

FOR FIELD USE

DR. BY: PKM CHK. BY: ALN

JOB NUMBER | SHEET NO. REV

SCALE: N.A.

148

DATE: 06-19-22

| | | | FIELD NOTES |); | | | |
|-------------|-----------------------|------------|-------------|-------|--------------|-----|----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| REF. D | WG/SPEC : RESS-SS | -2000 | | | | | |
| EG R | EF. SPEC. / DWG : | | | | | | |
| \triangle | | | | | | | |
| \triangle | | | | | | | |
| REV. | For Field Use | | | | | ALN | 06-30-22 |
| Â | For Approval | | | | | ALN | 06-24-22 |
| EV. | | DESCR | IPTION | | | BY | DATE |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | I DANITUM | LWELDO | | l or Earling | | |
| DLES U.N | . 13/ ₁₆ Ø | PAINT U.N. | WELDS: | E70XX | CLEANING: | | |

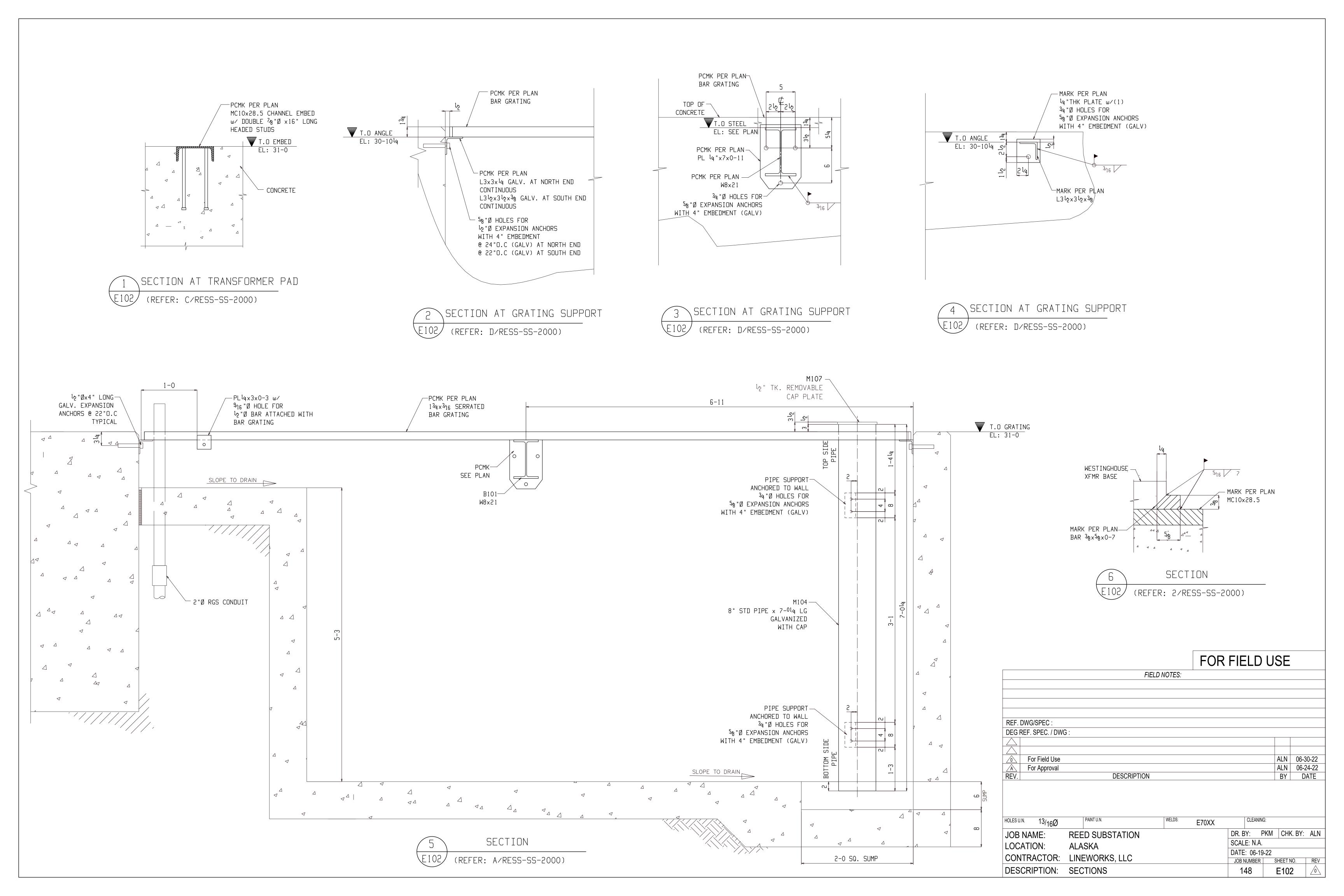
JOB NAME:

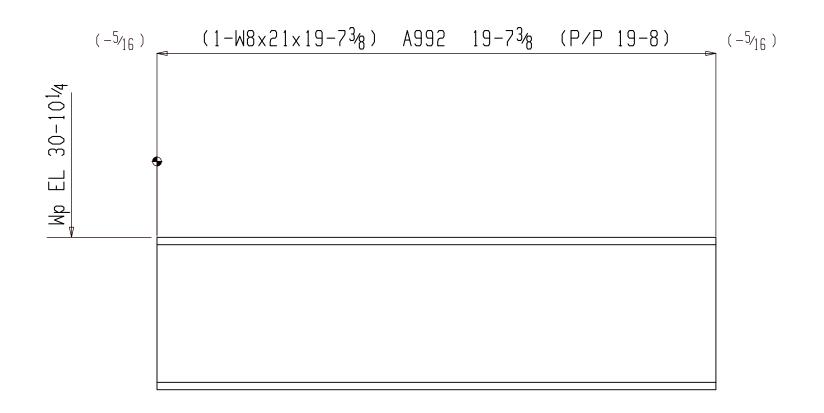
REED SUBSTATION

DESCRIPTION: TRANSFORMER PAD AND OIL CONTAINMENT PLAN

ALASKA

CONTRACTOR: LINEWORKS, LLC



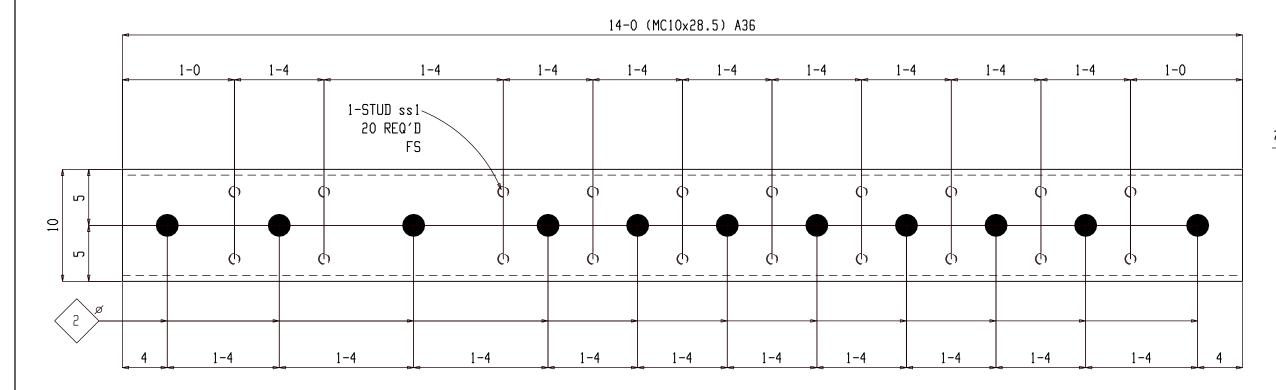


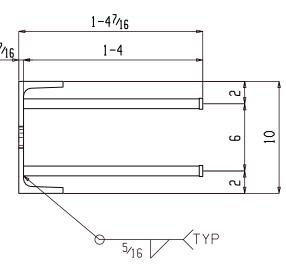
ONE BEAM B101

(E REFER: E101)

