JOHN CLEVELAND COLLEGE

A Specialist Science College

Butt Lane Hinckley Leicestershire LE10 1LE
Tel 01455 632183 Fax 01455 638030 Email jcc.office@jcc.leics.sch.uk Web www.jcc.leics.sch.uk

Acting Principal: Denise Fox BSc, MA (Ed)

Environment and Heritage Services
Community Services Department
Leicestershire County Council
County Hall
Glenfield
Leicestershire
LE3 8TE



22nd September 2007

Dear Sir/Madam

Design and Access Statement

The enclosed application is for the replacement of our existing Redgra all weather pitch with a synthetic pitch. The new pitch will be larger than the existing to accommodate a full size Hockey pitch along with the recommended runoff area; and three Five-A-Side pitch's, this will be carried out by extending into the bank at the top of the existing pitch. The existing pitch has four floodlight columns to one side; the new pitch will have eight floodlight columns, four to each side providing a lighting level of 350 Lux.

The existing pitch is unsuitable to play on and by replacing it with a synthetic pitch it will provide an external sports area for students to use all year round for physical education, and will provide a facility for the colleges' hockey teams to practice and play competition games on. At the moment they have to travel to other venues to practice and play home matches. It will also be available for other schools and colleges, along with community groups and local hockey teams to hire thereby facilitating the requirements of the Governments Extended Schools and Every Child Matters agendas.

The size of the proposed pitch is larger than the existing but this will not affect the surrounding playing fields as the area to be used is a bank that has an old jump pit on the top. As it is a replacement of an existing pitch it will not have an impact on how the college operates or the local area with regards to services and businesses.

The position of the pitch is close to neighbours' gardens but at a lower level and is overlooked by others on the far side of the playing fields. The new pitch will not have an effect on them as the floodlighting will be evenly distributed around the pitch and directed down on to the pitch, where as the existing floodlighting is to one side and shines across the pitch to the bottom of the neighbours' gardens. The new lighting will therefore reduce the amount of light spillage on to neighbours' gardens a copy of the lighting details is enclosed, it has also been designed so that it can be switched in thirds if only one five-a-side pitch is being used. The new fence will be of green in colour so that it blends into the pitch and adjoining playing fields.

The access to the pitch is along existing paths to the two pedestrian gates, there is also one larger set of gates to provide access for maintenance equipment. Once all the works have been carried out the bank and any other areas disturbed during construction will be levelled and topsoil added and then reseeded.

I trust that the above Design and Access statement covers all required areas, if you require any more information then please do not hesitate to contact me.

Yours sincerely

BJ Botterill

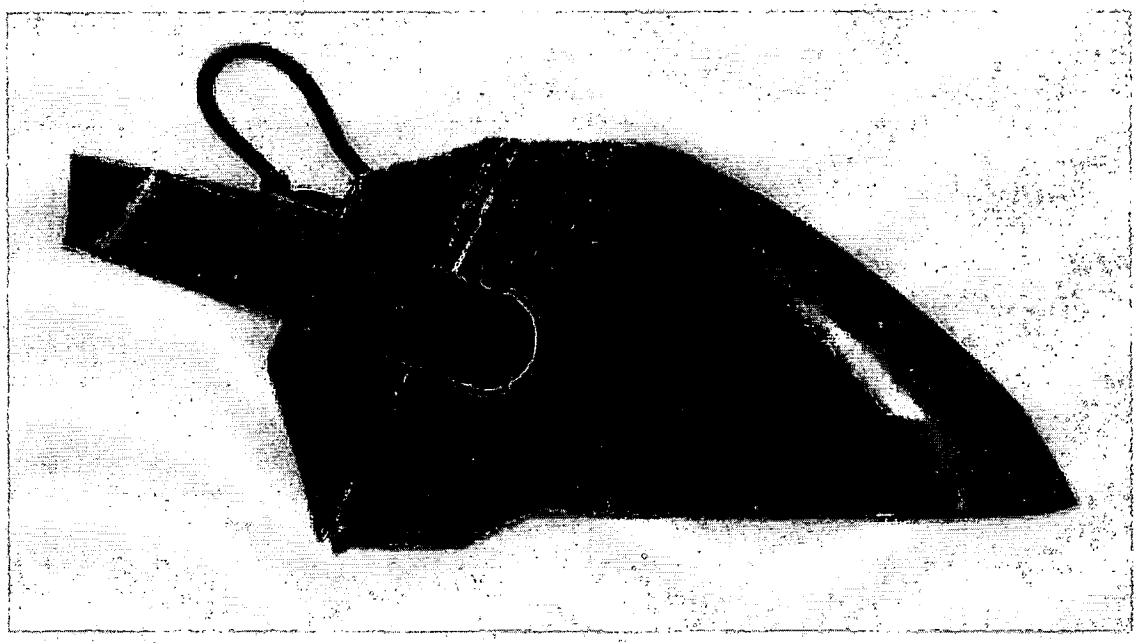
BJ Botterill
Facilities Manager

Science · Specialist Schools Trust · Arts Council England · Investor in People · NMN approved provider · Healthy Schools · Career Mark · The Challenge Award For Excellence in Provision for Able, Gifted & Talented Pupils

DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED

aq-08-27-Project - Low Glare Pitch Floodlighting.

