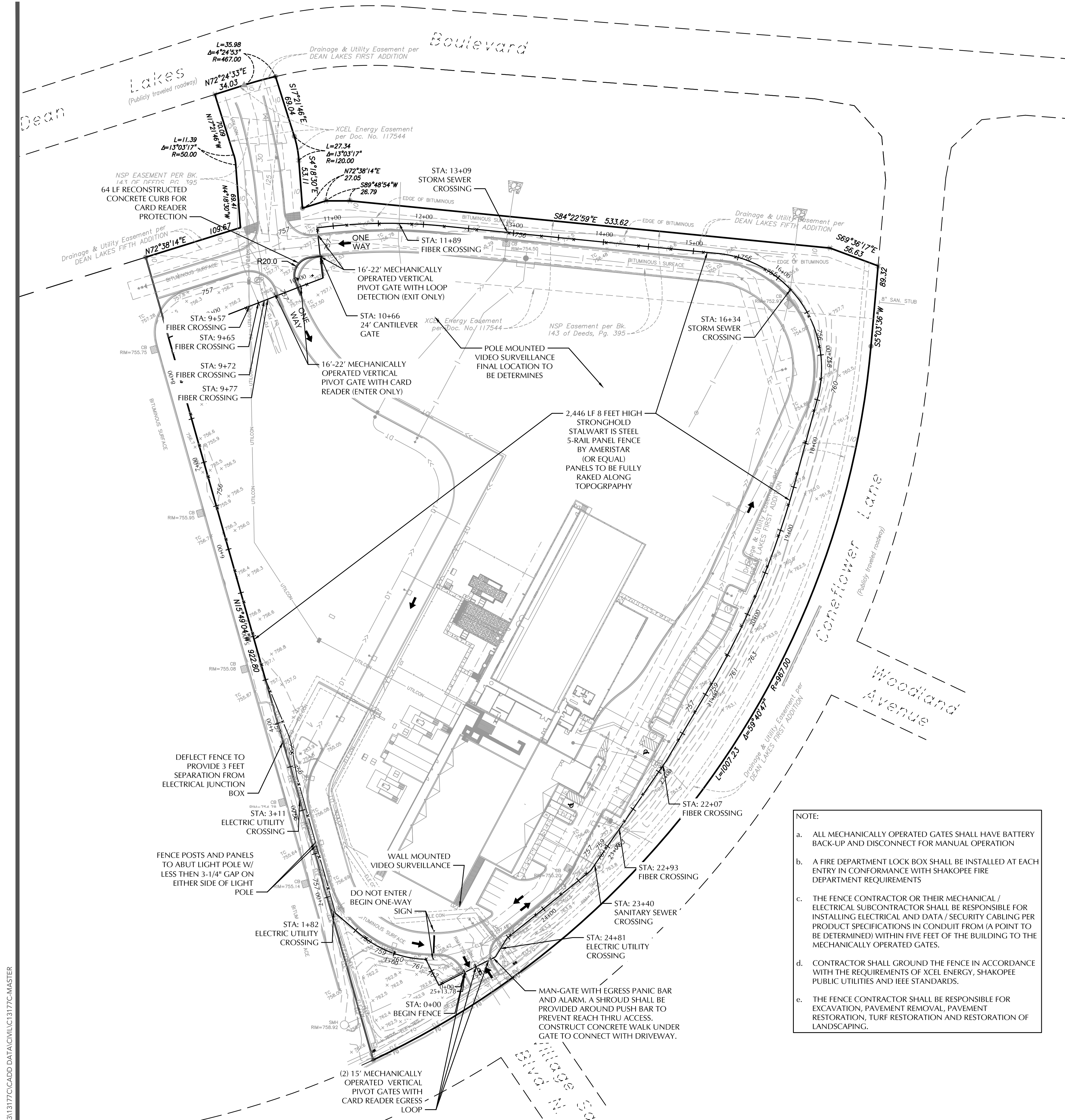


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- NOTE:
- ALL MECHANICALLY OPERATED GATES SHALL HAVE BATTERY BACK-UP AND DISCONNECT FOR MANUAL OPERATION
 - A FIRE DEPARTMENT LOCK BOX SHALL BE INSTALLED AT EACH ENTRY IN CONFORMANCE WITH SHAKOPEE FIRE DEPARTMENT REQUIREMENTS
 - THE FENCE CONTRACTOR OR THEIR MECHANICAL / ELECTRICAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ELECTRICAL AND DATA / SECURITY CABLING PER PRODUCT SPECIFICATIONS IN CONDUIT FROM (A POINT TO BE DETERMINED) WITHIN FIVE FEET OF THE BUILDING TO THE MECHANICALLY OPERATED GATES.
 - CONTRACTOR SHALL GROUND THE FENCE IN ACCORDANCE WITH THE REQUIREMENTS OF XCEL ENERGY, SHAKOPEE PUBLIC UTILITIES AND IEEE STANDARDS.
 - THE FENCE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, PAVEMENT REMOVAL, PAVEMENT RESTORATION, TURF RESTORATION AND RESTORATION OF LANDSCAPING.