| | | E | BILL OF M | 1ATE | RIAL | | | | | - | BILL OF M | IATE | RIAL | | |
|------|-------|-----|-------------|---------|---------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| B101 | | ONE | BEAM | | (GALV) | | 412 | | | | | | | | |
| | B101 | 1 | W8×21 | 19-73/8 | | A992 | 412 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | | | | FOR | FABRIC | CATIC | N | |
|-------------------------------|--------------|-------------|--------|-------|-------------|---------|--------|------|
| | | SHOP | NOTES: | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| REF. E PLAN : E101 | | | | | | | | |
| REF. DESIGN SWG : | RESS-SS-2000 | | | | | | | |
| | | | | | | | | |
| ✓ For Fabricati | ion | | | | | ALN | 06-3 | 0.22 |
| For Approva | | | | | | ALN | 06-2 | |
| For Fabricati For Approva | | DESCRIPTION | | | | BY | | TE. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| DLES U.N. 13/ ₁₆ Ø | PAINT U.N. | GALVANIZED | WELDS: | E70XX | CLEANIN | G: SSPC | S-SP3 | |
| OB NAME: | REED SUBST | ATION | ' | | DR. BY: | PKM CH | K. BY: | ALN |
| OCATION: | ALASKA | | | | SCALE: N.A. | | | |
| ONTRACTOR: | LINEWORKS, | шс | | | DATE: 06-20 | | | |
| | LINEWURKS, | LLC | | | JOB NUMBER | SHEET | 10. | REV |
| ESCRIPTION: | BEAM DETAIL | _ | | | 148 | B10 | 1 | /0\ |





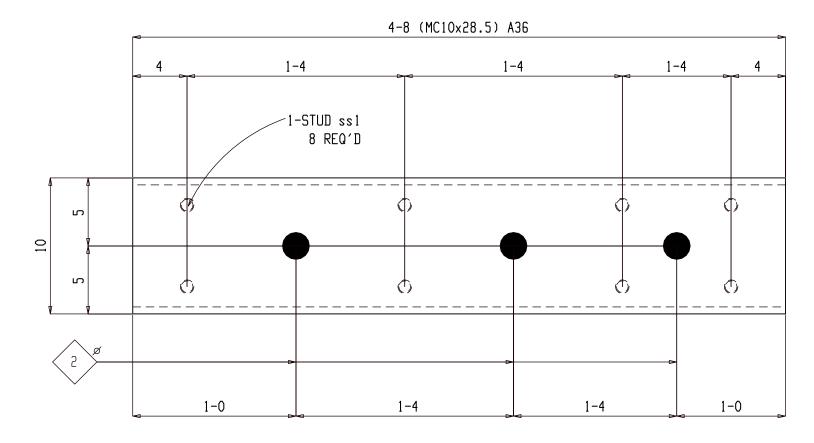
2 EMBEDS EM101

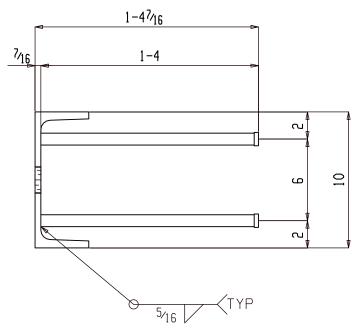
(E REFER: E101)

THERMAL FLAME-SPRAY ZINC COATED

| | | - | BILL OF N | 1ATE | RIAL | | | | | | BILL OF M | 1ATE | RIAL | | |
|-------|-------|-----|--------------------|--------|-------------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| EM101 | | 2 | EMBED | | THERMAL | | 908 | | | | | | | | |
| | | | | | FLAME-SPRAY | | | | | | | | | | |
| | | | | | ZINC COATED | | | | | | | | | | |
| | EM101 | 2 | MC10x28.5 | 14-0 | | A36 | 798 | | | | | | | | |
| | ssl | 40 | WS ⁷ /8 | 1-4 | | A108 | 110 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| FOR | FABRICA | OITA | N |
|--|----------------|----------|----------|
| SHOP NOTES: | | | |
| | | | |
| | | | |
| | | | |
| DEE E DI ANI, E (A) | | | |
| REF. E PLAN : E101 | | | |
| REF. DESIGN SWG : RESS-SS-2000 | | | |
| Δ | | | |
| For Fabrication | | ALN | 06-30-22 |
| A For Approval | | ALN | 06-24-22 |
| REV. DESCRIPTION | | BY | DATE |
| | | | |
| | | | |
| | | | |
| HOLES U.N. 13/ ₁₆ Ø PAINT U.N. ZINC COATED WELDS: E70XX | CLEANING: | SSPC-S | SP3 |
| JOB NAME: REED SUBSTATION | DR. BY: PK | и СНК. | BY: ALN |
| LOCATION: ALASKA | SCALE: N.A. | | |
| | DATE: 06-20-22 | 2 | |
| CONTRACTOR: LINEWORKS, LLC | JOB NUMBER | SHEET NO |). REV |
| DESCRIPTION: EMBED DETAIL | 148 | EM101 | |





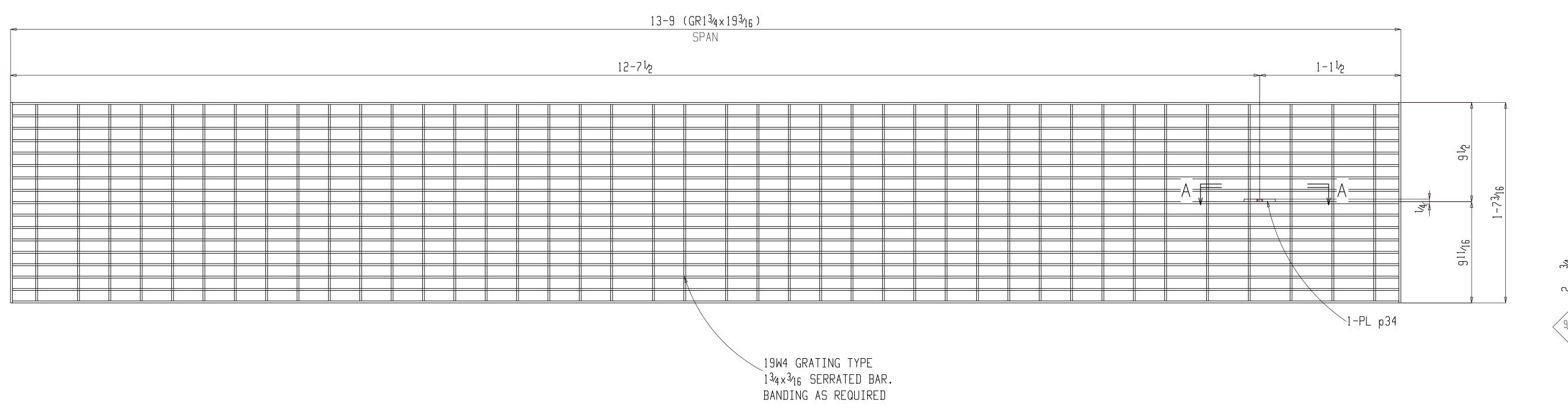
ONE EMBED EM102

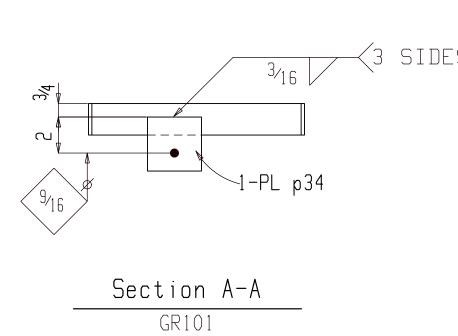
(E REFER: E101)