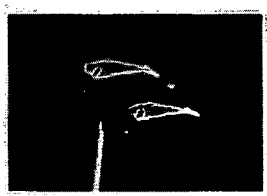
CHRISTY LIGHTING LTD
NO 6 NORTHUMBERLAND COURT
DUKES PARK INDUSTRIAL ESTATE
CHELMSFORD
ESSEX CM2 6UW
01245-451212 FAX 01245-451818.

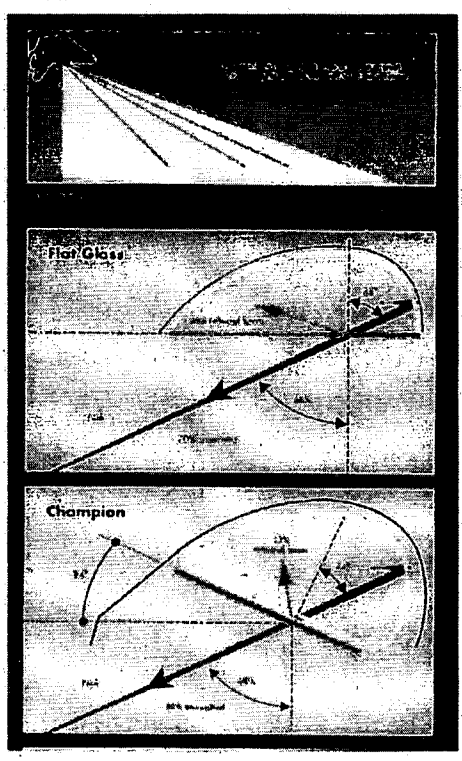


ULTRA LOW GLARE FLOODLIGHTING

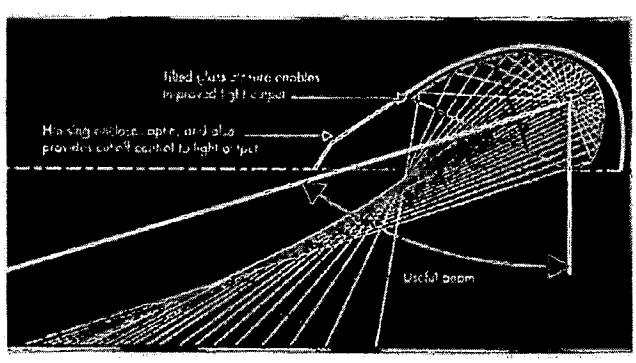
HORIZONTAL GLASS SYSTEM

OPTIONAL ULTRA LOW GLARE BAFFLE .









DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED

a0708-27-Project - Low Glare Pitch Floodlighting.

CHRISTY LIGHTING LTD
NO 8 NORTHUMBERLAND COURT
DUKES PARK INDUSTRIAL ESTATE
CHELMSFORD
ESSEX CM2 6UW
01245-461212 FAX 01245-461818.