GENERAL NOTES

- MINNESOTA STATE STATUTE REQUIRES NOTIFICATION PER "GOPHER STATE ONE CALL" PRIOR TO COMMENCING ANY GRADING, EXCAVATION OR UNDERGROUND WORK.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
- ALL CONSTRUCTION PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE FINAL GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
- EXISTING TOPOGRAPHY PROVIDED BY LOUCKS ASSOCIATES, TOPOGRAPHIC SURVEY DATED 04/19/17.
- THE SCOPE OF WORK SHOWN HEREIN FOR SECURITY FENCING SHALL BE THE BASIS OF A DESIGN BUILD CONTRACT. IN NO WAY SHALL THE WORK SHOWN HEREIN RELEASE THE CONTRACTOR FROM DEVELOPING PLANS SUITABLE FOR PERMIT AND CONSTRUCTION OF THE WORK TO BE PERFORMED.
- STATIONING OF THE FENCE ALIGNMENT REFLECTS TWO DIMENSIONAL ACCURACY. CONTRACTOR IS RESPONSIBLE FOR 3D SLOPE LENGTH ADJUSTMENTS OF FULLY RAKED FENCE PANELS.
- CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO PROTECTION OF UNDERGROUND UTILITIES. INTERRUPTIONS TO UTILITY SERVICE ARE NOT PERMISSIBLE. SPECIAL FABRICATION OF EXTRA LENGTH FENCE PANELS MAY BE NECESSARY TO SPAN UTILITIES AND PREVENT DAMAGE TO UTILITIES. IT IS RECOMMEND THE CONTRACTOR EMPLOY VACUUM EXCAVATING TECHNIQUES TO VERIFY POST PLACEMENT IN AREAS OF KNOWN UTILITIES.

Cyxtera Security Fence

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SUBMITTAL/REVISIONS

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05/18/17	CUP APPLICATION
09/27/18	CUP APPLICATION

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my supervision and that I am a duly licensed Professional Engineer in the State of Minnesota.
Michael J. St. Martin - PE

License No.	24440
Date	N/A

QUALITY CONTROL

Loucks Project No.	13177.0C
Project Lead	CDL
Drawn By	CDL
Checked By	MJS
Review Date	05/01/17

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C8-4	FENCE SPECIFICATIONS
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PRELIMINARY SITE PLAN

