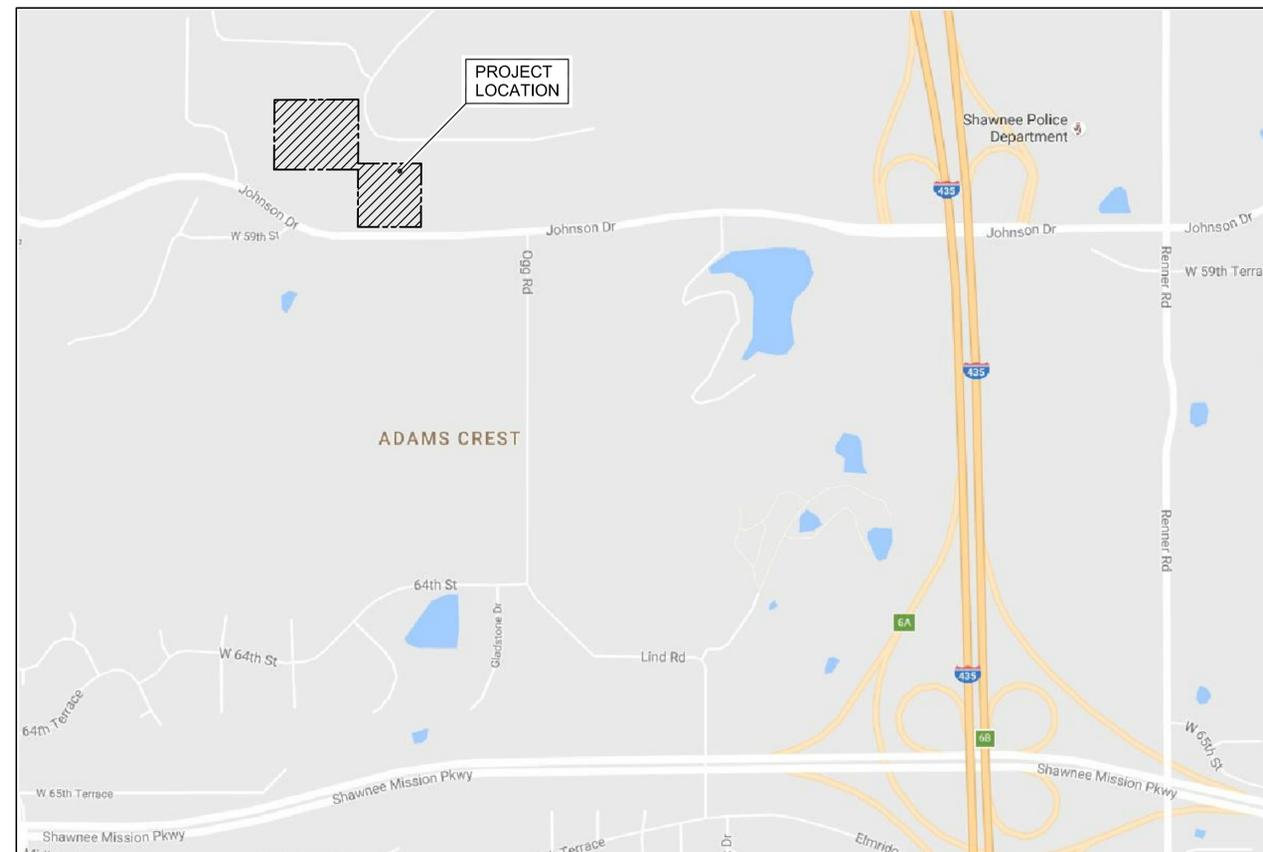


CITY OF SHAWNEE

NEW EQUIPMENT SHELTERS

18690 JOHNSON DRIVE

SHAWNEE, KANSAS 66218

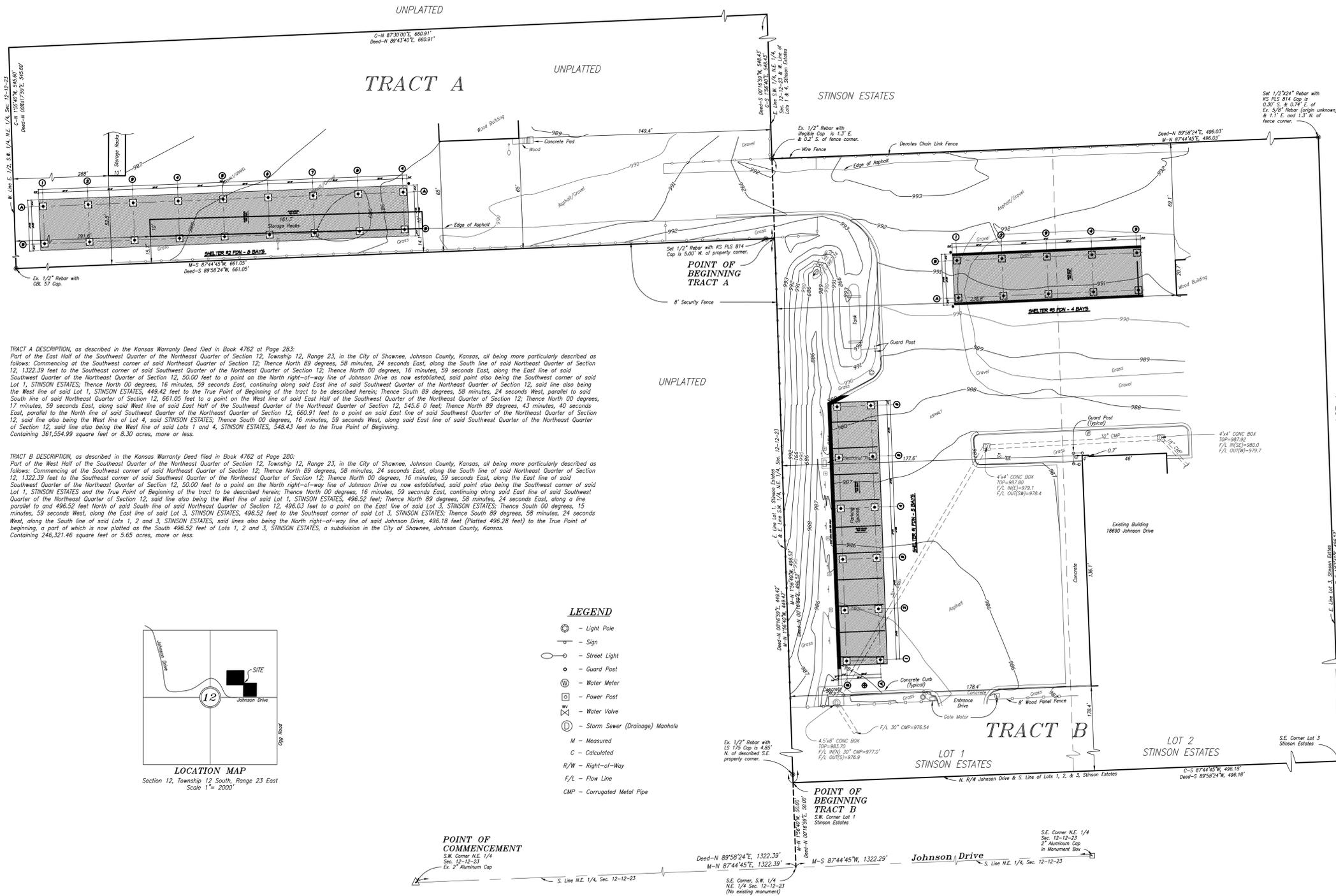



LOCATION PLAN
 NOT TO SCALE

SHEET INDEX	
CV1	COVER SHEET
C1	SITE PLAN
A2.01	ARCHITECTURAL SITE PLAN
A2.02	EROSION CONTROL PLAN
A4.01	SHELTER #1 - 5 SPAN
A4.02	SHELTER #2 - 8 SPAN
A4.03	SHELTER #3 - 4 SPAN
A4.04	ARCHITECTURAL DETAILS
S0	GENERAL NOTES & DETAILS
S1	SHELTER #1 - 5 BAYS
S2	SHELTER #2 - 8 BAYS
S3	SHELTER #3 - 4 BAYS
E1	ELECTRICAL PLAN

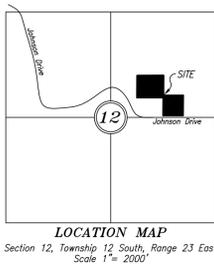
ISSUED FOR CONSTRUCTION
 08/15/16

TOPOGRAPHIC SURVEY



TRACT A DESCRIPTION, as described in the Kansas Warranty Deed filed in Book 4762 at Page 283:
 Part of the East Half of the Southwest Quarter of Section 12, Township 12, Range 23, in the City of Shawnee, Johnson County, Kansas, all being more particularly described as follows: Commencing at the Southwest corner of said Northeast Quarter of Section 12, Thence North 89 degrees, 58 minutes, 24 seconds East, along the South line of said Northeast Quarter of Section 12, 1322.39 feet to the Southeast corner of said Southwest Quarter of the Northeast Quarter of Section 12, Thence North 00 degrees, 16 minutes, 59 seconds East, along the East line of said Southwest Quarter of the Northeast Quarter of Section 12, 50.00 feet to a point on the North right-of-way line of Johnson Drive as now established, said point also being the Southwest corner of said Lot 1, STINSON ESTATES, Thence North 00 degrees, 16 minutes, 59 seconds East, continuing along said East line of said Southwest Quarter of the Northeast Quarter of Section 12, said line also being the West line of said Lot 1, STINSON ESTATES, 449.42 feet to the True Point of Beginning of the tract to be described herein; Thence South 89 degrees, 58 minutes, 24 seconds West, parallel to said South line of said Northeast Quarter of Section 12, 661.05 feet to a point on the West line of said East Half of the Southwest Quarter of the Northeast Quarter of Section 12, Thence North 00 degrees, 17 minutes, 59 seconds East, along said West line of said East Half of the Southwest Quarter of the Northeast Quarter of Section 12, 545.8 0 feet, Thence North 89 degrees, 43 minutes, 40 seconds East, parallel to the North line of said Southwest Quarter of the Northeast Quarter of Section 12, 660.91 feet to a point on said East line of said Southwest Quarter of the Northeast Quarter of Section 12, said line also being the West line of Lot 4, said STINSON ESTATES, Thence South 00 degrees, 16 minutes, 59 seconds West, along said East line of said Southwest Quarter of the Northeast Quarter of Section 12, said line also being the West line of said Lots 1 and 4, STINSON ESTATES, 548.43 feet to the True Point of Beginning. Containing 361,554.99 square feet or 8.30 acres, more or less.

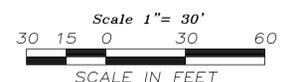
TRACT B DESCRIPTION, as described in the Kansas Warranty Deed filed in Book 4762 at Page 280:
 Part of the West Half of the Southwest Quarter of the Northeast Quarter of Section 12, Township 12, Range 23, in the City of Shawnee, Johnson County, Kansas, all being more particularly described as follows: Commencing at the Southwest corner of said Northeast Quarter of Section 12, Thence North 89 degrees, 58 minutes, 24 seconds East, along the South line of said Northeast Quarter of Section 12, 1322.39 feet to the Southeast corner of said Southwest Quarter of the Northeast Quarter of Section 12; Thence North 00 degrees, 16 minutes, 59 seconds East, along the East line of said Southwest Quarter of the Northeast Quarter of Section 12, 50.00 feet to a point on the North right-of-way line of Johnson Drive as now established, said point also being the Southwest corner of said Lot 1, STINSON ESTATES and the True Point of Beginning of the tract to be described herein; Thence North 00 degrees, 16 minutes, 59 seconds East, continuing along said East line of said Southwest Quarter of the Northeast Quarter of Section 12, said line also being the West line of said Lot 1, STINSON ESTATES, 496.52 feet; Thence North 89 degrees, 50 minutes, 24 seconds East, along a line parallel to and 496.52 feet North of said South line of said Northeast Quarter of Section 12, 496.03 feet to a point on the East line of said Lot 1, STINSON ESTATES; Thence South 00 degrees, 15 minutes, 59 seconds West, along the East line of said Lot 3, STINSON ESTATES, 496.52 feet to the Southeast corner of said Lot 3, STINSON ESTATES; Thence South 89 degrees, 58 minutes, 24 seconds West, along the South line of said Lots 1, 2 and 3, STINSON ESTATES, said lines also being the North right-of-way line of said Johnson Drive, 496.18 feet (Platted 496.28 feet) to the True Point of Beginning, a part of which is now platted as the South 496.52 feet of Lots 1, 2 and 3, STINSON ESTATES, a subdivision in the City of Shawnee, Johnson County, Kansas. Containing 246,321.46 square feet or 5.65 acres, more or less.



- LEGEND**
- - Light Pole
 - ⊙ - Sign
 - - Street Light
 - ⊙ - Guard Post
 - ⊙ - Water Meter
 - ⊙ - Power Post
 - ⊙ - Water Valve
 - ⊙ - Storm Sewer (Drainage) Manhole
 - M - Measured
 - C - Calculated
 - R/W - Right-of-Way
 - F/L - Flow Line
 - CMP - Corrugated Metal Pipe

SURVEYOR'S NOTES:
 The bearings shown hereon are based on the Kansas State Grid, North Zone. The deed bearings are also referenced.
 Building dimensions and dimensions to the buildings are plus or minus 0.2 feet.
 The subject property is outside the 0.2% annual flood chance, according to the Federal Emergency Management Agency's Federal Insurance Rate Map No. 20091C00190. Effective Date: August 3, 2009.
 Bench Mark-Johnson County Vertical Control Network BM 409 located at the Southwest corner of Johnson Drive & Dgg Road. Elevation-950.41.
 Utilities were marked outside the site, along Johnson Drive. No underground utilities were marked on the site.
 No Title Report or Title Commitment was furnished for this survey. The surveyor is not responsible for any easements or rights-of-way that such documents may have divulged.

