

PHASE 1 SITE PLAN NOTES

- NEW UTILITY POLE TO BE INSTALLED BY BELMONT LIGHT IN-LINE WITH EXISTING 5KV OVERHEAD CONDUCTORS. POLE-MOUNTED UTILITY TRANSFORMER TO BE INSTALLED ON NEW POLE BY BELMONT LIGHT. REFER TO 1/SU1.05.
- PROVIDE (1) 2-1/2"C FOR NEW UNDERGROUND 120/240V CONDUCTORS FROM SECONDARY SIDE OF POLE-MOUNTED TRANSFORMER TO EXISTING TO REMAIN GRANT FIELD SERVICE ENTRANCE GEAR. REFER TO 1/SU1.05.
- 4 EXISTING TRANSFORMER TO BE RELOCATED BY BELMONT LIGHT TO NEW UTILITY POLE. EXISTING SERVICE ENTRANCE GEAR TO REMAIN. REFER TO
- 5 PROVIDE 18"x18"x6" NEMA 3R UNDERGROUND HANDHOLE. REFER TO

GENERAL SITE ELECTRICAL NOTES

- WHERE UNDERGROUND UTILITIES ARE LIKELY TO BE ENCOUNTERED THE CONTRACTOR SHALL EXCAVATE BY HAND.

 REFER TO LANDSCAPE & CIVIL SITE PLANS FOR FINAL LOCATIONS OF OTHER SITE UTILITIES.
- PROVIDE CONDUIT PLUGS WITH 1/4" NYLON DRAG LINE ATTACHED IN ALL
- EMPTY CONDUITS. EXISTING OVERHEAD UTILITIES NOT SHOWN. COORDINATE WITH UTILITY
- COMPANY AS REQUIRED. DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE ELECTRICAL DRAWINGS. FIELD CONDITIONS SHALL GOVERN LOCATION OF ELECTRICAL DEVICES.

UNDERGROUND UTILITY NOTE

THE CONTRACTOR IS TO BE RESPONSIBLE FOR CONTACTING THE LOCAL CABLE TELEVISION COMPANY, POWER COMPANY, TELEPHINE COMPANY, GAS COMPANY, WATER AND SEWER COMPANY AND ANY OTHER UTILITY COMPANY WITHIN THE AREA PRIOR TO PROCEEDING WITH ANY EXCAVATION. BY LAW, THE CONTRACTOR IS REQUIRED TO CALL BEFORE DOING ANY EXCAVATION, DIGGING HOLES OR DRIVING POSTS REGARLESS OF WHETHER IT IS WITHIN THE STREET LINE OR ON PRIVATE PROPERTY. OBTAIN INFORMATION REGARDING THE EXISTENCE AND LOCATION OF ANY UNDERGROUND FACILITIES BY CALLING 811.

WATER PREVENTION MEASURES

- PITCH ALL UNDERGROUND CONDUITS DOWNWARDS AWAY FROM THE BUILDING. CONDUITS SHALL NOT BE PITCHED TOWARDS THE BUILDING, ALLOWING GROUND WATER TO ENTER BUILDING.

 PROVIDE FOAM SEALANT FOR ALL ELECTRIC CONDUITS CONTAINING CONDUCTORS, EQUAL TO POLYWATER FST. LOCATE AT INTERIOR END OF EACH CONDUIT WHERE CONDUIT TERMINATES IN BUILDING. FOR SPARE
- CONDUITS WITHOUT CONDUCTORS, PROVIDE CAP AT EACH END. ALL CONDUITS SHALL SWEEP UPWARD A MINIMUM OF 12" ABOVE THE BASE OF HANDHOLES OR OTHER EXTERIOR STRUCTURES. COORDINATE SWEEP AT TRANSFORMER PADS WITH UTILITY COMPANY DETAILS AND STANDARDS.

THE GALANTE ARCHITECTURE STUDIO INC

146 MT AUBURN ST CAMBRIDGE, MA 02138

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Project Number 2202 Project Title

Belmont Skating & Sports Facility

297 Concord Ave, Belmont, MA 02478

Drawing Title

PHASE 1 - SITE PLAN

Date/Issued For 11.15.2023

ISSUED FOR 90% CD

Print 24 x 36

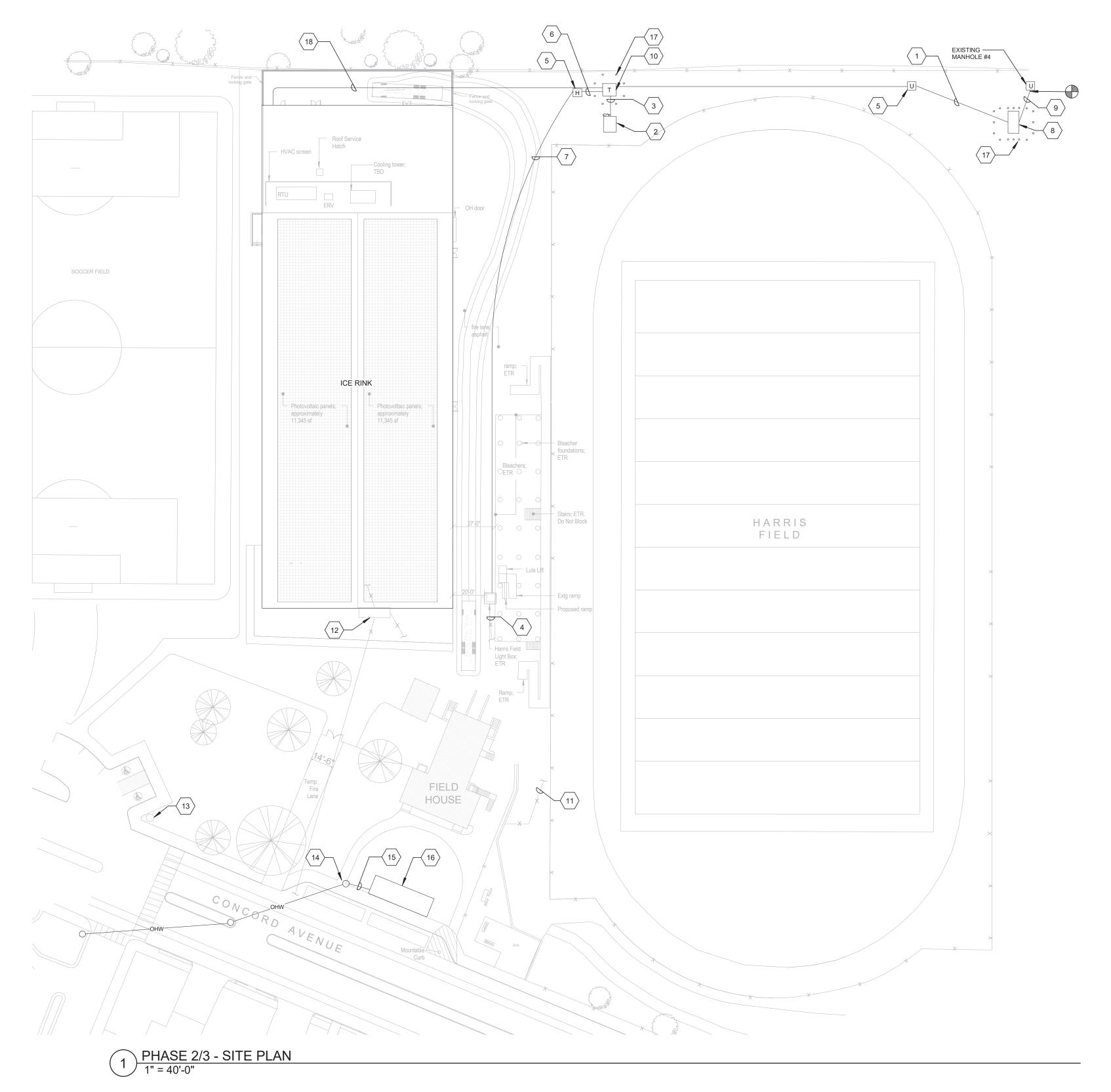
Scale As indicated

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Drawing Number

SU1.00

PHASE 1 - SITE PLAN 1" = 40'-0"



PHASE 2/3 SITE PLAN NOTES

- PROVIDE NEW UNDERGROUND 13.8KV PRIMARY ELECTRICAL SERVICE FROM UTILITY SWITCHGEAR TO NEW PAD-MOUNTED UTILITY TRANSFORMER. PROVIDE (4) 5" PVC CONCRETE ENCASED CONDUIT.
 - RESPONSIBILITIES:

 INSTALLATION OF CONDUIT, STRINGS, FEEDERS, ETC. TO BE COMPLETED BY ELECTRICAL CONTRACTOR PER BELMONT LIGHT SPECIFICATIONS.
- BELMONT LIGHT TO INSPECT WORK PRIOR TO BACKFILLING.
 BELMONT LIGHT TO COMPLETE HIGH VOLTAGE WIRING.