THERMAL FLAME-SPRAY ZINC COATED

| | | | BILL OF N | 1ATE | RIAL | | | | | | BILL OF M | 1ATE | RIAL | | |
|-------|-------|-----|--------------------|--------|-------------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| EM102 | | ONE | EMBED | | THERMAL | | 155 | | | | | | | | |
| | | | | | FLAME-SPRAY | | | | | | | | | | |
| | | | | | ZINC COATED | | | | | | | | | | |
| | EM102 | 1 | MC10x28.5 | 4-8 | | A36 | 133 | | | | | | | | |
| | 122 | 8 | WS ⁷ /8 | 1-4 | | A108 | 55 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | | | | | | FOR I | FABRIC | CATIO | NC | |
|-------------|-----------------------------------|---------|------------|-------------|--------|-------|-------------|--------|---------|-------|
| | | | | SHOP I | VOTES: | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | E PLAN : E101 | | | | | | | | | |
| REF. [| DESIGN SWG : F | RESS-SS | -2000 | | | | | | | |
| \triangle | | | | | | | | | | |
| \triangle | | | | | | | | | | |
| | For Fabrication | n | | | | | | ALN | | 30-22 |
| A | For Approval | | | | | | | ALN | | 24-22 |
| REV. | | | | DESCRIPTION | | | | BY | D. | ATE |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| HOLES U. | ^{N.} 13/ ₁₆ Ø | | PAINT U.N. | ZINC COATED | WELDS: | E70XX | CLEANING | G: SSP | C-SP3 | |
| JOB N | NAME: | REED | SUBSTA | ATION | | | DR. BY: | KM CH | łK. BY: | ALN |
| LOCA | TION: | ALASI | KA | | | | SCALE: N.A. | | | |
| | TRACTOR: | | VORKS, | II C | | | DATE: 06-20 | | | |
| | | | | | | | JOB NUMBER | SHEET | | REV |
| DESC | RIPTION: | EMBE | D DETA | L | | | 148 | EM1 | 02 | |



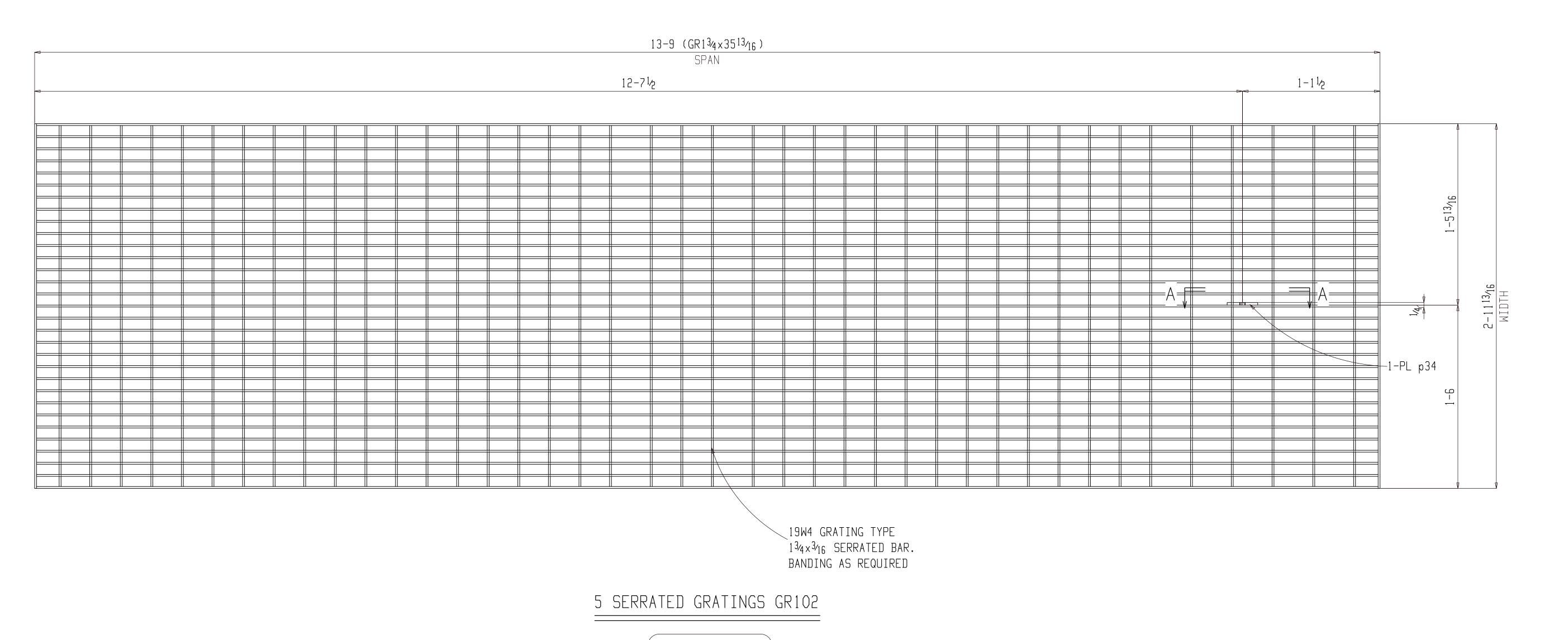


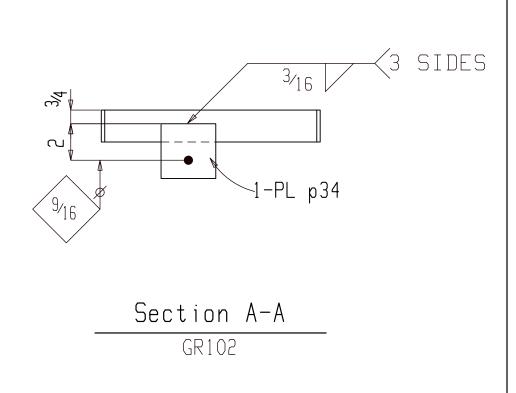
ONE SERRATED GRATING GR101

(E REFER: E101)

| | | | BILL OF M | 1ATERIA | | | | | | | BILL OF N | MATERIA | L | | |
|-------|-------|-----|--|---------|---------|-------|--------|------|-------|-----|-------------|---------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| GR101 | | ONE | SERRATED GRATING | | (GALV) | | 283 | | | | | | | | |
| | GR101 | 1 | $GR1\frac{3}{4} \times 19\frac{3}{16}$ | 13-9 | | | 282 | | | | | | | | |
| | p34 | 1 | PL ¹ /4×3 | 3 | | A36 | 1 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | | | | | FOR | FA | BRI | CA | TIC | N |
|---------------------|---------------------|------------|-------------|--------|-------|-------|----------|------|---------|----------|
| | | | SHOP | NOTES: | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| DEE D | WG/SPEC : | | | | | | | | | |
| | EF. SPEC. / DWG | <u> </u> | | | | | | | | |
| | | , . | | | | | | | | |
| $\overline{\wedge}$ | | | | | | | | | | |
| Ô EV. | For Fabrication | | | | | | | A | LN | 06-30-22 |
| Â | For Approval | | | | | | | А | LN | 06-24-22 |
| EV. | | | DESCRIPTION | | | | | E | 3Y | DATE |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| LES U.N | 13/ ₁₆ Ø | PAINT U.N. | GALVANIZED | WELDS: | E70XX | | CLEANING | i: 5 | SSPC-S | P3 |
| OB N | NAME: | REED SUBS | STATION | | | DR. B | Y: P | KM | CHK. I | BY: ALN |
| OCA | TION: | ALASKA | | | | SCAL | E: N.A. | | | |
| | RACTOR: | LINEWORK | S 11 C | | | | : 05-26- | | | |
| | | | · · | | | | UMBER | | EET NO. | REV |
| ESC | RIPTION: | SERRATED | GRATING DET | AIL | | 14 | 48 | Gl | R101 | |
| | | | | | | | | | | |