15	48																			
0	5	10	15	20	25	30	35	40	45											
50	55	60	65	70	75	80	85	90												
-28	-21	-18	-16	-14	-12	-10	-8	-6	-4											
-2	0	2	4	6	8	10	12	14	16											
18	20	22	27	32	37	42	47	52	57											
62	67	72	77	82	87	92	97	102	104											
106	108	110	112	114	116	118	120													
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0-28∞
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0-23∞
0	7	4	6	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0-18∞
2	1	2	3	3	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0-16∞
10	10	12	13	14	16	9	6	3	0	0	0	0	0	0	0	0	0	0	0	0-14∞
95	99	111	120	112	79	55	38	11	4	1	0	0	0	0	0	0	0	0	0	0-12∞
272	279	286	303	293	339	167	100	46	15	2	0	0	0	0	0	0	0	0	0	0-10∞
581	579	597	590	545	427	313	190	97	33	6	0	0	0	0	0	0	0	0	0	0-8∞
972	958	982	965	884	708	489	306	158	55	11	1	0	0	0	0	0	0	0	0	0-6∞
1336	1304	1324	1299	1201	965	663	413	222	77	15	1	0	0	0	0	0	0	0	0	0-4∞
1532	1498	1501	1469	1362	1109	791	489	269	98	18	2	1	0	0	0	0	0	0	0	0-2∞
1545	1525	1519	1463	1352	1138	846	525	287	112	22	3	1	0	0	0	0	0	0	0	0- 0∞
1430	1415	1397	1332	1234	1077	818	522	283	114	28	4	2	0	0	0	0	0	0	0	0- 2∞
1238	1225	1199	1138	1064	958	750	484	260	109	34	4	4	0	0	0	0	0	0	0	0- 4∞
1014	1005	984	933	875	799	638	422	228	100	37	8	5	0	0	0	0	0	0	0	0- 6∞
798	791	771	727	676	625	511	354	202	96	42	12	5	1	0	0	0	0	0	0	0- 8∞
627	618	598	560	525	486	406	288	178	91	45	17	6	1	0	0	0	0	0	0	0-10∞
514	512	504	474	453	422	350	251	156	89	48	21	9	2	0	0	0	0	0	0	0-12∞
458	462	458	438	418	391	320	239	149	88	52	25	12	3	0	0	0	0	0	0	0-14∞
415	417	417	404	383	360	309	231	147	90	56	29	15	5	0	0	0	0	0	0	0-16∞
371	377	382	369	348	327	285	222	146	94	59	33	18	6	0	0	0	0	0	0	0-18∞
338	345	351	342	318	301	265	212	148	101	63	36	21	8	0	0	0	0	0	0	0-20∞
307	314	317	313	293	280	248	205	151	104	66	39	23	7	0	0	0	0	0	0	0-22∞
253	264	266	273	257	247	228	201	149	106	71	44	25	6	0	0	0	0	0	0	0-27∞
236	238	236	241	250	240	226	187	135	98	66	40	20	9	0	0	0	0	0	0	0-32∞
202	204	204	205	214	219	212	170	117	85	56	32	13	6	0	0	0	0	0	0	0-37∞
181	182	180	178	184	199	191	159	106	72	44	24	6	3	0	0	0	0	0	0	0-42∞
184	184	182	179	180	188	182	154	104	66	40	19	4	2	0	0	0	0	0	0	0-47∞
203	192	190	183	175	170	166	145	105	64	36	15	3	1	0	0	0	0	0	0	0-53∞
161	146	153	154	143	133	123	109	83	50	28	9	1	1	0	0	0	0	0	0	0-57∞
68	67	72	73	62	53	52	54	43	21	10	3	1	1	0	0	0	0	0	0	0-62∞
56	57	61	57	52	49	46	39	26	12	6	2	1	0	0	0	0	0	0	0	0-67∞
67	69	71	68	63	58	49	35	21	11	4	1	1	0	0	0	0	0	0	0	0-72∞
93	88	81	76	66	58	46	31	17	9	3	1	0	0	0	0	0	0	0	0	0-77∞
86	80	73	68	58	53	44	31	14	5	2	1	0	0	0	0	0	0	0	0	0-82∞
50	50	50	42	41	41	35	25	13	4	2	1	0	0	0	0	0	0	0	0	0-87∞
38	37	38	35	31	29	28	24	12	4	1	0	0	0	0	0	0	0	0	0	0-92∞
40	40	41	37	27	22	22	20	10	3	1	0	0	0	0	0	0	0	0	0	0-97∞
43	45	46	36	25	17	15	13	7	2	0	0	0	0	0	0	0	0	0	0	0-102∞
41	43	45	36	24	15	13	10	6	2	0	0	0	0	0	0	0	0	0	0	0-104∞
40	42	43	34	23	14	10	7	5	2	0	0	0	0	0	0	0	0	0	0	0-106∞
36	38	38	31	21	12	8	5	4	1	0	0	0	0	0	0	0	0	0	0	0-108∞
28	30	32	28	17	9	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0-110∞
20	24	25	20	12	7	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0-112∞
12	15	15	12	7	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0-114∞
5	6	7	5	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0-116∞
1	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0-118∞
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0-120∞

V2 CHANP2SLA CHP2SB_cf
Champion - HQI-TS 2000W/NDL (Long Accl pk @ 62°
measured by Thorn FAND 18/09/2003



THE BRITISH ASTRONOMICAL ASSOCIATION

GOOD LIGHTING AWARD

for protecting the night sky

On behalf of all who enjoy the splendour of the night sky, the British Astronomical Association thanks

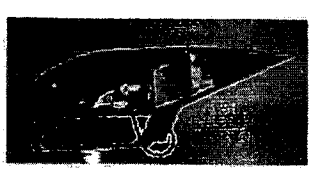
Christy Lighting Ltd.

