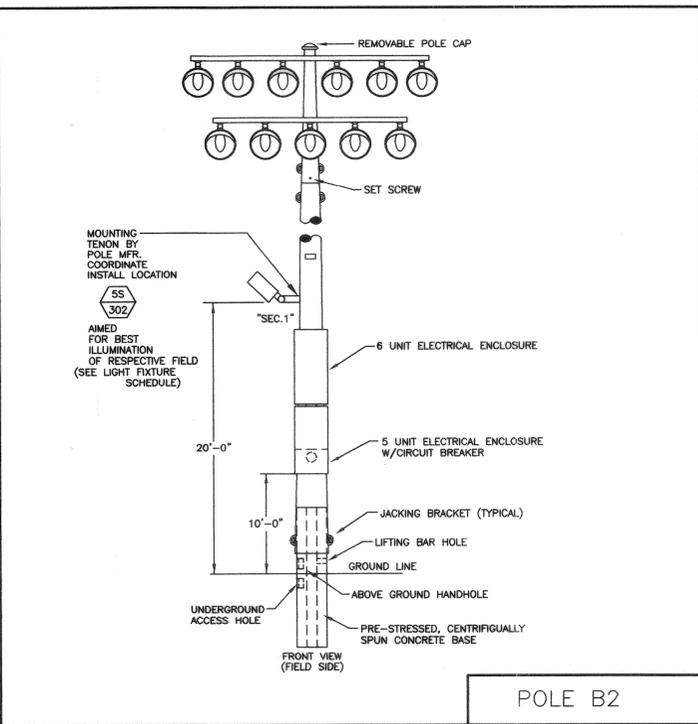
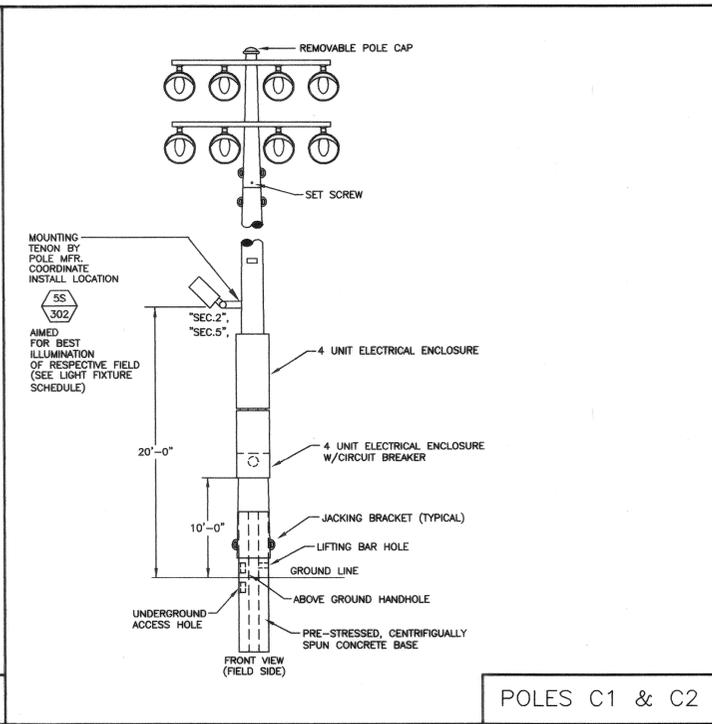