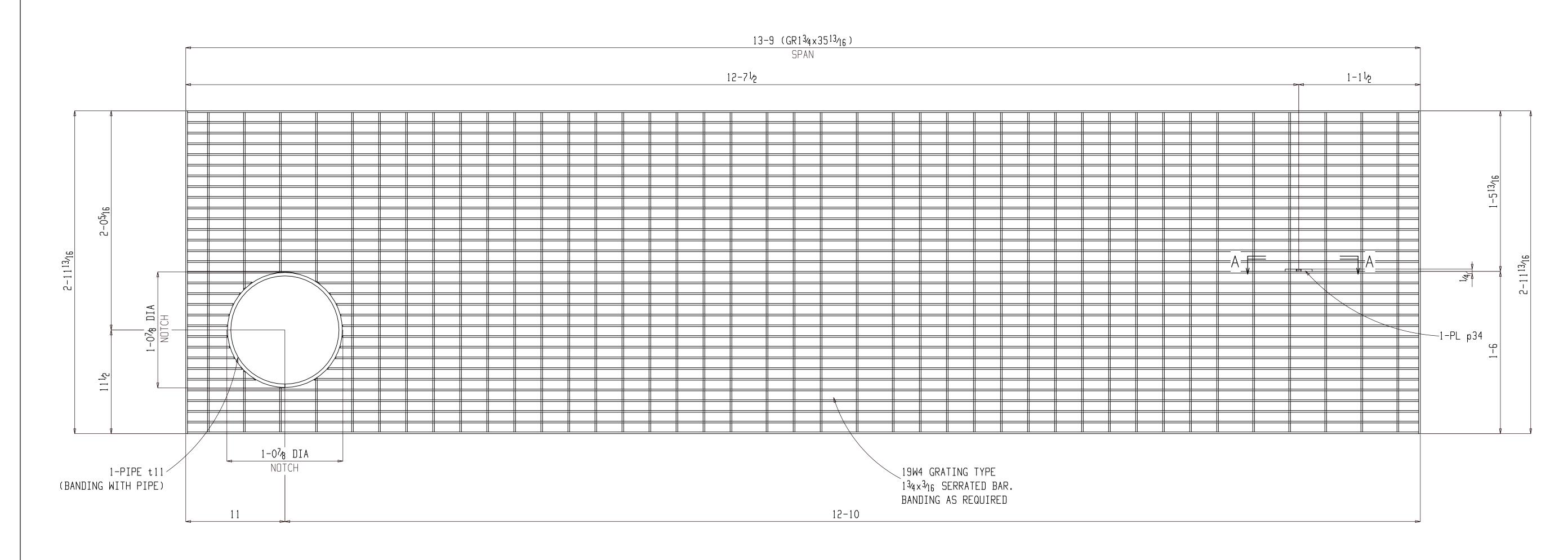


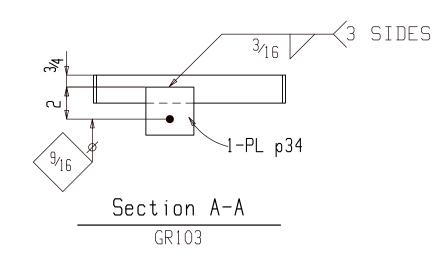


(E REFER: E101)

| | | | BILL OF M | 1ATERIA | L | | | BILL OF MATERIAL | | | | | | | |
|-------|-------|-----|---|---------|---------|-------|--------|------------------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| GR102 | | 5 | SERRATED GRATING | | (GALV) | | 2580 | | | | | | | | |
| | GR102 | 5 | GR1 ³ / ₄ ×35 ¹³ / ₁₆ | 13-9 | | | 2577 | | | | | | | | |
| | p34 | 5 | PL ¹ / ₄ ×3 | 3 | | A36 | 3 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | F | OR FABR | ICATION |
|---------------------------------|--|-----------------|--------------------------------|
| | SHOP NOTES: | | |
| | | | |
| | | | |
| | | | |
| | | | |
| EF. DWG/SPEC : | | | |
| EG REF. SPEC. / DW | G: | | |
| | | | |
| Con Fabrication | | | ALN 00.00.00 |
| For Fabrication For Approval | | | ALN 06-30-22 ALN 06-24-22 |
| For Approval EV. | DESCRIPTION | | BY DATE |
| | | | |
| | | | |
| | | | |
| _ES U.N. 13/ ₁₆ Ø | PAINT U.N. GALVANIZED WELDS: E7 | 0XX CLEANII | SSPC-SP3 |
| OB NAME: | REED SUBSTATION | DR. BY: | PKM CHK. BY: ALN |
| | ALASKA | SCALE: N.A | |
| $\mathcal{A}(A \cap A)$ | | DATE: OF O | 0.00 |
| | | DATE: 05-2 | |
| OCATION: ONTRACTOR: ESCRIPTION: | LINEWORKS, LLC SERRATED GRATING DETAIL | JOB NUMBER 148 | 6-22 SHEET NO. REV GR102 |



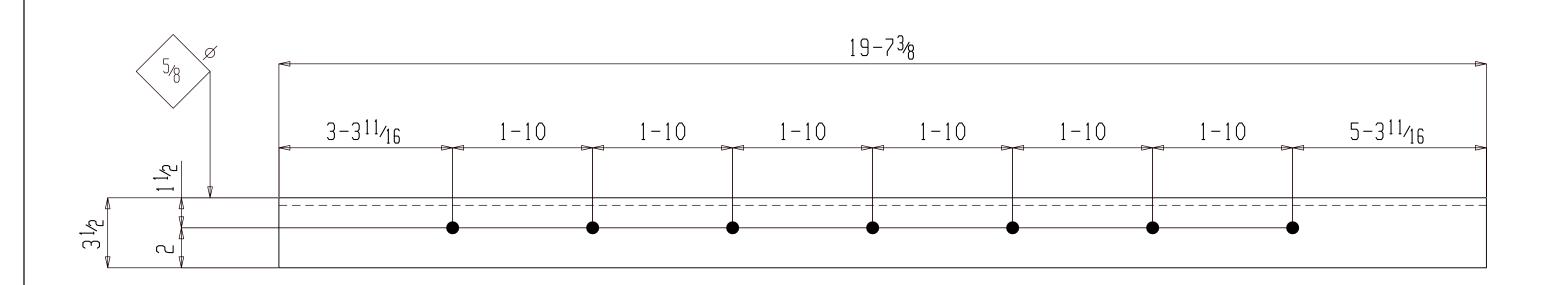


ONE SERRATED GRATING GR103

(E REFER: E101)

