HOWARD STREET

ROSSLYN ST TO VICTORIA ST

WEST MELBOURNE

STREETSCAPE WORKS

DRAWING INDEX

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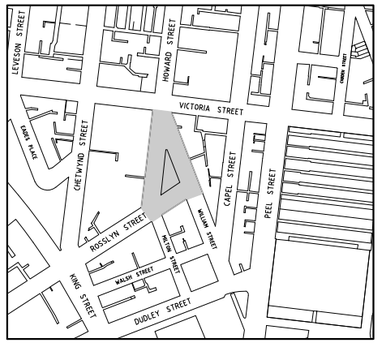

LOCATION OF WORKS

LOCALITY PLAN
NOT TO SCALE

CONSTRUCTION NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND DRAWINGS ISSUED BY THE PROJECT MANAGER AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
2. ALL DIMENSIONS AND RELEVANT SETOUT POINTS SHALL BE CONFIRMED AND VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION IS COMMENCED. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE PROJECT MANAGER.
3. THE CONTRACTOR SHALL TRANSFER TBM'S OUT OF CONSTRUCTION AREA PRIOR TO COMMENCEMENT OF EXCAVATION WORKS..
4. THE CONTRACTOR SHALL MAINTAIN THE WORK SITE IN A SAFE AND TRAFFICABLE CONDITION.
5. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING, AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION AND FOR THE PROTECTION OF THE PUBLIC.
6. THE CONTRACTOR SHALL ENSURE THAT NO POLLUTED OR SEDIMENT LADEN RUNOFF ENTERS ANY DRAIN OR WATERCOURSE. THE CONTRACTOR SHALL ENSURE THAT PRECAUTIONS ARE TAKEN TO PREVENT EMISSION OF DUST, WHETHER FROM THE OPERATION OF CONSTRUCTION EQUIPMENT OR OTHERWISE.
7. THE CONTRACTOR SHALL PROVE ALL SERVICE LOCATIONS PRIOR TO COMMENCING WORK.
8. SAWCUT EXISTING PAVEMENT AT LIMIT OF WORKS TO ENSURE NEAT MATCHING TO NEW WORKS. SAWCUT DEPTH 75mm FOR ASPHALT FOOTPATH & 125mm FOR ASPHALT ROADWAY.
9. CARE MUST BE TAKEN WHEN EXCAVATING IN THE VICINITY OF SERVICES.
10. EXCAVATION WITHIN 4.5m RADIUS OF TREES SHALL BE CARRIED OUT WITH HAND HELD EQUIPMENT AS PER MCC TREE PROTECTION FACT SHEET. CUTTING OF TREE ROOTS GREATER THAN 25mm DIA. SHALL BE CARRIED OUT UNDER THE SUPERVISION OF PARKS & URBAN DESIGN ARBORIST. CONTACT TANIA MacLEOD TEL. 9658 8176 PRIOR TO COMMENCEMENT OF WORKS IN THIS VICINITY.
11. CONTRACTOR TO SOURCE AS REQUIRED BLUESTONE PITCHERS FROM CITYWIDE DEPOT.
12. ALL SURPLUS BLUESTONE PITCHERS TO BE CLEANED AND DELIVERED TO CITYWIDE DEPOT BY CONTRACTOR.
13. CONTRACTOR TO ADJUST ALL AFFECTED SERVICE COVERS TO MATCH NEW PAVEMENT LEVELS.
14. ALL DOWN PIPES TO BE RECONNECTED TO CHANNEL AS PER MCC STD DWG 1P54315.
15. CONTRACTOR TO COORDINATE EXCAVATION WORKS WHERE OPTIC FIBRE EXISTS WITH TELSTRA.
16. CONTRACTOR TO TAKE EXTREME CAUTION WHEN EXCAVATING NEAR EXISTING BUILDING FOOTINGS.
17. ALL NEW KERBS USED TO BE 300mm SAWN BLUESTONE.
18. ALL EXISTING STREET FURNITURE TO BE CAREFULLY REMOVED AND STORED ON SITE FOR REINSTALLATION. FURNITURE INSTALLATION TO BE IN NEW GIB KEY SOCKETS AS PER STD DWG 1P 54408 UNLESS NOTED OTHERWISE. EXISTING OBSOLETE SOCKETS TO BE REMOVED AND DISCARDED BY CONTRACTOR. SIGN POSTS TO BE TAGGED WITH LOCATION DESCRIPTION ON-SITE PRIOR TO REMOVAL.
19. TACTILE GROUND SURFACE INDICATORS TO BE INSTALLED IN ACCORDANCE WITH AS1428.4-2002.
20. CONSTRUCT TREE PLOTS WITH TREATED TIMBER PLINTH EDGING AND INFILL WITH GRANITIC SAND.
21. MATCH EXISTING FLUSH ENTRANCES.
22. ALL DIMENSIONS OF TREE PLOTS TO BE CENTRED AROUND TREE TRUNK.
23. REMOVE ALL METAL PLATES OVER EXISTING CROSSINGS AND INDIVIDUALLY LABEL AND STORE TEMPORARILY AT CITYWIDE DEPOT FOR POSSIBLE FUTURE RETURN TO PROPERTY OWNERS. CONTRACTOR TO COORDINATE AND LIAISE WITH PROPERTY OWNERS PRIOR TO UNDERTAKING RECONSTRUCTION.
24. UPON COMPLETION THE WHOLE SITE SHALL BE CLEANED UP AND ALL RUBBISH REMOVED AND SITE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE PROJECT MANAGER.

DRAINAGE NOTES

D1. ALL REINFORCED CONCRETE PIPES (RCP) SHALL BE CLASS 2 (UNLESS OTHERWISE NOTED) AND COMPLY WITH AS 4058.
ALL UNPLASTICISED POLYVINYL CHLORIDE PIPE (UPVC) PIPES SHALL BE CLASS 8 U.N.O. AND COMPLY WITH AS1254.

D2. ALL REINFORCED CONCRETE PIPES AND ALL UPVC PIPES 225Ø OR GREATER SHALL BE RUBBER RING JOINTED. ALL UPVC PIPES 150Ø OR LESS SHALL BE SOLVENT WELDED.

D3. LAYING OF PIPES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATION.

D4. PIPE LAYING SHALL COMMENCE AT THE DOWNSTREAM END OF WORK.

D5. ALL DRAINAGE PITS TO HAVE NON-METAL STEPS AND LADDERS INSTALLED.
APPROVED MANUFACTURER: INDUSTRIAL STEPS & LADDERS
CONTACT GORDON BILK TEL. 0429 881 150
WWW.INDUSTRIALSTEPS.COM

OH&S DRAINAGE NOTES

1. CONTRACTOR TO CHECK FOR CONTAMINANTS PRIOR TO ENTERING DRAINAGE SYSTEM.
2. CONTRACTOR TO INTRODUCE MANUAL HANDLING PROCEDURES PRIOR TO CONSTRUCTION AND MAINTENANCE WORKS.
3. CONTRACTOR TO INTRODUCE SAFE MAINTENANCE PROCEDURES PRIOR TO UNDERTAKING MAINTENANCE WORKS ON THESE ASSETS.
4. ALL EXCAVATION AND TRENCHING TO COMPLY WITH OH&S ACT AND RELEVANT GUIDELINES

BIORETENTION MEDIA SPECIFICATION

NOTE: TO BE READ IN CONJUNCTION WITH "GUIDELINE SPECIFICATIONS FOR SOIL MEDIA IN A BIORETENTION SYSTEM (FAWB, MARCH 2008)

1. BIORETENTION SYSTEMS WITH IMPORTED MEDIA

THE BIORETENTION SOIL MEDIA SPECIFICATIONS REQUIRE FILTER MEDIA (450mm DEEP U.N.O.), A TRANSITION LAYER (100mm DEEP) AND A DRAINAGE LAYER (100mm DEEP).

2. FILTER MEDIA - GENERAL DESCRIPTION

THE MATERIAL CAN BE OF SILICEOUS OR CALCAREOUS ORIGIN ONLY, MINIMAL LIGHT COMPACTION TO AVOID SUBSIDENCE AND UNEVEN DRAINAGE SHOULD BE CARRIED OUT. THE BIORETENTION SYSTEM WILL OPERATE SO THAT WATER WILL INFILTRATE INTO THE FILTER MEDIA AND MOVE VERTICALLY DOWN THROUGH THE PROFILE.
IN GENERAL, THE MEDIA SHOULD BE A LOAMY SAND SOIL WITH AN APPROPRIATELY HIGH PERMEABILITY UNDER COMPACTION AND SHOULD BE FREE OF RUBBISH AND DELETERIOUS MATERIAL, TOXICANTS, DECLARED PLANTS AND LOCAL WEEDS AND SHOULD NOT BE HYDROPHOBIC. THE SOILS SHOULD CONTAIN SOME ORGANIC MATTER FOR INCREASED WATER HOLDING CAPACITY BUT BE LOW IN NUTRIENT CONTENT. IN GENERAL APPROPRIATE MATERIAL IS LIKELY TO BE APPROXIMATED BY A MIX OF 80-90% SAND, 10-20% LOAM SOIL AND 3-10% COMPOSTED ORGANICS OR PEAT.
THE HYDRAULIC CONDUCTIVITY OF THE FILTER MEDIA TO BE 100mm/hr.

3. FILTER MEDIA - TESTING REQUIREMENTS

TO DETERMINE WHETHER A SOIL IS SUITABLE THE FOLLOWING TESTS SHOULD BE UNDERTAKEN:
1. A HYDRAULIC CONDUCTIVITY TEST USING THE ASTM F1815-06 METHOD
2. PARTICLE SIZE DISTRIBUTION (PSD)
3. AS4419-2003 - SOILS FOR LANDSCAPING AND GARDEN USE
4. SOIL NUTRITION TESTING BY A HORTICULTURALIST

4. FILTER MEDIA - DETAILED SPECIFICATION

PARTICLE SIZE DISTRIBUTION
A SUITABLE SOIL WILL HAVE STRUCTURAL INTEGRITY AND A INFILTRATION RATE IN THE FOLLOWING APPROPRIATE RANGE:

CLAY & SILT	<3%	(<0.05mm)
VERY FINE SAND	5-30%	(0.05-0.15mm)
FINE SAND	10-30%	(0.15-0.25mm)
MEDIUM TO COARSE SAND	40-60%	(0.25-1.0mm)
COARSE SAND	7-10%	(1.0-2.0mm)
FINE GRAVEL	<3%	(2.0-3.4mm)

PERMEABILITY - THE SATURATED HYDRAULIC CONDUCTIVITY REQUIRED IS 100mm/hr

5. TRANSITION LAYER

TRANSITION LAYER MATERIAL SHALL BE CLEAN, WELL GRADED SAND / COARSE SAND MATERIAL CONTAINING LITTLE OR NO FINES. AN INDICATIVE PSD IS:

% PASSING	4.0mm 100%
	1.0mm 80%
	0.7mm 44%
	0.5mm 8.4%

6. DRAINAGE LAYER

THE DRAINAGE LAYER IS TO BE CLEAN, FINE GRAVEL, SUCH AS 2-5mm WASHED SCREENINGS.

7. MULCH LAYER

THE MULCH LAYER IS TO BE 50mm DEPTH, 7-19mm RECYCLED NO FINES ROCK AGGREGATE (ALEX FRASER OR APPROVED EQUIVALENT).

CONSTRUCTION HOLD POINTS

A. TREE PIT EXCAVATION AND INSTALLATION OF DRAINAGE PIPES.
B. PLACEMENT OF FILTER MEDIA IN TREE PITS.
C. PRACTICAL COMPLETION

FILTER MEDIA TESTING

A. CONTRACTOR TO PROVIDE PROOF OF TESTING OF FILTER MEDIA.

CONTACT JEFF NELSON CITY OF MELBOURNE, DESIGN AND URBAN ENVIRONMENT TEL. 9658 9158 TO ARRANGE HOLD POINT INSPECTIONS.

