

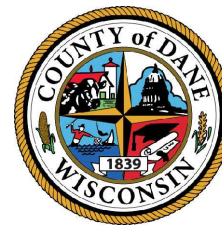
PLANS FOR THE
**DANE COUNTY NO. 2 (RODEFELD) LANDFILL
 RENEWABLE NATURAL GAS FACILITY**

ADDENDUM #1 FOR DEPARTMENT OF PLANNING & COMMUNITY & ECONOMIC DEVELOPMENT

PREPARED FOR:

**DANE COUNTY DEPARTMENT OF PUBLIC WORKS
 SOLID WASTE DIVISION
 MADISON, WISCONSIN**

FEBRUARY 2018



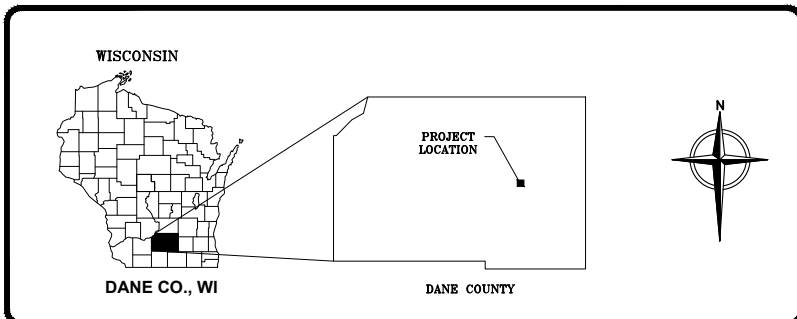
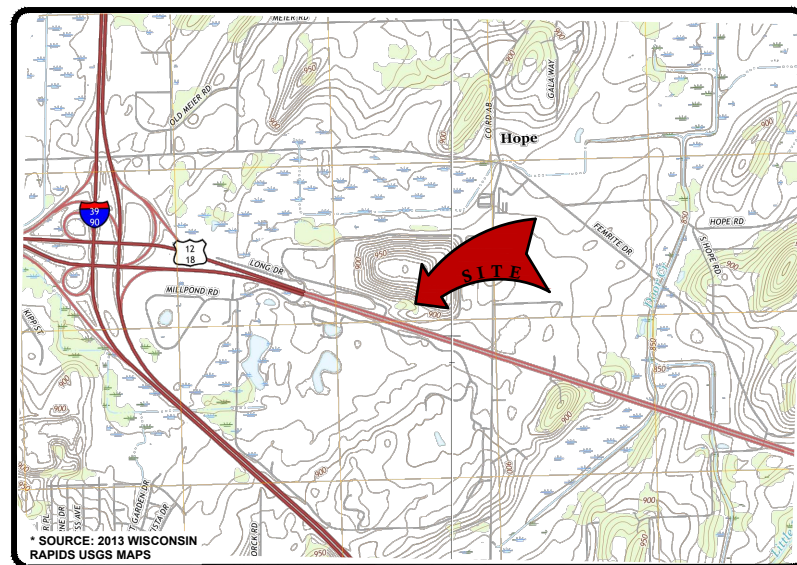
PREPARED BY:



8413 EXCELSIOR DRIVE
 SUITE 160
 MADISON, WISCONSIN, 53717
 Tel: (877) 633-5520

SHEET INDEX

A0	TITLE SHEET
A1	SITE PHOTOMETRIC PLAN
A2	SITE PHOTOMETRIC PLAN (SOUTHWEST)
A3	SITE PHOTOMETRIC PLAN (NORTHWEST)
A4	SITE PHOTOMETRIC PLAN (NORTH CENTRAL)
A5	SITE PHOTOMETRIC PLAN (SOUTH CENTRAL)
A6	SITE PHOTOMETRIC PLAN (SOUTHEAST)
A7	SITE PHOTOMETRIC PLAN (NORTHEAST)
A8	FENCE PRIVACY SCREENING
A9	3D RENDERING (ENTRANCE)
A10	3D RENDERING (SOUTHEAST VIEW)
A11	3D RENDERING (SOUTHWEST VIEW)
1	PRIVACY SCREENING CUT SHEET
2	BUILDING COLOR SCHEME
3	BUILDING ROOF AND WALL SYSTEM



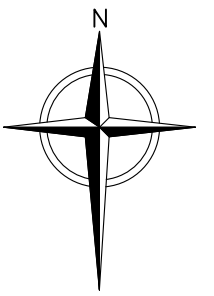
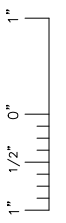
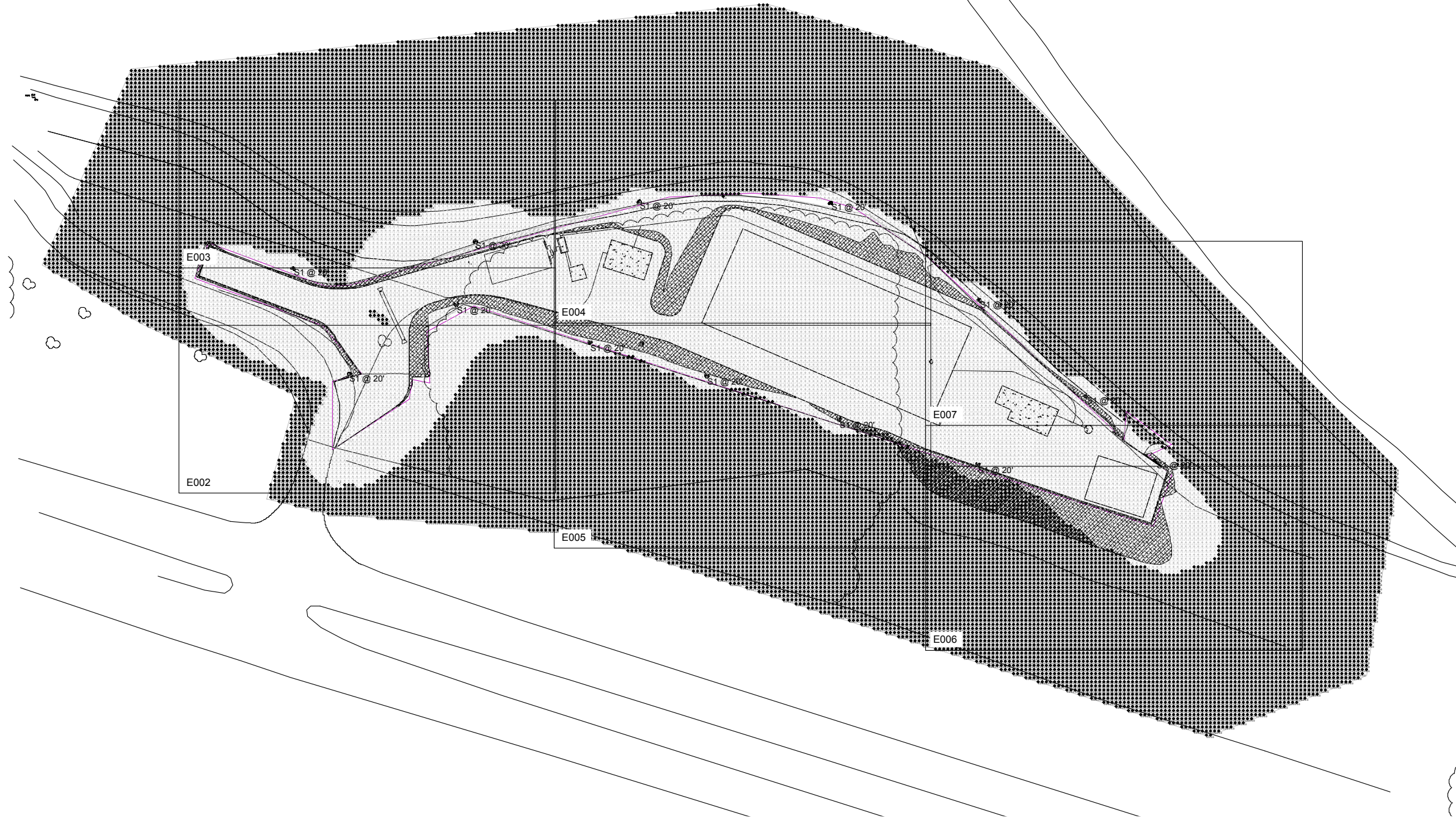
LOCATION MAP

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File: X:\PROJECTS\DANE COUNTY\10651 - RIG ENGINEERING SERVICES_Plan Set\VP0-MDC-S-C5.dwg Layout: Adst_A0 User: shoucumminga Feb 14, 2018 - 11:36am
 1" 1/2" 0"

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
□	S1	13	Beacon Products	PL-98-220-907-4W-FC	LARGE VAPER	A-75-CRI	1	PL-98-220-907-4W-FC	14811	0.85	230.6

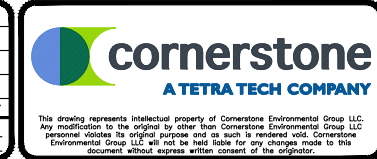
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Construction Boundary	+	0.0 fc	5.5 fc	0.0 fc	N/A	N/A
Lot and Drives	+	1.2 fc	7.0 fc	0.0 fc	N/A	N/A