| | | | BILL OF M | 1ATERIA | | | | | | | BILL OF I | MATERIA | | | |
|-------|-------|-----|---|---------|---------|-------|--------|------|-------|-----|-------------|---------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| GR103 | | ONE | SERRATED GRATING | | (GALV) | | 523 | | | | | | | | |
| | GR103 | 1 | GR1 ³ / ₄ ×35 ¹³ / ₁₆ | 13-9 | | | 515 | | | | | | | | |
| | p34 | 1 | PL 1/4×3 | 3 | | A36 | 1 | | | | | | | | |
| | t 1 1 | 1 | PIPE 12 STD | 1 3/4 | | A53B | 7 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | F | FOR FABRICAT | ION |
|---|---------------------------------|---|-------------|
| | SHOP NOTES: | | |
| | | | |
| | | | |
| | | | |
| | | | |
| REF. DWG/SPEC : | | | |
| DEG REF. SPEC. / DW | G: | | |
| | | | |
| | | | |
| 6 For Fabricatio | 1 | ALN | |
| For Approval | DESCRIPTION | ALN | |
| <u> </u> | DESCRIPTION | BY | DATE |
| | | | |
| DLES U.N. 13/ ₁₆ Ø | PAINT U.N. GALVANIZED WELDS: E7 | OXX CLEANING: SSP | C-SP3 |
| 10/100 | PAINT U.N. GALVANIZED WELDS: E7 | DR. BY: PKM CH | |
| OB NAME: | REED SUBSTATION | UXX 55P | |
| OB NAME: OCATION: | REED SUBSTATION ALASKA | DR. BY: PKM CH SCALE: N.A. DATE: 05-26-22 | ik. by: Ali |
| OLES U.N. 13/ ₁₆ Ø ODB NAME: OCATION: CONTRACTOR: DESCRIPTION: | REED SUBSTATION | DR. BY: PKM CH SCALE: N.A. | IK. BY: ALM |

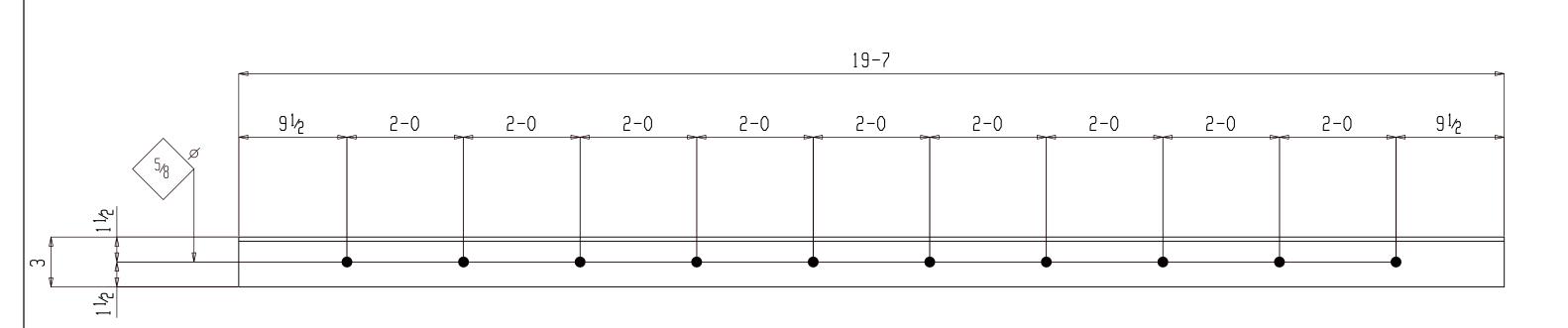


ONE ANGLE M101

(E REFER: E101)

| | | F | BILL OF M | 1ATE | RIAL | | | | | 6 | BILL OF M | 1ATE | RIAL | | |
|------|-------|-----|-----------------|---------|------------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M101 | | ONE | ANGLE | | (GALV) | | 167 | | | | | | | | |
| | M101 | 1 | L3l∕2x3l∕2x3⁄8 | 19-73/8 | | A36 | 167 | | | | | | | | |
| | | | FIELD BOLTS | | | | | | | | | | | | |
| | | 7 | り Dia EXPANSION | 6 | (GALV) (4" | | | | | | | | | | |
| | | | ANCHOR | | EMBED) | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | | | FOR I | FABRIC | CATIC | N |
|--|-------------|--------|-------|-------------|----------|------------|
| | SHOP | NOTES: | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| REF. E PLAN : E101 | | | | | | |
| REF. DESIGN SWG : RESS-SS-2000 | | | | | | |
| $\frac{1}{\sqrt{1}}$ | | | | | | |
| For Fabrication | | | | | ALN | 06-30-22 |
| A For Approval | | | | | ALN | 06-24-22 |
| EV. | DESCRIPTION | | | | BY | DATE |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| DLES U.N. 13/ ₁₆ Ø PAINT U.N. | GALVANIZED | WELDS: | E70XX | CLEANIN | IG: SSPC | S-SP3 |
| OB NAME: REED SUBS | STATION | | | DR. BY: | PKM CH | K. BY: ALN |
| OCATION: ALASKA | | | | SCALE: N.A. | | |
| ONTRACTOR: LINEWORK | SIIC | | | DATE: 06-20 | | |
| | · | | | JOB NUMBER | SHEETI | |
| ESCRIPTION: ANGLE DET | AIL | | | 148 | M10 | 1 🔼 |

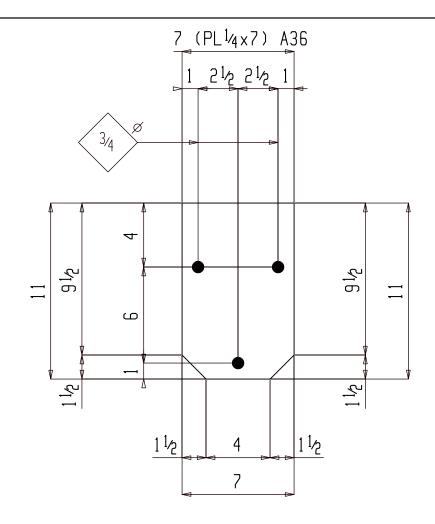


ONE ANGLE M102

(E REFER: E101)

| | | E | BILL OF M | 1ATE | RIAL | | | | | BILL OF MATERIAL | | | | | |
|------|-------|-----|-------------------|--------|------------|-------|--------|------|-------|------------------|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M102 | | ONE | ANGLE | | (GALV) | | 96 | | | | | | | | |
| | M102 | 1 | L3x3x14 | 19-7 | | A36 | 96 | | | | | | | | |
| | | | FIELD BOLTS | | | | | | | | | | | | |
| | | 10 | ¹⁄2 Dia EXPANSION | 6 | (GALV) (4" | | | | | | | | | | |
| | | | ANCHOR | | EMBED) | | | | | | | | | | |
| | | | | | | | | | | · | | | | | |
| | | | | | | | | | | | | | | | |

| | FOR | FABRIC | ATIC | N |
|--|-------|--------------|----------------|----------------------|
| SHOP NOTES: | | | | |
| | | | | |
| | | | | |
| | | | | |
| REF. E PLAN : E101 | | | | |
| REF. DESIGN SWG : RESS-SS-2000 | | | | |
| \triangle | | | | |
| | | | 41.11 | 00 00 00 |
| ↑ For Fabrication For Approval | | | ALN ALN | 06-30-22 06-24-22 |
| REV. DESCRIPTION | | | BY | DATE |
| | | | | |
| | | | | |
| | | | | |
| OLES U.N. 13/ ₁₆ Ø PAINT U.N. GALVANIZED WELDS: | E70XX | CLEANING | SSPC | -SP3 |
| IOB NAME: REED SUBSTATION | | DR. BY: P | KM CHK | (.BY: ALN |
| OCATION: ALASKA | | SCALE: N.A. | | |
| CONTRACTOR: LINEWORKS, LLC | | DATE: 06-20- | -22 SHEET N | IO. REV |
| DESCRIPTION: ANGLE DETAIL | | JOB NUMBER | M10 | |
| ANGLE DETAIL | | 1+0 | 101 102 | _ |



