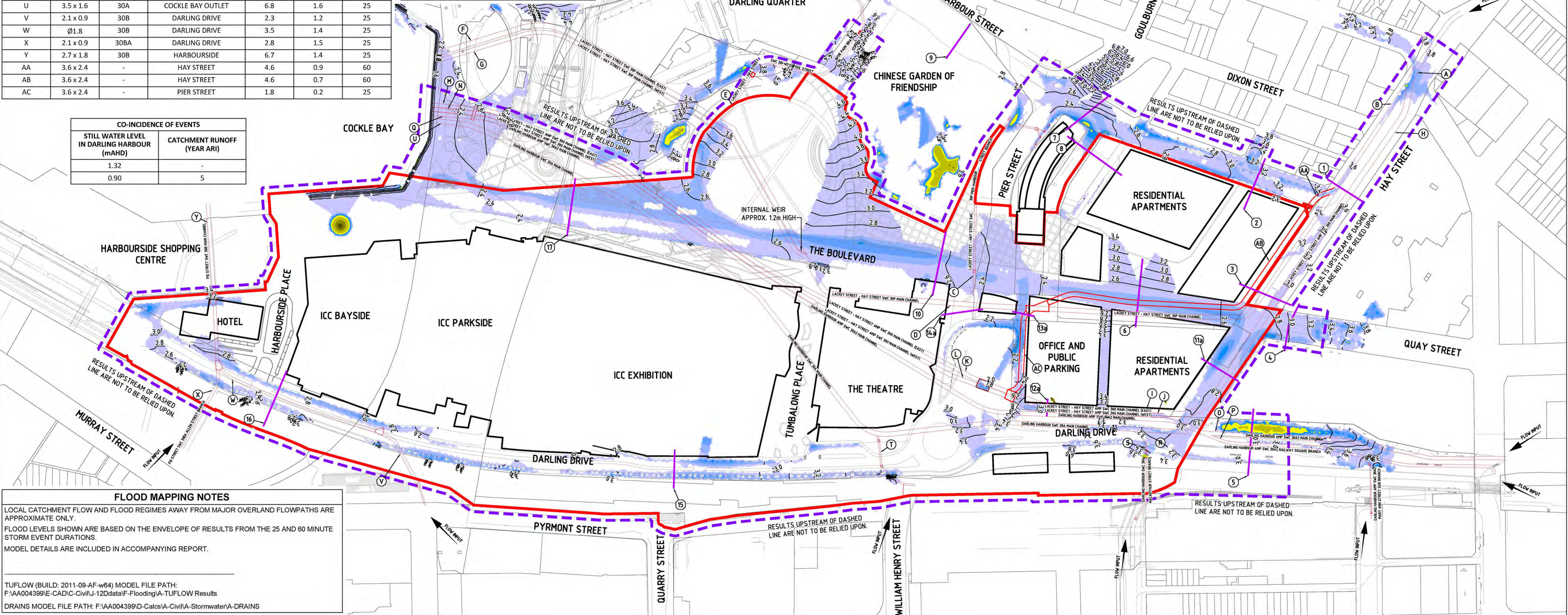


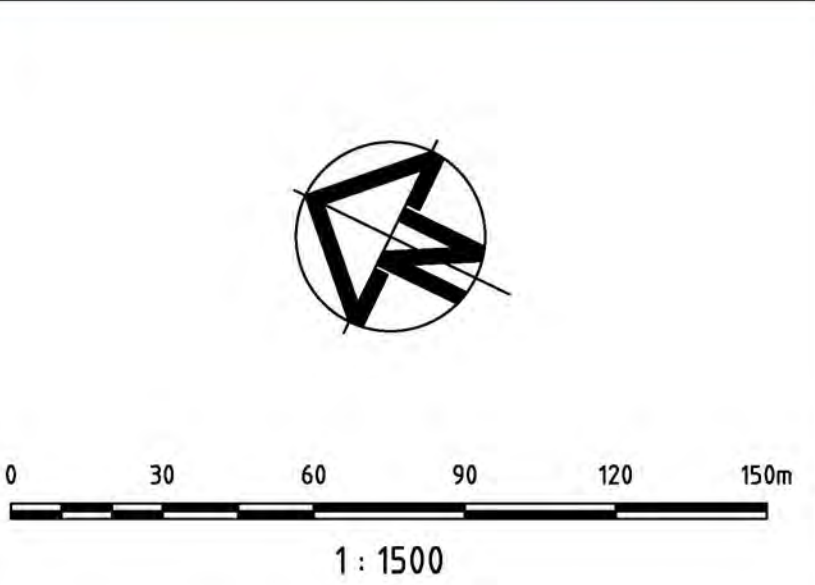
CONDUIT LABEL	CONDUIT DIMENSION (m)	SYDNEY WATER CHANNEL	LOCATION	Q (m³/s) ¹	V (m/s) ²	STORM DURATION (MIN)
A	3.6 x 2.1	300	HAY STREET	25.6	3.4	60
B	3.1 x 2.0	30P	HAY STREET	9.2	3.2	60
C	Ø1.5	30P	PIER STREET	1.9	1.1	25
D	3.7 x 2.2	30P	PIER STREET	11.3	1.4	60
E	1.5 x 1.5	30P	TUMBALONG PARK	4.4	3.6	25
F	3.9 x 2.2	30P	IMAX THEATRE	8.2	1.1	60
G	3.1 x 2.2	30P	IMAX THEATRE	7.7	1.4	60
H	4.3 x 2.4	300	HAY STREET	17.1	1.8	60
I	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	8.9	1.3	60
J	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	8.9	1.3	60
K	3.0 x 2.4	300	PIER STREET	8.9	1.3	60
L	3.0 x 2.4	300	PIER STREET	8.9	1.3	60
M	3.0 x 2.4	300	COCKLE BAY OUTLET	9.0	1.3	60
N	3.0 x 2.4	300	COCKLE BAY OUTLET	8.9	1.2	60
O	3.1 x 1.6	30A2	DARLING DRIVE	8.4	1.7	25
P	2.1 x 1.8	30A2	DARLING DRIVE	7.7	2.0	25
Q	3.0 x 2.4	30A2	COCKLE BAY OUTLET	13.6	1.9	25
R	3.1 x 1.6	30A	DARLING DRIVE	2.6	0.7	25
S	Ø0.9	30A	DARLING DRIVE	1.4	2.2	25
T	Ø1.1	30A	DARLING DRIVE	1.8	2.1	25
U	3.5 x 1.6	30A	COCKLE BAY OUTLET	6.8	1.6	25
V	2.1 x 0.9	30B	DARLING DRIVE	2.3	1.2	25
W	Ø1.8	30B	DARLING DRIVE	3.5	1.4	25
X	2.1 x 0.9	30BA	DARLING DRIVE	2.8	1.5	25
Y	2.7 x 1.8	30B	HARBOURSIDE	6.7	1.4	25
