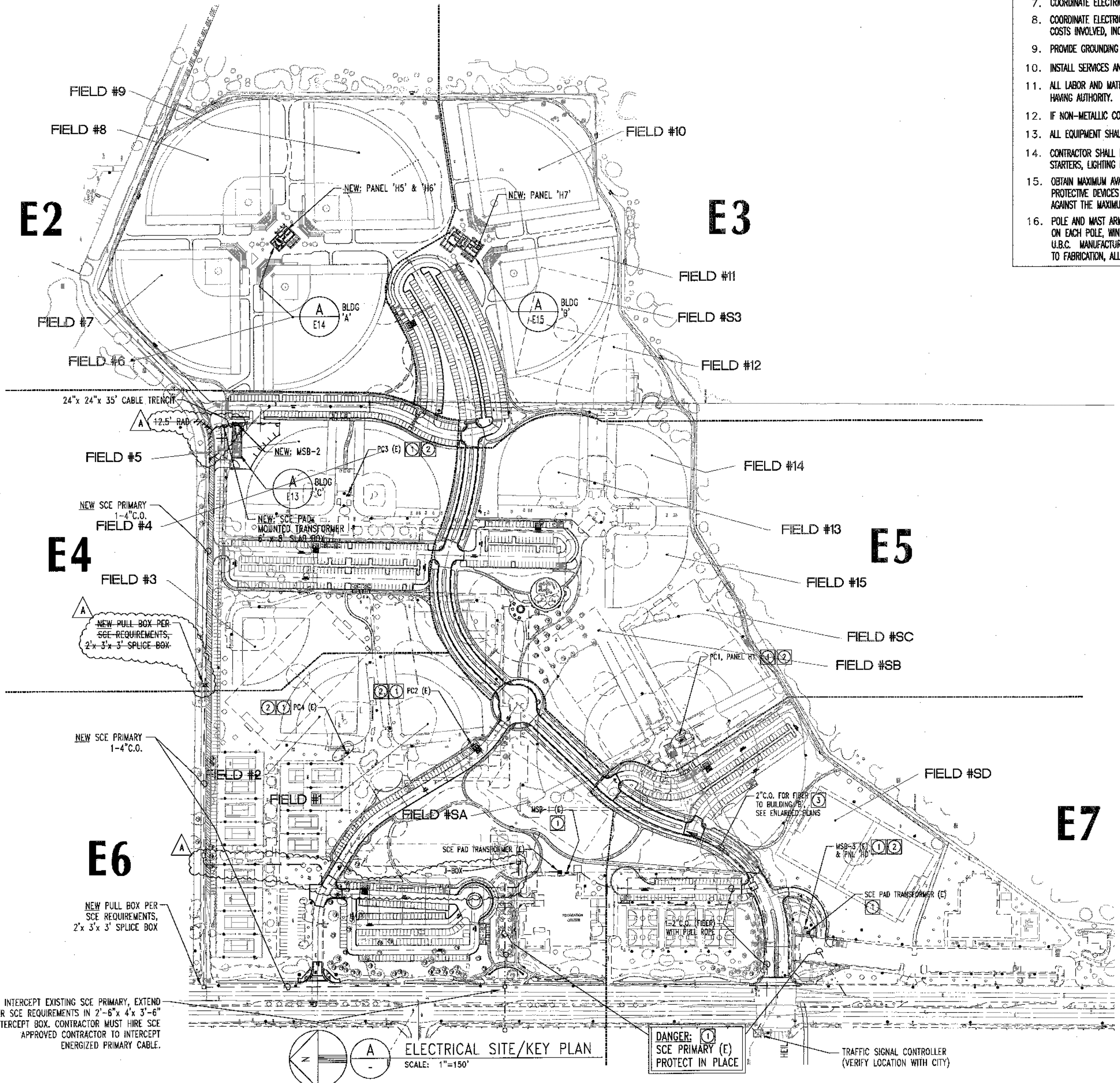


(1557) (3420)

