GENERAL NOTES:

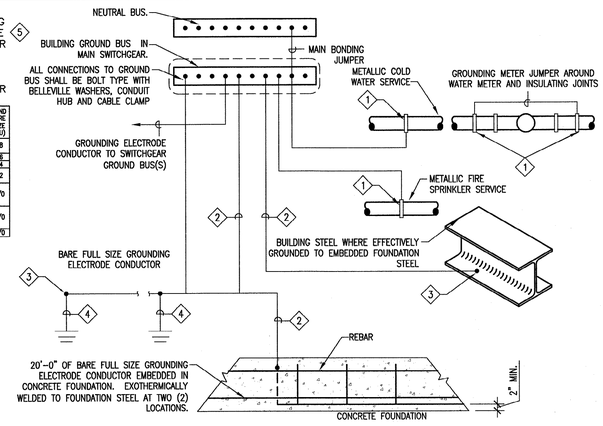
1. WHEN PRESENT THE EXECRTICAL CONTRACTOR SHALL PROVIDE ALL GROUNDING MEANS INDICATED. CONTRACTOR SHALL REFER TO ELECTRICAL ONE-LINE DIAGRAM AND GROUNDING ELECTRODE CONDUCTOR SCHEDULE (THIS DETAIL) FOR GROUNDING ELECTRODE CONDUCTOR SIZE. CONTRACTOR SHALL REFER TO ELECTRICAL SPECIFICATIONS FOR SPECIFICS OF GROUNDING SYSTEM INSTALLATION AND MATERIALS.
2. IF APPLICABLE THE GROUNDING ROD SHALL BE MINIMUM OF 9'-0" AWAY FROM IRRIGATION CONTROLLER.

KEYED NOTES:

1. T&B 3900 BU GROUND CLAMP WITH 3/4" CONDUIT HUB AND CABLE CLAMP
2. FULL SIZE GROUNDING ELECTRODE CONDUCTOR IN PVC.
3. EXOTHERMICALLY WELDED (TYPICAL)
4. DRIVEN GROUND RODS ⅝"x96" COPPER/SHEET ON BUILDING EXTERIOR
5. TABLE TAKEN FROM NEC 250.66. UNGROUNDED PHASE CONDUCTOR REFERS TO THE SIZE OF THE LARGEST UNGROUNDED SERVICE-ENTRANCE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS. SEE NEC 250.66.

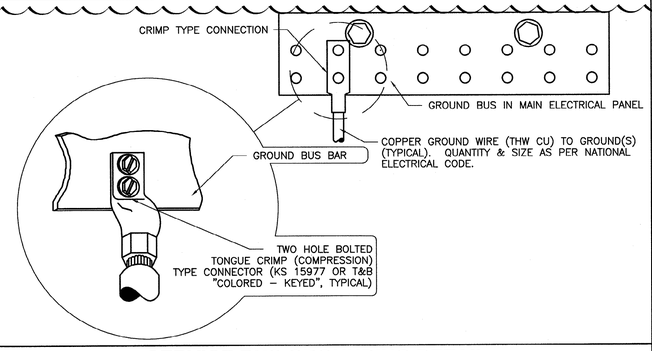
GROUNDING ELECTRODE CONDUCTOR & MAIN BONDING JUMPER CONDUCTOR SIZES

UNGROUNDED PHASE CONDUCTOR (COPPER)	GRND WIRE SIZE (CU)
#2 OR SMALLER	#8
1 OR 1/0	#6
2/0 OR 3/0	#4
>3/0 THRU 350 KCMIL	#2
>350 KCMIL THRU 600 KCMIL	1/0
>600 KCMIL THRU 1100 KCMIL	2/0
>1100 KCMIL	3/0



SERVICE GROUNDING DETAIL

SCALE: NTS



SERVICE BUS GROUNDING DETAIL

SCALE: NTS

IF PANELBOARD IS FEED FROM A TRANSFORMER LOCATED IN THE SAME ROOM AS THE PANEL. THE TOTAL LENGTH OF THE BRANCH CIRCUITS SHALL NOT EXCEED THE FOLLOWING:

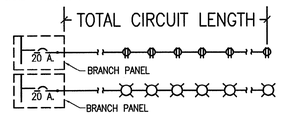
	120 VOLTS	277 VOLTS
a- USING #12 AWG	90 FT.	180 FT.
b- USING #10 AWG	150 FT.	300 FT.
c- USING #8 AWG	250 FT.	450 FT.
d- USING #6 AWG	380 FT.	700 FT.

THE ABOVE CIRCUIT LENGTHS ARE BASED ON 4% VOLTAGE DROP AT 16 AMPS LOAD AT THE END OF THE CIRCUIT. SAME WIRE SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT.

