

| CIRCUIT NAME:   | CIRCUIT (A)                          | CIRCUIT (B)              | CIRCUIT (C)                    | CIRCUIT (D)                    | CIRCUIT (E)  | CIRCUIT (F)            |
|---|--------------------------------------|--------------------------|--------------------------------|--------------------------------|--------------|------------------------|
| CIRCUIT TYPE:   | PEDESTRIAN BRIDGE LIGHTING (TYPE S2) | TRAIL LIGHTING (TYPE S1) | BRIDGE FEATURE LIGHT (TYPE S3) | BRIDGE FEATURE LIGHT (TYPE S3) | FUTURE SPACE | PHOTO ELECTRIC CONTROL |
| VOLTAGE:  | 240                                  | 240                      | 240                            | 240                            | 120          | 120                    |
| CIRCUIT CAPACITY:   | 30                                   | 30                       | 30                             | 30                             | 0            | 15                     |
| MAXIMUM CONTINUOUS CURRENT DRAW IS 80% OF CIRCUIT CAPACITY:       | 24                                   | 24                       | 24                             | 24                             | 0            | 12                     |
| EXISTING CIRCUIT LOAD AMPS =                                      | 0                                    | 0                        | 0                              | 0                              | 0            | 0                      |
| PROPOSED LOAD TO CIRCUIT:   | PROPOSED                             |                          | PROPOSED                       |                                | PROPOSED     |                        |
|   | QTY.                                 | AMPS                     | QTY.                           | AMPS                           | QTY.         | AMPS                   |
| 57 WATT LED SINGLE LUMINAIRES AT 240V                             | 0                                    | 0                        | 6                              | 1.4                            | 0            | 0                      |
| 59 WATT LED SINGLE LUMINAIRES AT 240V                             | 55                                   | 13.5                     | 0                              | 0                              | 0            | 0                      |
| 300V AMP DRIVER   |                                      |                          | 11                             | 14                             | 11           | 14                     |
| TOTAL PROPOSED LOAD AMPS = 42.9                                   | 13.5                                 |                          | 1.4                            |                                | 14           |                        |
| EXISTING PLUS PROPOSED LOAD AMPS = 42.9                           | 13.5                                 |                          | 1.4                            |                                | 14           |                        |
| REMAINING AVAILABLE LOAD AMPS: MAXIMUM - EXISTING - PROPOSED = 63 | 10.0                                 |                          | 22                             |                                | 10           |                        |

**B** CIRCUIT CAPACITY VERIFICATION  
E0.01 NTS

(BRIDGE LIGHTING) NEMA RATING: 3R

| TYPE          | DESCRIPTION | LOAD | BREAKER | CKT | CKT | BREAKER | LOAD | DESCRIPTION   | TYPE |
|---------------|-------------|------|---------|-----|-----|---------|------|---------------|------|
| BRIDGE LIGHTS |             | 1623 | 30      | 1   | 2   | 30      | 1650 | FEATURE LIGHT |      |
|               |             | 1623 | 2       | 3   | 4   | 2       | 1650 | EAST SIDE     |      |
| TRAIL LIGHTS  |             | 171  | 30      | 5   | 6   |         |      | SPACE         |      |
|               |             | 171  | 2       | 7   | 8   |         |      | SPACE         |      |
| FEATURE LIGHT |             | 1650 | 30      | 9   | 10  | 20/1    | 120  | SPACE         |      |
| WEST SIDE     |             | 1650 | 2       | 11  | 12  | 20/1    | 120  | PHOTOCELL     |      |

TOTAL LOAD: 10 KVA ( 43 A)

VOLTS:  240 /120V, 1Ø, 3Ø, 400A

AMPS:  100A  225A  400A

MAIN:  MCB  MLO

LUGS:  DBL LUGS  FEED-THRU

MTD:  SURFACE  FLUSH

BUS:  COPPER  ALUMINUM

DOOR:  DOOR IN DOOR  STANDARD

NEUTRAL BUS:  100%  200%

GROUND BUS:  STANDARD  ISOLATED

AIC RATING:  10K  14K  22K

(LANDSCAPE) NEMA RATING: 3R

| TYPE             | DESCRIPTION | LOAD | BREAKER | CKT | CKT | BREAKER | LOAD | DESCRIPTION | TYPE |
|------------------|-------------|------|---------|-----|-----|---------|------|-------------|------|
| IRRIGATION CLOCK |             | 180  | 20/1    | 1   | 2   |         |      | SPACE       |      |
| SPARE            |             |      | 20/1    | 3   | 4   |         |      | SPACE       |      |
| SPARE            |             |      | 20/1    | 5   | 6   |         |      | SPACE       |      |
| SPARE            |             |      | 20/1    | 7   | 8   |         |      | SPACE       |      |
| SPARE            |             |      | 20/1    | 9   | 10  |         |      | SPACE       |      |
| SPARE            |             |      | 20/1    | 11  | 12  |         |      | SPACE       |      |

