GENERAL SPECIFICATIONS:

The following items are included here for contractor's special attention.

1. Furnish and install a completely wired and operational electrical system as shown on the drawings and specified herein.

2. The installation shall comply with applicable local and state codes and ordinances, with the regulations of the latest edition of the National Electric Code.

3. The following industry standards, specifications and codes are minimum requirements:
   a. The National Electrical Manufacturer's Association Standards.
   b. The National Electrical Code.
   c. Underwriter Laboratories Incorporated Standards.
   d. American National Standards Institute.

4. Prior to submitting a bid for electrical work, the Contractor shall visit the site of the proposed construction and shall thoroughly acquaint himself with existing utilities, and working conditions to be encountered, etc. Allowance will not be made for noncompliance with this condition after bidding.

5. Deliver materials and equipment to the project in the manufacturer's original, unopened, labeled containers. Protect against moisture, tampering, or damage from improper handling or storage. Contractor shall protect and be responsible for any damage to work or materials until final acceptance by the Owner, and shall make good without cost to the Owner, any damage or loss that may occur during this period.

6. Arrange for timely delivery of materials and equipment to the job site in order to minimize the length of time between delivery and installation.

7. Keep the premises free from accumulation of waste materials, or rubbish caused by employees or work under this division of the specifications. At the completion of the work, remove all surplus materials, tools, etc., and leave the premises clean.

8. Perform all excavation and back filling required for work performed under this division of the specifications. Trench bottoms shall be graded true and free from stones or soft spots. Use excavated materials for back fill unless off site materials are deemed necessary by the Engineer.

9. The drawings indicate the general arrangement and locations of the electrical work. Data presented on these drawings are as accurate as planning can determine, but field verification of all dimensions, locations, levels, etc., to suit field conditions is required. Review all structural drawings and adjust all work to meet the requirements of conditions shown. Discrepancies between different plans, or between drawings and specifications, or regulations and codes governing the installation shall be brought to the attention of the engineer in writing before the date of bid opening. If discrepancies are not reported, the contractor shall bid the greater quantity or better quality, and appropriate adjustments will be made after contract award. Contractor shall be responsible to field measure and confirm mounting heights and location of electrical equipment. Do not scale distances off the electrical drawings. Use actual field dimensions.

10. Perform the excavation, cutting, fitting, repairing and finishing of the work necessary for the installation of the equipment of this Section.

11. Cooperate with the other trades so that the installation of the electrical equipment will be properly coordinated.

12. Coordinate the location of trenches and conduits for electrical and telephone utility services with the General Contractor. Establish the location of all buried conduits and wiring before the start of excavation.

13. All materials shall be new and of quality as specified on the plans or specifications and must carry the Underwriter's Laboratories approval covering the purpose for which they are used, in addition to meeting all requirements of the current applicable codes and regulations.

14. Flexible metallic and nonmetallic conduit systems shall have a code sized copper ground conductor. Increase conduit size as required.

15. Conduit and conductors are to be identified at the panel and junction box. Conductors are to be identified at the junction box with the panel and circuit #.

16. Conductor sizes shown on the drawings are based on copper wire. Unless otherwise specified, all wire shall be 75 degree C Type THW. All branch circuit wiring shall be copper. The wires shall be marked with color to simplify circuit identification.

17. No wire shall be installed in the conduit system until the conduit system is complete. Use Mineralac No. 100 or equivalent as a lubricant to facilitate the installation of the conductors in the conduit system.

18. Wire termination for panelboards and circuit breakers shall be listed as suitable for 90 degrees C.

19. Grounding shall comply with requirements of Article 250. All exposed noncurrent-carrying metallic parts of electrical equipment, grounding conductor in nonmetallic raceways, and grounded conductors of the wiring system shall be grounded.

20. The grounded conductor (neutral) of the wiring system shall be connected to the system grounding conductor at a single place in each system by removable bonding jumpers, sized according to the applicable provisions of the National Electrical Code. The grounded conductor (neutral) to the grounding conductor connection shall be located in the enclosure for the system's over current protection or where otherwise indicated on the plans or specifications.

21. In accessible locations connections shall be made with bolted through, approved solder less bronze grounding devices.

