


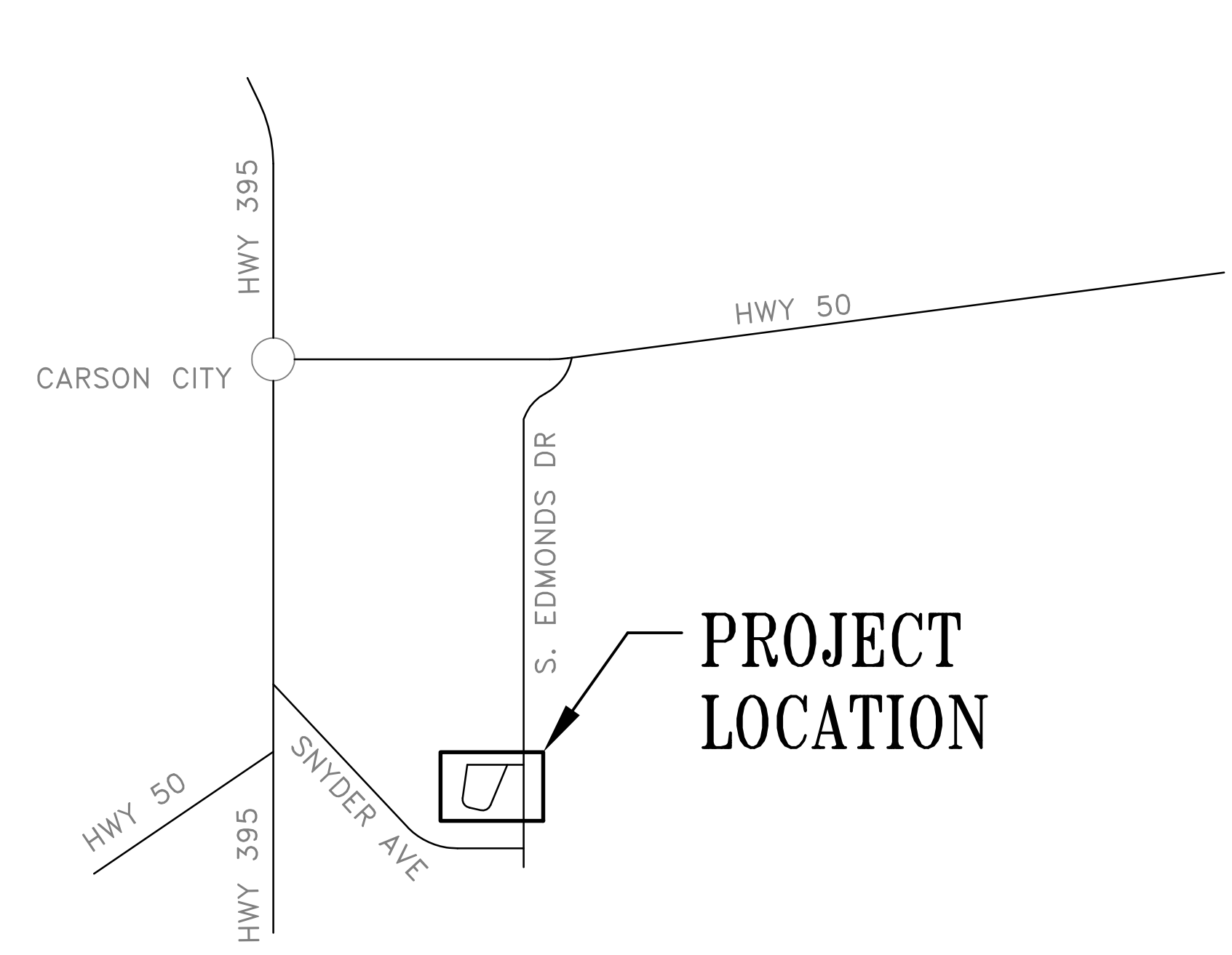
CARSON CITY PARKS AND RECREATION DEPARTMENT EDMONDS SPORTS COMPLEX BMX TRACK LIGHTING PROJECT CARSON CITY, NEVADA CC PROJECT NUMBER 010714



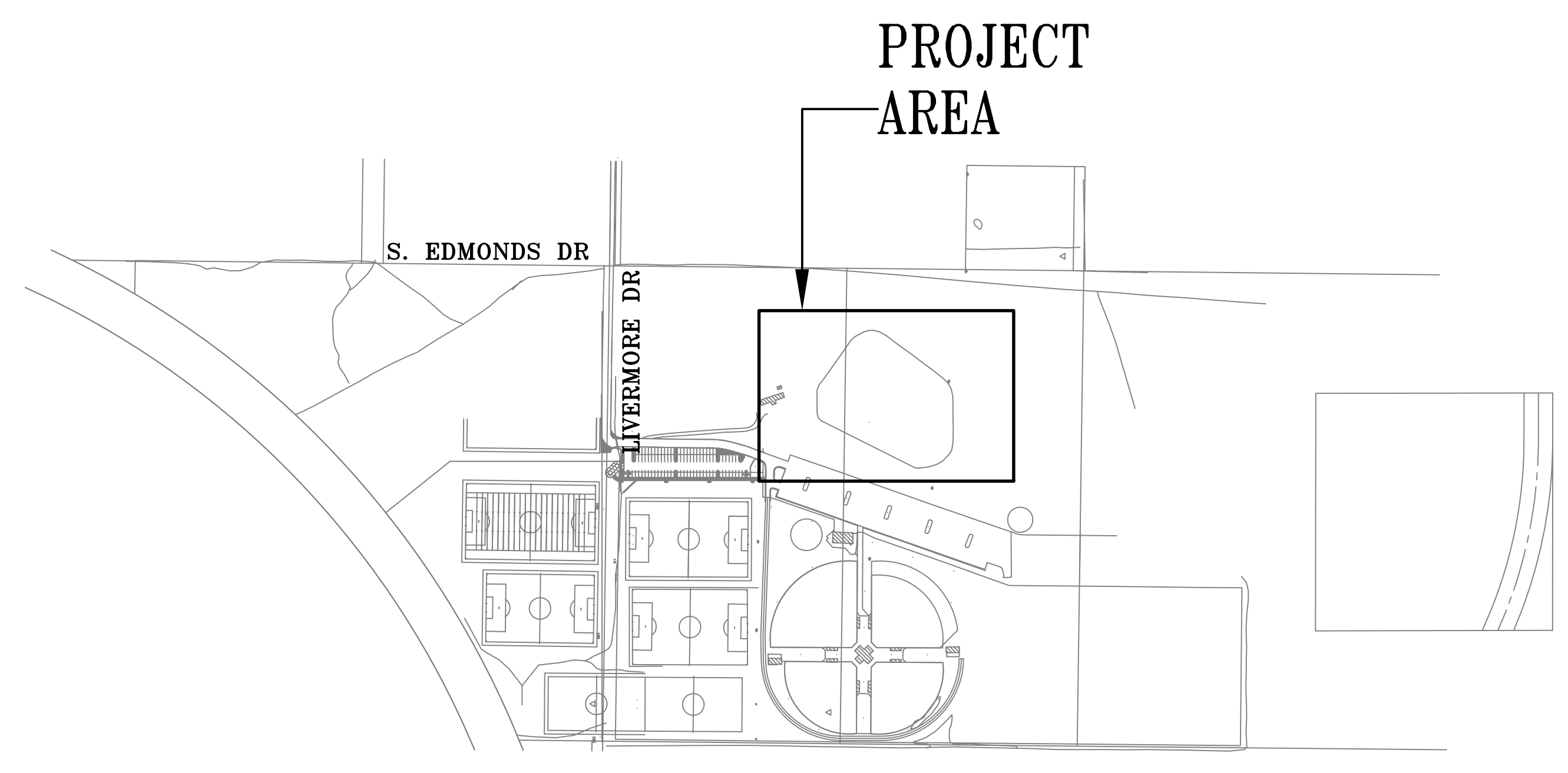
DINTER ENGINEERING CO.
MECHANICAL, ELECTRICAL, AND AIRFIELD ELECTRICAL CONSULTING ENGINEERS
385 GENTRY WAY
RENO, NEVADA 89502-4608
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**EDMONDS SPORTS COMPLEX
BMX TRACK LIGHTING PROJECT**
 CARSON CITY PARKS AND RECREATION DEPARTMENT
 1555 LIVERMORE LANE CARSON CITY, NV.

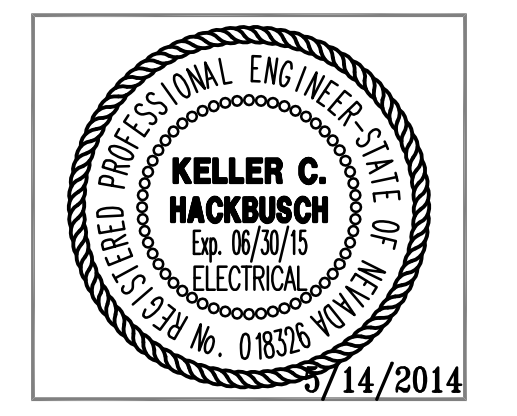
ELECTRICAL	CARSON CITY PARKS AND RECREATION DEPT.	INDEX OF DRAWINGS
DINTER ENGINEERING CO. 385 GENTRY WAY RENO, NEVADA 89502 PH. 775-826-4044 FAX. 775-826-4190 CONTACT: ED GANSBERG - 775-682-4616	ADDRESS: 3303 BUTTI WAY, BUILDING 9, CARSON CITY, NV 89701 DIRECTOR: ROGER MOELLENDORF 775-887-2262 EXT 7345 PARK PLANNER: VERN L. KRAHN 775-887-2262 EXT 7343 DIRECTOR OF OPERATIONS: SCOTT FAHRENBRUCH 775-887-2262 EXT 7340	T0.1 TITLE SHEET E0.1 SYMBOL LIST, SCHEDULES AND GENERAL NOTES E1.1 ELECTRICAL SITE PLAN E2.1 ELECTRICAL DETAILS AND EXISTING SINGLE-LINE DIAGRAM E3.1 SOFT LIGHTING SYSTEMS PHOTOMETRIC PLAN
UTILITY CONTACTS	CARSON CITY PUBLIC WORKS	
<u>NV ENERGY</u> <u>AT&T</u> DARRYN CRAWFORD TOM HODGKINS 775-848-5401 775-448-9226	ADDRESS: 3505 BUTTI WAY, CARSON CITY, NV 89701 PROJECT MANAGER: TOM GRUNDY 775-887-2355 ASSISTANT PROJECT MANAGER: DARREN ANDERSON 775-887-2355	