 PROVIDE NEW TEMPORARY ELECTRICAL SERVICE TO CONEX BOX FOR CONSTRUCTION. REFER TO 2/SU1.05.
- RESPONSIBILITIES:

 INSTALLATION OF TRANSFORMER PAD AND 480V PANELBOARD, CONNECTIONS, AND WIRING SERVICE SHALL BE COMPLETED BY ELECTRICAL CONTRACTOR PER BELMONT LIGHT. SPECIFICATIONS:

 BELMONT LIGHT SHALL BE RESPONSIBLE FOR INSTALLATION OF
- PROVIDE ONE SET OF CONDUIT AND FEEDERS UNDERGROUND FROM UTILITY TRANSFROMER TO TEMPORARY ELECTRIC CONEX BOX. PROVIDE EXTRIOR AND INTERIOR PICTURES IF NEEDED. REFER TO 2/SU1.05

STEPDOWN TRANSFORMERS.

- RESPONSIBILITIES:

 EXCAVATION & BACKFILL TO BE DONE BY SITE CONTRACTOR.

 CONDUIT, INSTALLATIONS, WIRING, AND TERMINATIONS TO BE DONE BY ELECTRICAL CONTRACTOR..
- DISCONNECT AND REMOVE EXISTING HARRIS FIELD FEED FROM BLUE TRANSFORMER.
- 5 PROVIDE NEW MANHOLE, PER BELMONT SPECIFICATIONS
- PROVIDE ONE SET OF CONDUIT AND FEEDERS UNDERGROUND FROM UTILITY TRANSFORMER TO NEW HANDHOLE. REFER TO 2/SU1.05.
 - RESPONSIBILITIES:

 INSTALLATION OF CONDUIT, STRINGS, FEEDERS, ETC. TO BE COMPLETED BY ELECTRICAL CONTRACTOR PER BELMONT LIGHT
- SPECIFICATIONS.

 BELMONT LIGHT TO PERFORM TERMINATIONS AT TRANSFORMER.

 7 PROVIDE ONE SET OF CONDUIT AND FEEDERS UNDERGROUND FROM NEW HANDHOLE TO EXISTING HARRIS LIGHT BOX. REFER TO 2/SU1.05.
- RESPONSIBILITIES:

 ALL CONDUITS, STRING, FEEDER, ETC TO BE DONE BY ELECTRICAL CONTRACTOR.
- 8 NEW 15KV SWITCHGEAR PROVIDED BY UTILITY COMPANY.
 RESPONSIBILITIES:
 PURCHASE & INSTALLATION OF FOUNDATION/VAULT & BOLLARDS
 SHALL BE COMPLETED BY ELECTRICAL CONTRACTOR WITH SITE
 - SHALL BE COMPLETED BY ELECTRICAL CONTRACTOR WITH CONTRACTOR SUPPORT.
 BELMONT LIGHT RESPONSIBLE FOR INSTALLATION OF SWITCHGEAR AND ALL HIGH VOLTAGE CONNECTIONS.
- 9 UNDERGROUND 13.8KV PRIMARY ELECTRICAL SERVICE FROM EXISTING MANHOLE #4 TO UTILITY SWITCHGEAR. PROVIDE (6) 5" PVC CONRETE ENCASED CONDUIT.
 RESPONSIBILITIES:
 - INSTALLATION OF CONDUIT, STRINGS, FEEDERS, ETC. TO BE COMPLETED BY ELECTRICAL CONTRACTOR PER BELMONT LIGHT SPECIFICATIONS.
 - BELMONT LIGHT TO INSPECT WORK PRIOR TO BACKFILLING.
 BELMONT LIGHT TO COMPLETE HIGH VOLTAGE WIRING.
- PROVIDE NEW 480Y/277V PAD-MOUNTED UTILITY TRANSFORMER AS SPECIFIED BY BELMONT LIGHT
 - RESPONSIBILITIES:

 PURCHASE & INSTALLATION OF FOUNDATION & BOLLARDS SHALL BE COMPLETED BY ELECTRICAL CONTRACTOR WITH SITE CONTRACTOR
- SUPPORT.

 INSTALLATION OF ALL CONDUIT, STRINGS, FEEDERS, AND ETC TO BE COMPLETED BY ELECTRICAL CONTRACTOR PER BELMONT LIGHT.
- SPECIFICATIONS:BELMONT LIGHT SHALL BE RESPONSIBLE FOR INSTALLATION OF TRANSFORMER.
- REMOVE EXISTING OVERHEAD FEED FROM FIELD HOUSE TO LULA LIFT. REMOVE ALL EXISTING CONDUITS AND CONDUCTORS.

 REMOVE EXISTING BLUE PAD MOUNTED TRANSFORMER. REMOVE ALL
- FEEDERS TO OLD ICE RINK SERVICE ENTRANCE AND HARRIS FIELD.

 EXISTING UTILITY POLE AND LIGHT FIXTURE TO BE RELOCATED BY
- BELMONT LIGHT AND POWER.
- NEW POLE, TRANSFORMER, OVERHEAD WIRE, AND ANCHOR PROVIDED BELMONT LIGHT.
- PROVIDE FEEDERS AND CONDUIT FROM THE NEW POLE MOUNTED TRANSFORMER PROVIDED BY BELMONT LIGHT. REFER TO 2/SU1.05.
- APPROXIMATE LOCATION OF TEMPORARY CONSTRUCTION TRAILER.
 CONFIRM EXACT LOCATION IN FIELD.
 ELECTRICAL: INSTALL MAST WITH WEATHER HEAD TO METER
 SOCKET BOX WITH SERVICE DISCONNECT MOUNTED ON EXTERIOR OF
 TRAILER INCLUDING ALL CONDUIT WIRING AND TERMINATION.
 TELE/COMM: INSTALL MAST WITH WEATHER HEAD, CONDUIT TO
 TRAILER TELDATA BOX FOR VERIZON FEED. INCLUDE ALL WIRING AND
 TERMINATION.
- PROVIDE CONCRETE PROTECTIVE BOLLARDS. REFER TO 4/SU1.03. REFER TO BOTH 5/SU1.03 AND 6/SU1.03 FOR ADDITIONAL INFORMATION.
- PROVIDE SIX SETS OF CONDUITS UNDERGROUND FROM UTILITY
 TRANSFORMER TO ELECTRICAL ROOM OF NEW ICE RINK FOR NEW
 SECONDARY ELECTRIC SERVICE. REFER TO 3/SU1.05.
 RESPONSIBILITIES:
 CONDUIT BY SITE CONTRACTOR.

GENERAL SITE ELECTRICAL NOTES

- WHERE UNDERGROUND UTILITIES ARE LIKELY TO BE ENCOUNTERED THE
 CONTRACTOR SHALL EXCAVATE BY HAND.
- CONTRACTOR SHALL EXCAVATE BY HAND.

 2. REFER TO LANDSCAPE & CIVIL SITE PLANS FOR FINAL LOCATIONS OF OTHER
- PROVIDE CONDUIT PLUGS WITH 1/4" NYLON DRAG LINE ATTACHED IN ALL EMPTY CONDUITS.

 EXISTING OVERHEAD LITELITIES NOT SHOWN, COORDINATE WITH LITELITY.
- 4. EXISTING OVERHEAD UTILITIES NOT SHOWN. COORDINATE WITH UTILITY COMPANY AS REQUIRED.
- 5. DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE ELECTRICAL DRAWINGS. FIELD CONDITIONS SHALL GOVERN LOCATION OF ELECTRICAL DEVICES.

