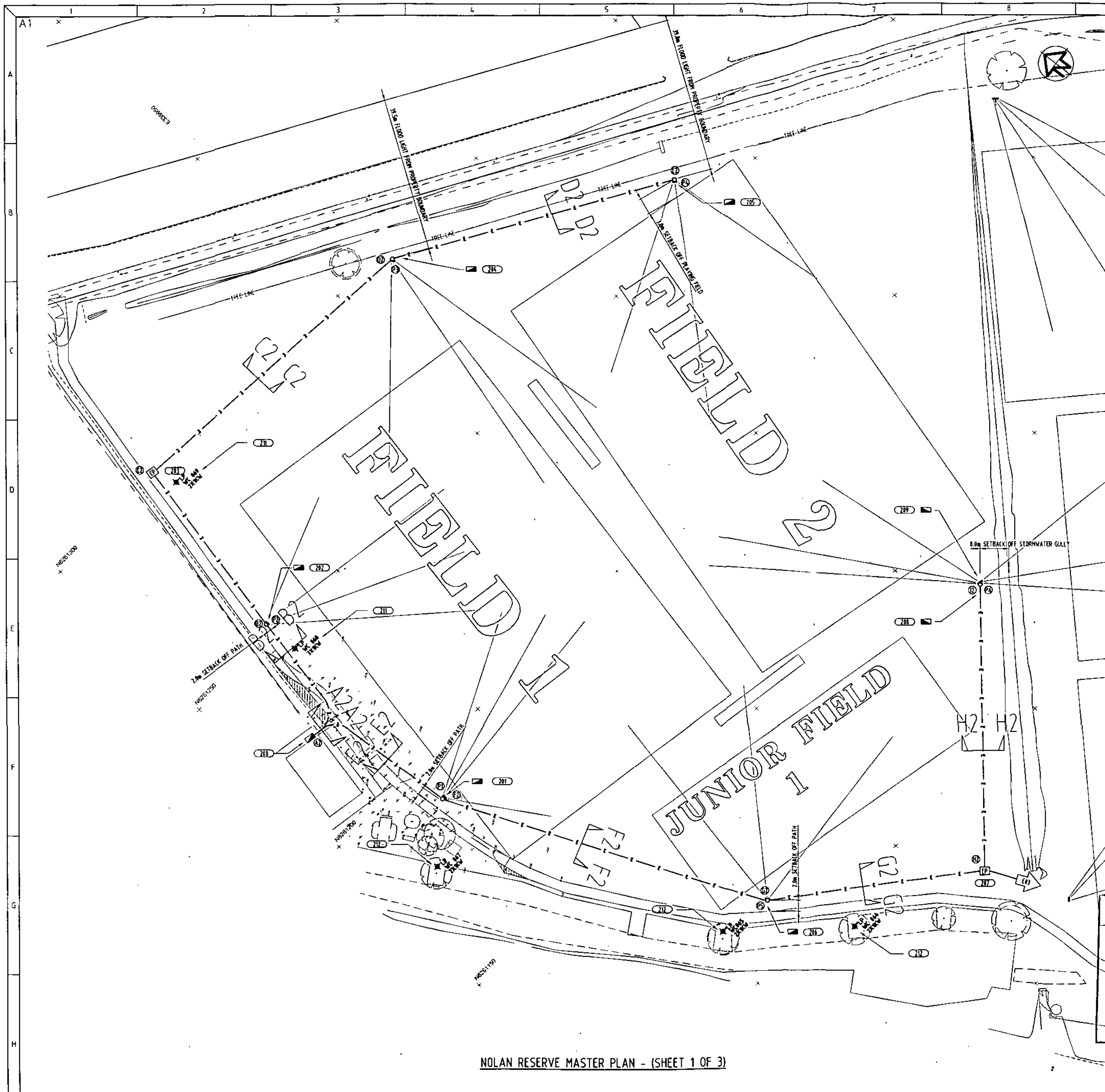
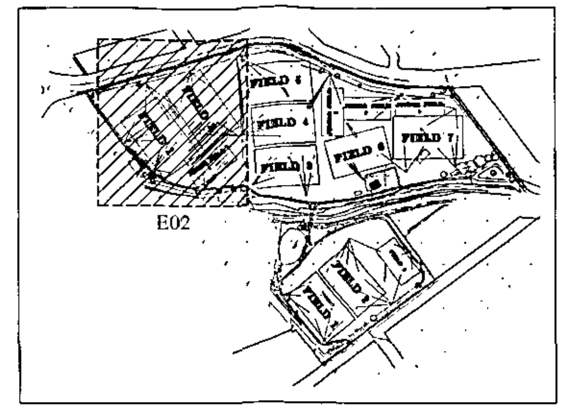


NOLAN RESERVE MASTER PLAN - (SHEET 1 OF 3)



KEYPLAN

ELECTRICAL NOTES:

- (200) MDBA-NR (NOLAN RESERVE MASTER DISTRIBUTION BOARD A) TO BE MOUNTED ON THE FACADE WALL AT GROUND LEVEL NORTH EASTERN CORNER. THE DISTRIBUTION BOARD SHALL CONTAIN SWITCHING CONTROL FOR THE FLOOD LIGHTING. REFER TO E?? SINGLE LINE DIAGRAM.
- (201) NRDBF1L1 (NOLAN RESERVE FIELD 1 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF THE FLUSH FITTING ACCESS HOLE WITHIN POLE 1. AT THE FLUSH FITTING ACCESS DOOR THE LIGHTING SUPPLIER WILL HOUSE LUMINAIRE CONTROL GEAR WHICH ARE CONNECTED TO EACH LIGHT FITTING. ELECTRICAL SUBCONTRACTOR TO SUPPLY DISTRIBUTION BOARD AND TERMINATE SUPPLY AND SUBMAINS TO EACH LUMINAIRE CONTROL GEAR AS DETAILED IN E?? SINGLE LINE DIAGRAM, I.E. LIMIT OF CONTRACT.
- (202) NRDBF1L2 (NOLAN RESERVE FIELD 1 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 2. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (203) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (204) NRDBF1L3 (NOLAN RESERVE FIELD 1 FLOOD LIGHT DISTRIBUTION 3) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 3. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (205) NRDBF2L1 (NOLAN RESERVE FIELD 2 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 4. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (206) NRDBJF1L1 (NOLAN RESERVE JUNIOR FIELD 1 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 5. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (207) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (208) NRDBF2L2 (NOLAN RESERVE FIELD 2 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 6. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (209) NRDBF4L1 (NOLAN RESERVE FIELD 4 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 6. REFER TO NOTE 201 LIMIT OF CONTRACT.
- (210) REFER TO E06 SECTIONAL DETAILS AND SCOPE OF WORKS, FOR WORKS ASSOCIATED WITH E02.
- (211) EXISTING LIGHT POLE CABLING TO BE DECOMMISSIONED AND REMOVED. EXISTING LIGHT POLE TO BE REMOVED. EXISTING FLOOD LIGHTS TO BE REMOVED.
- (212) EXISTING LIGHT POLE TO REMAIN IN SERVICE FOR CAR PARK FLOOD LIGHTING.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH
DA 2009 / 1659
WARRINGAH COUNCIL