WARNING
BEWARE OF UNDERGROUND SERVICES
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MELBOURNE ONE CALL SERVICE 1100 DIAL BEFORE YOU DIG

Rev.	Revision Details	By	Date
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WK060385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED (Delivery)	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Licensed Surveyors, Engineers, Traffic & Transportation
Consultants of Commerce
Planning Consultants
Environmental Consultants

Quality Endorsed Company ISO 9001 LRQA9001

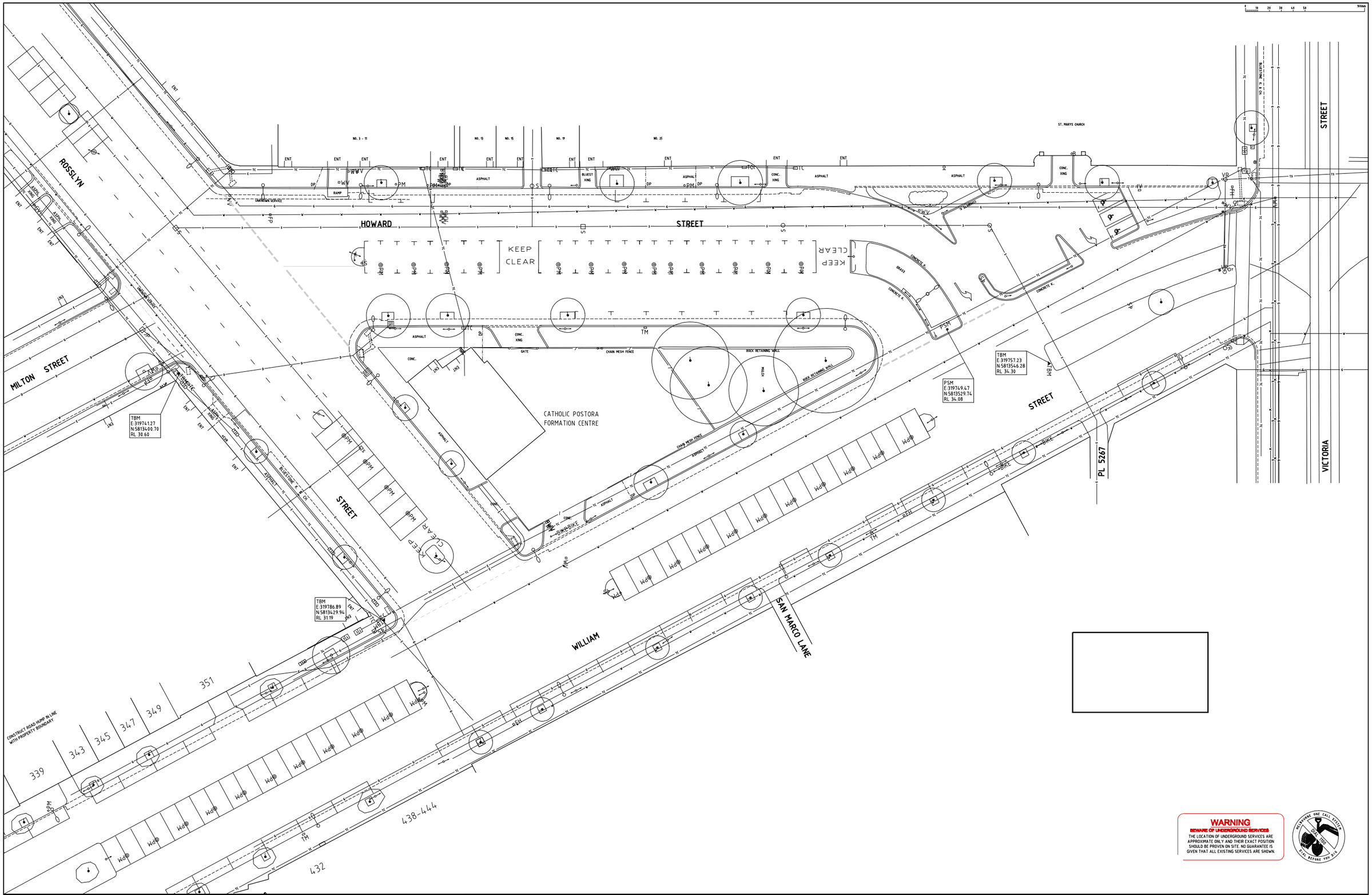
MELBOURNE

STATUS **CONSTRUCTION ISSUE**

JOB LOCATION
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
DRAWING INDEX, NOTES AND LOCALITY PLAN

ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer –	Group Manager –	NUMBER OF SHEETS 1 OF 11	REVISION B
Date –	Date –	DOCS NUMBER	5178856



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MELBOURNE ONE CALL SYSTEM — DIAL 1100 — STILL BEFORE YOU DIG

Rev.	Revision Details	By	Date
B	ISSUED FOR CONSTRUCTION	MB	01/05/99
A	PRELIMINARY ISSUE	MB	01/04/99

CAD FILE	WK060385	PROJECT NUMBER	08E526RR
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CHECKED	H. McCORMICK	SCALE	1:200
CONCEPT DATE	01/04/99	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Consulting Engineers, Planners, Traffic & Transportation
Quality Endorsed Company ISO 9001 LLOYDS

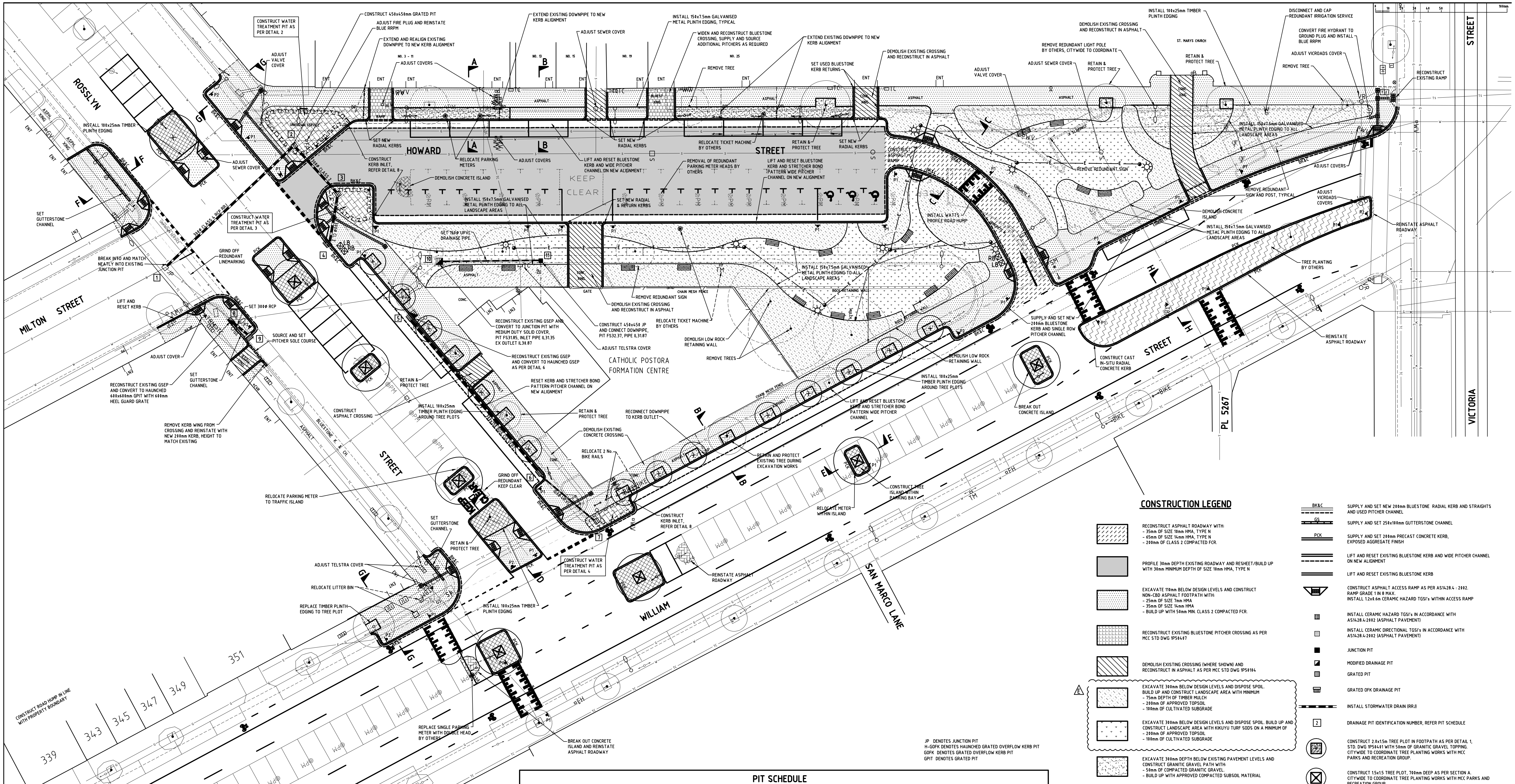
MELBOURNE

STATUS: CONSTRUCTION ISSUE

JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
EXISTING CONDITIONS PLAN

ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer	Group Manager	NUMBER OF SHEETS	2 OF 11
-	-		REVISION B
Date -	Date -	DOCS NUMBER	5178856



CONSTRUCTION LEGEND

- RECONSTRUCT ASPHALT ROADWAY WITH:
  - 35mm OF SIZE 10mm HMA, TYPE N
  - 65mm OF SIZE 14mm HMA, TYPE N
  - 200mm OF CLASS 2 COMPACTED FCR.
- PROFILE 30mm DEPTH EXISTING ROADWAY AND RESHEET/BUILD UP WITH 30mm MINIMUM DEPTH OF SIZE 10mm HMA, TYPE N
- EXCAVATE 110mm BELOW DESIGN LEVELS AND CONSTRUCT NON-CBD ASPHALT FOOTPATH WITH:
  - 25mm OF SIZE 7mm HMA
  - 35mm OF SIZE 14mm HMA
  - BUILD UP WITH 50mm MIN. CLASS 2 COMPACTED FCR.
- RECONSTRUCT EXISTING BLUESTONE PITCHER CROSSING AS PER MCC STD DWG 1P50407
- DEMOLISH EXISTING CROSSING (WHERE SHOWN) AND RECONSTRUCT IN ASPHALT AS PER MCC STD DWG 1P50104
- E: EXCAVATE 300mm BELOW DESIGN LEVELS AND DISPOSE SPOIL. BUILD UP AND CONSTRUCT LANDSCAPE AREA WITH MINIMUM
  - 75mm DEPTH OF TIMBER MULCH
  - 200mm OF APPROVED TOPSOIL
  - 100mm OF CULTIVATED SUBGRADE
- EXCAVATE 300mm BELOW DESIGN LEVELS AND DISPOSE SPOIL. BUILD UP AND CONSTRUCT LANDSCAPE AREA WITH KIKUYU TURF SODS ON A MINIMUM OF
  - 200mm OF APPROVED TOPSOIL
  - 100mm OF CULTIVATED SUBGRADE
- EXCAVATE 300mm DEPTH BELOW EXISTING PAVEMENT LEVELS AND CONSTRUCT GRANITIC GRAVEL PATH WITH:
  - 50mm OF COMPACTED GRANITIC GRAVEL.
  - BUILD UP WITH APPROVED COMPACTED SUBSOIL MATERIAL
- EXCAVATE 300mm DEPTH BELOW EXISTING PAVEMENT LEVELS AND CONSTRUCT MEDIAN/TREE ISLAND WITH:
  - 50mm OF COMPACTED GRANITIC GRAVEL.
  - BUILD UP WITH APPROVED COMPACTED SUBSOIL MATERIAL
- DEMOLISH AND EXCAVATE 450mm BELOW TOP OF EXISTING CONCRETE ISLAND AND REINSTATE ASPHALT ROADWAY WITH:
  - 35mm OF SIZE 10mm HMA, TYPE N
  - 65mm OF SIZE 14mm HMA, TYPE N
  - BUILD UP WITH CLASS 2 COMPACTED FCR.
- CONSTRUCT WATER TREATMENT PIT AS PER DETAILS
- SCRAPE 50mm DEPTH EXISTING LANDSCAPING WITHIN MEDIAN AND LAY 50mm DEPTH OF COMPACTED GRANITIC GRAVEL
- INSTALL MCC STANDARD PARK TYPE LIGHT POLE REFER MCC STD DWG 164-F01 TO F11
- INSTALL ELECTRICAL CONDUIT PIT, REFER DETAIL 7
- E: INSTALL ELECTRICAL CONDUITS, REFER DETAIL 7
- BK&C: SUPPLY AND SET NEW 200mm BLUESTONE RADIAL KERB AND STRAIGHTS AND USED PITCHER CHANNEL
- GS: SUPPLY AND SET 250x100mm GUTTERSTONE CHANNEL
- PCK: SUPPLY AND SET 200mm PRECAST CONCRETE KERB, EXPOSED AGGREGATE FINISH
- LIFT AND RESET EXISTING BLUESTONE KERB AND WIDE PITCHER CHANNEL ON NEW ALIGNMENT
- LIFT AND RESET EXISTING BLUESTONE KERB
- CONSTRUCT ASPHALT ACCESS RAMP AS PER AS1428.4 : 2002. RAMP GRADE 1 IN 8 MAX. INSTALL 1.2x0.6m CERAMIC HAZARD TGSI's WITHIN ACCESS RAMP
- INSTALL CERAMIC HAZARD TGSI's IN ACCORDANCE WITH AS1428.4:2002 (ASPHALT PAVEMENT)
- INSTALL CERAMIC DIRECTIONAL TGSI's IN ACCORDANCE WITH AS1428.4:2002 (ASPHALT PAVEMENT)
- JUNCTION PIT
- MODIFIED DRAINAGE PIT
- GRATED PIT
- GRATED OFK DRAINAGE PIT
- INSTALL STORMWATER DRAIN (RRJ)
- 2: DRAINAGE PIT IDENTIFICATION NUMBER, REFER PIT SCHEDULE
- CONSTRUCT 2.0x1.5m TREE PLOT IN FOOTPATH AS PER DETAIL 1, STD. DWG 1P50401 WITH 50mm OF GRANITIC GRAVEL TOPPING. CITYWIDE TO COORDINATE TREE PLANTING WORKS WITH MCC PARKS AND RECREATION GROUP.
- CONSTRUCT 1.5x1.5 TREE PLOT, 700mm DEEP AS PER SECTION A. CITYWIDE TO COORDINATE TREE PLANTING WORKS WITH MCC PARKS AND RECREATION GROUP.
- EXISTING TREE TO BE REMOVED BY MCC PARKS & RECREATION GROUP. CITYWIDE TO COORDINATE TREE REMOVAL WORKS.
- REMOVE REDUNDANT LINEMARKING.
- PROPOSED/RELOCATED PARKING METER & FOOTING BY OTHERS. CONTACT CITYWIDE METER CARE TEL: GREG 0419 145 154 TO ARRANGE INSTALLATION
- PM: EXISTING PARKING METER TO BE REMOVED OR RELOCATED BY OTHERS. CONTACT CITYWIDE METER CARE TEL: GREG 0419 145 154
- P1: INSTALL 3.2m TRAFFIC SIGN POST AS PER MCC STD DWG. 1P50400
- P2: INSTALL 1.5m TRAFFIC SIGN POST AS PER MCC STD DWG. 1P50400
- RELOCATE EXISTING PARKING SIGN AND POST
- LB: INSTALL 80Lt. LITTER BIN AS PER MCC TECH. NOTE 702.01
- RB: INSTALL 80Lt. RECYCLING BIN AS PER MCC TECH. NOTE 702.02
- INSTALL STEEL SEAT AS PER MCC TECH. NOTE 701.01