UNDERGROUND UTILITY NOTE

THE CONTRACTOR IS TO BE RESPONSIBLE FOR CONTACTING THE LOCAL CABLE TELEVISION COMPANY, POWER COMPANY, TELEPHINE COMPANY, GAS COMPANY, WATER AND SEWER COMPANY AND ANY OTHER UTILITY COMPANY WITHIN THE AREA PRIOR TO PROCEEDING WITH ANY EXCAVATION. BY LAW, THE CONTRACTOR IS REQUIRED TO CALL BEFORE DOING ANY EXCAVATION, DIGGING HOLES OR DRIVING POSTS REGARLESS OF WHETHER IT IS WITHIN THE STREET LINE OR ON PRIVATE PROPERTY. OBTAIN INFORMATION REGARDING THE EXISTENCE AND LOCATION OF ANY UNDERGROUND FACILITIES BY CALLING 811.

WATER PREVENTION MEASURES

- PITCH ALL UNDERGROUND CONDUITS DOWNWARDS AWAY FROM THE BUILDING. CONDUITS SHALL NOT BE PITCHED TOWARDS THE BUILDING, ALL OWING CROUND WATER TO ENTER BUILDING.
- ALLOWING GROUND WATER TO ENTER BUILDING.

 2. PROVIDE FOAM SEALANT FOR ALL ELECTRIC CONDUITS CONTAINING CONDUCTORS, EQUAL TO POLYWATER FST. LOCATE AT INTERIOR END OF EACH CONDUIT WHERE CONDUIT TERMINATES IN BUILDING. FOR SPARE CONDUITS WITHOUT CONDUCTORS, PROVIDE CAP AT EACH END.
- ALL CONDUITS SHALL SWEEP UPWARD A MINIMUM OF 12" ABOVE THE BASE OF HANDHOLES OR OTHER EXTERIOR STRUCTURES.
 COORDINATE SWEEP AT TRANSFORMER PADS WITH UTILITY COMPANY DETAILS AND STANDARDS.

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Project Number

2202

Project Title

Belmont Skating &

Sports Facility

297 Concord Ave, Belmont, MA 02478

Drawing Title

PHASE 2/3 - SITE PLAN

Date/Issued For

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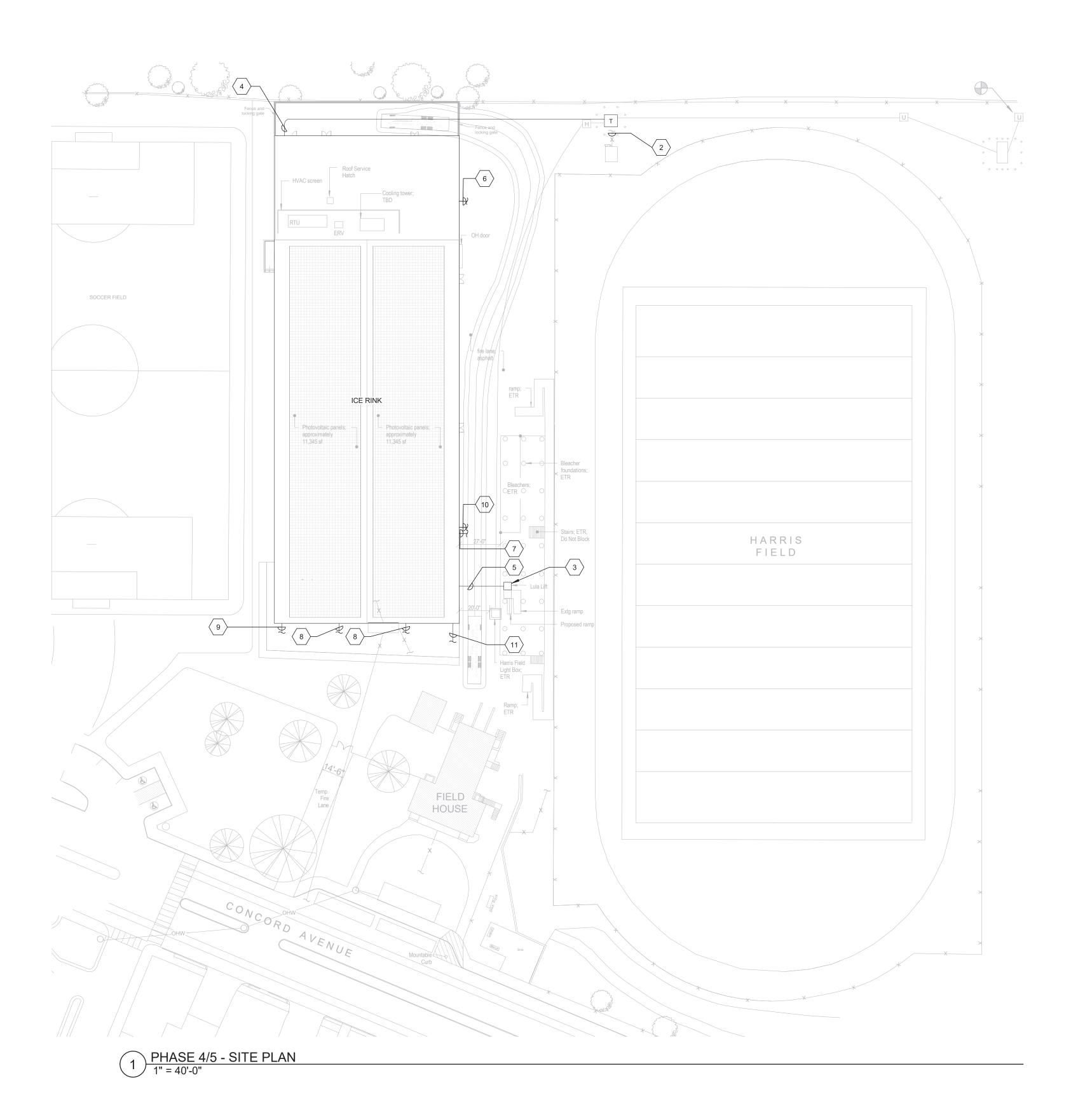
Print 24 x 36

Scale As indicated

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Drawing Number

SU1.01



PHASE 4/5 SITE PLAN NOTES

- REMOVE ALL EXISTING ELECTRICAL EQUIPMENT IN FIELD HOUSE. REMOVE ALL ASSOCIATED CONDUCTORS, CONDUITS AND FEEDERS BACK TO CONCORD AVE.
- 2 REMOVE TEMPORARY CONSTRUCTION TRANSFORMER AND SERVICE.
- REMOVE EXISTING TEMPORARY POWER FEED TO LULA LIFT. REMOVE ALL CONDUITS AND CONDUCTORS.
- PROVIDE SIX SETS OF CONDUITS UNDERGROUND FROM UTILITY TRANSFORMER TO ELECTRICAL ROOM OF NEW ICE RINK FOR NEW SECONDARY ELECTRICAL SERVICE. REFER TO 3/SU1.05. RESPONSIBILITIES:

─ BELOW GRADE. SEE CIVIL PLANS FOR CONTINUATION.

- CONDUIT BY SITE CONTRACTOR.

 NEW PERMANENT POWER FEED TO LULA LIFT. SEE BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.
- $\fbox{6}$ 8" STORM MAIN TO ENTER BUILDING FOOTPRINT BELOW GRADE. SEE CIVIL PLANS FOR CONTINUATION.
- 7 6" FIRE PROTECTION SERVICE MAIN TO ENTER BUILDING FOOTPRINT
- 8 4" STORM MAIN TO ENTER BUILDING FOOTPRINT BELOW GRADE. SEE CIVIL PLANS FOR CONTINUATION.
- 9 4" WASTE MAIN TO LEAVE BUILDING FOOTPRINT BELOW GRADE. SEE CIVIL PLANS FOR CONTINUATION.
- $\left\langle 10 \right\rangle$ 3" DOMESTIC COLD WATER SERVICE MAIN TO ENTER BUILDING FOOTPRINT BELOW GRADE. SEE CIVIL PLANS FOR CONTINUATION.
- 4" FIRE DEPARTMENT CONNECTION TO STANDALONE FDC ON SITE. SEE CIVIL PLANS FOR CONTINUATION.