0 10 20 30 40 50 METRES
(Scale 1: 500 on A1, 1:1,000 on A3)

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV		0-0	0-1	1-0	1-1	1-2		
DISCIPLINE DRAWING NO.		REVISION OR DATE						
ARCH	M-PLAN	11.6.09	11.6.09	11.6.09	11.6.09	11.6.09		
STRUCT								
MECH								
ELECT	SLA N2877				26.11.09	26.11.09		
SURVEY	4111	22.6.09	22.6.09	22.6.09	22.6.09	22.6.09		

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The installation of services must only commence after drawings have been issued for contract purposes

STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
0-0	PRELIMINARY DESIGN	DB	8.10.09
0-1	PRELIMINARY DESIGN ADDENDUM	DB	2.11.09
1-0	ISSUED FOR DA	KZ	16.11.09
1-1	RE-ISSUED FOR DA	DB	1.12.09
1-2	NOTES ON EXISTING LIGHT POLES FOR DA	DB	4.12.09

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Telephone: (02) 9719 3700
Facsimile: (02) 9719 3711
E-Mail: email@bucktonlysenko.com.au

PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
ELECTRICAL RETICULATION
SHEET 1 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381E02_12

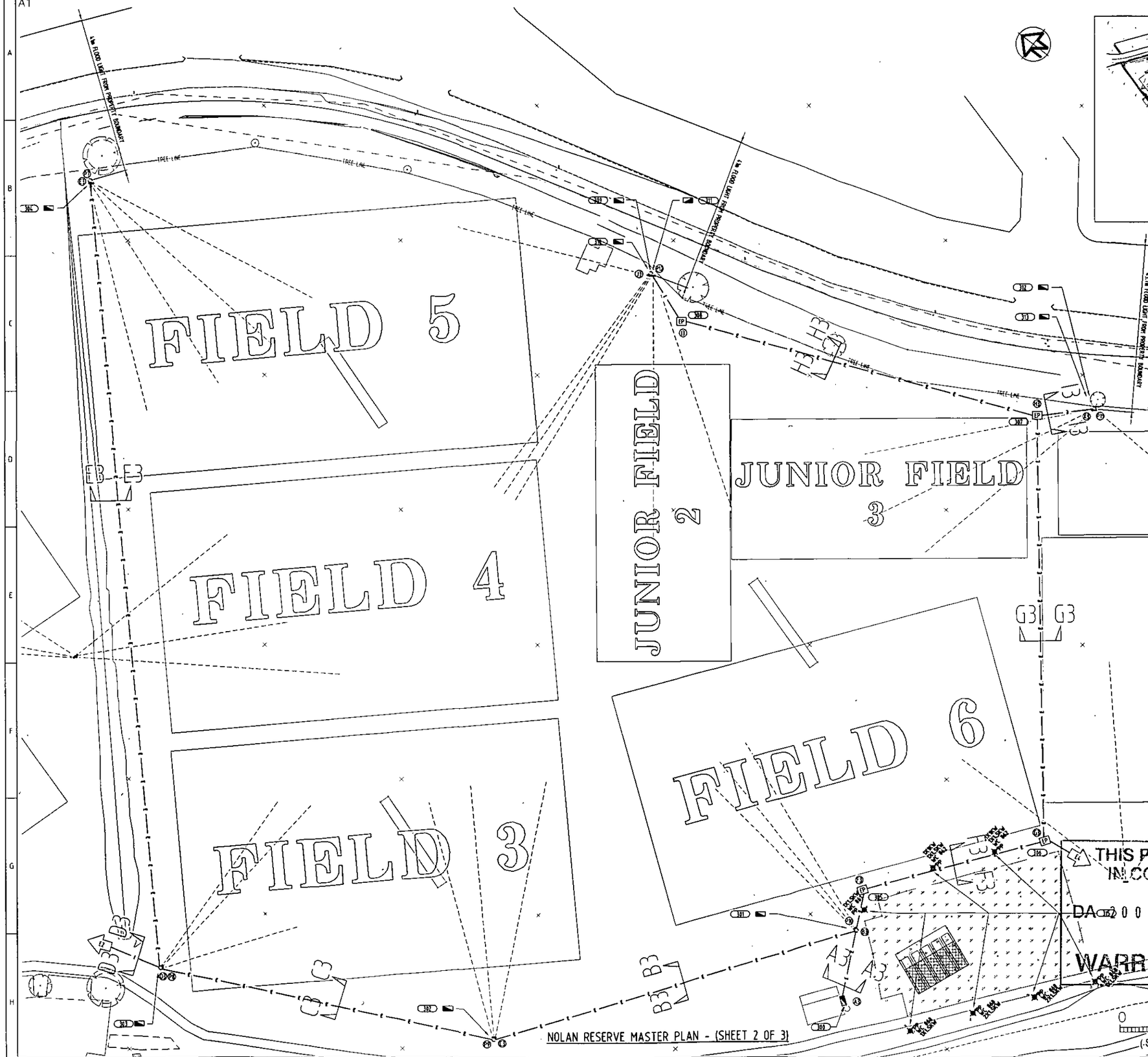
CHECKED				APPROVED			
1	2	3	C	1	2	3	C

DRAWING STATUS LEGEND

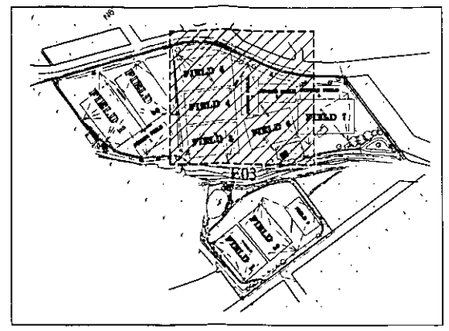
0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES
NOTE:	DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

PROJECT	STATUS	REVISION	DRAWING No
25381	1	2	E02

A1



NOLAN RESERVE MASTER PLAN - (SHEET 2 OF 3)



KEYPLAN

ELECTRICAL NOTES:

360 MDBB-NR (NOLAN RESERVE MASTER DISTRIBUTION BOARD B) TO BE MOUNTED ON THE EASTERN FACADE WALL AT GROUND LEVEL ADJACENT TO PUMP CONTROL PANEL. THE DISTRIBUTION BOARD SHALL CONTAIN SWITCHING CONTROL FOR THE FLOOD LIGHTING. REFER TO E?? SINGLE LINE DIAGRAM.

