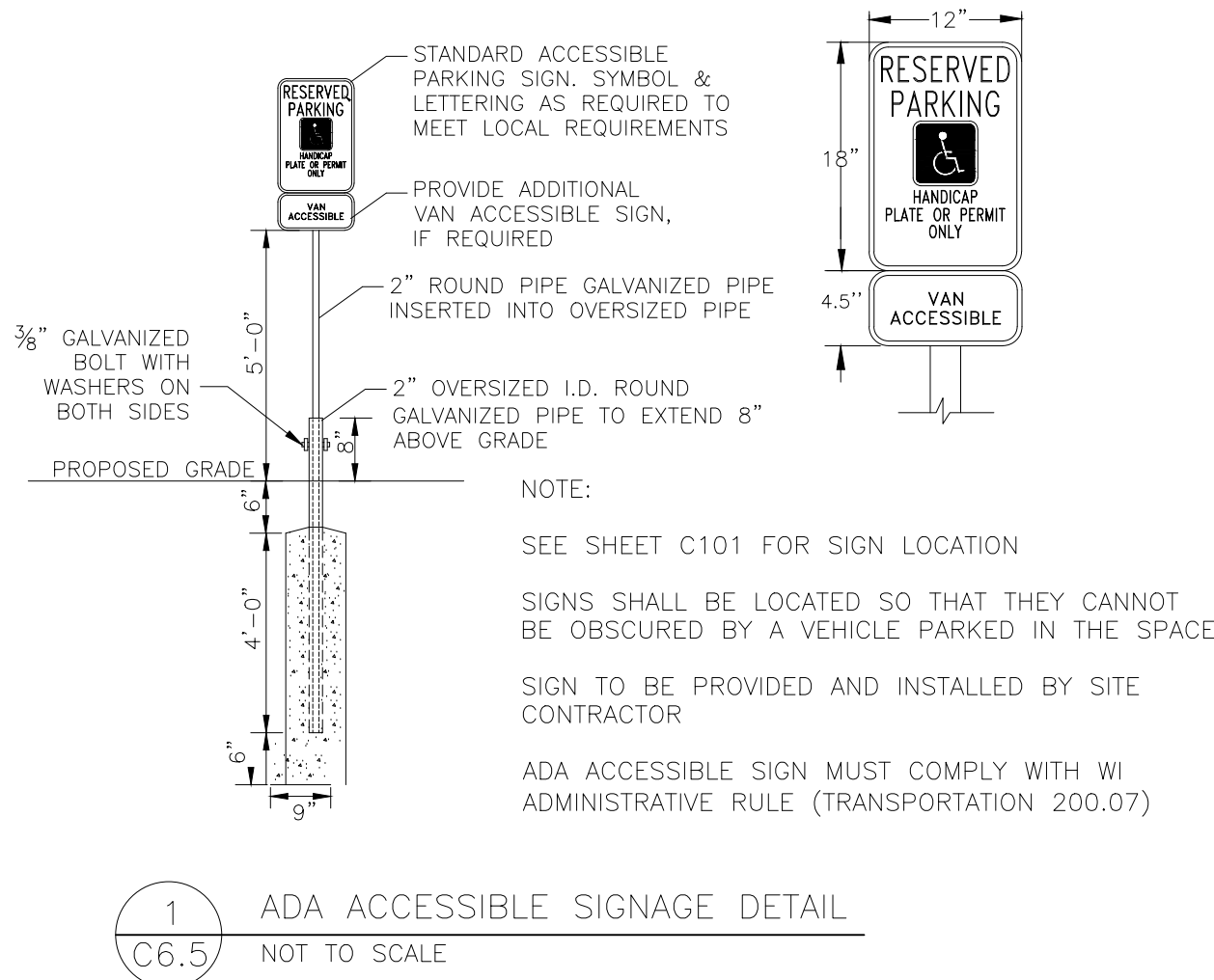
Details

Sheet Number

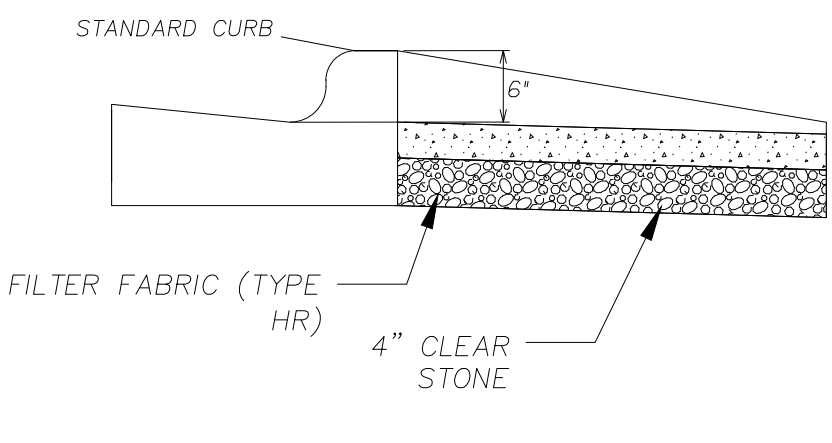
PRELIMINARY. NOT FOR CONSTRUCTION.