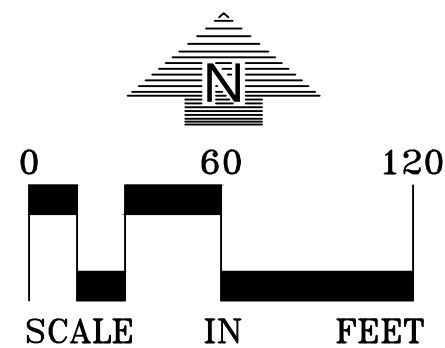
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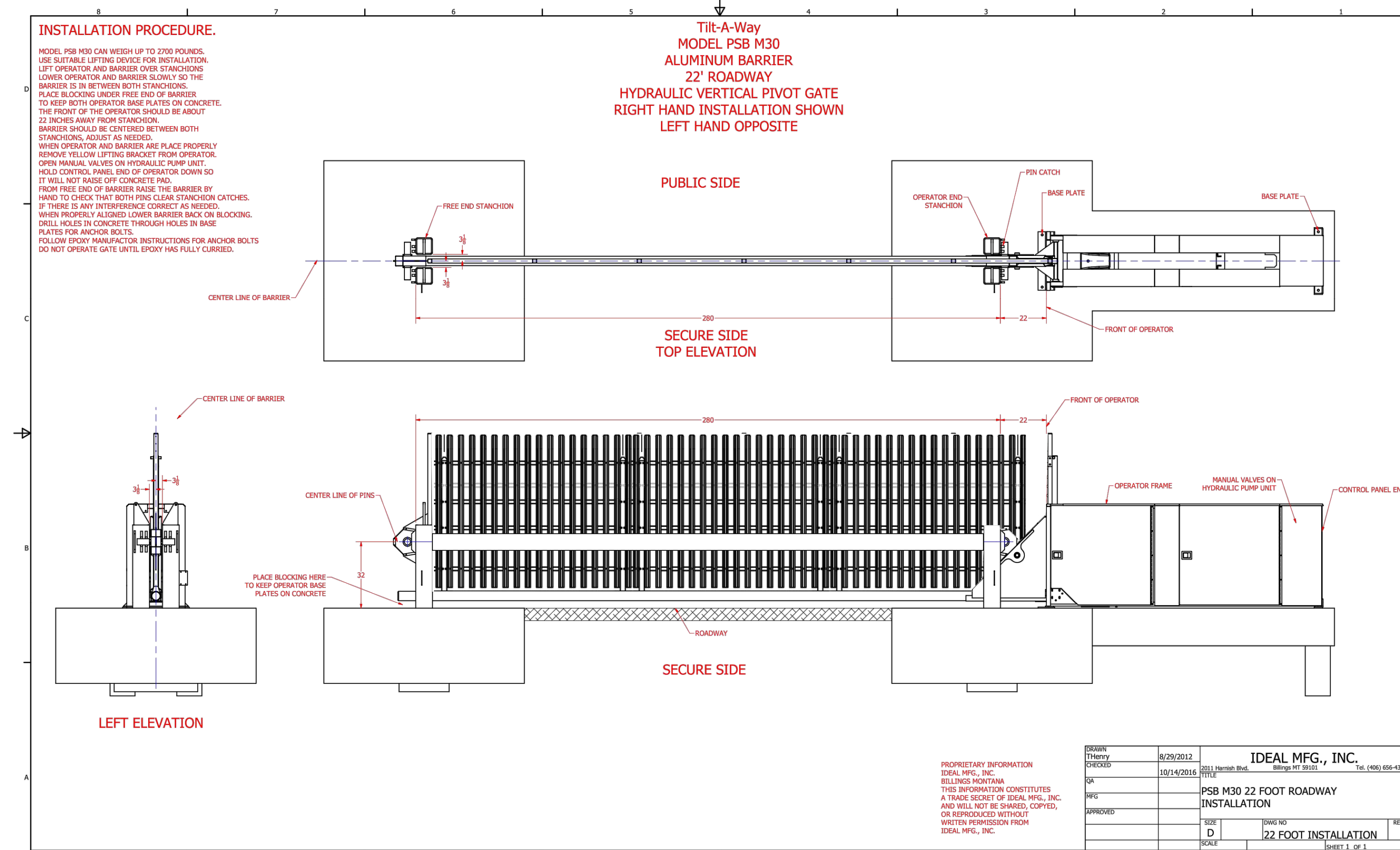
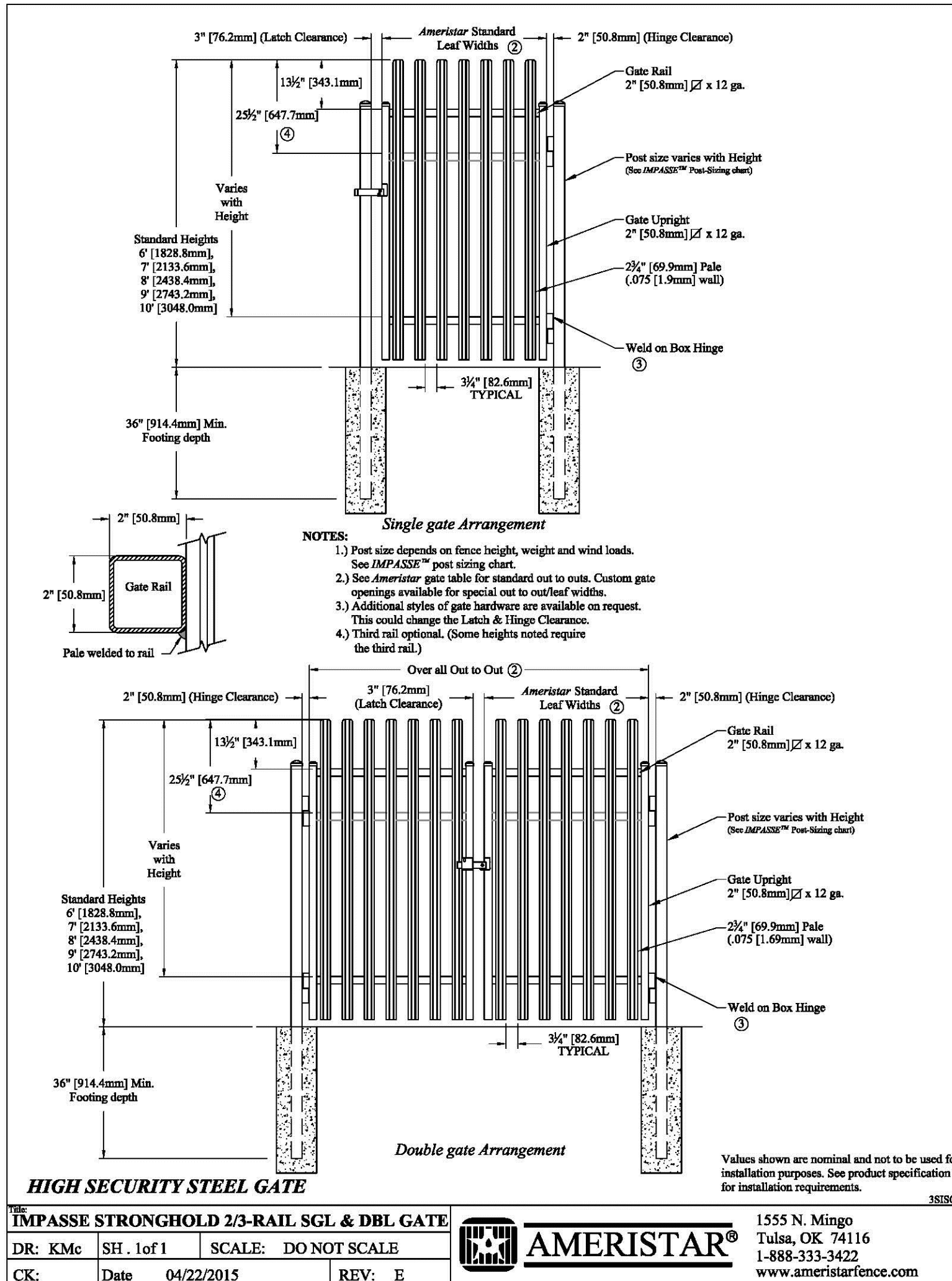
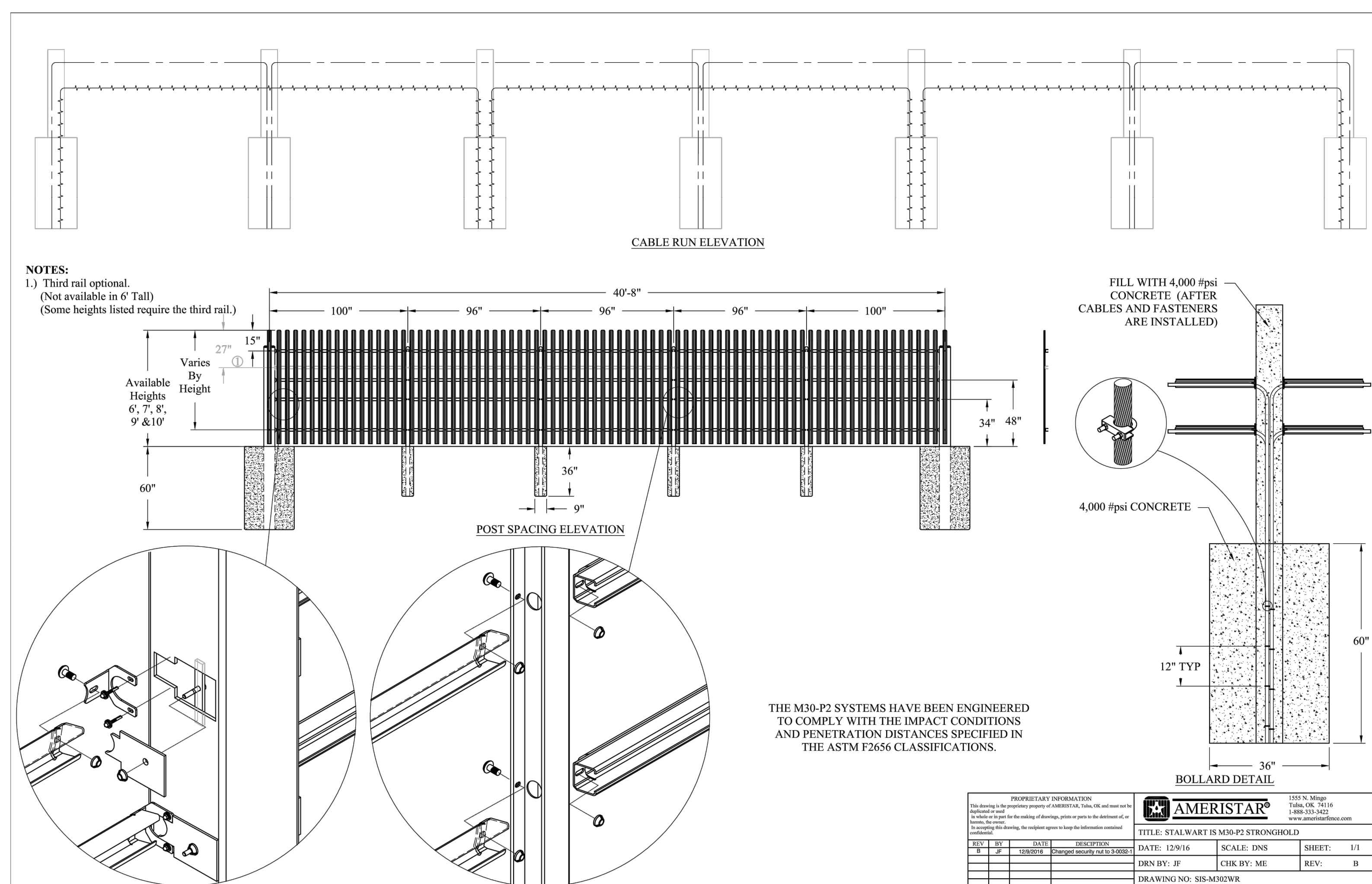
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Date N/A

