

**IMAP Implementation Committee
Business Arising
24 February 2012**

A Senior Executive's Forum Action Items (26 March 2009)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
5 Update from DIIRD	IMAP Executive Officer	Reconvene Action 7.4 working group, review and identify opportunities and communicate to DBI. <i>[In response to changing environment & govt strategies, policies & priorities]</i>	Sept 09	In Progress <i>[Discuss further with DBI]</i>
B IMAP Implementation Committee Action Items (29 May 2009)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
10 GLawler briefing on CoM/CoS software trial	IMAP Executive Officer & City of Melbourne	Executive Officer to organise a 'briefing' of Microsoft's 'public domain emissions tracker' in liaison with CoM staff <i>[Software tool to communicate with public, benchmark & measure]</i>	Oct 09	In Progress
C IMAP Executive Forum Action Items (20 July 2010)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
3 IMAP Review	IMAP Executive Officer	Executive Officer to provide an update of key statistics included in the IMAP introductory section	Nov 2010	In Progress
D IMAP Implementation Committee Action Items (27 August 2010)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
12 Car Sharing Action 3.3	Geoff Robinson/Stuart Outhred CoM	CoM to hold discussions with other IMAP Councils on joint car sharing tenders	Sept 2010	In Progress – CoM undertaking preliminary work
E IMAP Implementation Committee Action Items (11 March 2011)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
14 Action 9.4 Green Demo Projects	IMAP Executive Officer	Executive Officer to follow up CoMs White Roofs guideline for distribution	When available	
F IMAP Implementation Committee Action Items (27 May 2011)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
7 Business Arising	IMAP Executive Officer	Executive Officer progress Ministerial meetings	June/July 2011	In Progress. Meeting held with Min Local Govt 14 Nov 2011.
17	IMAP Executive Officer	Executive Officer to follow up invite to Mr Chesterfield, Melbourne Water to the August IMAP Committee meeting.	June/July 2011	In Progress – deferred until 2012
G IMAP Implementation Committee Action items (26 August 2011)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
7 Action 8.1	IMAP Executive Officer	Arrange for the Project Team leader Action 8.1 to contact Tony Pensabene DBI	Nov 2011	In Progress (staff changes)
11 Com & Gov	IMAP Executive Officer	IMAP AR to be finalised and distributed	Nov 2011	Completed
H IMAP Executive Forum Action items (18 October 2011)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
3 Action 9.4	IMAP Executive Officer	To note Action 9.4 Green Guide funding for Implementation Plan and arrange invoicing	Feb 2012	In progress
5 CoMari contributions	IMAP Executive Officer	To collate the project information and forward to CEO Maribyrnong for final approval of his Councils participation in these projects	Nov 2011	Completed. Refer item 6 (Att 2a)
I IMAP Implementation Committee (18 November 2011)				
<i>Item</i>	<i>Responsibility</i>	<i>Action</i>	<i>Due</i>	<i>Progress</i>
5 Minutes	IMAP Executive Officer	Minutes of the IMAP Implementation Meeting of 26 August 2011 to be amended as noted	Dec 2011	Completed
7 Business Arising	IMAP Executive Officer Geoff Lawler	Change ref to DIIRD in Business Arising G Lawler to follow up John Watson, Exec Dir DPCD regarding outcomes of meeting with Minister Powell	Feb 2012 TBA	Completed TBA

		Exec Officer to discuss current WSUD position with Action 9.3 Project team and Melbourne Water	Dec 2011	In Progress
		Exec Officer to draft letter to Min for Planning regarding support for WSUD	Dec 2011	In Progress
9 Progress report	IMAP Executive Officer	Exec Officer to pass on info regarding coroners report to the Bicycle network working group	Dec 2011	Completed
11 Action 9.4	IMAP Executive Officer	Exec Officer to circ Water Sensitive Cities report to other Councils and include in correspondence to Ministers for Planning and Water	Feb 2012	In Progress
	Warren Roberts, CEO CoS	W Roberts to present to next meeting of IMAP	Feb 2012	Completed – refer item14
13 Action 3.5	IMAP Executive Officer	Exec Officer to place update on Action 3.5 on the Feb agenda	Feb 2012	Completed – refer item11 (Att 7)
14 Implementation Plan	IMAP Executive Officer	Exec officer to liaise with CEO CoMarbyrnong and update financial plan with Maribyrnong contributions	Jan 2012	Completed – refer item 9 (Att 5)
		Exec officer to advise IMAP Councils of budget requirements for 2012/13	Jan 2012	Completed. Report in preparation
15 Action 6.3 final report	IMAP Executive Officer	Pass on the thanks from the committee to the Action 6.3 Working Group and encourage them to continue to meet over issues	Dec 2011	Completed
	IMAP Executive Officer	Arrange deputation to meet Hon Michael O'Brien, Min for Consumer Affairs, Sec Dept of Justice and Dir of Liquor Licensing	Jan 2012	In progress
16 Action 5.2 Affordable Housing	IMAP Executive Officer and Action 5.2 project team	Executive Officer to <ul style="list-style-type: none"> publish the consultant reports and Attachment 2 on the IMAP website under Action 5.2 arrange a briefing for City of Maribyrnong representatives Action 5.2 Project team to: <ul style="list-style-type: none"> Circulate consultant reports to interested parties Undertake monitoring & advocacy to promote planning mechanisms when opportunities arise and report back Provide a progress report on CLT research Contact Australians for Affordable Housing re the overlay and IMAP support to promote affordable housing Brief City of Maribyrnong representatives 	Jan 2012 TBA TBA	Completed

Correspondence

From	Regarding
Vince Haining, CEO City of Maribyrnong	Maribyrnongs engagement in IMAP activities
Cr Bill McArthur, President, MAV	Assistance to IMAP Councils
Minister Powell's Office	Acknowledgement of Annual Report
Minister Asher's Office	Acknowledgement of Annual Report
City of Stonnington	Wayfinding Signage Review

8 December 2011

Ms Elissa McElroy
IMAP Executive Officer
City of Stonnington
PO Box 21
Prahran 3181

CITY OF STONNINGTON	
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Dear Elissa

Re: Maribyrnong's Engagement in the IMAP Activities

Further to your recent email (copy attached) in relation to IMAP Projects expenses, I confirm that my Council is pleased to participate in the program of activities and to contribute to the associated funding as outlined in your program (copy attached).