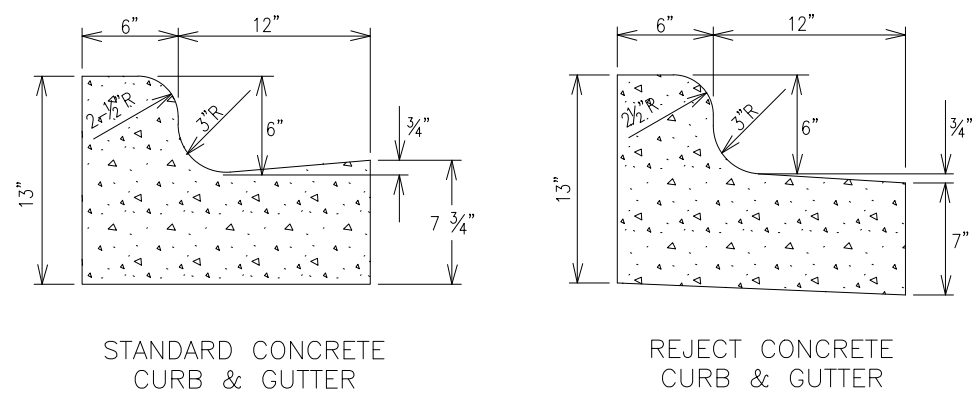
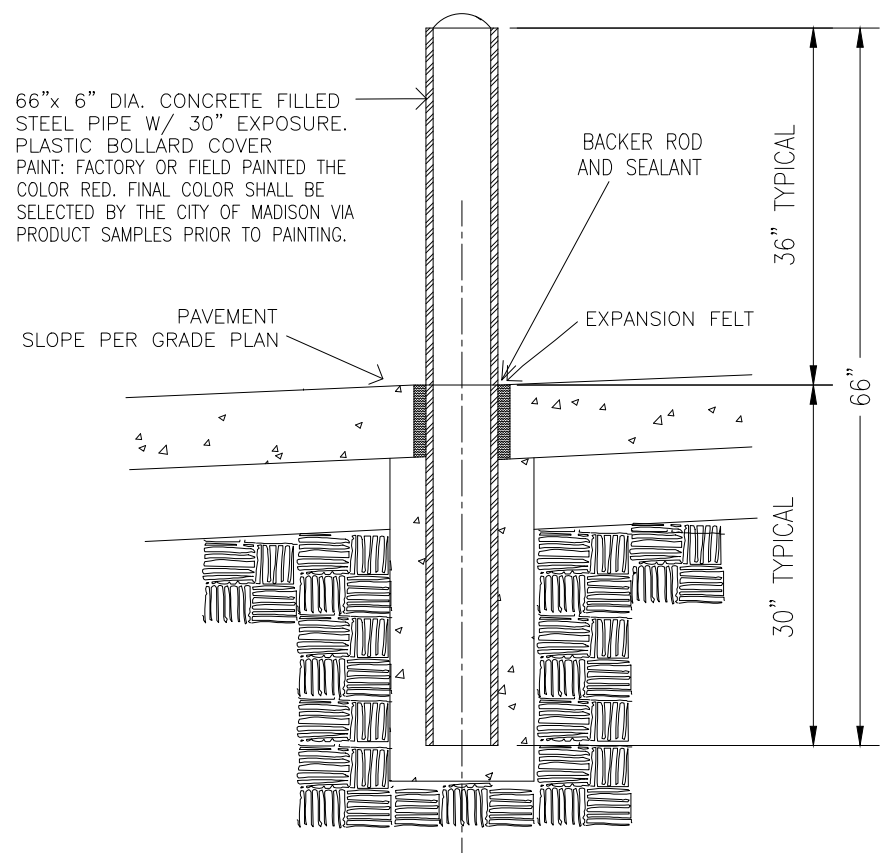
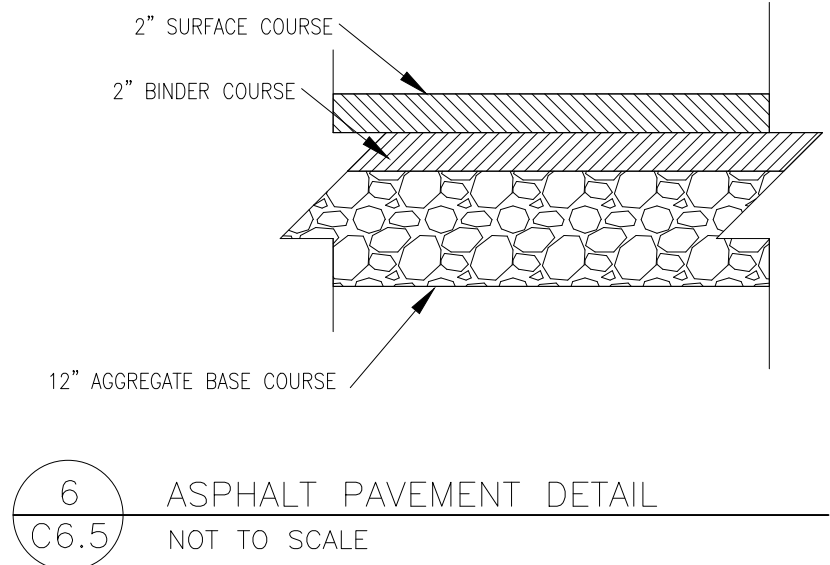