AA	3.6 x 2.4	-	HAY STREET	4.6	0.9	60
AB	3.6 x 2.4	-	HAY STREET	4.6	0.7	60
AC	3.6 x 2.4	-	PIER STREET	1.8	0.2	25

OVERLAND FLOW LABEL	LOCATION	Q (m³/s) ¹
1	HAY STREET	0.0
2	HARBOUR STREET	0.0
3	HAY STREET	0.0
4	QUAY STREET	0.5
5	DARLING DRIVE (SOUTH)	0.2
6	THE BOULEVARD	0.2
7	HARBOUR STREET	0.2
8	LITTLE PIER STREET	0.0
9	HARBOUR STREET	0.0
10	CHINESE GARDENS	0.4
11A	HAY STREET	0.1
12A	DARLING DRIVE	0.1
13A	PIER STREET	0.2
14A	PIER STREET	0.0
15	DARLING DRIVE	0.0
16	DARLING DRIVE (NORTH)	0.1
17	DARLING QUARTER	0.1

TABLE NOTES		
¹ FLOW IS PEAK FOR MODELLED DESIGN CONDITION		
² VELOCITY IS AT CORRESPONDING DESIGN FLOW		



DARLING HARBOUR LIVE



- NOTES:
- ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
 - ALL COORDINATES TO MGA. ALL LEVELS TO AHD.
 - THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS.
 - PRECINCT BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.

REV	DESCRIPTION	DATE
01	ISSUE FOR DEVELOPMENT APPLICATION	11/03/2013

CLIENT



PROJECT MANAGEMENT & CONSTRUCTION
LEVEL 4, THE BOND, 30 HICKSON RD MILLERS POINT, NSW 2000

CIVIL / TRAFFIC / FACADES
HYDER CONSULTING PTY LTD
ABN 76 104 485 289
LEVEL 5, 141 WALKER ST.
NORTH SYDNEY NSW 2060
AUSTRALIA
Tel: +61 (0)2 8807 9000
Fax: +61 (0)2 8807 9001
www.hyderconsulting.com
© Copyright reserved