Please advise the most suitable mechanism for transferring funds to IMAP to facilitate our participation in this program stream.

Please don't hesitate to contact me should you need to discuss on 9688 0212.

Yours faithfully

Vince Haining
Chief Executive Officer

Att.



Maribyrnong – IMAP Project Involvement – Proposed

Summary

	SUMMARY	2011/12	2012/13	2013/14	2014/15	Project totals
Action 2.5	Bicycle network <i>Interested in participation – Funded by individual councils</i>					
Action 2.6	Tram network & fixed rail improvements					
Action 4.3	"Think Tram" program					
Action 4.4	Enhanced bus priority [advocacy] <i>Interested in participation. No budget requirement</i>					
Action 3.3	Regional approach to parking management <i>Interested in participation - \$10,000 in current year (Subject to review of DoT work)</i>	10,000?				10,000?
Action 3.5	Reduced through traffic <i>Interested in participation in Stage 1 and 2. Stage 1 \$20,000 over 2 years (same contribution) – however through traffic issues likely to be different. Await brief to determine. Stage 2 \$20,000 over 2 years – expand project budget by same contribution</i>	10,000	10,000 10,000	10,000		40,000
Action 4.7	Improvements to public transport services <i>Interested in outcome of CoMelbourne strategy. No funding requirement</i>					
Action 8.1	Priority for freight movement <i>Interested in participation - \$17,500 contribution over 3 years – expand project budget by same contribution</i>	5,830	5,830	5,840		17,500
Strategy 11	Promote the Inner Melbourne Region as a tourism destination <i>Interested in participation - \$20,000 per annum – expand the current budget to cover a larger region.</i>	20,000	20,000	20,000	20,000	20,000 per year
	TOTAL MARIBYRNONG CONTRIBUTION	45,830	45,830	35,840	20,000	147,500
	IMAP COUNCILS CONTRIBUTION	190,000 (47,500 each)	155,000 (38,750 each)	165,000 (41,250 each)	80,000 (20,000 each)	590,000 (147,500 each)

MUNICIPAL ASSOCIATION OF VICTORIA

9 December 2011

Inner Melbourne Action Plan
c/o Warren Roberts
Chief Executive Officer
Stonnington City Council
PO Box 21
Prahran VIC 3181

CITY OF STONNINGTON	
12 DEC 2011 (E)	
<input checked="" type="checkbox"/>	PERMANENT 14
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FILE No	13/01/07
ATTN TO	W Roberts
offering their services.	

Dear Mr Roberts

Assistance for the Inner Melbourne Action Plan councils

I write to follow up on the forum we held in August at which we provided metropolitan mayors and chief executive officers an opportunity to consider and comment on how we represent, engage with and advocate for metropolitan councils on metropolitan issues.

Dr Michael Henry facilitated the forum after interviewing a number of metropolitan mayors and CEOs. One of the conclusions of Dr Henry's report, *Towards Forums for Metropolitan Mayors*, was that we should offer to assist existing regional and sub-regional forums of mayors and CEOs, noting the desire of the participating councils to retain responsibility for setting the agenda and chairing meetings.

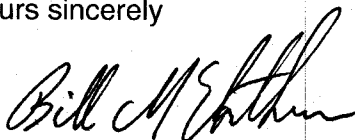
I encourage the Inner Melbourne Action Plan councils to request assistance as and when you consider it valuable to gain our input or advice, or receive updates or presentations on topical and contemporary issues.

As you may be aware, I have also written to mayors, chief executive officers and MAV representatives outlining proposals to hold metropolitan wide forums for the purposes of receiving input and testing positions on critical and timely matters of state policy impacting metropolitan councils as well as receiving updates from select committees or groups on the progress of projects and research on matters of importance to metropolitan councils.

I believe that the MAV has the capacity to provide critical advocacy, capacity building and policy development services for all council types and I am committed to strengthening our engagement with metropolitan councils.

If you wish to take up the opportunity for either a general update or specialist advisers to attend any future meetings of the Inner Melbourne Action Plan please contact Chris Jones on 03 9667 5502 to make arrangements.

Yours sincerely



Cr BILL McARTHUR
President



**Office of the Minister
for Local Government & Aboriginal Affairs**

Ref: 2011/3521, CMIN035635

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Dear Ms McElroy,

INNER MELBOURNE ACTION PLAN – ANNUAL REPORT 2010-11

On behalf of Minister Powell's Office, I acknowledge receipt of your letter dated 1 December 2011 regarding the above.

Thank you for forwarding a copy of the IMAP Annual Report 2010-11.

Yours sincerely,

**Vivien Leizer
Office Administrator**

13 December 2011

CITY OF STONNINGTON	
14 DEC 2011 (4)	
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KEY WORD	acknowledgement
DOC No	





**Minister for Innovation, Services and Small Business
Minister for Tourism and Major Events**

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Ms Elissa McElroy
IMAP Executive Officer
Email: emcelroy@stonnington.vic.gov.au

Dear Ms McElroy

Thank you for your letter dated 1 December 2011 with the enclosed Inner Melbourne Action Plan's Annual Report Summary for 2010-11.

It is encouraging to hear about the key strategies and programs in which you have been involved the past year.

Thank you again for keeping me informed.

Yours sincerely,

THE HON LOUISE ASHER MP
Minister for Innovation, Services and Small Business
Minister for Tourism and Major Events

23 DEC 2011



VISUALVOICE
wayfinding strategy & design

November 2011

City of Stonnington

Pedestrian Wayfinding Signage Review

Review of implementation issues and recommended improvements



Pedestrian wayfinding sign – Chapel St, Windsor

Prepared for
Katherine Wrzesinski
Transport Planner
City of Stonnington

Prepared by
Bruce Herbes
Wayfinding Consultant
Visualvoice

Version Date
01 11.11.11

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Signage overview

The initial Inner Melbourne Action Plan (IMAP) demonstration project was implemented in 2009 and included map-based signs and directional signs. The majority of these were installed in the cities of Stonnington & Yarra. In the City of Stonnington the precincts where signage was installed were Toorak Rd – South Yarra and Chapel St, South Yarra between Toorak Rd and Windsor Train Station. Refer to the original strategy in the appendix for details of sign locations etc.