75% REVIEW - NOT FOR CONSTRUCTION

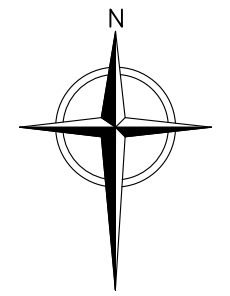
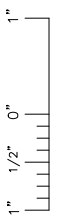
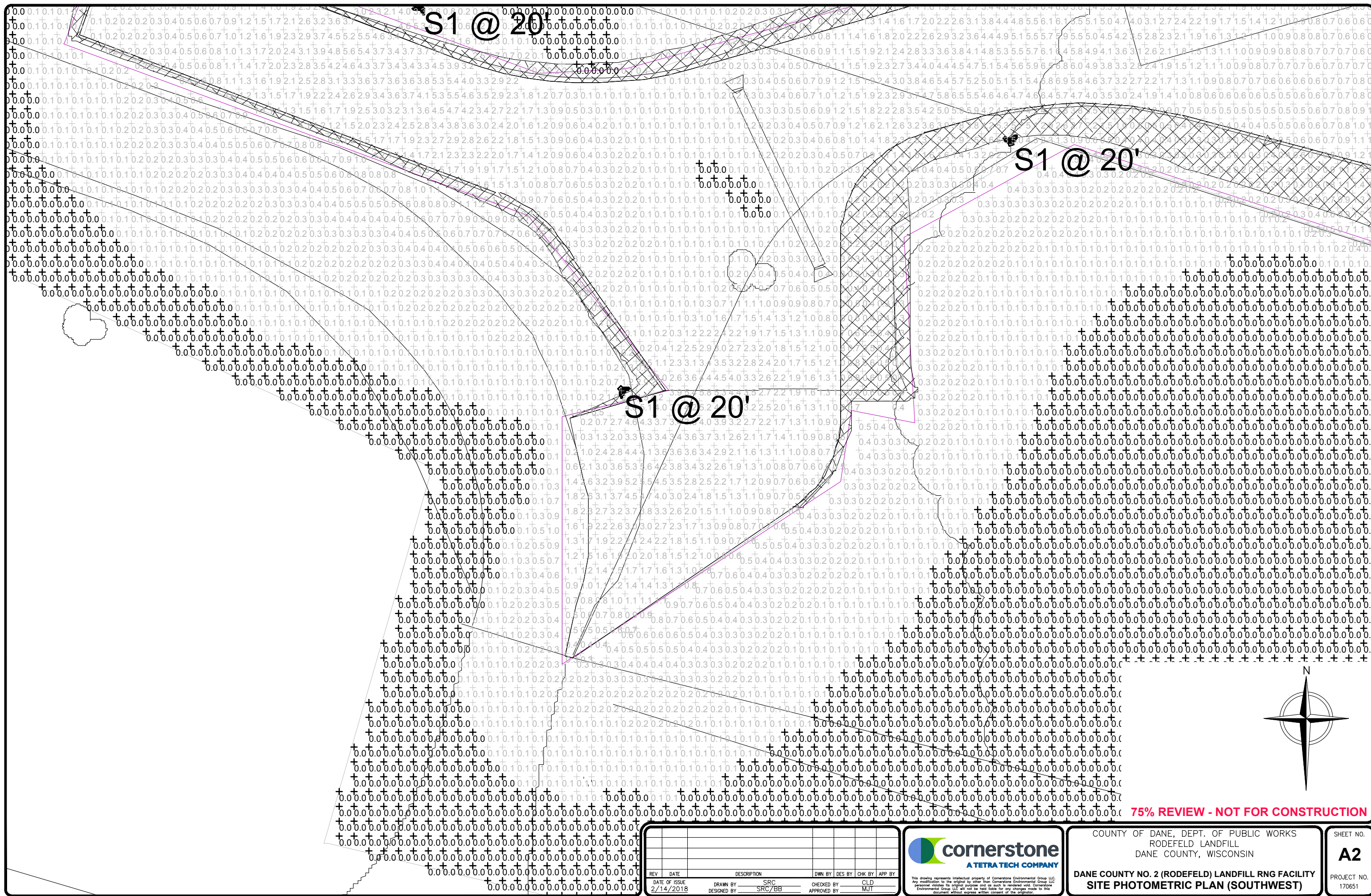
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DATE OF ISSUE: 2/14/2018
 DRAWN BY: SRC
 DESIGNED BY: SRC/BB
 CHECKED BY: CLD
 APPROVED BY: MJT



COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN**

SHEET NO.
A1
 PROJECT NO.
 170651



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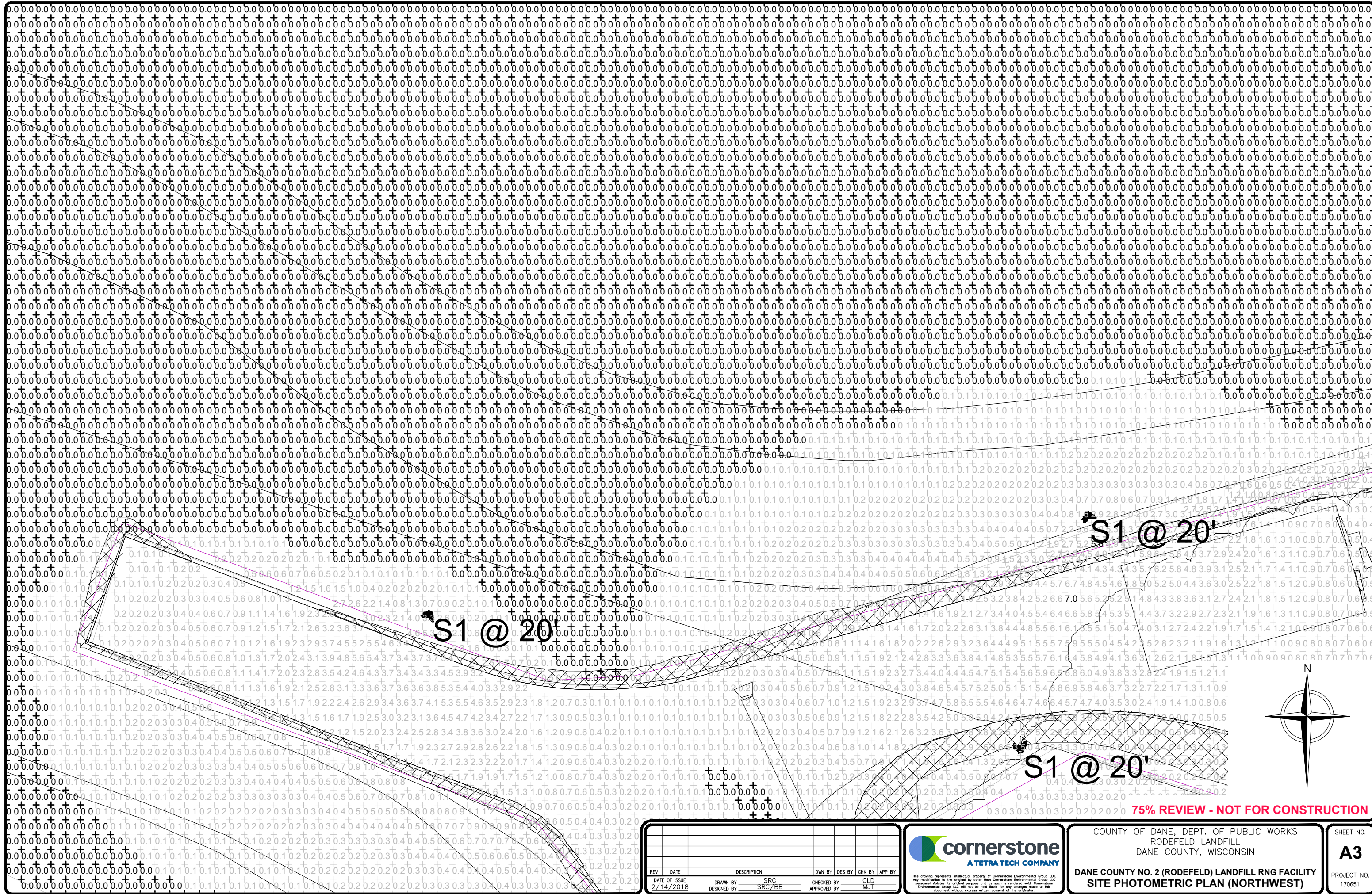
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DESIGNED BY	SRC/BB	APPROVED BY
		MJT

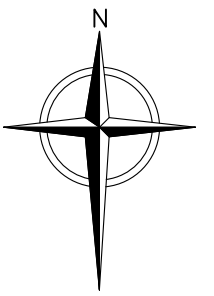


COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN (SOUTHWEST)**

SHEET NO.
A2
 PROJECT NO.
 170651



1" = 1/2' 0"