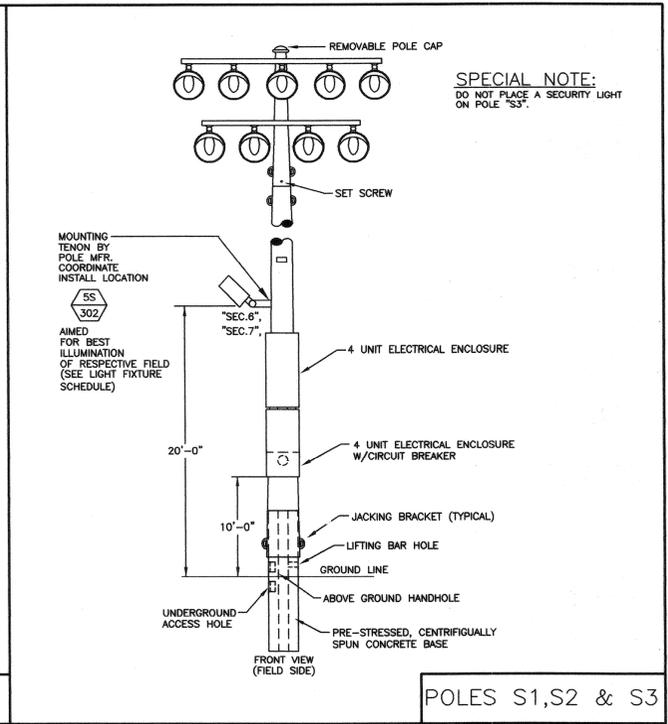
POLES A1 & A2



POLE B2



POLES C1 & C2



POLES S1, S2 & S3

LIGHTING FIXTURE DETAIL

SCALE N.T.S. 1

LIGHTING FIXTURE DETAIL

SCALE N.T.S. 3

LIGHTING FIXTURE DETAIL

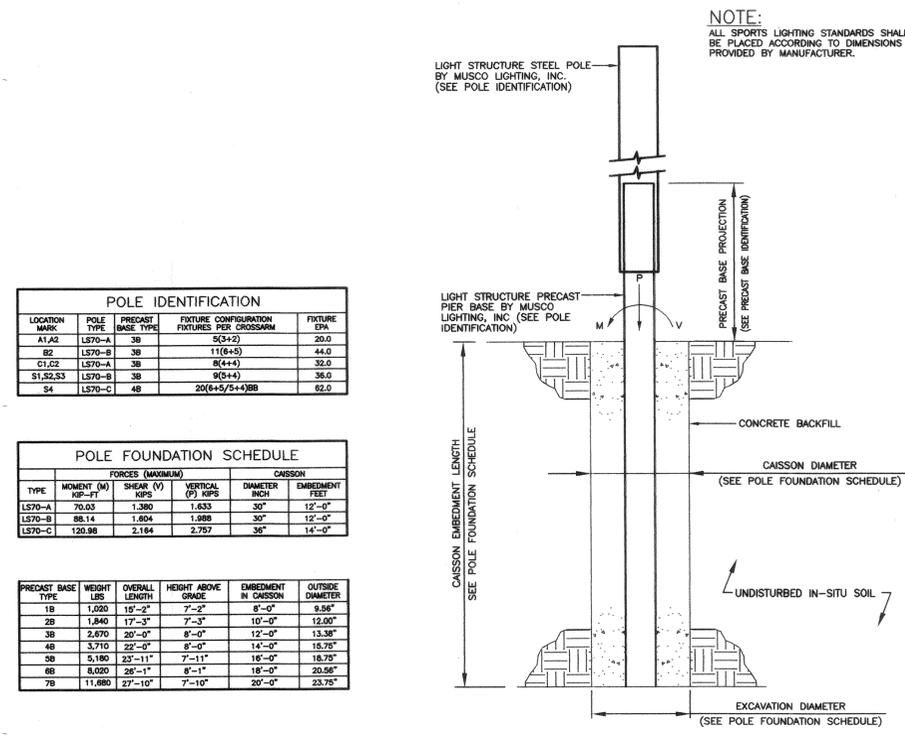
SCALE N.T.S. 2

LIGHTING FIXTURE DETAIL

SCALE N.T.S. 2

POLE BASE NOTES

- GENERAL**
- ALL CONSTRUCTION AND WORKMAN SHIP SHALL CONFORM TO THE UNIFORM BUILDING CODE.
 - WIND: 70 MPH (EXPOSURE C)
 - REFERENCE POLE LOCATION DRAWING FOR ACTUAL POLE PLACEMENT AND SITE LOCATION.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION PROCEDURES AND SAFETY CONDITIONS AT THE JOB SITE.
- SOIL DESIGN PARAMETERS**
- ALLOWABLE END BEARING SOIL PRESSURE: 1,000 PSF
ALLOWABLE LATERAL PASSIVE SOIL BEARING PRESSURE: 200 PSF/FT
 - REFERENCE CHAPTER 18, SECTION 1806.7.2.1 AND TABLE 18-1-A OF THE 1994 EDITION OF THE UNIFORM BUILDING CODE.
 - DESIGN SOIL PARAMETERS ARE AS NOTED. ACTUAL ALLOWABLE SOIL PARAMETERS MUST BE VERIFIED ON SITE.
 - A GEOTECHNICAL ENGINEER SHALL BE AVAILABLE AT THE TIME OF THE FOUNDATION INSTALLATION TO VERIFY THE SOIL DESIGN PARAMETERS AND TO PROVIDE ASSISTANCE IF ANY PROBLEMS ARISE IN FOUNDATION INSTALLATION.
 - ENCOUNTERING SOIL FORMATIONS THAT WILL REQUIRE SPECIAL DESIGN CONSIDERATION OF EXCAVATION PROCEDURES MAY EXIST. POLE FOUNDATIONS MAY NEED TO BE REANALYZED ACCORDING TO THE SOIL CONDITIONS THAT EXIST.
 - IF ANY DISCREPANCIES OR INCONSISTENCIES ARISE, NOTIFY THE ENGINEER OF SUCH DISCREPANCIES. FOUNDATIONS WILL THEN BE REVISED ACCORDINGLY.