IF PANELBOARD IS FEED FROM A TRANSFORMER LOCATED REMOTLY FROM THE PANEL. THE TOTAL LENGTH OF THE BRANCH CIRCUITS SHALL NOT EXCEED THE FOLLOWING:

	120 VOLTS	277 VOLTS
a- USING #12 AWG	75 FT.	180 FT.
b- USING #10 AWG	125 FT.	260 FT.
c- USING #8 AWG	205 FT.	420 FT.
d- USING #6 AWG	325 FT.	660 FT.

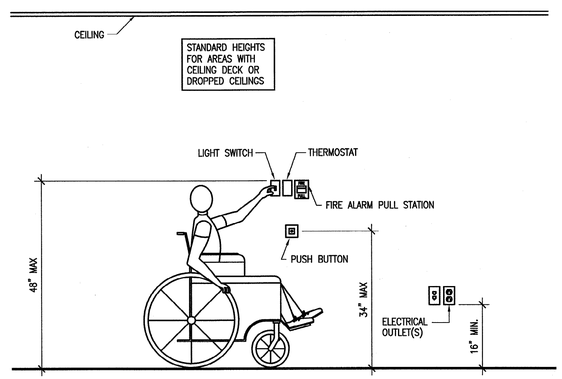
THE ABOVE CIRCUIT LENGTHS ARE BASED ON 3% VOLTAGE DROP AT 16 AMPS LOAD AT THE END OF THE CIRCUIT. SAME WIRE SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT.



BRANCH CIRCUIT DEFINITION:
CIRCUIT ORIGINATING FROM A 20 AMP CIRCUIT BREAKER IN A BRANCH PANEL AND ENDING AT THE LAST DUPLEX OUTLET ON THE CIRCUIT OR ENDS AT THE LAST LIGHT FIXTURE.

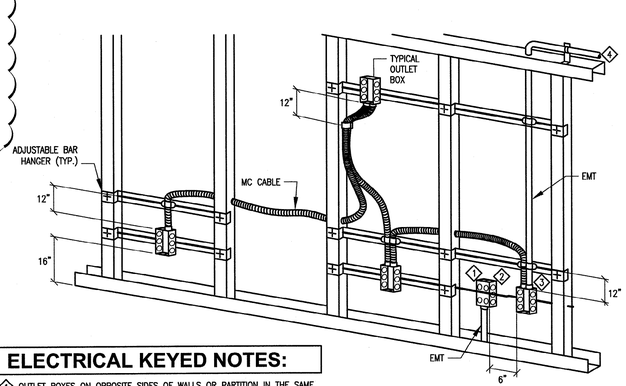
BRANCH CIRCUIT VOLTAGE DROP DETAIL

SCALE: NTS



HANDICAPPED MOUNTING HEIGHTS DETAIL

SCALE: NTS



ELECTRICAL KEYED NOTES:

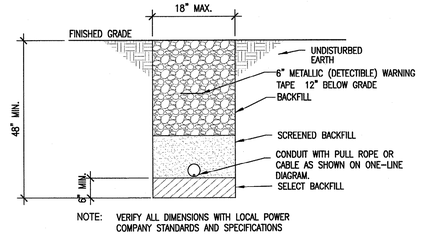
1. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITION IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
2. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 712.3.2 (24" SEPARATION ON OPPOSITE SIDES.)
3. INSULATED THROAT EMT CONNECTOR.
4. HOME RUN TO PANEL MUST BE IN RACEWAY.

ELECTRICAL GENERAL NOTES:

1. TYPICAL FOR WOOD AND METAL STUD ROUGH IN.
2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINAL FINISH SURFACE.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.

TYPICAL ROUGH-IN REQUIREMENTS DETAIL FOR MC CABLE

SCALE: NTS



NOTE: VERIFY ALL DIMENSIONS WITH LOCAL POWER COMPANY STANDARDS AND SPECIFICATIONS

TRENCHING DETAIL

SCALE: NTS

PLANCHECK BY PMS
May 02, 2012
(A,S,P,M,E,F/P,E/N)

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Registered Engineer (Electrical) CERTIFICATE NO. 36628 STEVEN R. GRIFFITHS Date Signed ARIZONA U.S.A. EXPIRES: 12/31/13

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DESIGNED BY: KJH
CHECKED BY: SRG
ROYAL ENGINEERING PROJECT NO. J11245.00
DATE PLOTTED: 01.05.2012

REVISIONS:	DATE:	JOB NO.
PLAN REVIEW 4.16.2012	12-19-2011	11-023

GUEST HOGANS
For N.A.T.I.V.E.
KAYENTA, ARIZONA 86033

ELECTRICAL DETAILS

E4.1