PROJECT
SICEEP
DARLING HARBOUR
PROJECT PRECINCT

DRAWING TITLE
5 YEAR ARI
PROPOSED DEVELOPMENT
FLOOD DEPTH AND LEVEL CONTOURS

STATUS

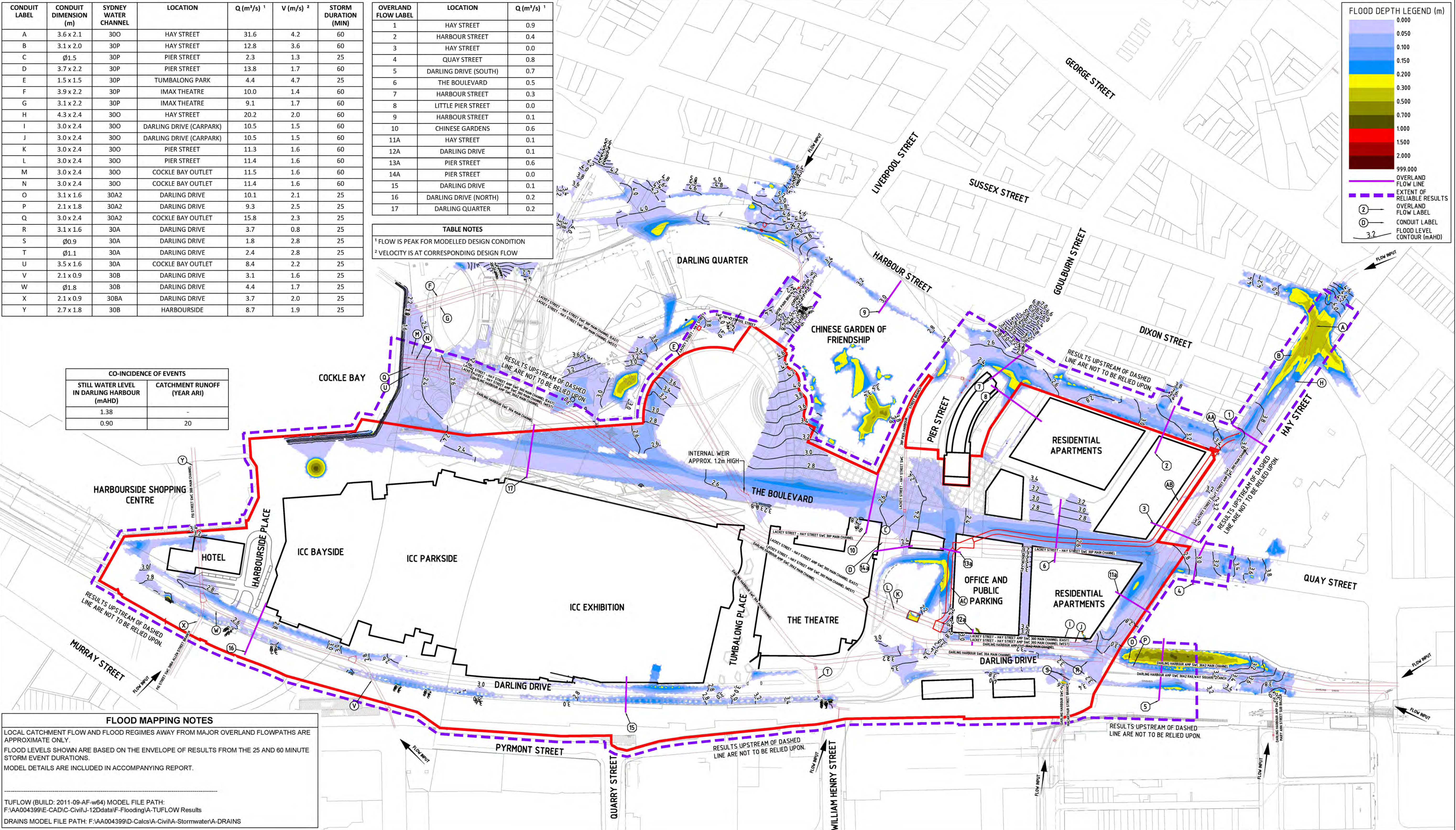
PRELIMINARY ONLY

SCALE @ A1	DRAWN	DESIGNED	REVIEWED	APPROVED
1:1500	RD	CM	BC	JH
PROJECT NUMBER	DRAWING NUMBER	REV		
AA004399	WP-FL-0121	01		