361 NRDBF4L1 (NOLAN RESERVE FIELD 4 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF THE FLUSH FITTING ACCESS HOLE WITHIN POLE 10. AT THE FLUSH FITTING ACCESS DOOR THE LIGHTING SUPPLIER WILL HOUSE LUMINAIRE CONTROL GEAR WHICH ARE CONNECTED TO EACH LIGHT FITTING. ELECTRICAL SUBCONTRACTOR TO SUPPLY DISTRIBUTION BOARD AND TERMINATE SUPPLY AND SUBMAINS TO EACH LUMINAIRE CONTROL GEAR AS DETAILED IN E?? SINGLE LINE DIAGRAM, I.E. LIMIT OF CONTRACT.

362 NRDBF3L2 (NOLAN RESERVE FIELD 3 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 9. REFER TO NOTE 301 LIMIT OF CONTRACT.

363 NRDBF3L1 (NOLAN RESERVE FIELD 3 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 8. REFER TO NOTE 301 LIMIT OF CONTRACT.

364 NRDBF5L1 (NOLAN RESERVE FIELD 5 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 7. REFER TO NOTE 301 LIMIT OF CONTRACT.

365 ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.

366 ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.

367 ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.

368 ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.

369 NRDBF5L1 (NOLAN RESERVE FIELD 5 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 12. REFER TO NOTE 301 LIMIT OF CONTRACT.

370 NRDBF4L2 (NOLAN RESERVE FIELD 5 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 12. REFER TO NOTE 301 LIMIT OF CONTRACT.

371 NRDBJFJL1 (NOLAN RESERVE JUNIOR FIELD 2 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 12. REFER TO NOTE 301 LIMIT OF CONTRACT.

372 NRDBJF3L1 (NOLAN RESERVE JUNIOR FIELD 3 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 11. REFER TO NOTE 301 LIMIT OF CONTRACT.

373 NRDBJF4L1 (NOLAN RESERVE JUNIOR FIELD 4 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 11. REFER TO NOTE 301 LIMIT OF CONTRACT.

374 REFER TO E07 & E08 SECTIONAL DETAILS AND SCOPE OF WORKS, FOR WORKS ASSOCIATED WITH E03.

375 EXISTING OH CABLING TO BE DECOMMISSIONED AND REMOVED. EXISTING POWER POLE TO BE REMOVED. EXISTING FLOOD LIGHTS TO BE REMOVED

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV	0-0	0-1	1-0	1-1	1-2		
DISCIPLINE DRAWING NO.	REVISION OR DATE						
ARCH M-PLAN	11.6.09	11.9.09	11.6.09	11.6.09	11.6.09		
STRUCT							
MECH							
ELECT SLA N2877					25.11.09	26.11.09	
SURVEY 4111	22.5.09	22.6.09	22.6.09	22.6.09	22.6.09		

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STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
0-0	PRELIMINARY DESIGN	DB	6.10.09
0-1	PRELIMINARY DESIGN ADDENDUM	DB	2.11.09
1-0	ISSUED FOR DA	KZ	18.11.09
1-1	RE-ISSUED FOR DA	DB	1.12.09
1-2	NOTES ON EXISTING LIGHT POLES FOR DA	DB	4.12.09

ARCHITECT
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Facsimile: (02) 9719 3711
E-Mail: email@bucktonlysenko.com.au

PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
ELECTRICAL RETICULATION
SHEET 2 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381ED3_12

