

| TYPICAL UNIT A & UNIT E PANEL | | | | VOLTAGE: 120/240V, 1PH, 3W | | AMPERE RATING: 125 A | | | | |
|-------------------------------|-----|------|--|-----------------------------------|------------|--|----------------------|-----|-----|----|
| | | | | MOUNTING: RECESSED | | MAIN CIRCUIT BREAKER RATING: MLO | | | | |
| | | | | SUPPLIED FROM: UTILITY DISCONNECT | | SHORT CIRCUIT CURRENT RATING: 10,000 A | | | | |
| CKT | AMP | POLE | LOAD DESCRIPTION | PHASE A VA | PHASE B VA | LOAD DESCRIPTION | POLE | AMP | CKT | |
| A 1 | 20 | 1 | REC - KITCHEN REF. ABOVE COUNTER | 1,500 | 4,550 | RANGE | 2 | 50 | 2 | |
| A 3 | 20 | 1 | REC - KITCHEN ABOVE COUNTER, DINING | | 1,500 | 4,550 | | | 4 | |
| A 5 | 20 | 1 | REC - DISHWASHER | 1,080 | 360 | REC/FAN - POWDER ROOM | 1 | 20 | 6 | |
| A 7 | 20 | 1 | REC - CLOTHES WASHER | | 1,440 | 200 | REC/FAN - BATHROOM 1 | 1 | 20 | 8 |
| G 9 | 30 | 2 | REC - CLOTHES DRYER | 2,800 | 1,080 | REC - 3RD LEVEL HALL, BEDROOM 1 | 1 | 20 | 10 | |
| G 11 | 2 | 2 | | | 2,800 | 720 | REC - BEDROOM 2 | 1 | 20 | 12 |
| A 13 | 20 | 1 | REC - HEAD BOLT HEATER | 600 | | SPACE | 1 | 20 | 14 | |
| A 15 | 20 | 1 | REC - GARAGE, GARAGE DOOR OPENER, SM PANEL | | 1,200 | SPACE | 1 | - | 16 | |
| A 17 | 20 | 1 | REC - HALL, LIVING ROOM | 900 | | SPACE | 1 | - | 18 | |
| A 19 | 20 | 1 | SMOKE/CO DETECTORS | | 30 | SPACE | 1 | - | 20 | |
| A 21 | 20 | 1 | RANGE HOOD | 216 | | SPACE | 1 | - | 22 | |
| A 23 | 20 | 1 | LIGHTING | | 490 | SPACE | 1 | - | 24 | |
| A 25 | 20 | 1 | BOILER SYSTEM | 600 | | SPACE | 1 | - | 26 | |
| GP* 27 | 20 | 1 | HEAT TRACE | | 50 | SPACE | 1 | - | 28 | |
| 29 | - | 1 | SPACE | | | SPACE | 1 | - | 30 | |
| 31 | - | 1 | SPACE | | | SPACE | 1 | - | 32 | |
| 33 | - | 1 | SPACE | | | SPACE | 1 | - | 34 | |
| 35 | - | 1 | SPACE | | | SPACE | 1 | - | 36 | |
| 37 | - | 1 | SPACE | | | SPACE | 1 | - | 38 | |
| 39 | - | 1 | SPACE | | | SPACE | 1 | - | 40 | |
| 41 | - | 1 | SPACE | | | SPACE | 1 | - | 42 | |
| CONNECTED LOAD (VA) | | | | 13,686 | 12,980 | 26,666 VA | | | | |
| CONNECTED LOAD (AMPERES) | | | | 114 | 108 | 111 A | | | | |
| DEMAND LOAD (VA) | | | | 13,686 | 13,103 | 26,789 VA | | | | |
| DEMAND LOAD (AMPERES) | | | | 114 | 109 | 112 A | | | | |