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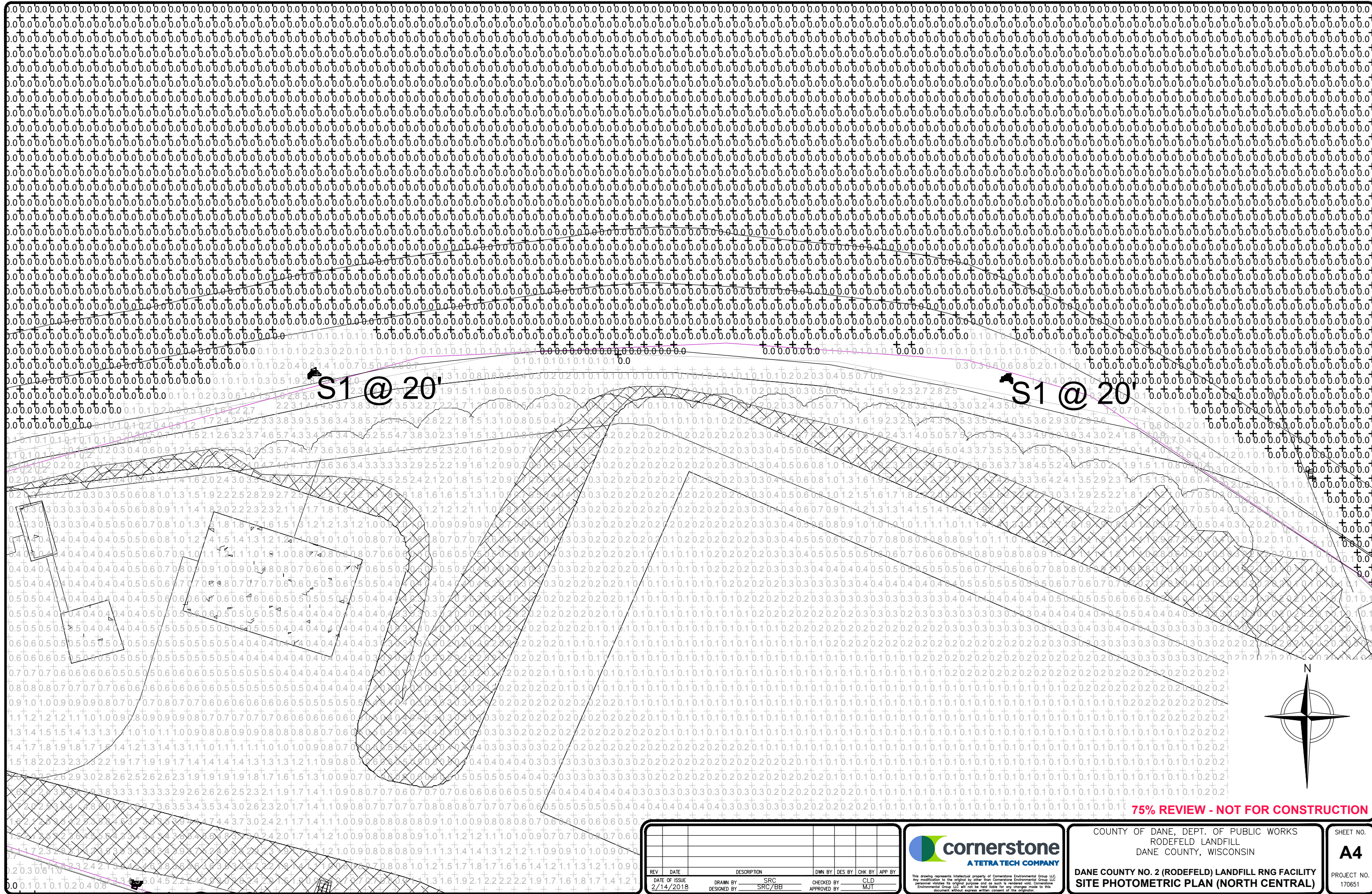
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2/14/2018	DESIGNED BY	SRC/BB	APPROVED BY	MJT



COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
 DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN (NORTHWEST)

SHEET NO.
A3
 PROJECT NO.
 170651

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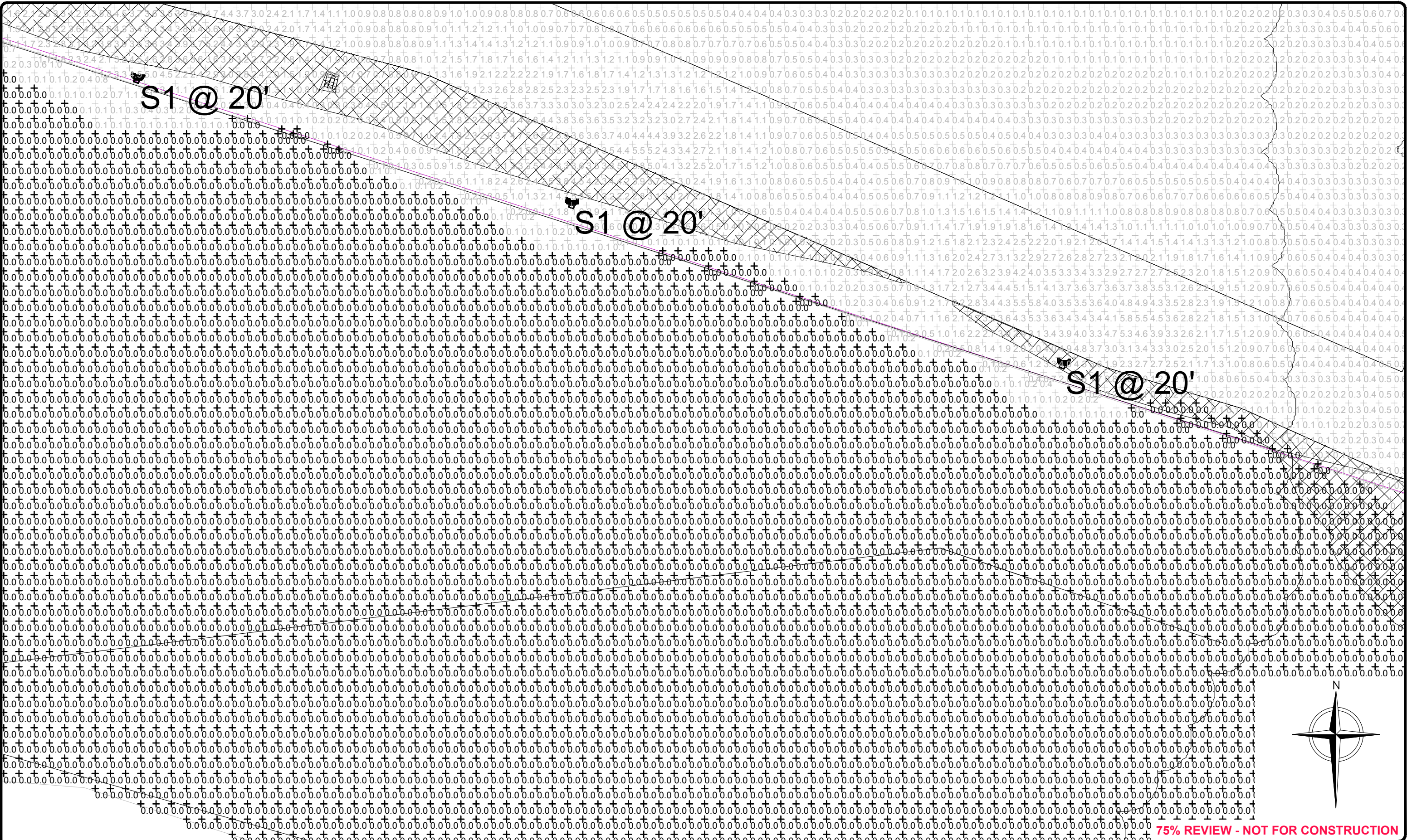
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2/14/2018	SRC	CLD
DESIGNED BY	SRC/BB	APPROVED BY
		MJT