CHECKED				APPROVED			
1	2	3	C	1	2	3	C

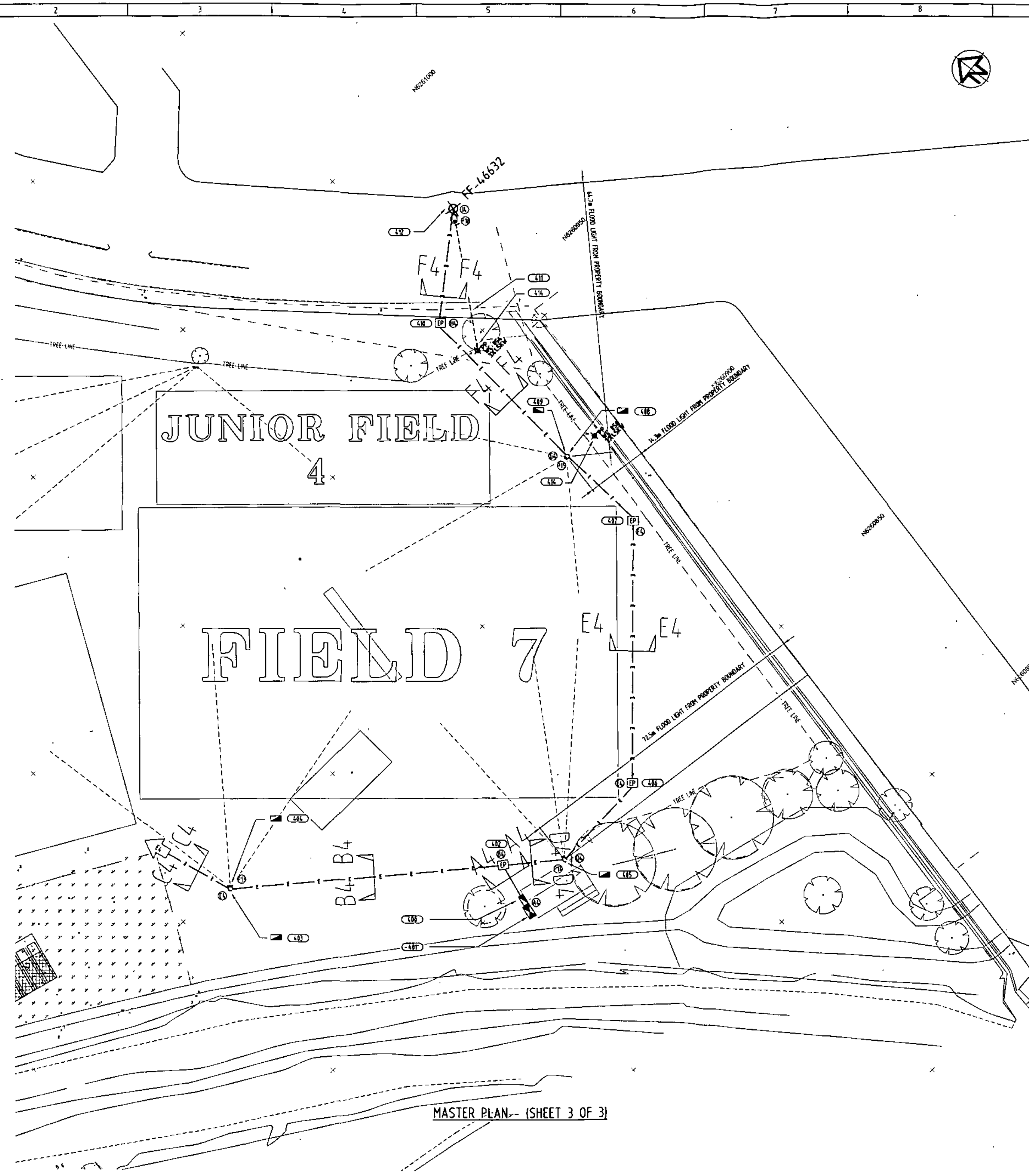
DRAWING STATUS LEGEND

0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES

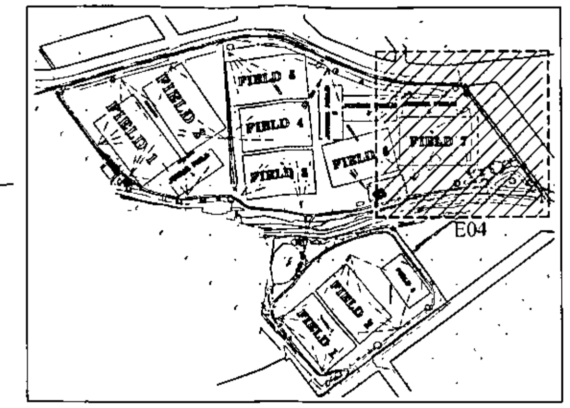
NOTE: DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

PROJECT	STATUS	REVISION	DRAWING No
25381	1	2	E03

A1



MASTER PLAN - (SHEET 3 OF 3)



KEYPLAN

ELECTRICAL NOTES:

- (400) MSBD-NR (NOLAN RESERVE MAIN SWITCHBOARD) TO BE MOUNTED ON THE WESTERN FACADE WALL AT GROUND LEVEL, ADJACENT TO MASTER DISTRIBUTION BOARD C. MAIN SWITCHBOARD IS METERED AT THIS LOCATION AND DISTRIBUTED SUBMAINS TO NOLAN RESERVE MASTER DISTRIBUTION BOARDS 'A','B' & 'C'.
- (401) MDBC-NR (NOLAN RESERVE MASTER DISTRIBUTION BOARD C) TO BE MOUNTED ON THE WESTERN FACADE WALL AT GROUND LEVEL . THE DISTRIBUTION BOARD SHALL CONTAIN SWITCHING CONTROL FOR THE FLOOD LIGHTING. REFER TO E?? SINGLE LINE DIAGRAM.
- (402) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (403) NRDBF7L1 (NOLAN RESERVE FIELD 7 FLOOD LIGHT DISTRIBUTION 1) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 13. AT THE FLUSH FITTING ACCESS DOOR THE LIGHTING SUPPLIER WILL HOUSE LUMINAIRE CONTROL GEAR WHICH ARE CONNECTED TO EACH LIGHT FITTING. ELECTRICAL SUBCONTRACTOR TO SUPPLY DISTRIBUTION BOARD AND TERMINATE SUPPLY AND SUBMAINS TO EACH LUMINAIRE CONTROL GEAR AS DETAILED IN E?? SINGLE LINE DIAGRAM, I.E. LIMIT OF CONTRACT.
- (404) NRDBF6L2 (NOLAN RESERVE FIELD 6 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 13. REFER TO NOTE 403 LIMIT OF CONTRACT.
- (405) NRDBF7L2 (NOLAN RESERVE FIELD 7 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF THE FLUSH FITTING ACCESS HOLE WITHIN POLE 14. REFER TO NOTE 403 LIMIT OF CONTRACT.
- (406) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (407) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (408) NRDBJF4L2 (NOLAN RESERVE JUNIOR FIELD 4 FLOOD LIGHT DISTRIBUTION 2) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 15. REFER TO NOTE 402 LIMIT OF CONTRACT.
- (409) NRDBF7L3 (NOLAN RESERVE FIELD 7 FLOOD LIGHT DISTRIBUTION 3) TO BE MOUNTED OPPOSITE OF FLUSH FITTING ACCESS HOLE WITHIN POLE 15. REFER TO NOTE 402 LIMIT OF CONTRACT.
- (410) ELECTRICAL SUBCONTRACTOR TO SUPPLY ELECTRICAL PIT REFER TO E01 FOR SELECTION.
- (411) L2 SERVICE PROVIDER TO DECOMMISSION AND REMOVE EXISTING OH LINE BETWEEN POLE FF-46632 & WC 054 AT EACH CABLE SUPPORT.
- (412) L2 SERVICE PROVIDER TO TERMINATE NEW 200A/PH CONSUMER MAINS AT POLE 16 (FF-46632) TO EXISTING OH DISTRIBUTOR. THE EXISTING OVERHEAD DISTRIBUTOR TO BE CONNECTED TO NETWORK SUBSTATION S16799 DISTRIBUTION NO3. LIAISE WITH ENERGY AUSTRALIA PRIOR TO CONNECTION.
- (413) REFER TO E09 SECTIONAL DETAILS AND SCOPE OF WORKS, FOR WORKS ASSOCIATED WITH E04.
- (414) EXISTING LIGHT POLE CABLING TO BE DECOMMISSIONED AND REMOVED. EXISTING FLOOD LIGHTS TO BE REMOVED. LIAISE WITH ENERGY AUSTRALIA AND CONFIRM EXISTING NETWORK CABLING TO THESE POWER POLES CAN BE DECOMMISSIONED AND REMOVED OR UNDERGROUND CONNECTION IS REQUIRED TO SERVICE THE EXISTING NETWORK, PRIOR TO REMOVAL OF EXISTING POWER POLES.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH

DA 2009 / 1659

WARRINGAH COUNCIL

0 10 20 30 40 50 METRES
(Scale 1: 500 on A1, 1:1,000 on A3)

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV		0-0	0-1	1-0	1-1	1-2		
DISCIPLINE	DRAWING NO.	REVISION OR DATE						
ARCH	M-PLAN	11.6.09	11.6.09	11.6.09	11.6.09	11.6.09		
STRUCT								
MECH								
ELECT	SLA N2877				26.11.09	26.11.09		
SURVEY	4111	22.6.09	22.6.09	22.6.09	22.6.09	22.6.09		

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STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
0-0	PRELIMINARY DESIGN	DB	6.10.09
0-1	PRELIMINARY DESIGN ADDENDUM	DB	2.11.09
1-0	ISSUED FOR DA	KZ	16.11.09
1-1	RE-ISSUED FOR DA	DB	1.12.09
1-2	NOTES ON EXISTING LIGHT POLES FOR DA	DB	4.12.09

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Telephone: (02) 9719 3700
Facsimile: (02) 9719 3711
E-Mail: email@bucktonlysenko.com.au

PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
ELECTRICAL RETICULATION
SHEET 3 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381E04_12

CHECKED				APPROVED			
1	2	3	C	1	2	3	C

DRAWING STATUS LEGEND

0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES
NOTE:	DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

PROJECT	STATUS	REVISION	DRAWING No
25381	1	2	E04

A1

Design Notes

Where SLA Britelines have been included in this design, "Imax" photometric data has been utilized. For further calculations and/or for installation aiming details please consult your SLA representative.