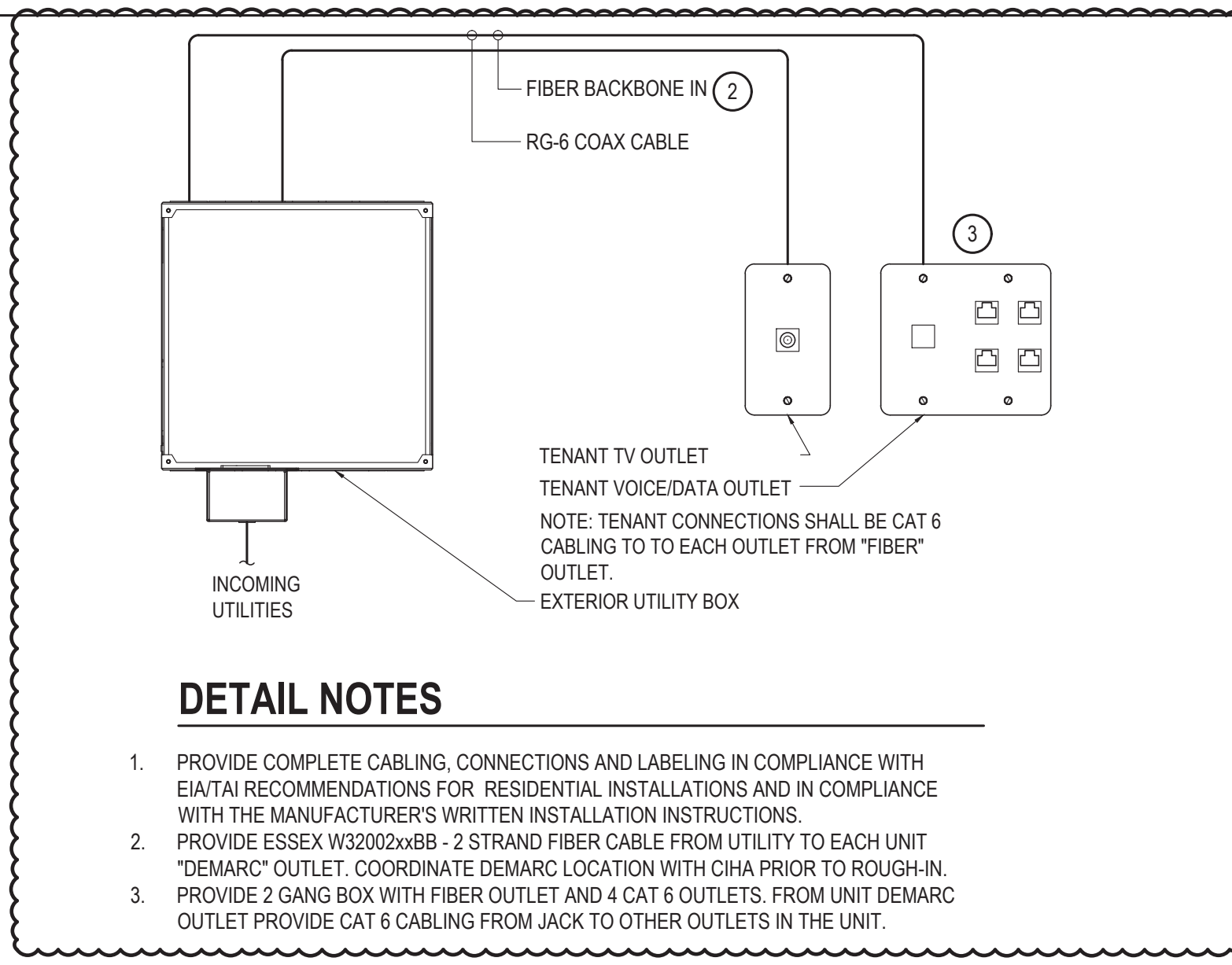
A - PROVIDE ARC-FAULT TYPE CIRCUIT BREAKERS, G - PROVIDE GFCI TYPE CIRCUIT BREAKER, GP - PROVIDE CLASS A GFI TYPE CIRCUIT BREAKER (5mA), L - PROVIDE CIRCUIT BREAKER LOCK
 *- PROVIDE ONLY WHERE REQUIRED, SEE DRAWINGS FOR OVERFLOW SCUPPER HEAT TRACE LOCATIONS, PROVIDE SPACE IN PANELS WHERE HEAT TRACE CIRCUIT IS NOT REQUIRED.