COUNTY OF DANE, DEPT. OF PUBLIC WORKS
RODEFELD LANDFILL
DANE COUNTY, WISCONSIN

**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
SITE PHOTOMETRIC PLAN (NORTH CENTRAL)**

SHEET NO.
A4
PROJECT NO.
170651



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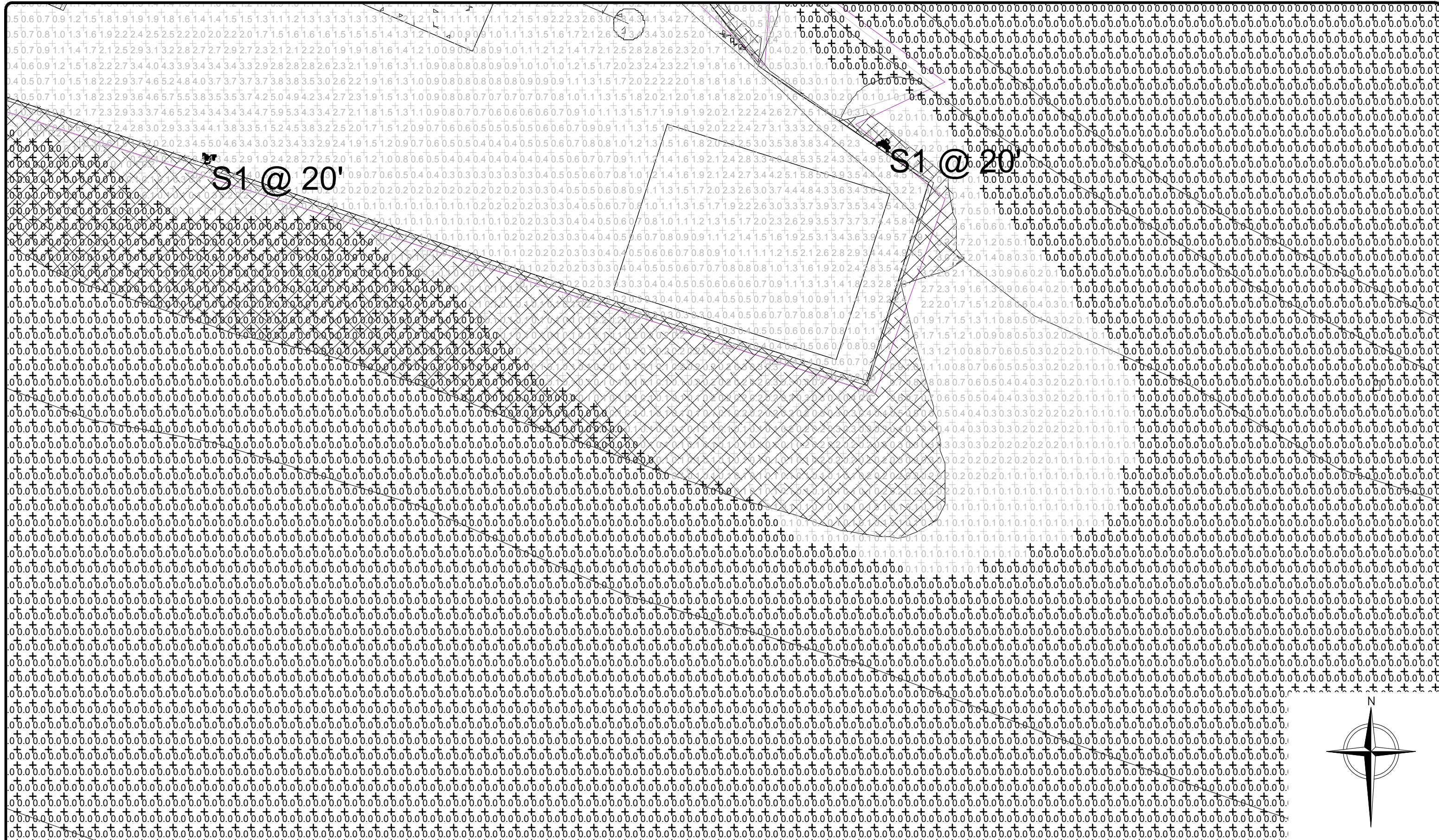
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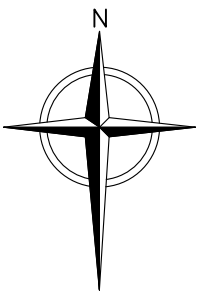
COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN

**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN (SOUTH CENTRAL)**

SHEET NO.
A5
 PROJECT NO.
 170651



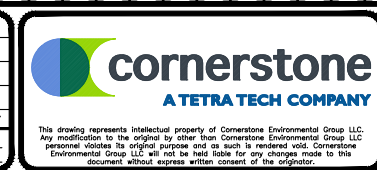
1" = 1/2" @ 0'



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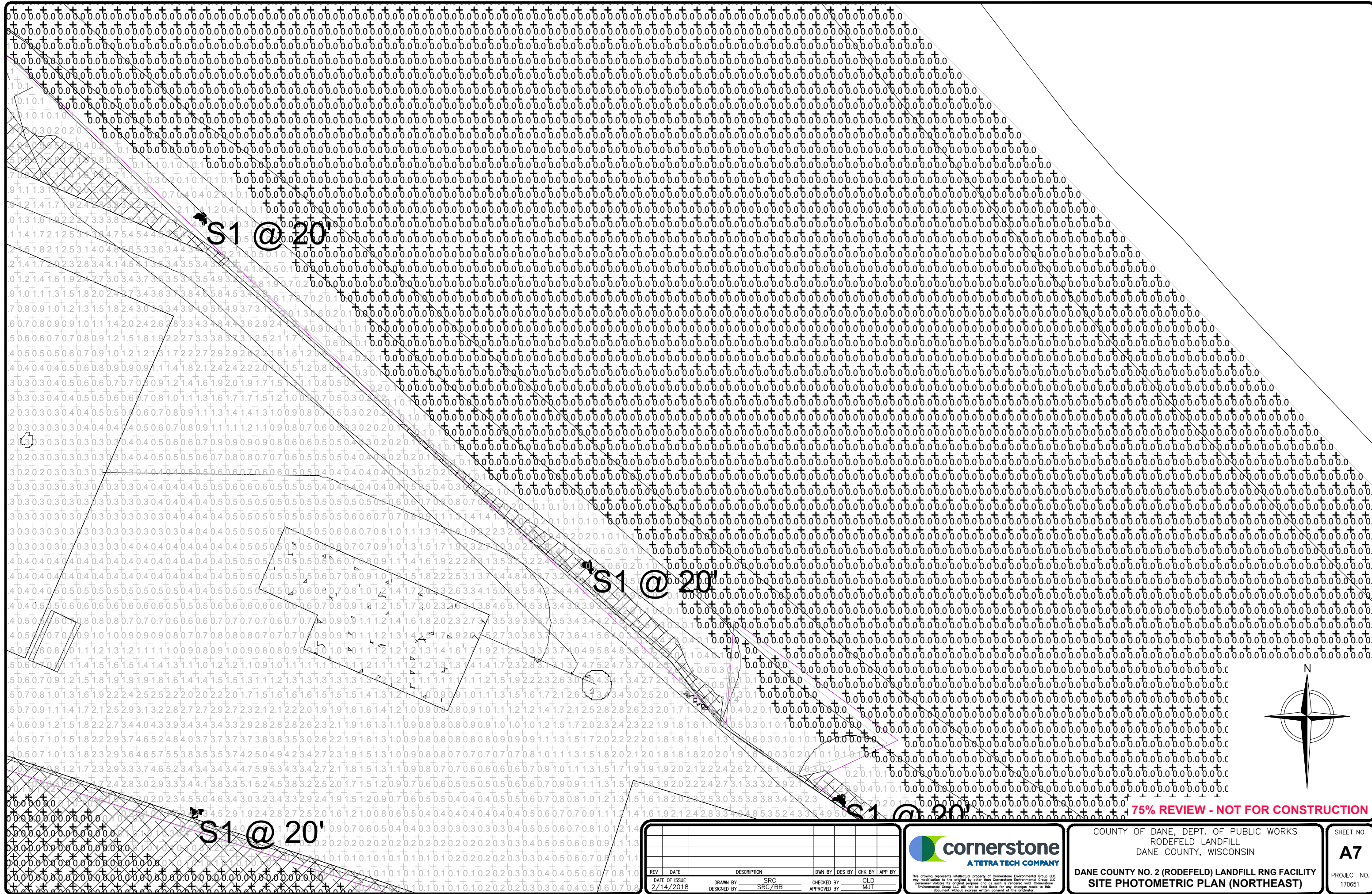
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 CHECKED BY: CLD
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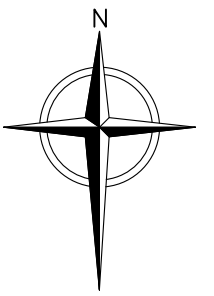
COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN

DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN (SOUTHEAST)

SHEET NO.
A6
 PROJECT NO.
 170651



1" = 1/2' = 0'