GENERAL SITE ELECTRICAL NOTES

- WHERE UNDERGROUND UTILITIES ARE LIKELY TO BE ENCOUNTERED THE CONTRACTOR SHALL EXCAVATE BY HAND.
 REFER TO LANDSCAPE & CIVIL SITE PLANS FOR FINAL LOCATIONS OF OTHER
- SITE UTILITIES.

 3. PROVIDE CONDUIT PLUGS WITH 1/4" NYLON DRAG LINE ATTACHED IN ALL EMPTY CONDUITS.

 4. EXISTING OVERHEAD UTILITIES NOT SHOWN. COORDINATE WITH UTILITY
- COMPANY AS REQUIRED.

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UNDERGROUND UTILITY NOTE

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WATER PREVENTION MEASURES

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- ALLOWING GROUND WATER TO ENTER BUILDING.

 2. PROVIDE FOAM SEALANT FOR ALL ELECTRIC CONDUITS CONTAINING CONDUCTORS, EQUAL TO POLYWATER FST. LOCATE AT INTERIOR END OF EACH CONDUIT WHERE CONDUIT TERMINATES IN BUILDING. FOR SPARE CONDUITS WITHOUT CONDUCTORS, PROVIDE CAP AT EACH END.
- ALL CONDUITS SHALL SWEEP UPWARD A MINIMUM OF 12" ABOVE THE BASE OF HANDHOLES OR OTHER EXTERIOR STRUCTURES.
 COORDINATE SWEEP AT TRANSFORMER PADS WITH UTILITY COMPANY DETAILS AND STANDARDS.

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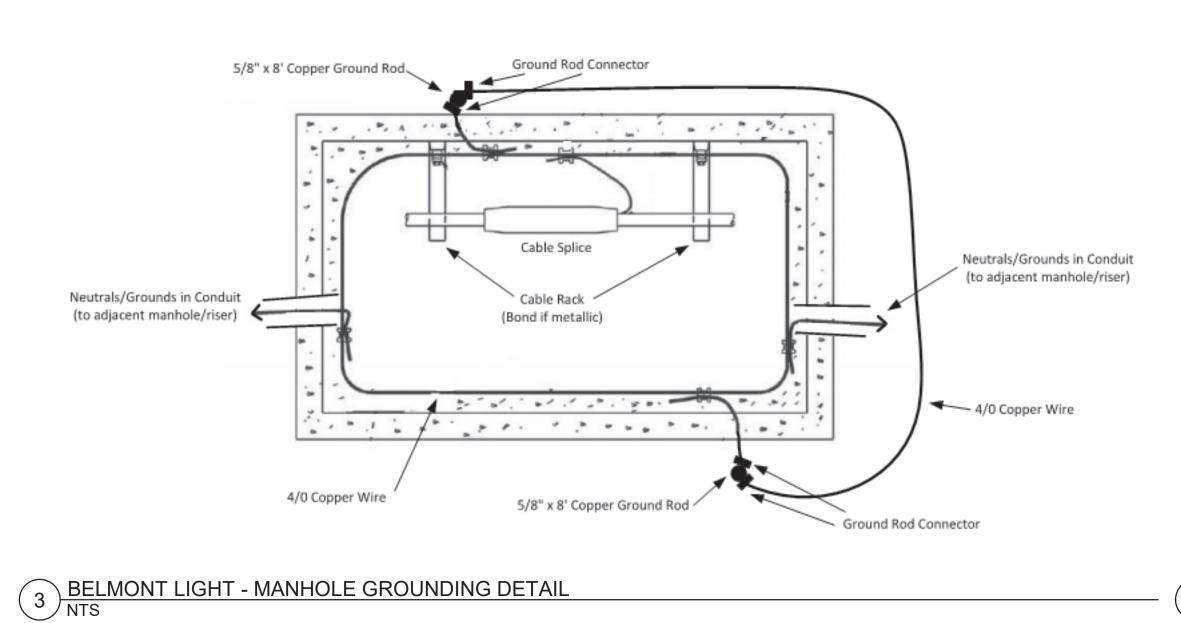
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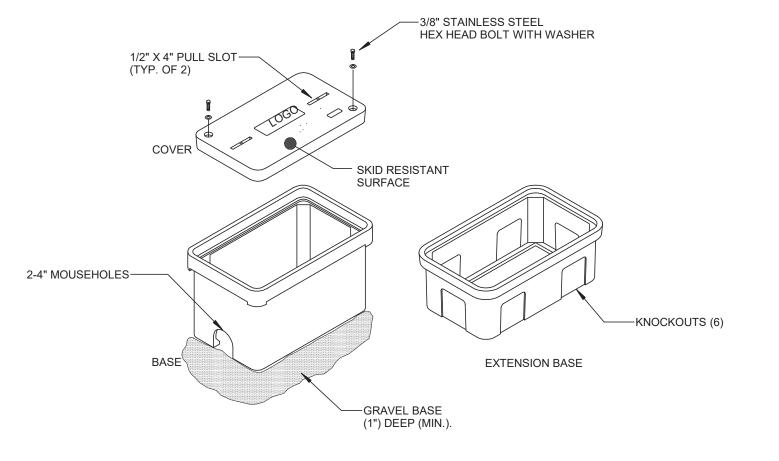
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Drawing Number

SU1.02



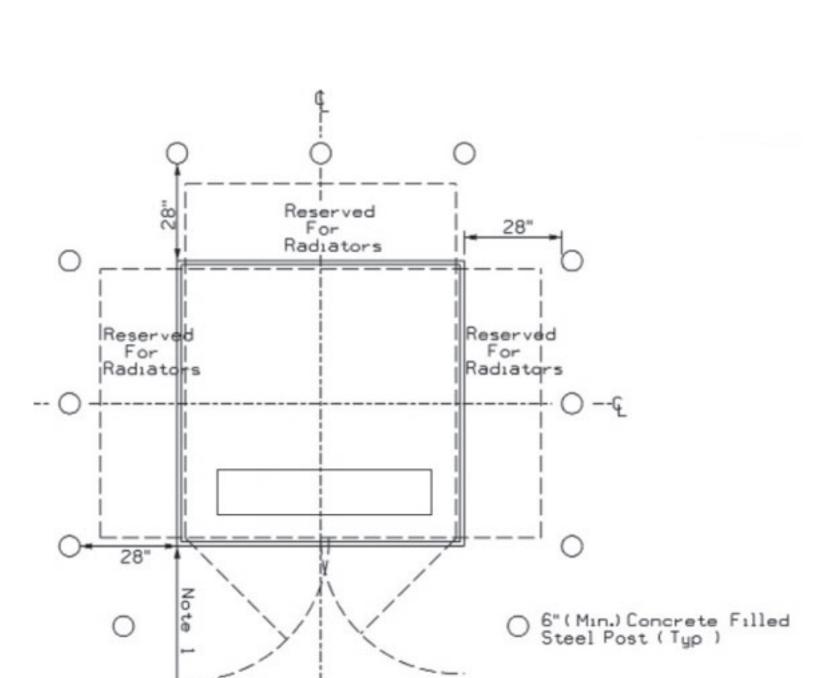


- NOTES:

 1. PROVIDE STANDARD HANDHOLE. COVER COLOR SHALL BE AS COORDINATED WITH THE OWNER
 2. COVER, RING AND BOX SHALL BE MADE OF SAME MATERIAL.
 3. PROVIDE IMPRINTED LOGO WITH 'ELECTRIC' OR 'COMMUNICATIONS' LOGO AS INDICATED ON
- PROVIDE EXTENSION BASES AND GRADE ADJUSTABLE EXTENSIONS TO SET FLUSH WITH GRADE AND TO SET AT DEPTH TO ALLOW CONDUITS TO ENTER THE BASE HORIZONTALLY.
- 5. PITCH CONDUITS AWAY FROM HANDHOLE. REFER TO DRAWINGS FOR SIZES.