| TYPICAL UNIT B & UNIT D PANEL | | | | VOLTAGE: 120/240V, 1PH, 3W | | AMPERE RATING: 125 A | | | | |
|-------------------------------|-----|------|--|-----------------------------------|------------|--|---------------------------|-----|-----|----|
| | | | | MOUNTING: RECESSED | | MAIN CIRCUIT BREAKER RATING: MLO | | | | |
| | | | | SUPPLIED FROM: UTILITY DISCONNECT | | SHORT CIRCUIT CURRENT RATING: 10,000 A | | | | |
| CKT | AMP | POLE | LOAD DESCRIPTION | PHASE A VA | PHASE B VA | LOAD DESCRIPTION | POLE | AMP | CKT | |
| A 1 | 20 | 1 | REC - KITCHEN REF. ABOVE COUNTER | 1,500 | 4,550 | RANGE | 2 | 50 | 2 | |
| A 3 | 20 | 1 | REC - KITCHEN ABOVE COUNTER, DINING | | 1,500 | 4,550 | | | 4 | |
| A 5 | 20 | 1 | REC - DISHWASHER | 1,200 | 560 | REC/FAN/HEAT - POWDER ROOM | 1 | 20 | 6 | |
| A 7 | 20 | 1 | REC - CLOTHES WASHER | | 1,500 | 420 | REC/FAN/HEAT - BATHROOM 1 | 1 | 20 | 8 |
| G 9 | 30 | 2 | REC - CLOTHES DRYER | 2,800 | 1,260 | REC - 2ND LEVEL HALL, BEDROOM | 1 | 20 | 10 | |
| G 11 | 2 | 2 | | | 2,800 | | SPACE | 1 | 20 | 12 |
| A 13 | 20 | 1 | REC - HEAD BOLT HEATER | 600 | | SPACE | 1 | - | 14 | |
| A 15 | 20 | 1 | REC/HEAT - GARAGE, GARAGE DOOR OPENER | | 1,220 | SPACE | 1 | - | 16 | |
| A 17 | 20 | 1 | REC/HEAT - HALL, LIVING ROOM, SM PANEL | 1,460 | | SPACE | 1 | - | 18 | |
| A 19 | 20 | 1 | SMOKE/CO DETECTORS | | 30 | SPACE | 1 | - | 20 | |
| A 21 | 20 | 1 | RANGE HOOD | 216 | | SPACE | 1 | - | 22 | |
| A 23 | 20 | 1 | LIGHTING | | 540 | SPACE | 1 | - | 24 | |
| A 25 | 20 | 1 | BOILER SYSTEM & PUMP | 600 | | SPACE | 1 | - | 26 | |
| 27 | - | 1 | SPACE | | | SPACE | 1 | - | 28 | |
| 29 | - | 1 | SPACE | | | SPACE | 1 | - | 30 | |
| 31 | - | 1 | SPACE | | | SPACE | 1 | - | 32 | |
| 33 | - | 1 | SPACE | | | SPACE | 1 | - | 34 | |
| 35 | - | 1 | SPACE | | | SPACE | 1 | - | 36 | |
| 37 | - | 1 | SPACE | | | SPACE | 1 | - | 38 | |
| 39 | - | 1 | SPACE | | | SPACE | 1 | - | 40 | |
| 41 | - | 1 | SPACE | | | SPACE | 1 | - | 42 | |
| CONNECTED LOAD (VA) | | | | 14,746 | 12,568 | 27,314 VA | | | | |
| CONNECTED LOAD (AMPERES) | | | | 123 | 105 | 114 A | | | | |
| DEMAND LOAD (VA) | | | | 14,746 | 12,705 | 27,451 VA | | | | |
| DEMAND LOAD (AMPERES) | | | | 123 | 106 | 114 A | | | | |

