

WSU - LOT 4

DARCY RD & HAWKESBURY RD, WESTMEAD

STORMWATER CONCEPT PLAN

NOTES

GENERAL

1. THE DRAWINGS SHALL BE READ AS REQUIRED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS
2. ALL DIMENSIONS ARE IN mm UNO. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS
3. THE PROPOSED WORKS DETAILED SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF COUNCIL, GENERALLY AS DETAILED HEREUNDER
4. ALL EXISTING SERVICES SHALL BE VERIFIED FOR DEPTH AND HORIZONTAL POSITION BY PHYSICAL MEANS PRIOR TO EXCAVATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE SUPERINTENDENTS ATTENTION

STORMWATER DRAINAGE MATERIALS

5. SELECT FILL SHALL BE MATERIAL OBTAINED FROM EXCAVATION OF THE PIPE TRENCH OR IMPORTED WITH A PARTICLE SIZE FOR ROCK NOT GREATER THAN 75mm OR FOR OTHER THAN ROCK NOT GREATER THAN 150mm
 6. IMPORTED FILL SHALL BE EITHER, & GENERALLY CONSIST OF SINGLE SIZED AGGREGATE WITH PARTICLE SIZE NOT GREATER THAN 5mm WRAPPED ALL AROUND WITH GEOTEXTILE FILTER FABRIC OR APPROVED HIGH COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR
 7. CONCRETE SHALL HAVE A SLUM OF 80mm, A MAXIMUM AGGREGATE SIZE OF 20mm & STRENGTH GRADE OF 25MPa (KERBS, EDGE STRIPS & CONCRETE ENCASEMENT) & 32MPa ELSEWHERE
 8. ALL PIPES & FITTINGS FOR STORMWATER DRAINAGE SHALL BE AS FOLLOWS UNO ON THE DRAWINGS:
 - a) UNPLASTISIZED POLYVINYL CHLORIDE (UPVC) WITH SOLVENT WELDED JOINTS FOR DRAINAGE UP TO 300mm
 - b) FIBRE REINFORCED CEMENT WITH RUBBER RINGS FOR PIPE DIAMETERS GREATER THAN 300mm UNO
 - c) REINFORCED CONCRETE WHERE REQUIRED BY AS3500 FOR EXCESSIVE DEPTH
 - d) INSTALL IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS
 9. ALL INGROUND DRAINAGE PIPEWORK SERVING DOWNPIPES SHALL BE MINIMUM 100mm DIAMETER UNO
 10. ALL GRATED DRAINS SHALL BE 225mm UNO WIDTH IN TRAFFICABLE AREAS
 11. ALL GUTTERS TO BE SIZED AT CONSTRUCTION CERTIFICATION STAGE
- ##### EARTHWORKS AND RESTORATION
12. EXCAVATE TRENCHES & STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO RE-USE
 13. BEDDING MATERIAL SHALL CONSIST OF IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN 0.1.R. & 200mm IN ROCK
 14. EMERD ALL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT & 150mm OVERLAY ABOVE PIPE CROWN
 15. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR FOOTWAY FILL MATERIAL SHALL BE AS FOLLOWS:

UNDER ROADWAY:

TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED OR EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR

OTHER THAN ROADWAY:

TRENCH FILL MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED & SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 25mm & 150mm AND NONE LARGER THAN 150mm. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED & APPROVED BY THE CONSULTANT

16. COMPACT BEDDING, EMBEDMENT & TRENCH FILL MATERIALS AS FOLLOWS:

EMBEDMENT:

FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOILS) EG. COARSE AGGREGATE FILL, HIGH GRADE COMPACTION SAND, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 65%

TRENCH FILL:

FOR GRANULAR MATERIAL (NON-COHESIVE SOILS) THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 85%

FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS) THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%

17. RESTORE ALL TRAFFIC AREAS PER STRUCTURAL ENGINEERS DETAILS OR OTHERWISE AS REQUIRED BY COUNCIL

18. FOR ALL SURFACES OTHER THAN IN TRAFFIC AREAS RESTORE DISTURBED SURFACES TO PRE-EXISTING CONDITIONS UNO ON ARCHITECTURAL OR LANDSCAPE ARCHITECTS DRAWINGS & COMPACT AS SPECIFIED

INSTALLATION OF PIPE SYSTEM

19. MINIMUM GRADES FOR GRAVITY STORMWATER DRAINAGE SHALL CONFORM TO AS3500 PART 3 AS FOLLOWS, UNO:
 - a) 1% FOR 100 DIAMETER
 - b) 0.5% FOR 150 & 225 DIAMETER
 - c) 0.4% FOR 300mm DIAMETER
 - d) 0.35% FOR 375mm DIAMETER