SITE ELECTRICAL NOTES

1. ALL POLES SHALL HAVE RIGID PVC WRAPPED GALVANIZED CONDUIT SWEEPS IN BASES TO 30" BELOW GRADE, POLES TO BE TRUE AND PLUMB AND BONDED TO GROUND WIRE.
 2. OBTAIN ROUTE FOR VEHICLE TRAFFIC AT SITE FROM OWNER. REPAIR ANY DAMAGE TO TURF, TREES, SHRUBS, HARDSCAPE, OR EQUIPMENT.
 3. ALL UNDERGROUND PVC CONDUIT SHALL HAVE 3" CONCRETE COVER AND BE 30" BELOW GRADE OR ROUTE UNDER WALKS.
 4. CONTRACTOR SHALL VISIT JOB SITE, VERIFY EXISTING CONDITIONS, AND INCLUDE IN BID ALL WORK REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
 5. ALL SPLICES IN HANDHOLES AND PULLBOXES TO BE WATERPROOF. ALL CONDUCTORS TO BE COPPER, THW OR THWN.
 6. ALL EXPOSED HARDWARE (FASTENERS) TO BE TAMPERPROOF INCLUDING PULLBOX AND HANDHOLE FASTENERS.
 7. COORDINATE ELECTRICAL WORK WITH REQUIREMENTS OF OTHER TRADES.
 8. COORDINATE ELECTRICAL AND TELEPHONE UTILITY SERVICE CONNECTIONS AND INCLUDE IN BID ALL COSTS INVOLVED, INCLUDING MATERIAL, LABOR, SERVICE FEES AND PERMITS.
 9. PROVIDE GROUNDING WHERE INDICATED OR REQUIRED BY CODE.
 10. INSTALL SERVICES AND METERS PER UTILITY COMPANY REQUIREMENTS.
 11. ALL LABOR AND MATERIALS SHALL MEET FULLY WITH ALL REQUIREMENTS OF ELECTRICAL CODES HAVING AUTHORITY.
 12. IF NON-METALLIC CONDUIT IS USED, PROVIDE GROUND WIRE.
 13. ALL EQUIPMENT SHALL BE LEFT CLEAN. PREMISES SHALL BE CLEANED OF DIRT AND DEBRIS.
 14. CONTRACTOR SHALL FURNISH FOR APPROVAL, SHOP DRAWINGS OF SERVICE EQUIPMENT, MOTOR STARTERS, LIGHTING FIXTURES, AND CONTROL DEVICES PRIOR TO PURCHASE.
 15. OBTAIN MAXIMUM AVAILABLE FAULT CURRENT FROM THE POWER COMPANY PRIOR TO BID, CIRCUIT PROTECTIVE DEVICES SHALL HAVE INTERRUPTING RATING TO PROTECT THE ELECTRICAL SYSTEM AGAINST THE MAXIMUM AVAILABLE FAULT CURRENT.
 16. POLE AND MAST ARMS SHALL BE DESIGNED TO SUPPORT THE NUMBER OF LUMINAIRES CALLED FOR ON EACH POLE, WIND LOADING AND POLE DESIGN SHALL CONFORM TO THE LATEST EDITION OF THE U.B.C. MANUFACTURER SHALL SUBMIT CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION, ALL CALCULATIONS TO BE SIGNED BY CALIFORNIA REGISTERED PROFESSIONAL ENGINEER.
- EXCAVATION AND BACKFILLING:**
17. ALL TRENCHES SHALL BE BACKFILLED, WITH ALL EXCAVATED EARTH PUDDLED OR WELL TAMPED INTO PLACE. LARGE STONES AND INORGANIC MATERIAL SHALL NOT BE RETURNED TO THE TRENCHES. ALL EXCESS EARTH FROM THE EXCAVATIONS NOT REQUIRED FOR BACKFILLING, FILL, OR GRADING, SHALL BE REMOVED FROM THE SITE AS DIRECTED.
 18. CONTRACTOR SHALL COORDINATE TRENCHING WITH ALL OTHER TRADES AND EXISTING UNDERGROUND UTILITIES AND SPRINKLER PIPING TO AVOID CONFLICTS. ALL DAMAGED PIPING, IRRIGATION WIRING, AND LANDSCAPING SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, AT NO ADDITIONAL COST.
- CUTTING AND PATCHING:**
19. THE CONTRACTOR SHALL ORGANIZE AND LAYOUT HIS WORK SO THE WORK CAN BE INSTALLED IN THE INSPECTABLE SEGMENTS AS THE WORK PROCEEDS. IF REQUIRED, TO PROPERLY INSTALL ANY WORK, CUTTING OF THE STRUCTURE SHALL BE KEPT TO A MINIMUM SIZE NEEDED TO INSTALL THE WORK. OBTAIN PERMISSION FROM THE STRUCTURAL ENGINEER BEFORE CUTTING OR BORING ANY STRUCTURAL FRAMING MEMBER.
 20. PATCHING OF ANY HOLE OR CUT SHALL BE MADE IN SUCH A MANNER THAT THE ORIGINAL CONDITIONS ARE SUBSTANTIALLY RESTORED TO THE SATISFACTION OF THE ARCHITECT OR ENGINEER.
 21. BORE UNDER ALL CONCRETE OR ASPHALT WALKS. SAW CUT AND REPAIR ALL CONCRETE OR ASPHALT AREAS TO NEW CONDITION.
 22. PROVIDE CONDUIT SEALS WITH DRAIN PLUG (EYSD) IN ALL CONDUITS ENTERING VAULTS TO PREVENT GROUND WATER OR WATER PONDS OR ANY WATER CONTAINMENT AREA FROM DRAINING WATER INTO ELECTRICAL EQUIPMENT IN BELOW GRADE VAULTS (NEC 230-8).
 23. ALL EXTERIOR LIGHTING CIRCUITS SHALL BE PROVIDED WITH A PHOTOCELL AND 7-DAY 24 HOUR DIGITAL TIMECLOCK LOCATED NEAR PANEL, WHETHER INDICATED ON PLANS OR NOT. CONTROL PANEL SHALL BE EQUIPPED WITH NUMBER OF TIME SWITCHES REQUIRED. CONTROL PANEL SHALL HAVE SPACE FOR TWO ADDITIONAL TIME SWITCHES. TIME SWITCHES SHALL HAVE SILVER CONTACTS 30 AMP MINIMUM RATING. FURNISH EQUAL NUMBER OF CONTACTS AS CIRCUITS CONTROLLED PLUS ONE SPARE POLE, TORK, INTERMATIC, AMF OR EQUAL.