JP DENOTES JUNCTION PIT
H-GOFK DENOTES HAUNCHED GRATED OVERFLOW KERB PIT
GOFK DENOTES GRATED OVERFLOW KERB PIT
GPIT DENOTES GRATED PIT

PIT SCHEDULE

PIT No.	TYPE	PIT SIZE	INLET PIPE		BRANCH INLET		OUTLET PIPE		COVER / GRATE		PIT DEPTH	COMMENTS
			SIZE	INVERT	SIZE	INVERT	SIZE	INVERT	LEVEL	TYPE		
1	EX JP	800x800	EX300	29.08	300	29.800	EX375	EX29.08	30.480	RE-USE EXISTING COVER	1.400	BREAK INTO EXISTING JP AND CONNECT NEW 300Ø SWD
2	GPIT	450x450	300	30.120	-	-	300	30.100	30.900	MCC 450mm LANE TYPE FRAME & GRATE AS PER STD DWG 1P50317	0.800	CONSTRUCT MCC LANE TYPE GRATE AS PER STD DWG 1P50310
3	GPIT	450x450	300	30.500	-	-	300	30.400	31.350	MCC 450mm LANE TYPE FRAME & GRATE AS PER STD DWG 1P50317	0.950	CONSTRUCT MCC LANE TYPE GRATE AS PER STD DWG 1P50310
4	GOFK	900x750	-	-	-	-	300	30.620	31.220	INSTALL MCC 937x549mm FRAME & GRATE AS PER STD DWG 1P50306 INSTALL MCC 300mm OVERFLOW KERB STONE	0.600	CONSTRUCT MCC OVERFLOW KERB PIT AS PER STD DWG 1P50301
5	H-GOFK	1800x950	300x150 BC	30.790	-	-	EX300	EX30.79	31.290	INSTALL MCC 937x549mm FRAME & GRATE AS PER STD DWG 1P50306 INSTALL MCC 300mm OVERFLOW KERB STONE	0.500	CONSTRUCT HAUNCHED MCC OVERFLOW KERB PIT AS PER DETAIL 6
6	GOFK	900x750	150	31.000	-	-	300x150 BC	30.950	31.447	INSTALL MCC 937x549mm FRAME & GRATE AS PER STD DWG 1P50306 INSTALL MCC 300mm OVERFLOW KERB STONE	0.497	CONSTRUCT MCC OVERFLOW KERB PIT AS PER STD DWG 1P50301
7	GPIT	450x450	-	-	-	-	150	31.100	31.700	MCC 450mm LANE TYPE FRAME & GRATE AS PER STD DWG 1P50317	0.600	CONSTRUCT MCC LANE TYPE GRATE AS PER STD DWG 1P50310
8	EX GPIT	600x600	EX300	29.700	300	29.800	EX300	29.700	30.710	600x600mm MEDIUM DUTY HEEL GUARD APPROVED GRATE	1.010	RECONSTRUCT EXISTING PIT AS PER STD DWG 1P50310 AND CONVERT TO GRATED JUNCTION PIT
9	GOFK	900x750	-	-	-	-	300	29.88	30.480	INSTALL MCC 937x549mm FRAME & GRATE AS PER STD DWG 1P50306 INSTALL MCC 300mm OVERFLOW KERB STONE	0.600	CONSTRUCT MCC OVERFLOW KERB PIT AS PER STD DWG 1P50301
10	JP	600x600	150	31.350	-	-	EX300	EX30.87	31.850	600x600mm MEDIUM DUTY SOLID CONCRETE COVER	0.980	RECONSTRUCT EXISTING PIT AS PER STD DWG 1P50318 AND CONVERT TO JUNCTION PIT
11	JP	450x450	EX100	EX32.10	-	-	150	31.870	32.370	450x450mm MEDIUM DUTY SOLID CONCRETE COVER	0.500	CONSTRUCT JUNCTION PIT AS PER STD DWG 1P50318

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MELBOURNE ONE CALL SYSTEM – DIAL 1100 – DIAL BEFORE YOU DIG

CONSTRUCTION HOLD POINTS

A. TREE PIT EXCAVATION AND INSTALLATION OF DRAINAGE PIPES.
B. PLACEMENT OF FILTER MEDIA IN TREE PITS.
C. PRACTICAL COMPLETION

FILTER MEDIA TESTING

A. CONTRACTOR TO PROVIDE PROOF OF TESTING OF FILTER MEDIA.

CONTACT JEFF NELSON CITY OF MELBOURNE, DESIGN AND URBAN ENVIRONMENT TEL. 9658 9150 TO ARRANGE HOLD POINT INSPECTIONS.

Rev.	Revision Details	By	Date
E	LANDSCAPING CHANGES	MB	18/12/09
D	SPEED HUMP MOVED NEAR CHURCH	MB	17/11/09
C	CROSSOVER ADDED IN ROSSLYN ST	MB	23/10/09
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WK060385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED DATE	01/04/09	DATUM	MGA94/AHD

North Point

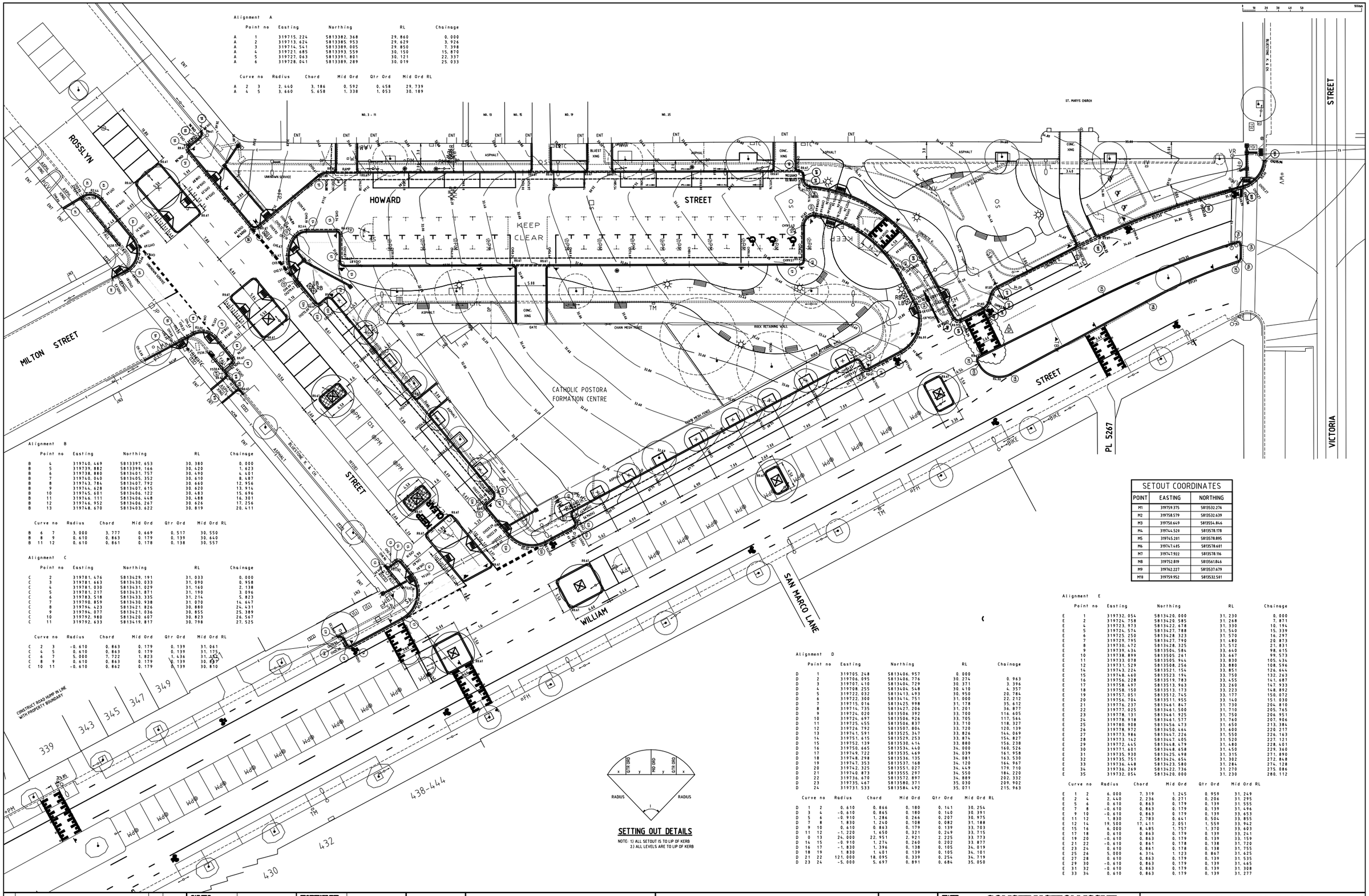
Cardno Grogan Richards
Quality Endorsed Company

STATUS: **CONSTRUCTION ISSUE**

JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
CONSTRUCTION PLAN

ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 3 OF 11	REVISION: E
Date: -	Date: -	DOCS NUMBER	5178856



Alignment A

Point no	Easting	Northing	RL	Chainage
A 1	319715.224	5813382.368	29.860	0.000
A 2	319713.624	5813385.953	29.629	3.926
A 3	319714.541	5813389.005	29.850	7.398
A 4	319721.685	5813393.559	30.150	15.870
A 5	319727.063	5813391.801	30.121	22.337
A 6	319728.041	5813389.289	30.019	25.033

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
A 2 3	2.440	3.186	0.592	0.458	29.739
A 4 5	3.660	5.658	1.338	1.053	30.189

Alignment B

Point no	Easting	Northing	RL	Chainage
B 4	319740.469	5813397.653	30.380	0.000
B 5	319739.882	5813399.166	30.420	1.623
B 6	319738.880	5813401.757	30.490	4.401
B 7	319740.040	5813405.352	30.610	8.487
B 8	319743.786	5813407.792	30.660	12.956
B 9	319744.628	5813407.615	30.620	13.914
B 10	319745.601	5813406.122	30.483	15.696
B 11	319746.111	5813406.448	30.488	16.301
B 12	319746.952	5813406.267	30.626	17.256
B 13	319748.670	5813403.622	30.819	20.411

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
B 6 7	3.000	3.777	0.669	0.517	30.550
B 8 9	0.610	0.863	0.179	0.139	30.660
B 11 12	0.610	0.861	0.178	0.138	30.557

Alignment C

Point no	Easting	Northing	RL	Chainage
C 2	319781.476	5813429.191	31.033	0.000
C 3	319781.663	5813430.033	31.090	0.958
C 4	319781.030	5813431.029	31.160	2.138
C 5	319781.217	5813431.871	31.190	3.096
C 6	319783.518	5813433.335	31.214	5.823
C 7	319790.859	5813430.938	31.070	14.447
C 8	319794.423	5813421.826	30.880	24.431
C 9	319794.077	5813421.036	30.855	25.389
C 10	319792.980	5813420.607	30.823	26.567
C 11	319792.633	5813419.817	30.798	27.525