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DATE OF ISSUE: 2/14/2018
 DRAWN BY: SRC
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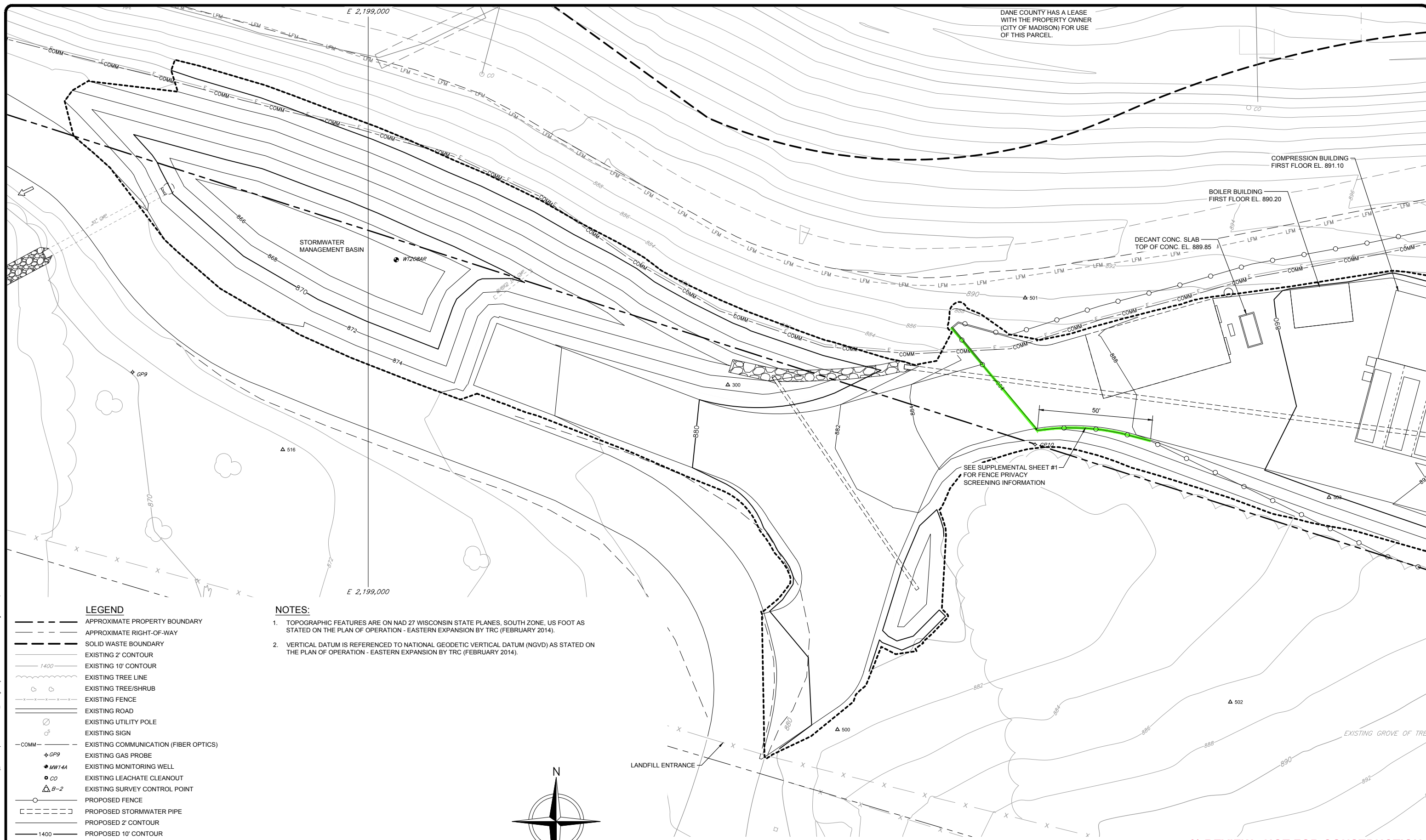


COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN

**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 SITE PHOTOMETRIC PLAN (NORTHEAST)**

SHEET NO.
A7
 PROJECT NO.
 170651

DANE COUNTY HAS A LEASE WITH THE PROPERTY OWNER (CITY OF MADISON) FOR USE OF THIS PARCEL.

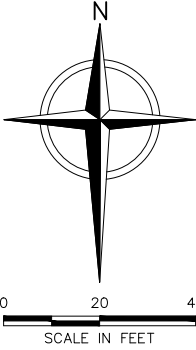


LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- SOLID WASTE BOUNDARY
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING TREE LINE
- EXISTING TREE/SHRUB
- EXISTING FENCE
- EXISTING ROAD
- EXISTING UTILITY POLE
- EXISTING SIGN
- EXISTING COMMUNICATION (FIBER OPTICS)
- EXISTING GAS PROBE
- EXISTING MONITORING WELL
- EXISTING LEACHATE CLEANOUT
- EXISTING SURVEY CONTROL POINT
- PROPOSED FENCE
- PROPOSED STORMWATER PIPE
- PROPOSED 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED LIMITS OF EXCAVATION
- PROPOSED PRIVACY SCREENING

NOTES:

1. TOPOGRAPHIC FEATURES ARE ON NAD 27 WISCONSIN STATE PLANES, SOUTH ZONE, US FOOT AS STATED ON THE PLAN OF OPERATION - EASTERN EXPANSION BY TRC (FEBRUARY 2014).
2. VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM (NGVD) AS STATED ON THE PLAN OF OPERATION - EASTERN EXPANSION BY TRC (FEBRUARY 2014).



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DATE OF ISSUE: 2/14/2018
 DRAWN BY: SRC
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COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
**DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
 FENCE PRIVACY SCREENING**

SHEET NO.
A8
 PROJECT NO.
 170651

THIS VIEW IS INCLUDED TO SPECIFICALLY SHOW FENCE DETAILS. BUILDING LOCATIONS ARE APPROXIMATE.



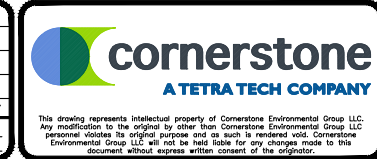
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RENDERINGS BY ENVISION CAD (02/13/2018)

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DATE OF ISSUE	DRAWN BY	CHECKED BY
2/14/2018	SRC	CLD
DESIGNED BY	SRC/BB	APPROVED BY
		MJT



COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
3D RENDERING (ENTRANCE)

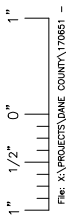
SHEET NO.
A9
 PROJECT NO.
 170651

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SEE SUPPLEMENTAL SHEET #2 FOR BUILDING COLOR SELECTION. SEE SUPPLEMENTAL SHEET #3 FOR BUILDING MATERIAL SELECTION.



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 User: atuncummins Feb 14, 2018 - 11:47am
 Layout: A10



RENDERINGS BY ENVISION CAD (02/13/2018)

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DATE OF ISSUE	DRAWN BY	CHECKED BY
2/14/2018	SRC	CLD
DESIGNED BY	SRC/BB	APPROVED BY
		MJT



COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN

DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
3D RENDERING (SOUTHEAST VIEW)

SHEET NO.
A10

PROJECT NO.
 170651

SEE SUPPLEMENTAL SHEET #2 FOR BUILDING COLOR SELECTION. SEE SUPPLEMENTAL SHEET #3 FOR BUILDING MATERIAL SELECTION.



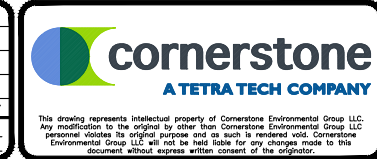
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RENDERINGS BY ENVISION CAD (02/13/2018)

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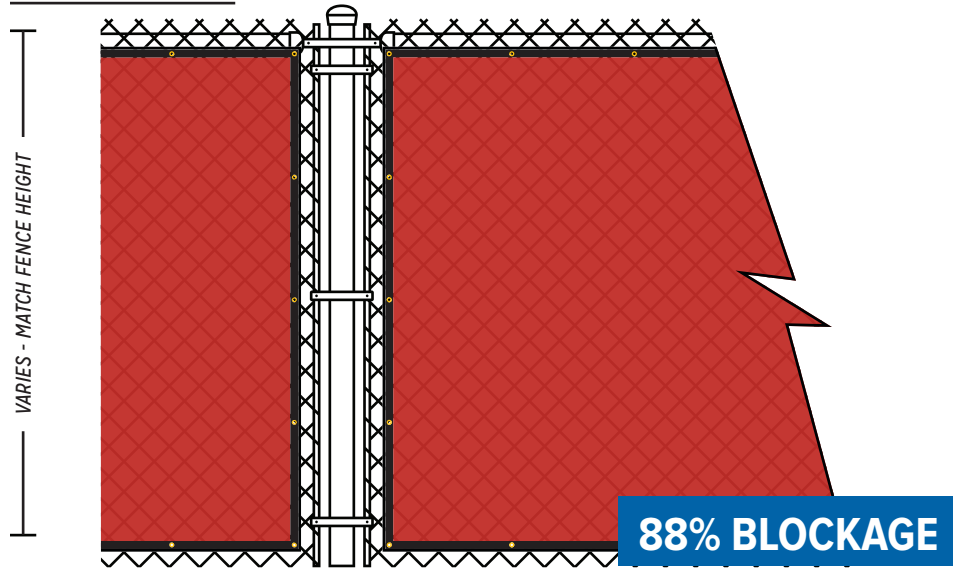
COUNTY OF DANE, DEPT. OF PUBLIC WORKS
 RODEFELD LANDFILL
 DANE COUNTY, WISCONSIN
DANE COUNTY NO. 2 (RODEFELD) LANDFILL RNG FACILITY
3D RENDERING (SOUTHWEST VIEW)

SHEET NO.
A11
 PROJECT NO.
 170651

200 SERIES

PRIVACY SCREEN PLUS

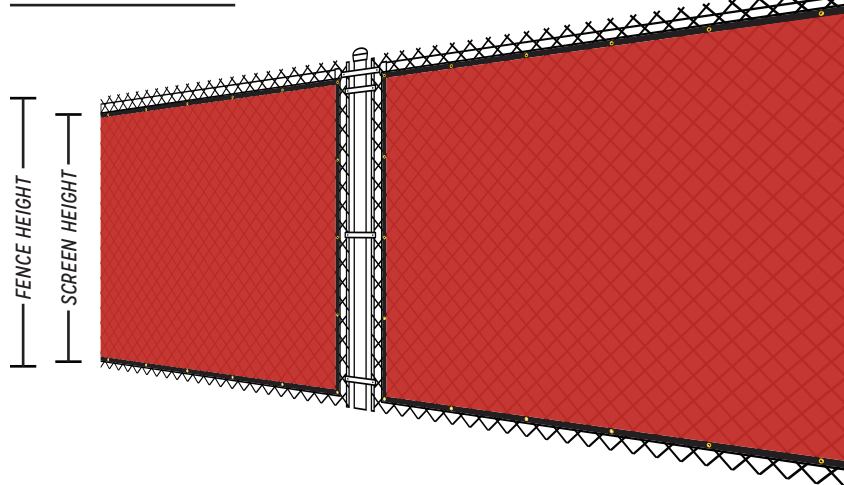
Elevation View



- FENCESCREEN PANELS WITH 2" POLYPROPYLENE WEBBING FOR EDGE REINFORCEMENT.
- 3/8" BRASS GROMMETS AT 24" ON CENTER ATTACH TO FENCE WITH FENCESCREEN FASTENERS OR GALVANIZED HOG RINGS.