 - ALL PIERS AND CONCRETE BACKFILL MUST BEAR ON AND AGAINST FIRM, UNDISTURBED SOIL.
 - ALL EXCAVATIONS MUST BE FREE OF LOOSE SOIL, AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND PLACEMENT OF CONCRETE BACKFILL. CASING MAY BE REQUIRED IF CAVING OCCURS.
 - ALL EXCAVATIONS MUST BE FREE OF WATER OR CONCRETE SHALL BE PLACED WITH A TREMIE PIPE IN ACCORDANCE WITH ACI STANDARD 304.
- CONCRETE BACKFILL**
- CONCRETE BACKFILL SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3,000 PSI. SPECIAL INSPECTION IS NOT REQUIRED. (3,000 PSI CONCRETE STRENGTH NOT REQUIRED BY STRUCTURAL DESIGN.)
 - USE TYPE II PORTLAND CEMENT OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
 - MIX IN CONFORMANCE WITH ASTM C-94. (1" MAX AGG. SIZE)
 - AGGREGATES PER ASTM C-33.
 - PLACE CONCRETE IMMEDIATELY AFTER COMPLETION OF EXCAVATION AND INSPECTION BY THE GEOTECHNICAL ENGINEER. NO EXCAVATIONS SHALL BE LEFT UNPROTECTED OR OPEN OVERNIGHT.
 - CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION (NO CONSTRUCTION JOINT) WITH SPECIAL EQUIPMENT WITH A MAXIMUM FREEFALL OF 5 FT AND TO PREVENT CONCRETE FROM STRIKING THE SIDES OF THE EXCAVATION. VIBRATE TOP 5 FT.
 - CONCRETE BACKFILL SHALL ATTAIN A MINIMUM STRENGTH OF 2,000 PSI PRIOR TO POLE INSTALLATION.
- MISCELLANEOUS**
- FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0" MINIMUM HORIZONTAL CLEARANCE FROM ANY OBSTRUCTION.
 - POLES, FIXTURES, PRECAST BASES, ELECTRICAL ITEMS, PLATFORMS, SPECIFICATIONS, AND INSTALLATION PER MUSCO LIGHTING, INC.
 - FIXTURE: EPA = 4.0 WEIGHT = 25 LBS (PER MUSCO LIGHTING, INC.)