CONDUIT LABEL	CONDUIT DIMENSION (m)	SYDNEY WATER CHANNEL	LOCATION	Q (m³/s) ¹	V (m/s) ²	STORM DURATION (MIN)
A	3.6 x 2.1	300	HAY STREET	31.6	4.2	60
B	3.1 x 2.0	30P	HAY STREET	12.8	3.6	60
C	Ø1.5	30P	PIER STREET	2.3	1.3	25
D	3.7 x 2.2	30P	PIER STREET	13.8	1.7	60
E	1.5 x 1.5	30P	TUMBALONG PARK	4.4	4.7	25
F	3.9 x 2.2	30P	IMAX THEATRE	10.0	1.4	60
G	3.1 x 2.2	30P	IMAX THEATRE	9.1	1.7	60
H	4.3 x 2.4	300	HAY STREET	20.2	2.0	60
I	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	10.5	1.5	60
J	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	10.5	1.5	60
K	3.0 x 2.4	300	PIER STREET	11.3	1.6	60
L	3.0 x 2.4	300	PIER STREET	11.4	1.6	60
M	3.0 x 2.4	300	COCKLE BAY OUTLET	11.5	1.6	60
N	3.0 x 2.4	300	COCKLE BAY OUTLET	11.4	1.6	60
O	3.1 x 1.6	30A2	DARLING DRIVE	10.1	2.1	25
P	2.1 x 1.8	30A2	DARLING DRIVE	9.3	2.5	25
Q	3.0 x 2.4	30A2	COCKLE BAY OUTLET	15.8	2.3	25
R	3.1 x 1.6	30A	DARLING DRIVE	3.7	0.8	25
S	Ø0.9	30A	DARLING DRIVE	1.8	2.8	25
T	Ø1.1	30A	DARLING DRIVE	2.4	2.8	25
U	3.5 x 1.6	30A	COCKLE BAY OUTLET	8.4	2.2	25
V	2.1 x 0.9	30B	DARLING DRIVE	3.1	1.6	25
W	Ø1.8	30B	DARLING DRIVE	4.4	1.7	25
X	2.1 x 0.9	30BA	DARLING DRIVE	3.7	2.0	25
Y	2.7 x 1.8	30B	HARBOURSIDE	8.7	1.9	25

OVERLAND FLOW LABEL	LOCATION	Q (m³/s) ¹
1	HAY STREET	0.9
2	HARBOUR STREET	0.4
3	HAY STREET	0.0
4	QUAY STREET	0.8
5	DARLING DRIVE (SOUTH)	0.7
6	THE BOULEVARD	0.5
7	HARBOUR STREET	0.3
8	LITTLE PIER STREET	0.0
9	HARBOUR STREET	0.1
10	CHINESE GARDENS	0.6
11A	HAY STREET	0.1
12A	DARLING DRIVE	0.1
13A	PIER STREET	0.6
14A	PIER STREET	0.0
15	DARLING DRIVE	0.1
16	DARLING DRIVE (NORTH)	0.2
17	DARLING QUARTER	0.2

TABLE NOTES		
¹ FLOW IS PEAK FOR MODELLED DESIGN CONDITION		
² VELOCITY IS AT CORRESPONDING DESIGN FLOW		



CO-INCIDENCE OF EVENTS	
STILL WATER LEVEL IN DARLING HARBOUR (mAHD)	CATCHMENT RUNOFF (YEAR ARI)
1.38	20
0.90	

FLOOD MAPPING NOTES	
LOCAL CATCHMENT FLOW AND FLOOD REGIMES AWAY FROM MAJOR OVERLAND FLOWPATHS ARE APPROXIMATE ONLY.	
FLOOD LEVELS SHOWN ARE BASED ON THE ENVELOPE OF RESULTS FROM THE 25 AND 60 MINUTE STORM EVENT DURATIONS.	
MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT.	
TUFLOW (BUILD: 2011-09-AF-w64) MODEL FILE PATH: F:\AA004399\I-CAD\I-Civil\J-12\data\F-Flooding\A-TUFLOW Results	
DRAINS MODEL FILE PATH: F:\AA004399\I-CAD\I-Civil\A-Stormwater\A-DRAINS	

DARLING HARBOUR LIVE

0 30 60 90 120 150m

1 : 1500

NOTES:

- ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
- ALL COORDINATES TO MGA. ALL LEVELS TO AHD.
- THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS.
- PRECINCT BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.

01	ISSUE FOR DEVELOPMENT APPLICATION	11/03/2013
REV	DESCRIPTION	DATE

CLIENT

Lend Lease

PROJECT MANAGEMENT & CONSTRUCTION
LEVEL 4, THE BOND, 30 HICKSON RD MILLERS POINT, NSW 2000

CIVIL / TRAFFIC / FACADES

HYDER CONSULTING PTY LTD
ABN 76 104 485 289
LEVEL 5, 141 WALKER ST,
NORTH SYDNEY NSW 2060
AUSTRALIA

Tel: +61 (0)2 8907 9000
Fax: +61 (0)2 8907 9001
www.hyderconsulting.com
© Copyright reserved