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
C 2 3	-0.610	0.863	0.179	0.139	31.061
C 4 5	0.610	0.863	0.179	0.139	31.175
C 6 7	5.000	7.722	1.823	1.436	31.452
C 8 9	0.610	0.863	0.179	0.139	30.837
C 10 11	-0.610	0.862	0.179	0.139	30.810

Alignment D

Point no	Easting	Northing	RL	Chainage
D 1	319705.248	5813406.957	0.000	
D 2	319706.095	5813406.776	30.274	0.963
D 3	319707.410	5813404.729	30.371	3.396
D 4	319708.255	5813404.548	30.410	4.357
D 5	319722.032	5813413.493	30.950	20.784
D 6	319722.300	5813414.751	31.000	22.212
D 7	319715.016	5813425.998	31.178	35.612
D 8	319714.735	5813427.206	31.201	36.877
D 9	319724.020	5813506.392	33.700	116.605
D 10	319724.697	5813506.926	33.705	117.564
D 11	319725.455	5813506.837	33.710	118.327
D 12	319726.792	5813507.804	33.720	120.139
D 13	319741.591	5813525.347	33.826	144.069
D 14	319751.615	5813529.253	33.874	154.827
D 15	319752.139	5813530.414	33.880	156.238
D 16	319750.665	5813534.440	34.000	160.526
D 17	319749.722	5813535.469	34.039	161.958
D 18	319748.298	5813536.135	34.081	163.530
D 19	319747.353	5813537.168	34.120	164.967
D 20	319742.325	5813551.027	34.449	179.710
D 21	319740.873	5813555.297	34.550	184.220
D 22	319736.670	5813572.897	34.889	202.332
D 23	319735.467	5813580.371	35.030	209.902
D 24	319731.533	5813584.492	35.071	215.963

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
D 1 2	0.610	0.866	0.180	0.141	30.254
D 3 4	-0.610	0.865	0.180	0.140	30.391
D 5 6	-0.910	1.286	0.266	0.207	30.975
D 7 8	1.830	1.240	0.108	0.082	31.188
D 9 10	0.610	0.863	0.179	0.139	33.703
D 11 12	-1.220	1.650	0.321	0.249	33.715
D 0 13	24.000	22.951	2.921	2.225	33.773
D 14 15	-0.910	1.274	0.260	0.202	33.877
D 16 17	-1.830	1.396	0.138	0.105	34.019
D 18 19	1.830	1.401	0.139	0.105	34.101
D 21 22	121.000	18.095	0.339	0.254	34.719
D 23 24	-5.000	5.697	0.891	0.684	35.050

SETTING OUT DETAILS

NOTE: 1) ALL SETOUT IS TO LIP OF KERB
2) ALL LEVELS ARE TO LIP OF KERB

SETOUT COORDINATES

POINT	EASTING	NORTHING
M1	319759.375	5813532.276
M2	319758.579	5813532.639
M3	319758.669	5813554.846
M4	319744.528	5813578.178
M5	319745.281	5813578.895
M6	319747.485	5813578.681
M7	319747.922	5813578.116
M8	319752.819	5813561.846
M9	319762.227	5813537.679
M10	319759.952	5813532.541

Alignment E

Point no	Easting	Northing	RL	Chainage
E 1	319732.054	5813420.000	31.230	0.000
E 2	319724.758	5813420.585	31.268	7.871
E 4	319723.973	5813422.678	31.330	10.194
E 5	319724.574	5813427.788	31.540	15.339
E 6	319725.250	5813428.323	31.570	16.297
E 7	319729.795	5813427.790	31.680	20.873
E 8	319730.472	5813428.325	31.512	21.831
E 9	319739.434	5813504.584	33.640	98.615
E 10	319738.899	5813505.241	33.667	99.573
E 11	319733.078	5813505.944	33.830	105.434
E 12	319731.529	5813508.256	33.880	108.596
E 14	319743.224	5813521.154	33.851	126.644
E 15	319748.460	5813523.194	33.750	132.263
E 16	319756.228	5813519.783	33.455	141.687
E 17	319758.497	5813513.963	33.260	147.933
E 18	319758.150	5813513.173	33.223	148.892
E 19	319757.051	5813512.745	33.177	150.072
E 20	319756.704	5813511.955	33.140	151.030
E 21	319776.237	5813461.847	31.730	204.810
E 22	319777.025	5813461.500	31.710	205.765
E 23	319778.131	5813461.925	31.750	206.951
E 24	319778.918	5813461.577	31.760	207.906
E 25	319780.908	5813456.473	31.650	213.384
E 26	319778.972	5813450.464	31.600	220.217
E 27	319773.986	5813447.226	31.550	226.163
E 28	319773.142	5813447.405	31.520	227.121
E 29	319772.445	5813448.479	31.480	228.401
E 30	319771.601	5813448.658	31.450	229.360
E 31	319735.930	5813425.498	31.315	271.890
E 32	319735.751	5813424.654	31.302	272.848
E 33	319736.448	5813423.580	31.286	274.128
E 34	319736.269	5813422.736	31.270	275.086
E 35	319732.054	5813420.000	31.230	280.112

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
E 1 2	6.000	7.319	1.245	0.959	31.249
E 2 4	2.440	2.236	0.271	0.206	31.295
E 5 6	0.610	0.863	0.179	0.139	31.555
E 7 8	-0.610	0.863	0.179	0.139	31.496
E 9 10	-0.610	0.863	0.179	0.139	33.653
E 11 12	1.830	2.783	0.641	0.504	33.855
E 12 14	19.500	17.411	2.051	1.559	33.942
E 15 16	6.000	8.485	1.757	1.370	33.603
E 17 18	0.610	0.863	0.179	0.139	33.241
E 19 20	-0.610	0.863	0.179	0.139	33.159
E 21 22	-0.610	0.861	0.178	0.138	31.720
E 23 24	0.610	0.861	0.178	0.138	31.755
E 25 26	5.000	6.314	1.123	0.867	31.625
E 27 28	0.610	0.863	0.179	0.139	31.535
E 29 30	-0.610	0.863	0.179	0.139	31.465
E 31 32	-0.610	0.863	0.179	0.139	31.308
E 33 34	0.610	0.863	0.179	0.139	31.277

Rev.	Revision Details	By	Date
D	SPEED HUMP MOVED NEAR CHURCH	MB	17/11/99
C	CROSSOVER ADDED IN ROSSLYN ST	MB	23/10/99
B	ISSUED FOR CONSTRUCTION	MB	01/05/99
A	PRELIMINARY ISSUE	MB	01/04/99

CAD FILE	WK060385
DESIGNED BY	M. BRAJANOVSKI
DRAWN BY	M. BRAJANOVSKI
CHECKED	H. McCORMICK
CHECKED DATE	01/04/99
PROJECT NUMBER	88ES26RR
CONCEPT PLAN NO.	
SURVEY REFERENCE	SURFCOAST
SCALE	1:200
DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Consulting Civil Engineers, Traffic & Transportation
Subdivisions, Roads, Drainage
Water Supply & Sewerage
Environmental Management

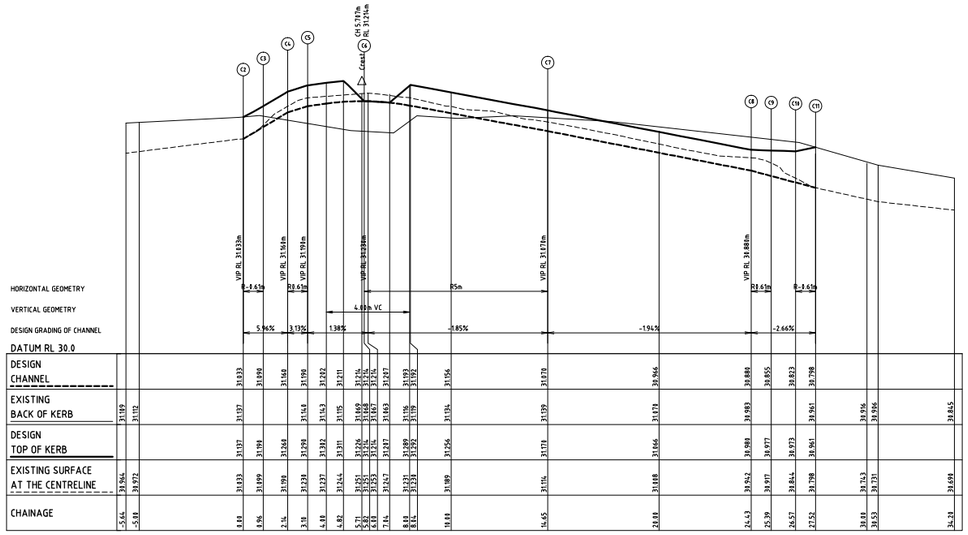
Quality Endorsed Company ISO 9001 LLOYDS

STATUS: CONSTRUCTION ISSUE

JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
SETOUT PLAN

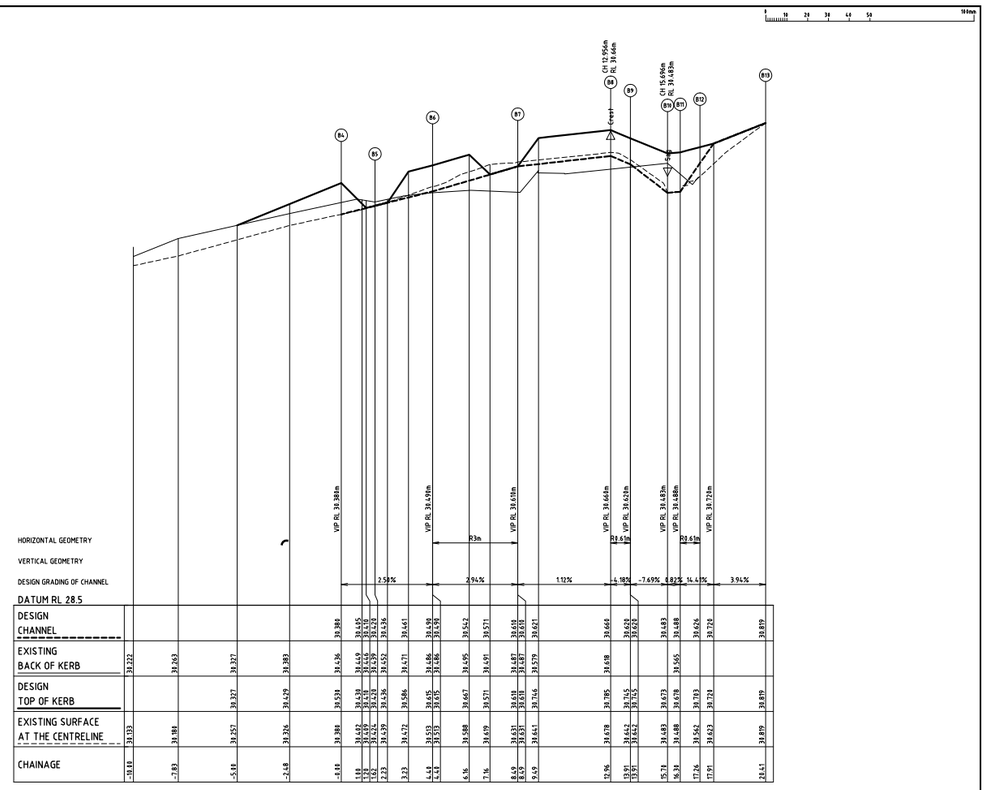
ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: –	Group Manager: –	NUMBER OF SHEETS: 4 OF 11	REVISION: D
Date: –	Date: –	DOCS NUMBER: 5178856	



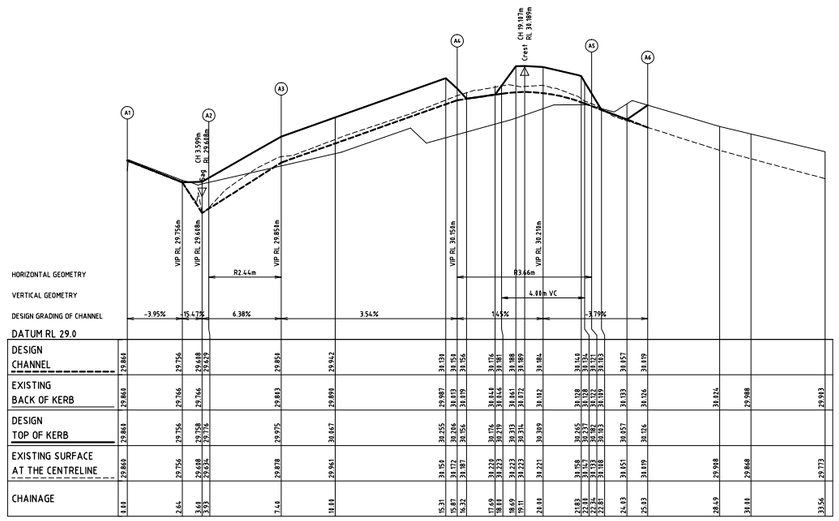
WILLIAM/ROSSLYN ST CORNER
C - LONGITUDINAL SECTION