A VICINITY MAP
T0.1 SCALE: NONE



B KEY PLAN
T0.1 SCALE: NONE



REVISION: _____

JOB NO.: J-4144.1
DESIGN: MJB
DRAWN: MJB
CHECK: ERG
DATE: 14 MAY 2014

TITLE SHEET

SHEET NO.:
T0.1

ELECTRICAL SYMBOL LIST : (NOTE: ALL OF THE SYMBOLS INDICATED BELOW MAY NOT APPEAR ON THIS PROJECT)

- CONDUIT RUN IN OR ON CEILING OR WALL
- CONDUIT RUN IN OR UNDER FLOOR OR UNDERGROUND
- HASH MARKS INDICATE NUMBER OF #2 ALG CONDUCTORS IN CONDUIT. NO MARKS INDICATE 2 #2'S. DOES NOT INCLUDE GROUND WIRE. IF NON-METALLIC CONDUIT ADD GROUND PER NEC.
- LONG SLASH WITH HASH MARKS AS SHOWN INDICATES GROUND WIRE FOR ISOLATED GROUNDING SYSTEM. SIZE PER N.E.C.
- EXISTING UTILITY LINE
- PRIMARY UTILITY LINE
- SECONDARY UTILITY LINE
- OVERHEAD UTILITY LINE
- SPORTS POLE LIGHT - 1 FIXTURE HEADS
- SPORTS POLE LIGHT - 5 FIXTURE HEADS
- MAGNETIC CONTACTOR
- TIME CLOCK
- JUNCTION BOX AS REQUIRED BY NATIONAL ELECTRIC CODE
- ELECTRICAL PANELBOARD - SURFACE MOUNTED
- ELECTRICAL PANELBOARD - FLUSH MOUNTED
- SERVICE OR DISTRIBUTION EQUIPMENT
- TRANSFORMER
- PRECAST CONCRETE PULLBOX (SIZE AS INDICATED)
- EXISTING WIRE AND/OR CONDUIT TO REMAIN
- 'E' ADJACENT TO DEVICES, LIGHT FIXTURES, ETC. INDICATES EXISTING TO REMAIN
- AFG ABOVE FINISHED GRADE
- AL ALUMINUM
- AT&T AT&T TELEPHONE COMPANY
- CU COPPER
- (E) EXISTING
- EC EMPTY CONDUIT WITH FULL WIRE
- (N) NEW
- NEC NATIONAL ELECTRICAL CODE
- NL NIGHTLIGHT
- NVE NEVADA ENERGY
- UNO UNLESS NOTED OTHERWISE
- W/ WITH
- WP WEATHERPROOF (NEMA 3R)
- XFMR TRANSFORMER
- SHEET NOTE
- LIGHT FIXTURE DESIGNATION & WATTAGE. SEE FIXTURE SCHEDULE
- MECHANICAL EQUIPMENT DESIGNATION. SEE MECHANICAL & PLUMBING PLANS
- FEEDER - SIZE AS INDICATED ON SINGLE LINE DIAGRAM
- DETAIL DESIGNATION - 'B' INDICATES DETAIL * ON SHEET E3.1
- * NOTE: ALL MOUNTING HEIGHTS AS INDICATED UNLESS NOTED OTHERWISE.

ELECTRICAL GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, COUNTY AND LOCAL CODES AND ORDINANCES, AS WELL AS ADOPTED VERSION OF THE IBC AND NEC, AND ALL CURRENT STANDARDS, CODES AND PRACTICES AS REQUIRED BY NEMA, ANSI, NFPA, UL, IEEE, NECA AND UTILITY COMPANY STANDARDS.
2. FURNISH ALL LABOR, MATERIALS, TOOLS, ACCESSORIES, ETC. REQUIRED FOR A COMPLETE WORKING ELECTRICAL SYSTEM.
3. INCIDENTAL ITEMS NOT INDICATED ON DRAWINGS OR MENTIONED IN THE SPECIFICATIONS THAT CAN BE REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED TO PROVIDE A COMPLETE WORKING SYSTEM, SHALL BE FURNISHED AND INSTALLED.
4. APPEARANCE AND WORKMANSHIP SHALL BE OF THE HIGHEST STANDARDS OF QUALITY ANALOGOUS TO THE JOB.
5. ELECTRICAL CONTRACTOR SHALL GUARANTEE THE ELECTRICAL WORK TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL PROJECT ACCEPTANCE.
6. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, WHICH MAY AFFECT HIS WORK, PRIOR TO SUBMITTING A BID. NO ADDITIONAL PAYMENT WILL BE MADE FOR FAILURE TO COMPLY WITH THIS REQUIREMENT.
7. ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE PLANS, SPECIFICATIONS AND WORK OF ALL OTHER TRADES AND UTILITY COMPANIES. NO EXTRA PAYMENT WILL BE MADE FOR WORK OR MATERIALS RESULTING FROM LACK OF COORDINATION.
8. ALL EQUIPMENT, MATERIALS, AND WORK SHOWN ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING OR NOTED OTHERWISE ON OTHER SHEETS.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE A NEAT AND COMPLETE SET OF 'AS-BUILT' DRAWINGS WITHIN 30 DAYS OF FINAL PROJECT ACCEPTANCE OF HIS WORK. 'AS-BUILT' DRAWINGS SHALL BE 'RED-LINES' OR AS REQUIRED IN THE GENERAL SPECIFICATIONS.
10. OBTAIN WRITTEN APPROVAL FROM THE ENGINEER OF ALL SHOP DRAWINGS AND MANUFACTURE DATA FOR SWITCHGEAR, LIGHTING FIXTURES, WIRING DEVICES, ETC. BEFORE RELEASING ORDERED MATERIALS. SUBMITTAL DATA SHALL INDICATE THAT THE CONTRACTOR HAS REVIEWED THE INFORMATION THEREIN AND THAT THE PROPOSED EQUIPMENT WILL MEET THE PHYSICAL CONSTRAINTS AT THE JOBSITE. ANY SUBSTITUTIONS SHALL BE OF EQUIVALENT OR BETTER QUALITY THAN THE SPECIFIED COMPONENTS.
11. PRIOR TO PURCHASE OF ANY PANEL, PROTECTIVE DEVICES, SWITCH, STARTER, CONDUIT, WIRE, ETC., TO FEED ANY PIECE OF MECHANICAL EQUIPMENT VERIFY THE VOLTAGE, PHASE AND LOAD OF THAT ITEM IN THE FIELD AND/OR WITH THE PARTICULAR ENTITY INVOLVED IN FURNISHING THE ITEM SUCH THAT THE PROPER SIZE AND RATING OF THE MATERIALS ARE PURCHASED. NO EXTRA COSTS WILL BE ALLOWED FOR FAILURE TO COMPLY.
12. ORDER AND/OR RELEASE ORDERED MATERIALS PROMPTLY AFTER SUBMITTAL APPROVAL. NO SUBSTITUTIONS OR ALTERNATE METHODS OF INSTALLATION WILL BE ACCEPTED FOR FAILURE TO ORDER MATERIALS IN A TIMELY FASHION.
13. ELECTRICAL EQUIPMENT SUCH AS SWITCHGEAR, PANELBOARDS, ETC. SHALL BE AS MANUFACTURED BY CHALLENGER, CUTLER HAMMER, GE, ITE, SQUARE-D, OR WESTINGHOUSE. SWITCHBOARD TO BE FULLY ENCLOSED AND FACTORY ASSEMBLED. PANELBOARDS TO HAVE BOLT-IN CIRCUIT BREAKERS ONLY.
14. PROVIDE ALL ELECTRICAL SWITCHGEAR SUCH AS SWITCHBOARDS, TRANSFORMERS, MOTOR CONTROL CENTERS, PANELBOARDS, DISCONNECT SWITCHES, ETC. WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING IDENTIFICATION DESIGNATION, EQUIPMENT SERVED, AND FROM WHERE IT IS FED.
15. PROVIDE AND MOUNT ALL FREESTANDING ELECTRICAL EQUIPMENT SUCH AS SWITCHBOARDS, TRANSFORMERS, ENCLOSED BREAKERS, ETC. ON A 4" HIGH CONCRETE HOUSEKEEPING PAD.
16. SHORT CIRCUIT INTERRUPTING CAPACITIES AS INDICATED ON THESE PLANS REFER TO BOTH BUS BAR BRACING LEVELS AND TO CIRCUIT BREAKER WITHSTAND LEVELS.
17. SERIES RATING OF UPSTREAM OR DOWNSTREAM CIRCUIT BREAKERS OR FUSES IS PROHIBITED. ONLY FULLY RATED SYSTEM COMPONENTS WILL BE ACCEPTED.
18. PROVIDE ALL PANELBOARDS WITH TYPED DIRECTORIES INSTALLED UNDER A CLEAR PLASTIC COVER. SUBMIT DIRECTORY INFORMATION TO THE PROJECT MANAGER FOR APPROVAL PRIOR TO FINALIZATION.
19. VERIFY THE EXACT LOCATION AND ELEVATION OF ALL ELECTRICAL EQUIPMENT AND LIGHT POLE CONCRETE FOOTINGS PRIOR TO ROUGH-IN. FINAL CONNECTIONS OF EQUIPMENT SHALL BE PER MANUFACTURER APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
20. DRAWINGS ARE EXPLANATORY AND CAN NOT SHOW EVERY CONDUIT, CONNECTION, JUNCTION BOX, ETC. EXACT LOCATION OF EQUIPMENT AND PARTS WILL BE DETERMINED DURING CONSTRUCTION.
21. CONDUIT/CONDUCTOR RUNS SHOWN ARE DIAGRAMMATICAL ONLY. THE BEST FINAL CONDUIT ROUTING SHALL BE AS DETERMINED BY THE ELECTRICAL CONTRACTOR AT TIME OF CONSTRUCTION AND APPROVED BY THE CITY PROJECT MANAGER.
22. ELECTRICAL WORK SHALL BE WELL ORGANIZED WITH CONDUIT RUNS RUNNING PARALLEL AND WITH MAXIMUM OVERHEAD CLEARANCE. ARRANGE ALL ELECTRICAL WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE. LOCATE ALL CONTROL EQUIPMENT TO PROVIDE EASY ACCESS. COORDINATE THE PLACEMENT AND REQUIRED ACCESS OF LARGE ELECTRICAL EQUIPMENT WITH APPROPRIATE TRADES.
23. THE GROUNDING SYSTEM MUST BE GROUNDED ACCORDING TO NEC 250, AND CONNECTED TO ALL ITEMS AS LISTED IN NEC 250.
24. TYPE MC OR TYPE AC CABLE AND ENT TYPE CONDUIT ARE NOT ALLOWED.
25. ALL WIRE SHALL BE COPPER THIN, THIN, OR XLHH UNLESS OTHERWISE NOTED. WHERE ALUMINUM WIRE IS PERMITTED, CONDUCTORS SHALL TERMINATE IN COMPRESSION TYPE LUGS.
26. ALL UNDERGROUND CONDUIT SHALL BE WRAPPED RIGID STEEL WITH THREADED COUPLINGS AND CONNECTORS, AND/OR PVC SCHEDULE 40. ALL ELBOWS AND EXPOSED RISERS SHALL BE RIGID STEEL CONDUIT.
27. PROVIDE ALL TRENCHING, EXCAVATION, BACKFILLING, SHORING, PUMPING, COMPACTION TESTS, ETC. THAT ARE REQUIRED FOR THE SCOPE OF ELECTRICAL WORK.