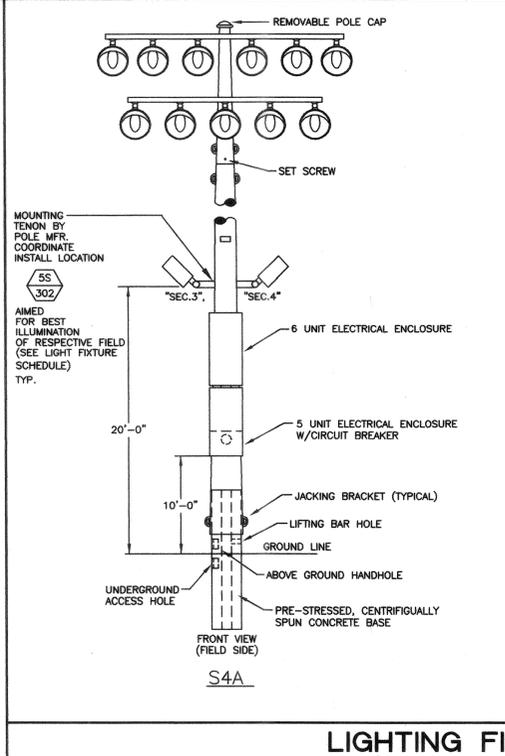
POLE IDENTIFICATION			
LOCATION MARK	POLE TYPE	PRECAST BASE TYPE	FIXTURE CONFIGURATION FIXTURES PER CROSSARM
A1,A2	L570-A	3B	5(3+2)
B2	L570-B	3B	11(6+5)
C1,C2	L570-A	3B	8(4+4)
S1,S2,S3	L570-B	3B	8(4+4)
S4	L570-C	4B	20(6+5/5+4)9B

POLE FOUNDATION SCHEDULE				
TYPE	FORCES (MAXIMUM)			EMBEDMENT FEET
	MOMENT (K) KIP-FT	SWAY (K) KIPS	VERTICAL (P) KIPS	
L570-A	70.03	1.360	1.433	30"
L570-B	88.14	1.804	1.988	30"
L570-C	120.98	2.164	2.757	36"

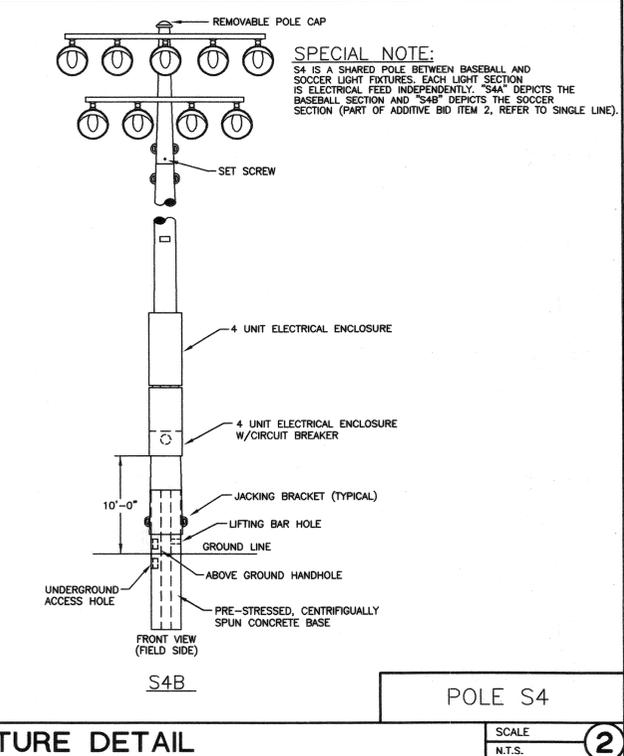
PRECAST BASE TYPE	WEIGHT LBS	OVERALL LENGTH	HEIGHT ABOVE GROUND	EMBEDMENT IN CAISSON	
				DIAMETER INCH	DIAMETER FEET
1B	1,020	15'-2"	7'-2"	8'-0"	8.56'
2B	1,840	17'-3"	7'-3"	10'-0"	12.00'
3B	2,670	20'-0"	8'-0"	12'-0"	13.38'
4B	3,710	22'-0"	8'-0"	14'-0"	15.75'
5B	5,180	23'-11"	7'-11"	16'-0"	18.75'
6B	8,020	26'-1"	8'-1"	18'-0"	20.56'
7B	11,480	27'-10"	7'-10"	20'-0"	23.75'