A maintenance factor of 0.85 has been applied to all luminaires. A maintenance policy should be adopted to support the maintenance factor of 0.85.

M.H. (ave) of 25m indicates height above the playing surface to a single crossarm.

Maximum glare rating for Field 1 only is 46.7 for observer locations as per Figure 6 AS2560.2.3-2007. Glare ratings are based on a diffuse playing surface reflectance of 25%.

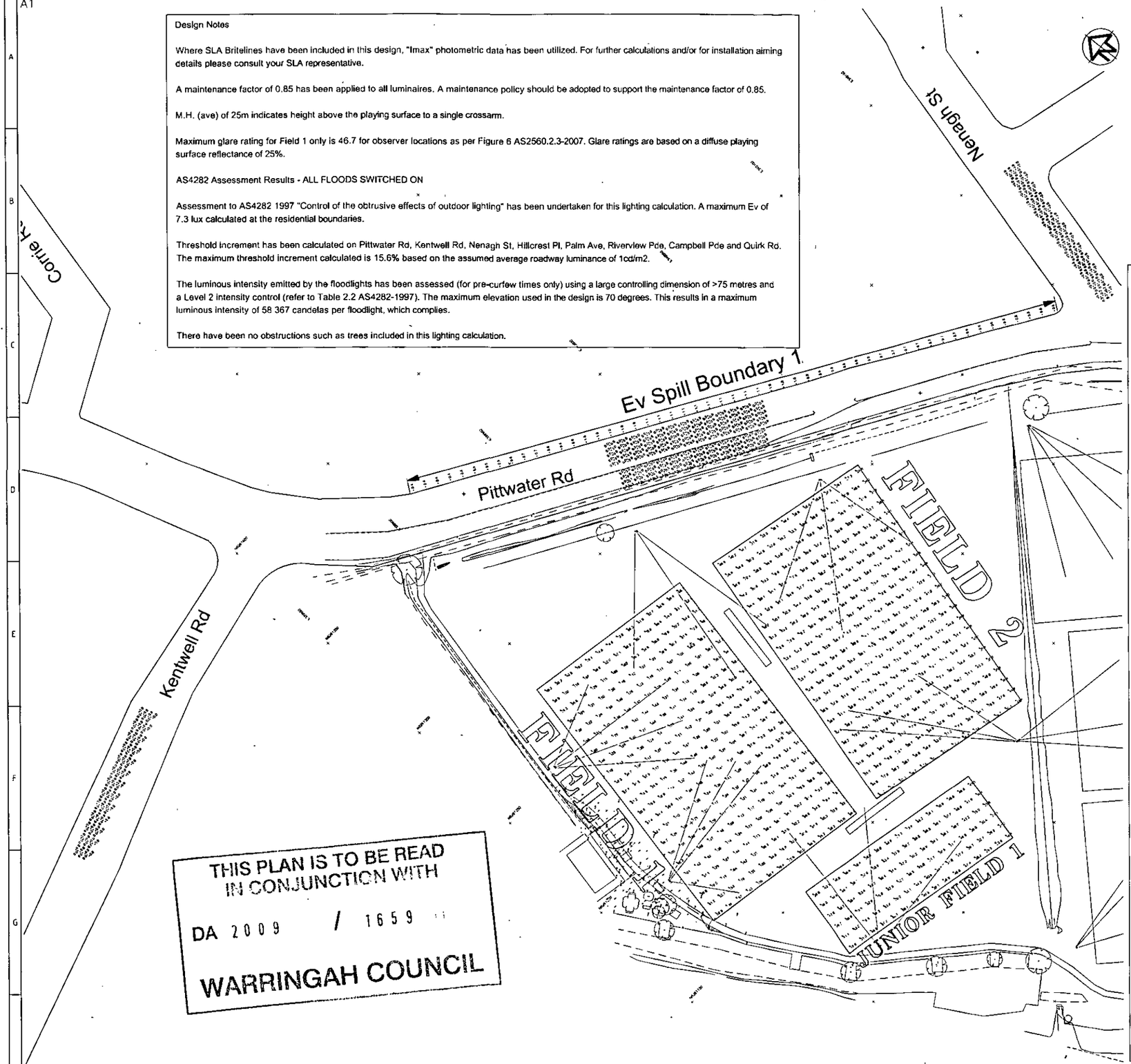
AS4282 Assessment Results - ALL FLOODS SWITCHED ON

Assessment to AS4282 1997 "Control of the obtrusive effects of outdoor lighting" has been undertaken for this lighting calculation. A maximum Ev of 7.3 lux calculated at the residential boundaries.

Threshold increment has been calculated on Pittwater Rd, Kentwell Rd, Nenagh St, Hillcrest Pl, Palm Ave, Riverview Pde, Campbell Pde and Quirk Rd. The maximum threshold increment calculated is 15.6% based on the assumed average roadway luminance of 1cd/m2.

The luminous intensity emitted by the floodlights has been assessed (for pre-curfew times only) using a large controlling dimension of >75 metres and a Level 2 intensity control (refer to Table 2.2 AS4282-1997). The maximum elevation used in the design is 70 degrees. This results in a maximum luminous intensity of 58 367 candelas per floodlight, which complies.

There have been no obstructions such as trees included in this lighting calculation.



THIS PLAN IS TO BE READ IN CONJUNCTION WITH
DA 2009 / 1659
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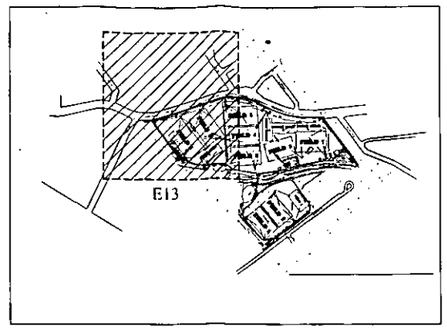
NOLAN RESERVE MASTER PLAN - (SHEET 1 OF 3)

ALL Fields Switched ON.