DRAWING TITLE

**20 YEAR ARI
PROPOSED DEVELOPMENT
FLOOD DEPTH AND LEVEL CONTOURS**

STATUS

PRELIMINARY ONLY

SCALE @ A1	DRAWN	DESIGNED	REVIEWED	APPROVED
1:1500	RD	CM	BC	JH

PROJECT NUMBER

AA004399

DRAWING NUMBER

WP-FL-0122

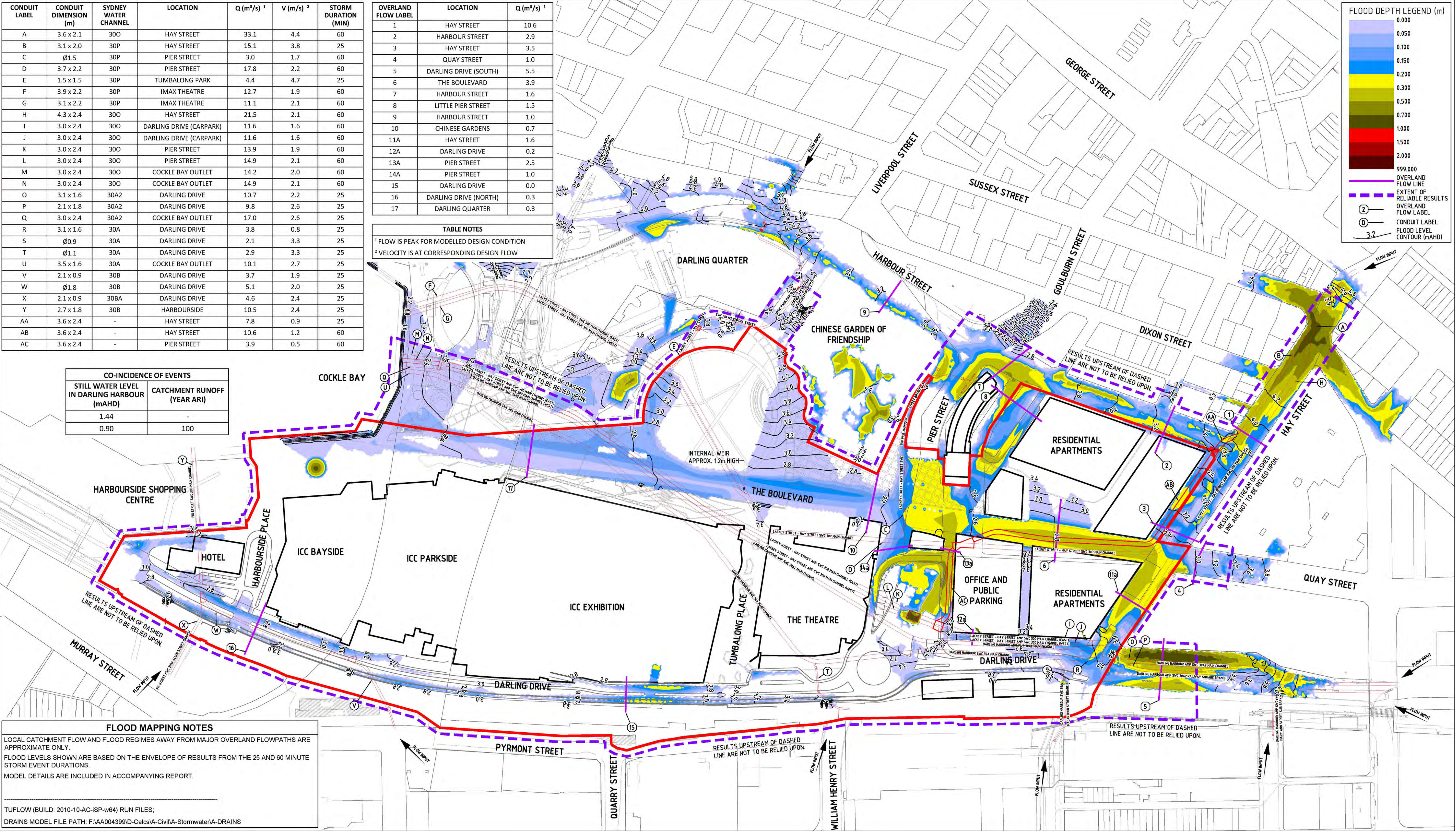
REV

01

CONDUIT LABEL	CONDUIT DIMENSION (m)	SYDNEY WATER CHANNEL	LOCATION	Q (m³/s) ¹	V (m/s) ²	STORM DURATION (MIN)
A	3.6 x 2.1	300	HAY STREET	33.1	4.4	60
B	3.1 x 2.0	30P	HAY STREET	15.1	3.8	25
C	Ø1.5	30P	PIER STREET	3.0	1.7	60
D	3.7 x 2.2	30P	PIER STREET	17.8	2.2	60
E	1.5 x 1.5	30P	TUMBALONG PARK	4.4	4.7	25
F	3.9 x 2.2	30P	IMAX THEATRE	12.7	1.9	60
G	3.1 x 2.2	30P	IMAX THEATRE	11.1	2.1	60
H	4.3 x 2.4	300	HAY STREET	21.5	2.1	60
I	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	11.6	1.6	60
J	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	11.6	1.6	60
K	3.0 x 2.4	300	PIER STREET	13.9	1.9	60
L	3.0 x 2.4	300	PIER STREET	14.9	2.1	60
M	3.0 x 2.4	300	COCKLE BAY OUTLET	14.2	2.0	60
N	3.0 x 2.4	300	COCKLE BAY OUTLET	14.9	2.1	60
O	3.1 x 1.6	30A2	DARLING DRIVE	10.7	2.2	25
P	2.1 x 1.8	30A2	DARLING DRIVE	9.8	2.6	25
Q	3.0 x 2.4	30A2	COCKLE BAY OUTLET	17.0	2.6	25
R	3.1 x 1.6	30A	DARLING DRIVE	3.8	0.8	25
S	Ø0.9	30A	DARLING DRIVE	2.1	3.3	25