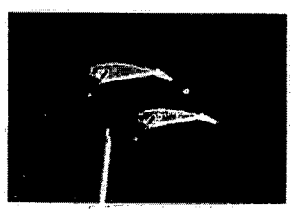
for producing "sky friendly" sports and commercial lighting at

The English Institute of Sport at the University of Bath

Its whole surrounding lighting scheme, the most careful and intelligent we have encountered in the country, is a model for coming generations

Past President BAA *Past President BAA*





DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED

d0708 27-Project - Low Glare Pitch Floodlighting 350 lux.

CHRISTY LIGHTING LTD
NO 8 NORTHUMBERLAND COURT
DUKES PARK INDUSTRIAL ESTATE
CHELMSFORD
ESSEX CM2 6UW
01245 461212 FAX 01245 461818.

Nch820-16m mh @ 65m-350 lux Standard

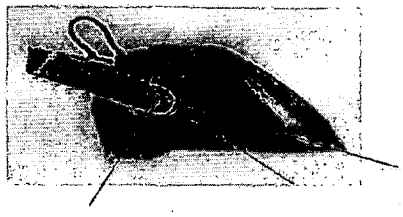
24 8no15m @13/45

HORIZONTAL ILLUMINANCE VALUES

Y/X	.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	180.0
.0	0.0	0.0	0.0	0.0	0.0	.1	.3	.3	.3	.3	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	.1	.5	1.0	1.2	1.2	1.0	.5	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	.1	.2	.3	2.0	4.0	5.7	5.7	4.0	2.0	.3	.2	.1	0.0	0.0	0.0	0.0	0.0
30.0	0.0	.1	.2	2.0	6.1	10.1	24.4	25.9	25.9	24.4	10.1	6.1	2.0	.2	.1	0.0	0.0	0.0	0.0
40.0	.1	.2	1.0	31.7	70.4	125.2	128.1	137.4	137.4	128.1	125.2	70.4	31.7	1.0	.2	.1	0.0	0.0	0.0
50.0	.1	.3	4.0	40.5	192.3	402.4	369.4	405.8	405.8	369.4	402.4	192.3	40.5	4.0	.3	.1	0.0	0.0	0.0
60.0	.2	.4	2.4	17.8	262.4	406.2	495.6	618.2	618.2	495.6	406.2	262.4	17.8	2.4	.4	.2	0.0	0.0	0.0
70.0	.2	.4	1.6	21.3	175.9	316.3	497.6	650.9	650.9	497.6	316.3	175.9	21.3	1.6	.4	.2	.1	0.0	0.0
80.0	.1	.4	3.3	36.5	160.5	355.1	497.4	536.6	536.6	497.4	355.1	160.5	36.5	3.3	.4	.1	.1	0.0	0.0
90.0	.2	.3	2.5	28.2	154.1	305.5	440.1	562.2	562.2	440.1	305.5	154.1	28.2	2.5	.3	.2	.1	0.0	0.0
100.0	.2	.3	2.5	28.2	154.1	305.5	440.1	562.2	562.2	440.1	305.5	154.1	28.2	2.5	.3	.2	.1	0.0	0.0
110.0	.1	.4	3.3	36.5	160.5	355.1	497.4	536.6	536.6	497.4	355.1	160.5	36.5	3.3	.4	.1	.1	0.0	0.0
120.0	.2	.4	1.6	21.3	175.9	316.3	497.6	650.9	650.9	497.6	316.3	175.9	21.3	1.6	.4	.2	.1	0.0	0.0
130.0	.2	.4	2.4	17.8	262.4	406.2	495.6	618.2	618.2	495.6	406.2	262.4	17.8	2.4	.4	.2	0.0	0.0	0.0
140.0	.1	.3	4.0	40.5	192.3	402.4	369.4	405.8	405.8	369.4	402.4	192.3	40.5	4.0	.3	.1	0.0	0.0	0.0
150.0	.1	.2	1.0	31.7	70.4	125.2	128.1	137.4	137.4	128.1	125.2	70.4	31.7	1.0	.2	.1	0.0	0.0	0.0
160.0	0.0	.1	.2	2.0	6.1	10.1	24.4	25.9	25.9	24.4	10.1	6.1	2.0	.2	.1	0.0	0.0	0.0	0.0
170.0	0.0	0.0	.1	.2	.3	2.0	4.0	5.7	5.7	4.0	2.0	.3	.2	.1	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	.1	.5	1.0	1.2	1.2	1.0	.5	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190.0	0.0	0.0	0.0	0.0	0.0	.1	.3	.3	.3	.3	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.0	0.0	0.0	0.0	0.0	0.0	0.0	.1	.1	.1	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
210.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
220.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RESULTS FOR THE SUB GRID RUN

Maximum Illuminance.....	630.932
Minimum Illuminance.....	305.506
Average Illuminance.....	457.288
Diversity (Min/Max).....	.469 = 0.5
Uniformity (Min/Avg).....	.668 = 0.7
Utilisation Factor.....	.357



Champion 3272 Adjustable Beam & Optional baffle

DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED

CHRISTY LIGHTING LTD
NO 6 NORTH [illegible]
DUKES PARK INDUSTRIAL ESTATE
CHELMSFORD
ESSEX CM2 6UW
01245 461212 FAX 01245 461818.