- SITE PLAN NOTES**
- 1 REFER TO SHEET UT-1 FOR ADDITIONAL EXISTING UNDERGROUND UTILITY FEEDERS.
 - 2 REPLACE EXISTING ENCLOSURE & EQUIPMENT WITH NEW. SEE SHEETS E-8 AND E-18.
 - 3 PLACE PULL BOXES (PVB#6) EVERY 600 FT. ON CENTER. MINIMUM SWEEP- 36" RADIUS, 2" CONDUIT WITH PULL ROPE, 24" MINIMUM COVER. PLACE WARNING TAPE, "NO CONCRETE COVER".

Southern California Edison
Spring Bowles
714.895.0221
7333 Bolsa Ave
Westminster, CA 92683

JOB ADDRESS:
16400 BROOKHURST ST.
FOUNTAIN VALLEY

MULLEN & ASSOCIATES INCORPORATED
ELECTRICAL ENGINEERS
2006017
LARRY D. MULLEN, PE, 12411 D. AVALON, CHL, 80807 (714) 850-0505
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(714) 978-8200 (714) 978-8289 Fax

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REGISTERED PROFESSIONAL ENGINEER
LARRY D. MULLEN
ELECTRICAL
EXP. 9/20/2008
STATE OF CALIFORNIA

SUBMITTALS			
No.	Date	Agency	
No.	Date	Revisions	By
1	2/09	AS CONSTRUCTED	KT

Project: **Fountain Valley Recreation Center**
Owner: **City of Fountain Valley**

Project No.: 14545
Drawn By:
Checked By: LDM
Date: 12/19/2006
Scale:
Drawing Title:

ELECTRICAL SITE LIGHTING KEY PLAN

Drawing No: **E1**

PLAN NOTES

- SCORE BOARD - SEE 1 E3 AND 1-2 C.O. (CONTROL)
- RUN 1" C.O. FROM 'A' POLE 15' NIPPLE TO "HOME PLATE RECEPTACLE". TYPICAL FOR ONE 'A' POLE IN EACH FIELD. (SEE PLAN)
- SEE NOTED PANEL SCHEDULES FOR CIRCUIT #'S, CORRESPONDING WIRE SIZES AND VOLTAGE DROP, TYPICAL.

1 J BOX PER LEGEND A

FIELD #9

FIELD #8

FIELD #7

FIELD #6

MATCHLINE SEE SHEET E-4

ELECTRICAL ENLARGED LIGHTING PLAN

SCALE: 1"=40'

AS CONSTRUCTED

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REGISTERED PROFESSIONAL ENGINEER
LARRY D. MULLEN
ELECTRICAL
EXP. 09/28/88
STATE OF CALIFORNIA

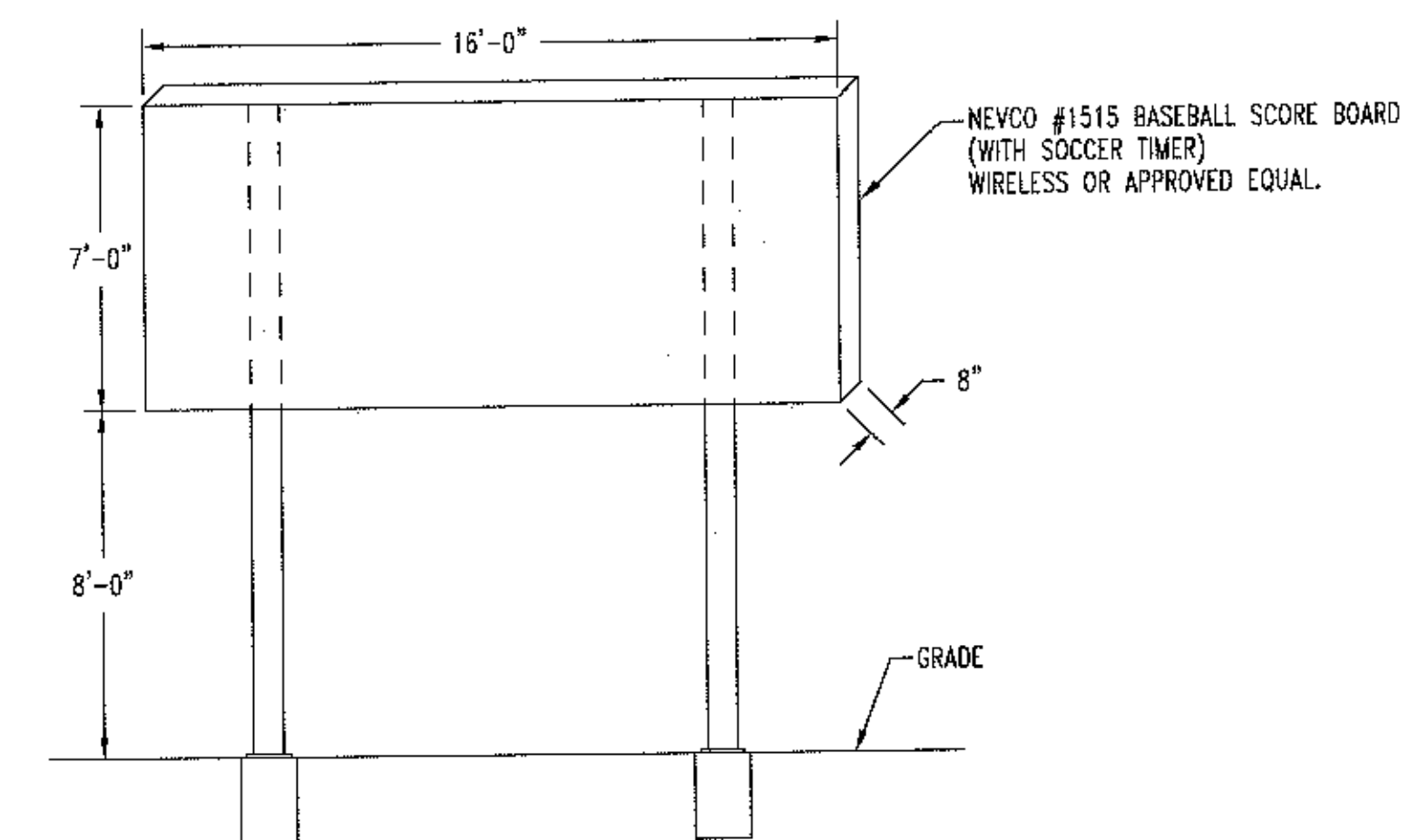
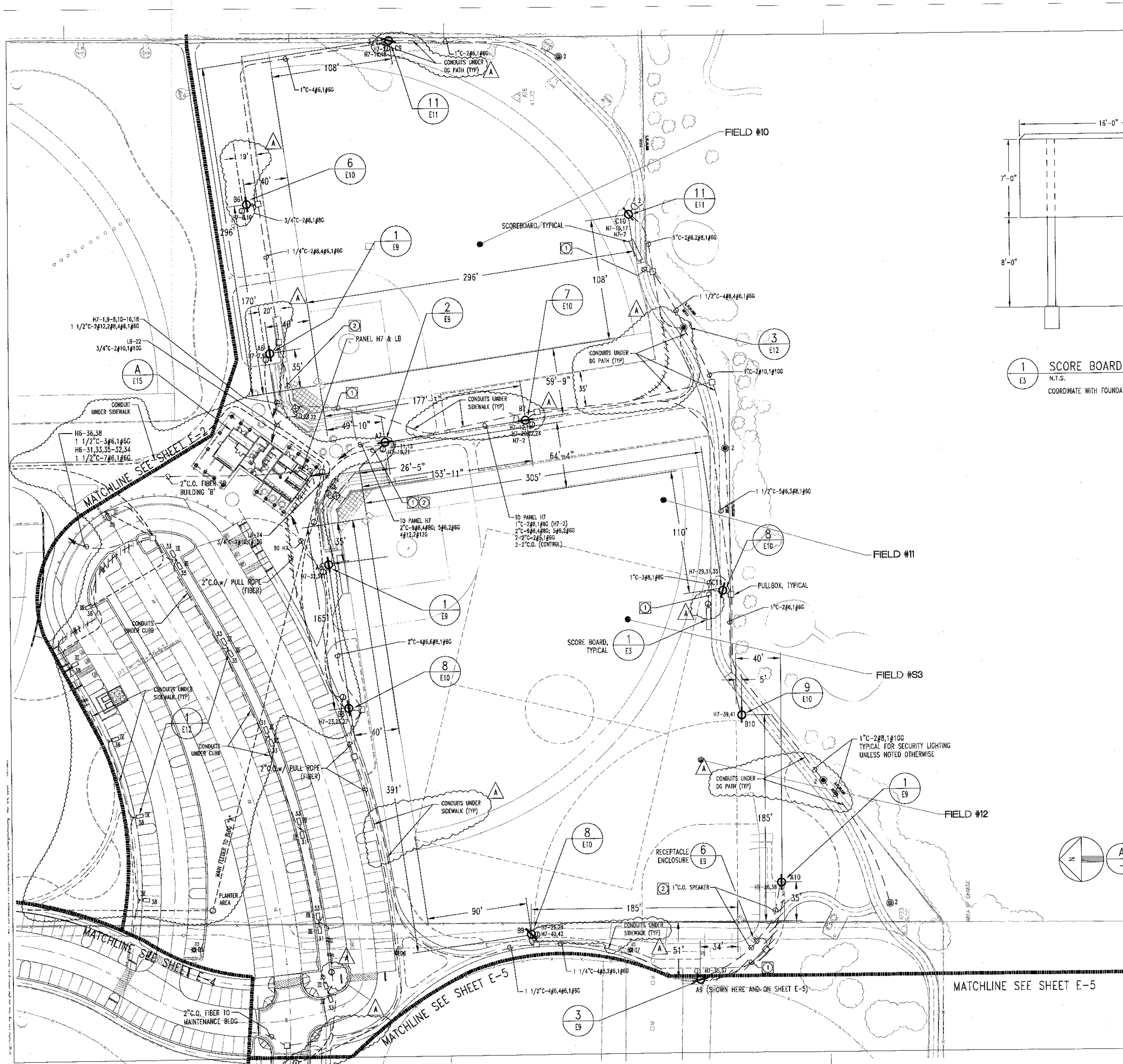
SUBMITTALS		
No.	Date	Agency