This plot portrays the results of a topographic and partial boundary survey of the properties described hereon. Said survey was conducted under my direct supervision and was completed in the field on June 1, 2016.
 Jerold W. Pruitt, PLS 814
 June 2, 2016



Client:
 CEO Structural Engineers
 6950 Squibb Road
 Suite 230
 Mission, KS 66202

TOPOGRAPHIC SURVEY		
Section 12, Township 12 South, Range 23 East Shawnee, Johnson County, Kansas		
PRUITT and DOOLEY SURVEYING, LLC		
7912 Elm Ave. Raytown, MO 64138 816-699-4239	10777 Barkley, Ste. 220-I Overland Park, KS 66211 913-652-9002	
Job No. 16-0509 Shawnee Public Works Topography.dwg June 2, 2016		SHEET OF 1

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 PHONE 913.677.3000 • FAX 913.677.3097
 ceo@ceosurvey.com
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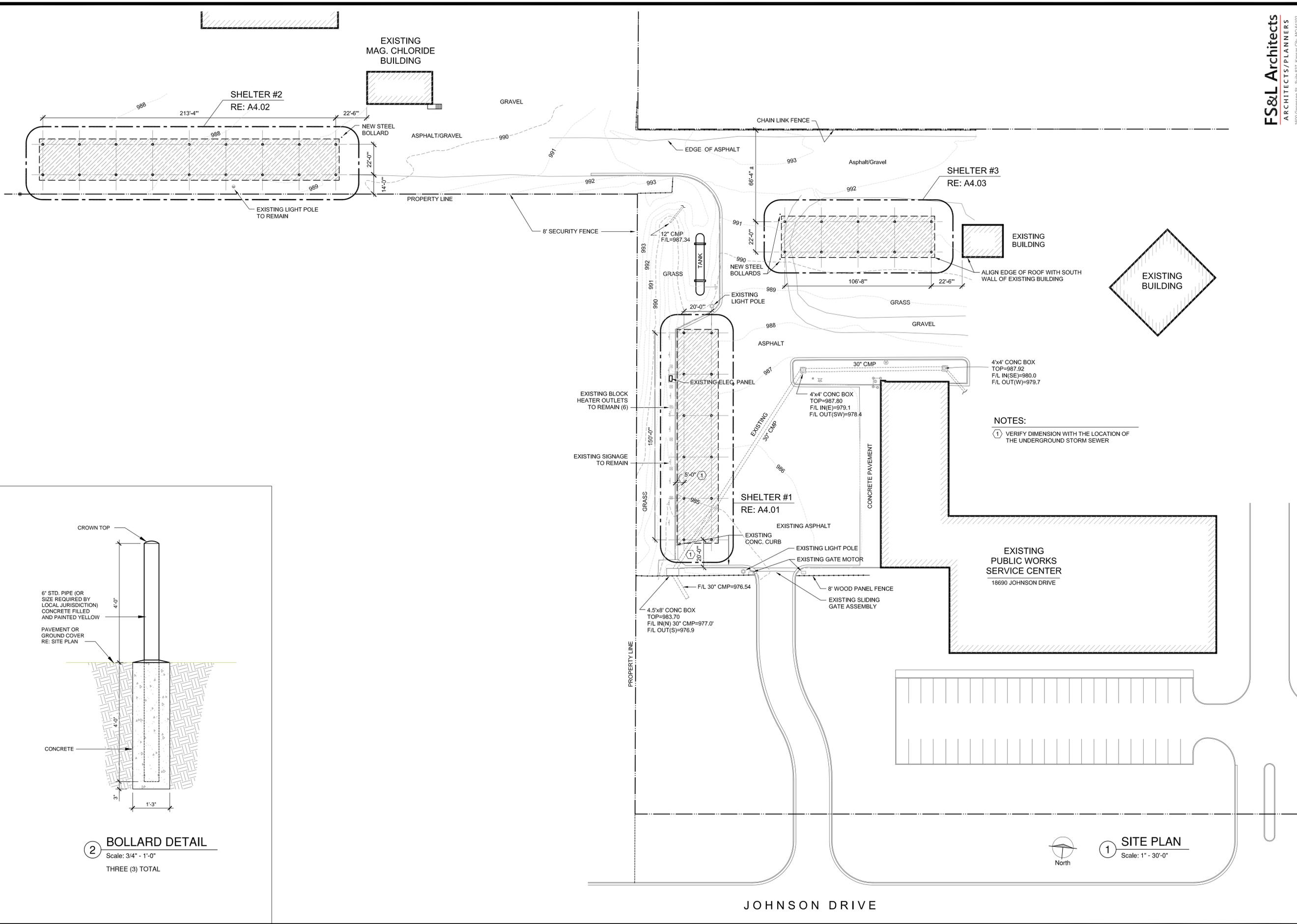
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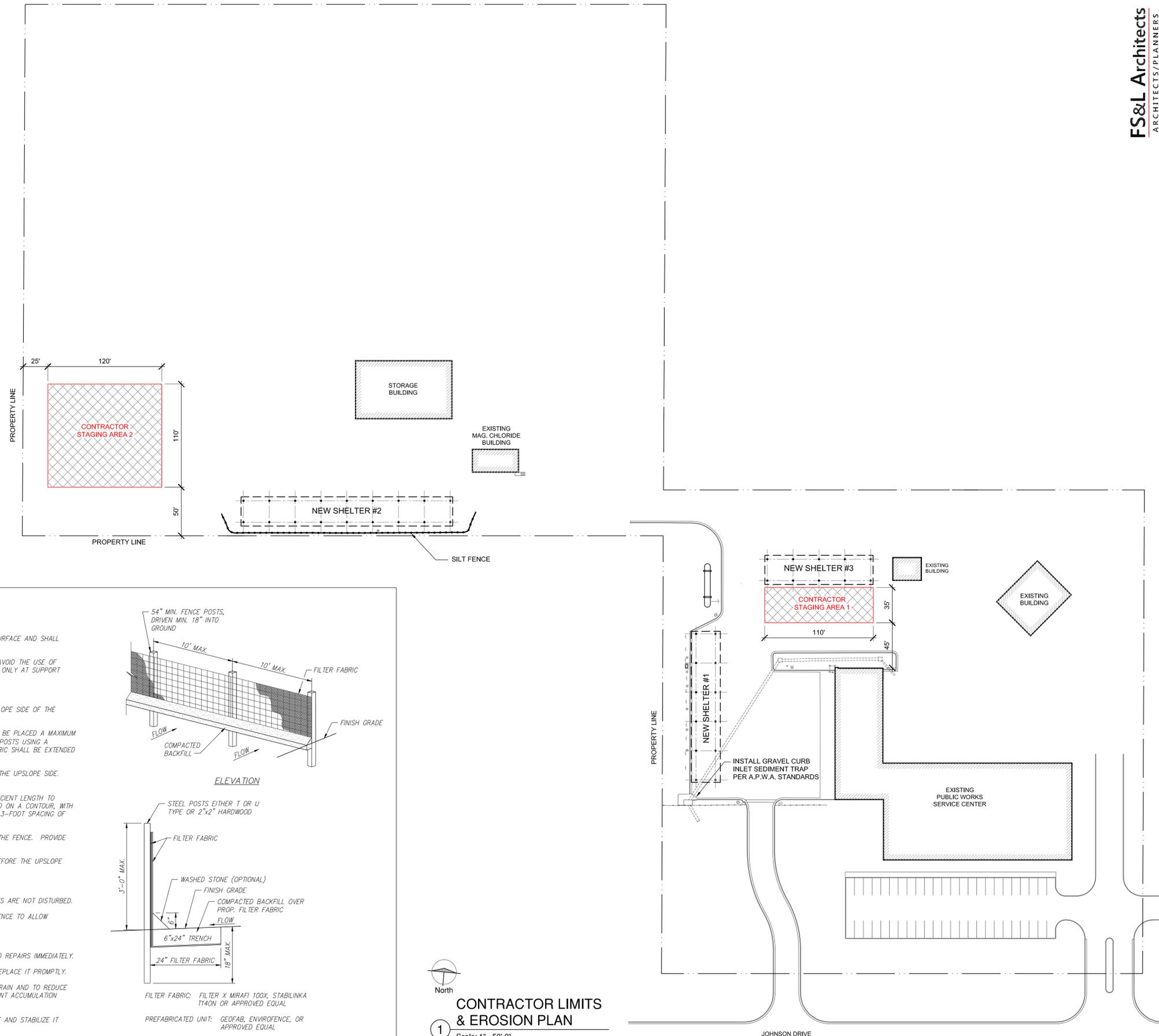
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 DESIGNED BY: NRC
 CHECKED BY: CEO
 DATE: 08/15/16
 PROJECT #: C050116

C1

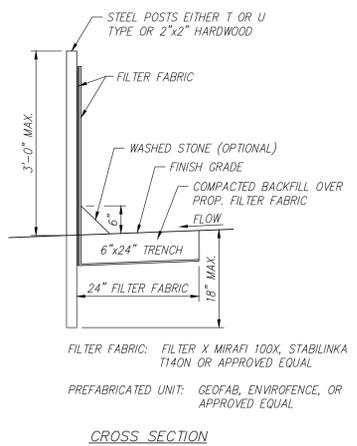
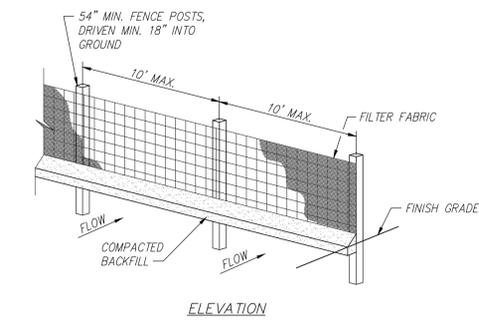
SITE PLAN





SEDIMENTATION FENCE NOTES:

- A. INSTALLATION:**
1. THE HEIGHT OF SEDIMENT FENCE SHALL BE A MINIMUM OF 30 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 36 INCHES ABOVE THE GROUND SURFACE.
 2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, THE FILTER FABRIC SHALL BE SECURELY SPLICED TOGETHER ONLY AT SUPPORT POSTS, WITH A MAXIMUM 6-INCH OVERLAP.
 3. DIG A TRENCH AT LEAST 6 INCHES DEEP AND 24 INCHES WIDE ALONG THE FENCE ALIGNMENT.
 4. DRIVE POSTS AT LEAST 12 INCHES AND NO MORE THAN 18 INCHES INTO THE GROUND ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 10 FEET APART.
 5. EXTRA-STRENGTH SEDIMENT FABRIC SHALL BE USED. POSTS FOR THIS TYPE OF FABRIC SHALL BE PLACED A MAXIMUM OF 10' APART. THE SEDIMENT FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING A MINIMUM OF ONE INCH LONG, HEAVY-DUTY WIRE STAPLES OR TIE-WIRES, AND 24 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
 6. PLACE THE BOTTOM 2 FEET OF FABRIC IN THE MINIMUM-OF-6-INCH DEEP TRENCH, LAPPING TOWARD THE UPSLOPE SIDE. BACKFILL WITH COMPACTED EARTH OR WASHED STONE TO A HEIGHT OF 6" ABOVE GROUND LEVEL.
 7. IF A SEDIMENT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, IT MUST BE OF SUFFICIENT LENGTH TO ELIMINATE ENDFLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE, PLACED ON A CONTOUR, WITH THE ENDS ORIENTED UPSLOPE. EXTRA-STRENGTH SEDIMENT FABRIC SHALL BE USED WITH A MAXIMUM 3-FOOT SPACING OF POSTS.
 8. TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SEDIMENT STORAGE AREA IN THE UPSLOPE SIDE OF THE FENCE. PROVIDE GOOD ACCESS IN AREAS OF HEAVY SEDIMENTATION FOR CLEAN OUT AND MAINTENANCE.
 9. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- B. CONSTRUCTION SPECIFICATIONS:**
1. DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES, BEFORE FENCE INSTALLATION SO UTILITIES ARE NOT DISTURBED.
 2. GRADE ALIGNMENT OF FENCE AS NEEDED TO PROVIDE A BROAD, NEARLY LEVEL AREA UPSTREAM OF FENCE TO ALLOW SEDIMENT COLLECTION AREA.
- C. INSPECTION AND MAINTENANCE:**
1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID DAMAGING OR UNDERMINING THE FENCE DURING CLEANOUT. SEDIMENT ACCUMULATION SHOULD NOT EXCEED 1/2 THE HEIGHT OF THE FENCE.
 4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY AND COMPLETELY STABILIZED.



CONTRACTOR LIMITS & EROSION PLAN
 1 Scale: 1" = 50'-0"

SEDIMENT FENCE

FS&L Architects
 ARCHITECTS/PLANNERS
 1800 Genessee St., Suite 837, Kansas City, MO 64102
 Tel: 816-421-4133



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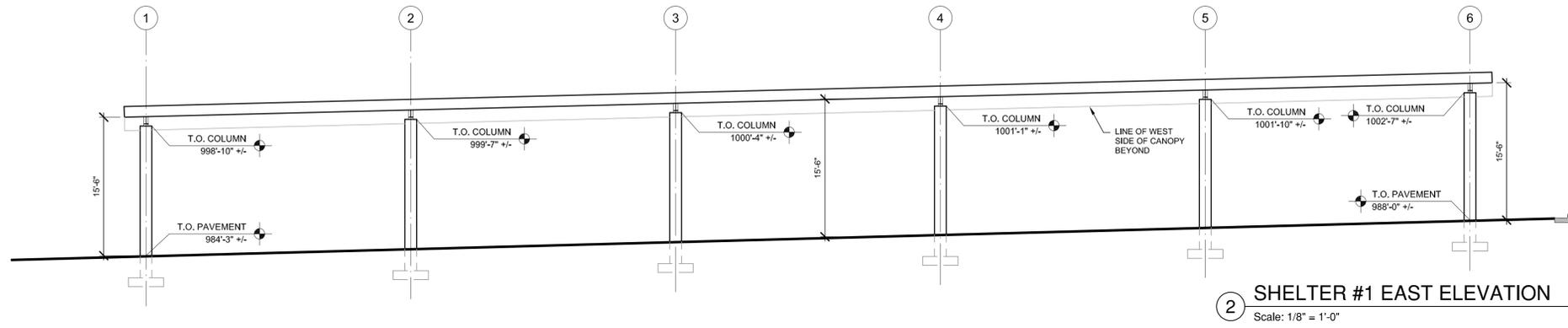
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EROSION CONTROL PLAN