22. Guarantee all material furnished and all workmanship performed for a period of one year from the date of final acceptance of the work. Any defects developing within this period, traceable to material furnished as a part of this Section or workmanship performed here under, shall be made good at no expense to the Owner.

23. The items specified herein and on drawings are used as a standard of quality. Any materials of equal quality and aesthetic value will be given consideration as a substitute for the materials specified. No approval will be given to a specific catalog number, model or type of equipment, prior to bidding. After bidding, the decision of the Owner and/or Engineer, determining equal materials, will be final.

24. The Contractor shall submit six (6) identical bound sets of shop drawings on the items submitted:

25. Submit items at one time in a neat and orderly manner within 15 days of award of contract. Partial submittals will not be acceptable.

26. Where materials and equipment are specified or indicated by the name of the manufacturer or by accepted trade designation, substitution will be considered. Where two (2) or more items are furnished under the same specification, they shall be of the same manufacturer and be identical and interchangeable.

27. Provide and Secure pullstring in all empty conduit.

28. Provide expantion couplings every 100' on all underground PVC conduits.

29. The Square D Company componants have been used as referrance for the sizling of the switchgear cabinets and circuit breakers. Alternate switchgear manufacturers must comply with physical size of the cabinets and the minimal calculated AIC ratings of the circuit breakers.

30. The electrical contractor is to coordinate with Sprint to provide a complete operating telephone system.

31. The electrical contractor is to coordinate with Nevada Power Company to provide a complete primary operating electrical system.

SYMBOL LEGEND

- Panel Board
- General Pull / Junction Box
- Non-fused disconnect
- Conduit in slab or underground (or existing as noted)
- F.A. — Conduit in slab or underground (or existing as noted)
- Circuit breaker
- Transformer
- Photocell
- Current transformer
- Circuit breaker
- Combination Strobe/Horn (Fire Alarm) Unit.
- Contactor
- Flood Light
- 1' x 4' Lighting Fixture
- 1' x 4' Lighting Fixture with Emergency Battery
- 2' x 2' Lighting Fixture
- 2' x 2' Lighting Fixture with Emergency Battery
- Incandacent Light Fixture (Type)
- Wall mounted Light Fixture
- Ground mounted Light Fixture
- Shunt Trip
- Receptacle
- GFI — Ground Fault Current Interrupting Receptacle
- Quad Recetacle (Recessed Floor Mounted)
- L/C — Lighting Contactor
- Motor
- Telephone Outlet
- Combination Data/Telephone Outlet
- S — Switch
- S_3 — Switch (Three way)
- S_4 — Switch (Four way)

DRAWING SYMBOLS

- 1 / EX-X — Detail Number / Sheet Number
- — E — Electrical Primary Service – Underground Conduit
- (X) Distance Point
- (X) Key Note (Number)
- Mechanical unit
- UFER or Electrode Ground

DRAWING SHEET INDEX (PRO-SHOP)

DRAWING NO.	DESCRIPTION
TPE-0.1	GENERAL SPECIFICATIONS, DRAWING INDEX, AND DRAWING SYMBOL LEGEND FOR PRO-SHOP
TPE-1.1	PRO-SHOP FIXTURE IDENTIFICATION PLAN
TPE-1.2	PRO-SHOP LIGHT CIRCUITING PLAN
TPE-2.1	PRO-SHOP POWER AND COMMUNICATION FLOOR PLAN
TPE-2.2	PRO-SHOP MECHANICAL POWER PLAN
TPE-2.3	RESTROOM #1 & #2 – POWER & LIGHTING
TPE-3.1	LIGHTING WIRING DIAGRAM, LIGHTING DETAIL, AND SINGLE LINE DIAGRAM
TPE-4.1	PANEL SCHEDULE

79349

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS

REVISIONS

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WASHINGTON/BUFFALO PARK – PHASE 1A
WASHINGTON & BUFFALO, LAS VEGAS, NV

GENERAL SPECIFICATIONS, DRAWING INDEX AND DRAWING SYMBOL LEGEND FOR PRO-SHOP

STAMP

PROFESSIONAL ENGINEER HAROLD BARKER ELECTRICAL NEVADA

OWNER: CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
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DRAWN	GS
FILE	TPE0.1
DATE	7/03
SCALE	N.T.S.
BID NO	03.15341.07
CLV DWG NO	650.76.1A
SHT NO	TPE-0.1