20. PIPES SHALL BE TRUE TO GRADES SHOWN & ALIGNED SO THAT THE CENTRES OF THE INLET PIPES INTERSECT WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSSTREAM FACE OF THE PIT

- a) MINIMUM DEPTH OF COVER SHALL BE:
 - 300mm FOR NON-TRAFFICABLE AREAS
 - 450mm FOR TRAFFICABLE AREAS
 - 600mm FOR HEAVY VEHICLE TRAFFIC AREAS

22. BED ALL PIPES FIRMLY & EVENLY ONTO IMPORTED BEDDING FILL MATERIAL

23. LOCATIONS & FIXING OF PIPEWORK SHALL BE SUBJECT TO CO-ORDINATION WITH OTHER DESIGN DISCIPLINES EG. PENETRATIONS THROUGH CONCRETE ELEMENTS

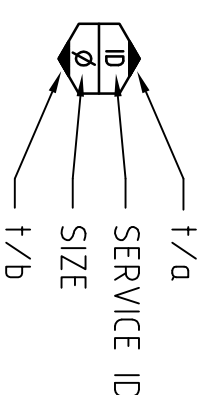
APPROVALS

24. THE AS CONSTRUCTED WORKS SHALL BE INSPECTED BY COUNCIL BUILDING INSPECTOR OR DESIGN CONSULTANT. MINIMUM 48 HOURS NOTICE SHALL APPLY TO ALL INSPECTIONS
25. COUNCIL ENGINEER TO BE GIVEN 48 HOURS NOTICE OF INTENTION TO COMMENCE CONNECTION TO EXISTING COUNCIL MAIN
26. SUBMIT WORK AS EXECUTED DRAWINGS IN HARD COPY FORMAT. VERIFY ALL CONSTRUCTION WORKS SHOWN
27. CERTIFY THAT THE AS CONSTRUCTED SYSTEM HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS ISSUED FOR CONSTRUCTION

LEGEND

EXISTING	PROPOSED	
---	---	STORMWATER MAIN
---	---	SEWER DRAINS OR WASTES
---	---	WASTE LINE
---	---	SUB-SURFACE DRAINS
---	---	AGL GAS MAIN

N	NON RETURN VALVE	FP	FLUSHING POINT
BT	BUCKET TRAP	JU/CO	JUMP UP TO CLEAR OUT
ST	SILT TRAP	AP	ALTERING PIPE
TG	TRENCH GRATE		EXISTING SEWER MAIN HOLE
FW	FLOOR WASTE		STREET FIRE HYDRANT
EL	EXPANSION JOINT		OVERLAND FLOW PATH
CO	CLEAR OUT POINT		
IO	INSPECTION OPENING		



ABBREVIATIONS

eFH	EXISTING FIRE HYDRANT.	MH	MANHOLE.
EX	EXISTING	VR	VERTICAL RISER.
IO	INSPECTION OPENING	JU	JUMP UP.
UPVC	UNPLASTICIZED POLYVINYL CHLORIDE.	AP	ALTERING PIPE.
KO	KERB OUTLET	CO	CLEAR OUT.
FP	FLUSHING POINT	RWT	RAINWATER TANK
RWO	RAIN WATER OUTLET	OSD	ONSITE DETENTION
TG	TRENCH GRATE	SWP	STORMWATER PIT
HP	HIGH POINT		
RWH	RAINWATER HARVEST		
DP	DOWNSPIPE		

CLIENT

DeiCorp Pty Limited
Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8665 4100 Fax: (02) 2566 4111
Email: info@deicorp.com.au

ARCHITECT

TURNER

17 ONE O'NEILL STREET
SYDNEY NSW 2010
Australia

1st & 2nd FLOOR
2nd FLOOR
Sydney NSW 2010
Australia

HYDRAULIC CONSULTANT

Neil Lowry & Associates Pty Ltd
hydraulic & fire services consultants

Suite 3/08, Level 3, 7-9 Gibbons Street, Redfern NSW 2016
Tel: (02) 9526 7923
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 71 011 077 294

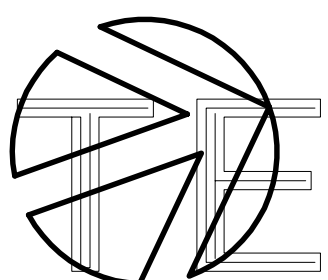
PROJECT

WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD

DRAWING

STORMWATER CONCEPT
COVER SHEET & LEGEND

DRAWN	DESIGNED	CHECKED	DATE	SCALE
KJ	NL		DEC 16	NTS@A1
PROJECT	DWG No.	REV	STATUS	DA
	0789 SC00.4	D		

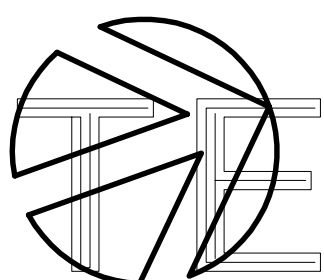


CERTIFICATE

No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	148
-----	---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----