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AMERISTAR® PERIMETER SECURITY USA INC.
Stalwart IS® Anti-Ram Barrier | M30/P2 (K4) Engineered Cable System
Construction Specification 32 30 00.11

PART 1 – GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the anti-ram barrier system defined herein at (*specify project site*).

1.02 RELATED WORK

Section ____ - Earthwork
Section ____ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total anti-ram cable barrier system of the Ameristar® Stalwart IS® (*specify* Trident, Stronghold, or Gauntlet) M30/P2 Engineered design. The system shall include all components (i.e., cables, supports, panels, I-beam posts, bollards and hardware) required. The barrier shall comply with Ameristar's System Drawing Number (*specify* Trident / SIT- M302-WR, Stronghold / SIS- M302-WR, or Gauntlet / SIG- M302-WR).

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
- ASTM A500/A500M – Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
- ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus
- ASTM D523 - Test Method for Specular Gloss
- ASTM D714 - Test Method for Evaluating Degree of Blistering in Paint
- ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus
- ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates
- ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- ASTM D3359 - Test Method for Measuring Adhesion by Tape Test
- ASTM F2656 – Standard Test Method for Vehicle Crash Testing of Perimeter Barriers
- Federal Specification RR-W-410E / Wire Rope and Strand
- ASTM F2408 – Ornamental Fences Employing Galvanized Steel Tubular Pickets

1.06 SUBMITTAL

The manufacturer's literature shall be submitted prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 – MATERIALS

2.01 MANUFACTURER

A. The anti-ram cable barrier system shall conform to the Stalwart IS (*specify* Trident, Stronghold, or Gauntlet) M30/P2 (K4) Engineered, manufactured by Ameristar Perimeter Security USA Inc., in Tulsa, Oklahoma. This system shall be M30/P2 engineered (Equivalent to K4) based on test results of similar design. Engineering analysis shall be based upon ASTM F2656, Impact Condition Designation M30, Penetration Rating P2, with capability of stopping a 15,000 lb vehicle traveling at speeds up to 30mph.

B. The integrated steel ornamental pale high security fence panel shall conform to Ameristar Stalwart IS (Impasse Security) (*specify* 5-Rail or 6-Rail) (total number of rails includes two blank rails for housing anti-ram cabling) style manufactured by Ameristar Perimeter Security USA Inc., in Tulsa, Oklahoma.

C. The entire anti-ram barrier system, and all associated panels, I-beam posts, bollards, gates, accessories, fittings, and fasteners shall be obtained from a single source.

2.02 MATERIAL

A. Steel material for cable-supporting framework (i.e., corrugated pales, rails and I-beam posts) shall be galvanized prior to forming and shall conform to the requirements of ASTM A653/A653M, with a minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90.

B. Steel material for cable-anchoring bollard posts shall conform to the requirements of ASTM A500/A500M, with a minimum yield strength of 46,000 psi (315 MPa).