28. THESE PLANS DO NOT PURPORT TO SHOW ALL EXISTING CONDITIONS, ANY OUTLETS, CIRCUITING AND/OR DEVICES THAT CONFLICT WITH ALL WORK BEING PERFORMED DURING THE COURSE OF THIS PROJECT SHALL BE RELOCATED/REROUTED OR REMOVED ENTIRELY AS DICTATED BY THE PROJECT MANAGER.
29. LIGHTING EQUIPMENT SHOWN ON THE CITY-APPROVED PLANS SHALL NOT BE ALTERED OR SUBSTITUTED IN ANY WAY (MANUFACTURER, WATTAGE, COLOR, MOUNTING, ETC.) WITHOUT FIRST SUBMITTING REVISED LIGHTING AND PHOTOMETRIC PLANS TO THE PROJECT MANAGER FOR REVIEW AND WRITTEN APPROVAL.
30. THE CONTRACTOR IS TO SCHEDULE A NIGHTTIME INSPECTION OF THE ENERGIZED LIGHTING, TO ATTEND THIS INSPECTION, AND TO CORRECT ALL ITEMS IDENTIFIED DURING INSPECTION PRIOR TO ISSUING THE FINAL PROJECT ACCEPTANCE BY THE PROJECT MANAGER.
31. UTILITIES SHOWN TO BE DEMOLISHED SHALL NOT BE REMOVED FROM SERVICE UNTIL EITHER OF THE FOLLOWING EVENTS OCCUR: A) THE FACILITY SERVED BY THE UTILITY IS NO LONGER OCCUPIED AND IS READY FOR DEMOLITION. OR B) EQUIVALENT SERVICE BY NEW UTILITY CONSTRUCTION HAS BEEN PROVIDED TO THE FACILITY CURRENTLY SERVICED. UNLESS OTHERWISE NOTED.
32. VERIFY EXACT LOCATION OF ALL RECEPTACLES ABOVE OR ADJACENT TO COUNTERS FIXTURES MIRRORS AND OUTDOOR FIXTURES AND MOUNTING HEIGHTS AND LOCATIONS OF ALL FIXTURES AND BACK BOXES PRIOR TO ROUGH-IN. NO EXTRA COSTS WILL BE ALLOWED FOR FAILURE TO COMPLY.
33. ALL RECEPTACLES SHALL MATCH THE MALE PLUG CONNECTOR OF ALL EQUIPMENT PROVIDED, VERIFY PRIOR TO PURCHASE. SEE GENERAL NOTE #11.
34. FULL ROPES: PROVIDE 12 GA FULL WIRE OR NYLON EQUIVALENT IN ALL INTERIOR EMPTY CONDUIT RUNS. PROVIDE 1/4" DIA NYLON FULL ROPE IN ALL EXTERIOR EMPTY CONDUIT OR DUCT RUNS.
35. ANY POWER OUTAGE OF ANY CIRCUIT SHALL BE APPROVED BY THE PROJECT MANAGER IN WRITING A MINIMUM OF TWO WEEKS PRIOR TO OUTAGE. ALL OUTAGES SHALL BE DONE EXACTLY WHEN DETERMINED BY THE PROJECT MANAGER AND DONE BEFORE OR AFTER WORKING HOURS OR ON WEEKENDS. NO SINGLE OUTAGE SHALL REQUIRE MORE THAN 4 HOURS. PROVIDE TEMPORARY POWER, HEATING OR COOLING IF REQUIRED DURING OUTAGE.

LIGHT FIXTURE SCHEDULE

SYM	DESCRIPTION & MANUFACTURER	LAMPS	VOLTS
B1/100	SPORTS CUT-OFF FORWARD THROW FLOODLIGHT, 65' POLE, DARK BRONZE POWDER COAT, 1000 WATT HI PRESSURE SODIUM SOFT LIGHTING * 8FT-FT-1000HP9	(1) 852XB-1000	480
B2/100	SPORTS CUT-OFF FORWARD THROW FLOODLIGHT, 65' POLE, DARK BRONZE POWDER COAT, 1000 WATT METAL HALIDE SOFT LIGHTING * 8FT-FT-1000MH	(1) M4TPA-1000U	480
B3/300	CUTOFF SECURITY LIGHT, DARK BRONZE POWDER COAT, 250 WATT H.P.S. SOFT LIGHTING * 8FT-3-250 H.P.S.	(1) 650VA-250	480

BMX TRACK POLE AND FLOODLIGHT SCHEDULE

POLE NUM.	LENGTH	HPS-1000W TYPE 'B1'	MH-1000W TYPE 'B2'	HPS-300W TYPE 'B3'	TOTAL FIX.	DETAILS
B1	65'	2	3	1	6	1/E2.1 & 2/E2.1
B2	65'	3	4	1	8	1/E2.1 & 2/E2.1
B3	65'	2	3		5	1/E2.1 & 2/E2.1
B4	65'	2	3		5	1/E2.1 & 2/E2.1
B5	65'	2	3		5	1/E2.1 & 2/E2.1
B6	65'	2	3	1	6	1/E2.1 & 2/E2.1
TOTAL						

** ONE TYPE 'B1' AND TYPE 'B2' FIXTURE ON BACKSIDE OF LIGHT POLE.

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CARSON CITY PARKS AND RECREATION DEPARTMENT
1555 LIVERMORE LANE, CARSON CITY, NV.