LOT 3



CERTIFICATE

0	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
1	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
2	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
3	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
4	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
5	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
6	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
7	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
8	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
9	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
10	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
11	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
12	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
13	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
14	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
15	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
16	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
17	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
18	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
19	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
20	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
21	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
22	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
23	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
24	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
25	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
26	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
27	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
28	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
29	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
30	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
31	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
32	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
33	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
34	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
35	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
36	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
37	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
38	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
39	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
40	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
41	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
42	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
43	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
44	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
45	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
46	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
47	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
48	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
49	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
50	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
51	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
52	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
53	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
54	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
55	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
56	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
57	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
58	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
59	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
60	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
61	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
62	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
63	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
64	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
65	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
66	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
67	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
68	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
69	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
70	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
71	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
72	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
73	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
74	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
75	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
76	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
77	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
78	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
79	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
80	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
81	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
82	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
83	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
84	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
85	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
86	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
87	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
88	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
89	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
90	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
91	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
92	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
93	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
94	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
95	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
96	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
97	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
98	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
99	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL
100	DEVELOPMENT APPLICATION ISSUE	28/09/17	NL	NL

DELCORP
pty limited
Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8655 4100 Fax: (02) 2566 4111
Email: delcorp@delcorp.com.au

TURNER
17 ONE ONE ONE Street
Sydney NSW 2010
Tel: (02) 2566 4100
Fax: (02) 2566 4111
Email: turner@turner.com.au

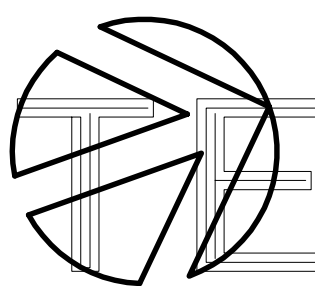
HYDRAULIC CONSULTANT
Neil Lowry & Associates Pty Ltd
hydraulic & fire services consultants
Suite 308, Level 3, 7-9 Gibsons Street, Redfern NSW 2016
Tel: (02) 9526 7922
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 71 011 077 294

WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD

STORMWATER CONCEPT
BASEMENT 1
DRAWN: KJ, DESIGNED: NL, CHECKED: NL
DATE: DEC 16, SCALE: 1:200@A1
PROJECT: 0789 SC05.4, DWS No: D, STATUS: DA



LOT 3



CERTIFICATE

No.	REVISION/ISSUE	DATE	BY	CHECKED
D	REVISED DEVELOPMENT APPLICATION ISSUE	18.09.17	NL	NL
C	REVISED DEVELOPMENT APPLICATION ISSUE	19.08.17	NL	NL
B	REVISED DEVELOPMENT APPLICATION ISSUE	20.12.16	NL	NL
A	DEVELOPMENT APPLICATION ISSUE	20.12.16	NL	NL

CLIENT

DeCorr Pty Limited

Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8655 4100 Fax: (02) 2565 4111
Email: info@decorr.com.au

ARCHITECT

TURNER

17 The Oval Street
Tel: (02) 9556 7822
Fax: (02) 9556 7822
Email: info@turner.com.au

HYDRAULIC CONSULTANT

Neil Lowry & Associates Pty Ltd

hydraulic & fire services consultants

Suite 308, Level 3, 79 Gibsons Street, Redfern NSW 2016
Tel: (02) 9556 7822
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 7 101 077 296

PROJECT

WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD

DRAWING

STORMWATER CONCEPT
LOWER GROUND FLOOR

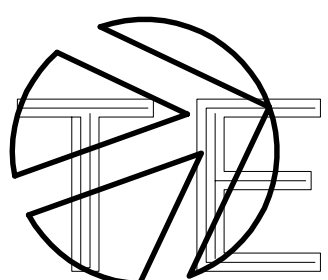
DRAWN	DESIGNED	CHECKED
KJ	NL	

DATE	SCALE
DEC 16	1:200@A1

PROJECT	DWG No.	REV	STATUS
0789	SC06.4	D	DA



LOT 3



CERTIFICATE

No.	D	DESIGN/DEVELOPMENT APPLICATION ISSUE	18.09.17	NL	NL
	A	DESIGN/DEVELOPMENT APPLICATION ISSUE	20.12.16	NL	NL
REVISION/ISSUE			DATE	BY	CHECKED