POLE FOUNDATION DETAIL

SCALE N.T.S. 2



S4A



S4B

POLE S4

LIGHTING FIXTURE DETAIL

SCALE N.T.S. 2

JDSAengineers inc.
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Tel: 951-781-1827 Fax: 951-781-8802
Project Number: 01-750B
Contact Name: CHRIS JENNINGS

Professional Engineer
No. E13883
Exp. 6/30/04
STATE OF CALIFORNIA

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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PREPARED UNDER THE DIRECTION OF
REGISTERED LANDSCAPE ARCHITECT, RLA
EXPIRATION DATE _____ DATE _____
SCALE: _____ NORTH:

CITY OF RIVERSIDE
3900 MAIN STREET
RIVERSIDE, CA

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY _____ BY _____ DATE _____
PRINCIPAL ENGINEER
THIRD DEPARTMENT
CHIEF P.M. ENGR.

BOBBY BONDS PARK
FIELD LIGHTING
2080 UNIVERSITY AVE.
RIVERSIDE, CA
Electrical Plan

PROJECT NO.
E-20
SHEET 2 OF 5
FILE NO. _____

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BID NO. 5985

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POSITION EDGE OF PRINT ON THIS LINE

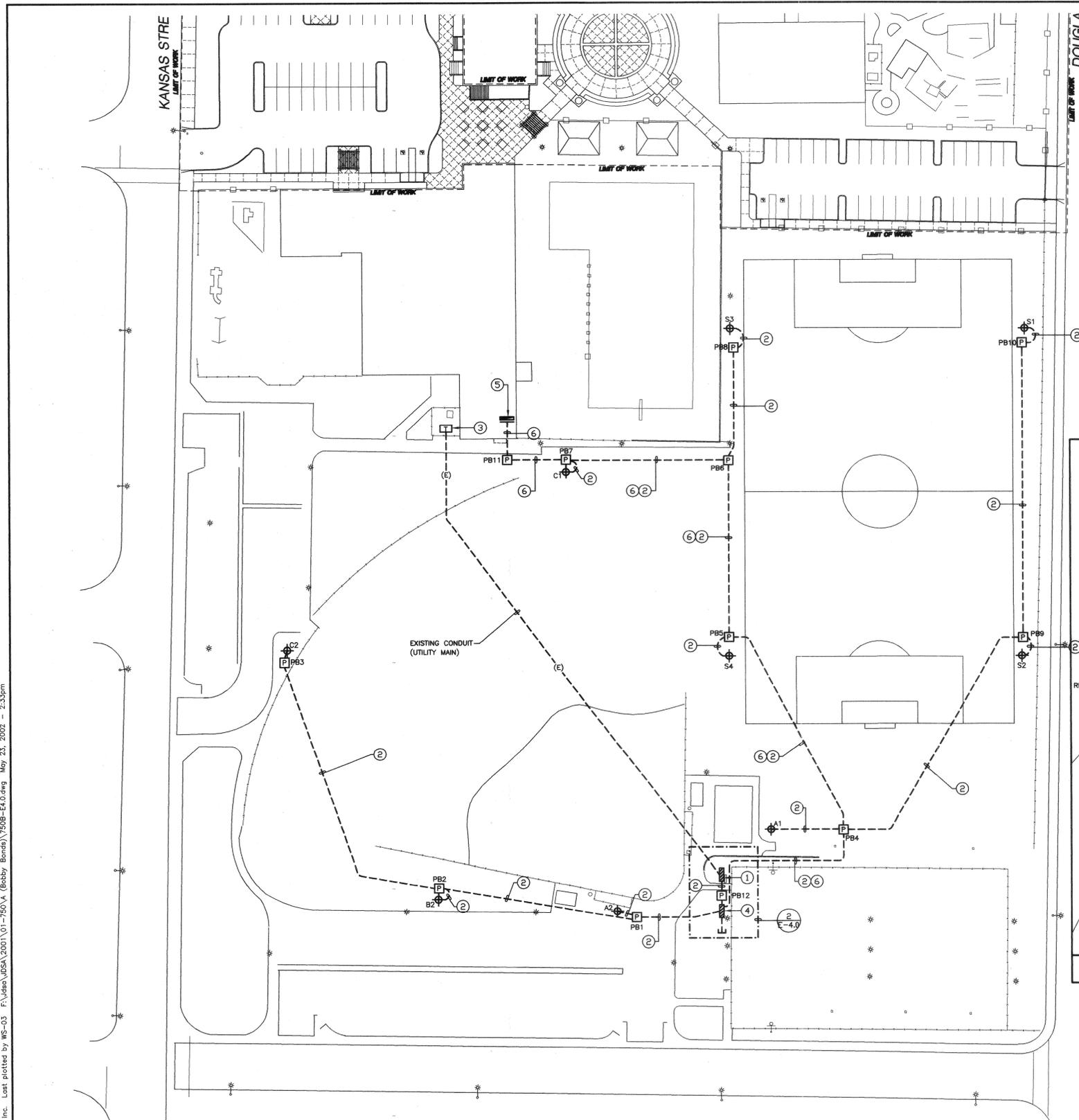
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REORDER BY NUMBER 075AR
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PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
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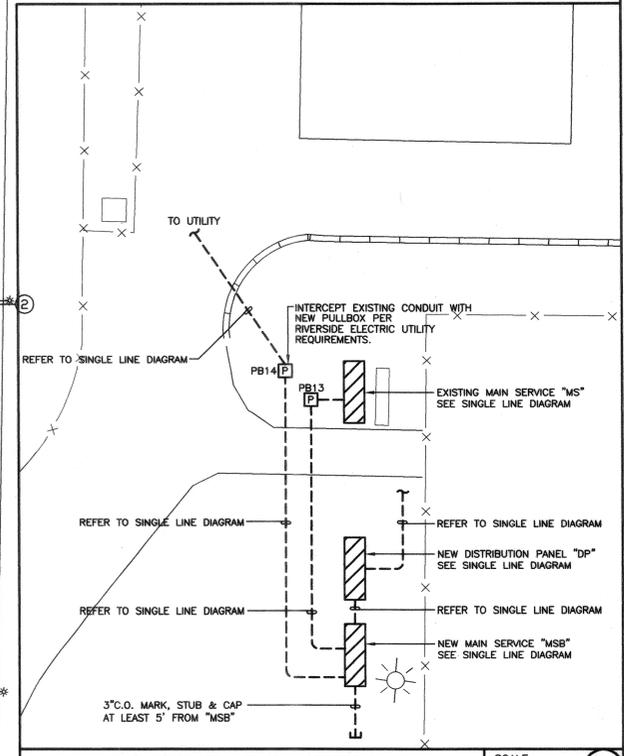
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REORDER BY NUMBER 075AR
POSITION EDGE OF PRINT ON THIS LINE

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REORDER BY NUMBER 075AR
POSITION EDGE OF PRINT ON THIS LINE

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
POSITION EDGE OF PRINT ON THIS LINE



- PLAN NOTES:**
- EXISTING MAIN SWITCHBOARD "MS". SEE SINGLE LINE DIAGRAM.
 - REFER TO SINGLE LINE DIAGRAM FOR ELECTRICAL CONNECTIONS TO FIELD LIGHTS.
 - EXISTING UTILITY TRANSFORMER
 - NEW DISTRIBUTION PANEL "DP": 277/480V. 3Ø 4W.
 - EXISTING "SIEMENS" SIGNAL TERMINAL CABINET "TC-1".
 - NEW (1) 2" C. W / 4 #12 AND 1 #12 E/G (CONTROL CIRCUIT: REFER TO LADDER LOGIC)