KELLER C. HACKBUSCH
Exp. 06/30/15
ELECTRICAL
No. REG. No. 018316
5/14/2014

REVISION: _____

JOB NO.: J-4144.1
DESIGN: MJB
DRAWN: MJB
CHECK: ERG
DATE: 14 MAY 2014

SYMBOL LIST, SCHEDULES AND GENERAL NOTES

SHEET NO.: **E0.1**

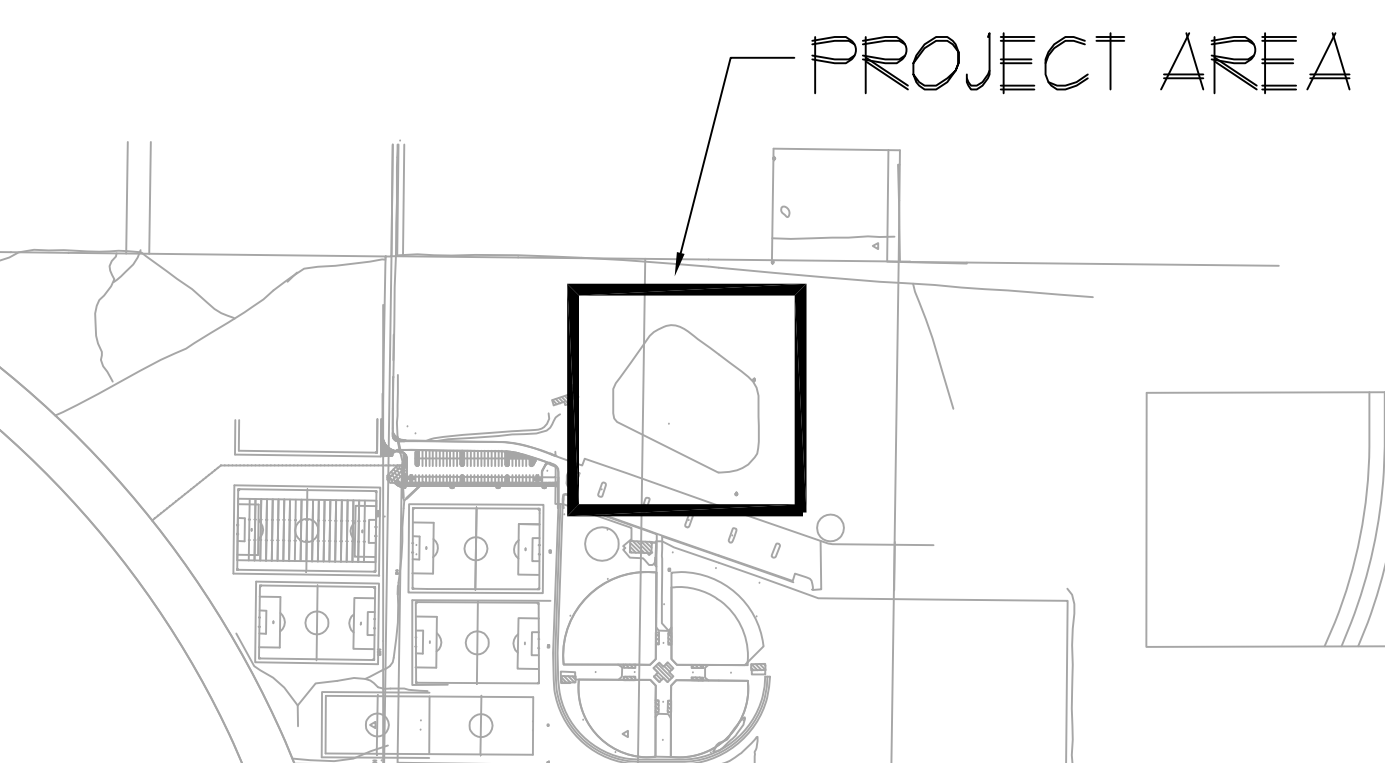


SHEET NOTES

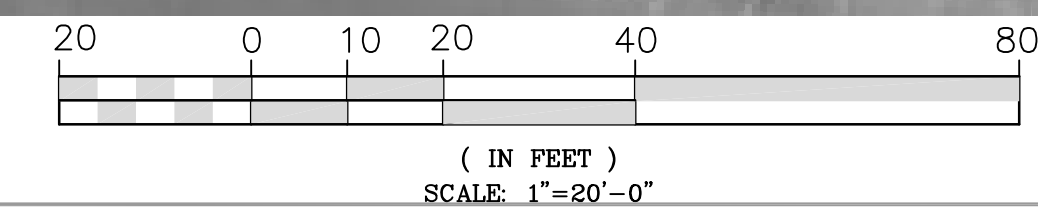
- 1 (E) ELECTRICAL N9 CONCRETE HANDHOLE W/ CONCRETE LID. VERIFY EXACT LOCATION IN THE FIELD. PROVIDE NEW TAMPER RESISTANT BOLTS.
- 2 (E) 1 1/2" ELECTRICAL UNDERGROUND CONDUIT. VERIFY EXACT LOCATION IN THE FIELD. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL (3) #4 CU, (3) #10 CU, AND (1) #4 CU GROUND.
- 3 PROVIDE AND INSTALL RISER MATERIAL UP POLE PER NVE DETAIL #FCR130 AND AT&T STANDARDS. WORK COMPLETED BY CONTRACTOR.
- 4 NEW 1 1/2" ELECTRICAL UNDERGROUND CONDUIT @ 24" DEPTH. INTERCEPT EXISTING CONDUITS. VERIFY EXACT LOCATION IN THE FIELD. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL (3) #4 CU, (3) #10 CU, AND (1) #4 CU GROUND.
- 5 NEW 1 1/2" ELECTRICAL UNDERGROUND CONDUIT @ 24" DEPTH. VERIFY EXACT LOCATION IN THE FIELD. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL (6) #10 CU AND (1) #10 CU GROUND.
- 6 (N) ELECTRICAL N9 CONCRETE HANDHOLE W/ CONCRETE LID (VERIFY EXACT LOCATION IN THE FIELD) INTERCEPT EXISTING CONDUIT IN OPEN AREA NEAR NEW LIGHT POLE. PROVIDE TAMPER RESISTANT BOLTS.
- 7 (E) MAIN SWITCHBOARD M9B-B. ELECTRICAL CONTRACTOR IS TO REMOVE BREAKER NAME PLATES "POLE LIGHTS" AND "SECURITY LIGHTS" AND SWITCH THEIR LOCATIONS. "SECURITY LIGHTS" AT THE 20/3 BREAKER AND "POLE LIGHTS" AT THE 10/3 BREAKER.
- 8 (E) ELECTRICAL N9 CONCRETE HANDHOLE W/ CONCRETE LID (VERIFY EXACT LOCATION IN THE FIELD) TO BE RELOCATED FROM BMX TRACK FINISH LINE TO AREA NEAR OFF THE TRACK NEXT TO THE START/FINISH BUILDING'S FENCE.
- 9 NEW NV ENERGY CONCRETE PRIMARY VAULT BY CITY AS BASE BID, JENSEN PRECAST #551 W/ TRAFFIC RATED LID. ADD ALTERNATE #1. WORK TO BE COMPLETED BY CONTRACTOR.
- 10 NEW AT&T CONCRETE SPlice BOX BY CITY AS BASE BID, 11"x30"x24" WITH TRAFFIC RATED LID. ADD ALTERNATE #1. WORK TO BE COMPLETED BY CONTRACTOR.
- 11 REMOVE AND RELOCATE EXISTING CHAIN LINK FENCE TO PROVIDE CLEARANCE FOR NEW NVE GUY WIRE ON EXISTING POLE. VERIFY REQUIREMENTS W/OWNER AND NVE.
- 12 REPLACE EXISTING PULLBOX & LID W/ NEW CONCRETE N11 H20 TRAFFIC RATED BOX & LID. PROVIDE TAMPER RESISTANT BOLTS.

JOINT TRENCH W/(1) 4" EC AND (1) 2" EC BY CARSON CITY AS BASE BID. ADD ALTERNATE #1. WORK TO BE COMPLETED BY CONTRACTOR. SEE DETAIL 4/E2.1. INSTALLATION SHALL BE DONE IN COMPLIANCE W/NVE DRAWING #3000156218 AND AT&T STANDARDS.

NOTICE:
EXACT LOCATIONS OF NEW LIGHT POLES WILL BE LOCATED IN THE FIELD WITH OWNER & ENGINEER PRIOR TO START OF CONSTRUCTION.

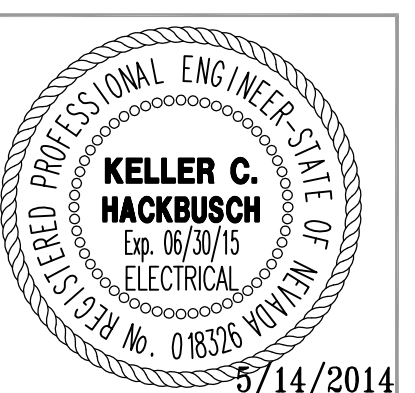


A SITE LIGHTING PLAN
E1.1 1"=20'-0"



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REVISION:

JOB NO.:	J-41441
DESIGN:	MJLB
DRAWN:	GLR
CHECK:	ERG
DATE:	14 MAY 2014

SITE LIGHTING PLAN

SHEET NO.:

E1.1

CIVIL ENGINEER'S POLE BASE NOTES:

I. GENERAL

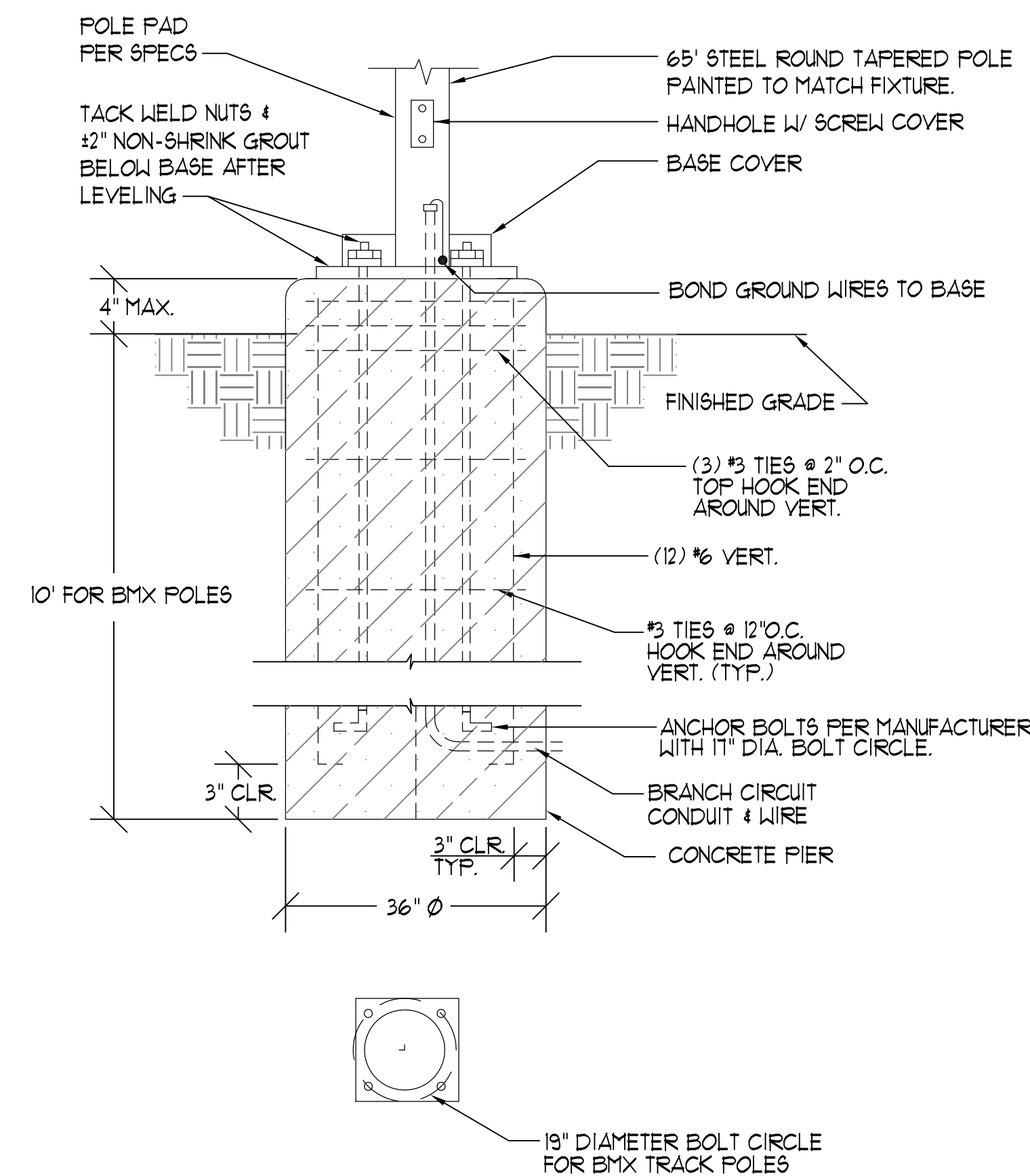
- A. THE FOLLOWING GENERAL NOTES APPLY TO ALL STRUCTURAL DRAWINGS UNLESS OTHERWISE SPECIFICALLY SHOWN OR NOTED.
- B. ALL PHASES OF WORK TO CONFORM TO THE MINIMUM STANDARDS OF THE LATEST EDITION OF THE 2012 INTERNATIONAL BUILDING CODE.
- C. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, PREPARING AND FOLLOWING THE WRITTEN SAFETY PROGRAM FOR THE CONSTRUCTION PROJECT, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, AND ALL RETAINING WALLS ALL OSHA REGULATIONS CONCERNING ERECTION SHALL BE STRICTLY ADHERED TO.
- D. OPENINGS, POCKETS, ETC., SHALL NOT BE PLACED IN SLABS, BEAMS, COLUMNS, WALLS, ETC., UNLESS SPECIFICALLY DETAILED ON THE DRAWINGS.
- E. ALL ASTM SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE OF THE LATEST REVISION.
- F. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR AND SHALL BE REVIEWED BY THE ENGINEER.
- G. IN THE EVENT THAT CERTAIN EXISTING CONDITIONS ARE FOUND TO BE DIFFERENT FROM THOSE SHOWN ON THE PLANS AND DETAILS, THEN THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED SO THAT THE PROPER REVISIONS CAN BE MAKE IF NECESSARY.
- H. NO CHANGES OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER.