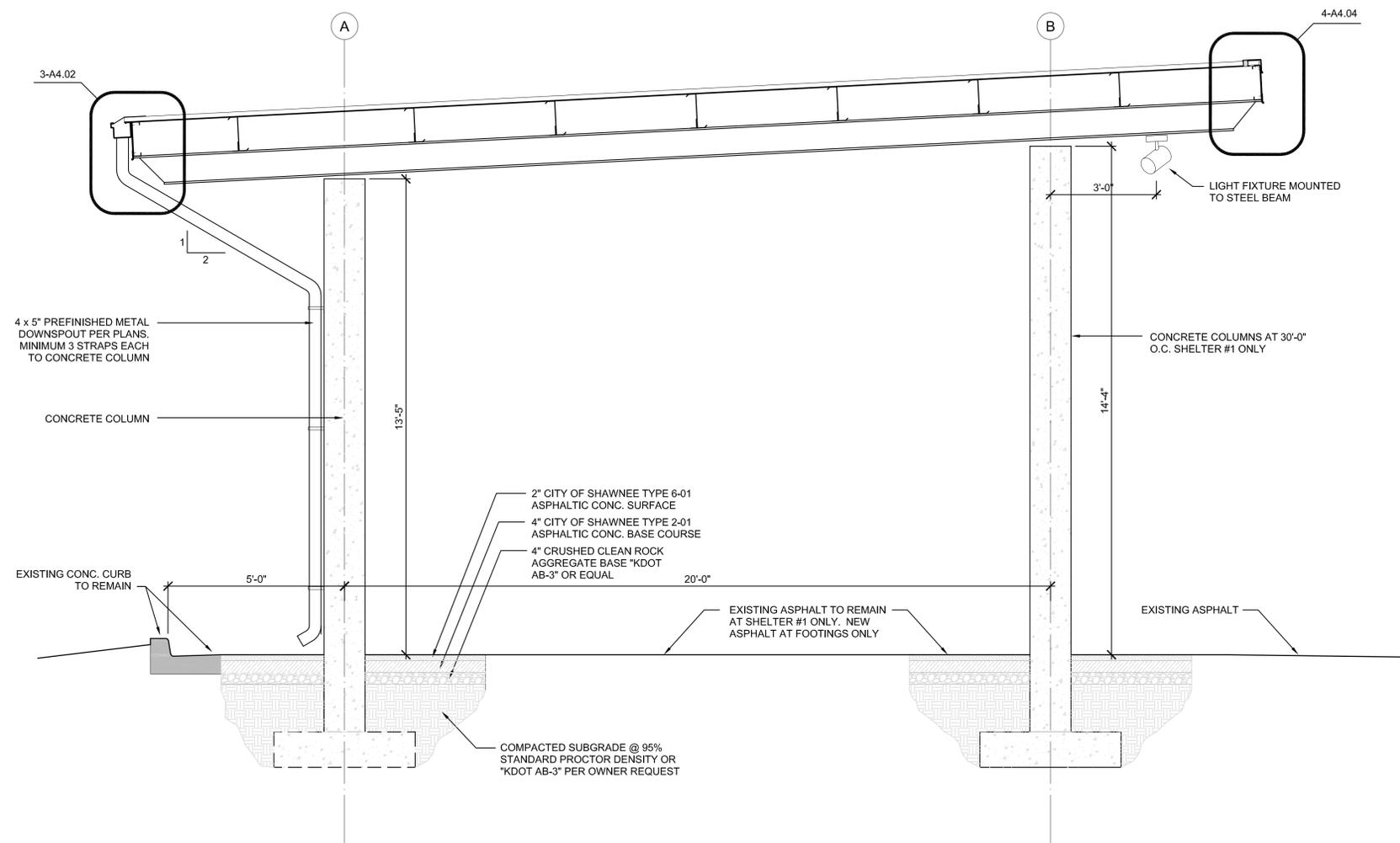
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 DESIGNED BY: GDL
 CHECKED BY: CEO
 DATE: 08/15/16
 PROJECT #:

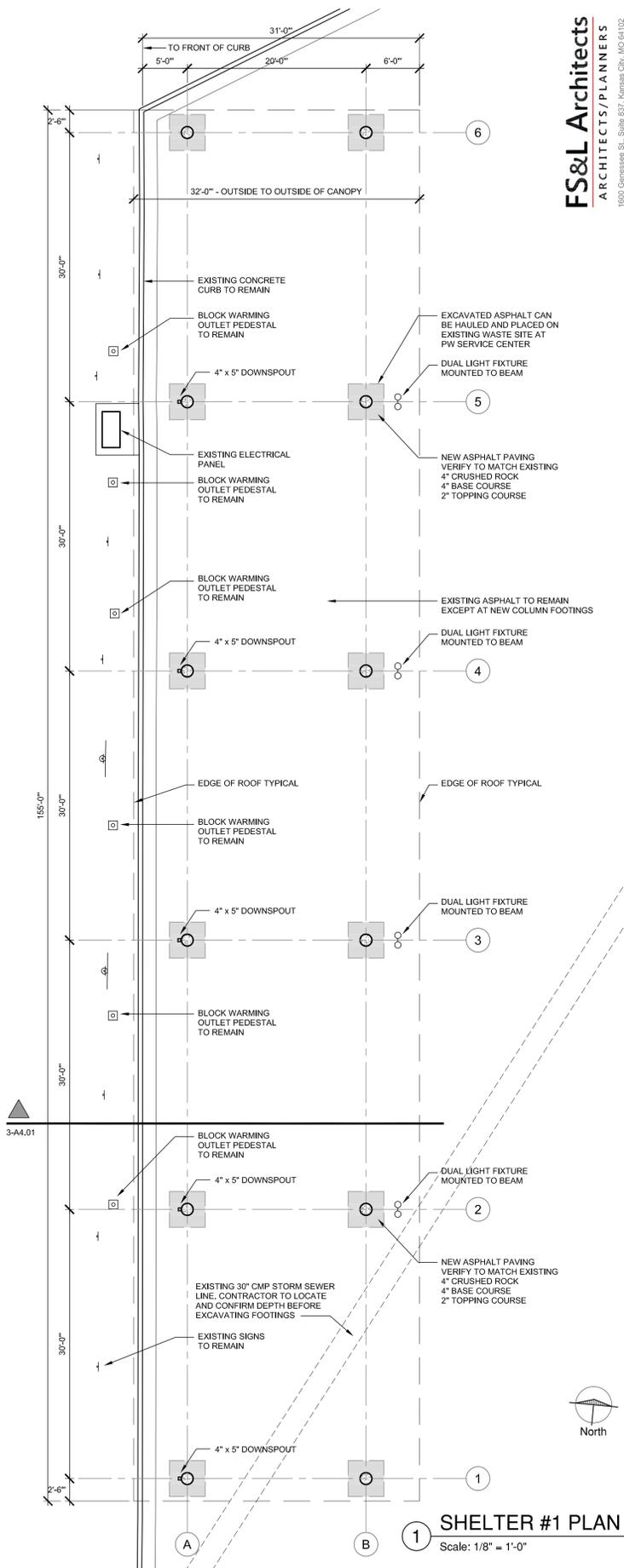
A2.02



2 SHELTER #1 EAST ELEVATION
Scale: 1/8" = 1'-0"



3 SHELTER #1 SECTION
Scale: 1/2" = 1'-0"



FS&L Architects
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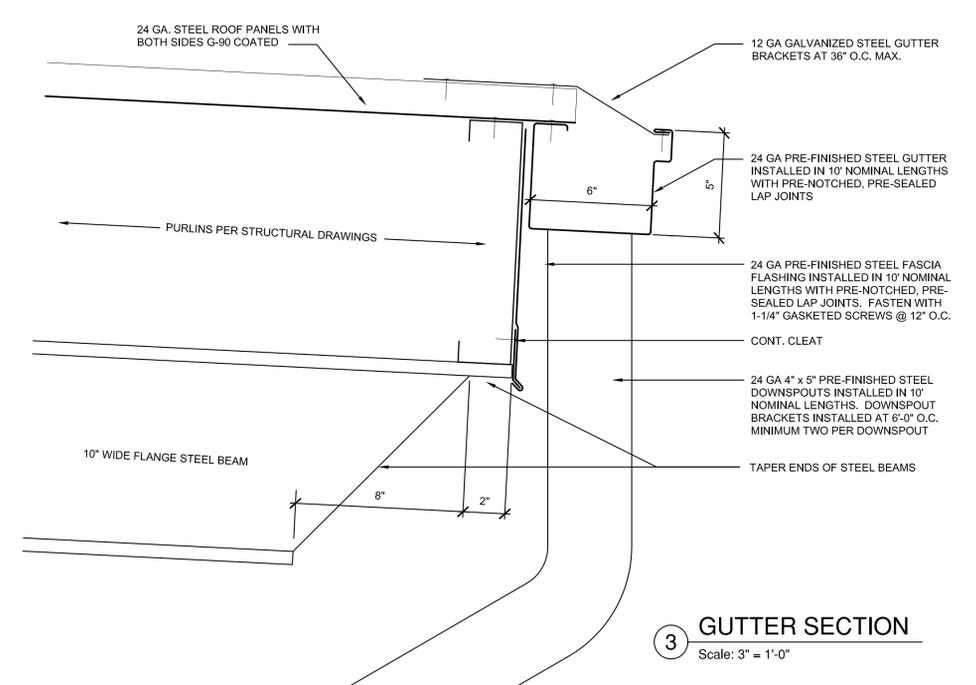
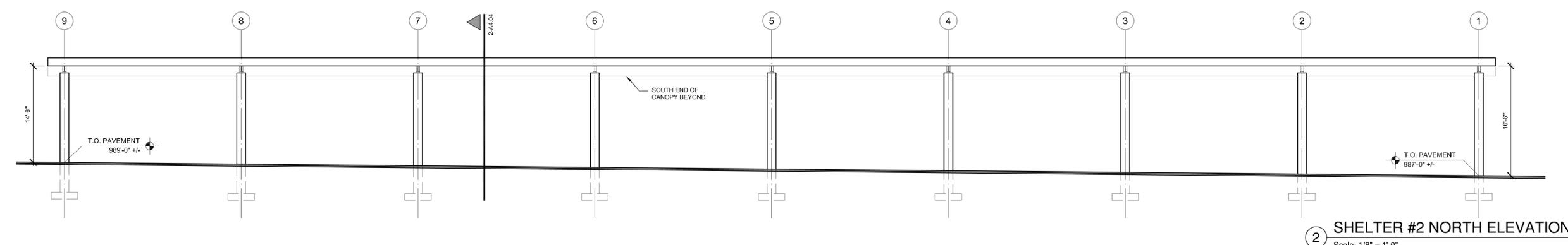
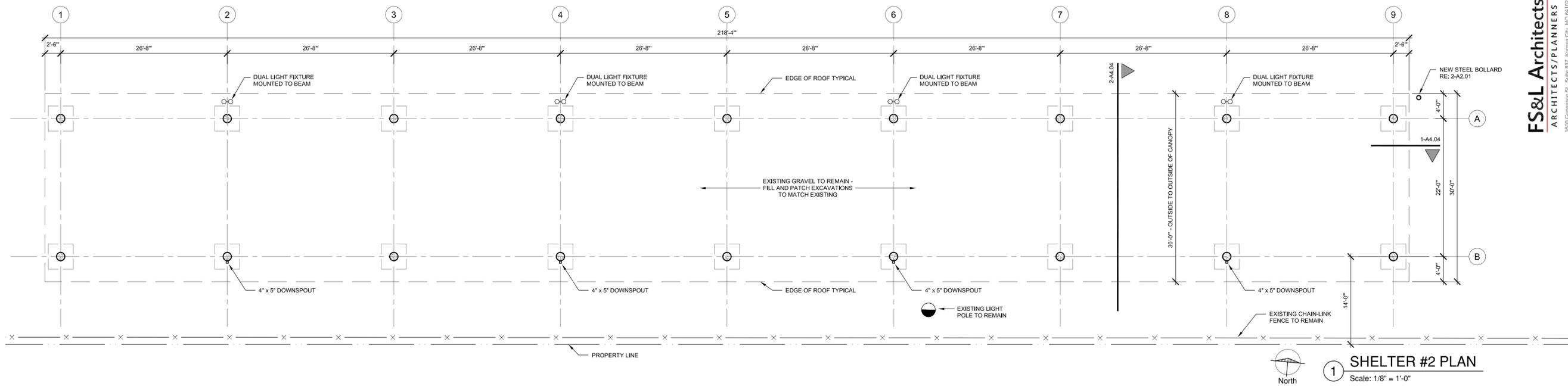
EQUIPMENT SHELTERS
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SHAWNEE, KANSAS 66218

SHELTER #1 - 5 SPAN

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DATE: 08/15/16
PROJECT #:

A4.01



FS&L Architects
ARCHITECTS/PLANNERS
1800 Genessee St., Suite 837, Kansas City, MO 64112
Tel: 816-451-1133

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SHELTER #2 - 8 SPAN

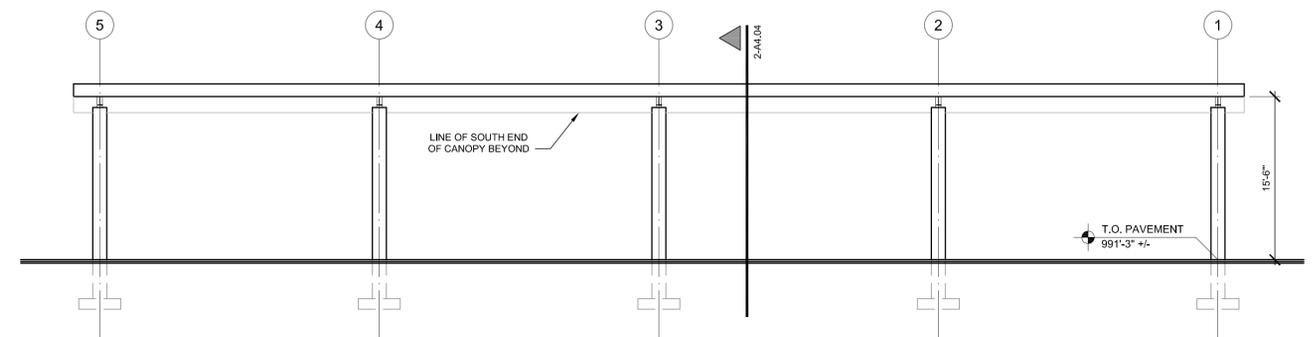
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DATE: 08/15/16
PROJECT #:

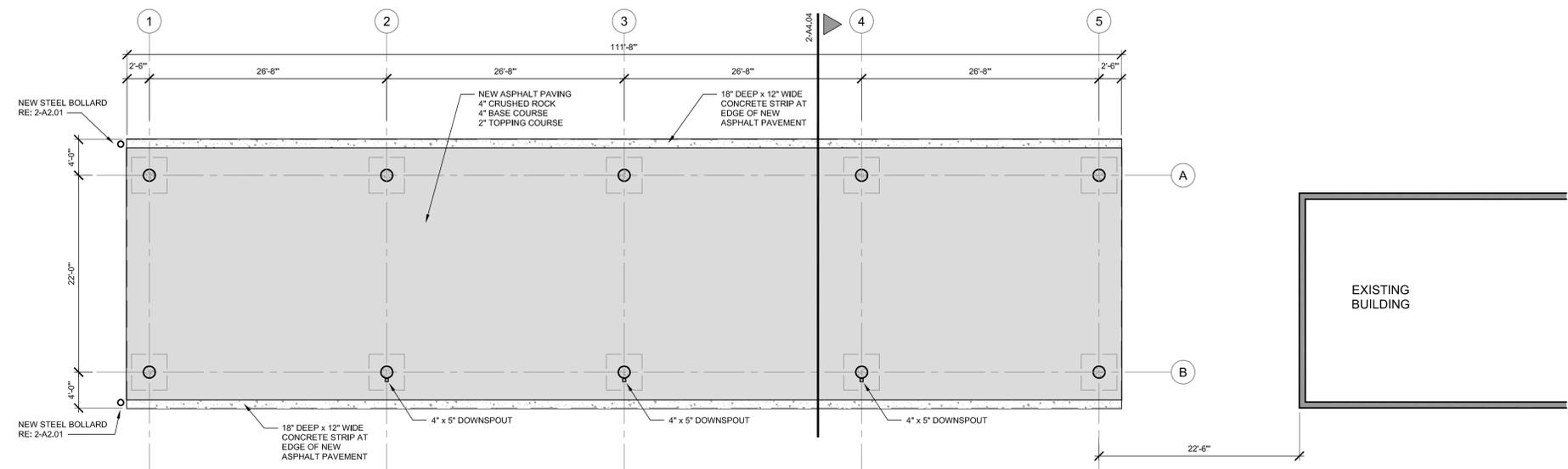
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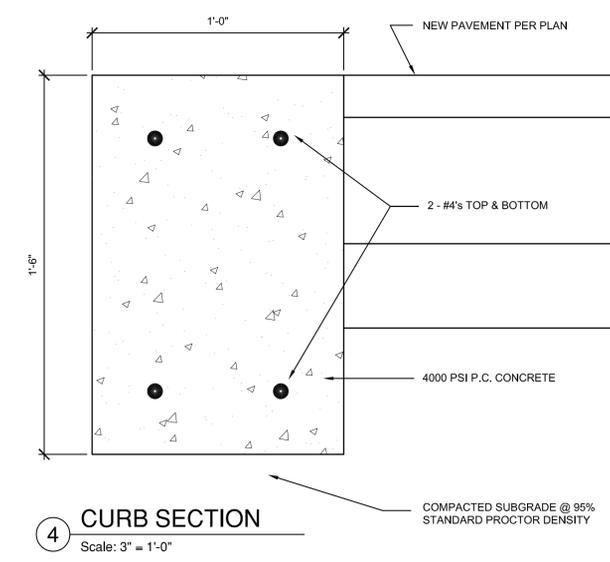
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 CHECKED BY: CEO
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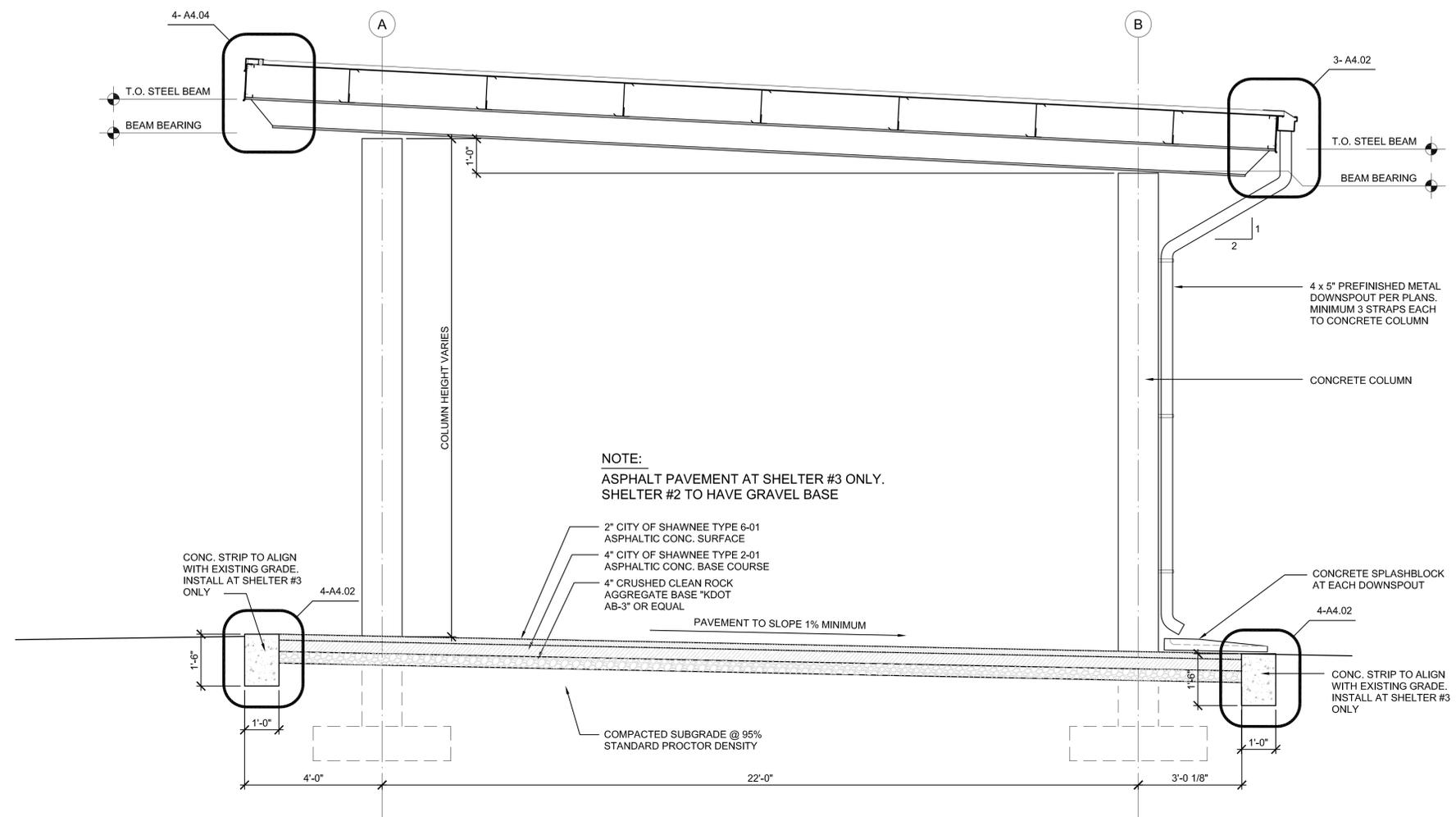
SHELTER #3 NORTH ELEVATION
 SCALE: 1/8" = 1'-0"



SHELTER #3 PLAN
 SCALE: 1/8" = 1'-0"

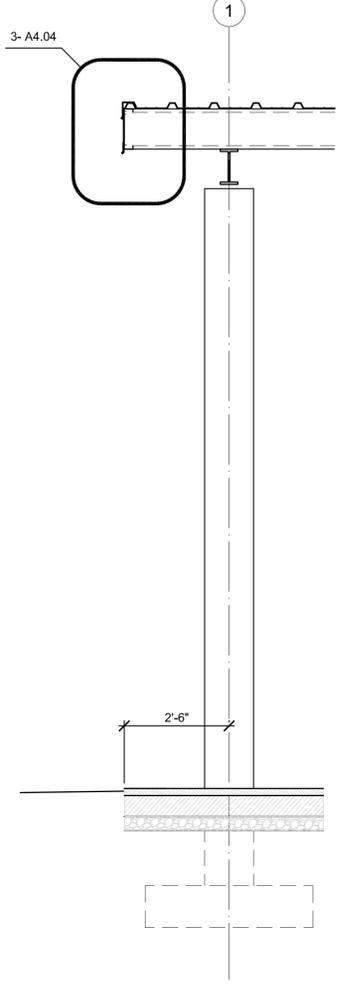


4 CURB SECTION
 Scale: 3" = 1'-0"

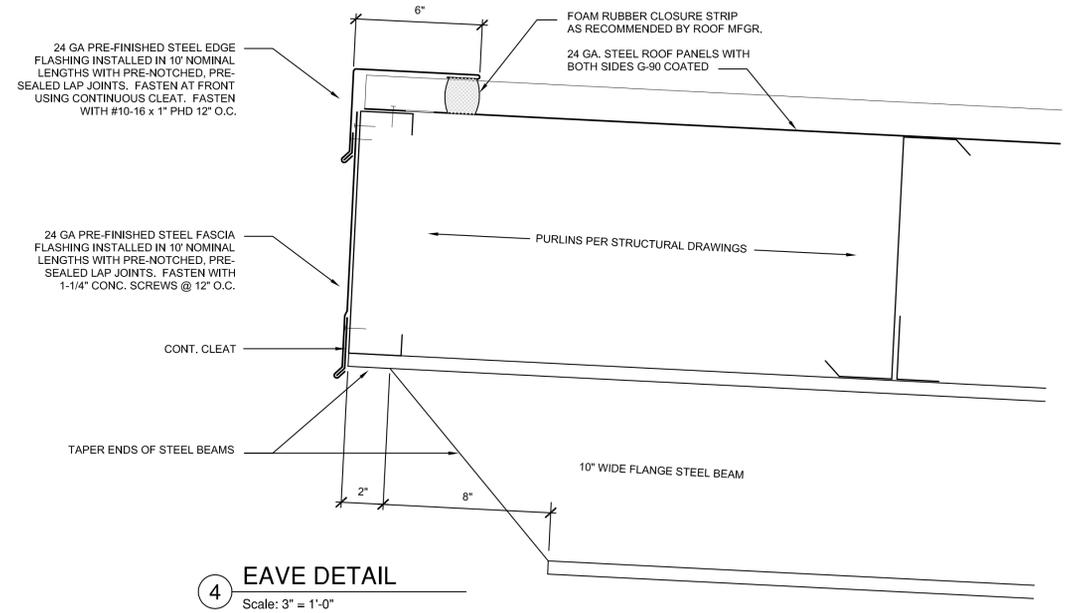


NOTE:
 ASPHALT PAVEMENT AT SHELTER #3 ONLY.
 SHELTER #2 TO HAVE GRAVEL BASE

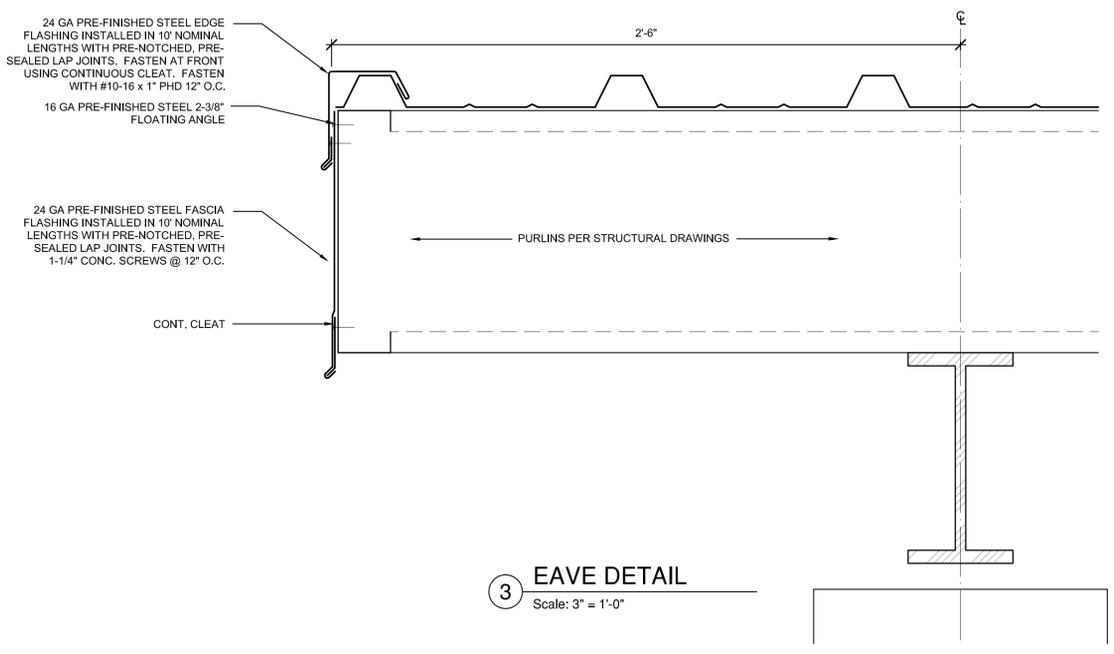
2 SHELTER SECTION
 Scale: 1/2" = 1'-0"



1 SHELTER SECTION
 Scale: 1/2" = 1'-0"



4 EAVE DETAIL
 Scale: 3" = 1'-0"



3 EAVE DETAIL
 Scale: 3" = 1'-0"

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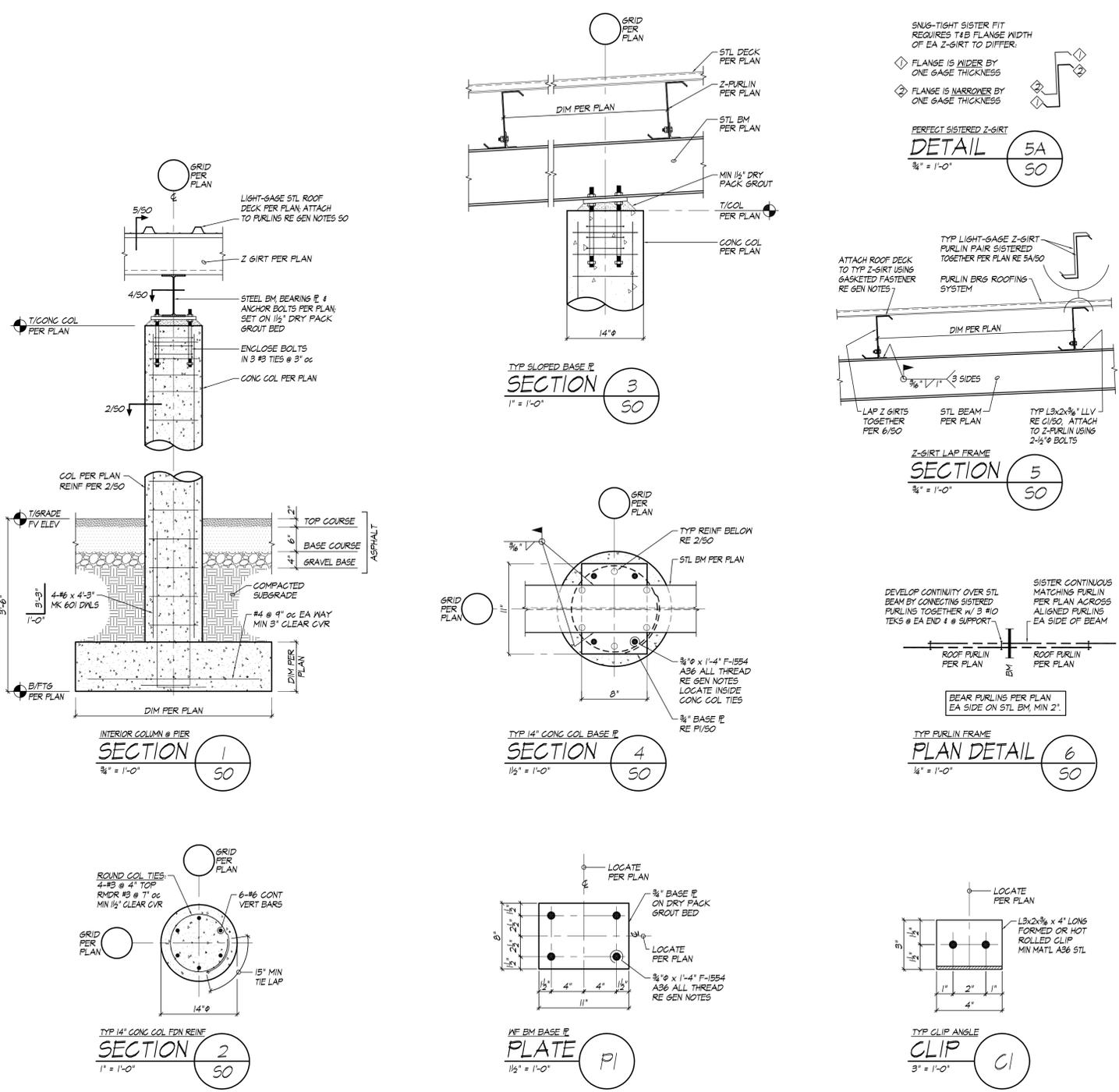
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ARCHITECTURAL DETAILS