A - PROVIDE ARC-FAULT TYPE CIRCUIT BREAKERS, G - PROVIDE GFCI TYPE CIRCUIT BREAKER, L - PROVIDE CIRCUIT BREAKER LOCK

| TYPICAL UNIT C | | | | VOLTAGE: 120/240V, 1PH, 3W | | AMPERE RATING: 125 A | | | | |
|--------------------------|-----|------|---------------------------------------|-----------------------------------|------------|--|-----------------|-----|-----|----|
| | | | | MOUNTING: SURFACE | | MAIN CIRCUIT BREAKER RATING: MLO | | | | |
| | | | | SUPPLIED FROM: UTILITY DISCONNECT | | SHORT CIRCUIT CURRENT RATING: 10,000 A | | | | |
| CKT | AMP | POLE | LOAD DESCRIPTION | PHASE A VA | PHASE B VA | LOAD DESCRIPTION | POLE | AMP | CKT | |
| A 1 | 20 | 1 | REC - KITCHEN REF. ABOVE COUNTER | 1,500 | 4,550 | RANGE | 2 | 50 | 2 | |
| A 3 | 20 | 1 | REC - KITCHEN ABOVE COUNTER, DINING | | 1,500 | 4,550 | | | 4 | |
| A 5 | 20 | 1 | REC - DISHWASHER | 1,200 | 560 | REC/FAN/HEAT - BATHROOM 1 | 1 | 20 | 6 | |
| A 7 | 20 | 1 | REC - CLOTHES WASHER | | 1,500 | 900 | REC - BEDROOM 1 | 1 | 20 | 8 |
| G 9 | 30 | 2 | REC - CLOTHES DRYER | 2,800 | | SPACE | 1 | 20 | 10 | |
| G 11 | 2 | 2 | | | 2,800 | | SPACE | 1 | - | 12 |
| A 13 | 20 | 1 | REC - HEAD BOLT HEATER | 600 | | SPACE | 1 | - | 14 | |
| A 15 | 20 | 1 | REC/HEAT - GARAGE, GARAGE DOOR OPENER | | 1,220 | SPACE | 1 | - | 16 | |
| A 17 | 20 | 1 | REC/HEAT - HALL, LIVING ROOM | 1,460 | | SPACE | 1 | - | 18 | |
| A 19 | 20 | 1 | SMOKE/CO DETECTORS | | 30 | SPACE | 1 | - | 20 | |
| A 21 | 20 | 1 | RANGE HOOD | 216 | | SPACE | 1 | - | 22 | |
| A 23 | 20 | 1 | LIGHTING | | | SPACE | 1 | - | 24 | |
| A 25 | 20 | 1 | BOILER SYSTEM | 600 | | SPACE | 1 | - | 26 | |
| 27 | - | 1 | SPACE | | | SPACE | 1 | - | 28 | |
| 29 | - | 1 | SPACE | | | SPACE | 1 | - | 30 | |
| 31 | - | 1 | SPACE | | | SPACE | 1 | - | 32 | |
| 33 | - | 1 | SPACE | | | SPACE | 1 | - | 34 | |
| 35 | - | 1 | SPACE | | | SPACE | 1 | - | 36 | |
| 37 | - | 1 | SPACE | | | SPACE | 1 | - | 38 | |
| 39 | - | 1 | SPACE | | | SPACE | 1 | - | 40 | |
| 41 | - | 1 | SPACE | | | SPACE | 1 | - | 42 | |
| CONNECTED LOAD (VA) | | | | 13,486 | 12,500 | 25,986 VA | | | | |
| CONNECTED LOAD (AMPERES) | | | | 112 | 104 | 108 A | | | | |
| DEMAND LOAD (VA) | | | | 13,486 | 12,500 | 25,986 VA | | | | |
| DEMAND LOAD (AMPERES) | | | | 112 | 104 | 108 A | | | | |