II. FOUNDATIONS

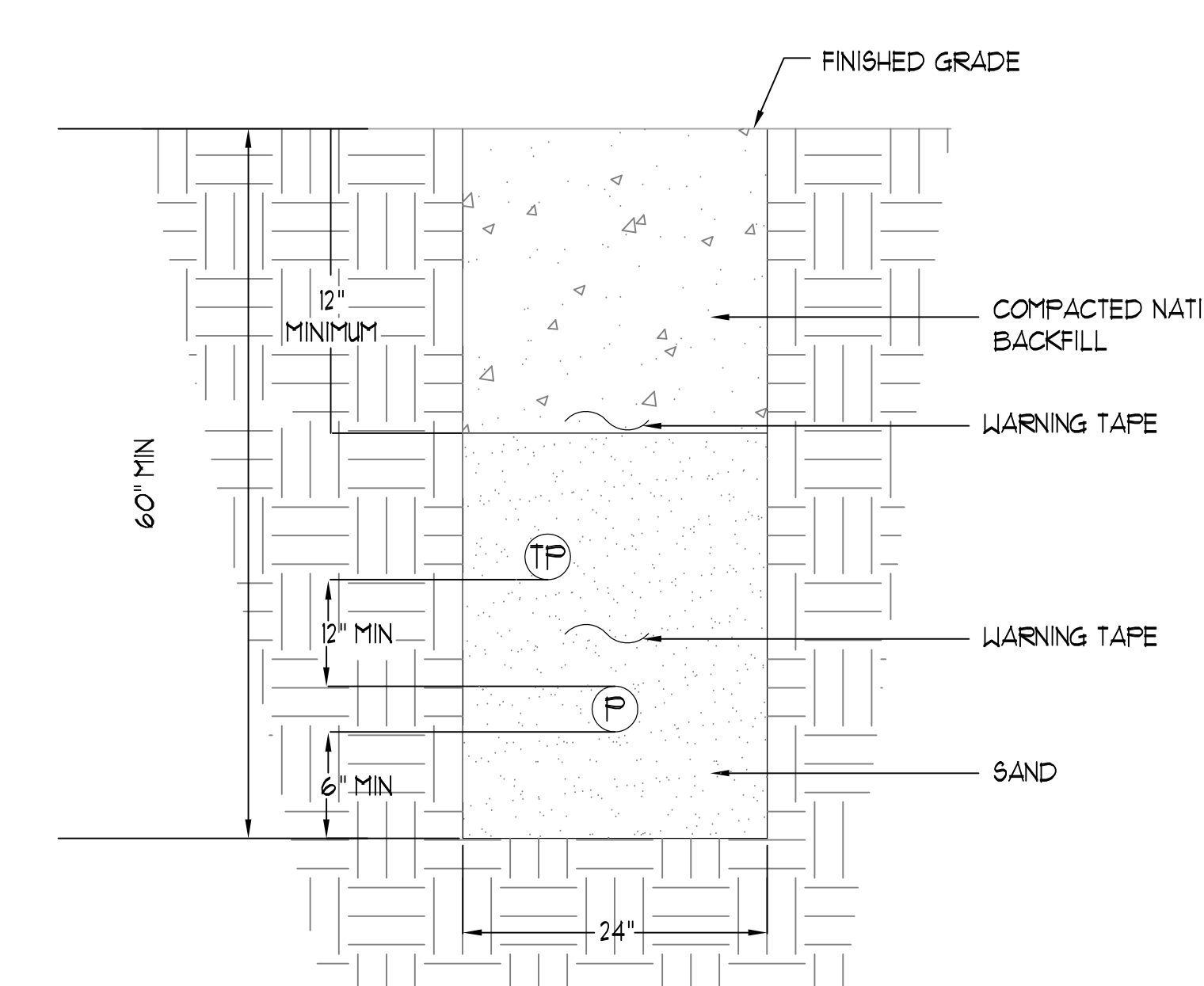
- A. FOOTINGS HAVE BEEN DESIGNED USING AN ASSUMED ALLOWABLE LATERAL BEARING VALUE OF 150 PSF PER FOOT INCREASED BY A FACTOR OF 2 AS ALLOWED BY 2012 IBC SECTION 1804.3.1. THE CONTRACTOR SHALL VERIFY THAT SOILS ARE ADEQUATE TO PROVIDE ASSUMED LATERAL BEARING VALUES PRIOR TO CONSTRUCTION.

III. CONCRETE

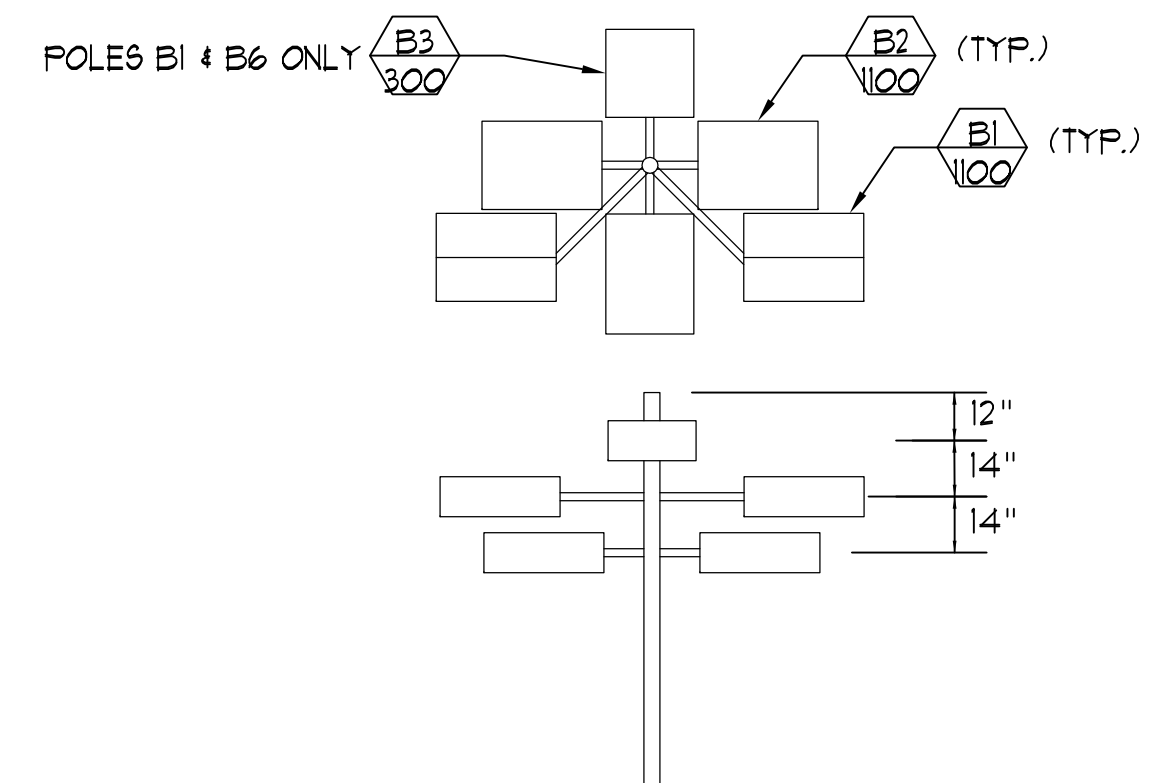
- A. REINFORCED CONCRETE WORK SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2012 EDITION, AND ACI STANDARD 318.
- B. CEMENT SHALL CONFORM TO ASTM C150 TYPE II. COMPRESSION STRENGTH OF ALL EXTERIOR REINFORCED CONCRETE SHALL NOT BE LESS THAN 4000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE AND SHALL HAVE A MAXIMUM WATER CEMENT RATIO OF 0.45. DESIGN IS BASED ON A 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
- C. CONCRETE SLUMP SHALL NOT EXCEED 4" WHEN TESTED IN ACCORDANCE WITH ASTM STANDARD NO. C143 FOR FOOTINGS, SLABS, BEAMS AND GIRDERS AND 5" FOR CAST-IN-PLACE WALLS AND COLUMNS.
- D. REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO THE REQUIREMENTS OF MINIMUM ASTM A615 GRADE 60 U.N.O. ALL REINFORCEMENT TO BE WELDED SHALL CONFORM TO ASTM A106. SUPPORTS AND ACCESSORIES SHALL BE FURNISHED AS SHOWN OR REQUIRED. CHAIRS PLACED AGAINST EXPOSED SURFACES SHALL BE GALVANIZED OR PLACED WITH PLASTIC FEET.
- E. MINIMUM COVERAGE FOR REINFORCING SHALL BE THE CLEAR DISTANCE TO THE FACE OF BARS AS FOLLOWS: 3" WHEN CONCRETE IS POURED AGAINST EARTH, 1 1/2" FOR #5 AND SMALLER BARS FROM FORMED SURFACES EXPOSED TO GROUND OR WEATHER, 2" FOR #6 AND LARGER BARS FROM FORMED SURFACES EXPOSED TO GROUND OR WEATHER.
- F. ALL REINFORCING STEEL SHALL BE ACCURATELY POSITIONED AND ADEQUATELY TIED USING PROPER CHAIRS OR BOLSTERS PRIOR TO POURING CONCRETE.
- G. SPLICES IN REINFORCEMENT SHALL NOT BE MADE AT OR NEAR POINTS OF MAXIMUM STRESS. SPLICES SHALL BE LAPPED NOT LESS THAN 63 DIAMETERS.
- H. ALL CONCRETE EDGES, CORNERS AND INTERSECTIONS SHALL BE TOOLED OR CHAMFERED NO LESS THAN 3/4" WHETHER SHOWN OR NOT ON THE DRAWINGS.
- I. CONSTRUCTION JOINTS WILL NOT BE PERMITTED, EXCEPT AS SHOWN ON THE DRAWINGS, WITHOUT WRITTEN CONSENT OF THE ENGINEER.
- J. NON-SHRINK GROUT OR DRY PACK: A PERMIXED NON-METALLIC FORMULA HAVING THE FOLLOWING CHARACTERISTICS: NO SHRINKAGE AFTER PLACEMENT EXPANSION AFTER SET (ASTM C-827), ONE DAY COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI (ASTM C-109) AND INITIAL SET TIME OF NOT LESS THAN 45 MINUTES (ASTM C-191II) PROVIDE "SUPREME" U.S. GROUT CORP., "5 STAR GROUT", BURKE CO., "324", CLIFFORD HILL, OR EQUIVALENT. MINIMUM f_c AT 28 DAYS = 5000 PSI.