DATE	REVISIONS	BY
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	▲	

DRAWN BY: GDL
 DESIGNED BY: GDL
 CHECKED BY: CEO
 DATE: 08/15/16
 PROJECT #:

A4.04



STRUCTURAL NOTES:

- GENERAL**
 - Design and construction shall conform to the 2012 International Building Code (IBC) as may be modified by the City of Shawnee.
 - The Contractor shall notify the Structural Engineer when actual conditions vary from what is shown on these drawings. The Engineer is not responsible for the consequences of construction that do not comply with the requirements specified or the reasonable intent conveyed in these drawings or approved revisions thereof.
 - The Contractor shall coordinate any miscellaneous structural requirements that may be shown in non-structural drawings included in the contract documents.
 - The Contractor shall coordinate dimensions shown herein with dimensions shown on other drawings, and in case of conflict, seek clarification with the Structural Engineer before proceeding with construction.
 - This design is valid only for the dimensions shown. This design may not be valid if actual constructed dimensions vary substantially from what is shown.
 - On the drawings details marked "Typical" shall apply to all situations occurring on the project that are the same or similar, as may be ascertained by the title of the detail, whether the section is cut on the drawing at each required location or not. If it is not clear how a particular typical detail applies to a specific location, the Contractor shall seek clarification from the Engineer before proceeding with construction.
 - The Contractor shall take all necessary and prudent precautions to maintain the full integrity of the structure during construction. The Contractor is solely responsible for designing and installing all temporary shoring and bracing.
 - The Contractor is entirely responsible for developing and enforcing his own safety regimen. The contractor shall design, construct and maintain all safety devices, and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations.
 - Structural members shall not be cut, notched, reduced or penetrated unless specifically approved by the engineer in advance or as shown on these drawings.
 - These drawings and notes are for this specific project and no other use is authorized.
- FOUNDATION DESIGN CRITERIA**
 - Drive slab Live load capacity 100 psf
Modulus of subgrade 100 pci
 - Soil Bearing @ 3'-0" deep 1500 psf
- FOUNDATIONS**
 - All foundation excavations shall be approved by a professional geotechnical engineer registered in the State of Kansas prior to placement of reinforcing steel or concrete.
 - The Contractor shall be entirely responsible for safely excavating into the ground and constructing stable soil slopes.
 - All perimeter footings, stoops and retaining structures shall bear minimally 3'-0" below the lowest adjacent grade.
 - Zones of soil encountered at the bottom of footing excavations deemed "soft" or inadequate shall be replaced or remediated as directed by the geotechnical engineer.
 - The Contractor shall provide dewatering of excavations from either surface water or seepage. The moisture content in soils prior to excavation should not be allowed to change relevantly after the excavation is made. Concrete for foundations shall not be placed on frozen ground or on ground softened from excess water.
 - The base of the excavation shall be free of water and loose soil prior to placement of reinforcing or concrete. Footing excavations left open for more than 24 hours shall be covered over and protected to reduce evaporation or entry of moisture. Ideally, foundation concrete shall be placed the same day the excavation is made.
 - Unless noted otherwise, all concrete slabs-on-grade shall be poured upon 4" gravel on stabilized compacted fill. The gravel shall consist of well-graded crushed stone with 3/4" maximum particle size and less than 5% passing through No. 4 sieve. Prior to asphalt placement, the gravel shall be compacted with a minimum of 4 passes of a vibratory plate compactor or vibratory drum roller.
 - Establish grades so that drainage flows positively away from the building perimeter.
 - Shrubs, trees or other plants with roots requiring large quantities of water shall not be planted within 15' of the foundation perimeter.
- STRUCTURAL CONCRETE**
 - All concrete shall be designed and constructed according to ACI 318-11, "Building Code Requirements for Reinforced Concrete," and Commentary (ACI 318-11R).
 - All concrete shall develop a minimum ultimate compressive strength of 2800 psi in 3 days and 5000 psi in 28 days, with not less than 550 pounds of Type 1 or 2 Portland cement per cubic yard of concrete, regardless of the strengths obtained, not more than 6.00 gallons of water for each 100 pounds of cement, with slump that does not exceed 4-1/2".
 - All concrete shall have between 10 to 20% of the Portland cement weight replaced with an equivalent weight of an approved Grade 100 slag cement.
 - All concrete shall have a minimum ultimate compressive strength of 2800 psi in 3 days and 5000 psi in 28 days, with not less than 550 pounds of Type 1 or 2 Portland cement per cubic yard of concrete, regardless of the strengths obtained, not more than 6.00 gallons of water for each 100 pounds of cement, with slump that does not exceed 4-1/2".
 - Large aggregate shall be comprised entirely of quartz, traprock, granite or KDOT's "Concrete Paving Aggregate 3" (CPA-3); limestone shall not be used. The maximum size of aggregate shall not exceed 3/4" diameter.
 - Small aggregate shall be comprised of clean, uniformly graded sand or quartz crystals with at least 5% of the total weight passing thru #50 sieve and not more than 45% of the total weight passing thru two consecutive standard sieves.
 - Water shall be potable. NOTE: All of the water ingredient shall be mixed into the concrete at the batch plant. After leaving the batch plant, concrete identified as having had water added to it will be rejected, and entirely removed and replaced at the Contractor's expense.
 - All concrete is reinforced unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas. Any sections not shown shall be detailed per ACI 315, "Details and Detailing of Concrete Reinforcement", current edition.
 - Clear minimum coverage of concrete over longitudinal reinforcing steel shall be minimized, but it shall not be less than the largest nominal bar diameter, nor less than the following (unless noted otherwise):
 - Concrete placed against trenched earth 3"
 - Concrete placed against form in earth 2"
 - Un-bid elements (elevated slabs and walls) 1"
 - Tied elements (columns & elevated beams) 1-1/2"
 - All concrete accessories shall have plastic-coated feet and shall comply with the latest edition of the ACI Detailing Handbook and the latest handbook of CRSI, "Placing Reinforcing Bars".
 - Forms shall not be released until concrete has achieved its minimum 3-day strength.
 - Isolate aluminum from concrete. Do not embed any aluminum items in concrete.
 - Limit control joints in dirt-formed slab areas to 16'-0" apart along any side.
 - Cut saw joints in slab-on-grade concrete maximum 8 hours after concrete pour.
- CONCRETE ADMIXTURES**
 - For all admixture products to be used in concrete, the Contractor shall submit defining literature for review and approval by the EOR prior to placement in concrete.
 - Unless approved otherwise, all admixtures shall be mixed at the batch plant according to manufacturer's written instructions. Admixtures shall not contain chlorine or any chemical detrimental to reinforcing, light-gauge metal or structural steel.
 - Entrain all new concrete with 6% +/- 1% air.
 - All concrete shall contain an organic corrosion inhibitor, such as RHEOCRETE 222+ or approved equivalent.
 - Where specified on plan, concrete shall contain "fibrillated polypropylene" micro-fibers complying with ASTM C-1116 with specific gravity < 1.00 that are both alkali and acid resistant. Average fiber length shall be at least 1" long, not less than 3/4" and not more than 2" long. Dosage shall be not less than 1.5 lbs per cubic yard of concrete.
- REINFORCING STEEL**
 - Fabrication, erection and placement of reinforcing steel shall conform to Concrete Reinforcing Steel Institute (CRSI), "Manual of Standard Practice".
 - Bar reinforcing shall conform to ASTM A615 grade 60 deformed reinforcing steel, except stirrups and ties shall comply with CRSI supplementary requirements for improved bendability.
 - Reinforcing steel shall not be welded or heated, unless specifically noted otherwise. All bar bends shall be made cold.
 - Reinforcing steel shall be clean of rust, grease or other material likely to impair bond.
 - Fabricate reinforcing bars in continuous lengths as is practicable. Where discrete bars require splicing, use direct contact bar laps according to the Schedule:

BAR SIZE	MIN LAP IN CONC	90° HOOK IN CONC	BAR SIZE	MIN LAP IN CONC	90° HOOK IN CONC
#3	15"	6"	#7	42"	14"
#4	20"	8"	#8	48"	16"
#5	24"	10"	#9	54"	18"
#6	30"	12"	#10	60"	20"
 - Place dowels between adjacent or sequential pours and as indicated. All dowels shall be same size and spacing as adjoining main bars. Unless noted otherwise, set equal legs into adjoining members and lap according to the Schedule above.
 - Prior to placing concrete all reinforcing shall be tied and secured in place from displacement using standard ties and anchorage devices.
 - Splicing of bars shall be considered as maximum spacing.
 - Allow 500 lbs of reinforcing bars #4 and #5 to be used as directed in the field by the Structural Engineer for special conditions. Labor for placing same to be included.

- STRUCTURAL STEEL**
 - Design, fabrication and erection of steel shall be according to the AISC, "Manual of Steel Construction", 14th Edition, 2011 [AISC #14].
 - All structural steel shall be fabricated using the following materials:
 - Standard W, S, M, HP & T: ASTM A992 Gr 50 w/ 50 ksi yield.
 - Standard C, MC & angles: ASTM A36 w/ 36 ksi yield.
 - Rod, plate & other miscellaneous shapes: ASTM A36 w/ 36 ksi yield.
 - All welding shall conform to American Welding Society (AWS) specification D1.1 as defined by AISC #13, Section J2.
 - All fillet welds shall use standard E-70XX electrodes. All steel-to-steel fillet welds not otherwise detailed shall be 3/16". After completion, remove all slag.
 - All structural steel-to-steel connection bolts not otherwise specified shall be ASTM A325-N, 3/4" diameter twist-off type tension-control assemblies and shall be installed fully pre-tensioned according to manufacturer's written instructions.
 - Unless noted otherwise, all anchor bolts cast into fresh concrete shall be 3/4" Ø ASTM F-1554 with at least 36 ksi yield, at least 12" long, which includes a 4" threaded projection above top of concrete and threaded-end nut.
 - Unless noted otherwise, all anchor bolts drilled, epoxied and set into existing concrete shall be 3/4" Ø all-thread, ASTM F-1554 with at least 36 ksi yield.
 - All exterior steel directly exposed to the environment shall be galvanized or coated with approved products to prevent corrosion.
- STRUCTURAL LIGHT-GAGE STEEL FRAMING**
 - All properties, fabrication and erection shall be according to the AISI, Specification for the Design of Cold-Formed Structural Members, 2007.
 - All structural light-gauge metal shall conform to ASTM A1008, structural grade, Type H, with G90 galvanized metallic coating and have at least 55 ksi minimum yield.
 - In contrast to tracks [noted "C"], studs [noted "S"] and zees [noted "Z"] shall have at least 1/2" return flaps.
 - All metal studs are specified according to the Steel Stud Manufacturer's Association, Product Technical Information", ICBO ER-4943P, with properties as follows:

PLAN MARK	Deep (in)	Gage (steel) (in)	Flange (in)	Area (in ²)	Ie (in ⁴)
1200 Z 325 - 135	12.00	10	3.50	2.60	8.96
1000 Z 300 - 105	10.00	12	2.75	1.82	5.16
1200 S 300 - 105	12.00	10	2.50	2.38	8.01
1000 S 250 - 105	10.00	12	2.50	1.58	4.39
 - All light-gauge members used in framing shall be straight and undamaged. Curved or warped members or members with bent flanges shall not be used.
 - Cut framing members as required to fit squarely against abutting members.
- LIGHT-GAGE METAL FASTENERS**
 - Fasteners used to connect sheathing to light-gauge steel members or light-gauge steel members to each other shall be thread-cutting tapping screws with the material, process and performance requirements of SAE J78, Bulldex brand "tr" or approved equivalent, #10 (0.1875" diameter) with 16 threads per inch, with at least 1450 lbs ultimate shear and 1400 lbs breaking tension.
 - Fasteners used to connect light-gauge steel members to structural steel members shall be smooth-shank collated gas fasteners, Hill type "X-EGN" or approved equivalent, comprised of AISI 1008-1005 steel, austempered to a core hardness of 52-58 Rc with minimum 270 ksi tensile breaking strength and 160 ksi ultimate shear strength.
 - Fasteners used to connect light-gauge steel members to structural concrete shall be straight-shank collated gas fasteners, Hill type "X-U" or approved equivalent, comprised of AISI 1008-1005 steel, austempered to a core hardness of 52-58 Rc with 270 ksi tensile breaking strength and 160 ksi ultimate shear strength.
 - Fasteners used to connect light-gauge steel roof deck to light-gauge metal roof purlins shall be zinc-plated hex-&washer head drill-point roof screws, #12 x 1" long, Bulldex "Tek" Model #10018754 or approved equivalent. For each screw, also provide 3/4" metal-backed neoprene sealant washers under fastener heads on weather-side of panels. Unless noted otherwise, drill and set roofing-fastener assemblies thru roof panel along length of each purlin not to exceed 12" o.c.
 - Welding shall conform to American Welding Society, Specification D1.1.
- MISCELLANEOUS LIGHT-GAGE STEEL CONSTRUCTION COMPONENTS**
 - Roof & edge panels shall be a minimum 22 GA aluminum zinc-coated steel. The coating shall have a minimum coating mass of 150 grams/square meter as determined by the triple spot test per ASTM A-428, latest issue.
 - Gutters, Downspouts, Flashings and Trim: See Section 7B above.
 - Sealant and Closures. Install closed cell EPDM closures matching the panel profiles at the eaves and gables as required to provide a weather-tight roof. Sealant for side laps and flashings shall be a nominal 1/8" thick x 3/4" wide, non-drying, non-sinking, pre-formed tape sealant.
 - Paint. All structural and light gauge steel shall be cleaned of all foreign materials and given one coat of a rust inhibiting primer. All coated steel panels, flashings, gutters, downspouts, trim and other exterior steel surfaces designated to receive a color coating shall be factory pre-treated then primed for adhesion. Then after priming the exterior side shall receive a finish coat (color as designated) of a thermo-set silicone-type paint to a controlled, dry film thickness of minimum 1 mil.
- EPOXY ANCHORING**
 - Where permitted in the drawings, drill clean holes not to exceed 1-1/2 times the diameter of the bar or anchor being installed.
 - Prior to epoxying, the holes shall be cleaned of laitance and debris.
 - The bar or anchor shall be drilled to such depth, as specified by the manufacturer of the epoxy product, to effectively develop 2.50 times the yield force of the steel area.
 - The epoxy product shall be waterproof and be able to maintain bond within the range of 10 degrees F below zero up to 120 degrees F above zero.
- CONSTRUCTION ADMINISTRATION**
 - The Owner shall engage the project structural engineer to perform testing of structural materials and to regularly inspect if ongoing construction is in compliance with project contract documents and IBC provisions.
 - All special inspections shall be reported in a timely manner, providing the time and location of inspection to the engineer and contractor, and to the designated official representing the Department of Public Works.
 - The Contractor shall notify special inspector or special inspection agency at least 24 hours in advance of the requested time of inspection.
 - The Contractor shall submit the following shop drawings for review and approval prior to fabrication or construction.
 - Concrete mix design.
 - Mill verifications for structural, light gauge and concrete reinforcing steel.
 - Structural steel shop drawings with Bill of Materials list.
 - Reinforcing steel placement drawings w/ bar lists and bar bends.
 - The Special Inspector shall inspect:
 - Placement of reinforcing steel in concrete forms - periodic.
 - Placement of bolts cast in concrete - periodic.
 - Installation of anchors epoxied or set into existing concrete - periodic.
 - If required design concrete mix is being used - periodic.
 - Slump, air content & temperature of concrete - periodic.
 - Placement of concrete - periodic.
 - High-strength bolting (using twist-off legume bolts) - periodic.
 - Structural welding for fillets > 5/16", grooves and plugs - periodic.
 - Steel frame inspection for pre-manufactured metal building - periodic.
 - The Contractor shall replace or repair all construction identified as defective in the Special Inspection reports, as required by the Engineer, without cost to the Owner.
- COPYRIGHT & DISCLAIMER**
 - Structural drawings marked S0, S1, S2 & S3 (4-24-36) dated July 2016 are the copyrighted work of CEO Structural Engineers, Inc., and shall not be reproduced for any use whatsoever except this project without the expressed written permission of Christopher E. Orlando, P.E.
 - Christopher E. Orlando, P.E., registered engineer and a representative of CEO Structural Engineers, Inc., do hereby accept professional responsibility as required by the professional registration laws of the State of Kansas only for the aforementioned drawings prepared under my direct supervision and control.
 - I hereby disclaim responsibility for all other drawings in the document package, they possibly being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.

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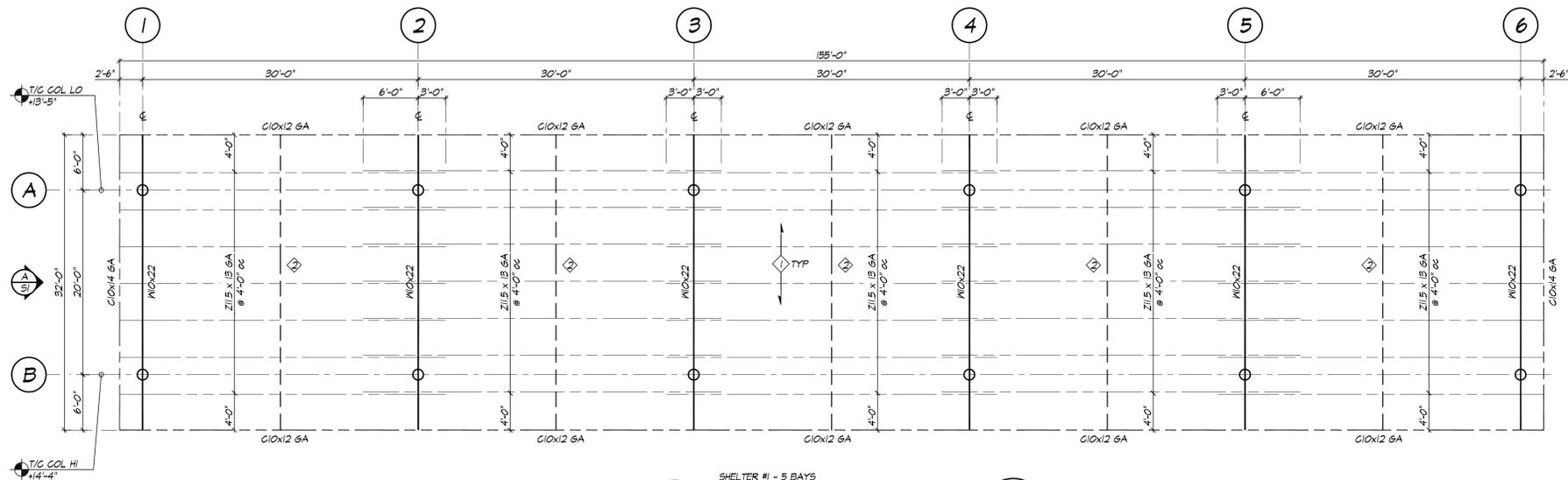
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GENERAL NOTES & DETAILS

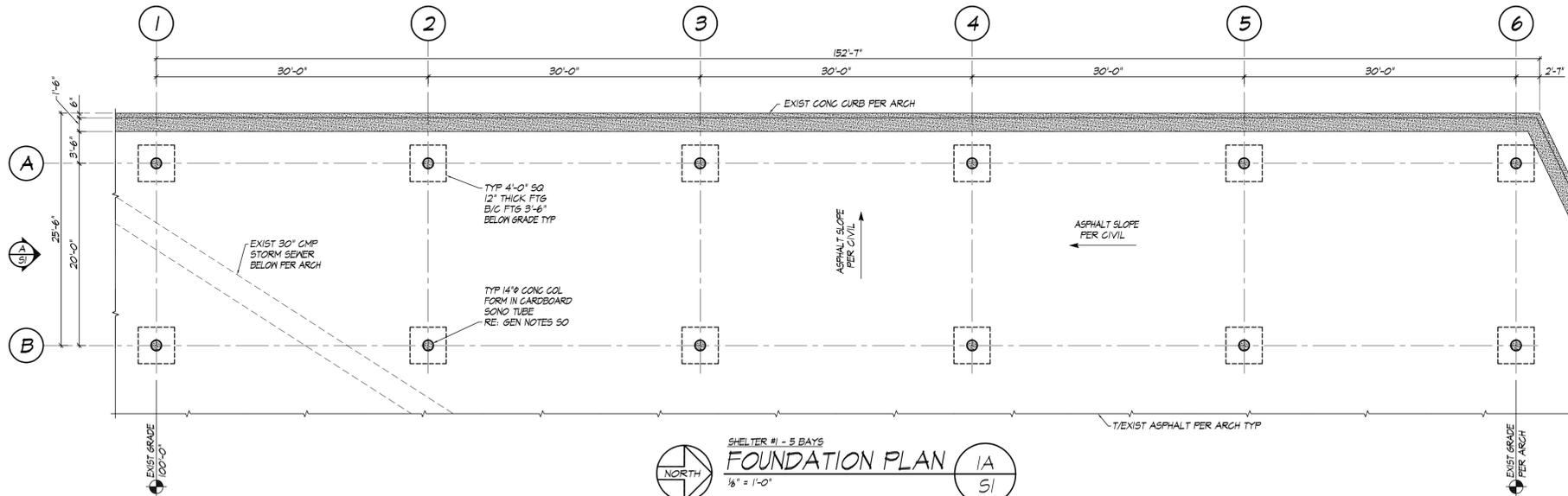
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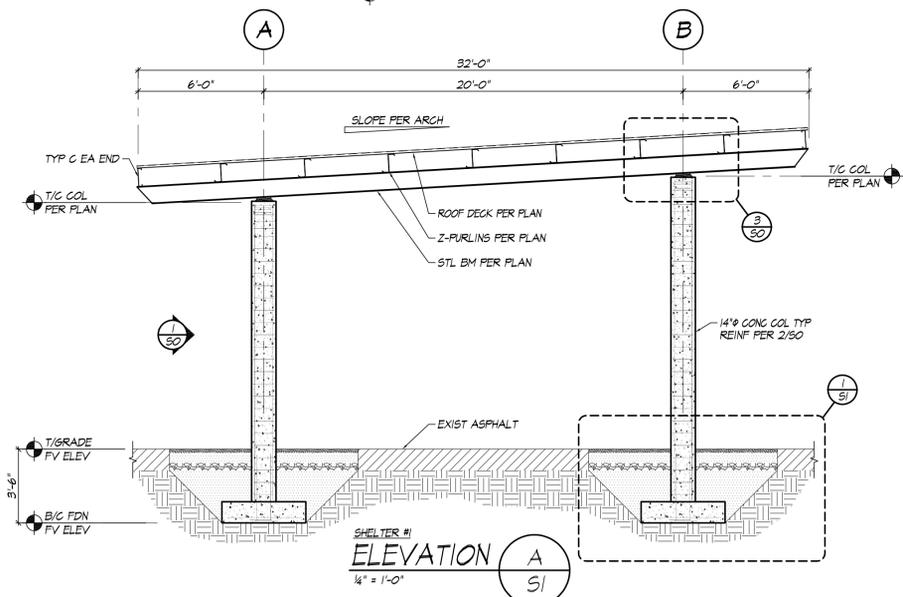


SHELTER #1 - 5 BAYS
ROOF FRAMING PLAN 1B
 1/8" = 1'-0"
 (T/S NOTED AS ± EXIST GRADE ELEV.)

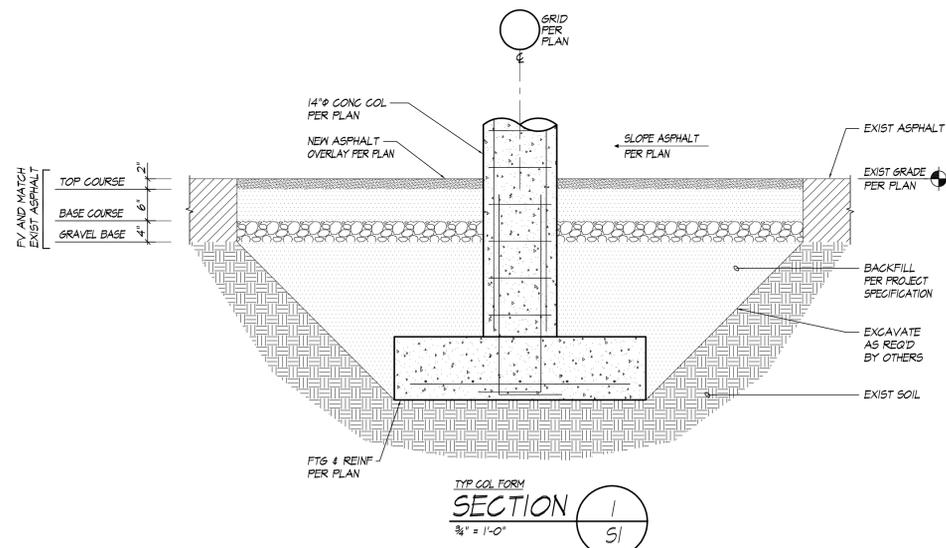
PLAN NOTES:
 1. 1/2" x 24 GA GALVANIZED STEEL FURLIN-BEARING ROOFING SYSTEM SPAN CONT IN DIRECTION SHOWN
 2. CONT ROY OF Z-SIRT BOTTOM-FLANGE UPLIFT COMPR BRACINGS.