The project was co-ordinated and implemented by the IMAP Councils (cities of Melbourne, Port Phillip, Stonnington & Yarra).

The project commenced with the development of a pedestrian wayfinding signage strategy which identified the type of signs needed, where they should be located and the appropriate information required to promote and support walking.

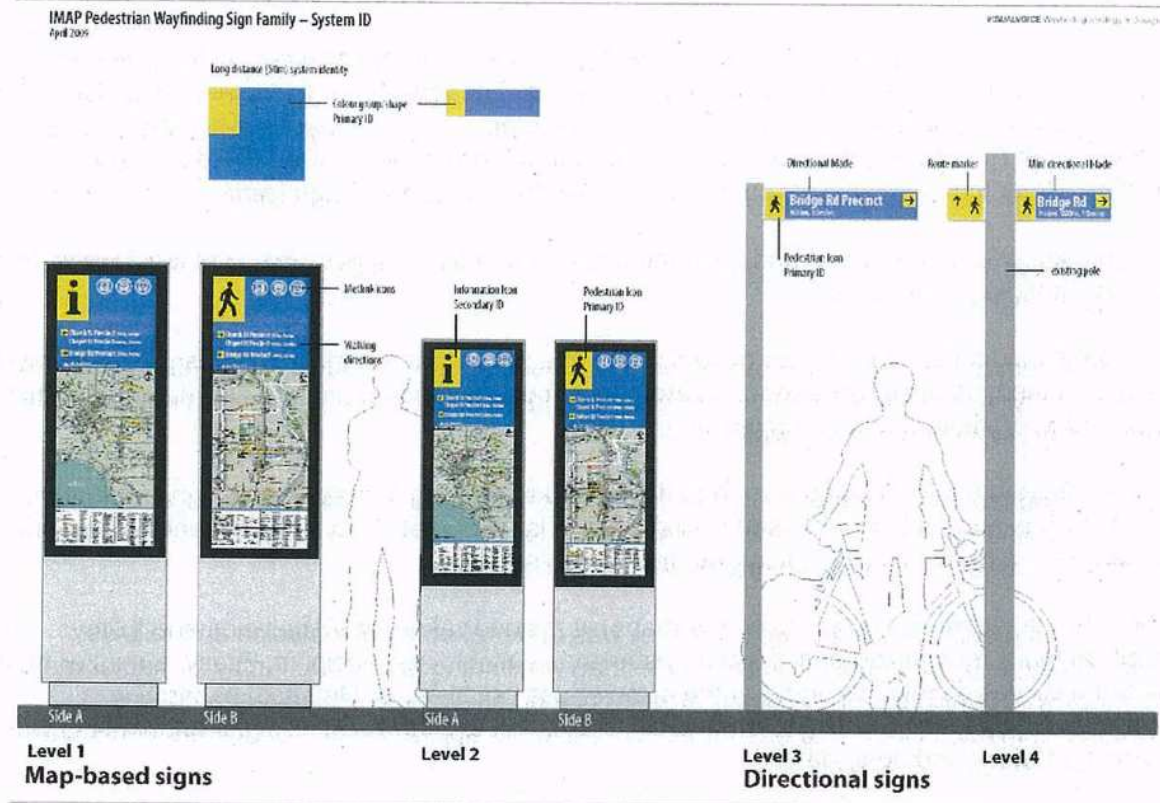
A co-ordinated family of signs was then developed consisting of map-based signs, directional pointer signs and route marker signs. The system is tied together by a consistent identity (the pedestrian icon) and colours, pictogrammes and typography.

The information design (sign content & maps) was undertaken by Visualvoice and follows internationally recognized best practice pedestrian wayfinding principles. Firstly, a master map (or base-map) was developed of the entire area for use on all signs. Detailed research was undertaken with each Council to ensure all information to appear on all signage elements was correct, relevant and up to date.

The sign structure hardware designs for the map-based signs were provided by the City of Melbourne. The manufacture and installation of the signage system was managed by City of Melbourne following a tender for supply and installation of all sign types.

The aim of the signage system is to promote sustainable transport use and enhance knowledge of the local area. The system has an emphasis on walking and highlights pedestrian and public transport connections between adjoining precincts. The original project was initiated by the Department of Transport (with funding grant) with the aim of creating a demonstration project which Victorian Councils could build upon in the future.

In 2010, the City of Stonnington continued to extend the system into Toorak Village, installing 3 map-based signs and a web of local directional signs. Plans are now underway to introduce the system to Hawksburn Village.



Map-based signs (MBS)

The map-based sign unit design was provided by the City of Melbourne, which has developed and used the sign within the City of Melbourne. The map-based signs were modified in size to suit the IMAP project requirements, resulting in Level 1 (larger) & Level 2 (smaller) signs.

The larger Level 1 signs are placed at key arrival points such as train stations.

The smaller Level 2 signs are placed on the footpath network where map-based signage is required. Apart from their size, they are identical to the Level 1 signs.

Directional signs (DS)

The directional signs (Level 3) are a finger blade style co-ordinated with the map-based signs through their design (colours, fonts etc). They are located on the walking network at key decision points identified in the initial signage strategy report and point to destinations that are within walking distance. The destinations largely determined the scope of the project. They are listed on the finger blades with the distance and average walk-time.

Route marker signs (RMS)

The route marker signs (Level 4) are small directional blades used along a route where neither a directional or map based sign is suitable or required. Their design is coordinated and integrated with the system identity. To date RMS have not been used.