CLIENT



Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8655 4100 Fax: (02) 2565 4111
Email: delin@delcorp.com.au

ARCHITECT

TURNER

17 ONE OAK STREET
ST. LEONARDS NSW 1585
AUSTRALIA
T +61 2 9555 7000
F +61 2 9555 7001
turner@turner.com.au

HYDRAULIC CONSULTANT

Neil Lowry & Associates Pty Ltd
hydraulic & fire services consultants

Suite 3/08, Level 3, 7/9 Gibbons Street, Redfern NSW 2016
Tel: (02) 9526 7922
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 7 101 877 294

PROJECT

WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD

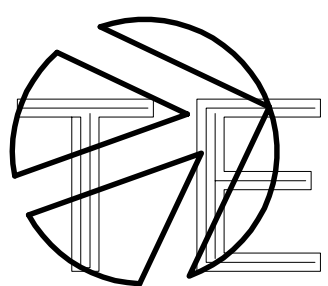
STORMWATER CONCEPT
LEVEL 2 - 5

DRAWN	KJ	DESIGNED	NL	CHECKED	
DATE	DEC 16	SCALE	1:200@A1		

PROJECT	0789 SC09.4	DWS No.	D	STATUS	DA
---------	-------------	---------	---	--------	----



LOT 3



CERTIFICATE

No.	D	18.09.17	NL	NL
A	18.09.17	NL	NL	NL
REVISION/ISSUE	DATE	BY	CHECKED	

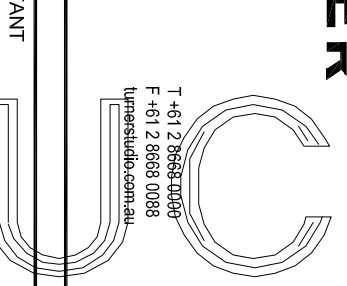
CLIENT



Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8655 4100 Fax: (02) 2565 4111
Email: info@delcorp.com.au

ARCHITECT
TURNER

17 ONE ONE ONE Street
Sydney NSW 2010
Australia
Tel: +61 2 9555 7922
Fax: +61 2 9555 7923
Email: info@turner.com.au



HYDRAULIC CONSULTANT
Neil Lowry & Associates Pty Ltd
hydraulic & fire services consultants

Suite 3/08, Level 3, 799 Gibbons Street, Redfern NSW 2016
Tel: (02) 9556 7922
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 71 001 077 294

PROJECT

**WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD**

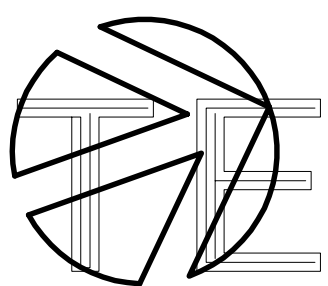
STORMWATER CONCEPT
LEVEL 6

DRAWN	KJ	DESIGNED	NL	CHECKED	
DATE	DEC 16	SCALE	1:200@A1		

PROJECT	0789 SC10.4	DWG No.	D	STATUS	DA
---------	-------------	---------	---	--------	----



LOT 3



CERTIFICATE

No.	D	REVISION/ISSUE	DATE	BY	CHECKED
1	A	REVISION/ISSUE	DATE	BY	CHECKED

CLIENT
DEL Corp Pty Limited
Suite 301, Level 3, 161 Redfern Street, Redfern NSW 2016
Phone: (02) 8655 4100 Fax: (02) 2565 4111
Email: delin@delcorp.com.au

ARCHITECT
TURNER
17 ONE O'Connell Street
Sydney NSW 2000
Australia
Tel: +61 2 9222 2000
Fax: +61 2 9222 2001
turnerarchitects.com.au

HYDRAULIC CONSULTANT
Neil Lowry & Associates Pty Ltd
hydraulic & fire services consultants
Suite 3/08, Level 3, 799 Gibsons Street, Redfern NSW 2016
Tel: (02) 9526 7922
Email: admin@nla.com.au
Neil Lowry & Associates Pty Ltd ABN 7 101 872 294

PROJECT
WSU - LOT 4
DARCY ROAD &
HAWKESBURY ROAD
WESTMEAD

DRAWING
STORMWATER CONCEPT
LEVEL 7

DRAWN	KJ	DESIGNED	NL	CHECKED	DATE	SCALE
					DEC 16	1:200@A1

PROJECT 0789 SC11.4

DWG No.	REV	STATUS	DA
0789	SC11.4	D	DA