Selected Color

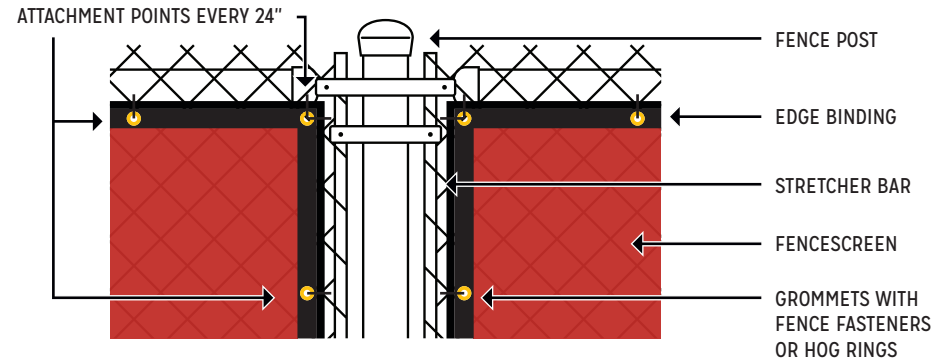
Perspective View



FENCESCREEN SPECIFICATIONS

PROPERTIES	RESULTS
Filament Strength	50 lbs. per ft.
Material Break Strength	500 lbs. per ft.
Material Weight	175 g/m ²
Crystalline Melt Point	133° C
Composition of UV Inhibitor	1.5% Amplas CM111821 / 1.5% Equaster CM 106000
Flamability Point	364° C
Shade / Wind Blockage	88%

Attachment Enlargement



- NOTE:
- INSTALL PER FENCESCREEN MANUFACTURER RECOMMENDATIONS.
 - REFER TO STRUCTURAL PLANS FOR ALL FOOTING SIZES.

Available Colors

Green, Black, Olive, Tan, Royal Blue, White, Gray, Orange, Red, Navy Blue, Chestnut



Material Composition

Privacy Screen Plus is made from knitted high density polyethylene with UV additives.

Drawings not to scale.

Detail Name:
200 Series Privacy Screen Plus

Drawing Number:
FSPS200



PHONE: 1.888.313.6313

| www.FenceScreen.com



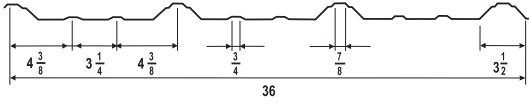
Color Chart *Selections*



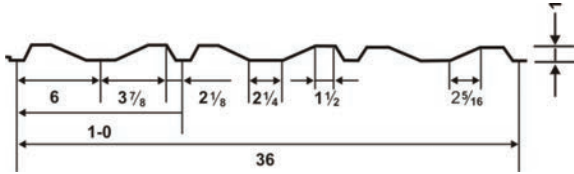
Star Building Systems
COLOR CHART

STAR STANDARD COLORS

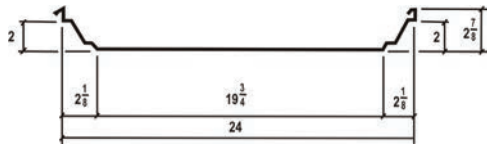
DURA-RIB®



STARMARK



STARSHIELD®



Field Seamed System

SIGNATURE® 200 | SILICONIZED POLYESTER | Polar White is a Straight Polyester.



POLAR WHITE ★
SR .58 SRI 69



ASH GRAY ★
SR .48 SRI 56



BURNISHED SLATE ★
SR .28 SRI 29



HAWAIIAN BLUE ★
SR .32 SRI 35



CHARCOAL GRAY ★
SR .28 SRI 30



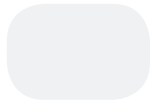
LIGHT STONE ★
SR .50 SRI 58



SADDLE TAN ★
SR .48 SRI 56

Note: 26-gauge material available in all colors. 24-gauge material available in Light Stone and Polar White only. All color selections may not be available in each profile or in the required KSI yield strength. Standard roll-formed gutter and gable trim are available in Polar White, Light Stone, Hawaiian Blue and Burnished Slate.

SIGNATURE® 300 | KYNAR 500® | HYLAR 5000®



SNOW WHITE ★
SR .65 SRI 79



SLATE GRAY ★
SR .37 SRI 41



CLASSIC GREEN ★
SR .28 SRI 30



PACIFIC BLUE ★
SR .29 SRI 31



COLONIAL RED ★
SR .34 SRI 37



ALMOND ★
SR .63 SRI 76



BROWNSTONE ★
SR .47 SRI 54

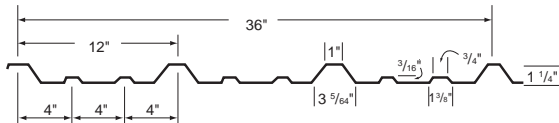


MEDIUM BRONZE ★
SR .33 SRI 36

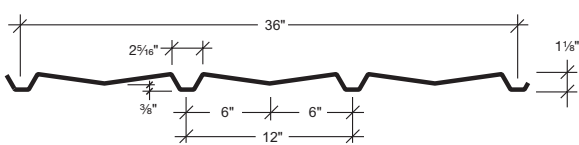
Note: Roof panels, wall panels and roll-formed gutter and gable trim are available in all Signature® 300 colors.

COMMERCIAL/ INDUSTRIAL & FASTAR COLORS

PBR



PBA



SIGNATURE® 200 | SILICONIZED POLYESTER



POLAR WHITE ★
SR .58 SRI 69



LIGHT STONE ★
SR .50 SRI 58



FERN GREEN ★
SR .28 SRI 29



HAWAIIAN BLUE ★
SR .32 SRI 35



DESERT SAND ★
SR .42 SRI 48



ASH GRAY ★
SR .48 SRI 56



SADDLE TAN ★
SR .48 SRI 56



RUSTIC RED ★
SR .36 SRI 40



GALLERY BLUE ★
SR .28 SRI 30



CHARCOAL GRAY ★
SR .28 SRI 30



KOKO BROWN ★
SR .28 SRI 30



BURNISHED SLATE ★
SR .28 SRI 29



CRIMSON RED ★
SR .33 SRI 34

SIGNATURE® 300 | KYNAR 500® | HYLAR 5000® TRIM



SNOW WHITE ★
SR .65 SRI 79



ALMOND ★
SR .63 SRI 76



SLATE GRAY ★
SR .37 SRI 41



HARBOR BLUE ★
SR .28 SRI 30



BRITE RED ★
SR .49 SRI 55



BROWNSTONE ★
SR .47 SRI 54



MEDIUM BRONZE ★
SR .33 SRI 36



CLASSIC GREEN ★
SR .28 SRI 30

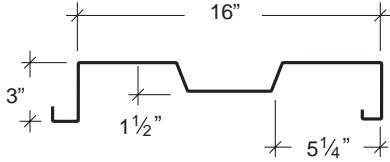
WALL PANELS

DOORS

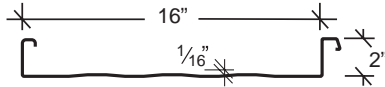


ARCHITECTURAL COLORS

STARCFW II

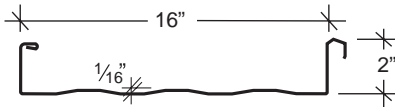


BATTENLOK® HS



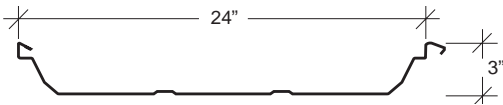
Field Seamed System
12" also available

SUPERLOK®



Field Seamed System
12" also available

DOUBLE-LOK®



Field Seamed System
12" and 18" also available



ENERGY STAR
★ Qualified Color

SIGNATURE® 300 Standard Colors | KYNAR 500® | HYLAR 5000®

				
SNOW WHITE ★ SR.65 SRI 79	ALMOND ★ SR.63 SRI 76	EVERGLADE ★ SR.33 SRI 36	NATURAL PATINA ★ SR.41 SRI 47	CLASSIC GREEN ★ SR.28 SRI 30
				
TUNDRA ★ SR.46 SRI 53	BROWNSTONE ★ SR.47 SRI 54	PACIFIC BLUE ★ SR.29 SRI 31	SPRUCE ★ SR.36 SRI 40	HUNTER GREEN ★ SR.35 SRI 39
				
SLATE GRAY ★ SR.37 SRI 41	MEDIUM BRONZE ★ SR.33 SRI 36	HARBOR BLUE ★ SR.28 SRI 30	BRITE RED ★ SR.49 SRI 55	COLONIAL RED ★ SR.34 SRI 37
				
MIDNIGHT BRONZE ★ SR.29 SRI 31				

SIGNATURE® 300 Metallic | KYNAR 500® | HYLAR 5000®

	
COPPER METALLIC ★ SR.45 SRI 51	SILVER METALLIC ★ SR.52 SRI 60

Note: Metallic coatings are directional. Panels and trim must be installed oriented in the same direction to prevent perceived shade variances. Directional arrows are on the back side of panels and trim to aid in the proper orientation.