KEYPLAN

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	MaxMin	MinAvg	PtSpcLr	PtSpcTb	Meter Type
Eh Nolan Reserve TPA	Illuminance	Lux	58.01	175	1.3	0.01	0.02	5	5	Horizontal
Eh Field 1	Illuminance	Lux	104.42	176	59.0	0.34	0.57	5	5	Horizontal
Eh Field 2	Illuminance	Lux	66.32	114	24.6	0.22	0.37	5	5	Horizontal
Eh Field M1	Illuminance	Lux	51.29	98.3	18.1	0.18	0.35	5	5	Horizontal
Ev Spill Boundary 1	Illuminance	Lux	N.A.	1.1	0.4	N.A.	N.A.	5	1	Normal
Ti Pittwater Rd_1_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.02	0.02	N.A.	N.A.	5	1	Normal
Ti Pittwater Rd_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.02	0.02	N.A.	N.A.	5	1	Normal
Ti Kentwell Rd_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.00	0.00	N.A.	N.A.	5	1	Normal
Ti Nenagh St_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.19	0.18	N.A.	N.A.	5	1	Normal

Luminaire Schedule					
Qty	Symbol	Label	Description	Lumens	LLF
0		BLS 2kw + BGS	SLA BLS2000_2000BL + GS Top and Both Sides Imax +10_0 deg	200000	0.850
0		BLP 2kw + BGS	SLA BLP2000_2000BL + GS Top and Both Sides Imax +10_0 deg	200000	0.850
14		2042926m10	SLA BLS2000_2000BL Imax +10_0 deg_	200000	0.850
2		2042939m10	SLA BLP2000_2000BL Imax +10_0 deg_	200000	0.850
2		2042794m10	SLA BLS2000_2000BL + GS Top and LHS Imax +10_0 deg_	200000	0.850
2		2042804m10	SLA BLS2000_2000BL + GS Top and RHS Imax +10_0 deg_	200000	0.850

0 20 40 60 80 100 METRES
(Scale 1: 800 on A1, 1:1.600 on A3)

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV	1-0	1-1	1-2				
DISCIPLINE DRAWING NO.	REVISION OR DATE						
ARCH M-PLAN	11 6 09	11 8 09	11 6 09				
STRUCT							
MECH							
ELECT SLA-N2473-R1	11 6 09						
SLA N2877		25 11 09	26 11 09				
SURVEY 41H		22 8 09	27 8 09	22 6 09			

STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
1-0	ISSUE FOR DA	DB	16 11 09
1-1	RE-ISSUED FOR DA	DB	2.12 09
1-2	SCALE + DRAWING DISCRIPTN CHANGE	DB	4.12 09

ARCHITECT
HABITATION

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Facsimile: (02) 9719 3711
E-Mail: email@bucktonlysenko.com.au

PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
SLA LIGHTING CALCULATIONS
SHEET 1 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381E13_12