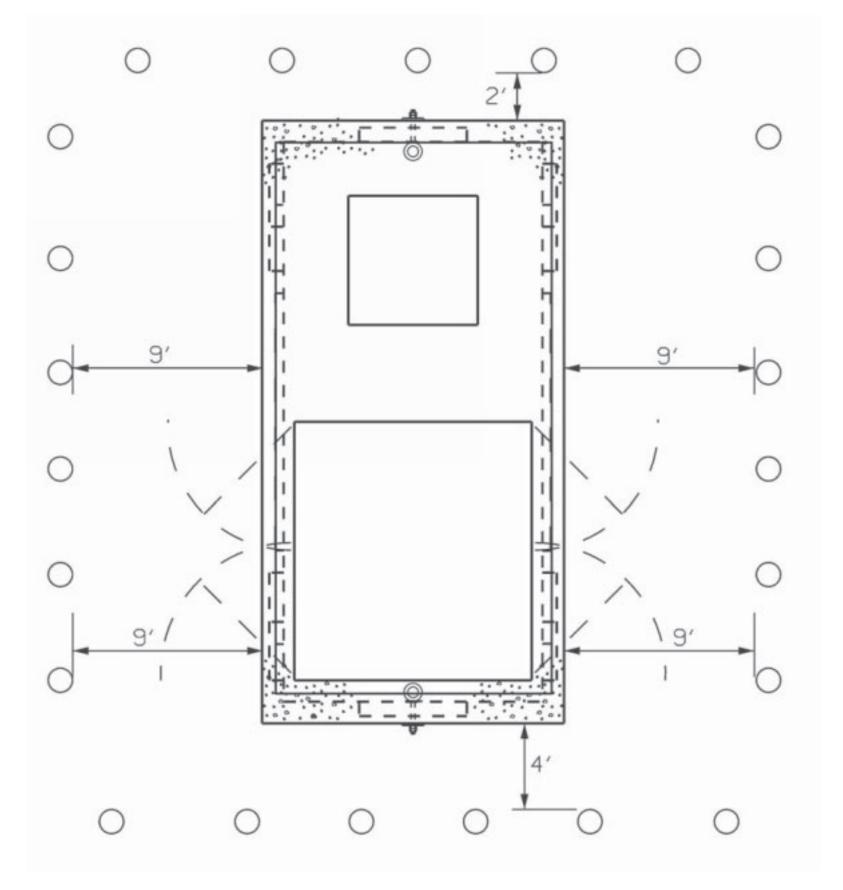
- REFER TO DRAWINGS FOR SIZES.
 PROVIDE TIER 22 DESIGN FOR ALL HANDHOLES LOCATED IN PAVED AREAS OR WHERE SUBJECT TO VEHICULAR TRAFFIC. TIER 15 DESIGN ELSEWHERE.
 PROVIDE HANDHOLE WITH DIVIDED INTERIOR OPTION TO SEPARATE POWER AND COMMUNICATIONS CABLING, WHERE MULTIPLE SERVICES ARE SHOWN ON SITE PLAN.

2 HANDHOLE DETAIL NTS

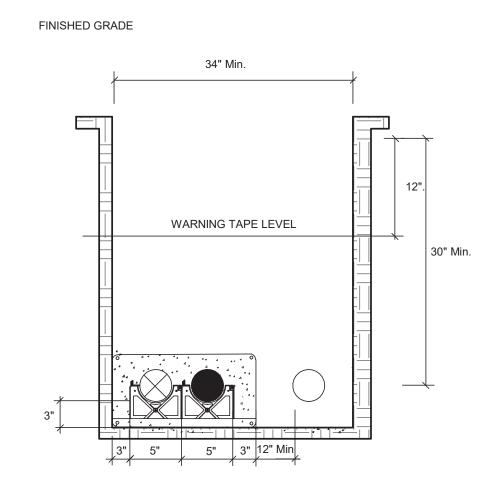


6 BELMONT LIGHT - TRANSFORMER BOLLARD REQUIREMENTS DETAIL NTS

10' Clear Space From Front Of Pad



5 BELMONT LIGHT - SWITCHGEAR BOLLARD REQUIREMENTS DETAIL NTS

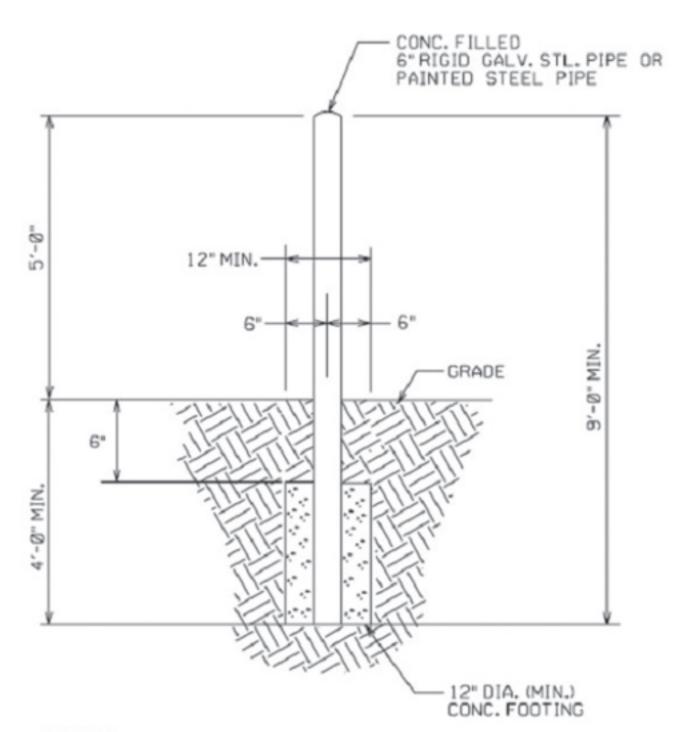


NOTES:

1. WARNING TAPE: PROVIDED BY CUSTOMER, RED BACKGROUND AND BLACK PRINTING

4 WAY

- 2. PRIMARY ELECTRICAL DUCT: FILLED CIRCLE
 3. COMMUNICATION DUCT OR CABLE: OPEN CIRCLE
 4. SPARE DUCT: CROSSOUT CIRCLE
- **DELMONT LIGHT CONCRETE ENCASED DUCT DETAIL**



NOTES:

- 1) Five foot minimum clearance from front of pad
- 2) Belmont Light engineering shall designate the number and location bollards by marking the above drawing
- 3) For installations around oil containment curbs, install bollards six feet minimum on all applicable sides.

4 BELMONT LIGHT - BOLLARD DETAIL NTS

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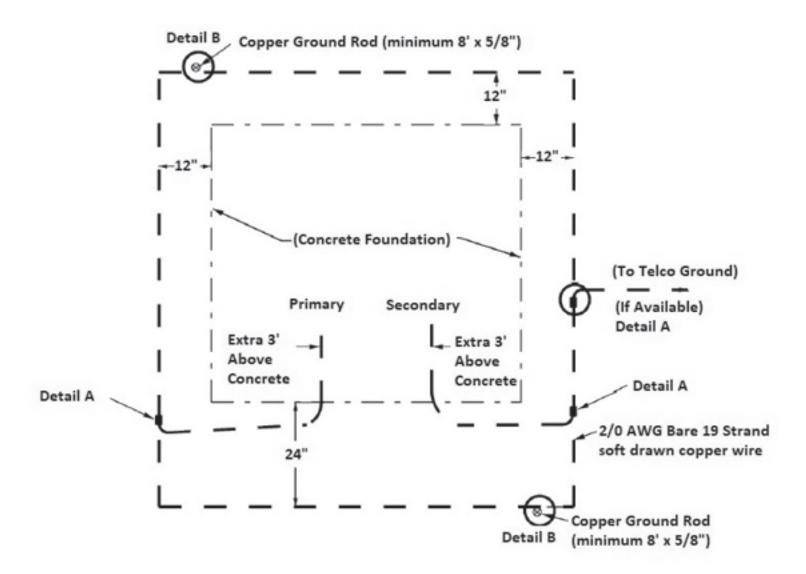
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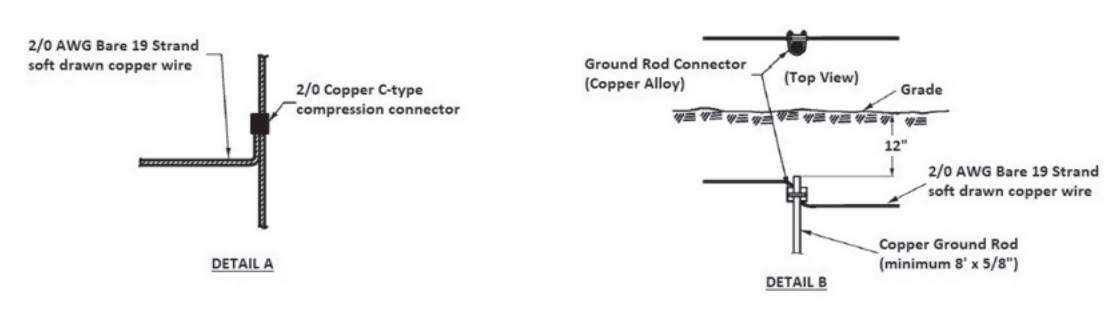
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Scale