80708-32-Program - Low Glare Pitch Floodlighting 350 Lux.

VERTICAL ILLUMINANCE FOR ILE ENVIRONMENTAL ZONES E.1, E.2 & E.3.

Mch820-16m mh 9 65m-350 Lux Standard.

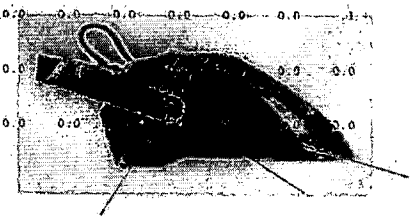
24' 8no15m @13/45

ILLUMINANCE NORMAL TO TV CAMERA

Y/X	.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	180.0
.0	0.0	0.0	.1	.1	.2	.4	1.4	1.6	1.6	1.4	.4	.2	.1	.1					
10.0	.1	.1	.1	.2	.5	2.2	4.2	4.9	4.9	4.2	2.2	.5	.2	.1	.1	.1	.1	.1	.1
20.0	.2	.3	.3	.7	1.0	6.6	13.3	17.9	17.9	13.3	6.6	1.0	.7	.3	.3	.2	.1	.1	.1
30.0	.2	.5	.9	4.1	9.7	22.6	49.1	53.6	53.6	49.1	22.6	9.7	4.1	.9	.5	.2	.1	.1	.1
40.0	.4	1.0	2.7	34.0	50.8	82.2	127.9	147.7	147.7	127.9	82.2	50.8	34.0	2.7	1.0	.4	.2	.2	.1
50.0	.7	1.4	6.8	29.6	46.1	81.5	185.2	195.6	195.6	185.2	81.5	46.1	29.6	6.8	1.4	.7	.3	.3	.1
60.0	.9	2.1	5.8	17.6	52.5	111.1	195.3	237.8	237.8	195.3	111.1	52.5	17.6	5.8	2.1	.9	.3	.2	.1
70.0	1.0	2.2	6.3	27.6	88.0	105.6	174.1	234.2	234.2	174.1	105.6	88.0	27.6	6.3	2.2	1.0	.5	.3	.2
80.0	.9	2.3	8.6	37.7	66.8	97.3	195.3	260.4	260.4	195.3	97.3	66.8	37.7	8.6	2.3	.9	.5	.3	.2
90.0	1.0	2.0	7.4	30.9	51.5	75.7	176.7	333.2	333.2	175.7	75.7	51.5	30.9	7.4	2.0	1.0	.4	.2	.2
100.0	1.0	2.0	7.4	30.9	51.5	75.7	175.7	333.2	333.2	175.7	75.7	51.5	30.9	7.4	2.0	1.0	.4	.2	.2
110.0	.9	2.3	8.6	37.7	66.8	97.3	195.3	260.4	260.4	195.3	97.3	66.8	37.7	8.6	2.3	.9	.5	.3	.2
120.0	1.0	2.2	6.3	27.6	88.0	105.6	174.1	234.2	234.2	174.1	105.6	88.0	27.6	6.3	2.2	1.0	.5	.3	.2
130.0	.9	2.1	5.8	17.6	52.5	111.1	195.3	237.8	237.8	195.3	111.1	52.5	17.6	5.8	2.1	.9	.3	.2	.1
140.0	.7	1.4	6.8	29.6	46.1	81.5	185.2	195.6	195.6	185.2	81.5	46.1	29.6	6.8	1.4	.7	.3	.3	.1
150.0	.4	1.0	2.7	34.0	50.8	82.2	127.9	147.7	147.7	127.9	82.2	50.8	34.0	2.7	1.0	.4	.2	.2	.1
160.0	.2	.5	.9	4.1	9.7	22.6	49.1	53.6	53.6	49.1	22.6	9.7	4.1	.9	.5	.2	.1	.1	.1
170.0	.2	.3	.3	.7	1.0	6.6	13.3	17.9	17.9	13.3	6.6	1.0	.7	.3	.3	.2	.1	.1	.1
180.0	.1	.1	.1	.2	.5	2.2	4.2	4.9	4.9	4.2	2.2	.5	.2	.1	.1	.1	.1	.1	.1
190.0	0.0	0.0	.1	.1	.2	.4	1.4	1.6	1.6	1.4	.4	.2	.1	.1	0.0	0.0	.1	.1	.1
200.0	.1	.1	.1	0.0	.1	.3	.4	.4	.4	.4	.3	.1	0.0	.1	.1	.1	0.0	0.0	0.0
210.0	.1	0.0	0.0	0.0	0.0	.1	.2	.3	.2	.2	.1	0.0	0.0	0.0	0.0	.1	.1	0.0	0.0
220.0	0.0	0.0	0.0	0.0	0.0	.1	.1	.1	.1	.1	.1	0.0	0.0	0.0	0.0	0.0	.1	.1	0.0
230.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.1
240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
250.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Environmental Zone E1 = not Exceeding 2 Lux Vertical.
Environmental Zone E2 = not Exceeding 5 Lux Vertical.
Environmental Zone E3 = not Exceeding 10 Lux Vertical.