TOTAL LOAD: 1 KVA ( 1 A)

VOLTS:  240 /120V, 1Ø, 3Ø, 400A

AMPS:  100A  225A  400A

MAIN:  MCB  MLO

LUGS:  DBL LUGS  FEED-THRU

MTD:  SURFACE  FLUSH

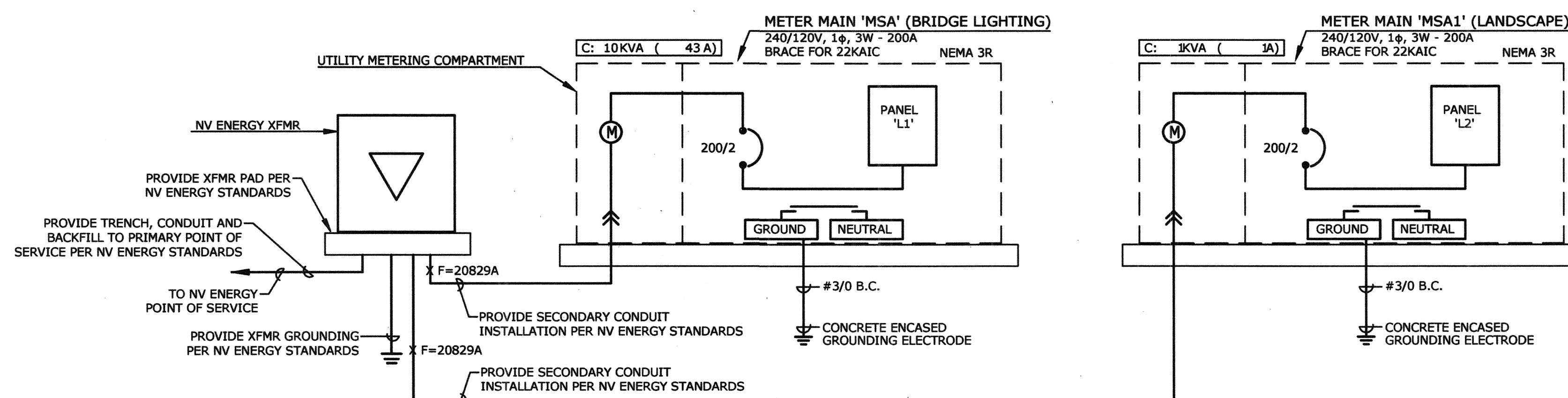
BUS:  COPPER  ALUMINUM

DOOR:  DOOR IN DOOR  STANDARD

NEUTRAL BUS:  100%  200%

GROUND BUS:  STANDARD  ISOLATED

AIC RATING:  10K  14K  22K



**A** PARTIAL SINGLE LINE DIAGRAM  
E0.01 NTS

| NO. | DATE | SHEET | REVISIONS |
|-----|------|-------|-----------|
|     |      |       |           |

PREPARED BY: **DEPARTMENT OF PUBLIC WORKS CAPITAL PROJECT MGMT**

DESIGNED BY: **PE**

DRAWN BY: **MSA**

CHECKED BY: **PE**

DATE: **JANUARY 2018**

SUBMITTAL STAGE: **100% FINAL**

PREPARED FOR: **CITY OF LAS VEGAS**

BID# **17-4868**

DATE: **JANUARY 2018**

SUBMITTAL STAGE: **100% FINAL**

TITLE: **CIMARRON PEDESTRIAN BRIDGE AT SUMMERLIN PARKWAY**

SHEET: **PARTIAL SINGLE LINE DIAGRAM, PANEL SCHEDULES AND ELECTRICAL DIAGRAMS**

PROFESSIONAL ENGINEER - STATE OF NEVADA

MSA#116032

JAN 12 2018

**msa.**

ENGINEERING CONSULTANTS

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SHEET **E0.01**

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DRAWING NO. **676-22**

FEDERAL PROJECT NUMBER: **CM-0003(180)**