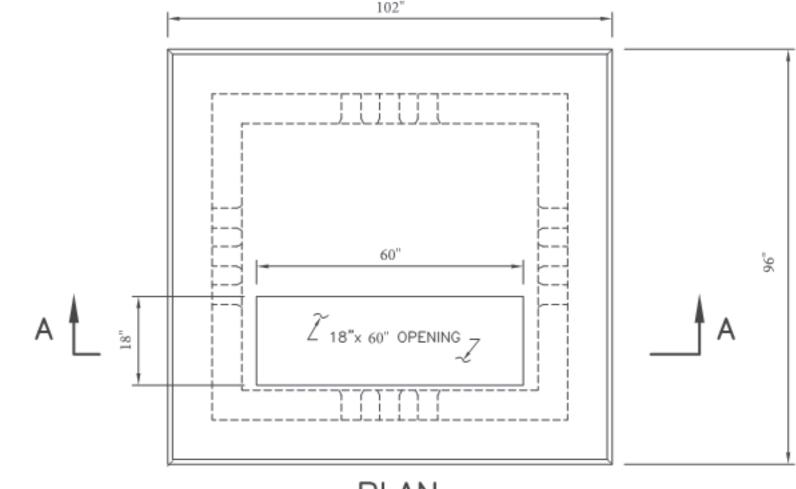
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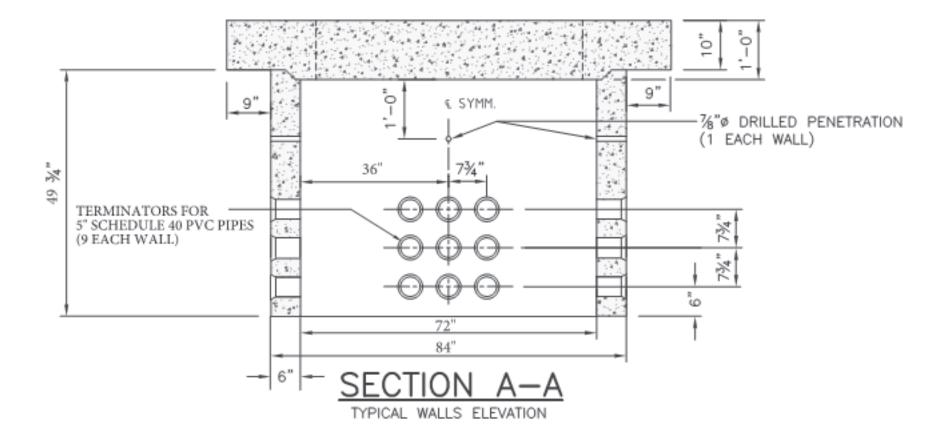




2 BELMONT LIGHT - TRANSFORMER GROUND GRID DETAIL



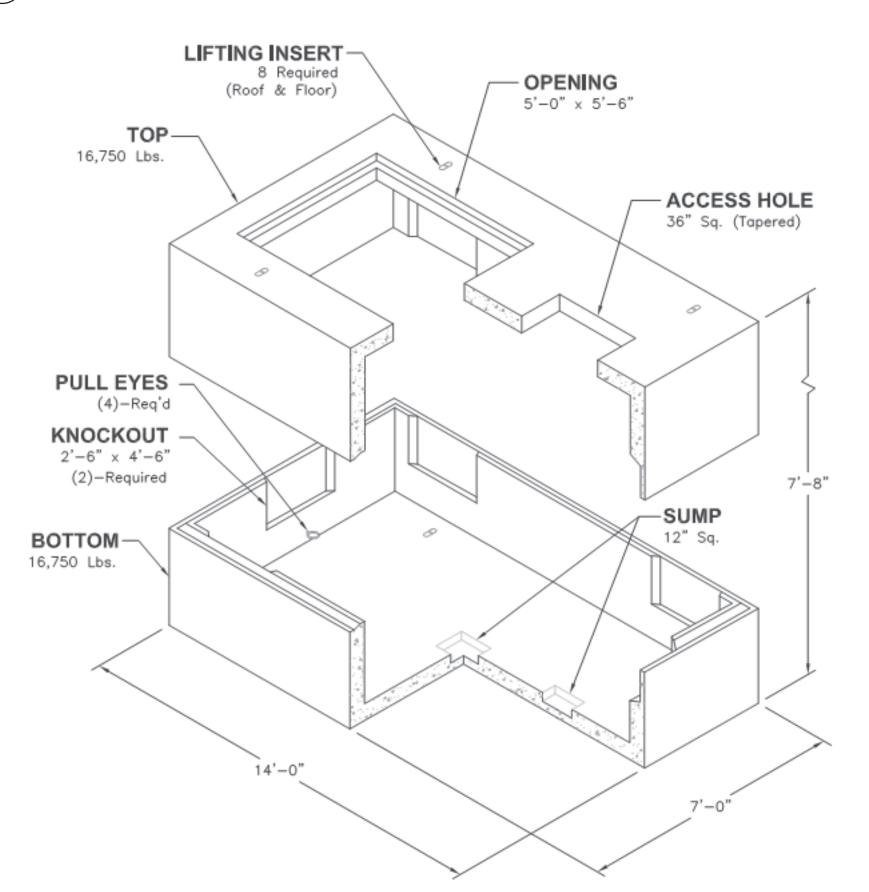
<u>PLAN</u>



NOTES:

- 1. CONCRETE MIN. STRENGTH 5,000 PSI @ 28 DAYS.
- STEEL REINFORCEMENT ASTM A615, GRADE 60.
 MINIMUM STEEL COVER 1-1/2 INCH TYPICAL.
- 4. DESIGN LOADING AASHTO HS20-44.
- 5. DESIGN SPECIFICATIONS ACI 318 & AASHTO LOAD FACTOR DESIGN METHOD.
- 6. TERMINATORS SHALL HAVE BELL ENDS FLUSH WITH INSIDE WALL.
- 7. CONSTRUCTION JOINT SHALL BE SEALED WITH 1"#
 BUTYL RUBBER OR APPROVED EQUAL.

1 BELMONT LIGHT - TRANSFORMER VAULT DETAIL NTS



3 BELMONT LIGHT - SWITCHGEAR VAULT DETAIL NTS

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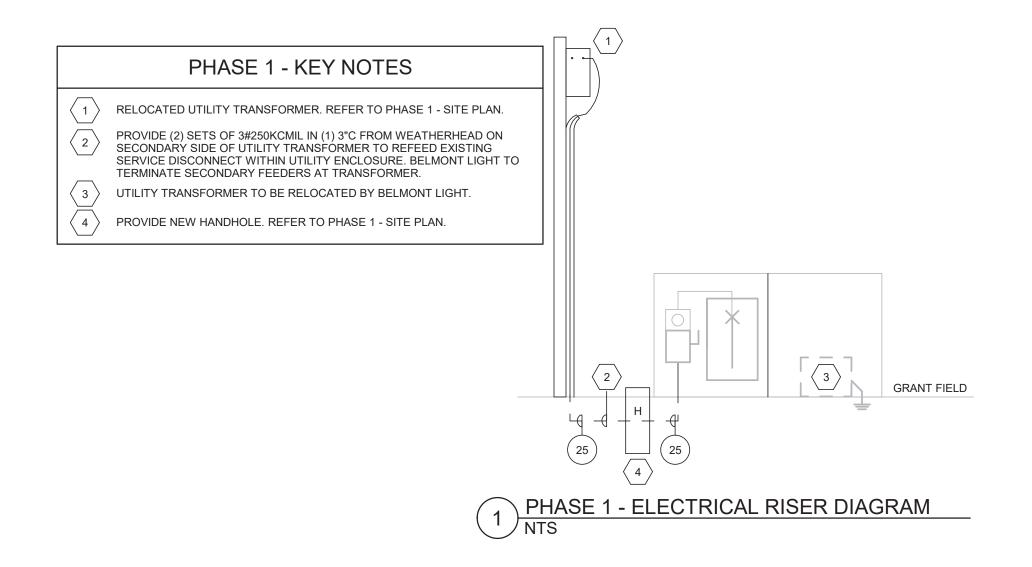
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Scale NTS