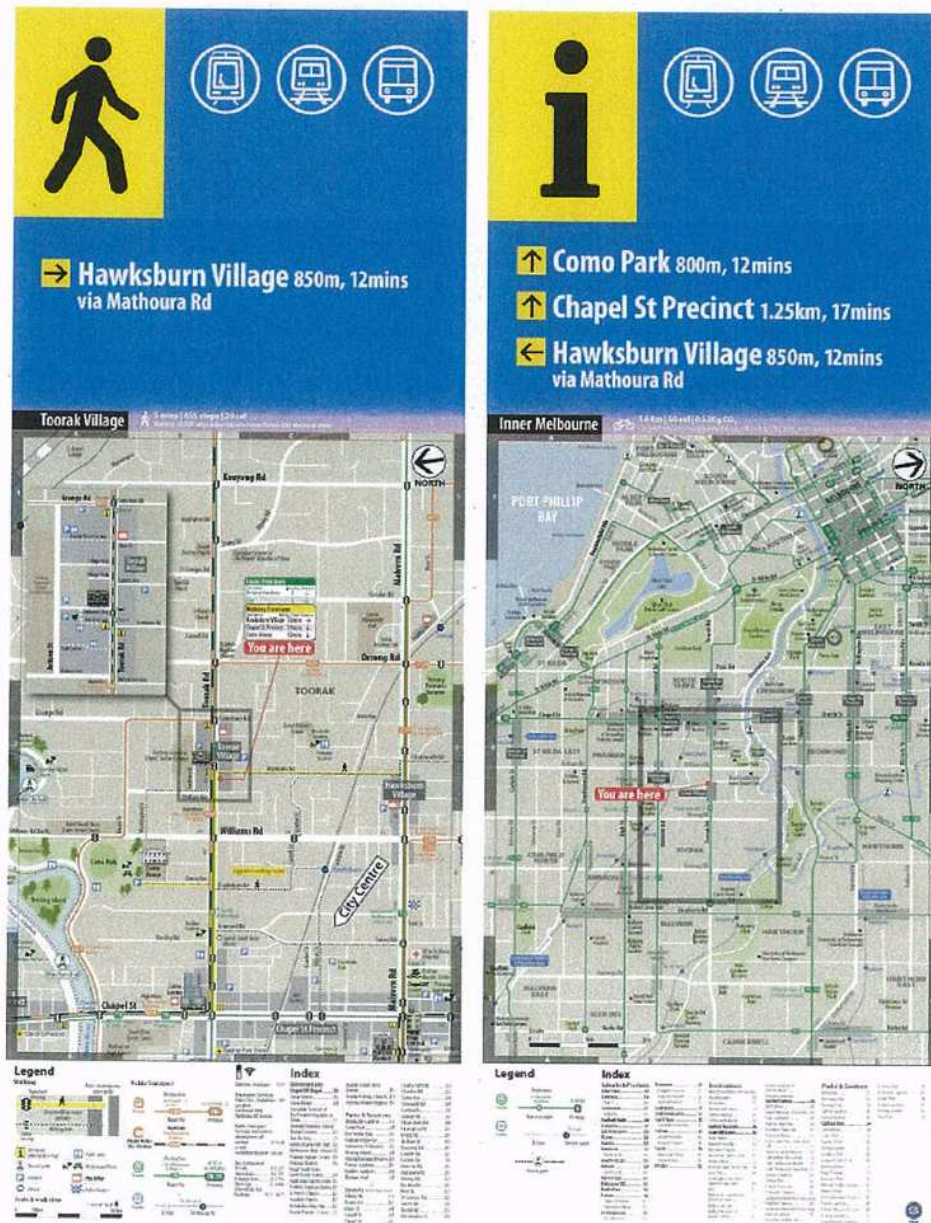
Placement policy

The methodology of locating the hierarchy of signs is identified in the original IMAP strategy (refer p19-20). Subsequently a mini strategy based on the original signing principles was prepared for Toorak Village, which recommended the sign types, location and content.

Mapping content

The map-based signs display two maps, one on each side of the sign. One side shows the local vicinity covering an area approximately 10-15 minutes walk. This is the walking map and shows detailed information about the local precinct such as landmarks, suggested walking routes, retail and recreational areas as well as relevant pedestrian detail such as safe road crossings, public toilets and seating. All walking maps are 'heads-up' - ie facing the direction of travel.

The opposite side shows a map of Inner Melbourne and highlights the connectivity via trains, trams and off road cycling routes across the cities of Port Phillip, Melbourne, Stonnington (up to Kooyong Rd) and Yarra (the IMAP Councils). The local vicinity is identified on this map with a rectangular box and 'You are here' to highlight its relation to the surrounding area.



System identity

The principle signage system colours are blue & yellow. Blue was selected as it is the internationally recognised colour for information. Yellow was introduced to enhance the visibility in the street-scape. It also created a distinct identity when paired with the pedestrian and information symbols which are consistently placed on the yellow on all sign types. The identity is designed to work at any size without need for modification.

Implementation issues

Since the initial installations, a number of potential improvements have been identified for the signage by the City of Stonnington and Visualvoice. The improvements relate to reducing sign hardware cost and maintenance and installation issues.

The following summarises these issues and the proposed improvements:

Sign hardware cost

The current map-based sign is adopted from a design by the City of Melbourne. The sign is a glass and stainless steel cabinet with the option for internal lighting. The map is printed and displayed behind the glass, allowing for easy changeover of information.

The sign units are durable and have an expected life of 15 years or more. However they are expensive (\$12,000 - \$14,000 each) and require long lead times to manufacture. There is an opportunity to introduce a less complex, non cabinet style sign which would dramatically reduce cost while still integrating with the system and with provision for updating. The alternative design is expected to cost \$3,000 - \$4,000 each.

Existing map-based signs have been installed with internal LED lighting panels, so have the capacity to be illuminated although no electrical connections to power were made in the initial roll out due to the cost. However, conduits have been installed in the concrete footings to allow for future connections.

Sign placement issues

The majority of signs were installed where recommended in the initial strategy. However not all signs were installed leaving gaps in the signed network in some places.

Two specific placement issues occurred at train stations and in retail strips:

Train stations

Signs were recommended for installation at the train stations as they are key arrival points. While Metlink agreed in principle with the standard and the objectives of the signage, the outcome was that no signage was permitted to be installed on Vic Track land or within the lobby areas of the stations due mainly to lack of co-operation between the authorities. However, installation of signs at the stations remains a preference as it reduces cost and clutter. At many stations the wayfinding maps could be displayed with cost effective wall displays at station exits.