SIGNATURE® 200 Standard Colors | SILICONIZED POLYESTER | Polar White is a Straight Polyester.

				
POLAR WHITE ★ SR.58 SRI 69	RUSTIC RED ★ SR.36 SRI 40	BURNISHED SLATE ★ SR.28 SRI 29	FERN GREEN ★ SR.28 SRI 29	HAWAIIAN BLUE ★ SR.32 SRI 35
				
LIGHT STONE ★ SR.50 SRI 58	KOKO BROWN ★ SR.28 SRI 30	CHARCOAL GRAY ★ SR.28 SRI 30	COAL BLACK SR.30 SRI 31	

- Final color selection should be made from actual color chips.
- For the most current information available, visit our website at www.starbuildings.com.
- See product catalog for gauge and color availability.
- Heavier gauges, narrower widths, striations and embossing minimize "oil canning."
- All Signature® 300 and 300 Metallic are low gloss colors.
- A 25-year limited paint warranty available for all colors upon written request, please inquire. (Outside the continental United States, please inquire.)
- Signature® is a registered trademark of NCI Group, Inc. KYNAR 500® is a registered trademark of Arkema, Inc. HYLAR 5000® is a registered trademark of Solvay Solexis.

What is Solar Reflectivity (SR)?

Solar reflectivity or reflectance (SR) is the ability of a material to reflect solar energy from its surface back into the atmosphere. The SR value is a number from 0 to 1.0. A value of 0 indicates that the material absorbs all solar energy and a value of 1.0 indicates it is all reflected. ENERGY STAR requires SR testing of both new and aged roof products. New products must have an SR value of 0.25 or higher for steep slope (above 2:12) roofing and an SR value of 0.65 or higher for low slope (2:12 or less) roofing. Aged testing takes 3 years to complete, so not all products that meet the initial requirements are qualified. For more information, please go to www.energystar.gov.

What is Solar Reflectance Index (SRI)?

The SRI is used to determine compliance with LEED requirements and is calculated according to ASTM E 1980 using values for reflectance and emissivity. Emissivity is a material's ability to release absorbed energy. To meet LEED requirements, a roofing material must have an SRI of 29 or higher for steep slope (above 2:12) roofing and an SRI value of 78 or higher for low slope (2:12 or less) roofing. For more information, please go to www.usgbc.org.

Signature® 200 SPECIFICATIONS

Product Name

Signature® 200, a premium coating with proven, proprietary polymer and premium pigments.

Product Description

Uses: Signature® 200 is a factory-applied and oven-baked protective coating used on GALVALUME®, galvanized steel or aluminum substrate. Signature® 200 combines excellent physical characteristics and aesthetic values for metal panels and components. Its uses in architectural, industrial, commercial, residential and institutional metal construction are numerous. Signature® 200 coatings are formulated for hardness and flexibility, making it a versatile and durable coating system when applied over a proprietary, corrosion-resistant primer.

Limitations: Since Signature® 200 coatings require baking to cure, they cannot be field applied. Signature® 200 coatings are not approved for use on hot or cold rolled bare steel substrates intended for exterior exposure.

Composition and Materials: Signature® 200 is a thermoset coating consisting

of a proprietary polyester resin modified by silicone resin intermediate. Signature® 200 uses premium, proven-durability ceramic pigments which give superior exterior protection and resistance to chemical corrosion and ultraviolet radiation.

Color: Signature® 200 coatings are available in a wide range of standard, field-proven colors. Special colors are available (minimum quantity requirements may apply) if approved by manufacturer. Polar White may not meet these specifications – please inquire.

Installation

The Signature® 200 system is factory applied over metal substrates using the coil coating process. Surfaces shall be chemically cleaned and pretreated according to manufacturers' specifications to remove contaminants and provide acceptable corrosion resistance. Total dry film thickness of topcoat (Signature® 200 protective coating and primer) is within the 0.9 - 1.05 mil range for coil coated applications. The pretreated substrate is primed with 0.2 - 0.25 mil of a high performance primer. The Signature® 200 protective coating is applied over the primed substrate at 0.7 - 0.8 mil. The Signature® 200 systems incorporate outstanding exterior durability, while affording superior coil line application and post-forming capabilities.

Warranty

The Signature® 200 warranty is backed by the strictest production specifications and is one of the strongest in the industry. Details and further information are available by contacting the manufacturer.

Maintenance

The factory applied finish of Signature® 200 is baked-on coating designed to give trouble-free performance for years with little service required. However, mild detergents and/or mineral spirits are recommended for removal of surface dust and airborne chemical deposits. Air-dry touch-up paints are also available for repair of minor scratches.

Technical Assistance

Complete technical information and literature is available from manufacturer.

Signature® is a registered trademark of NCI Group, Inc.
KYNAR® 500 is a registered trademark of Arkema, Inc.
HYLAR® 5000 is a registered trademark of Solvay Solexis.
GALVALUME® is a registered trademark of BIEC International Inc.

TECHNICAL DATA – PHYSICAL PROPERTIES

PROPERTY	VALUE	TEST DESIGNATION	
Gloss @ 60°	20-80	ASTM D523	(1) 2T to 4T, No loss of adhesion. (2) No field blisters. (3) ≤ 1/8 inch creep from scribe, few blisters, rating of 8. (4) Chalk rating no less than 8. Color change, no more than 5ΔE Hunter units. (5) 10% Hydrochloric acid solution 24 hours no visible changes. 25% sodium hydroxide 1 hour test no visible change.
Film Hardness	F-Min (Eagle Turq.)	ASTM D3363	
Impact Resistance, 3x Metal Thickness	No Adhesion Loss	ASTM D2794	
Cross-Hatch Adhesion	No Adhesion Loss	ASTM D3359	
Formability: T-Bend	(1) Acceptable	ASTM D4145	
Abrasion Resistance, Falling Sand	35 ± 5 Liters	ASTM D968	
ACCELERATED TESTS:			
Humidity, 1,000 hrs.	(2) Acceptable	ASTM D2247	
Dew Cycle Weatherometer, 200 Total Hours	(4) Acceptable	ASTM D3361	
Salt Spray, 1,000 hrs.	(3) Acceptable	ASTM B117	
Chemical Spot Test	(5) Acceptable	ASTM D1308	

Signature® 300 and Signature® 300 Metallic SPECIFICATIONS

Product Name

Signature® 300 and Signature® 300 Metallic, a premium fluoropolymer low gloss coating, produced with KYNAR® 500 or HYLAR® 5000 resin.

Product Description

Basic Uses: Signature® 300 coatings are specified by leading architects and used by manufacturers of metal curtain wall and other building products as a long-life exterior finish for aluminum, galvanized steel and Galvalume®. The liquid coating is factory applied and oven baked on properly prepared and primed substrates. Signature® 300 coatings typically are used as exterior finishes for metal roofing, siding, louvers, fascia, curtain wall, spandrel paneling and column covers. The building components can be post-formed from pre-coated coil stock.

Limitations: Since Signature® 300 coatings require baking to cure, they cannot be field applied. Signature® 300 coatings are not approved for use on hot or cold rolled bare steel substrates intended for exterior exposure.

Composition and Materials: Signature® 300 coatings are based on 70% KYNAR® 500 or HYLAR® 5000 PVDF fluoropolymer resin. They also

are formulated with highly durable pigments and solvents blended for optimum application properties.

Color: Signature® 300 coatings are available in a wide range of standard, field-proven colors. Special colors are available (minimum quantity requirements may apply) if approved by manufacturer.

Technical Data

See Chart Below.

Installation

Signature® 300 coatings may be coil coated on HDG steel, Aluminum or Galvalume® substrates that have been pretreated and primed according to manufacturer specifications. The entire system is applied in the factory and oven baked. Topcoat dry film thicknesses are within the 0.9-1.1 mil range (Note: which refers to the combination of primer and the Signature® 300 protective coating) for coil coated applications. The pretreated substrate is primed with 0.2 - 0.30 mil of a high performance primer. The Signature® 300 protective coating is applied over the primed substrate at 0.7 - 0.8 mil. The flexibility of the system permits coil-coated stock to be post-formed by either a roll former or press brake. All applicators of Signature® 300 coatings must have the approval of manufacturer. A list of approved applicators is available upon request.

Warranty

The Signature® 300 warranty is backed by the strictest production specifications and is one of the strongest in the industry. Details and further information are available by contacting manufacturer.

Maintenance

Signature® 300 coatings are virtually maintenance free and non-staining. If necessary, surface residue may be removed by conventional cleaning solvents or detergents. Minor scratches may be touched-up with a specially formulated, field-applied coating of the same color.