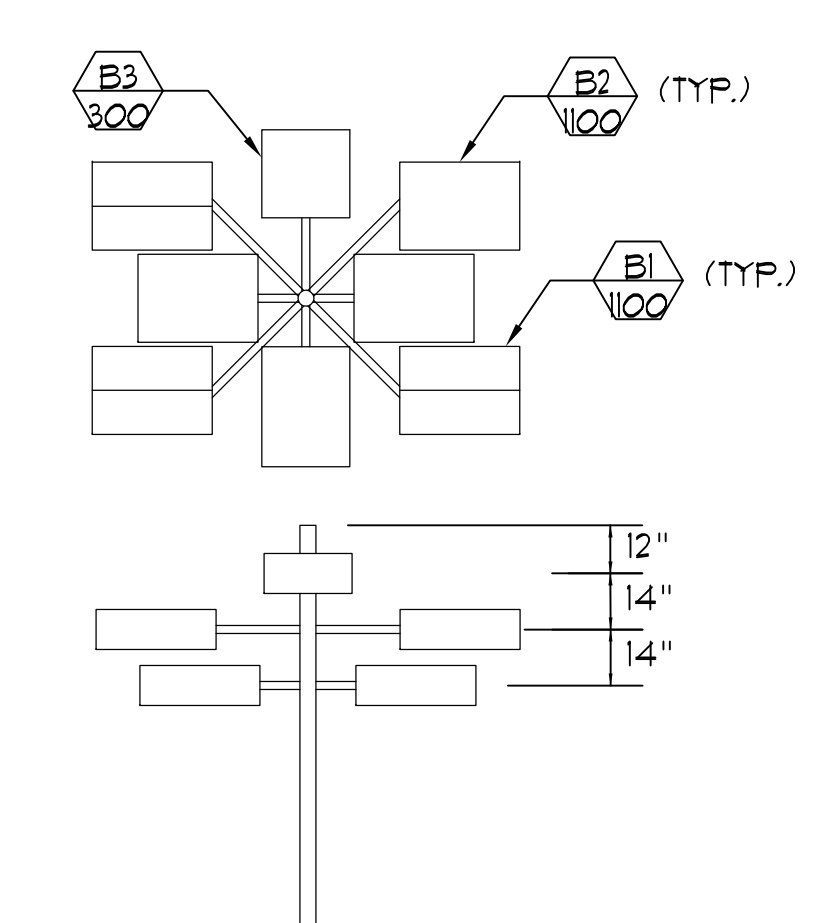
5 POLE BASE DETAIL
E2.1 NO SCALE FOR BMX POLES



4 JOINT UTILITIES TRENCH
E2.1 NO SCALE

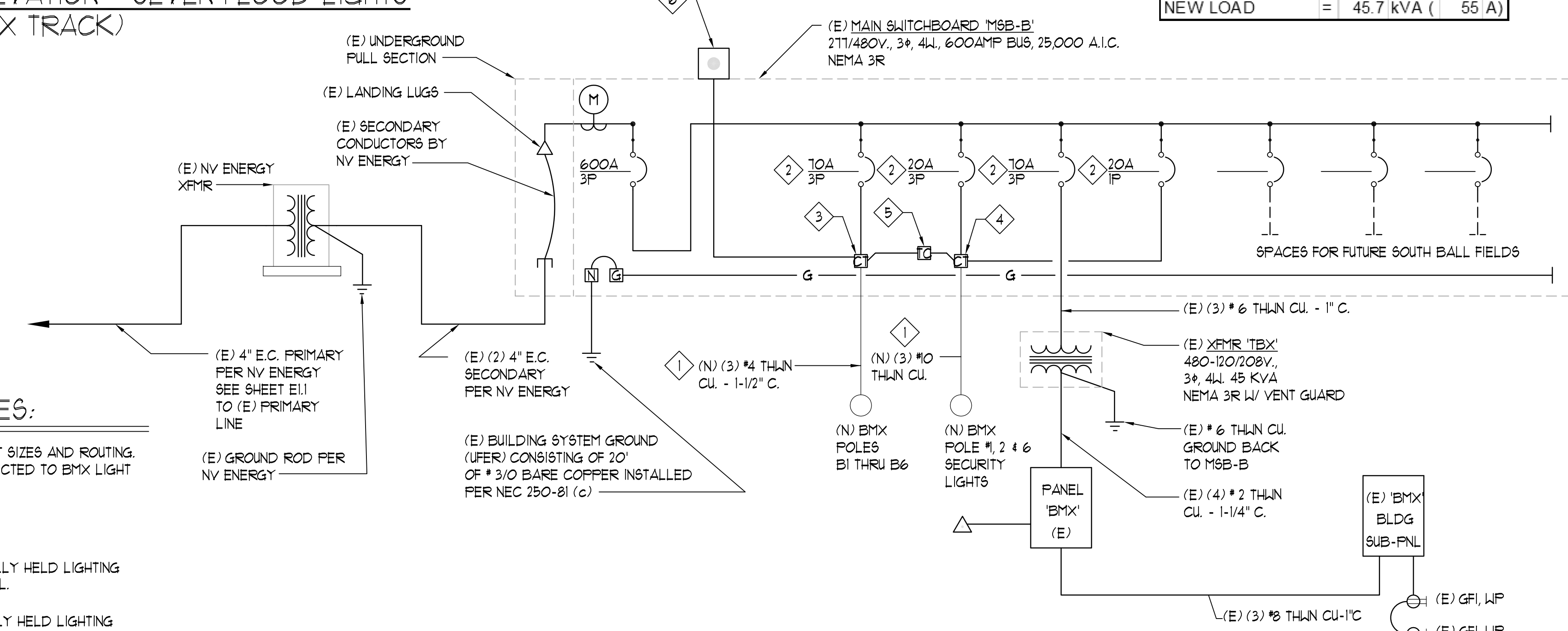


1 POLES B1 & B3 THRU B6
PLAN & ELEVATION - FIVE FLOOD LIGHTS
E2.1 NO SCALE (BMX TRACK)



2 POLE B2
PLAN & ELEVATION - SEVEN FLOOD LIGHTS
E2.1 NO SCALE (BMX TRACK)

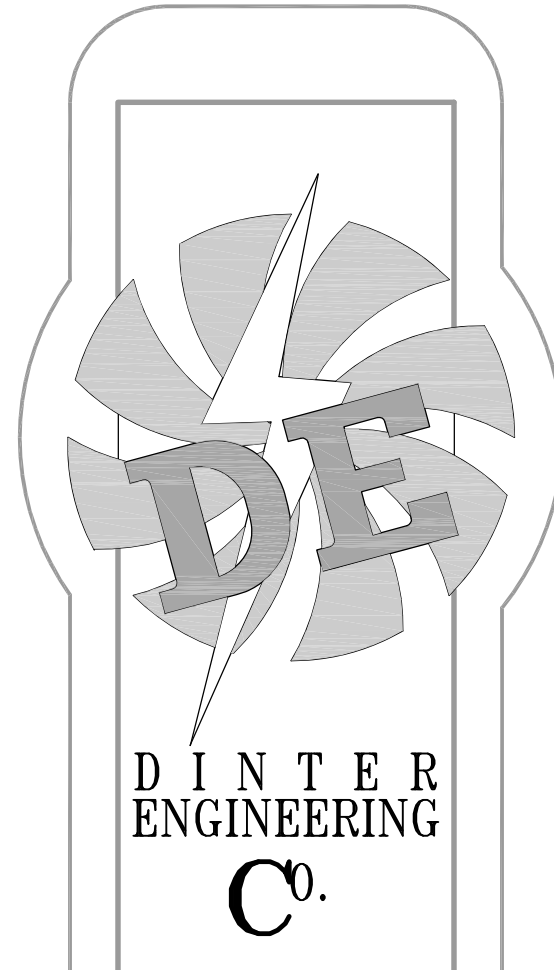
LOAD CHANGE SUMMARY	
EXISTING LOAD	= 9.6 kVA (11.6 A)
SPORTS LIGHTS	= 35.2 kVA (42.4 A)
SECURITY LIGHTS	= 0.9 kVA (1.08 A)
NEW LOAD	= 45.7 kVA (55 A)



3 EXISTING BMX TRACK SINGLE LINE DIAGRAM
E2.1 NO SCALE (BMX TRACK)

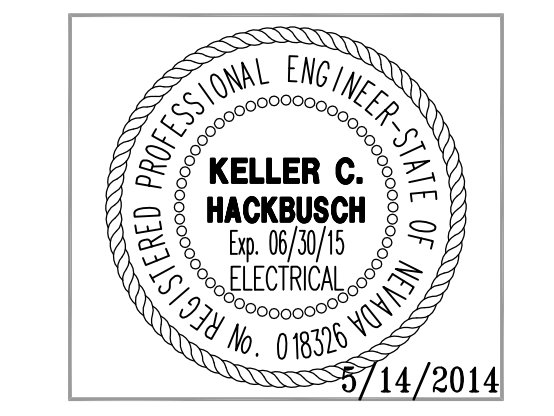
SINGLE LINE NOTES:

- 1 SEE SHEET E1.1 FOR CONDUIT SIZES AND ROUTING. CONDUCTORS TO BE CONNECTED TO BMX LIGHT POLES.
- 2 EXISTING BREAKER
- 3 EXISTING 100/3 ELECTRICALLY HELD LIGHTING CONTACTOR W/211VOLT COIL.
- 4 EXISTING 20/3 ELECTRICALLY HELD LIGHTING CONTACTOR W/211VOLT COIL.
- 5 EXISTING DIGITAL ASTRODIAL TIME SWITCH W/RESERVE POWER SPRING, 211VOLTS
- 6 EXISTING TOGGLE SWITCH ON EXTERIOR OF MSB IN NEMA 3R BOX W/LOCKABLE COVER



DINTER ENGINEERING CO.
MECHANICAL, ELECTRICAL, AND AIRFIELD ELECTRICAL CONSULTING ENGINEERS
385 GENTRY WAY
RENO, NEVADA 89502-4608
(775)826-4044
[FAX 826-4190]
www.dinter.com

EDMONDS SPORTS COMPLEX
BMX TRACK LIGHTING PROJECT
CARSON CITY PARKS AND RECREATION DEPARTMENT
1555 LIVERMORE LANE CARSON CITY, NV.