As a compromise to date, signs have been installed on the streets outside or near the stations. This proved to be a challenge at some sites due to a number of issues, for example the high levels of foot traffic on narrow footpaths. As a result, the map-based sign nominated for South Yarra Station was installed at a less than ideal location, in turn reducing its effectiveness.

Retail strips

In some locations retailers objected to having signs directly outside their shops, again particularly where footpaths are narrow. In these situations, signs were relocated in alignment with property boundaries to minimise interference with shop frontages.

The size of concrete footings were also an issue in some locations due to underground services. In at least one instance a footing had to be redesigned to suit the limited depth available.

Installation of signs

Installation of the original demonstration project signs was undertaken by an independent contractor and co-ordinated by the IMAP project officer(s) in 2009. The installation of subsequent signs within City of Stonnington has been undertaken by CoS Infrastructure Department. This has increased the workload of an already busy department with limited capacity.

Sign maintenance

Hardware

Maintenance of the signs is undertaken by CoS Infrastructure Department.

The map-based signs were designed and installed with laminated glass. The glass has been problematic in areas near nightclubs such as in and around Chapel St. Where repeated glass breakages have occurred, CoS have replaced the glass with polycarbonate to reduce maintenance costs.

Print media

Fading of the printed map content has occurred in some sites. This is believed to be due to the maps being printed on faulty media. This effect may be subtle but the impact over time will increase, reducing the legibility of the information. If the colour contrast reduces significantly, people with colour defective vision may not be able to distinguish between elements of the information.

In future a warranty should be provided by the supplier of the media for issues such as these.

Other issues (non signage)

Lack of guideline document

The IMAP project ended without the development of a guideline document to assist Council with continued implementation of the signed pedestrian network. The initial implementation established a demonstration only.

The vision of the signed pedestrian network was to link up all key destinations within and adjoining to the City of Stonnington making walking and cycling between all destinations easy and stress free. The task of implementing the project could be made easier by the development of a guideline document.

Signage evaluation

Two evaluations of the signage have been undertaken, one by the Department of Transport and the other initiated by CoS and carried out by Austraffic.

Summary of DOT evaluation

The Department of Transport assessment focused on the IMAP signage with the aim of understanding how effective it was for a range of users. Sweeney Research prepared a report following a methodical evaluation interviewing locals and visitors and using both interviews and follow on walk assessments.

The research compared five different wayfinding projects and identified the strengths and weaknesses of each. The IMAP signage was found to have the optimal map designs deemed to be highly effective at communicating local area information and aiding navigation. However, a weakness of the IMAP signage was the limited number of directional signs.

Summary of Austraffic evaluation

The Austraffic assessment focussed on the signage in Toorak Village with the aim of identifying its usefulness. Austraffic developed a specific interview questionnaire and surveyed people in the street over a number of days. The key findings of the surveys were:

- The majority of people interviewed lived in Toorak/Hawksburn and South Yarra 48% of interviewees walked to Toorak Village
- 39% travelled by private car and 10% by tram
- In relation to trip purpose, 59% were shopping, 19% for work and 9% for recreation
- 34% of those interviewed visit Toorak Village every day, 9% 5 days a week, 9% 4 days a week and 9% 3 days a week
- 6% said this was their first visit to Toorak Village
- 97% said they were able to find their way around Toorak Village
- 94% thought there were enough signs around the Village to find their way
- 11% said they have used the wayfinding signage
- 97% said they did not use other signage to find their way around
- 23% of respondents were aged 25-34, 23% were aged 35-49, 19% were 50-59 and 19% were 60-69
- 53% of respondents were female and 47% were male

A summary of some of the comments of those surveyed was:

- Many people like the look of the signs and think they are effective
- People think the signs are excellent for visitors
- People using trains are more likely to need help with direction signs
- Many people had not noticed the wayfinding signs
- Local people know their way around and do not need the signs

Proposed improvements

A number of potential improvements to the system have been identified by the City of Stonnington and Visualvoice and also through the evaluations. The improvements relate to a range of issues including sign hardware, cost, installation, maintenance and future works. The following recommendations seek to address the issues identified in the previous section.

Sign structures (including cost & maintenance)

New metal sign structure

The adoption of a non cabinet style metal sign structure will reduce the existing maintenance and implementation cost of the map-based signs. The metal sign is intended an additional sign type to the current sign family and as a possible replacement for some existing signs.

The cost of the metal sign structure will be approximately one third the cost of the existing structure, significantly reducing the future roll out costs. The maintenance associated with the metal sign will be reduced to cleaning up of tagging etc (no glass or plastic panels to replace).

Its use is intended for locations where there is no need for the sign to be illuminated. A typical site would be primarily a non night time economy (such as Hawksburn Village retail strip) where the majority of activity occurs in daylight hours throughout the year. However there remains the need for flexibility and illuminated signs may on occasion be required in any precinct. A local assessment at the time would identify this need.

It may also be used to replace existing cabinet style signs in areas where there is repeated glass breakages but (again) no need for sign illumination. Existing signs could be relocated to where an illuminated sign is required. Cost estimates should be obtained for the connection to the power supply and works required in association with the footings. It may also be possible to explore the use of solar powered lighting which would negate the need to provide power connections and associated issues such as metering. Identification of the costs would greatly assist CoS in determining the extent and priority for illuminated signs.

A generic metal sign specification has been supplied by Visualvoice for review by CoS (refer appendix). If adopted the new specification and artwork will need to be co-ordinated to achieve a design consistent with the existing map based sign.

To avoid future constraints with underground services it may be desirable to develop two standard options for concrete footings. The standard footing could be used as a first priority and where necessary, the option of the wide, shallow footing. Preparing engineering in advance for this scenario would avoid delays installing signs.

Sign placement

Train stations

New signs at train stations must be located at optimal sites to be effective, at or near the main entrance/exit. However they must not become an obstacle. Where a site is challenging (ie limited space) an assessment should be undertaken to ensure the sign will be seen by the majority of train patronage. This may require the use of a single sided sign(s) to accommodate space issues.