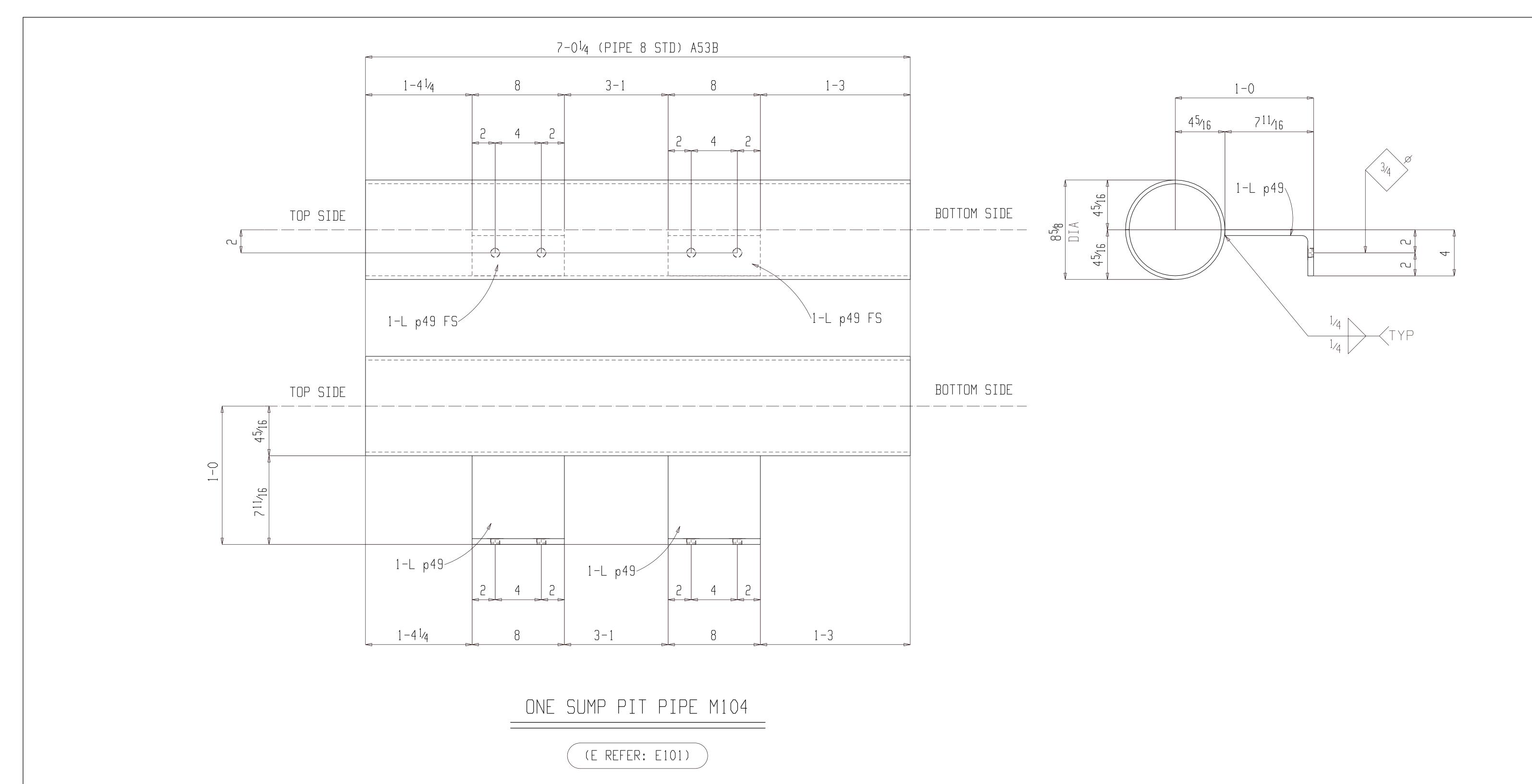
2 PLATES M103

(E REFER: E101)

GALVANIZED

| | | | E | BILL OF M | 1ATE | RIAL | | | | | E | BILL OF M | 1ATE | RIAL | | |
|-----|------|-------|-----|-----------------------------------|--------|------------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| - [| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| | MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M1 | 03 | | 2 | PLATE | | (GALV) | | 11 | | | | | | | | |
| | | M103 | 2 | PL ¹ / ₄ x7 | 11 | | A36 | 11 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | FIELD BOLTS | | | | | | | | | | | | |
| | | | 6 | 5⁄8 Dia EXPANSION | 6 | (GALV) (4" | | | | | | | | | | |
| | | | | ANCHOR | | EMBED) | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | · | | | | | | | | | | · | | | | | |

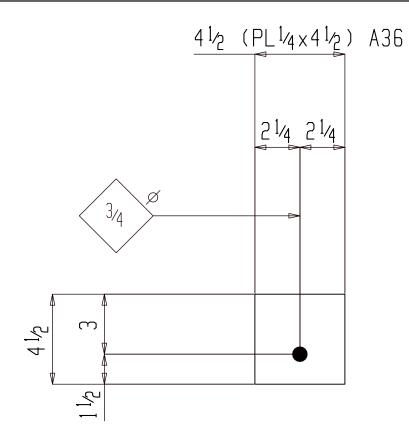
| | | | | SHOP | NOTES: | • | | | | | | |
|-------------|-------------------------|------------|--------|-------------|--------|-------|-------|---------|-----|---------|-------|------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| REF. | E PLAN : E101 | | | | | | | | | | | |
| REF. | DESIGN SWG : R | ESS-SS-200 | 0 | | | | | | | | | |
| \triangle | | | | | | | | | | | | |
| \triangle | | | | | | | | | | | | |
| <u> </u> | For Fabrication | 1 | | | | | | | | ALN | 06-3 | |
| A | For Approval | | | DECODIDE | | | | | | ALN | | 4-22 |
| REV. | | | | DESCRIPTION | | | | | | BY | DA | \TE |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| HOLES U | N 40, ~ | PAINT | TIN | | WELDS: | ==== | | CLEANII | NG: | | | |
| HOLES U | .N. 13/ ₁₆ Ø | LAINT | U.IV. | GALVANIZED | WLLDS. | E70XX | | CLEANII | NG. | SSPC- | SP3 | |
| JOB | NAME: | REED SU | IBSTA | ATION | | | DR. I | BY: | PKM | CHK | . BY: | ALN |
| LOCA | ATION: | ALASKA | | | | | SCA | LE: N.A | | | | |
| | TRACTOR: | | ו פעכ | 1.0 | | | DATI | E: 06-2 | | | | |
| CON | IKACIUK: | LINEWOF | τηΟ, I | LLC | | | JOB I | NUMBER | | SHEET N | 0. | REV |
| DES | CRIPTION: | PLATE D | ETAIL | | | | 1 | 148 | | M103 | 3 | |