Drawn By CWW

Drawing Number

SU1.04



PHASE 2/3 - KEY NOTES

- UTILIZE EXISTING MANHOLE #4 TO FEED POWER FROM UTILITY SERVICE. PROVIDED 15KW SWITCHGEAR. REFER TO SU1.01 - PHASE 2/3 - SITE
- PROVIDE NEW HANDHOLE. REFER TO SU1.01 PHASE 2/3 SITE PLAN.
- PROVIDE NEW MANHOLE. REFER TO SU1.01 PHASE 2/3 SITE PLAN. PROVIDE TRANSFORMER PAD TO UTILITY COMPANY SPECIFICATIONS. BELMONT LIGHT TO PROVIDE PERMENANT TRANSFORMER. REFER TO
- PHASE 2/3 SITE PLAN. PROVIDE (2) SET OF 4#500KCMIL IN 5"C FROM UTILITY TRANSFORMER TO TEMPORARY POWER CONEX BOX FOR CONSTRUCTION PURPOSES.

SERVICE ENTRANCE CONDUCTORS, -SEE RISER DIAGRAM FOR SIZE AND QUANTITY OF PHASES.

GROUNDED CONDUCTOR (NEUTRAL)

NEUTRAL BUS-

TELEPHONE SERVICE —

-PROVIDE GROUNDING ELECTRODE

PROVIDE GROUNDING ELECTRODE

CONDUCTOR (GEC): #4 AWG COPPER

OR SIZED PER NEC 250.66

CONDUCTOR (GEC): #6 AWG COPPER

SIZED PER NEC 250.102-

-PROVIDE CONCRETE ENCASED

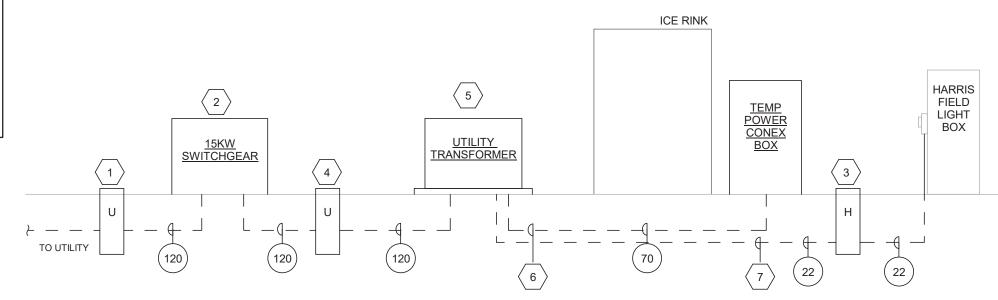
GROUNDING ELECTRODE IN

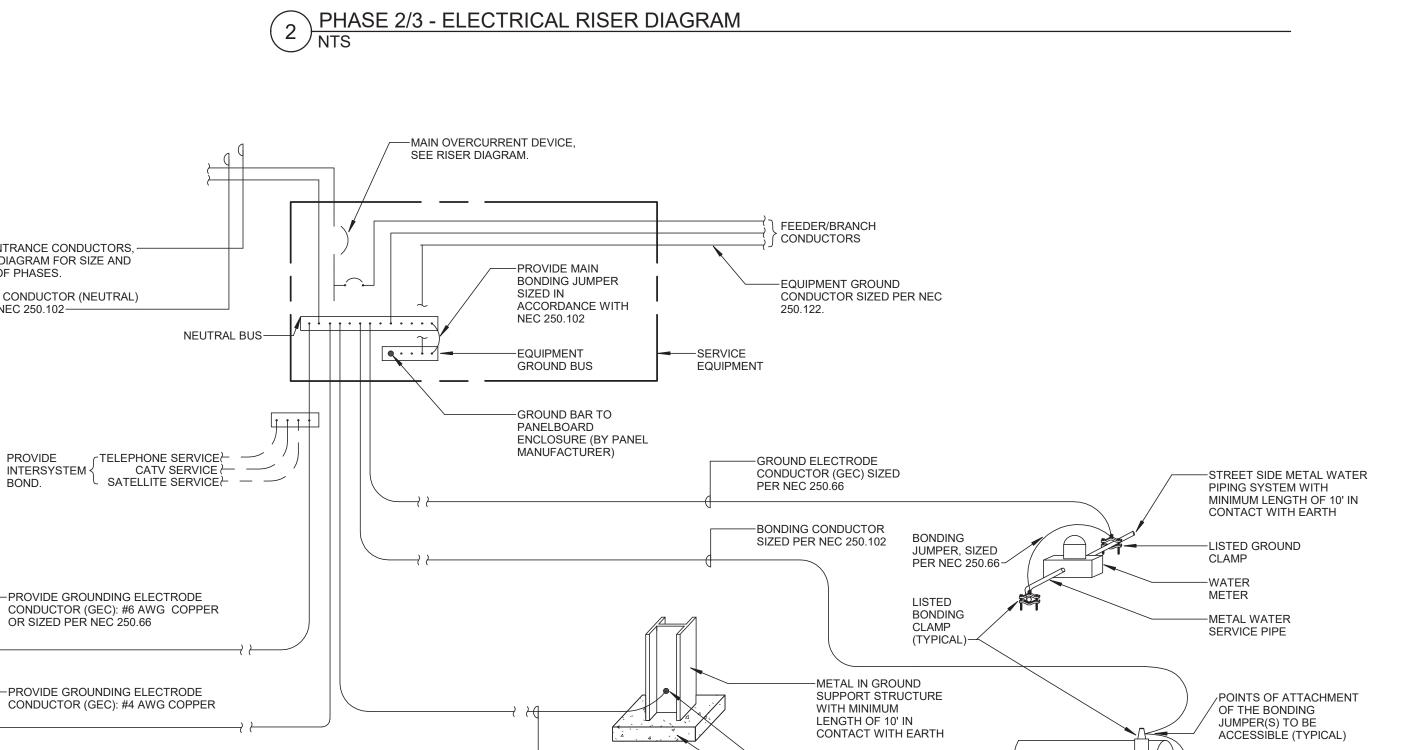
ACCORDANCE WITH 250.52

PROVIDE (1) SET OF 4#750 IN (1) 4"C TO REFEED FROM UTILITY TRANSFORMER TO NEW HANDHOLE.