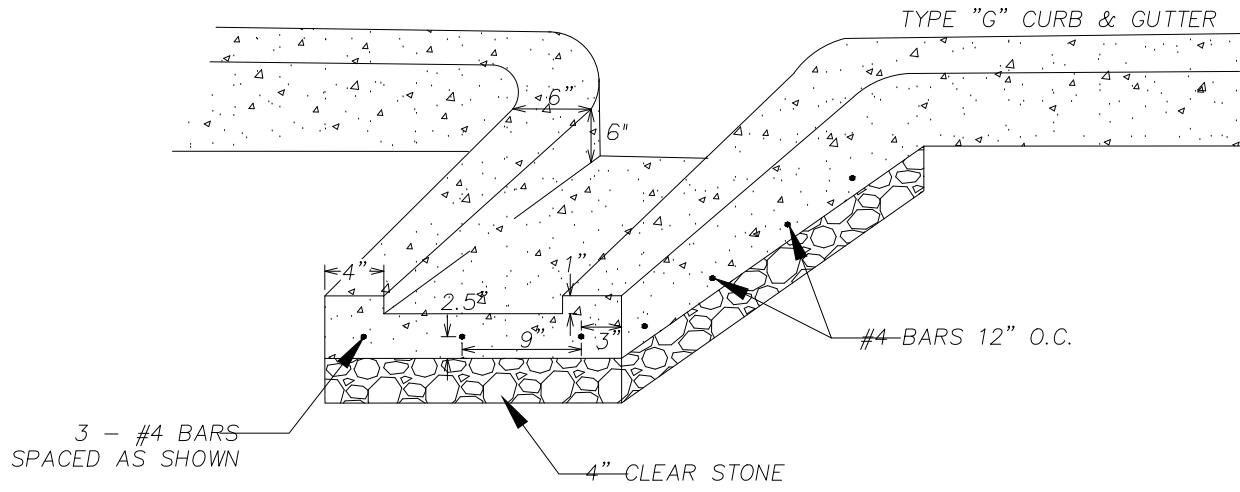
Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A



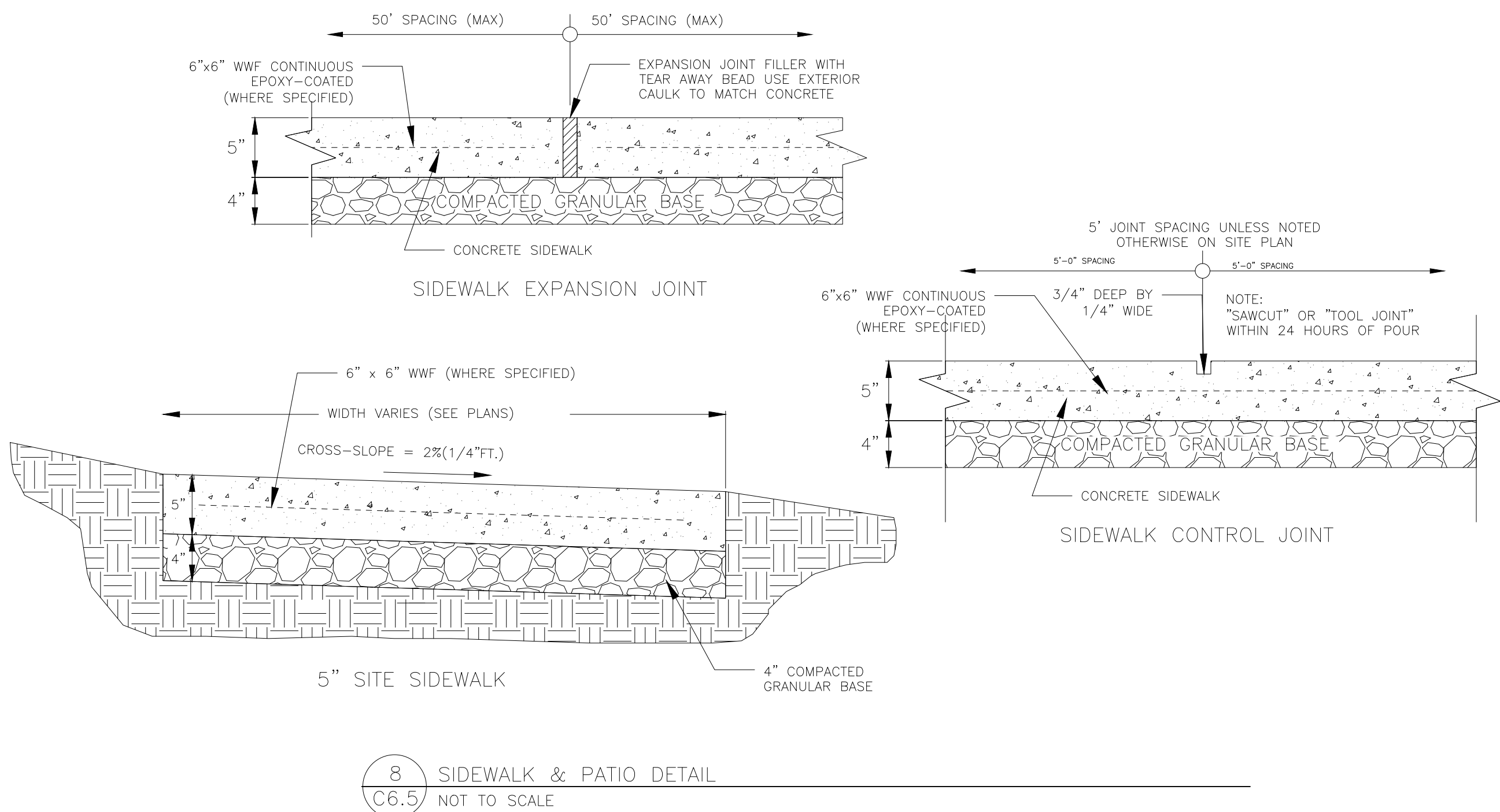