Many of the train stations are key arrival points to the CoS activity centres. As such, these sites should be given priority for provision of lighting in order to extend the hours of access to the information. The draft Stonnington Walking Policy Report identified the importance of signage at stations, as did the DOT review and surveys done in Toorak Village (described above).

Retail strips

New signs on retail strips must be aligned with property boundaries to avoid blocking sight lines from passing vehicle drivers into retail windows. New signs proposed for installation in Hawksburn Village will adhere to this rule.

Maintenance program

Maintenance of the signs is critical to create a positive image and reflect the value Council places on supporting and promoting sustainable transport and the local economy.

The CoS infrastructure maintenance department have a significant work load and the new signage system adds to it. To reduce the internal maintenance work, it may be financially viable to outsource the signage maintenance. This service is available from some of the larger signage suppliers in the market place. It is recommended Council obtain quotes for maintenance of the entire CoS wayfinding system to assess the cost. Maintenance may involve for example, bi-monthly cleaning and repairs. Clear documentation of all installed signs will be needed for this purpose.

Future evaluations

Future evaluations can be improved by evaluating a single signage system and by carrying out surveys in the areas which attract a large number of people.

The methodology for the DOT evaluation process appears to be appropriate ie using a range of interviews and follow on walk assessments. However the results are misleading as the IMAP signs were evaluated with other non related wayfinding signs. This could easily be avoided in future by evaluating only signs from the same system (ie only the IMAP family of signs).

The Austraffic evaluation was limited in the range of people intercepted who were prepared to be surveyed. This may be partially attributed to specific location – Toorak Village. Future evaluations should focus on larger activity centres which are likely to be frequented by a broader range of people such as tourists and visitors from the wider metropolitan area. This would be expected to provide a more accurate assessment of the usefulness of the system.

Pedestrian signage guideline document

The development of a pedestrian signage guideline document would greatly assist the project. This document would act as a reference for Council to the existing signage and guide the implementation of new signage.

The guideline document could include:

- System overview
- Sign map content reference (book of maps)
- General standards - for hardware and graphics
- Installed signs location map - directional and map based signs
- Proposed signed routes map - showing extent of potential future network
- Procurement process
- Suppliers - wayfinding consultant, signage, printers, installers, maintenance
- Installation procedures
- Maintenance program - responsibilities, process, programs

Future rollout of the signage

To date the CoS has extended the system with sign installations in Toorak Village and plans for Hawksburn are well advanced. The cost of implementing the work precinct by precinct, year by year is not necessarily the most effective approach. Cost savings could be achieved by ordering higher numbers of signs in a single manufacture and installation contract and the time required for Council officers to implement 2, 3 or 4 precincts simultaneously would also be reduced.

Council could consider developing an installation priority plan for future roll outs. This would require an audit of each precinct to be signed to quantify the total number of signs needed, followed by an assessment to determine the budget and amount of signage which could be implemented in one financial year.

Stonnington walking map

The following outlines new applications to further support walking in the City of Stonnington building on the work developed for the signage project.

The Stonnington base-map

Through the process of developing a best practice pedestrian signage system, a visually appealing and accurate base-map has been created. This map is a significant asset for the CoS which can be used for other purposes. The map currently covers the western half of the municipality and could be extended as needed.

The development of a related walking map for the municipality would compliment the signage and increase the reach of such information. The map would highlight walking & cycling routes between key activity centres, parks and recreational facilities. It could be delivered to residents and made available online or for mobile use. Studies have shown that when people are provided with good walking maps, they are encouraged to walk more.

Other new uses and applications

Use of the map beyond the signage would enable a single base-map to be kept up to date while having multiple uses and applications. Council currently uses a variety of different and inconsistent maps to communicate to the public a range of services, amenities and facilities within the municipality. The opportunity exists to unify and improve the consistency of the mapping information, while potentially reducing the cost of creating and maintaining multiple maps. The impact of providing highly legible information to the public should not be underestimated – many people find poorly presented maps difficult to read and interpret, leading to lost opportunities for residents, visitors and local businesses.

Council maps are often developed in isolation by officers working in different departments without knowledge of a pre existing base-map. Circulation of the above information to all departments within Council will raise awareness of the existence of the base-map asset and encourage its use and in-turn lead to a range of associated benefits to CoS.

Below is a list of potential themed maps which could be developed.

Sport & Recreation:

- Parks & recreation facilities map
- Recreational walks map
- Dog exercise areas map

Economic Development/Tourism:

- Cultural map
- Themed walks map
- Accommodation map
- Municipal trails map

Transport:

- Walking & cycling map (printed version)
- Transport access guide (Educational campuses, activity centres)
- Parking map (Educational campuses, activity centres)
- Mobility map

Applications

Any of the above themed maps could be developed for publication, online pre-journey use (with home printing capacity) and for use on mobile phones.

Digital information/wayfinding

Increasingly information is being distributed electronically. Wayfinding and other forms of spacial information will follow this trend. Currently the IMA developed Inner Melbourne Map is proved on line in PDF format, however this has limited usability online due to the fact that it is not formatted for digital use and does not leverage the full possibility of digital applications (interactivity).

Map app scenario

The following is a brief overview of a possible thematic map application (Map App). The opportunity exists to leverage and build upon the wayfinding map work and to develop a digital product for a range of needs.

This would involve the development of a multi layered, multi themed map app to be deployed via the internet and mobile platforms (phones and tablets). The primary attributes of the such an application and it's content are ease of access and use while providing comprehensive content.

The app can be thought of as a digital extension of the recently installed wayfinding signage. However the digital platform offers greater scope to provide specific information to specific people. In the simplest terms, CoS could create an internet browser based application to present city information on maps and/or a separate but related mobile application to view the same content on the move.

Objectives

- Provide municipality information relevant to residents and visitors.
- Develop the applications with a simple interface design to minimize the technology barrier (particularly for those less computer literate).
- Deliver user centered content which is widely and easily understood.

Benefits

- Modulated information, when and where residents & visitors require it.
- Offer a broad range of information which services specific interests and needs.
- Improved city experience through better knowledge of opportunities available.
- Improved sustainability, including reduced print media costs to Council and less waste.
- The application content can be updated and expanded as and when needed.