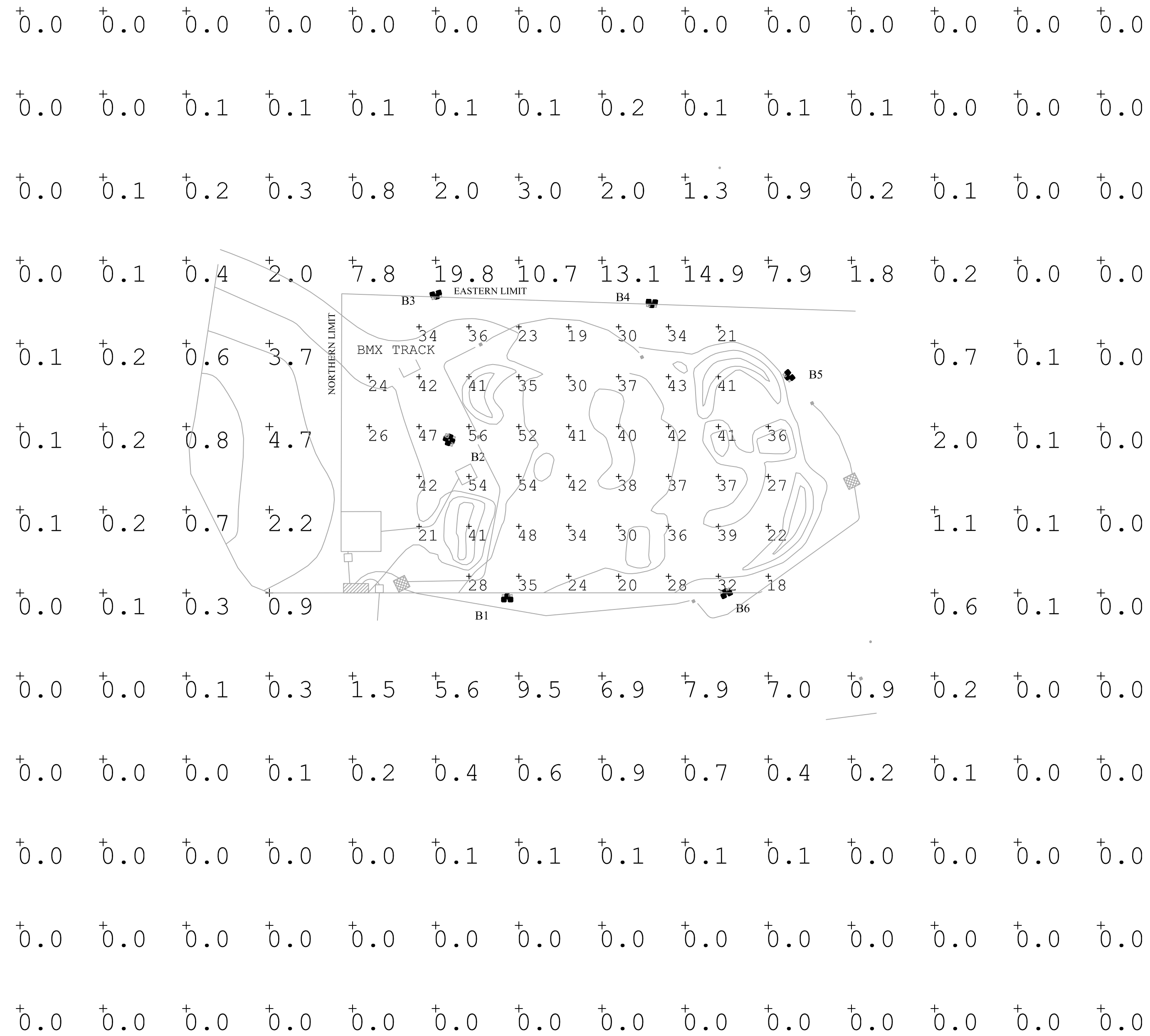
REVISION:

JOB NO.: J-4144.1
DESIGN: MJB
DRAWN: GLR
CHECK: ERG
DATE: 14 MAY 2014

ELECTRICAL DETAILS AND EXISTING SINGLE LINE DIAGRAM

SHEET NO.:
E2.1

Carson City - Edmonds Sports Complex BMX Track
 Engineers: Dinter Engineering, Inc. - Ed Gansberg, P.E.
 Design Level: 30 Footcandles Average Maintained
 USING 0.8 Maintenance Factor and
 0.85 Design Factor



Luminaire Schedule		
Project: Project_1		
Label	Qty	Description
Soft3-2	5	3 MH 2 HPS
BMX	1	Special

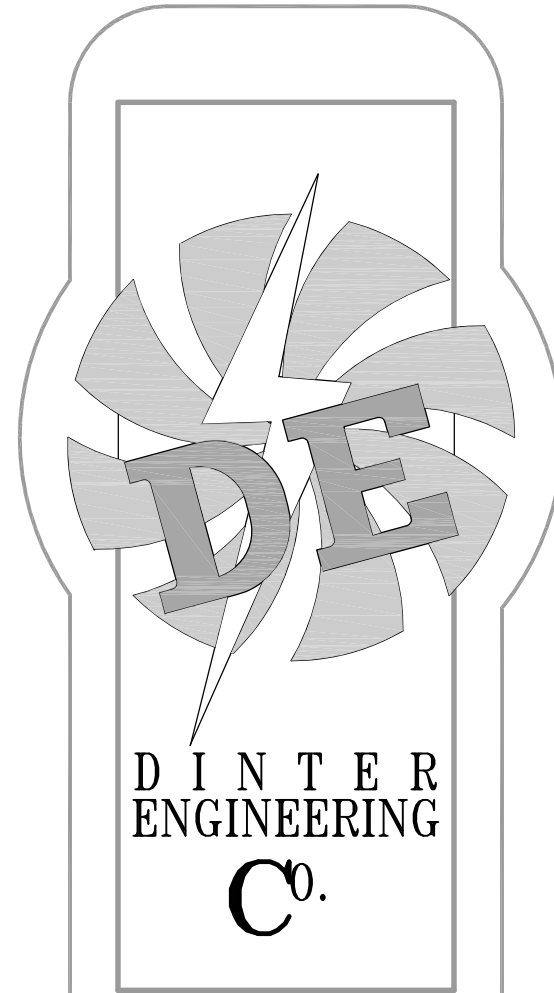
Luminaire Location Summary						
Project: Project_1						
Label	X	Y	Z	Orient	Status	
B5	Soft3-2	313	131	64	220	On
B4	Soft3-2	143	-4	64	90	On
B3	Soft3-2	275	-1	64	115	On
B1	Soft3-2	230	175	64	265	On
B6	Soft3-2	100	180	64	285	On
B2	BMX	108	92	64	340	On

4 MH, 3 HPS

Calculation Summary								
Label	CalcType	Avg	Units	CV	Max	Min	Max/Min	UG
BMX Track	Illuminance	35.28	Fc	0.27	56	18	3.11	2.00
Spill Light	Illuminance	1.15	Fc	N.A.	19.8	0.0	N.A.	N.A.
Spill Light	Illuminance	0.78	Fc	N.A.	9.5	0.0	N.A.	N.A.

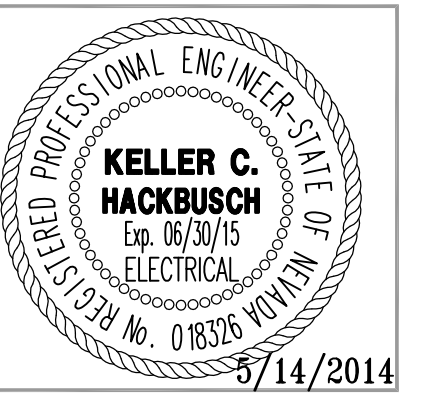
Soft Lighting Systems, Inc. Phone: 425.679.6550
 2224 - 137th Place S.E. Cell: 206.601.7312
 Bellevue, WA 98005-4032 Email: softlite@softlite.com

A SOFT LIGHTING SYSTEMS PHOTOMETRIC PLAN
 E3.1 NO SCALE NORTH



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EDMONDS SPORTS COMPLEX
 BMX TRACK LIGHTING PROJECT
 CARSON CITY PARKS AND RECREATION DEPARTMENT
 1555 LIVERMORE LANE CARSON CITY, NV.