C. Material for corrugated pales shall be a nominal 2.75" x .75" x 14 Ga. The cross-sectional shape of the rails shall conform to the manufacturer's Stalwart IS rail design a nominal 2" x 2" x 11 Ga. Pre-drilled holes in the Stalwart IS rail shall be spaced 6" on center, providing a pale airspace of no greater than 3.25". Tamperproof fasteners shall be used to fasten each pale to panel rail at every intersection (cable rails do not require pale to rail fasteners). Posts shall conform to the manufacturer's Stalwart IS I-Beam design with a nominal 3" x 2.75" x 12 Ga.

D. If applicable - Material for steel Stalwart IS privacy screening shall be 18ga. preformed slats, providing complete screening coverage between pales and at pale to post connections. Stalwart IS privacy screening shall provide screening from top rail to bottom rail, and be capable of traversing terrain without impeding the raking capabilities of the fencing panel.

E. The cable material shall be Independent Wire-Rope Core (IWRC) wire rope conforming to Federal Specification RR-W-410E, 6 x 36 Warrington Seale, preformed, right regular lay, medium lubrication, Extra Improved Plow Steel (EIPS), with a breaking strength of 103,400 pounds (51.7 tons). Cable diameter shall be 1 inch.

2.03 FABRICATION

A. Pales, rails, I-beam posts and bollards shall be pre-cut to specified lengths. Stalwart IS rails shall be pre-punched to accept tamperproof security fasteners. I-beam post flange shall be pre-punched to accept rail to post attachment. I-beam post web shall be punched providing a clear opening for interior of rails to align throughout the entire system for affixing conduit, video cabling, IDS wiring, and other components for a complete systems integration. Stalwart IS rails shall be attached to post flange providing a bracket-less design at each intermediate post.

B. The manufactured framework, I-beam posts and bollards shall be subjected to the PermaCoat® thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pretreatment/wash, an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be (*specify black, bronze, white or desert sand*). The stratification-coated framework & I-beam posts shall be capable of meeting the performance requirements for each quality characteristic shown in Table 1.

Table 1 – Coating Performance Requirements		
Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117, D714 & D1654	Corrosion Resistance over 3,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822, D2244, D523 (60' Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

PART 3 - EXECUTION

3.01 PREPARATION

A. The purchaser shall indicate the location of barrier line with suitable stakes. Stake intervals shall not exceed 500 ft or line of sight.

B. The purchaser shall indicate all underground utility locations, USC&G benchmarks, property monuments, and other underground structures.

C. Before installing the Stalwart IS Anti-Ram Cable System, all necessary site clearing and grading shall be performed by the purchaser. An adequate clearance on both sides of the cable barrier line is required.

3.02 INSTALLATION

The Stalwart IS barrier shall be installed per Ameristar's System Drawing Number (*specify* Trident / SIT- M302-WR, Stronghold / SIS- M302-WR, or Gauntlet / SIG- M302-WR). Fence panels, brackets, cabling, and fasteners shall be installed according to installation instructions and drawings. I-beam posts and bollards shall be installed per product drawings and installation instructions. The "Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer unless otherwise specified by the product drawings or installation instructions.

3.03 FENCE INSTALLATION MAINTENANCE

When cutting/drilling fence system components adhere to the following steps to seal the exposed steel surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.04 CLEANING

The contractor shall clean the jobsite thoroughly to ensure it is left neat and free of any debris caused by the installation of the cable system.

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FENCE AND
GATE SPECS

C8-3

PART 1 – GENERAL

1.01 Summary

- A. Section Includes: Provide vertical pivot gate system including gate, bollards, and PSB-K12 (M-50) Tilt-A-Way hydraulic operator, with accessories as required for complete operational installation.
- B. Related Sections:

- Division 3: Concrete support slab.
- Division 16: Electrical connections.

1.02 System Description

- A. Performance Requirements:
- Safety Devices:
 - Provide manufacturer's standard safety devices including following features.
 - Provide pressure relief valve to avoid crushing obstruction encountered in either direction of travel.
 - Provide shut off power device if balance system fails.
 - Power Failure: Provide manual bypass system, which allows barrier to be opened and to be closed in event of power failure.
 - Operation: Design system to allow for minimum 2900 open and close operations per day.

[Note: Gate heights up to eight feet, use a standard operator model HYJD-DC-25. Gates that are a total of nine feet tall require an extended operator model HYJD-DC-25E.]

- B. Gate Height: [_____]

[Note: Gate widths from 25 feet wide or up to 50 feet total width for two vertical pivot gate operators are possible with aluminum barriers, up to 40 feet total width for steel barriers, with no center posts, overhead supports, tracks, or special framing required.]

- C. Gate Width: [_____] [_____]total, two gates]

1.03 Submittals

Product Data: Furnish manufacturer's literature for gate and operator and each manufactured accessory to be provided for Project.

- Wiring Diagrams: Furnish manufacturer's wiring diagrams for gate operator.
 - Maintenance Data: Furnish manufacturer's operators and parts manual.
- Shop Drawings: Show location of vertical pivot gates system in relationship with adjacent fencing and paving, details of installation, hardware locations, and accessories.

7. All gates are equipped with a dry contractor to accommodate all types of access equipment.

[Note: Coordinate selection of following options with manufacturer.]