SHELTER #1 - 5 BAYS
FOUNDATION PLAN 1A
 1/8" = 1'-0"



SHELTER #1
ELEVATION A
 1/4" = 1'-0"

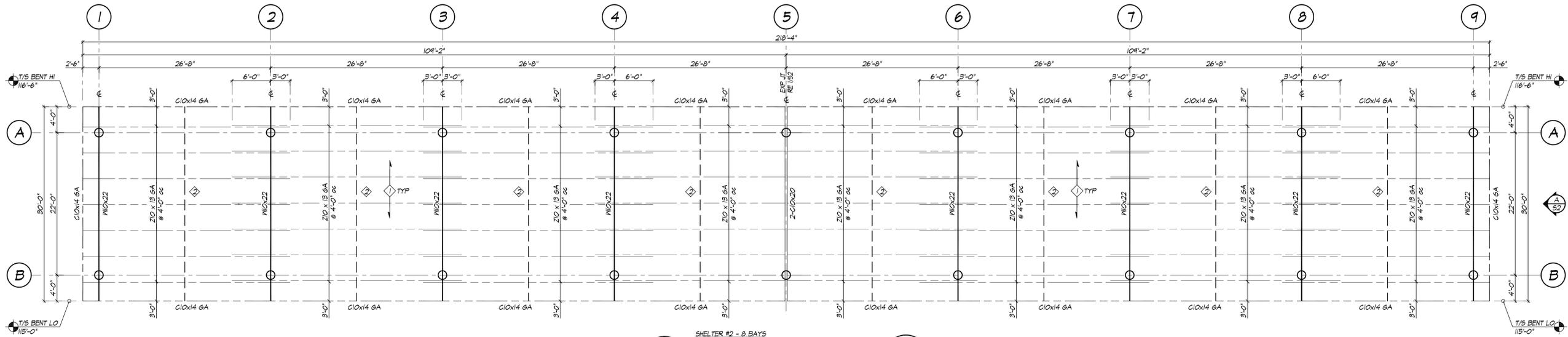


TYP COL FORM
SECTION 1
 3/4" = 1'-0"



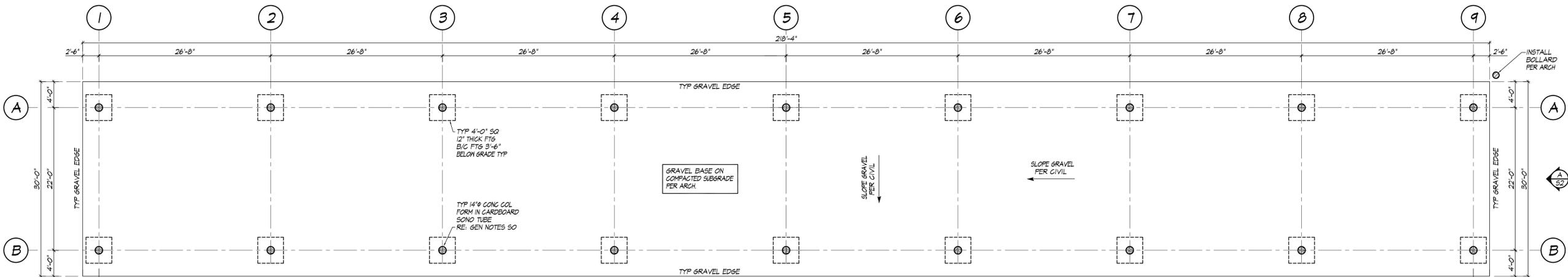
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 DATE: 08/15/16
 PROJECT #: COS016

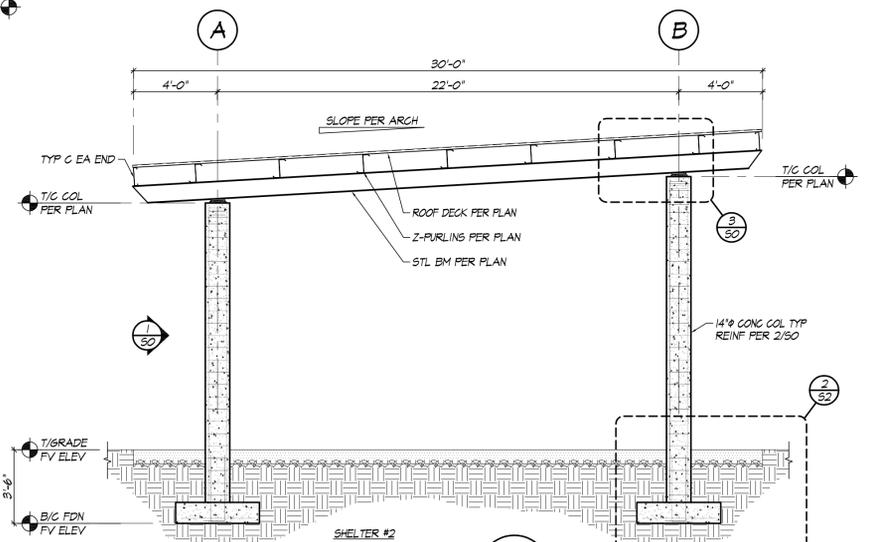


SHELTER #2 - 8 BAYS
ROOF FRAMING PLAN 1B
 1/8" = 1'-0" (1/8" NOTED AS ± EXIST GRADE ELEV.) S2

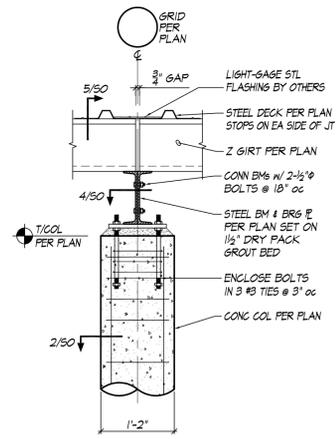
PLAN NOTES:
 ◆ 1/2" x 24 GA GALVANIZED STEEL PURLIN-BEARING ROOFING SYSTEM SPAN CONT IN DIRECTION SHOWN
 ◆ CONT ROW OF Z-GIRT BOTTOM-FLANGE UPLIFT COMPR BRACING.



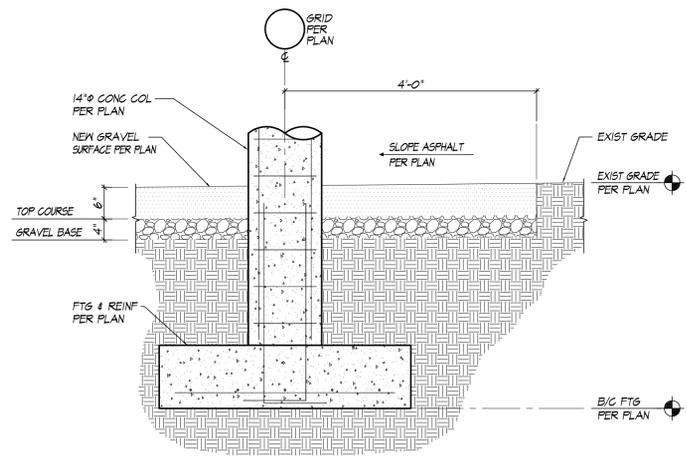
SHELTER #2 - 8 BAYS
FOUNDATION PLAN 1A
 1/8" = 1'-0" S2



SHELTER #2
ELEVATION A
 1/4" = 1'-0" S2



INTERIOR COL @ EXP-JT
SECTION 1
 3/4" = 1'-0" S2

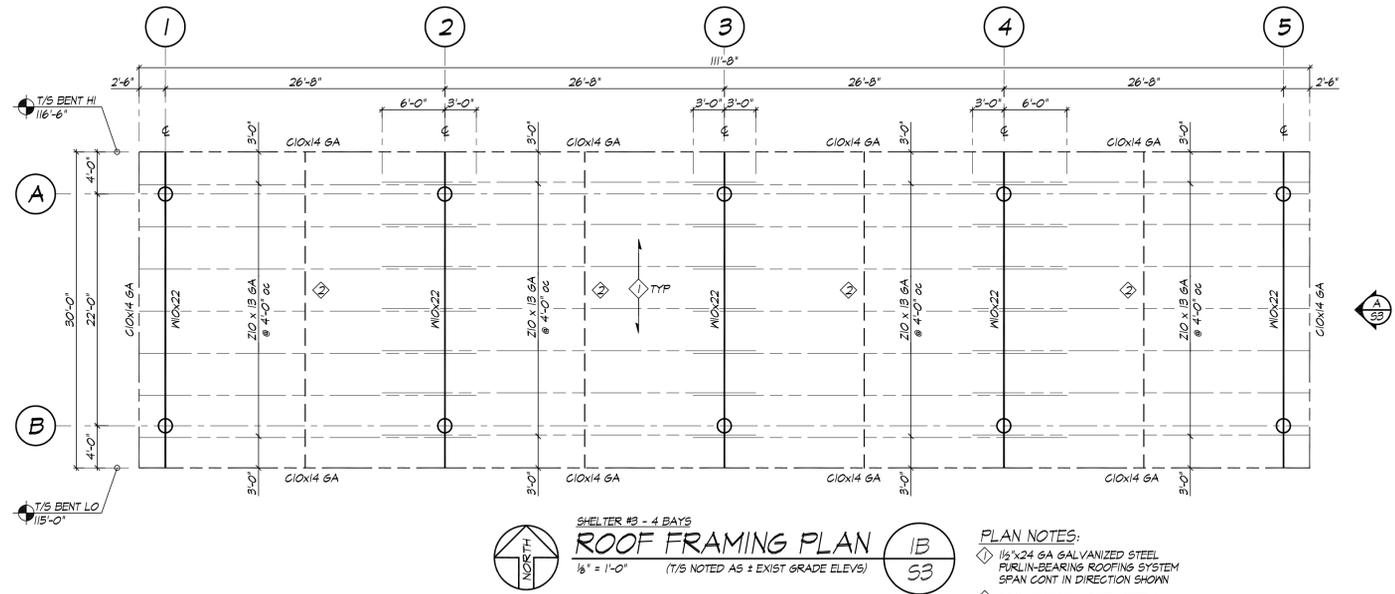
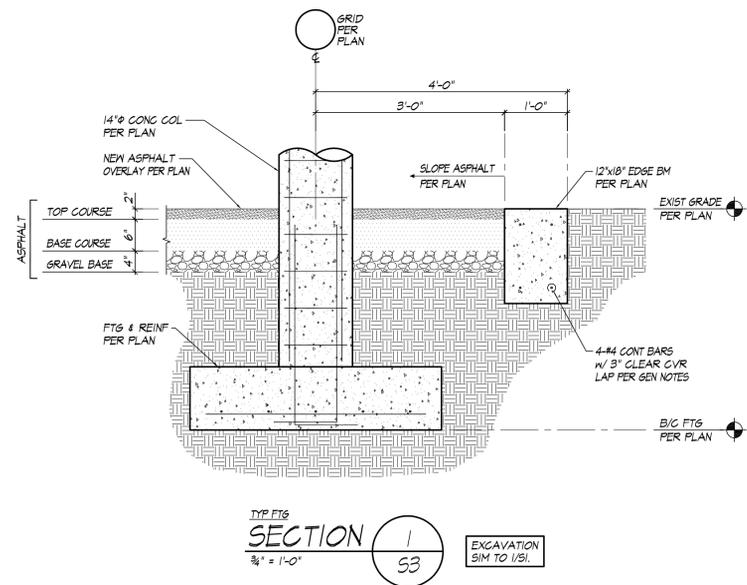
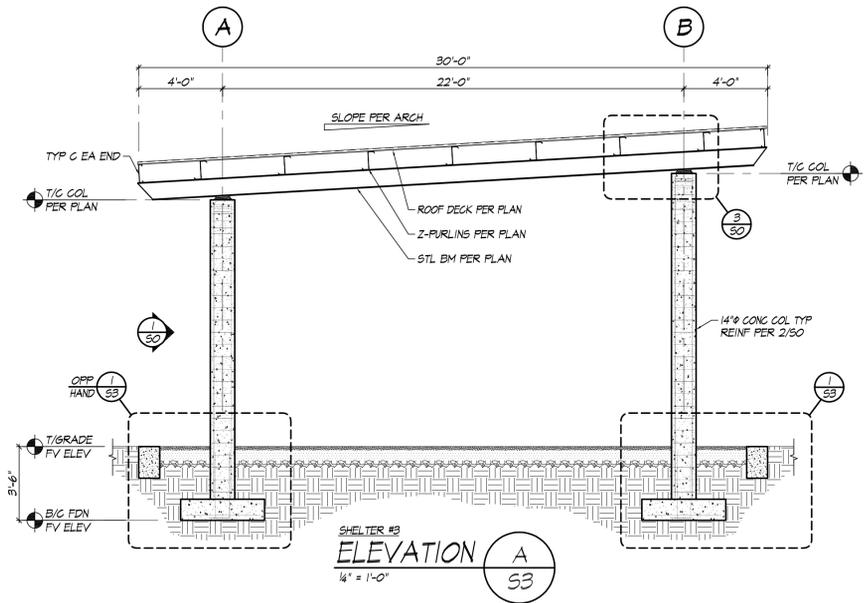


EDGE BEAM
SECTION 2
 3/4" = 1'-0" S2

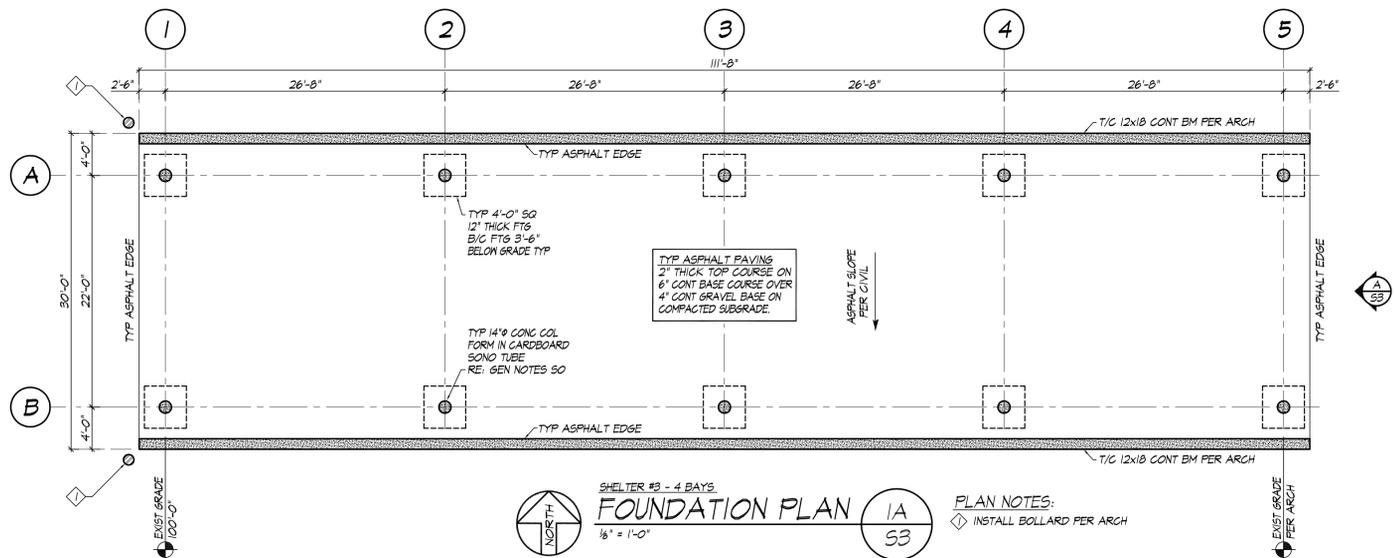
EXCAVATION SIM TO 1/5"

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 PROJECT #: COS016



PLAN NOTES:
 ◆ 15'x24' GA GALVANIZED STEEL PURLIN-BEARING ROOFING SYSTEM SPAN CONT IN DIRECTION SHOWN
 ◆ CONT ROM OF Z-SHIRT BOTTOM-FLANGE UPLIFT COMPR BRACING.