Thematic Content

Examples of the content targeted to specific audiences can be broadly organized into two streams, Destinations and Transport:

Destinations

- Information relevant to local, state and international visitors
- Information relevant to residents and community organizations
- Information relevant to events, shopping and dining
- Information relevant to people with mobility issues

Transport

- Information relevant to all sustainable transport modes, walking, cycling, public transport
- Information relevant to drivers
- Information relevant to people with mobility issues

The themed content listed in the Stonnington walking map section is also applicable.

Functionality

Applications on desktop and mobile platforms have different end user requirements. For example someone using the desktop application will have a larger screen, a comfortable environment, a printer etc. The mobile application user has a smaller screen, a distracting environment. Each application while presenting the same content requires a unique design approach based on user context.

The principle delivery platforms for the thematic map applications are:

- Via the internet for desktop computer use.
- Via downloadable apps for mobile devices.

A desktop application will enable pre-journey planning and discovery of the many aspects the city has to offer through a visually engaging means. Example desktop application features:

- User introduction and help
- User selectable thematic maps content
- User control for content layers and navigation
- Interactive discovery modes (display increased level of information about destinations)
- User print content
- User download content to mobile device

The mobile application will provide access to the same map information – on the street with or without a mobile data connection. Example mobile application features:

- View / navigate content
- Live, you are here, GPS tracking and orientation
- Live information link overlay (subject to data availability from other digital projects)

A full list of possible features and functionality would be established from research undertaken prior to the development of such application.

Appendix

Metal sign drawings

Inner Melbourne Wayfinding Signage Strategy 2007

Pedestrian Wayfinding Signage

For the City of Stonnington

Content

June 2011

Typical Map-based sign

- DWG 01 – Assembly
- DWG 02 – Construction
- DWG 03 – Construction details
- DWG 04 – Engineering specification

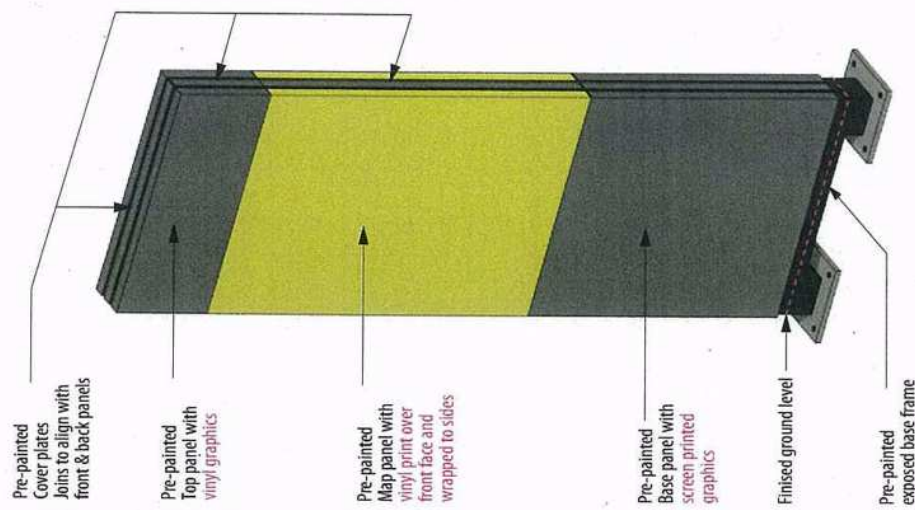
Maps, graphic files & schedules will be supplied to the successful contractor

Contractor Installation Note

This wayfinding system uses heads-up mapping. Heads-up mapping shows what is in front of you at the top of the map and what is behind you at the bottom of the map. The contractor must ensure that each sign is installed at the correct alignment (orientation) in the ground and the correct map is applied to each side of the sign.

Wayfinding consultants : Visualvoice

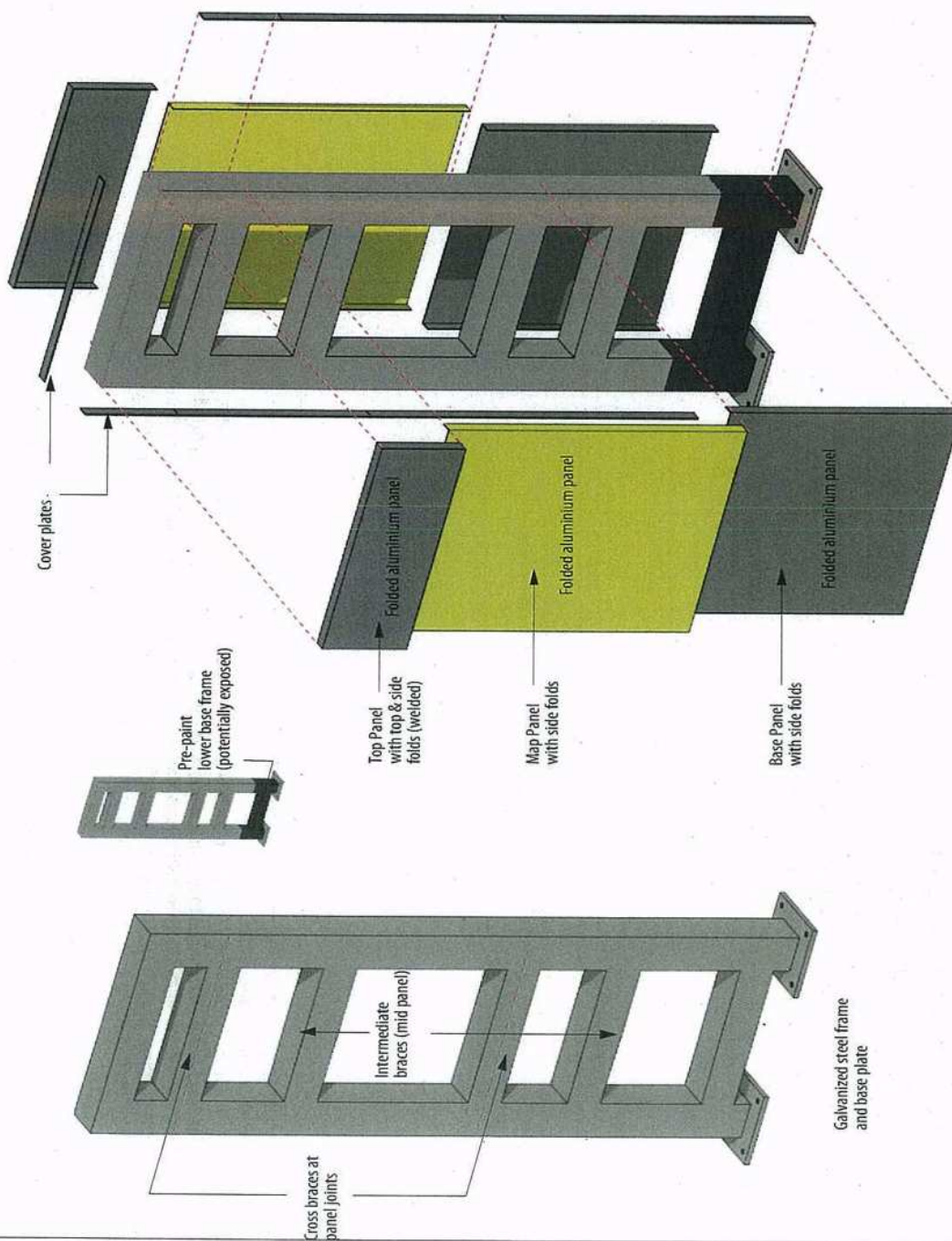
Contact: Bruce Herbes m: 0404 007 716 | t: (03) 9502 0393 | e: bruce@visualvoice.com.au