GALVANIZED

| | | BILL OF N | 1ATERIA | 4L | | | | | | BILL OF N | MATERIA | ۱L | | |
|------|-------|-------------------------------------|---------|------------|-------|--------|------|-------|-----|-------------|---------|---------|-------|-------|
| SHIP | PIECE | QTY DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGH |
| MARK | MARK | | | | | | MARK | MARK | | | | | | |
| M104 | | ONE SUMP PIT PIPE | | (GALV) | | 227 | | | | | | | | |
| | M104 | 1 PIPE 8 STD | 7-01/4 | | A53B | 201 | | | | | | | | |
| | p49 | 2 L8×4× ¹ ⁄ ₂ | 8 | | A36 | 26 | | | | | | | | |
| | | FIELD BOLTS | | | | | | | | | | | | |
| | | 4 5/8 Dia EXPANSION | 6 | (GALV) (4" | | | | | | | | | | |
| | | ANCHOR | | EMBED) | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| REF. DWG/SPEC: DEG REF. SPEC. / DWG: Tor Fabrication ALN 06-30-22 ALN 06-24-22 REV. DESCRIPTION BY DATE HOLES U.N. 13/16Ø PAINT U.N. GALVANIZED WELDS: E70XX CLEANING: SSPC-SP3 DR. BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV DESCRIPTION: SLIMP DIT DIDE DETAIL | | SHOP | NOTES: | | | |
|--|--------------------------------|-----------------------|--------------|-------------|-------------|-----|
| DEG REF. SPEC. / DWG: DESCRIPTION DESCR | | | | | | |
| DEG REF. SPEC. / DWG: DESCRIPTION DESCR | | | | | | |
| DEG REF. SPEC. / DWG: DESCRIPTION DESCR | | | | | | |
| DEG REF. SPEC. / DWG: DESCRIPTION DESCR | | | | | | |
| For Fabrication ALN 06-30-22 A For Approval REV. DESCRIPTION BY DATE HOLES U.N. 13/ ₁₆ Ø PAINT U.N. GALVANIZED WELDS: E70XX JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC CONTRACTOR: LINEWORKS, LLC | | | | | | |
| For Approval REV. DESCRIPTION BY DATE | DEG REF. SPEC. / DWG |) : | | | | |
| For Approval REV. DESCRIPTION BY DATE | | | | | | |
| For Approval REV. DESCRIPTION BY DATE HOLES U.N. 13/ ₁₆ Ø PAINT U.N. GALVANIZED WELDS: E70XX CLEANING: SSPC-SP3 JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC CLEANING: SSPC-SP3 DR. BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | Ser Entrication | | | | ALNI 06 20 | 22 |
| DESCRIPTION BY DATE HOLES U.N. 13/16Ø PAINT U.N. GALVANIZED WELDS: E70XX JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC DESCRIPTION WELDS: E70XX CLEANING: SSPC-SP3 DR. BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | | | | | |
| HOLES U.N. 13/ ₁₆ Ø PAINT U.N. GALVANIZED WELDS: E70XX CLEANING: SSPC-SP3 JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC PAINT U.N. GALVANIZED WELDS: E70XX DR. BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | DESCRIPTION | | | | |
| JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC GALVANIZED E70XX BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | | | | | |
| JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC GALVANIZED E70XX BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | | | | | |
| JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC GALVANIZED E70XX BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | | | | | |
| JOB NAME: REED SUBSTATION LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC GALVANIZED E70XX BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | | | | | | |
| LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | HOLES U.N. 13/ ₁₆ Ø | PAINT U.N. GALVANIZED | WELDS: E70XX | CLEANING: | SSPC-SP3 | |
| LOCATION: ALASKA CONTRACTOR: LINEWORKS, LLC SCALE: N.A. DATE: 05-26-22 JOB NUMBER SHEET NO. REV | JOB NAME: | REED SUBSTATION | | DR. BY: Ph | KM CHK. BY: | ALN |
| CONTRACTOR: LINEWORKS, LLC DATE: 05-26-22 JOB NUMBER SHEET NO. REV | I OCATION: | | | SCALE: N.A. | | |
|) OD NOWIDER OFFICE TWO. | | | | | | |
| DESCRIPTION: SLIMB DIT DIDE DETAIL 1/10 M10/1 M10/1 M1 | | • | | | | REV |
| DESCRIPTION. SUMPRIMEDETAIL 140 MITO4 /0 | DESCRIPTION: | SUMP PIT PIPE DETAIL | | 148 | M104 | 0 |



2 PLATES M105

(E REFER: E101)

GALVANIZED

| | | Е | BILL OF M | 1ATE | RIAL | | | | | | BILL OF M | 1ATE | RIAL | | |
|------|-------|-----|-------------------|--------|------------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M105 | | 2 | PLATE | | (GALV) | | 3 | | | | | | | | |
| | M105 | 2 | PL14x412 | 41/2 | | A36 | 3 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | FIELD BOLTS | | | | | | | | | | | | |
| | | 2 | 5⁄8 Dia EXPANSION | 6 | (GALV) (4" | | | | | | | | | | |
| | | | ANCHOR | | EMBED) | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

REF. E PLAN : E101 REF. DESIGN SWG : RESS-SS-2000 ALN 06-30-22 ALN 06-24-22 BY DATE For Fabrication For Approval

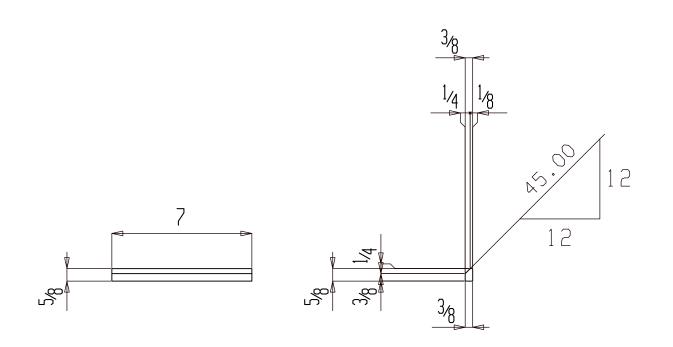
SHOP NOTES:

FOR FABRICATION

| HOLES U.N. | 13/ ₁₆ Ø | PAINT U.N. | GALVANIZED | WELDS: | E70XX | CLEANIN | IG: SSPC-SP3 | |
|------------|---------------------|-------------|------------|--------|-------|-------------|--------------|-------|
| JOB NAN | ЛЕ: | REED SUBST | ATION | ' | | DR. BY: | PKM CHK. BY | : ALN |
| LOCATIO | ON: | ALASKA | | | | SCALE: N.A. | | |
| CONTRA | | LINEWORKS, | ПС | | | DATE: 06-20 |)-22 | |
| CONTIN | CTOIN. | LINEWONNS, | LLG | | | JOB NUMBER | SHEET NO. | REV |
| DESCRI | PTION: | PLATE DETAI | L | | | 148 | M105 | |

DESCRIPTION

A REV.



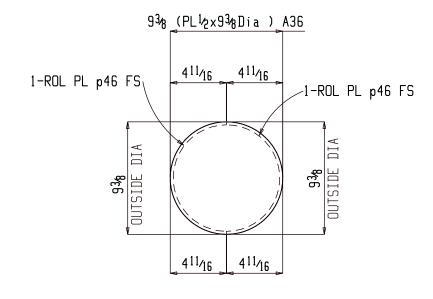
16 BARS M106

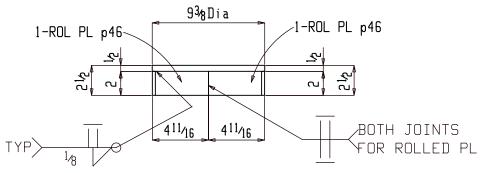
(E REFER: E101)