Scale H: 1:100
V: 1:10



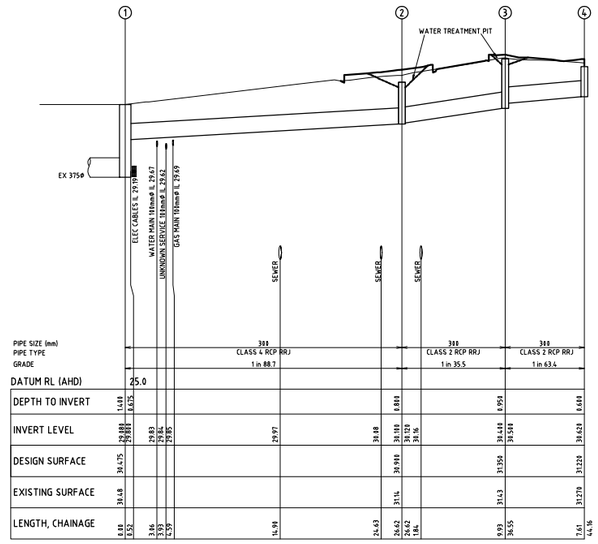
MILTON/ROSSLYN ST - SOUTH EAST CORNER
B - LONGITUDINAL SECTION

Scale H: 1:100
V: 1:10



MILTON/ROSSLYN ST - SOUTH WEST CORNER
A - LONGITUDINAL SECTION

Scale H: 1:100
V: 1:10



DRAINAGE LINE - 1

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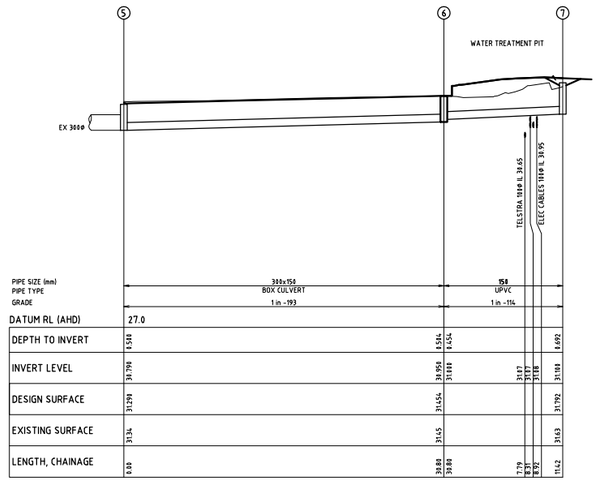
V: 1:50



DRAINAGE LINE - 2

Scale H: 1:200
V: 1:50

Rev.	Revision Details	By	Date
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WKO60385	PROJECT NUMBER	08E526RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED DATE	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Planning, Environmental Management, Economics, Traffic & Transportation
Subdivision & Development
Engineering Services
Configuration Management

Quality Endorsed Company ISO 9001 LRQA9001

MELBOURNE WATER

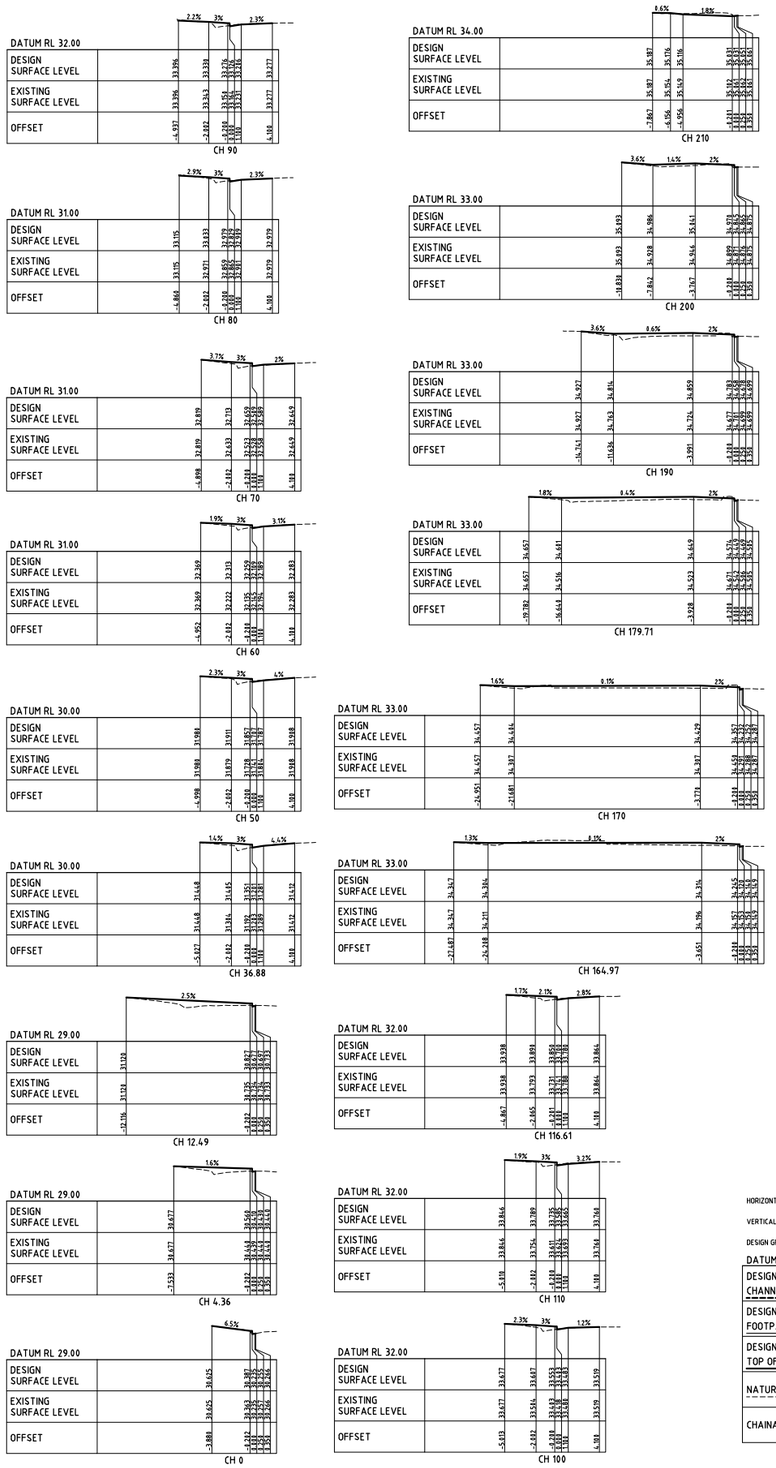
STATUS: CONSTRUCTION ISSUE

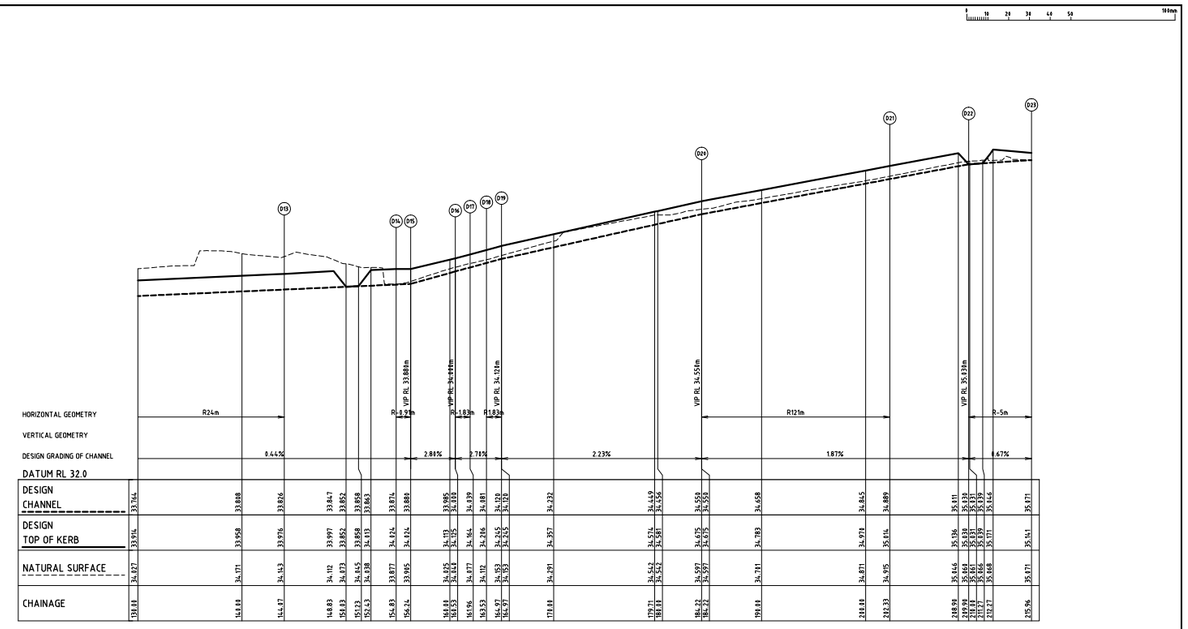
JOB LOCATION

HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
LONGITUDINAL SECTIONS

ENGINEERING SERVICES

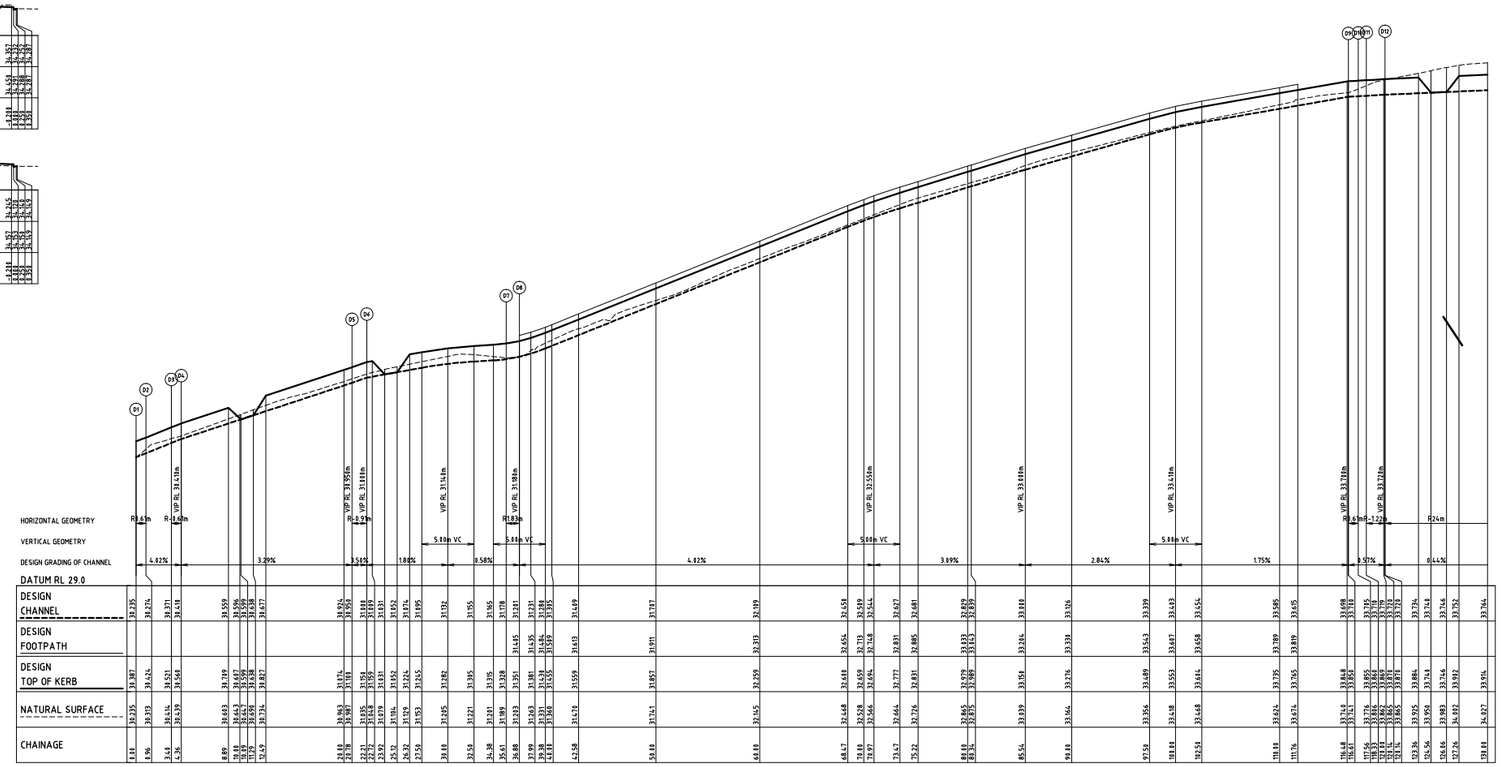
APPROVED BY		DRAWING NUMBER	WKO60385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 5 OF 11	REVISION: B
Date: -	Date: -	DOCS NUMBER: 5178856	





D - LONGITUDINAL SECTION

Scale H: 1:200
V: 1:20



D - LONGITUDINAL SECTION

Scale H: 1:200
V: 1:20

Rev.	Revision Details	By	Date
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WK060385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED DATE	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Planning & Environmental Consultants, Traffic & Transportation Consultants, Landscape Architects, Urban Designers, Engineering Surveyors, Subdivision Consultants.