Project: **Fountain Valley Recreation Center**
Owner: **City of Fountain Valley**

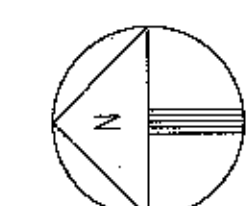
Project No.: 14545
Drawn By: LDM
Checked By: LDM
Date: 12/19/2006
Scale: 1"=40'
Drawing Title: ELECTRICAL NORTHEAST SITE LIGHTING PLAN

Drawing No: E2

MULLEN & ASSOCIATES INCORPORATED
ELECTRICAL ENGINEERS
Project Number 2006017
1800 N. Jefferson St., Suite D, Anaheim, CA 92807 (714) 988-8880
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- 1 SCORE BOARD
N.T.S.
COORDINATE WITH FOUNDATION DETAILS ON SHEET E12

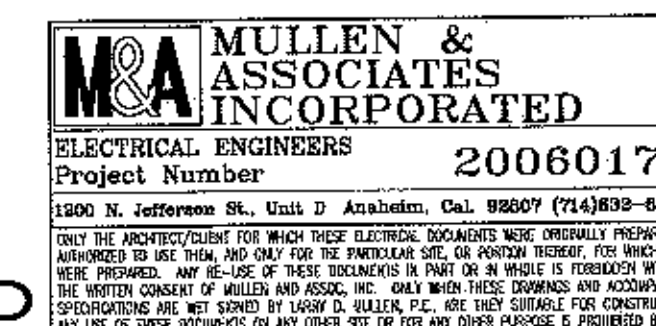


ELECTRICAL ENLARGED LIGHTING PLAN

SCALE: 1"=40'

PLAN NOTES

- 1 PROVIDE 1-2" C-2#6, 2#6G AND 1-2" C.O. (CONTROL)
- 2 PROVIDE 1-1" C.O. TO NIPPLE AT 15' ON 'A' POLE TO "HOME PLATE RECEPTACLE" AREA, TYPICAL.
- 3 SEE NOTED PANEL SCHEDULES FOR CIRCUIT #'S, CORRESPONDING WIRE SIZES AND VOLTAGE DROP, TYPICAL.