PLAN NOTES:
 ◆ INSTALL BOLLARD PER ARCH



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SHELTER #3 - 4 BAYS

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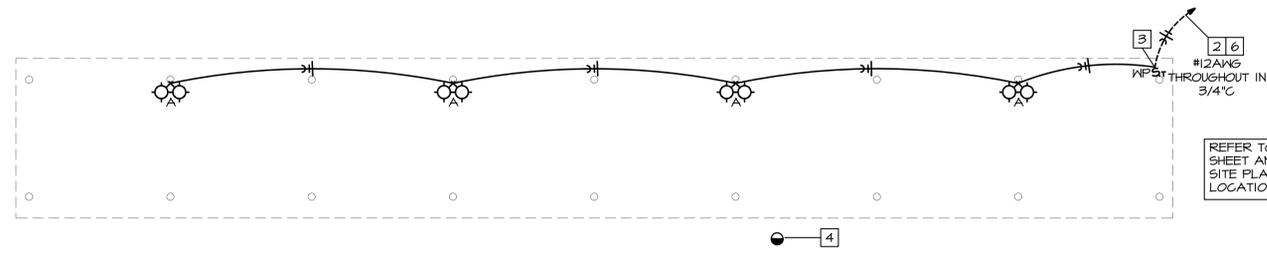
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ELECTRICAL SPECIFICATIONS

- I. GENERAL PROVISIONS:
- PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, NECESSARY FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS OUTLINED.
 - OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
 - ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
 - DURING CONSTRUCTION ALL FIXTURES, EQUIPMENT, CONDUIT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNHARMED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERINGS SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
 - PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILING, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.
 - CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
 - CONTRACTOR SHALL PROVIDE ACCESS PANELS WHERE NECESSARY FOR CONCEALED ELECTRICAL COMPONENTS.
- II. OPERATION AND MAINTENANCE MANUALS:
- DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 - ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS.
 - ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.
- III. MANUFACTURERS:
- MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSIDERED AS LIMITING COMPETITION. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN, UNLESS NOTED OTHERWISE.
- IV. TESTING AND BALANCING:
- ALL CIRCUITS SHALL BE TESTED FOR CONTINUITY, SHORTS, AND GROUNDS BEFORE CONNECTING TO THE PROPER PHASE AS DESIGNED TO BALANCE THE LOADING BETWEEN PHASES.
 - POWER AND LIGHTING PANELS SHALL BE PROPERLY PHASED TO DISTRIBUTE THE LOAD AND SHALL BE CONNECTED AND ADJUSTED TO OPERATE AS SPECIFIED.
 - ALL MOTORS AND SIMILAR EQUIPMENT SHALL BE CHECKED FOR PROPER PHASE ROTATION AND OPERATION.
- V. RACEWAYS:
- CONDUIT INSIDE THE BUILDING SHALL BE METALLIC TUBING (EMT) BEARING THE UL LABEL WITH COMPRESSION TYPE FITTINGS OR SCRUB SET FITTINGS.
 - CONDUIT EXPOSED TO THE WEATHER, INSTALLED UNDERGROUND, IN CONCRETE, OR USED FOR SERVICE ENTRANCE SHALL BE STANDARD RIGID CONDUIT (GALVANIZED) WITH THREADED FITTINGS.
 - UNDERGROUND CONDUIT MAY BE POLYVINYL CHLORIDE WITH A DEFLECTION TEMPERATURE, UNDER LOAD AT 204 PSI, OF 19 DEGREES C, AND A TENSILE STRENGTH OF 2,200 PSI. JOINTS SHALL BE FLUSH SOLVENT WELDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONDUIT SHALL BE EQUAL TO CARLON POWER AND COMMUNICATIONS DUCT TYPE 2B (DIRECT BURIAL). CONDUIT AND FITTINGS SHALL BE PROVIDED BY THE SAME MANUFACTURER.
 - FLEXIBLE METAL CONDUIT SHALL ONLY BE USED FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND LIGHT FIXTURES. MAXIMUM LENGTH SHALL BE 6'-0".
- VI. CONDUCTORS:
- WIRES SHALL BE CONTINUOUS WITHOUT SPLICES OR TAPS IN CONDUIT RUNS. ALL SPLICES SHALL BE MADE IN JUNCTION BULL OR OUTLET BOXES. ALL WIRE SHALL BE INSTALLED IN CONDUIT, WIREWAYS, OR OTHER PROTECTIVE COVER SANCTIONED BY CODES.
 - CONDUCTORS FOR LIGHTING AND POWER SHALL BE COPPER, MINIMUM NO. 12 AWG, 600 VOLT.
 - NO. 10 GAUGE AND SMALLER CONDUCTORS SHALL BE TYPE THHN (WET LOCATIONS) OR THHN (DRY LOCATIONS), SOLID CONDUCTOR, UNLESS OTHERWISE INDICATED.
 - NO. 8 GAUGE AND LARGER CONDUCTORS SHALL BE TYPE THHN (WET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED, UNLESS OTHERWISE INDICATED.
 - SERVICE ENTRANCE AND PANEL FEEDER CONDUCTORS, NO. 3 GAUGE AND LARGER SHALL BE TYPE XHHW-2 (WET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED COPPER, UNLESS OTHERWISE INDICATED.

ELECTRICAL SPECIFICATIONS (CONTINUED)

- VII. MC CABLE:
- MC CABLE SHALL CONSIST OF INTERLOCK ARMORED CABLE MADE OF THREE OR FOUR TYPE THHN SOLID (NO AWG AND LARGER MAY BE STRANDED) COPPER CONDUCTORS INSULATED WITH HEAT AND MOISTURE RESISTANT POLYVINYL CHLORIDE (PVC) WITH NYLON OR EQUIVALENT UL LISTED JACKET, PER UL STANDARD 83. THE THREE CONDUCTORS SHALL BE TWISTED TOGETHER WITH THE COPPER GROUNDING CONDUCTOR, SUITABLE FILLERS, AND WEAVED IN BINDER TAPE. THE ASSEMBLY SHALL BE ARMORED WITH SPIRALLY WRAPPED INTERLOCKED ARMOR OR ALUMINUM OR GALVANIZED STEEL.
 - CABLES SHALL BE TESTED IN ACCORDANCE WITH UL STANDARD 834 FOR TYPE MC CABLE AND RATED AT 600 VOLTS, 40 DEG. C FOR DRY LOCATIONS AND 75 DEG. C FOR WET LOCATIONS.
- VIII. WIRING DEVICES:
- HALL SWITCHES SHALL BE SPECIFICATION GRADE, QUIET TYPE, FLUSH TOGGLE SWITCH, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES.
 - SINGLE POLE: HUBBELL RGS221-X, OR EQUAL.
 - THREE WAY: HUBBELL RGS223-X, OR EQUAL.
 - RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX, GROUNDING, THREE-WIRE TYPE, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES. HUBBELL RGS892-X, OR EQUAL.
 - GROUND FAULT INTERRUPTER RECEPTACLES (GFI) SHALL BE HUBBELL RGF20-XL. DEVICE COVER PLATES SHALL BE AS HEREBEFORE SPECIFIED.
 - ISOLATED GROUND RECEPTACLES (IG) SHALL BE HUBBELL RGS89216, ORANGE COLOR. DEVICE COVER PLATES SHALL BE AS HEREBEFORE SPECIFIED.
 - RECEPTACLES OUTSIDE BUILDING AND WHERE NOTED AS WEATHERPROOF SHALL BE LISTED WEATHER-RESISTANT HUBBELL RGF20-X OR EQUAL, AND SHALL BE INSTALLED IN A WEATHERPROOF ENCLOSURE WHICH SHALL BE INTERMATIC #P1010M2D OR #P1010M3D DIECAST METAL WEATHERPROOF RECEPTACLE COVER. COVER SHALL BE WEATHER PROOF RATED #NILE IN USE.
 - VERIFY DEVICES AND DEVICE COVERPLATES COLOR WITH ARCHITECT.
- IX. BOXES:
- HOT DIPPED GALVANIZED STEEL BOXES. PROVIDE TYPE TO SUIT CONDITIONS FOR INSTALLATION.
 - ALL BOXES SHALL BE FLUSH MOUNTED, UNLESS INDICATED OTHERWISE.
- X. PANELBOARDS:
- PANELBOARDS ARE EXISTING AND SHALL BE REUSED. PROVIDE ADDITIONAL BREAKERS AS REQUIRED TO CONNECT CIRCUITS AS SHOWN ON THE DRAWINGS. ADDITIONAL BREAKERS SHALL BE THERMAL MAGNETIC, QUICK-BREAK BOLT ON CIRCUIT BREAKERS WITH ONE HANDLE FOR SINGLE OR MULTI-POLE RATINGS AND SHALL BE COMPATIBLE WITH EXISTING PANELS.
 - COMPLETE EXISTING DIRECTORY AS REQUIRED TO IDENTIFY NEW CIRCUIT, LISTING LOAD SERVED AND OTHER PERTINENT DATA.
- XI. LIGHT FIXTURES:
- WHERE LIGHT FIXTURES ARE MOUNTED IN A LAY-IN CEILING, PROVIDE A MINIMUM OF 2 SUPPORT WIRES ATTACHED DIRECTLY BETWEEN EACH LIGHT FIXTURE AND THE BUILDING STRUCTURE. SUPPORT WIRES SHALL BE A MINIMUM OF 12 GAUGE GALVANIZED STEEL WIRE, SOFT ANNEALED.
 - FIXTURES ARE REQUIRED AT ALL LIGHTING OUTLETS SHOWN ON THE DRAWINGS. APPROVED LIGHTING FIXTURE WIRE IS REQUIRED IN ALL FIXTURES AND FIXTURE RACEWAYS. WEATHERPROOF WIRING IS REQUIRED FOR EXTERIOR FIXTURES. ALL PARTS OF FIXTURES AND WIRING SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS.
 - ALL FIXTURES SHALL CARRY UL AND ETL LABELS. ALL FLUORESCENT FIXTURE BALLASTS SHALL BE HIGH FREQUENCY ELECTRONIC BALLASTS WITH A TOTAL HARMONIC DISTORTION OF LESS THAN 20%, REGARDLESS OF THE NUMBER OF LAMPS CONNECTED TO EACH BALLAST AND SHALL HAVE CEM LABEL. ALL FLUORESCENT FIXTURES INSTALLED SHALL INCORPORATE BALLAST PROTECTION. ALL FLUORESCENT BALLASTS SHALL HAVE AN AUDIBLE NOISE RATING OF "CLASS A" OR BETTER. ALL FLUORESCENT BALLASTS SHALL HAVE A STANDARD BALLAST FACTOR UNLESS SPECIFIED OTHERWISE.
 - ALL FLUORESCENT LAMPS SHALL BE 3500 K. COLOR TEMPERATURE WITH A MINIMUM COLOR RENDERING INDEX (CRI) OF 82 OR AS INDICATED ON LIGHT FIXTURE SCHEDULE.
- XII. SLEEVES:
- PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK.
 - INTERIOR PARTITIONS: 1/8 GAUGE GALVANIZED STEEL, PACK BETWEEN CONDUIT AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.
 - ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH HEATHERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.
- XIII. GROUNDING:
- GROUND ALL ELECTRICAL APPARATUS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) 250, AND ANY LOCAL REQUIREMENTS. INSURE CONTINUOUS BOND WHERE FLEXIBLE CONDUIT IS USED. PROVIDE BONDING JUMPER INSIDE ALL FLEXIBLE CONDUIT.
 - BOND METAL PIPING SYSTEMS IN COMPLIANCE WITH NEC 250.4(A)(4).



REFER TO KEY PLAN ON THIS SHEET AND ARCHITECTURAL SITE PLAN FOR EXACT LOCATION OF SHELTERS.

ELECTRICAL PLAN NOTES:

- EXISTING PANEL WE. 120/208V 3Ø, 4W 100A MCB.
- ROUTE CIRCUIT TO SPARE 20A/1P BREAKER IN PANEL 'WE' (NOTE 1), WITH WIRE SIZE INDICATED. PROVIDE NEW COMPATIBLE BREAKER AS REQUIRED.
- PROVIDE TIMER SWITCH INTERMATIC #5T01 IN WEATHER PROOF ENCLOSURE. VERIFY EXACT LOCATION OF TIMER SWITCH WITH OWNER.
- LIGHT POLE IS EXISTING TO REMAIN
- BLOCK HEATER OUTLET IS EXISTING TO REMAIN.
- PROVIDE ALTERNATE PRICING FOR LIGHTING AT SHELTER #2 TO BE ROUTED TO EXISTING PANEL IN BUILDING NORTH OF SHELTER. SEE KEY PLAN FOR EXACT LOCATION.

ELECTRICAL GENERAL NOTES:

- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
- ALL EXPOSED RACEWAYS SHALL BE IN EMT CONDUIT, MC CABLE IS NOT PERMITTED IN EXPOSED AREAS.
- REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING TRANSFORMERS, EQUIPMENT, ETC., FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.
- ALL ELECTRICAL DEVICES ARE EXISTING AND TO REMAIN UNLESS NOTED OTHERWISE OR CONFLICT WITH NEW CONSTRUCTION. MAINTAIN PROPER OPERATION OF ALL EXISTING ELECTRICAL.
- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL PER NEC 200.4.
- ALL BRANCH CIRCUITS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ELECTRICAL CONTRACTOR SHALL VERIFY WIRING INDICATED IS SUFFICIENT AND INCREASE CONDUCTOR SIZE AS REQUIRED BASED OFF ACTUAL INSTALLED LENGTH OF CONDUCTORS.

ELECTRICAL SYMBOLS LIST	
CIRCUITING & NOTES	
+48"	SPECIAL MOUNTING HEIGHT FOR ASSOCIATED DEVICE (CENTERLINE OF DEVICE)
X	ELECTRICAL FLOOR PLAN NOTE WITH DESIGNATION
WP	WEATHERPROOF ENCLOSURE ON DEVICE
2 LP	CONDUIT CONCEALED WHERE POSSIBLE OR AS NOTED, ARROWS INDICATE HOME RUN TO PANEL. CIRCUIT NUMBERS INDICATED
⊕	#12 WIRE IN CONDUIT, UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION
⊖	GROUNDING CONDUCTOR, #12 WIRE UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION
⌒	CONDUIT ROUTED UNDER FLOOR/GRADE
LIGHTING	
⬤	LIGHT FIXTURE WITH TYPE DESIGNATION
POWER DEVICES	
☐	PANEL BOARD
CONTROLS	
S	SINGLE POLE WALL SWITCH, TOP OF BOX AT 48" AFF

LIGHT FIXTURE SCHEDULE					
MARK NO.	MANUFACTURER & CATALOG NUMBER	VOLTS WATTS	LAMPS	DESCRIPTION	EQUIVALENT MANUFACTURERS
A	PASS & SEYMOUR WFFLDKIT-X	120 34	2-17W MAXLITE #17P30DLE D41FL	WEATHER PROOF DUAL FLOODLIGHT KIT W/ LED LAMPS INDICATED. MOUNT FIXTURE HEIGHT ON POLE OR ON STRUCTURE SHINING DOWN	OR EQUAL

SHELTER #1 ELECTRICAL LIGHTING PLAN
SCALE: 1/16" = 1'-0"

REFER TO KEY PLAN ON THIS SHEET AND ARCHITECTURAL SITE PLAN FOR EXACT LOCATION OF SHELTERS.



KEY PLAN
SCALE: 1/64" = 1'-0"

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