8. Options:

- Cold Weather Package: (Required in areas where the temperature drops to less than 35° F.)
- Stanchion: (This is for the free end of gate.)
- Radio Controls: Provide standard open–close–stop commercial transmitters/receiver systems.
- Loop Detectors: Provide detector system (except loop) To allow free exit/safety, safety or close gate operation; system to be factory wired inside electrical box and tested.
- Reversing Edge: Provide manufactures standard reversing edge system.
- Synchronizing Box: Master Slave system for paired gate system (required only when 2 gates operate in conjunction with each other.)
- Gate Status Lights: Provide light stacks indication gate status: Such as green light indicates barrier is open; red indicates barrier is closed; and flashing amber indicates gate is moving.
- Locks: magnetic lock secures gate in closed position.
- Photo Eye: Used as a form of safety
- S.O.S.: Siren Operated Sensor (Emergency access system)
- Snow removal access doors
- Stainless steel fasteners
- Heater for Electrical Box: Provide heater, including full box insulation to protect system for conditions to minus 70° F.
- Ice scrapers (for cable sheaves.)
- Access Control Systems:

- 1) Key switches.

- Key pads.
- Card readers.
- Intercom stations.
- Proximity card readers.
- Phone access systems.
- Fire access systems.
- Pedestals.
- Closed circuit television.
- Infrared detectors.

- Templates: Provide drawings or templates for installation of anchor bolts in support slab.
- Certificates: Furnish manufacturer's certification indicating system provided complies with specified requirements.

1.04 Quality Assurance

Installer Qualifications: Firm approved by manufacturer or with minimum five years successful experience completing vertical pivot gate installation similar to that required.

- Pre-installation Conference: Conduct meeting at site prior to commencing work related to vertical pivot gate system installation.
 - Require attendance of parties directly affecting vertical pivot gate installation.
 - Review site conditions, procedures, and coordination required with related work.

1.05 Project Conditions

Field Measurements: Verify dimensions and component layout by field measurements prior to beginning installation.

1.06 Warranty

Provide manufacturer's standard limited warranty for system and system components against failure resulting from normal use based on manufacturer's literature.

- Failure shall be defined as any defect in manufacturing which prevents gate from operating as intended.
- Warranty Period: Three years.

PART 2 – PRODUCTS

2.01 Manufacturer

Ideal Manufacturing, Inc., 2011 Harnish Blvd., Billings, MT 59101;
Telephone 800-523-3888 or 406-656-4360; Fax 406-656-4363;
Web address: www.tiltaway.com; E-mail: info@idealmfginc.com

2.02 Manufactured Unit

- Vertical Pivot Gate System: Ideal Mfg., Inc./TILT-A-WAY Model PBS-M30.

- A. Barrier System (Gates): Design to resist twist and to resist sway.

[Note: Select either standard steel, standard aluminum, or custom barriers; coordinate custom barriers with manufacturer.]

- Type: Manufacturer's standard aluminum barrier (up to 22 feet wide opening per gate leaf), minimum 9 gage aluminum chain link. Leading member of an aluminum barrier 4" schedule 40 round tube, uprights- 2 x 2 x .125 square tube, and 2 x 1 x .125 rectangular tube.
- Type: Custom barrier as indicated on Drawings, with sway bracing.
- Options: Provide stanchion to contain free end for severe crash applications; match barrier.

- Accessories: Provide as required for complete operational installation.
 - Child Guards: Provide child and small animal guard on secured side of operator.

2.04 Finishes

- A. Finish: Factory prime with DTM epoxy and paint with westhane acrylic urethane to resist corrosion.
- Color: [As selected from manufacturer's standard colors.] [Custom color as indicated on Finish Schedule.]
 - Manufacturers standard color is Sherwin Williams Stone Gray.
 - Specify color of gate if different from manufacturers standard color.
 - If a color (other than standard gray) is ordered the operator panels could be made from 16 gauge plate steel.

PART 3 – EXECUTION

3.01 Examination

Verification of Conditions: Verify concrete support slab complies with requirements and verify anchors and conduits are properly installed

- Ensure alignment with adjacent construction, fencing, and paving; coordinate with adjacent construction.

3.02 Installation

Comply with manufacturer's recommendations and installation instructions.

- Install vertical pivot gate system to provide rigid and secure installation as indicated, straight and true to lines and levels indicated, for free, easy operation.

2.03 Components

- A. Hydraulic Power Unit: 2 HP TEFC motor, 1725 RPM, 220 Volt Single-Phase Vickers Hydraulic power unit capable of delivering 4.3 GPM at 1000 PSI, with external adjustment relief valve and 4-way solenoid operated 3-position manual override valve.
- Hydraulic pump, motor, and reservoir will be all as one unit with fluid thermometer and fluid level sight gauge.
 - The hydraulic system will be designed to keep the gate locked in the closed position, keeping any person from lifting the gate open when it is in the closed position.
 - Pedestal Frame: Welded construction with removable outer skin of cross break corrosion resistant painted gray .063 aluminum plate panels.
 - Inspection Door Hardware: Stainless steel continuous hinges and heavy-duty lockable pull down catches to hold inspection door shut.
 - Power: : [208/220 Volt Single-Phase] 4 Wire Total gate system requires 20-amp service, with no more than 3% drop in voltage, while gate is in operation. (FOR WIRE SIZE: CONSULT LOCAL ELECTRICAL CODE.)

- Hydraulic System: 2500 psi hydraulic cylinder.
 - Cylinder: 2-1/2" by 38" stroke hydraulic cylinder with 1-3/8" diameter rod, proximity switches and cushioned slow down on each end of travel, and adjustable stops with lock down in any position.
 - Hydraulic Fluid: Manufacturer's standard, factory checked, filled, and tested.
- Balance System: System designed to allow barrier to be manually opened, and closed, consisting of manufacturer's standard cables, sheaves, sealed cam yoke roller bearings, and tension springs pulled in a straight line.
 - Safety Control Switch: Provide built-in safety control switch capable of stopping barrier in any position should balance system fail.
 - Testing: Factory test and adjust balance system to ensure gate may be manually raised and lowered with specified pressure.
 - Signage: Signage to be added to the gate barrier must be declared at the time of order so the manufacturer can add the signs on the barrier, to ensure Ideal Mfg. balances the operator correctly at the time of manufacturing
- Electrical System: Oversized rain tight enclosure housing electrical components except limit switches, safety switches, and motor.
 - Wire: Oil and gasoline resistant.
 - Overload Protection: Allen Bradley type overload protection relay to protect motor.
 - Reversing Controller: Provide as required to operate motor and solenoid valves.
 - Overrun Delay Timers: Integral to board capable of shutting down system in case motor runs longer than 30 seconds.
 - Proximity Switches: Adjustable snap action limit switches capable of stopping barrier at each end of travel.
 - Logic Board: Programmable logic board with manufacturer's full range of available functions.