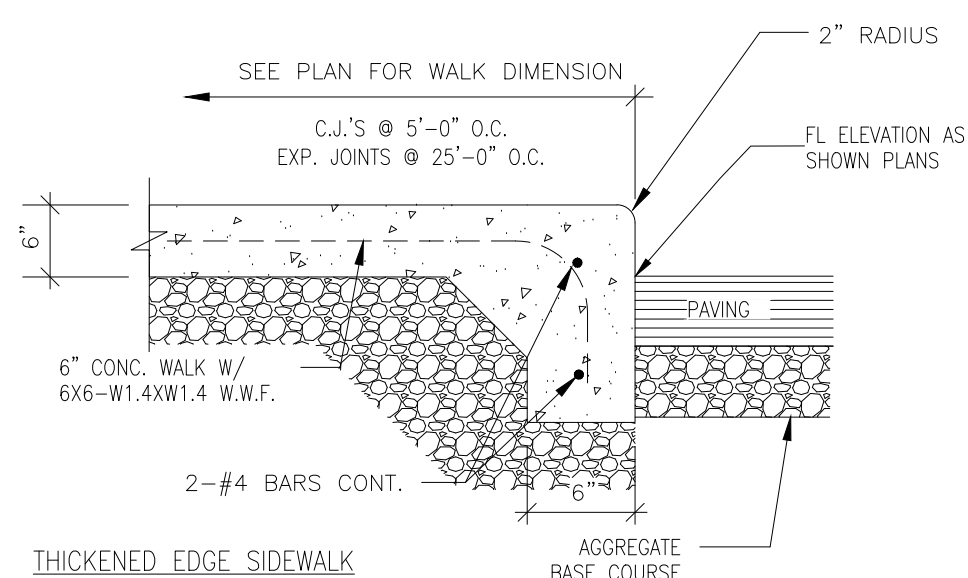
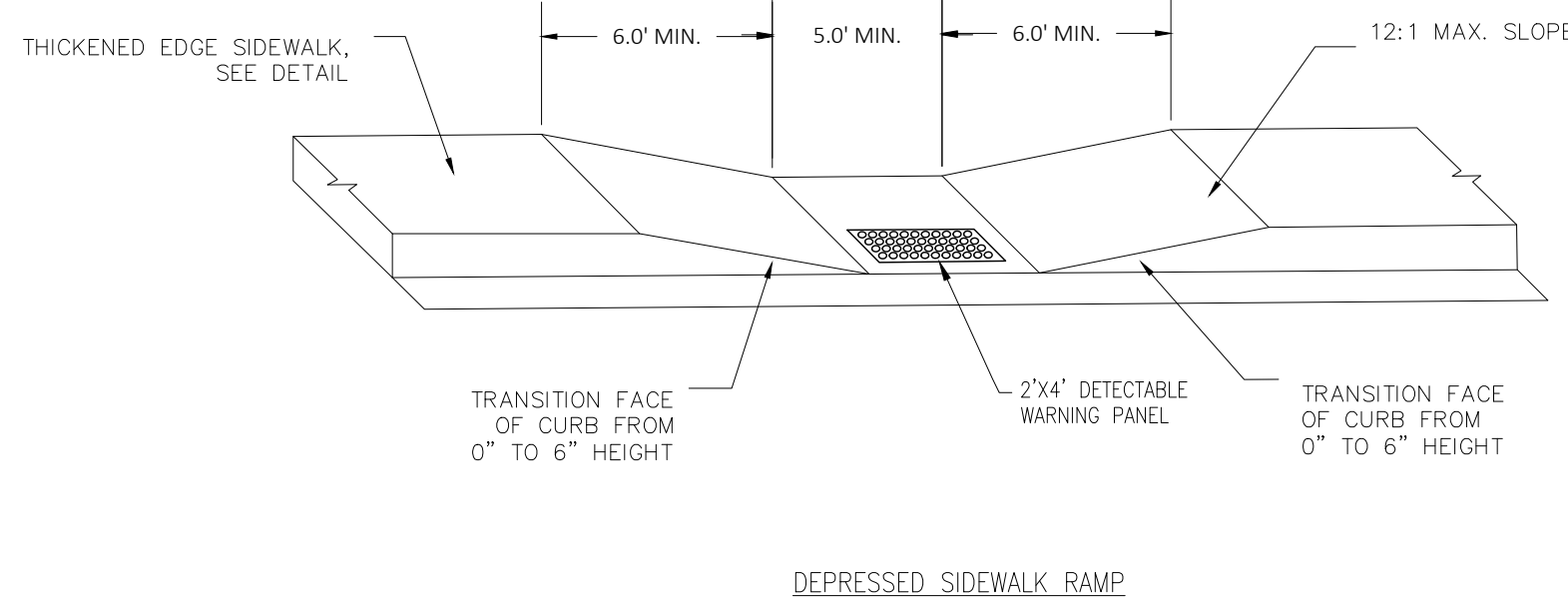
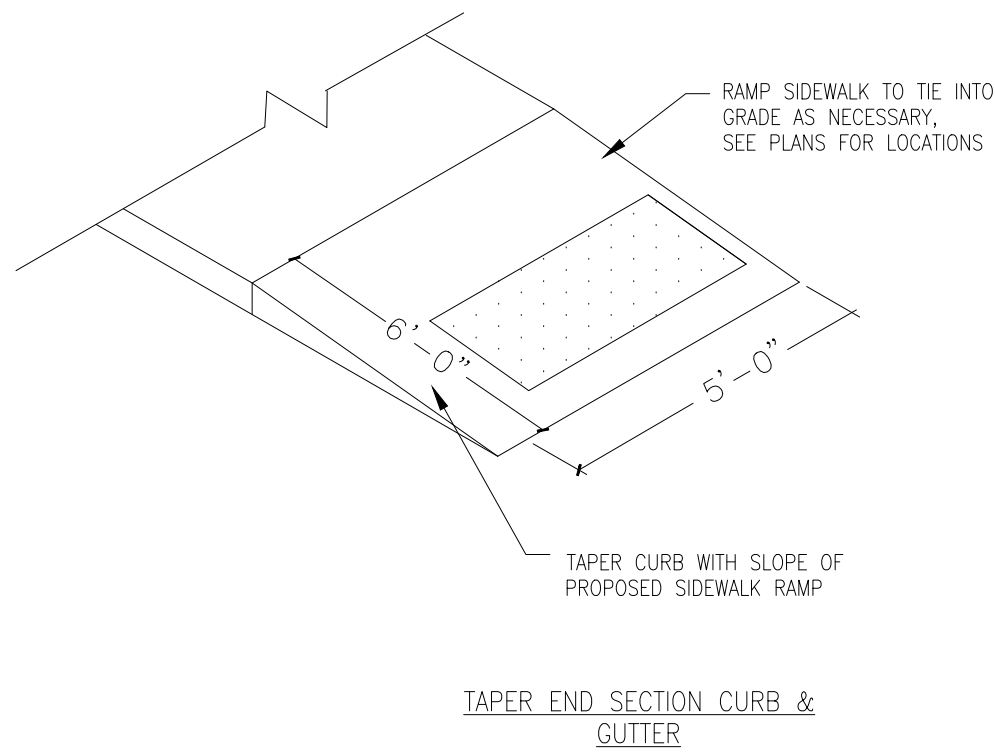