T	Ø1.1	30A	DARLING DRIVE	2.9	3.3	25
U	3.5 x 1.6	30A	COCKLE BAY OUTLET	10.1	2.7	25
V	2.1 x 0.9	30B	DARLING DRIVE	3.7	1.9	25
W	Ø1.8	30B	DARLING DRIVE	5.1	2.0	25
X	2.1 x 0.9	30BA	DARLING DRIVE	4.6	2.4	25
Y	2.7 x 1.8	30B	HARBOURSIDE	10.5	2.4	25
AA	3.6 x 2.4	-	HAY STREET	7.8	0.9	25
AB	3.6 x 2.4	-	HAY STREET	10.6	1.2	60
AC	3.6 x 2.4	-	PIER STREET	3.9	0.5	60

OVERLAND FLOW LABEL	LOCATION	Q (m³/s) ¹
1	HAY STREET	10.6
2	HARBOUR STREET	2.9
3	HAY STREET	3.5
4	QUAY STREET	1.0
5	DARLING DRIVE (SOUTH)	5.5
6	THE BOULEVARD	3.9
7	HARBOUR STREET	1.6
8	LITTLE PIER STREET	1.5
9	HARBOUR STREET	1.0
10	CHINESE GARDENS	0.7
11A	HAY STREET	1.6
12A	DARLING DRIVE	0.2
13A	PIER STREET	2.5
14A	PIER STREET	1.0
15	DARLING DRIVE	0.0
16	DARLING DRIVE (NORTH)	0.3
17	DARLING QUARTER	0.3

TABLE NOTES		
¹ FLOW IS PEAK FOR MODELLED DESIGN CONDITION		
² VELOCITY IS AT CORRESPONDING DESIGN FLOW		



CO-INCIDENCE OF EVENTS	
STILL WATER LEVEL IN DARLING HARBOUR (mAHD)	CATCHMENT RUNOFF (YEAR ARI)
1.44	-
0.90	100

FLOOD MAPPING NOTES

LOCAL CATCHMENT FLOW AND FLOOD REGIMES AWAY FROM MAJOR OVERLAND FLOWPATHS ARE APPROXIMATE ONLY.

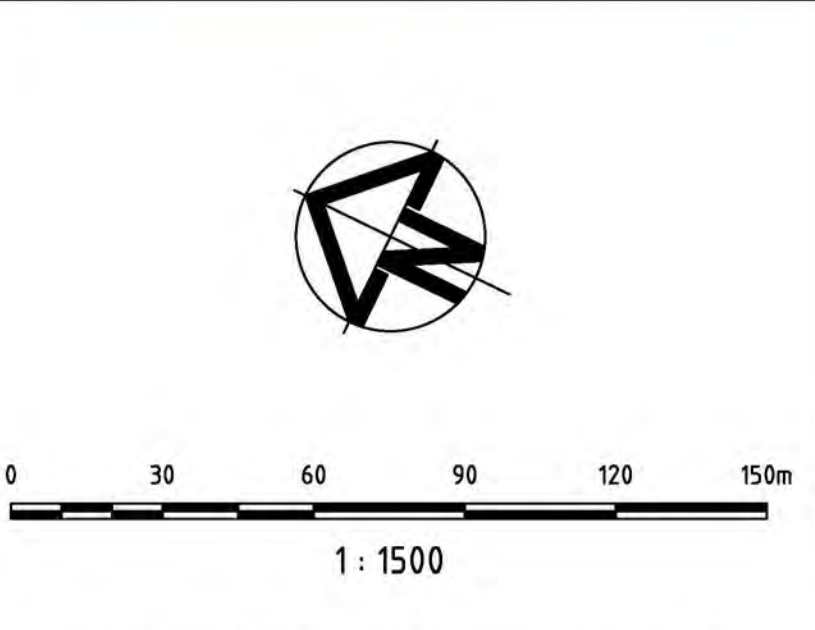
FLOOD LEVELS SHOWN ARE BASED ON THE ENVELOPE OF RESULTS FROM THE 25 AND 60 MINUTE STORM EVENT DURATIONS.

MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT.

TUFLOW (BUILD: 2010-10-AC-ISP-w64) RUN FILES;

DRAINS MODEL FILE PATH: F:\AA004399\D-Calcs\A-Civil\A-Stormwater\A-DRAINS

DARLING HARBOUR LIVE



- NOTES:
- ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
 - ALL COORDINATES TO MGA. ALL LEVELS TO AHD.
 - THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS.
 - PRECINCT BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.

REV	DESCRIPTION	DATE
01	ISSUE FOR DEVELOPMENT APPLICATION	11/03/2013

CLIENT

Lend Lease

PROJECT MANAGEMENT & CONSTRUCTION
LEVEL 4, THE BOND, 30 HICKSON RD MILLERS POINT, NSW 2000

CIVIL / TRAFFIC / FACADES

Hyder

HYDER CONSULTING PTY LTD
ABN 76 104 485 289
LEVEL 5, 141 WALKER ST.
NORTH SYDNEY NSW 2060
AUSTRALIA

Tel: +61 (0)2 8007 9000
Fax: +61 (0)2 8007 9001
www.hyderconsulting.com
© Copyright reserved

PROJECT

**SICEEP
DARLING HARBOUR
PROJECT PRECINCT**

DRAWING TITLE				
100 YEAR ARI PROPOSED DEVELOPMENT FLOOD DEPTH AND LEVEL CONTOURS				
STATUS				
PRELIMINARY ONLY				
SCALE @ A1	DRAWN	DESIGNED	REVIEWED	APPROVED
1:1500	RD	CM	BC	JH
PROJECT NUMBER	DRAWING NUMBER	REV		
AA004399	WP-FL-0123	01		

CONDUIT LABEL	CONDUIT DIMENSION (m)	SYDNEY WATER CHANNEL	LOCATION	Q (m³/s) ¹	V (m/s) ²	STORM DURATION (MIN)
A	3.6 x 2.1	300	HAY STREET	38.7	5.1	30
B	3.1 x 2.0	30P	HAY STREET	16.4	2.7	30
C	Ø1.5	30P	PIER STREET	4.7	2.7	15
D	3.7 x 2.2	30P	PIER STREET	26.2	3.2	30
E	1.5 x 1.5	30P	TUMBALONG PARK	5.3	2.8	45
F	3.9 x 2.2	30P	IMAX THEATRE	19.6	2.5	45
G	3.1 x 2.2	30P	IMAX THEATRE	15.9	2.6	45
H	4.3 x 2.4	300	HAY STREET	24.0	2.3	30
I	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	12.6	1.7	15
J	3.0 x 2.4	300	DARLING DRIVE (CARPARK)	12.7	1.8	15
K	3.0 x 2.4	300	PIER STREET	22.1	3.1	45
L	3.0 x 2.4	300	PIER STREET	22.5	3.1	45
M	3.0 x 2.4	300	COCKLE BAY OUTLET	23.2	3.2	45
N	3.0 x 2.4	300	COCKLE BAY OUTLET	22.5	3.1	45
O	3.1 x 1.6	30A2	DARLING DRIVE	12.1	2.5	15
P	2.1 x 1.8	30A2	DARLING DRIVE	11.0	2.9	15
Q	3.0 x 2.4	30A2	COCKLE BAY OUTLET	20.4	2.8	15
R	3.1 x 1.6	30A	DARLING DRIVE	2.6	0.5	15
S	Ø0.9	30A	DARLING DRIVE	3.0	4.8	45
T	Ø1.1	30A	DARLING DRIVE	4.8	5.6	15
U	3.5 x 1.6	30A	COCKLE BAY OUTLET	17.0	3.0	45
V	2.1 x 0.9	30B	DARLING DRIVE	9.6	5.1	30
W	Ø1.8	30B	DARLING DRIVE	7.3	2.9	30
X	2.1 x 0.9	30BA	DARLING DRIVE	6.3	3.3	15
Y	2.7 x 1.8	30B	HARBOURSIDE	15.3	5.3	30
AA	3.6 x 2.4	-	HAY STREET	8.4	1.0	15
AB	3.6 x 2.4	-	HAY STREET	12.4	1.4	30
AC	3.6 x 2.4	-	PIER STREET	3.7	0.4	15