3.03 Protection

Protect vertical pivot gate system from damage during remainder of construction operations; replace components damaged by subsequent construction operations.

- Touch-up scratched and damaged surfaces using same primer and finish system applied in shop.

Cyxtera
Security Fence

MP2 - SHAKOPEE, MN

COMPASS
DATA CENTERS

4450 DEAN LAKES BLVD.
SHAKOPEE, MINNESOTA 55379



PLANNING
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7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksa.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/01/17	CLIENT REVIEW
05/18/17	CUP APPLICATION
09/27/18	CUP APPLICATION

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.

Michael J. St. Martin - PE
License No. 24440
Date N/A

QUALITY CONTROL

Loucks Project No.	13177.0C
Project Lead	CDL
Drawn By	CDL
Checked By	MJS
Review Date	05/01/17

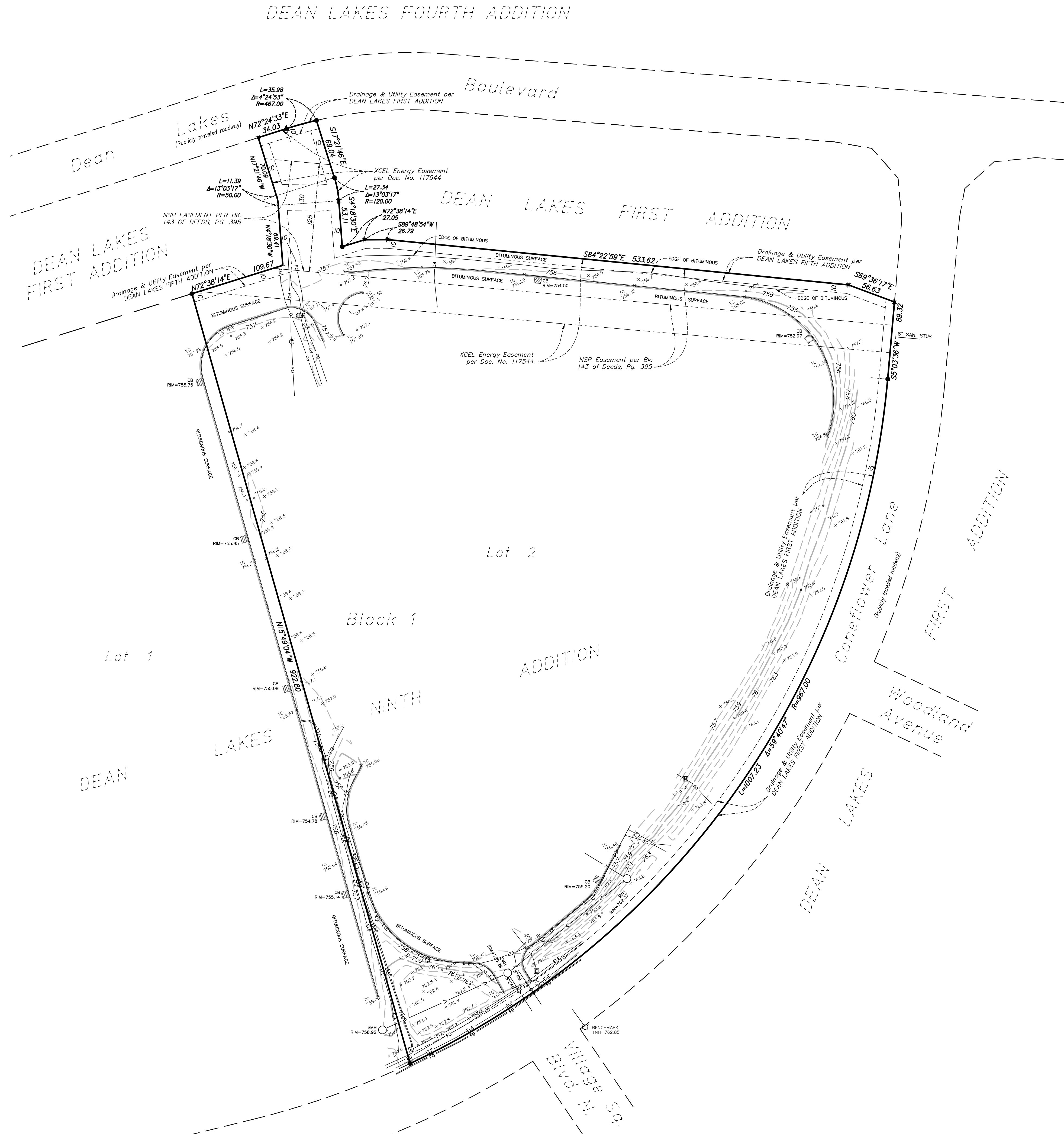
SHEET INDEX

C2-1	SITE PLAN
C8-1	DETAILS
C8-2	DETAILS
C8-3	FENCE SPECIFICATIONS
C8-4	FENCE SPECIFICATIONS
1 of 1	LAND SURVEY

FENCE AND
GATE SPECS

C8-4

Plotted: 05/19/2017 8:26 AM W:\2013\131317\CADD DATA\SURVEYS\13177C-MASTER



DESCRIPTION OF PROPERTY SURVEYED
(Per Scott County Tax records)

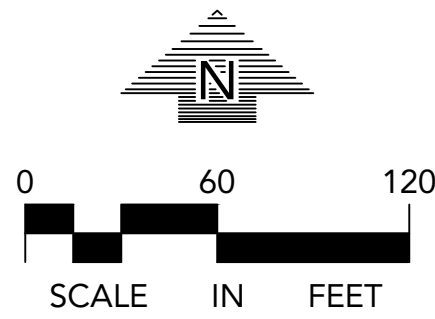
Lot 2, Block 1, DEAN LAKES 9TH ADDITION, Scott County, Minnesota.