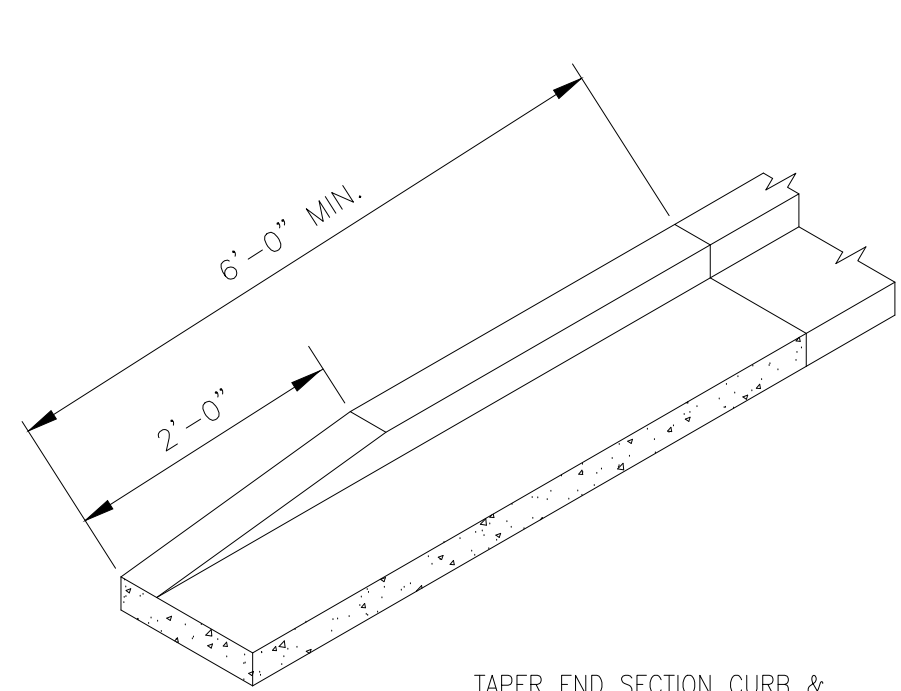
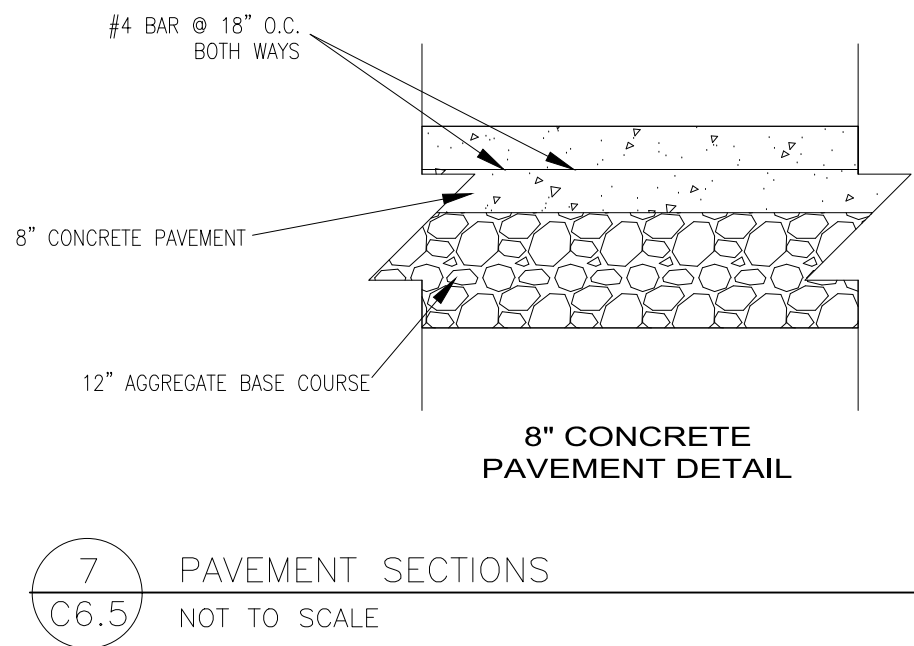
CONCRETE FLUME OPENING DETAIL (NOT TO SCALE)



CONCRETE FLUME DETAIL (NOT TO SCALE)



NOTES:  
LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER.  
THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE THAT IS 6" THICK.



PRELIMINARY. NOT FOR CONSTRUCTION.