UNDERGROUND PULLBOX SCHEDULE

I.D.	SIZE	COVER	COVER I.D.
PB-1, PB-2 PB-4, PB-5 PB-6, PB-12, PB-13	24" X 36"	CONCRETE TRAFFIC COVER	POWER
PB-3, PB-7, PB-8 PB-9, PB-10	13" X 24"	CONCRETE TRAFFIC COVER	POWER
PB-11	13" X 24"	CONCRETE TRAFFIC COVER	CONTROL
PB-14	PER R.P.U.	CONCRETE TRAFFIC COVER	CITY

- SCHEDULE NOTES:**
- 13" X 24" UNDERGROUND PULLBOXES SHALL BE BROOKS #38 SERIES, OR APPROVED EQUAL. PROVIDE WITH BOLT DOWN TRAFFIC COVERS.
 - 24" X 36" UNDERGROUND PULLBOXES SHALL BE BROOKS #100DPB SERIES, OR APPROVED EQUAL. PROVIDE WITH BOLT-DOWN TRAFFIC COVERS.

ENLARGED ELECTRICAL SITE PLAN



PREPARED UNDER THE DIRECTION OF
 REGISTERED LANDSCAPE ARCHITECT, RLA
 EXPIRATION DATE _____ DATE _____
 SCALE: _____ NORTH:
 DATE: 05/23/02

**CITY OF RIVERSIDE
 3900 MAIN STREET
 RIVERSIDE, CA**

MARK	REVISIONS	APPR. DATE	DESIGNED BY	DRAWN BY	CHECKED BY

**CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS**

APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER			
PARK DEPARTMENT			
TRAVEL DIVISION			
CHIEF P.K. ENGR.			

**BOBBY BONDS PARK
 FIELD LIGHTING
 2080 UNIVERSITY AVE.
 RIVERSIDE, CA
 Electrical Plan**

PROJECT NO.
E-4.0
 SHEET 4 OF 5
 FILE NO. _____



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BID NO. 5965

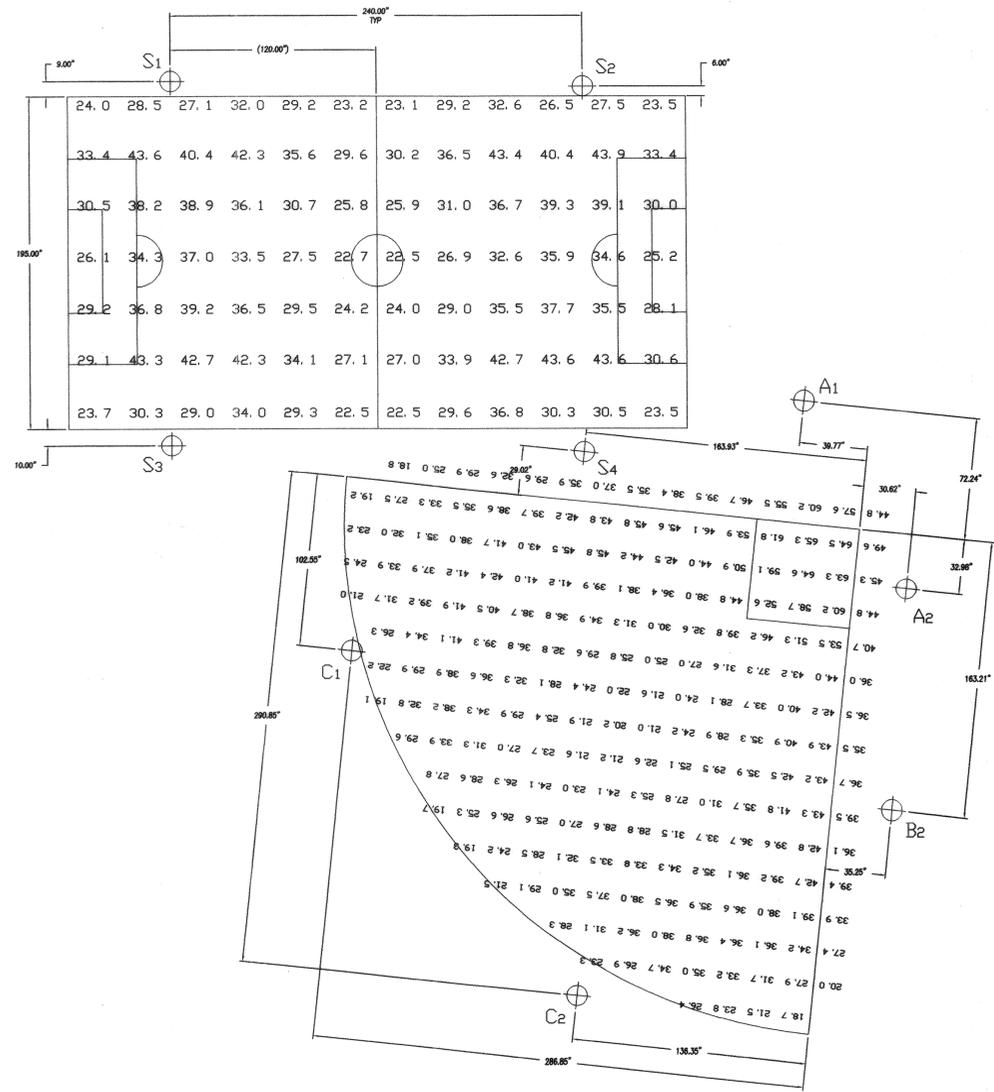
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA REORDER BY NUMBER 075AR POSITION EDGE OF PRINT ON THIS LINE