Maximum Illuminance..... 333.187



Champion 3272 Adjustable Beam & Optional baffle

Environmental Zone E1 = not Exceeding 2 Lux Vertical.
Environmental Zone E2 = not Exceeding 5 Lux Vertical.
Environmental Zone E3 = not Exceeding 10 Lux Vertical.
Environmental Zone E4 = not Exceeding 25 Lux Vertical.

a0758-27-Project - Low Glare Pitch Floodlighting 350 Lux.

CHRISTY LIGHTING LTD
NO 6 NORTHUMBERLAND COURT
DUKES PARK INDUSTRIAL ESTATE
CHELMSFORD
ESSEX CM2 6UW
01245-451212 FAX 01245-451818.

DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED

Mch820-16m mh @ 65m 350 Lux Standard.

24 8h015m 013/15

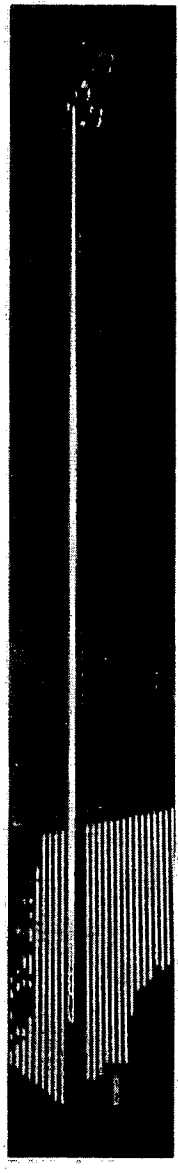
FLOOD NO	FLOODLIGHT LOCATION X	Y	H	AIMING ELEV	DETAILS NORZ	X	Y	TOTAL FILE	DATA FLUX
1	42.5	49.0	16.5	60.9	158.2	70.0	60.0	230.0	3272
2	42.5	50.0	16.5	66.6	148.4	75.0	70.0	230.0	3272
3	42.5	51.0	16.5	67.6	133.5	70.0	80.0	230.0	3272
4	42.5	81.0	16.5	64.5	217.4	70.0	60.0	230.0	3272
5	42.5	82.0	16.5	59.0	180.0	70.0	82.0	.0	3272
6	42.5	83.0	16.5	63.0	148.3	70.0	100.0	230.0	3272
7	42.5	107.0	16.5	63.0	211.7	70.0	90.0	230.0	3272
8	42.5	108.0	16.5	59.0	180.0	70.0	108.0	.0	3272
9	42.5	109.0	16.5	64.5	142.6	70.0	130.0	230.0	3272
10	42.5	139.0	16.5	67.6	226.5	70.0	110.0	230.0	3272
11	42.5	140.0	16.5	66.6	211.6	75.0	120.0	230.0	3272
12	42.5	141.0	16.5	60.9	201.8	70.0	130.0	230.0	3272
13	107.5	49.0	16.5	60.9	21.8	80.0	60.0	230.0	3272
14	107.5	50.0	16.5	66.6	31.6	75.0	70.0	230.0	3272
15	107.5	51.0	16.5	67.6	46.5	80.0	80.0	230.0	3272
16	107.5	81.0	16.5	64.5	322.6	80.0	60.0	230.0	3272
17	107.5	82.0	16.5	59.0	.0	80.0	82.0	.0	3272
18	107.5	83.0	16.5	63.0	31.7	80.0	100.0	230.0	3272
19	107.5	107.0	16.5	63.0	328.3	80.0	90.0	230.0	3272
20	107.5	108.0	16.5	59.0	.0	80.0	108.0	.0	3272
21	107.5	109.0	16.5	64.5	37.4	80.0	130.0	230.0	3272
22	107.5	139.0	16.5	67.6	313.5	80.0	110.0	230.0	3272
23	107.5	140.0	16.5	66.6	328.4	75.0	120.0	230.0	3272
24	107.5	141.0	16.5	60.9	338.2	80.0	130.0	230.0	3272

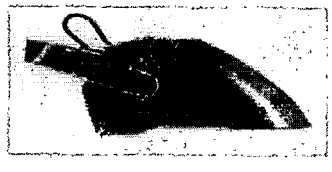
Television camera position.