Signature® 300 coatings can be used in conjunction with conventional sealants and caulking compounds. Mortar, plaster, etc. will neither adhere to nor stain the surface.

Technical Assistance

Complete technical information and literature is available from manufacturer.

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HYLAR® 5000 is a registered trademark of Solvay Solexis.
GALVALUME® is a registered trademark of BIEC International Inc.

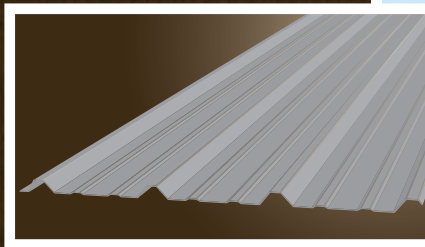
TECHNICAL DATA – PHYSICAL PROPERTIES

Property	Value	Test Designation	
Gloss @ 85°	8-15	ASTM D523	(1) No evidence of cracking, and no loss of adhesion to the point of metal rupture. (2) No removal of finish after 1/16-inch cross-hatching to bare metal, to impact limits or point of metal rupture. (3) No cracking, peeling, blistering, loss of adhesion or corrosion of base metal. Chalk rating of 8 per ASTM D4214. Color change less than 2ΔE per ASTM D2244. (4) Rating of 10, no blistering, cracking, creepage or corrosion per ASTM D1654. (5) No more than 5/32-inch average creepage from scribed line rating of 7, field test rating of 8 per ASTM D1654. (6) No more than 1/32-inch creepage from scribed line, rating of 8. No blistering, rating of 10 per ASTM D1654. (7) 10% Hydrochloric acid solution 24 hours no visible changes. 25% sodium hydroxide 1 hour test no color change, no blistering. (8) Reverse impact and direct impact, no cracking or loss of adhesion.
Film Hardness	HB-Min (Eagle Turq.)	ASTM D3363 (NCCA II-12) (2)	
Impact Resistance, .5" Ball Indenter, 3x Metal Thickness	(8) Acceptable	ASTM D2794	
Formability:	(1) Acceptable	ASTM D522	
180° bend around 1/8" mandrel	(2) Acceptable	ASTM D3359 (NCCA II-5)	
Adhesion	67 Liters	ASTM D968	
Abrasion Resistance, Falling Sand			
Accelerated Weathering, 5,000 hrs. exposure	(3) Acceptable	ASTM D4587, G53, or G154	
Humidity, 3,000 hrs.	(4) Acceptable	ASTM D2247, Apparatus A1	
Salt Spray, 2,000 hrs.	(5) Acceptable	ASTM B117 (NCCA III-2)	
Cyclic Salt Fog/UV exposure, 3,000 hrs.	(6) Acceptable	ASTM D5894	
Chemical Spot Test	(7) Acceptable	ASTM D1308	

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. We reserve the right to discontinue products at any time or change specifications and/or designs without notice and without incurring obligation.

PBR

Roof and Wall System



Description

The PBR panel's deep ribs create an even-shadowed appearance. The area between the major ribs is reinforced with minor ribs. PBR is one of the most economical panel systems and can be used for both roof and wall applications.

Gauge

- 26 gauge (standard)
- 24 gauge
- 22 gauge

Length

45' maximum length is standard but longer lengths are available by special request

Dimensions

36" x 1 1/4"

Finish

- Galvalume Plus®
- Signature® 200 Colors
- Signature® 300 Colors

NOTE: Oil-canning is not considered grounds for rejection of any panel system. Oil-canning can occur in any panel with wide flat sections. Heavier gauge, embossing, striations, flatter sub-frame systems and support from a solid sub-deck can all help to minimize oil-canning.

Fasteners

Standard coated, zinc- aluminum cast head, or stainless steel head screw

Usage

Roof, wall, liner, mansard, and soffit panel applications

Limitations

Not designed for coverage over bar joist or to be used as rigid secondary; Five foot on center purlin spacing

Attributes

1. Reverse rolled profile
2. Purlin bearing leg
3. Installation may start at either end
4. Economical profile
5. 36" coverage
6. Wind uplift rating
7. Diaphragm action
8. Light transmitting panels
9. Finish warranty

Advantages

1. The panel can serve as an alternate wall panel by putting the paint finish on the under side
2. An additional leg is rolled on one side of lap rib to facilitate installation
3. Flexible installation
4. Cost effective
5. Ease of installation
6. The panel qualifies for UL® 90 in multiple construction numbers
7. The panel configuration enhances diaphragm capabilities for purlin stability
8. Profile light transmitting panels are available for the PBR panel
9. Used with long-life fasteners this panel has a 25-year warranty

PBR - Section Properties

PANEL GAUGE	Fy (KSI)	WEIGHT (PSF)	NEGATIVE BENDING			POSITIVE BENDING		
			I _{xe} (IN.4/FT.)	S _{xe} (IN.3/FT.)	Maxo (KIP-IN.)	I _{xe} (IN.4/FT.)	S _{xe} (IN.3/FT.)	Maxo (KIP-IN.)
29	60*	0.75	0.0219	0.0357	1.2835	0.0242	0.0234	0.8423
26	60*	0.94	0.0302	0.0511	1.8366	0.0369	0.0372	1.3373
24	50	1.14	0.0404	0.0733	2.1953	0.0506	0.0521	1.5594

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the *North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.*

Allowable Uniform Loads In Pounds Per Square Foot

26 Gauge (Fy = 60 Ksi)

SPAN TYPE	LOAD TYPE	SPAN IN FEET							
		3.0	4.0	5.0	6.0	7.0	8.0	9.0	
SINGLE	NEGATIVE WIND LOAD	136.0	76.5	49.0	34.0	25.0	19.1	15.1	
	LIVE LOAD/DEFLECTION	99.1	50.4	25.8	14.9	9.4	6.3	4.4	
2-SPAN	NEGATIVE WIND LOAD	99.1	55.7	35.7	24.8	18.2	13.9	11.0	
	LIVE LOAD/DEFLECTION	87.3	54.6	35.2	24.5	18.1	13.9	10.7	
3-SPAN	NEGATIVE WIND LOAD	123.8	69.7	44.6	31.0	22.7	17.4	13.8	
	LIVE LOAD/DEFLECTION	99.2	67.7	43.8	28.2	17.7	11.9	8.3	
4-SPAN	NEGATIVE WIND LOAD	115.6	65.0	41.6	28.9	21.2	16.3	12.8	
	LIVE LOAD/DEFLECTION	95.9	63.4	40.9	28.6	18.8	12.6	8.9	

24 Gauge (Fy = 60 Ksi)

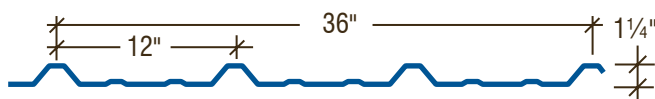
SPAN TYPE	LOAD TYPE	SPAN IN FEET							
		3.0	4.0	5.0	6.0	7.0	8.0	9.0	
SINGLE	NEGATIVE WIND LOAD	162.6	91.5	58.5	40.7	29.9	22.9	18.1	
	LIVE LOAD/DEFLECTION	115.5	65.0	35.4	20.5	12.9	8.6	6.1	
2-SPAN	NEGATIVE WIND LOAD	115.5	65.0	41.6	28.9	21.2	16.2	12.8	
	LIVE LOAD/DEFLECTION	109.4	64.2	41.3	28.7	21.1	16.2	12.8	
3-SPAN	NEGATIVE WIND LOAD	144.4	81.2	52.0	36.1	26.5	20.3	16.0	
	LIVE LOAD/DEFLECTION	124.3	79.8	51.4	35.8	26.4	16.3	11.4	
4-SPAN	NEGATIVE WIND LOAD	134.8	75.8	48.5	33.7	24.8	19.0	15.0	
	LIVE LOAD/DEFLECTION	119.6	74.7	48.1	33.5	24.6	17.3	12.2	

The engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the *North American Specification for the Design of Cold-Formed Steel Structural Members* published by the American Iron and Steel Institute to facilitate design. This specification contains the design criteria for cold-formed steel components. Along with the specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

EFFECTIVE NOVEMBER 3, 2004
SUBJECT TO CHANGE WITHOUT NOTICE

Galvalume Plus® is a registered trademark of BIEC International, Inc.

Signature® is a registered trademark of the NCI Group.



Properties Notes:

1. All calculations for the properties of PBR panels are calculated in accordance with the 2001 edition of the *North American Specification For Design Of Cold-Formed Steel Structural Members.*
2. **I_{xe}** is for deflection determination.
3. **S_{xe}** is for bending.
4. **Maxo** is allowable bending moment.
5. All values are for one foot of panel width.

Allowable Uniform Loads Notes:

1. Allowable loads are based on uniform span lengths and Fy = 50 and 60 ksi.
2. **LIVE LOAD** is limited by bending, shear, combined shear and bending and web crippling.
3. **NEGATIVE WIND LOAD** does not contain a 33.333% increase and does not consider fastener pull-out or pull-over.
4. Allowable loads consider a maximum deflection ratio of L/180.
5. The weight of the panel has not been deducted from the allowable loads.
6. The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all data.



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