ELECTRICAL FEEDER SCHEDULE COPPER CONDUCTORS CIRCUIT | CONDUCTORS (1 PH, 2W) CONDUIT CONDUCTORS (1 OR 3 PH. CONDUIT CONDUCTORS (3 PH, 4 WIRE) CONDUIT OVERCURRENT SYMBOL WITH GROUND **RATING** SIZE WITH GROUND 3 WIRE) WITH GROUND SIZE SIZE 2#12 & 1#12G 3/4" 3#12 & 1#12G 3/4" 4#12 & 1#12G 3/4" 15A 2#12 & 1#12G 3/4" 3#12 & 1#12G 3/4" 4#12 & 1#12G 3/4" 20A (3) 25A 2#10 & 1#10G 3/4" 3#10 & 1#10G 3/4" 4#10 & 1#10G 3/4" 3/4" 3/4" 3/4" 2#10 & 1#10G 3#10 & 1#10G 4#10 & 1#10G 30A (3.5) 2#8 & 1#10G 1" 3#8 & 1#10G 1" 4#8 & 1#10G 1" 35A 2#8 & 1#10G 3#8 & 1#10G 4#8 & 1#10G 40A (4.5) 1" 2#8 & 1#10G 3#8 & 1#10G 4#8 & 1#10G 45A 3#8 & 1#10G 4#8 & 1#10G 50A 2#8 & 1#10G 1" 1" 1" 2#6 & 1#10G 3#6 & 1#10G 4#6 & 1#10G 60A 2#4 & 1#8G 1 1/4" 3#4 & 1#8G 1 1/4" 4#4 & 1#8G 1 1/4" 70A 2#4 & 1#8G 1 1/4" 3#4 & 1#8G 1 1/4" 4#4 & 1#8G 1 1/4" 80A 1 1/4" 3#3 & 1#8G 1 1/4" 90A 2#3 & 1#8G 1 1/4" 4#3 & 1#8G 2#3 & 1#8G 1 1/4" 1 1/4" 4#3 & 1#8G 1 1/4" 100A 3#3 & 1#8G 3#2 & 1#6G 1 1/4" 4#2 & 1#6G 1 1/2" 110A 3#1 & 1#6G 1 1/2" 4#1 & 1#6G 2" 125A 3#1/0 & 1#6G 2" 4#1/0 & 1#6G 2" 150A 3#2/0 & 1#6G 4#2/0 & 1#6G 2" 175A 2" 4#3/0 & 1#6G 2 1/2" 3#3/0 & 1#6G 200A 3#4/0 & 1#4G 2 1/2" 4#4/0 & 1#4G 2 1/2" 225A 3#250KCMIL & 1#4G 4#250KCMIL & 1#4G 250A 4#350KCMIL & 1#4G 300A 3#350KCMIL & 1#4G 4" 350A 3#500KCMIL & 1#3G 4#500KCMIL & 1#3G 4" 3#600KCMIL & 1#3G 4#600KCMIL & 1#3G 4" 400A (2)3#4/0 & 1#2G (2) 2 1/2" 2 SETS OF 4#4/0 & 1#2G (2) 2 1/2" 450A (2)3#250KCMIL & 1#2G (2) 3" 2 SETS OF 4#250KCMIL & 1#2G (2) 3" 500A (2)3#350KCMIL & 1#1G (2) 3"2 SETS OF 4#350KCMIL & 1#1G (2) 4"600A (2)3#500KCMIL & 1#1/0G (2) 4"2 SETS OF 4#500KCMIL & 1#1/0G (2) 4" 700A 80 90 100 120 160 200 250 2 SETS OF 4#600KCMIL & 1#1/0G (2) 4" (2)3#600KCMIL & 1#1/0G (2) 4"800A (3) 3" 3 SETS OF 4#350KCMIL & 1#2/0G (3) 4" (3)3#350KCMIL & 1#2/0G 900A 3 SETS OF 4#500KCMIL & 1#2/0G (3) 4" 1000A (3)3#500KCMIL & 1#2/0G (3) 4" (4)3#350KCMIL & 1#3/0G 4 SETS OF 4#350KCMIL & 1#3/0G (4) 4" 1200A (4)3#600KCMIL & 1#4/0G 4 SETS OF 4#600KCMIL & 1#4/0G (4) 4" 1600A (5)3#600KCMIL & 1#250G 5 SETS OF 4#600KCMIL & 1#250G (5) 4" 2000A (6)3#600KCMIL & 1#350G 6 SETS OF 4#600KCMIL & 1#350G (6) 4" 2500A (6) 4"

- NOTES:
 CONDUIT SIZES ARE BASED ON THE NEC ANNEX C TABLES FOR EMT/SCH.40 WITH THHN/THWN CONDUCTORS.
- CONDUCTOR SIZES USED IN CONDUIT CALCULATION ARE BASED ON THE SIZE OF THE HOT CONDUCTORS OF CIRCUIT. EXAMPLE: 40A 3PH, 4W CONDUIT SIZE IS BASED ON 4# 8 + 1#8G + 1#8 'SPACE'. FOR ACTUAL WIRE INSTALL USE QUANTITY AND SIZES WITHIN SCHEDULE UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CIRCUIT WHERE INDICATED.
- PROVIDE MINIMUM SIZE CONDUIT INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS. FOR SINGLE PHASE FEEDERS, PROVIDE A 3-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL. FOR THREE PHASE FEEDERS, PROVIDE A 4-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL
- PROVIDE TYPE OF RACEWAY OR CABLE AS INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS. REFER TO PANELBOARD SCHEDULES AND ONE-LINE RISER DIAGRAM DRAWINGS FOR CONDUCTOR AND CONDUIT SIZE REQUIREMENTS. ALL CONDUCTOR SIZES ARE BASED ON 75°C (167°F), ALL EQUIPMENT CONNECTED TO WIRES SHALL BE RATED OR 75°C (167°F)





-EXOTHERMIC

CONCRETE

-WITH OR WITHIN

-GROUNDING ELECTRODE

ACCORDANCE WITH NEC

CONDUCTOR (GEC): SIZED IN

Metal Cold Water

Metal Hot Water

-METAL WATER PIPING

ELECTRODE) BONDING

(NON GROUNDING

JUMPER SHÁLL BE

SIZED PER NEC 250.102

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Project Number

2202 Project Title

Belmont Skating & Sports Facility

297 Concord Ave, Belmont, MA 02478

Drawing Title

ELECTRICAL ENABLING RISER DIAGRAMS

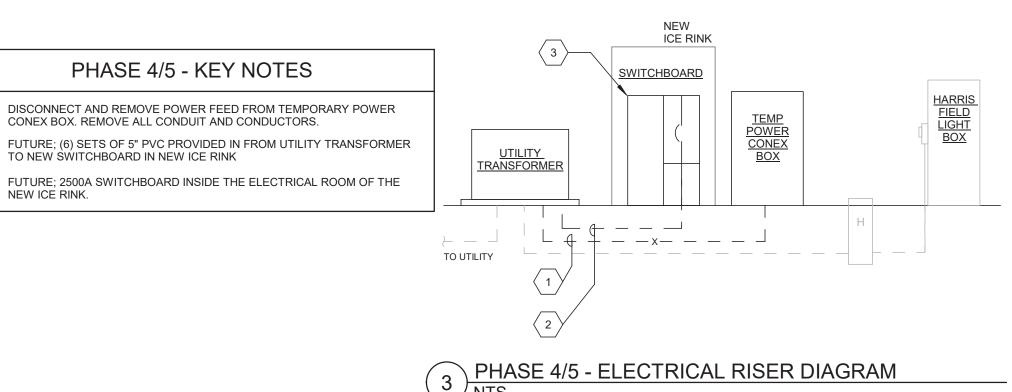
Date/Issued For 11.15.2023

ISSUED FOR 90% CD

Print 24 x 36 Scale N.T.S.

Drawn By CWW

Drawing Number



-FINISHED GRADE

BONDING ELECTRODE -

#6 AWG COPPER OR

SIZED PER NEC 250.66

-PROVIDE GROUNDING

CLAD GROUND ROD.

(TYPICAL OF 2)

ELECTRODE GROUND ROD:

10' X 3/4" DIAMETER COPPER

CONDUCTOR:

8" MINIMUM

COVER-

PHASE 4/5 - KEY NOTES

CONEX BOX. REMOVE ALL CONDUIT AND CONDUCTORS.

TO NEW SWITCHBOARD IN NEW ICE RINK

NEW ICE RINK.

3 PHASE 4/5 - ELECTRICAL RISER DIAGRAM NTS

GROUNDING ELECTRODE SYSTEM AND BONDING DETAIL NTS

NOTES:

1. THE INTENT OF THIS DETAIL IS TO ILLUSTRATE THE DESIGN OF THE PROJECT GROUNDING ELECTRODE SYSTEM AND SYSTEM BONDING AS

INDICATED BY THE WORD "PROVIDE". PER NEC 250, IF OTHER

2. PROVIDE GROUND ENHANCEMENT MATERIAL (GEM) AS REQUIRED.

3. PROVIDE ALL ADDITIONAL REQUIREMENTS OF NEC 250 INCLUDING MAIN BONDING, SYSTEM BONDING, SUPPLY AND SUPPLY SIDE

WITHIN 2'

20' MINIMUM

EARTH-

CONTACT WITH

THE REQUIREMENTS OF NEC 250 MUST ALSO BE MET.

JUMPERS AS REQUIRED.

-6" MINIMUM COVER

-EXOTHERMICALLY

WELDED

GROUNDING ELECTRODES OR PIPING/METAL SYSTEMS ARE PRESENT