LIGHTING CALCULATIONS:

FIXTURE TYPE: TLC MZ LAMP TYPE: 1500W MZ LUMENS: 155000 FILE #/DATE: 84745R2 / 24-APR-2002 PREPARED BY: MATT BINDEL

MAINTAINED ILLUMINATION SOCCER HORIZONTAL FOOTCANDLES ON PLANE AT Z= 3 TARGET POINTS: AVERAGE: 32.23 MAXIMUM: 43.90 MINIMUM: 22.47 AVG/MAX: 1.434 MAX/MIN: 1.954 UC (ADJ PTS): 1.587 CV: 0.193 NUMBER OF LUMINAIRES: 36 * KW CONSUMPTION: 134.40 **AVERAGE TILT FACTOR: 0.966 ***RECOVERABLE LIGHT LOSS FACTOR: x 0.800 TOTAL LIGHT LOSS FACTOR (LLF): 0.773

MAINTAINED ILLUMINATION BASEBALL HORIZONTAL FOOTCANDLES ON PLANE AT Z= 3 TARGET POINTS: Infield Outfield AVERAGE: 53.42 32.90 MAXIMUM: 65.33 46.15 MINIMUM: 39.82 18.71 AVG/MAX: 1.341 1.759 MAX/MIN: 1.640 2.487 UC (ADJ PTS): 1.397 1.720 CV: 0.145 0.217 NUMBER OF LUMINAIRES: 48 * KW CONSUMPTION: 134.40 **AVERAGE TILT FACTOR: 0.966 ***RECOVERABLE LIGHT LOSS FACTOR: x 0.800 TOTAL LIGHT LOSS FACTOR (LLF): 0.773



EQUIPMENT LISTING table with columns: Pole Count, Pole Location, Mounting Height, Pole Size, Pole Elev., Fixt./unit, Kilowatt/unit. Includes entries for poles A1-A2, B1-B2, C1-C2, and S1-S3.

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LIGHT DISTRIBUTION PLAN

CITY OF RIVERSIDE 3900 MAIN STREET RIVERSIDE, CA

DESIGNED BY DRAWN BY CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS APPROVED BY BY DATE APPROVED BY DIRECTOR OF PUBLIC WORKS DATE

SCALE N.T.S. 1

JDSAengineers inc. logo and professional engineer seal for Bobby Bonds, No. E13883, Exp. 6/30/04, Project Number 01-750B, Contact Name: CHRIS BENINGS

BOBBY BONDS PARK FIELD LIGHTING 2060 UNIVERSITY AVE RIVERSIDE, CA Electrical Plan

PROJECT NO. E-5.0 SHEET 5 OF 5 FILE NO.

BID NO. 5965