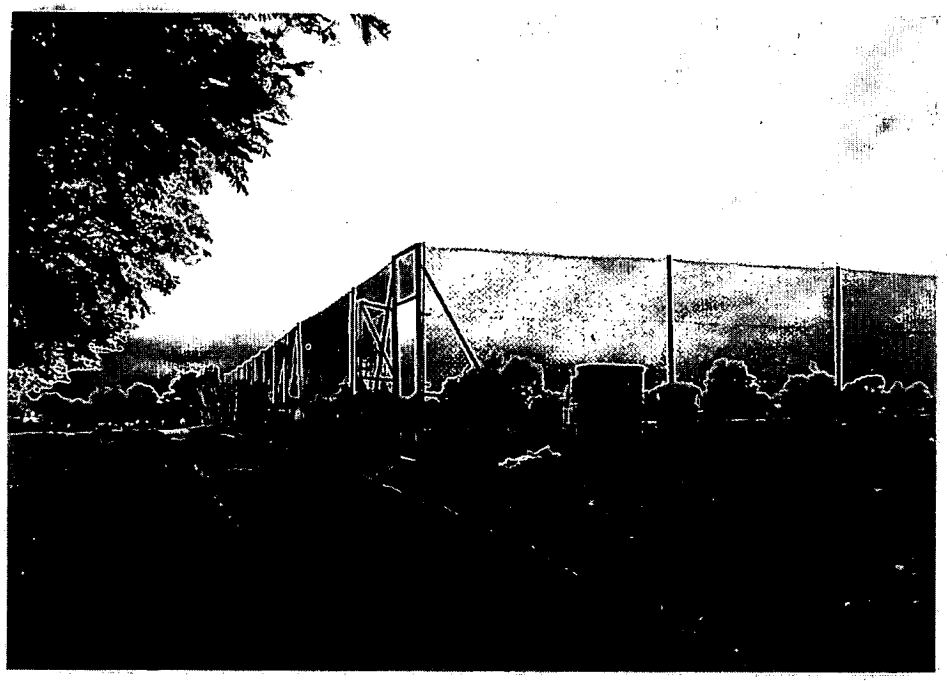
X co-ordinate= 75.000

Y co-ordinate= 95.000

Height = .500





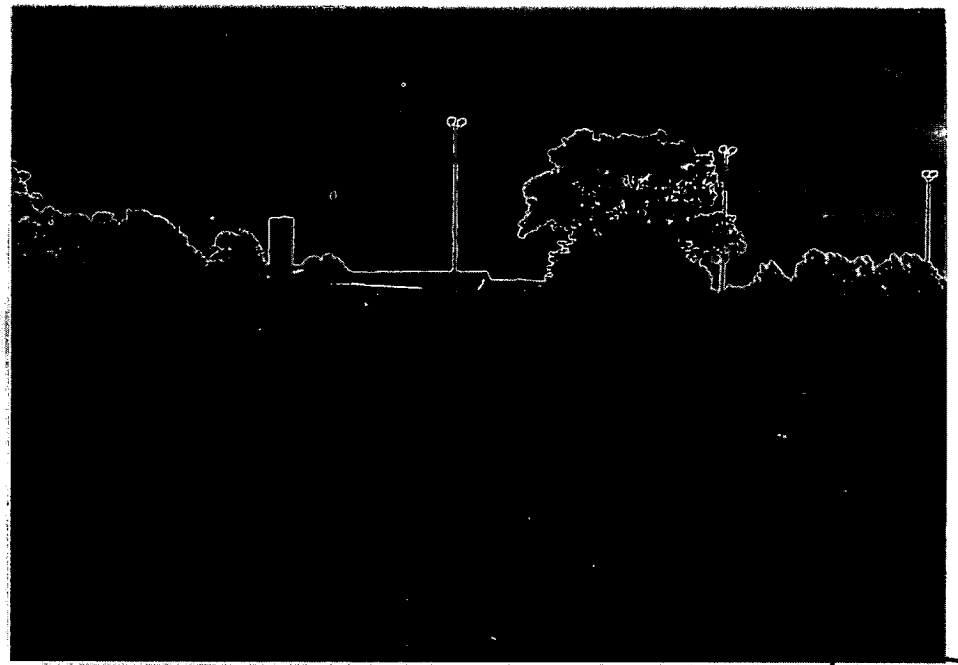


DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED







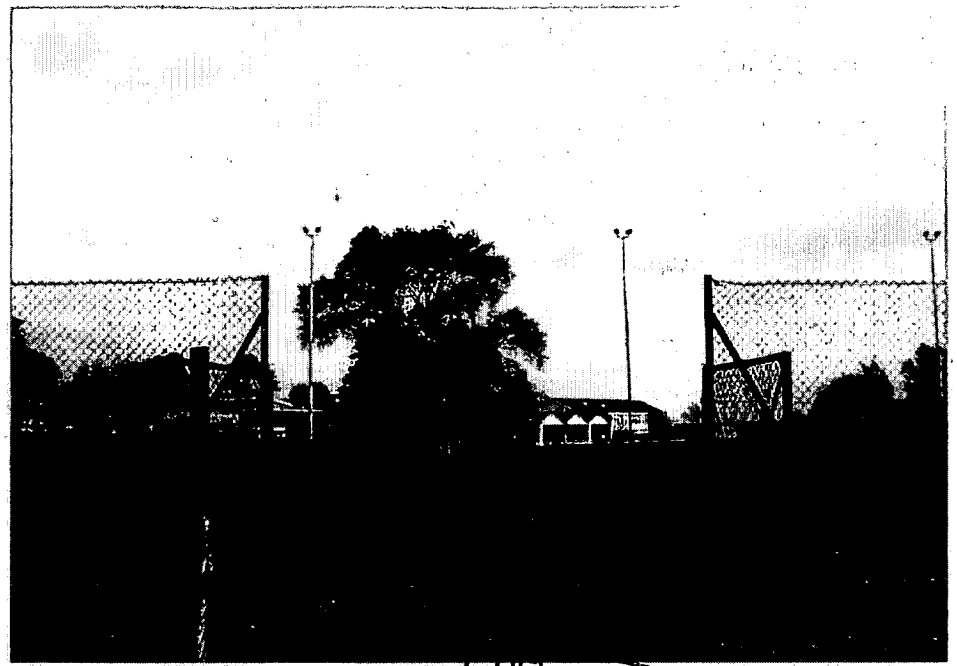




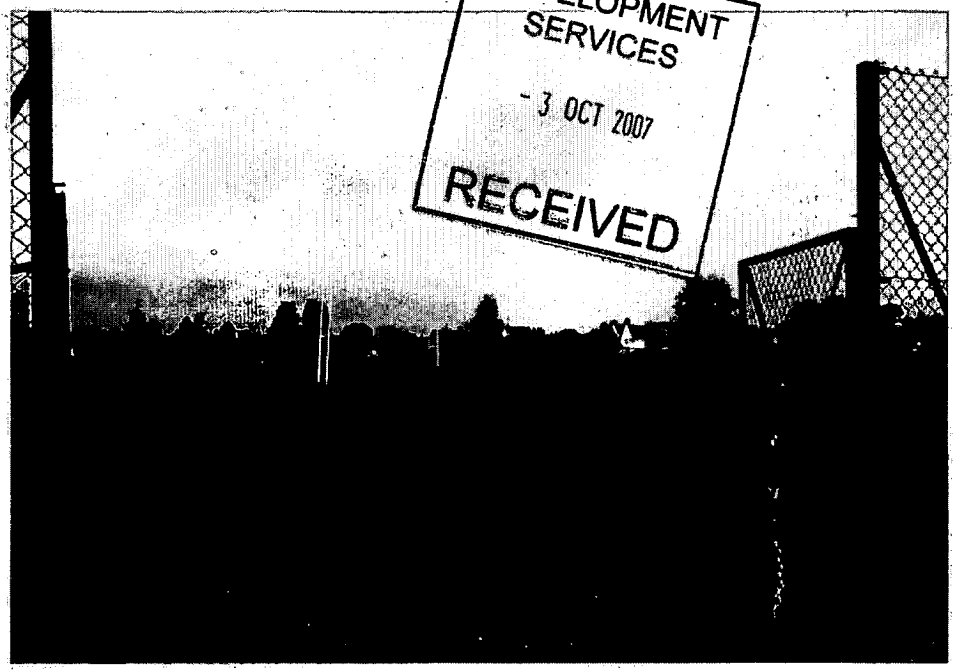


DEVELOPMENT SERVICES
- 3 OCT 2007
RECEIVED









DEVELOPMENT
SERVICES
- 3 OCT 2007
RECEIVED