CHECKED				APPROVED			
1	2	3	C	1	2	3	C

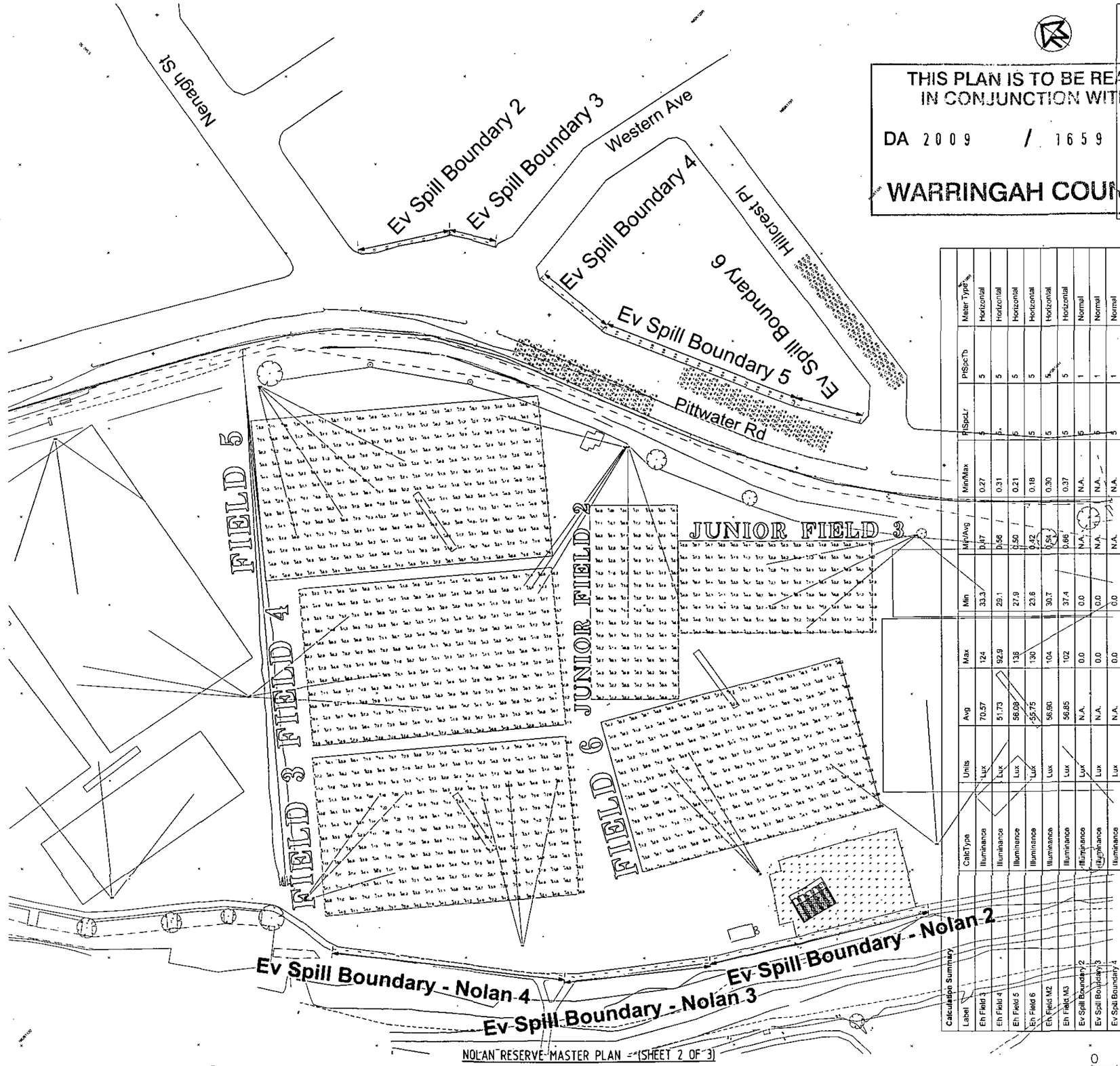
DRAWING STATUS LEGEND

0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES

NOTE: DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

PROJECT	STATUS	REVISION	DRAWING No
25381	1	– 2	E13

A1

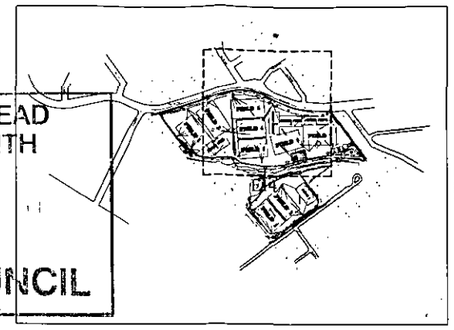


THIS PLAN IS TO BE READ IN CONJUNCTION WITH

DA 2009 / 1659

WARRINGAH COUNCIL

KEYPLAN



Calculation Summary														
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max	PtSpcLr	PtSpcTb	Meter Type				
Eh Field 3	Illuminance	Lux	70.57	124	33.3	0.47	0.27	5	5	Horizontal				
Eh Field 4	Illuminance	Lux	51.73	92.9	29.1	0.56	0.31	5	5	Horizontal				
Eh Field 5	Illuminance	Lux	56.08	136	27.9	0.50	0.21	5	5	Horizontal				
Eh Field 6	Illuminance	Lux	55.75	130	23.6	0.42	0.18	5	5	Horizontal				
Eh Field M2	Illuminance	Lux	56.90	104	30.7	0.54	0.30	5	5	Horizontal				
Eh Field M3	Illuminance	Lux	56.85	102	37.4	0.66	0.37	5	5	Horizontal				
Ev Spill Boundary 2	Illuminance	Lux	N.A.	0.0	0.0	N.A.	N.A.	1	1	Normal				
Ev Spill Boundary 3	Illuminance	Lux	N.A.	0.0	0.0	N.A.	N.A.	1	1	Normal				
Ev Spill Boundary 4	Illuminance	Lux	N.A.	0.0	0.0	N.A.	N.A.	1	1	Normal				
Ev Spill Boundary 5	Illuminance	Lux	N.A.	1.0	0.0	N.A.	N.A.	1	1	Normal				
Ev Spill Boundary 6	Illuminance	Lux	N.A.	0.0	0.0	N.A.	N.A.	1	1	Normal				
Ev Spill Boundary - Nolan 2	Illuminance	Lux	N.A.	6.4	2.7	0.60	N.A.	5	1	Normal				
Ev Spill Boundary - Nolan 3	Illuminance	Lux	N.A.	7.0	4.7	0.80	N.A.	5	1	Normal				
Ev Spill Boundary - Nolan 4	Illuminance	Lux	N.A.	7.7	4.3	0.71	N.A.	5	1	Normal				
Tl Pittwater Rd_2_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.07	0.06	N.A.	N.A.	5	1	Normal				
Tl Pittwater Rd_3_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.06	0.05	N.A.	N.A.	5	1	Normal				
Tl Hillcrest Pl_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.05	0.04	N.A.	N.A.	5	1	Normal				

Luminaire Schedule					
Qty	Symbol	Label	Lumens	LLF	Description
0		BLS 2kw + BGS	200000	0.850	SLA BLS2000_2000BL + GS Top and Both Sides Imax +10_0 deg
0		BLP 2kw + BGS	200000	0.850	SLA BLP2000_2000BL + GS Top and Both Sides Imax +10_0 deg
19		204292lm10	200000	0.850	SLA BLS2000_2000BL Imax +10_0 deg_
0		204293lm10	200000	0.850	SLA BLP2000_2000BL Imax +10_0 deg_
2		204279lm10	200000	0.850	SLA BLS2000_2000BL + GS Top and LHS Imax +10_0 deg_
5		204280lm10	200000	0.850	SLA BLS2000_2000BL + GS Top and RHS Imax +10_0 deg_

0 20 40 60 80 100 METRES
(Scale 1: 800 on A1, 1:1,600 on A3)

ALL Fields Switched ON.

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV	1-0	1-1	1-2				
DISCIPLINE DRAWING NO.	REVISION OR DATE						
ARCH M-PLAN	11.6.09	11.8.09	11.6.09				
STRUCT							
MECH							
ELECT SLA-N2475-R1	11.6.09						
SLA N2877		26.11.09	25.11.09				
SURVEY 4111	22.6.09	27.8.09	22.6.09				

STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
1-0	ISSUE FOR DA	DB	16.11.09
1-1	RE-ISSUED FOR DA	DB	2.12.09
1-2	SCALE + DRAWING DISCRIPTN CHANGE	DB	4.12.09

ARCHITECT
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PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
SLA LIGHTING CALCULATIONS
SHEET 2 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381E14_12

CHECKED				APPROVED			
1	2	3	C	1	2	3	C

DRAWING STATUS LEGEND

0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES

NOTE: DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

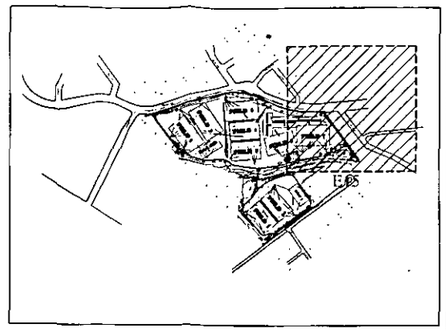
PROJECT	STATUS	REVISION	DRAWING No
25381	1	– 2	E14