A - PROVIDE ARC-FAULT TYPE CIRCUIT BREAKERS, G - PROVIDE GFCI TYPE CIRCUIT BREAKER, L - PROVIDE CIRCUIT BREAKER LOCK



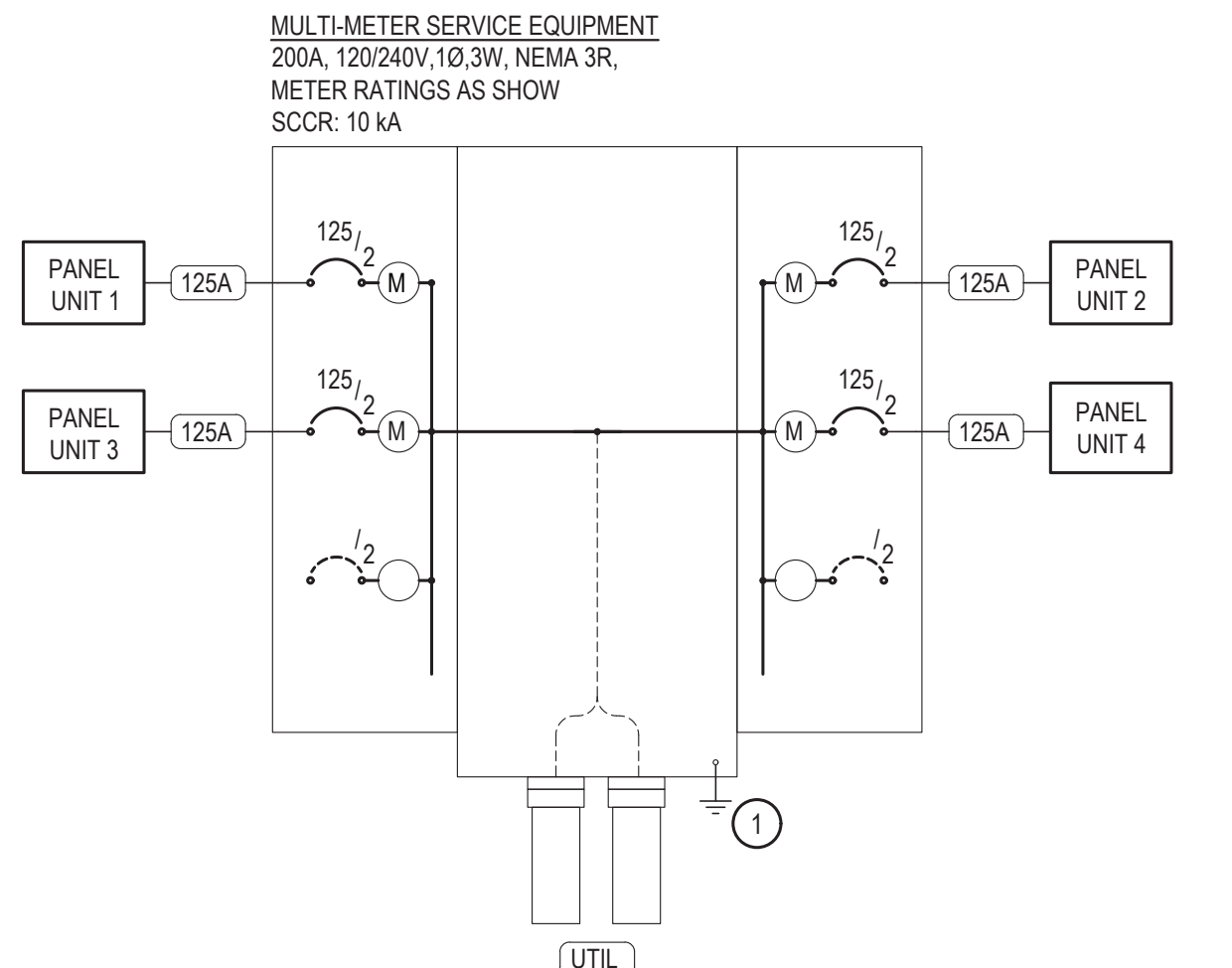
DETAIL NOTES

1. PROVIDE COMPLETE CABLING, CONNECTIONS AND LABELING IN COMPLIANCE WITH EIA/TAI RECOMMENDATIONS FOR RESIDENTIAL INSTALLATIONS AND IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
2. PROVIDE ESSEX W32002xxBB - 2 STRAND FIBER CABLE FROM UTILITY TO EACH UNIT "DEMARC" OUTLET. COORDINATE DEMARC LOCATION WITH CIHA PRIOR TO ROUGH-IN.
3. PROVIDE 2 GANG BOX WITH FIBER OUTLET AND 4 CAT 6 OUTLETS. FROM UNIT DEMARC OUTLET PROVIDE CAT 6 CABLING FROM JACK TO OTHER OUTLETS IN THE UNIT.

| FEEDER SCHEDULE | | | |
|-----------------|-------------------|---------|-------|
| FEEDER TAG | COPPER CONDUCTORS | | |
| | CONDUCTORS | RACEWAY | NOTES |
| 40A | 3#8, 1#10 EGC | 1" | |
| 125A | 3#1, 1#6 EGC | 1.25" | |
| UTIL | CONDUIT ONLY | | |

NOTES:

1 STRUCTURED MEDIA PANEL DETAIL
SCALE: NTS



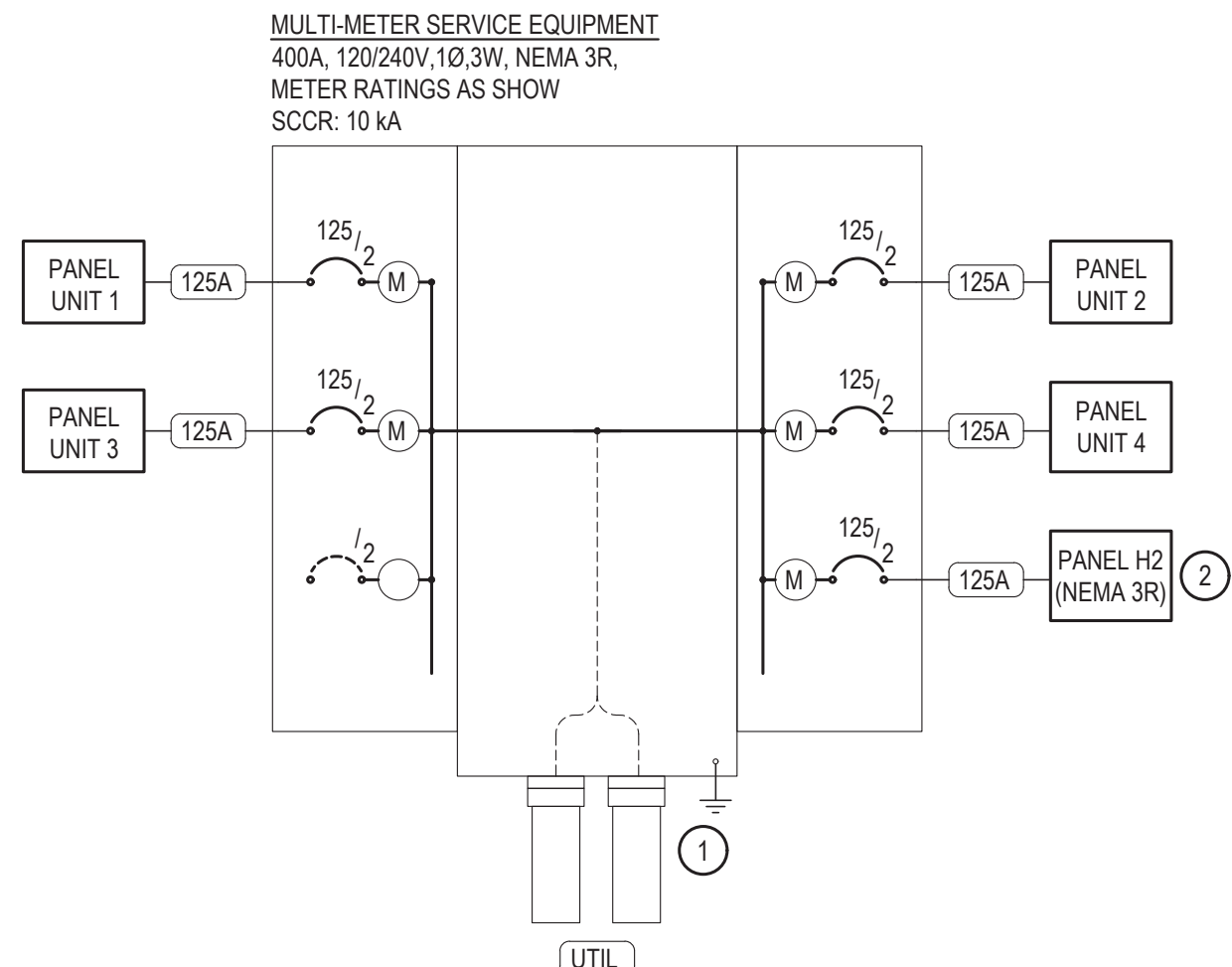
GENERAL NOTES

1. IMMEDIATELY UPON PROJECT INCEPTION THE CONTRACTOR SHALL COORDINATE WITH UTILITY FOR THE INSTALLATION OF A NEW ELECTRICAL SERVICE. EQUIPMENT LAYOUT AS SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL SUBMIT DETAILED INFORMATION REGARDING THE PROPOSED SERVICE ENTRANCE EQUIPMENT TO THE UTILITY COMPANY AND OWNER/ARCHITECT FOR APPROVAL PRIOR TO ORDERING ANY EQUIPMENT. ALL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH CHUGACH STANDARDS AND THE LATEST ADOPTED NEC.
2. METERS AND DISCONNECTS SHALL BE LABELED WITH ENGRAVED PLACARDS, IDENTIFYING EACH TENANT WITH THE ADDRESS OR OTHER MEANS AND BUSSED TERMINATION ENCLOSURES SHALL HAVE PROVISIONS TO BE SEALED. EXTERIOR EQUIPMENT WILL BE PROVIDED IN NEMA 3R ENCLOSURES.
3. EXPOSED FLEXIBLE CONDUIT IS NOT ALLOWED.
4. REFERENCE SITE ELECTRICAL PLAN FOR BUILDING DESIGNATIONS.