SURVEY REPORT

1. The surveyor was not provided Title Commitment or utility easement documents for the subject property, except those shown on the survey.
2. The purpose of this survey is to show topography and existing improvements for the requested area of the property. Monuments place (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or reference by existing monuments or witness to the corners are shown hereon.
3. The bearings for this survey are based on the plat of DEAN LAKES NINTH ADDITION.
4. Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or reference by existing monuments or witness to the corners are shown hereon.
5. The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 4450 Dean Lakes Blvd., Shakopee, Minnesota 55379.
6. The Gross land area is 504,714 ± square feet or 11.59 acres.
7. Benchmark: TNH at the intersection of Cornflower Land and Village Square Blvd. N. Elevation =762.85 (Per survey by Westwood Professional Services, Inc. dated September 19, 2014)
8. Substantial features observed in the process of conducting fieldwork are shown hereon.
10. We have shown underground utilities on and/or serving the surveyed property per Gopher State One-Call Ticket Nos. 170892377, 170892335 & 170901590. The following utilities and municipalities were notified:

CONSOLIDATED COMMUNICATIONS I	(800)778-9140	COMCAST	(612)522-8141
CITY OF SHAKOPEE	(612)366-7888	CENTURYLINK	(855)742-6062
CENTER POINT ENERGY	(406)541-9571	QWEST COMMUNICATIONS	(800)283-4237
SHAKOPEE UTILITIES	(952)445-1988	LEVEL 3 COMMUNICATIONS	(877)366-8344
ZAYO BANDWIDTH	(763)230-3870		

- i. Utility operators do not consistently respond to locate requests through the Gopher State One Call service for surveying purposes such as this. Those utility operators that do respond, often will not locate utilities from their main line to the customer's structure or facility. They consider those utilities "private" installations that are outside their jurisdiction. These "private" utilities on the surveyed property or adjoining properties, may not be located since most operators will not mark such "private" utilities. A private utility locator may be contacted to investigate these utilities further, if requested by the client.
- ii. The locations of underground utility lines shown hereon is an approximation based on available maps, unless otherwise noted on the survey.
- iii. Maps provided by those notified above, either along with a field location or in lieu of such a location, are very often inaccurate or inconclusive. EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THIS SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 811 or (651) 454-0002.



SURVEY LEGEND

● FOUND IRON MONUMENT	—>—>— STORM SEWER
○ SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED "LS 48988"	—>— SANITARY SEWER
▲ FOUND PK NAIL	— — WATERMAIN
✱ FOUND REBAR	—ELE— UNDERGROUND ELECTRIC
TC TOP OF CURB	—FO— UNDERGROUND FIBER OPTIC
TNH TOP NUT HYDRANT	—CONC— CONCRETE CURB
972.5 SPOT ELEVATION	—872— CONTOUR
☐ CATCH BASIN	
○ SANITARY MANHOLE	
◇ HYDRANT	
⌘ GATE VALVE	
⊕ LIGHT POLE	
⊞ ELECTRIC TRANSFORMER	
⊞ HAND HOLE	
⊞ TELEPHONE MANHOLE	
⊞ UTILITY MANHOLE	

COMPASS
DATA CENTER

4450 DEAN LAKES BLVD.
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COMPASS DATA
CENTERS MSP I, LLC

P.O. BOX 06019
CHICAGO, ILLINOIS 60606

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SUBMITTAL/REVIEWS

04/19/17 SURVEY ISSUED
05/02/17 UTILITIES REVISED

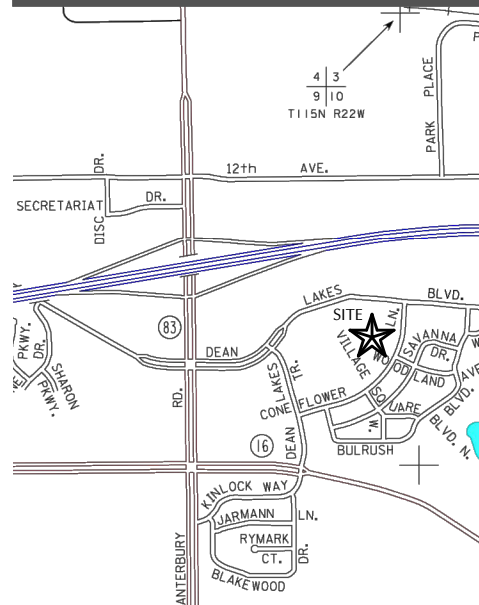
PROFESSIONAL SIGNATURE

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Max L. Stanislowski - PLS
License No. 48988
Date 04/19/17

QUALITY CONTROL

Loucks Project No. 13177C
Project Lead MLS
Drawn By BJJ
Checked By MLS
Field Crew DJP-MA



BOUNDARY &
PARTIAL
TOPOGRAPHIC
SURVEY

1 OF 1