NO PAINT

| | | | E | BILL OF M | 1ATE | RIAL | | | | | [| BILL OF M | 1ATE | RIAL | | |
|-----|-----|-------|-----|-------------|--------|---------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| S | HIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| M | ARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M10 |)6 | | 16 | BAR | | | | 7 | | | | | | | | |
| | | M106 | 16 | PL3/8×5/8 | 7 | | A36 | 7 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | · | | | | | · |
| | | · | | | | | | | | | · | | | | | |

| | | SHOP | NOTES: | | | | | |
|--|----------------------|-------------|--------|-------|-------|---------------------------------|------------|-------------------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| REF. E PLAN : E101 | | | | | | | | |
| REF. DESIGN SWG : F | RESS-SS-2000 | | | | | | | |
| | | | | | | | | |
| A Fan Fahriaatia | | | | | | | ALAL | 06.20 |
| For Fabrication | חי | | | | | | ALN ALN | 06-30- |
| REV. | | DESCRIPTION | | | | | BY | DATE |
| | | | | | | | • | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| HOLES U.N. 13/ ₁₆ Ø | PAINT U.N. | NO PAINT | WELDS: | E70XX | | CLEANING: | SSPC | -SP3 |
| 19/16/0 | | | WELDS: | E70XX | DR. E | | 3376 | -SP3 (. BY: _A |
| JOB NAME: | REED SUBST | | WELDS: | E70XX | | | 3376 | |
| JOB NAME: LOCATION: | REED SUBST ALASKA | ATION | WELDS: | E70XX | SCAL | BY: PK E: N.A. E: 06-20-2 | KM CHK | (. BY: A |
| HOLES U.N. 13/ ₁₆ Ø JOB NAME: LOCATION: CONTRACTOR: DESCRIPTION: | REED SUBST | ATION | WELDS: | E70XX | SCAL | BY: Pk .E: N.A. | (M CHK | (. BY: A |





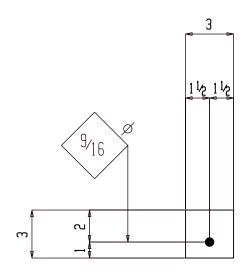
ONE CAP PLATE M107

(E REFER: E101)

GALVANIZED

| BILL OF MATERIAL | | | | BILL OF MATERIAL | | | | | | | | | | | |
|------------------|-------|-----|-------------------------------------|------------------|---------|-------|--------|------|-------|-----|-------------|--------|---------|-------|--------|
| SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT | SHIP | PIECE | QTY | DESCRIPTION | LENGTH | REMARKS | GRADE | WEIGHT |
| MARK | MARK | | | | | | | MARK | MARK | | | | | | |
| M107 | | ONE | CAP PLATE | | (GALV) | | 14 | | | | | | | | |
| | M107 | 1 | PL ¹ 2×9 ³ /8 | | | A36 | 10 | | | | | | | | |
| | p46 | 2 | PL14x2 | 1-115/16 | ROLLED | A36 | 4 | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| SHOP NOTES: | | | |
|---|-------------|----------|----------|
| | | | |
| | | | |
| | | | |
| REF. E PLAN : E101 | | | |
| REF. DESIGN SWG : RESS-SS-2000 | | | |
| NELT : DEGIGN GWG : NEGO-GG-2000 | | | |
| | | | |
| For Fabrication | | ALN | 06-30-22 |
| For Approval | | ALN | 06-24-22 |
| REV. DESCRIPTION | | BY | DATE |
| | | | |
| | | | |
| | | | |
| HOLES U.N. 13/ ₁₆ Ø PAINT U.N. GALVANIZED WELDS: E70XX | CLEANING | G: SSPC- | CD2 |
| | 122.27 | | |
| JOB NAME: REED SUBSTATION | | KM CHK | BY: ALN |
| LOCATION: ALASKA | SCALE: N.A. | | |
| CONTRACTOR: LINEWORKS, LLC | DATE: 06-20 | | 0 DEV |
| · | JOB NUMBER | SHEET N | |
| DESCRIPTION: CAP PLATE DETAIL | 148 | M107 | 7 0 |



7 PL¹/₄x3x0-3 p34

GRADE: A36

NO PAINT

| 1 | GR103 |
|-----|-------|
| 5 | GR102 |
| 1 | GR101 |
| QTY | ASSY |

REV

| _ | _ | | _ | _ |
|------|--------|-----|------|-------------|
| For | \Box | hri | ical | ·i \sim ı |
| I OI | ıa | UL | Ual | .IUI |

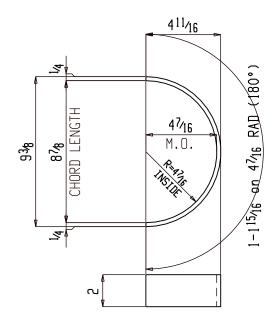
| | | HOLES U.N. | ¹³ / ₁₆ Ø |
|-----|----------|--------------|---------------------------------|
| | | JOB NAME: | REED SUBSTATION |
| | | LOCATION: | ALASKA |
| | | CONTRACTOR | : LINEWORKS, LLC |
| ALN | 06-30-22 | DECODIDATION | DIDE |
| BY | DATE | DESCRIPTION: | PIPE |

For Fabrication

DESCRIPTION

DR. BY: PKM CHK. BY: ALN SCALE: N.A.

DATE: 06-20-22 ORKS, LLC JOB NUMBER 148 p34



 $2 PL^{1/4} \times 2 \times 1 - 1^{15/16} p46$

GRADE: A36

NO PAINT

HOLES U.N.

| For | Fab | rica | tion |
|-----|-----|------|------|
| | | 1100 | |

2 M107 ASSY QTY

| \triangle | | | |
|-------------|-----------------|-----|----------|
| | | | |
| \bigcirc | | | |
| | | | |
| | For Fabrication | ALN | 06-30-22 |
| REV. | DESCRIPTION | BY | DATE |

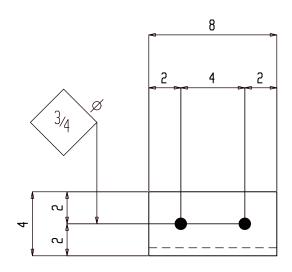
13/₁₆Ø REED SUBSTATION JOB NAME:

LOCATION: ALASKA

CONTRACTOR:

DR. BY: PKM CHK. BY: ALN SCALE: N.A. DATE: 06-20-22

LINEWORKS, LLC JOB NUMBER REV \bigcirc **DESCRIPTION:** PIPE 148 p46



2 L8x4x¹/₂x0-8 p49

GRADE: A36

NO PAINT

| Ear | Eah | rioo | tion |
|-----|-----|-------|------|
| For | rap | IIICa | uon |

| 2 | M104 |
|-----|------|
| QTY | ASSY |

| | For Fabrication | ALN | 06-30-22 |
|------|-----------------|-----|----------|
| REV. | DESCRIPTION | BY | DATE |

HOLES U.N. ¹³/₁₆Ø

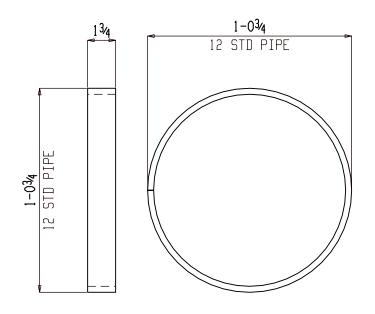
REED SUBSTATION JOB NAME: LOCATION: ALASKA

CONTRACTOR:

LINEWORKS, LLC DESCRIPTION: PIPE

DR. BY: CHK. BY: ALN PKM SCALE: N.A. DATE: 06-20-22

JOB NUMBER REV 148 p49



For Fabrication

ONE PIPE 12 STDx0-13/4 t11

GRADE: A53B

NO PAINT

ALN 06-30-22

For Fabrication

DESCRIPTION

| HOLES U.N. 1; | 3/ ₁₆ Ø | | | | |
|---------------|--------------------|--|-------------------------------|-------------|-------|
| JOB NAME: | REED SUBSTATION | | DR. BY: | PKM CHK. BY | : ALN |
| LOCATION: | ALASKA | | SCALE: N.A. DATE: 06-20-22 | | |
| CONTRACTOR: | LINEWORKS, LLC | | | | |
| CONTINACTOR. | LINE VVOICEO, LLC | | JOB NUMBER | SHEET NO. | REV |
| DESCRIPTION: | PIPE | | 148 | t11 | |

GR103

ASSY