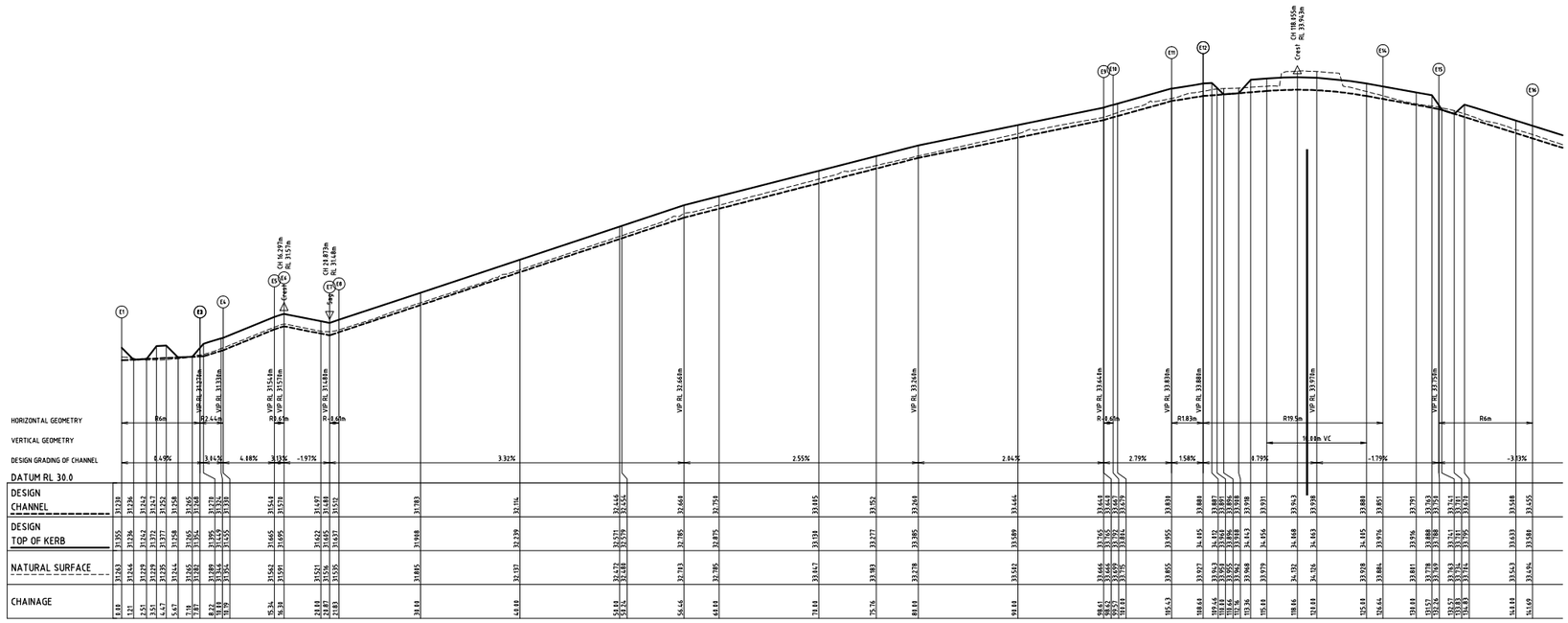
Quality Endorsed Company ISO 9001 LLOYDS

STATUS: CONSTRUCTION ISSUE

JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
LONGITUDINAL SECTIONS

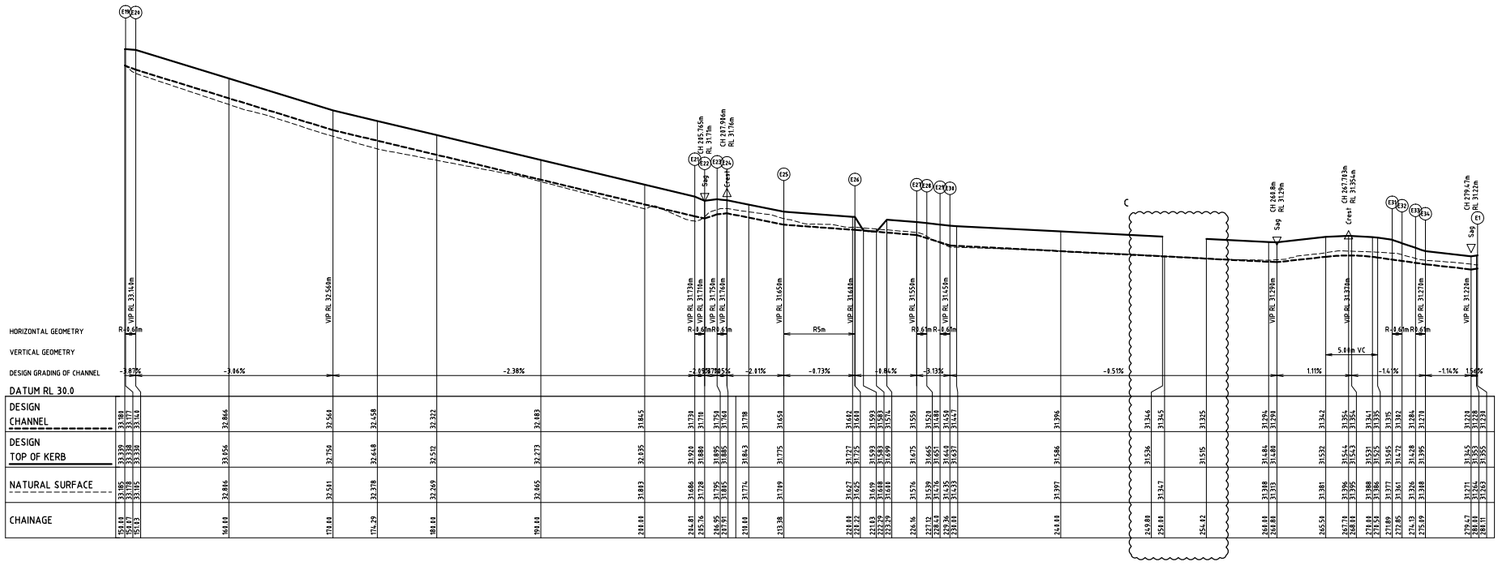
ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 6 OF 11	REVISION: B
Date: -	Date: -	DOCS NUMBER: 5178856	



E - LONGITUDINAL SECTION

Scale H: 1:200
V: 1:20



E - LONGITUDINAL SECTION

Scale H: 1:200
V: 1:20

Rev.	Revision Details	By	Date
C	CROSSOVER ADDED IN ROSSLYN ST	MB	23/10/99
B	ISSUED FOR CONSTRUCTION	MB	01/05/99
A	PRELIMINARY ISSUE	MB	01/04/99

CAD FILE	WKO60385	PROJECT NUMBER	08E526RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED DATE	01/04/99	DATUM	MGA94/AHD

North Point

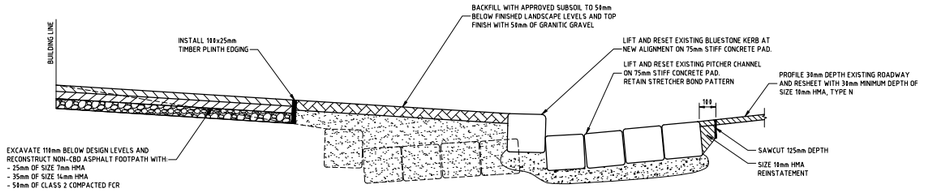
Cardno Grogan Richards
Consulting Engineers
Roads, Civil, Hydraulics, Traffic & Transportation
Quality Endorsed Company ISO 9001 LS4960

STATUS: CONSTRUCTION ISSUE

JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
LONGITUDINAL SECTIONS

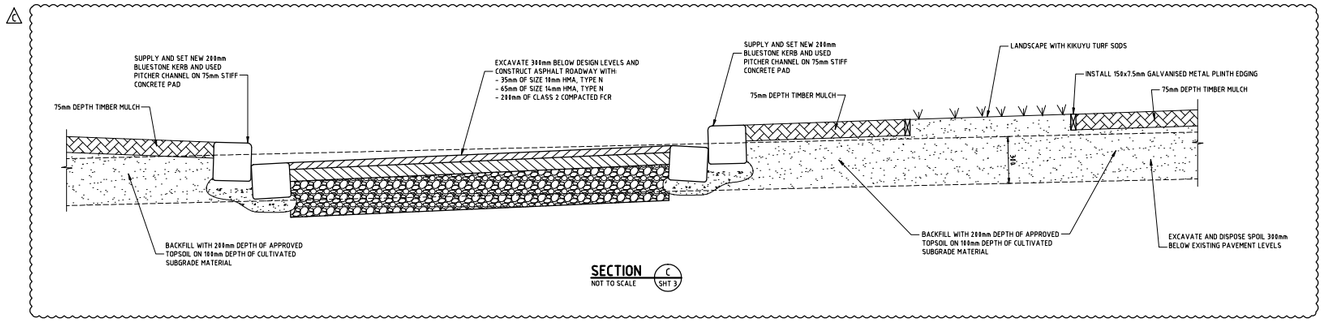
ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WKO60385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 7 OF 11	REVISION: C
Date: -	Date: -	DOCS NUMBER: 5178856	



TYPICAL FOOTPATH WIDENING

SECTION A SHT 3
NOT TO SCALE



SECTION C

SHT 3
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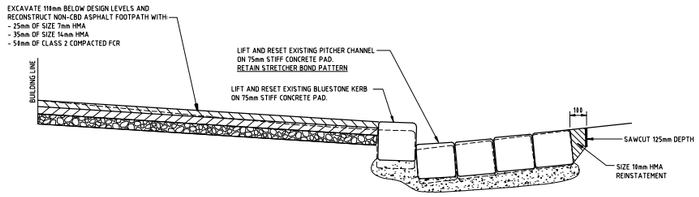

TYPICAL FOOTPATH RECONSTRUCTION

SECTION B
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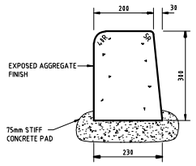
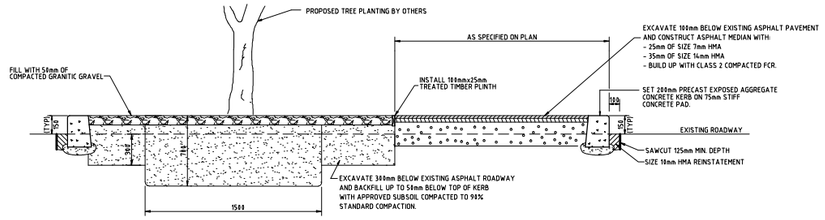


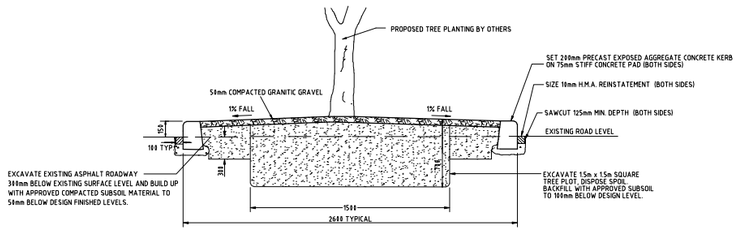
PRECAST EXPOSED AGGREGATE CONCRETE KERB

NOT TO SCALE



TYPICAL SECTION - ASPHALT MEDIAN

SECTION D
NOT TO SCALE SHT 3



TYPICAL CROSS SECTION - TREE ISLANDS

SECTION E
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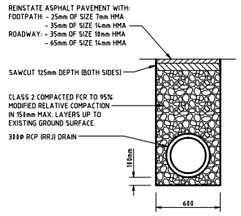
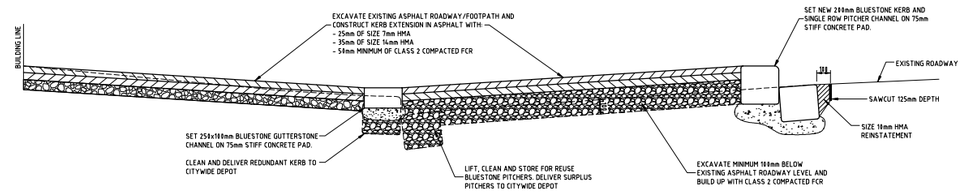