AS CONSTRUCTED



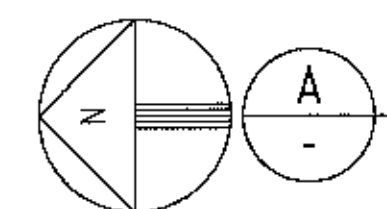
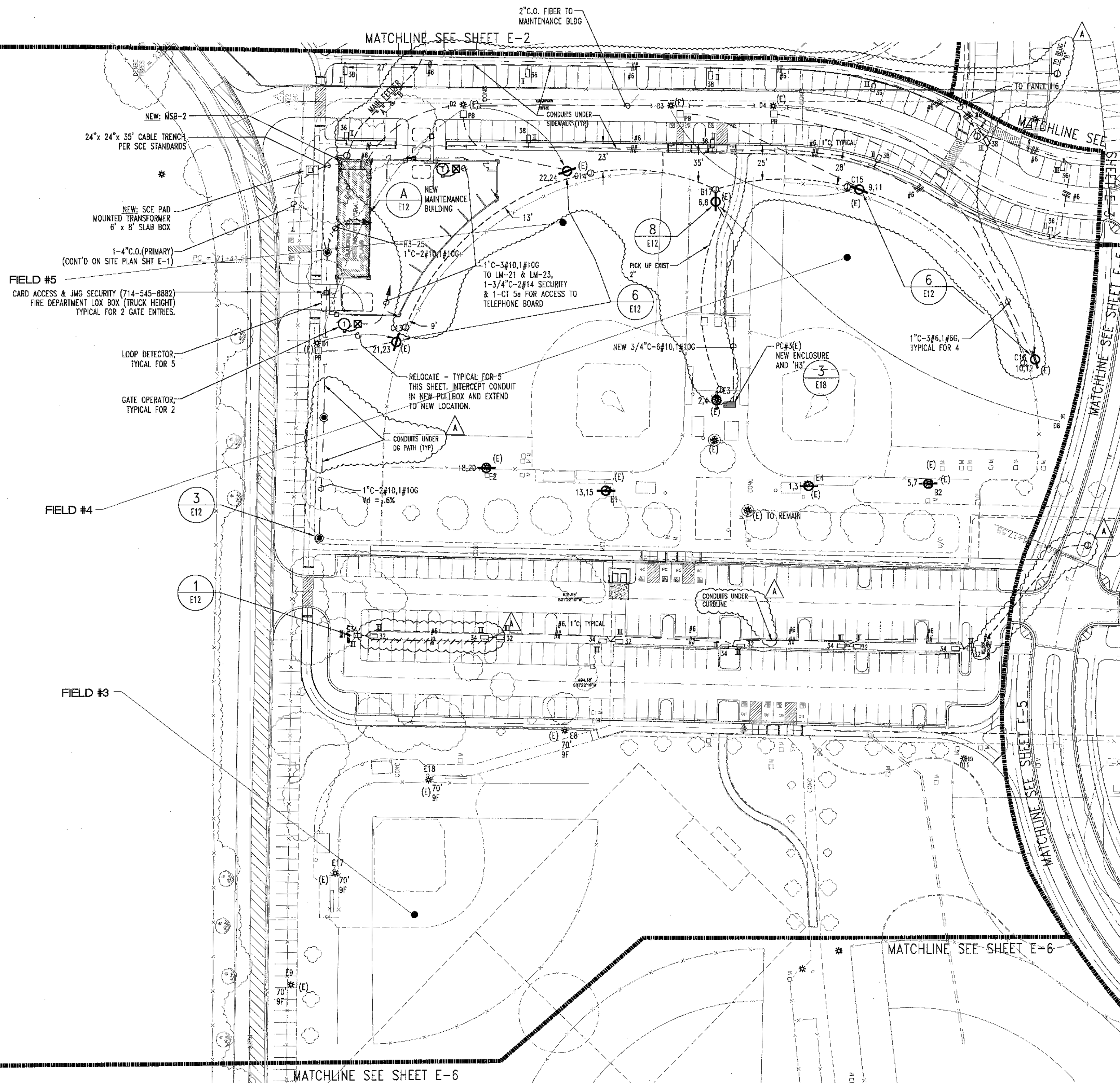
SUBMITTALS			
No.	Date	Agency	

Project: **Fountain Valley Recreation Center**
City of Fountain Valley

Project No.: 14545
Drawn By: LDW
Checked By: LDW
Date: 12/19/2006
Scale: 1"=40'
Drawing Title:

ELECTRICAL
SOUTHEAST SITE
LIGHTING PLAN

Drawing No: E3



ELECTRICAL ENLARGED LIGHTING PLAN

SCALE: 1"=40'

(E) = EXISTING

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SUBMITTALS

No. Date Agency

No. Date Revisions By
2/08 AS CONSTRUCTED KT

Project :

Fountain Valley
Recreation
Center

Owner:

City of Fountain
Valley

Project No. : 14545

Drawn By :

Checked By : LDM

Date : 12/19/2006

Scale :

Drawing Title :

ELECTRICAL
NORTH CENTRAL
SITE LIGHTING PLAN

Drawing No. :

E4