OVERLAND FLOW LABEL	LOCATION	Q (m³/s) ¹
1	HAY STREET	101
2	HARBOUR STREET	14
3	HAY STREET	91
4	QUAY STREET	4
5	DARLING DRIVE (SOUTH)	59
6	THE BOULEVARD	77
7	HARBOUR STREET	22
8	LITTLE PIER STREET	12
9	HARBOUR STREET	11
10	CHINESE GARDENS	119
11A	HAY STREET	15
12A	DARLING DRIVE	40
13A	PIER STREET	7
14A	PIER STREET	17
15	DARLING DRIVE	20
16	DARLING DRIVE (NORTH)	27
17	DARLING QUARTER	87

TABLE NOTES		
¹ FLOW IS PEAK FOR MODELLED DESIGN CONDITION		
² VELOCITY IS AT CORRESPONDING DESIGN FLOW		

CO-INCIDENCE OF EVENTS	
STILL WATER LEVEL IN DARLING HARBOUR (mAHD)	CATCHMENT RUNOFF
1.8	-
1.3	PMF



FLOOD MAPPING NOTES

LOCAL CATCHMENT FLOW AND FLOOD REGIMES AWAY FROM MAJOR OVERLAND FLOWPATHS ARE APPROXIMATE ONLY.

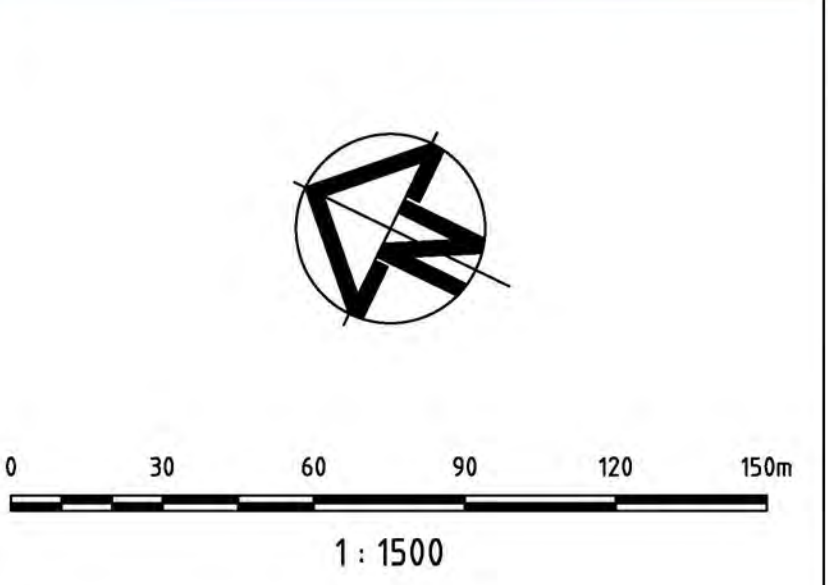
FLOOD LEVELS SHOWN ARE BASED ON THE ENVELOPE OF RESULTS FROM THE PMP 15, 30 AND 45 MINUTE DURATION STORM EVENTS.

MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT.

TUFLOW (BUILD: 2011-09-AF-v64) MODEL FILE PATH:
F:\AA004399\I-CAD\C-Civil\U-12\data\F-Flooding\A-TUFLOW Results

DRAINS MODEL FILE PATH: F:\AA004399\D-Calcs\A-Civil\A-Stormwater\A-DRAINS

DARLING HARBOUR LIVE



NOTES:

- ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
- ALL COORDINATES TO MGA. ALL LEVELS TO AHD.
- THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS.
- PRECINCT BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.

REV	DESCRIPTION	DATE
01	ISSUE FOR DEVELOPMENT APPLICATION	11/03/2013

CLIENT

Lend Lease

PROJECT MANAGEMENT & CONSTRUCTION
LEVEL 4, THE BOND, 30 HICKSON RD MILLERS POINT, NSW 2000

CIVIL / TRAFFIC / FACADES

HYDER CONSULTING PTY LTD
ABN 76 104 485 289
LEVEL 5, 141 WALKER ST,
NORTH SYDNEY NSW 2060
AUSTRALIA

Tel: +61 (0)2 8907 9000
Fax: +61 (0)2 8907 9001
www.hyderconsulting.com
© Copyright reserved

Hyder

PROJECT
**SICEEP
DARLING HARBOUR
PROJECT PRECINCT**

DRAWING TITLE

**PMF
PROPOSED DEVELOPMENT
FLOOD DEPTH AND LEVEL CONTOURS**

STATUS

PRELIMINARY ONLY

SCALE @ A1	DRAWN	DESIGNED	REVIEWED	APPROVED
1:1500	RD	CM	BC	JH

PROJECT NUMBER	DRAWING NUMBER	REV
AA004399	WP-FL-0124	01