DRAIN LAYING DETAIL WITHIN ROADWAY

1
NOT TO SCALE



TYPICAL KERB EXTENSION WITH CENTRE GUTTERSTONE CHANNEL

SECTION F
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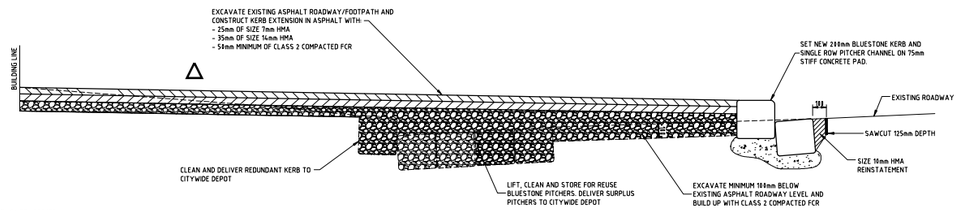

TYPICAL KERB EXTENSION WITH ONE-WAY CROSSFALL

SECTION G
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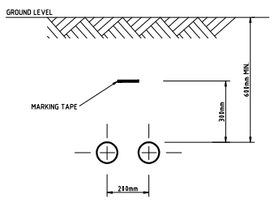
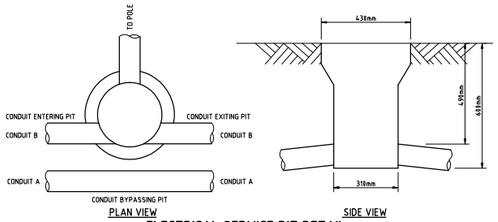


ELECTRICAL CONDUIT TYPICAL SECTION

SCALE 1:10

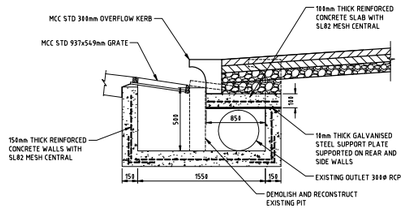


ELECTRICAL SERVICE PIT DETAIL

SCALE 1:10

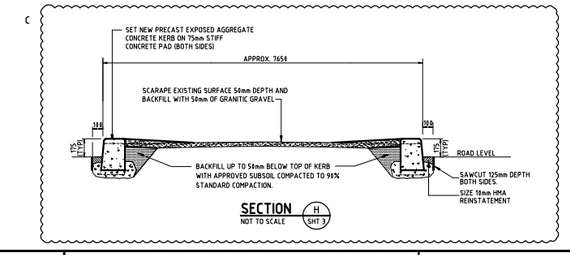
ELECTRICAL CONDUIT AND PIT DETAILS

S
NOT TO SCALE



PIT 5 MODIFICATION HAUNCHING DETAIL

6
NOT TO SCALE



SECTION H

SHT 3
NOT TO SCALE

Rev.	Revision Details	By	Date
C	LANDSCAPING CHANGES	MB	18/12/09
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WKO60385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:20
CONSULTANT/DATE	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Consulting Engineers
Planners, Civil, Structures, Traffic & Transportation
Subdivisions, Land Development
Subdivisions, Land Development
Subdivisions, Land Development
Quality Endorsed Company ISO 9001 LS5883

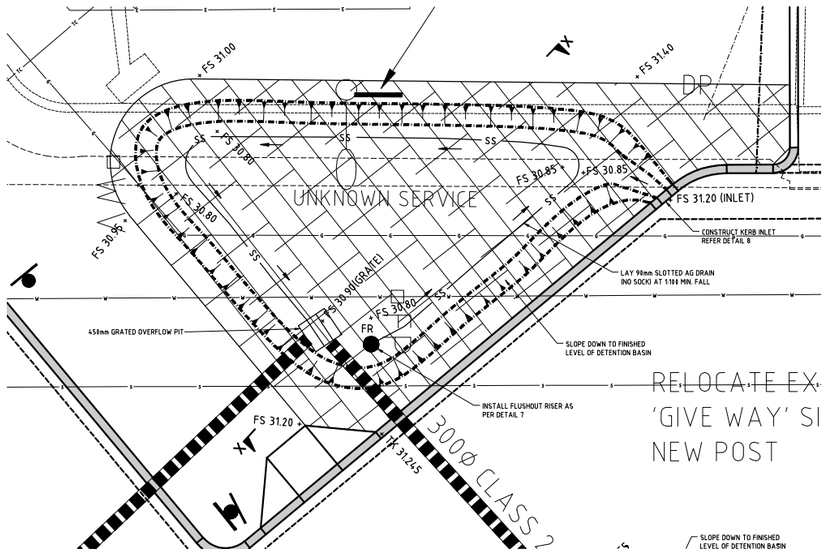
MELBOURNE

STATUS: CONSTRUCTION ISSUE

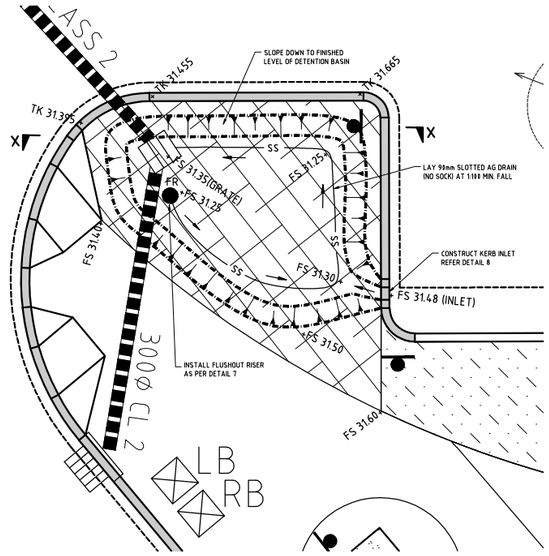
JOB LOCATION:
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
CONSTRUCTION DETAILS

ENGINEERING SERVICES

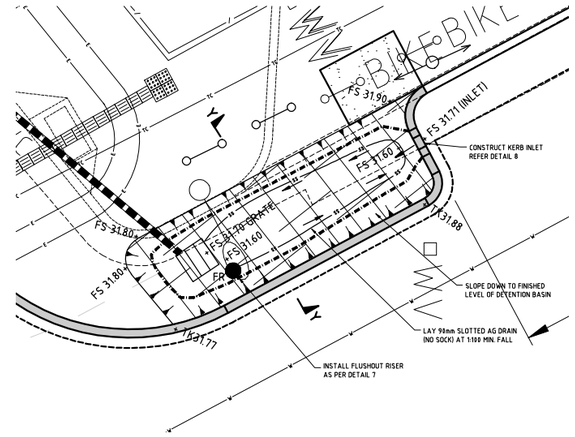
APPROVED BY		DRAWING NUMBER	WKO60385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 8 OF 11	REVISION: C
Date: -	Date: -	DOCS NUMBER: 5178856	



WATER TREATMENT PIT A
DETAIL 2
SCALE 1:50



WATER TREATMENT PIT B
DETAIL 3
SCALE 1:50



WATER TREATMENT PIT C
DETAIL 4
SCALE 1:50

CONSTRUCTION LEGEND

- CONSTRUCT WATER TREATMENT PIT AS PER DETAILS
- 450x450mm GRATED PIT
- **90mm SLOTTED DRAINAGE PIPE (NO SOCK)** LAID AT 1:100 GRADE
- FR **90mm UPVC UNSLOTTED STANDPIPE** FLUSHOUT RISER

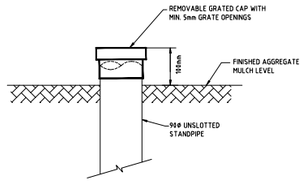
CONSTRUCTION HOLD POINTS

A. TREE PIT EXCAVATION AND INSTALLATION OF DRAINAGE PIPES.
B. PLACEMENT OF FILTER MEDIA IN TREE PITS.
C. PRACTICAL COMPLETION

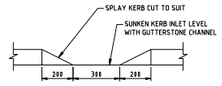
FILTER MEDIA TESTING

A. CONTRACTOR TO PROVIDE PROOF OF TESTING OF FILTER MEDIA.

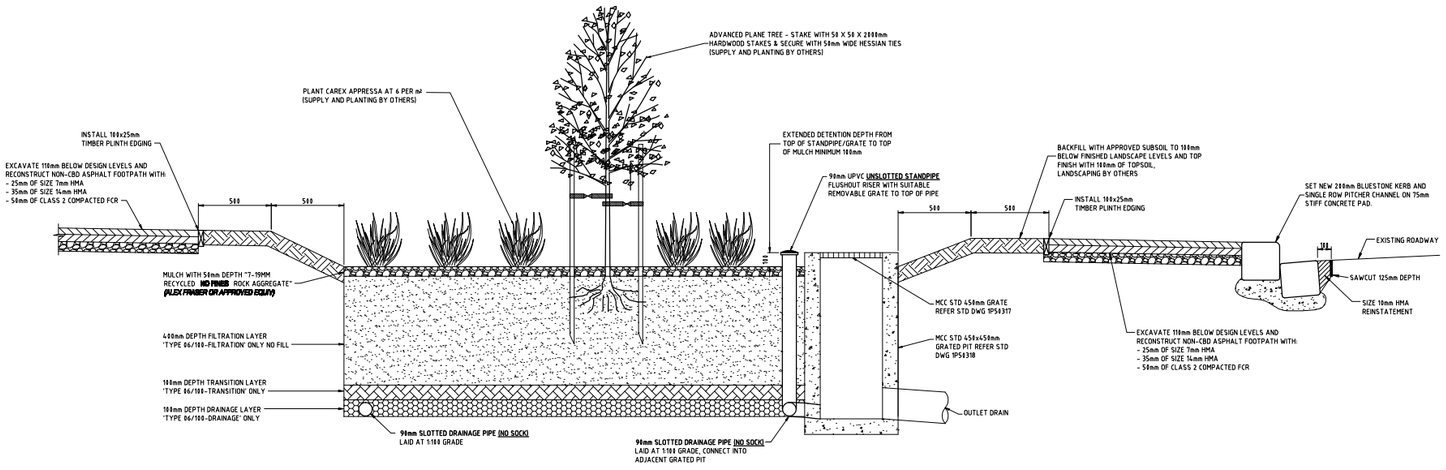
CONTACT JEFF NELSON CITY OF MELBOURNE, DESIGN AND URBAN ENVIRONMENT TEL. 9658 9158 TO ARRANGE HOLD POINT INSPECTIONS.



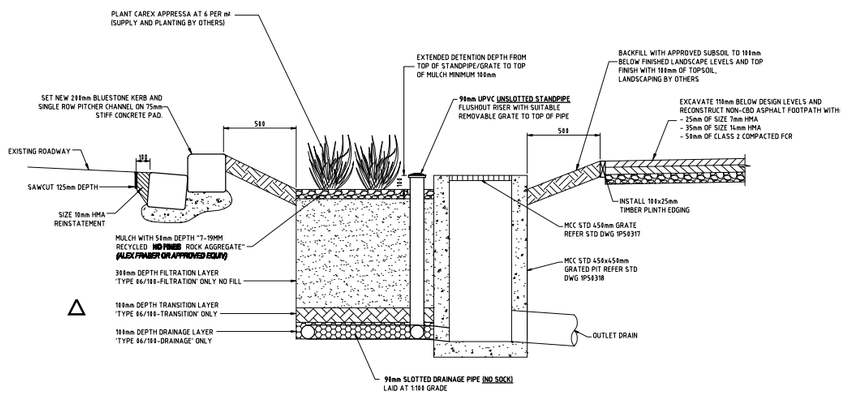
FLUSHOUT RISER STANDPIPE
DETAIL 7
SCALE 1:5



KERB INLET
DETAIL 8
SCALE 1:5



WATER TREATMENT PITS A & B
TYPICAL SECTION X
NOT TO SCALE



WATER TREATMENT PIT C
TYPICAL SECTION Y
NOT TO SCALE

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

MELBOURNE ONE CALL SYSTEM 1100 DIG DIAL BEFORE YOU DIG

Rev.	Revision Details	By	Date
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMINARY ISSUE	MB	01/04/09

CAD FILE	WK060385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANDVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANDVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CONSULTANT SUBMIT	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Consulting Engineers
Planning, Civil, Structural, Traffic & Transportation
Development & Management
Environmental Assessment
Geotechnical Investigation
Hydrogeology Risk Management