A1

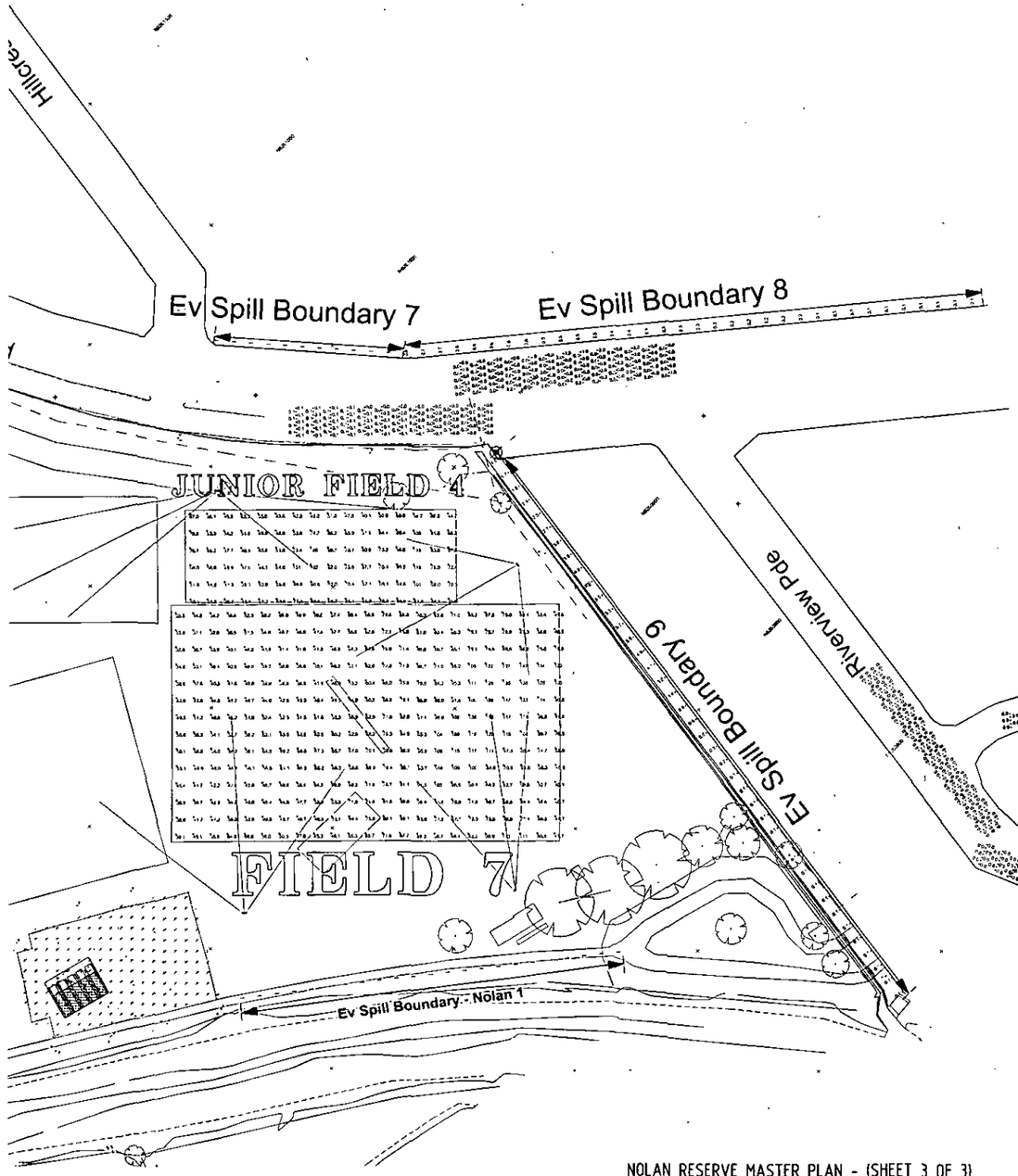
THIS PLAN IS TO BE READ
IN CONJUNCTION WITH

DA 2009 / 1659

WARRINGAH COUNCIL



KEYPLAN



ALL Fields Switched ON.

NOLAN RESERVE MASTER PLAN - (SHEET 3 OF 3)

0 20 40 60 80 100 METRES
(Scale 1: 800 on A1, 1:1,600 on A3)

Calculation Summary										
Label	CalcType	Units	Avg	Max	Min	Min/Avg	PtSpcLr	PtSpcTb	Meter Type
Ev Field 7	Illuminance	Lux	67.22	142	30.7	0.46	5	5	Horizontal
Ev Field M4	Illuminance	Lux	67.62	119	36.1	0.53	5	5	Horizontal
Ev Spill Boundary 7	Illuminance	Lux	N.A.	0.0	0.0	N.A.	5	1	Normal
Ev Spill Boundary 8	Illuminance	Lux	N.A.	0.8	0.1	N.A.	5	1	Normal
Ev Spill Boundary 9	Illuminance	Lux	N.A.	5.7	0.1	N.A.	5	1	Normal
Ev Spill Boundary - Nolan 1	Illuminance	Lux	N.A.	3.4	0.8	0.31	5	1	Normal
Ti Pittwater Rd_4_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.01	0.00	N.A.	5	1	Normal
Ti Pittwater Rd_5_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.13	0.12	N.A.	5	1	Normal
Ti Palm Ave_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.17	0.16	N.A.	5	1	Normal
Ti Riverview Pde_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.11	0.11	N.A.	5	1	Normal
Ti Riverview Pde_1_Lv	L_Veiling	Cd/Sq.M.	N.A.	0.00	0.00	N.A.	5	1	Normal

Luminaire Schedule					
Qty	Symbol	Label	Description	Lumens	LLF
0		BLS 2kw + BGS	SLA BLS2000_2000BL + GS Top and Both Sides Imax +10_0 deg	200000	0.850
0		BLP 2kw + BGS	SLA BLP2000_2000BL + GS Top and Both Sides Imax +10_0 deg	200000	0.850
3		204292sm10	SLA BLS2000_2000BL Imax +10_0 deg_	200000	0.850
0		204293sm10	SLA BLP2000_2000BL Imax +10_0 deg_	200000	0.850
2		204279sm10	SLA BLS2000_2000BL + GS Top and LHS Imax +10_0 deg_	200000	0.850
4		204280sm10	SLA BLS2000_2000BL + GS Top and RHS Imax +10_0 deg_	200000	0.850

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV		1-0	1-1	1-2					
DISCIPLINE DRAWING NO.		REVISION OR DATE							
ARCH	M-PLAN	16 09	11 5 09	11 6 09					
STRUCT									
MECH									
ELECT	SLA-N0475-R1	11 5 09							
	SLA N2827		26 11 09	2 6 09	11 09				
SURVEY	4111	22 6 09	23 6 09	26 6 09					

STATUS/ REVISION	DESCRIPTION	DRAWN	DATE
1-0	ISSUE FOR DA	DB	16 11 09
1-1	RE-ISSUED FOR DA	DB	2 12 09
1-2	SCALE - DRAWING DISCRIPTN CHANGE	DB	4 12 09

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PROJECT
NOLAN RESERVE

DRAWING TITLE
ELECTRICAL SERVICES
SLA LIGHTING CALCULATIONS
SHEET 3 OF 3

DESIGNER	DRAWN	SCALE	CAD FILE
DB	DB	AS SHOWN	25381E15_12

CHECKED				APPROVED			
1	2	3	C	1	2	3	C

DRAWING STATUS LEGEND

0	PRELIMINARY DESIGN DRAWING
1	DEVELOPMENT APPLICATION
2	AUTHORITY APPROVAL
3	TENDER PURPOSES
C	CONTRACT PURPOSES

NOTE: DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

PROJECT	STATUS	REVISION	DRAWING No
25381	1	– 2	E15