SHEET NOTES INDICATED BY: #

1. PROVIDE GROUNDING ELECTRODE SYSTEM AS FOLLOW: #2 CU. TO WATER MAIN, #2 CU. TO BUILDING STEEL, 20' OF #2 CU. ENCASED IN FOOTING CONCRETE AND BONDED TO REBAR. AND #4 CU. TO DRIVEN ROD ELECTRODE..

2 UTILITY / METERING GEAR - TYPICAL BUILDINGS '2a', '2b', & '2d'
SCALE: NTS



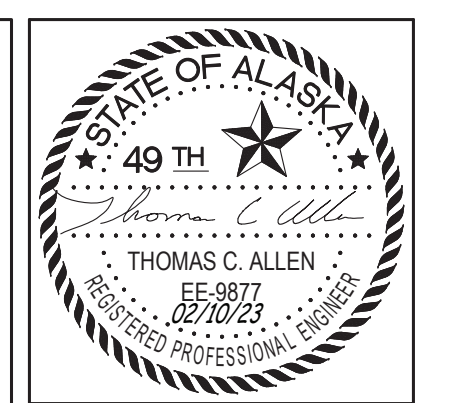
GENERAL NOTES

1. IMMEDIATELY UPON PROJECT INCEPTION THE CONTRACTOR SHALL COORDINATE WITH UTILITY FOR THE INSTALLATION OF A NEW ELECTRICAL SERVICE. EQUIPMENT LAYOUT AS SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL SUBMIT DETAILED INFORMATION REGARDING THE PROPOSED SERVICE ENTRANCE EQUIPMENT TO THE UTILITY COMPANY AND OWNER/ARCHITECT FOR APPROVAL PRIOR TO ORDERING ANY EQUIPMENT. ALL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH CHUGACH STANDARDS AND THE LATEST ADOPTED NEC.
2. METERS AND DISCONNECTS SHALL BE LABELED WITH ENGRAVED PLACARDS, IDENTIFYING EACH TENANT WITH THE ADDRESS OR OTHER MEANS AND BUSSED TERMINATION ENCLOSURES SHALL HAVE PROVISIONS TO BE SEALED. EXTERIOR EQUIPMENT WILL BE PROVIDED IN NEMA 3R ENCLOSURES.
3. EXPOSED FLEXIBLE CONDUIT IS NOT ALLOWED.
4. REFERENCE SITE ELECTRICAL PLAN FOR BUILDING DESIGNATIONS.

SHEET NOTES INDICATED BY: #

1. PROVIDE GROUNDING ELECTRODE SYSTEM AS FOLLOW: #2 CU. TO WATER MAIN, #2 CU. TO BUILDING STEEL, 20' OF #2 CU. ENCASED IN FOOTING CONCRETE AND BONDED TO REBAR. AND #4 CU. TO DRIVEN ROD ELECTRODE..
2. SEE 1/E5.02 FOR PV SYSTEM DETAILS.

3 UTILITY / METERING GEAR - BUILDING '2c'
SCALE: NTS



CERTIFICATE OF AUTHORIZATION NO: T3 ALASKA, LLC AECL # 1625

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VRS
OLD MATANUSKA TOWNHOUSE DEVELOPMENT
PHASE 2
UNIT GROUP 2A/2B/2C/2D

| REVISION SCHEDULE | | |
|-------------------|-------------|---------|
| # | DESCRIPTION | DATE |
| 1 | ADDENDUM #3 | 3.30.23 |

| | |
|----------|------------|
| JOB NO. | 2022.091.0 |
| DATE | 02.10.2023 |
| DRAWN | MJM |
| REVIEWED | TCA |

SHEET NAME
UTILITY RISER DIAGRAMS

SHEET NO.
E5.01