Quality Endorsed Company ISO 9001 LQ08180

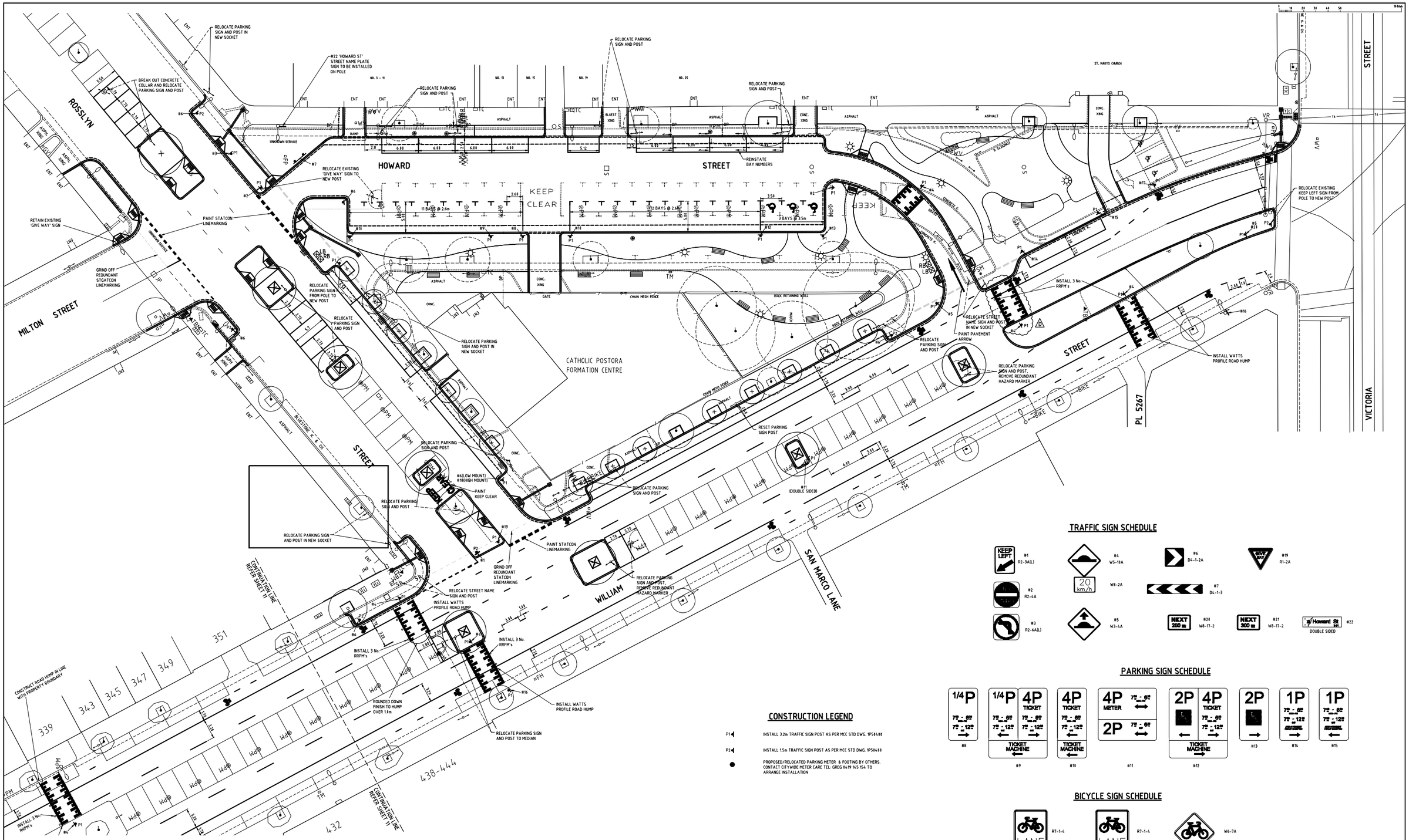
CITY OF MELBOURNE

STATUS **CONSTRUCTION ISSUE**

JOB LOCATION
HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
WATER TREATMENT PIT DETAILS

ENGINEERING SERVICES

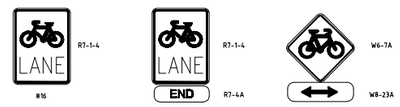
APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 9 OF 11	REVISION: B
Date: -	Date: -	DOCS NUMBER:	5178856



TRAFFIC SIGN SCHEDULE

PARKING SIGN SCHEDULE

BICYCLE SIGN SCHEDULE



CONSTRUCTION LEGEND

P1 INSTALL 3.2m TRAFFIC SIGN POST AS PER MCC STD DWG. 1PS1400

P2 INSTALL 1.5m TRAFFIC SIGN POST AS PER MCC STD DWG. 1PS1400

● PROPOSED/RELOCATED PARKING METER & FOOTING BY OTHERS. CONTACT CITYWIDE METER CARE TEL: GREG 1449 145 154 TO ARRANGE INSTALLATION

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MELBOURNE ONE CALL SERVICE — DIAL BEFORE YOU DIG — 1100

Rev.	Revision Details	By	Date
D	SPEED HUMP MOVED NEAR CHURCH	MB	17/11/09
C	CROSSOVER ADDED IN ROSSLYN ST	MB	23/10/09
B	ISSUED FOR CONSTRUCTION	MB	01/05/09
A	PRELIMNARY ISSUE	MB	01/04/09

CAD FILE	WK060385	PROJECT NUMBER	08ES26RR
DESIGNED BY	M. BRAJANOVSKI	CONCEPT PLAN NO.	
DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CONSULTANT	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards

Quality Endorsed Company ISO 9001 LLOYDS

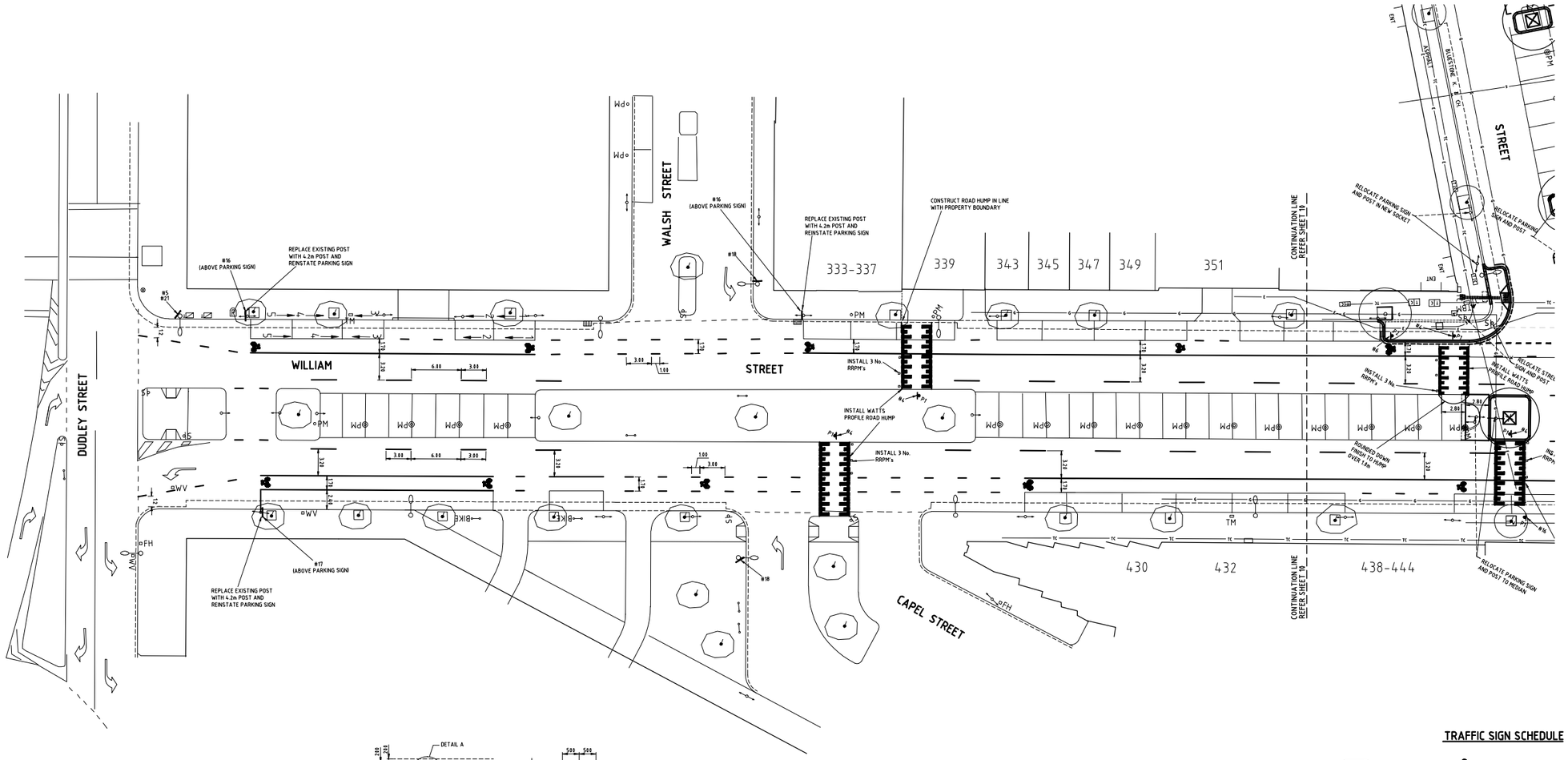
STATUS **CONSTRUCTION ISSUE**

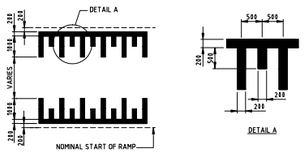
JOB LOCATION

HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
SIGNS AND LINEMARKING PLAN

ENGINEERING SERVICES

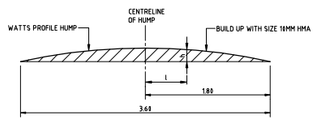
APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: –	Group Manager: –	NUMBER OF SHEETS: 10 OF 11	REVISION: D
Date: –	Date: –	DOCS NUMBER: 5178856	





WATTS PROFILE SPEED HUMP LINEMARKING DETAIL (7 -)

NOT TO SCALE



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h (mm)	100	100	99	97	95	93	91	86	81	76	71	65	58	51	43	34	25	16	5

NOTES:
1. AT RAMPS AT ENTRY POINTS TO SHARED ZONES THE RAMPS GRADE IS INCREASED TO BETWEEN 12 AND 14.
2. LONG LIFE PAINT TO BE USED FOR LINEMARKING WITH GLASS BEADS.

WATTS PROFILE SPEED HUMP SETOUT DETAIL (8 -)

NOT TO SCALE

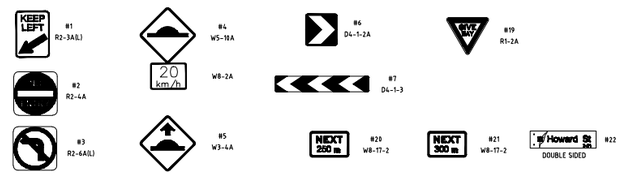
CONSTRUCTION LEGEND

P1 — INSTALL 3.2m TRAFFIC SIGN POST AS PER MCC STD DWG. 1PS1480

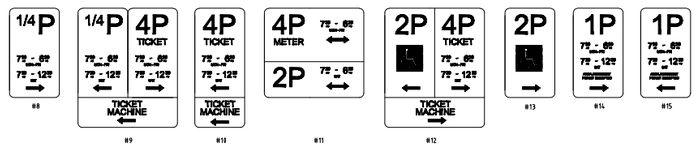
P2 — INSTALL 1.5m TRAFFIC SIGN POST AS PER MCC STD DWG. 1PS1480

● — PROPOSED/RELOCATED PARKING METER & FOOTING BY OTHERS. CONTACT CITYWIDE METER CARE TEL: GREG 0419 145 154 TO ARRANGE INSTALLATION

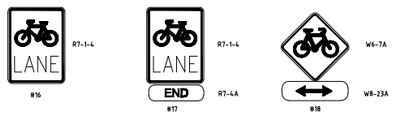
TRAFFIC SIGN SCHEDULE



PARKING SIGN SCHEDULE



BICYCLE SIGN SCHEDULE



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A	PRELIMINARY ISSUE	MB	01/04/09

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DRAWN BY	M. BRAJANOVSKI	SURVEY REFERENCE	SURFCOAST
CHECKED	H. McCORMICK	SCALE	1:200
CHECKED DATE	01/04/09	DATUM	MGA94/AHD

North Point

Cardno Grogan Richards
Consulting Civil Engineers, Traffic & Transportation
Quality Endorsed Company ISO 9001 LLR08

City of Melbourne

STATUS: CONSTRUCTION ISSUE

JOB LOCATION: HOWARD STREET
ROSSLYN ST TO VICTORIA ST
STREETSCAPE WORKS
SIGNS AND LINEMARKING PLAN

ENGINEERING SERVICES

APPROVED BY		DRAWING NUMBER	WK060385/60386
Principal Engineer: -	Group Manager: -	NUMBER OF SHEETS: 11 OF 11	REVISION: B
Date: -	Date: -	DOCS NUMBER: 5178856	