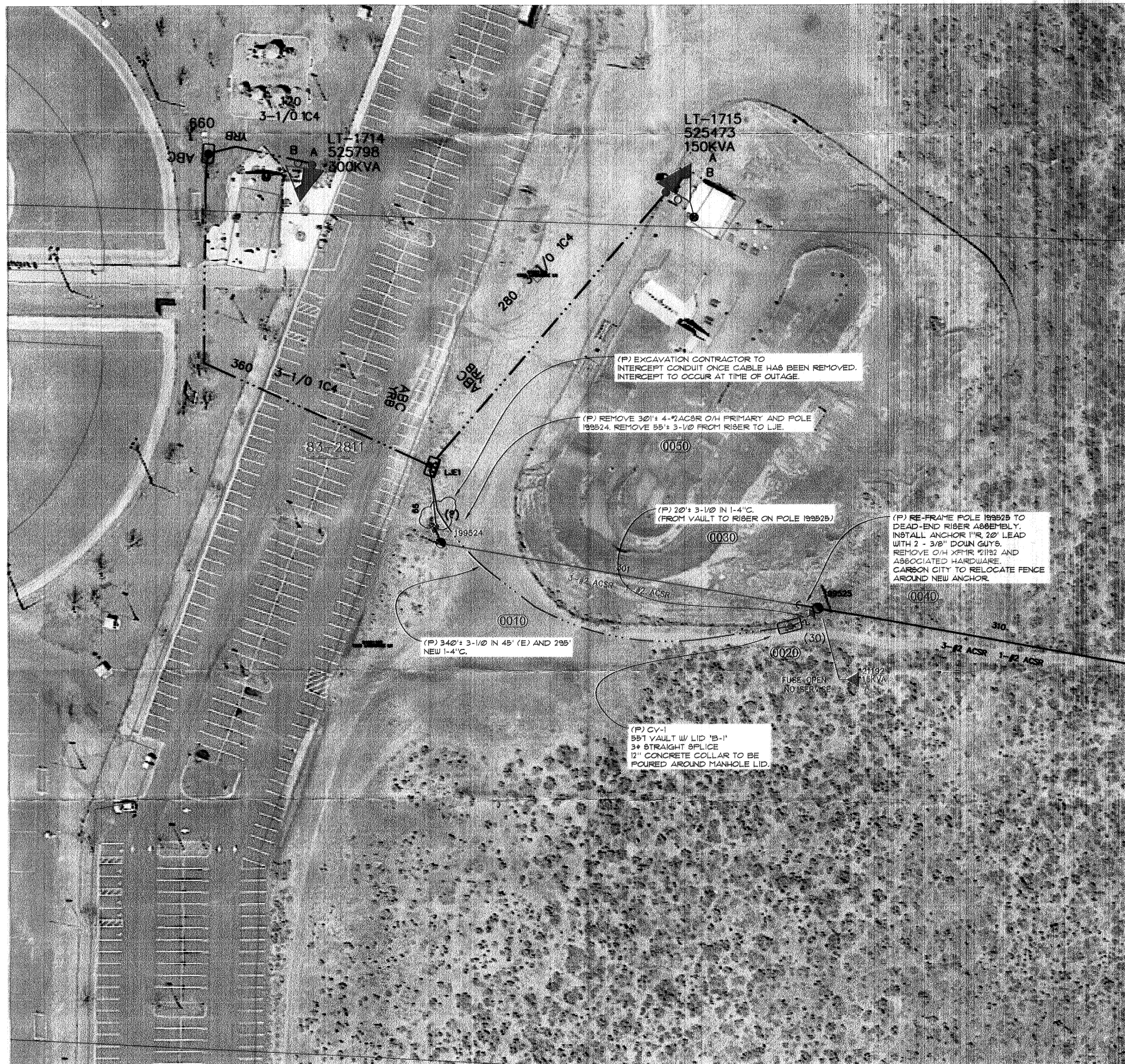


REVISION: _____

JOB NO.: J-4144.1
 DESIGN: MLB
 DRAWN: MLB
 CHECK: ERG
 DATE: 14 MAY 2014

SOFT LIGHTING
 SYSTEMS
 PHOTOMETRIC
 PLAN

SHEET NO.:
E3.1



NV ENERGY TO FURNISH AND / OR INSTALL:

- APPROX. 360' OCT. FT. 25 KV 3 ϕ W/G PRIMARY C/O 3-1/2" CABLE IN 45' (E) AND 315' OF NEW 1-4" C (CONDUIT BY CUSTOMER).
- 1 - ANCHOR C/O 1" R, 20' L AND 2 - 3/8" E.H.S. DOWN GUY(S).
- PRIMARY RISER MATERIAL TO CONSIST OF STAND OFF BRACKET(S) AND LAG SCREWS ONLY. (ALL RISER CONDUIT SUPPLIED BY CONTRACTOR)

APPLICANT TO FURNISH AND / OR INSTALL:

- 1 - 551 CABLE VAULT 48"x75"x60" I.D. WITH LID 15'-1" PER NVE STD. 195-0071L
- LID 'A' H-10 RATED, LID 'B' H-20 RATED EQUIPMENT, LID 'C' H-20 RATED 3' MANHOLE.
- PROPOSED APPROX. 365 FT. 4" PVC CONDUIT.
- (ABOVE FOOTAGE DOES NOT INCLUDE SLEEP(S) OR RISER(S) FOR SECONDARY BOX(ES), TRANSFORMER(S), JUNCTION ENCLOSURE(S), ETC.)

APPLICANT IS RESPONSIBLE FOR MANDRILING CONDUIT AND INSTALLING A FULL LINE THAT MEETS OR EXCEEDS THE FOLLOWING REQUIREMENTS:

- THE FULL LINE WILL BE OF A FLAT DESIGN
- SHALL HAVE A MINIMUM BREAKING STRENGTH OF 400 LBS.
- MUST HAVE SEGMENTAL FOOTAGE MARKINGS
- EXAMPLES OF FULL LINES THAT MEET THESE REQUIREMENTS (NVE, STK 95-1205)
- NEPCO TILE TAPE (40400P)
- CONDUX INTERNATIONAL (000926203)
- SEE NVE VOLUME II, SECTION 4-C000001L

- PRIMARY RISER RISER MATERIAL C/O 4" GALVANIZED STEEL SLEEP, 10' OF 4" GALVANIZED STEEL CONDUIT ALONG WITH COUPLING ADAPTER AND 30' OF SCHEDULE 40 CONDUIT. STAND-OFF BRACKETS AND LAG SCREWS BY NVE. (NVE TO INSTALL 30' OF SCHEDULE 40 CONDUIT ONLY.)

BEFORE INSTALLATION OF THE UTILITY FACILITIES AND IF NO PUBLIC UTILITY EASEMENTS EXIST, THE OWNER OF RECORD SHALL SIGN APPROPRIATE EASEMENT DOCUMENTS. ALL SERVICE CONDUITS TO BE STUBBED 10' MINIMUM FROM TRANSFORMER PADS AND SECONDARY BOXES AT THE SAME TIME AS MAIN LINE INSTALLED PER NVE STD6 VOLUME II. (E000201)

GENERAL COMMENTS:

CALL CARSON ELECTRIC UNDERGROUND (888-393-5564) 48 HOURS PRIOR TO START OF CONSTRUCTION FOR TRENCH INSPECTION BEFORE COVERING TRENCH. (INCLUDE WORK ORDER NUMBER, ALONG WITH NAME AND PHONE NUMBER OF PROJECT FOREMAN, IN VOICE MESSAGE)

ALL SECONDARY BOXES AND PRIMARY VAULTS SHALL BE TO FINISH GRADE. ALL MATERIAL SHALL BE ON THE JOB SITE PRIOR TO THE START OF ANY WORK BY NVE.

REFER TO NVE STD6, C00001M FOR FURTHER CLARIFICATION OF DETAILS.

COMPACTION TESTS REQUIRED PER NVE STD. SUBBOX.

NO TREE SHALL BE PLANTED UNDER OR ADJACENT TO ENERGIZED POWER LINES WHICH, AT MATURITY, SHALL GROW WITHIN 10 FEET OF THE ENERGIZED CONDUCTORS. NOR SHALL ANY PERMANENT STRUCTURE, FENCE, SHRUB OR TREE BE PLANTED CLOSER THAN 10 FEET IN FRONT AND 3 FEET FROM ALL OTHER SIDES OF A PAD MOUNTED TRANSFORMER.

NOTE: DEVELOPER IS RESPONSIBLE FOR ADHERENCE TO NV ENERGY GAS AND ELECTRIC STANDARDS. CONSTRUCTION STANDARDS CAN BE FOUND ON-LINE AT THE FOLLOWING WEB SITE: <http://www.nvenergy.com/business/newconstruction>.

THIS MAP ILLUSTRATES DATA COLLECTED FROM VARIOUS SOURCES AND MAY NOT REPRESENT A SURVEY OF THE PREMISES. NO RESPONSIBILITY IS ASSUMED AS TO THE SUFFICIENCY OR ACCURACY OF THE DATA DISPLAYED HEREON.

ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE ELECTRIC DISTRIBUTION GUIDE, VOL. II AS CURRENTLY ADOPTED BY NVE. THE CONTRACTOR SHALL SECURE COPIES OF THE AFOREMENTIONED CONSTRUCTION SPECIFICATIONS ON HIS OR HER OWN BEHALF.

SYMBOLS ARE NOT TO SCALE AND DO NOT NECESSARILY REPRESENT ACTUAL LOCATIONS OF FACILITIES.

NV ENERGY TO REMOVE:

POLE 199524 AND ASSOCIATED ANCHOR 55' 3-1/2" IN (E) 4" CONDUIT BETWEEN DIP POLE AND LJE SINGLE PHASE XPRR 2192 (15KVA)

CUSTOMER TO CONTACT NEVADA BELL REGARDING ALTERATION OR REMOVAL OF NEVADA BELL'S FACILITIES.

DRAWING	DESIGNED BY	DATE
BASE		
ELECTRIC		
GAS		
STREETLIGHT		

REVIEWED BY:			
Utility Designer	Engineer	Design Facilitator	Cathodic Protection
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	
7/14/12	7/14/12	7/14/12	

NO.	REVISION DESCRIPTIONS	DATE	DI
1			
2			
3			
4			
5			
6			
7			

Call **811** before you dig

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Avoid serious underground utility lines. It's really that easy.

CALL 1-702-227-2929

Phone: 775-834-6555 P.O. Box 10100
 Fax: 775-834-7305 NV Energy Reno, NV 89520-0024

NV ENERGY CONTACT INFORMATION:

COORDINATOR: DARRYN CRAWFORD
 OFFICE: #
 CELL: 775-848-5401
 FAX: #
 EMAIL: DCRAWFORD@NVEENERGY.COM
 DESIGNER:
 ELECTRIC INSPECTION HOTLINE: # 775/834-7520

CUSTOMER CONTACT INFORMATION:

CUSTOMER: CITY OF CARSON CITY
 ATTENTION: TOM GRUNDY
 PHONE: 775-283-7081
 FAX: #
 EMAIL: TGRUNDY@CARSON.ORG

CUST REP: VERN KRAHN
 PHONE: 775-283-7343
 EMAIL:

TOWNSHIP-RANGE-SECTION 1520-33	APN# 10-211-05
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SOURCE INFORMATION:

1250' OCT
 12.5KV NORM OUT OF
 OVERLAND SUB

1555 LIVERMORE LANE

VICINITY MAP (NTS)

E-1555 LIVERMORE LN - CIAC -
 OH TO UG - CITY OF CARSON
 CITY

EXHIBIT "A" APPLICANT INSTALLED CONDUIT ELECTRIC DESIGN	AUD#:	STL#:	GAS#:	ELE#: 3000156218
SCALE: 1:50				
SHEET#: E.1				