Finished Sign

Refer Graphic set-out drawing for required graphic treatment and finishes specification

Construction Drawing
Map-based Sign
DWG No: 01
Scale 1:10 (A3)
All measurements in millimetres



Panel Assembly

Frame Assembly

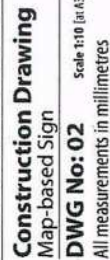
Refer Graphic set-out drawing for dimensions

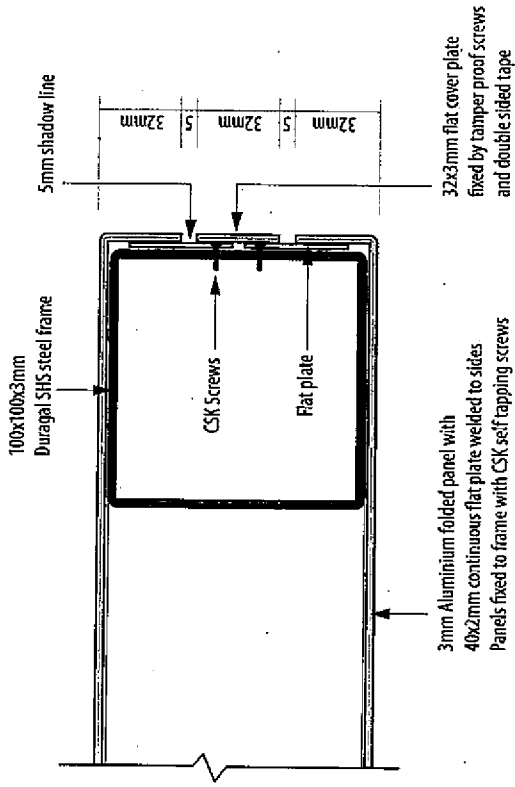


Note: 50mm clear concrete cover to reinforcing (including fitments) for footings unless otherwise specified

Front/Back & side elevations

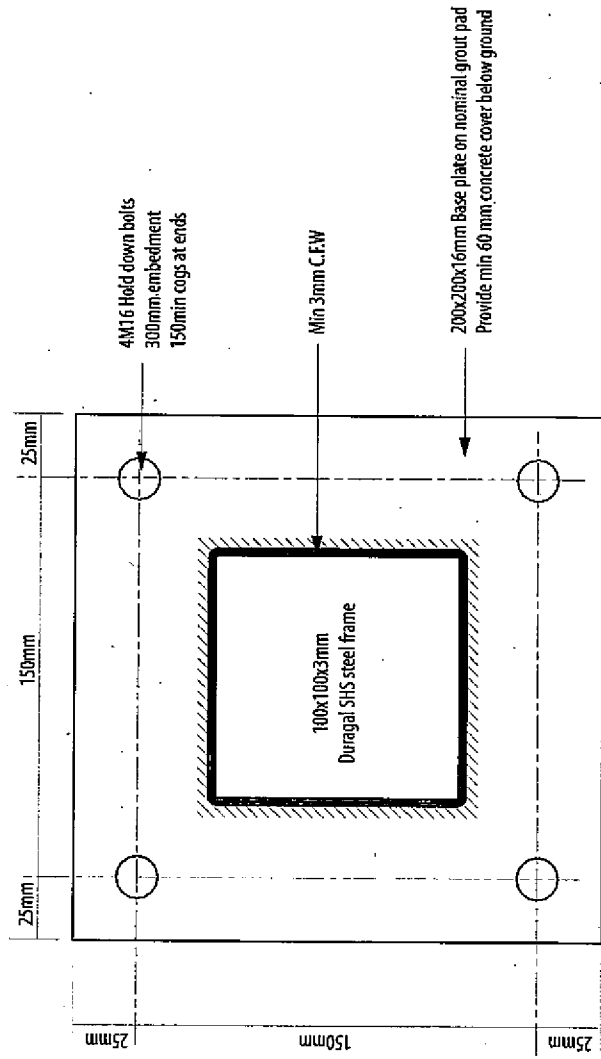
Refer Graphic set-out drawing for dimensions





A Cross Section – Panel fixing detail

Refer Graphic set-out drawing
for dimensions



B Plan – Base plate detail

Refer Graphic set-out drawing
for dimensions

NOTES

GENERAL :

- G1. The Structural drawings shall be read in conjunction with the Architectural drawings and the Specification. All discrepancies shall be referred to the Architect before proceeding with the work concerned.
- G2. All dimensions shall be verified from the Architectural drawings or on site.
- G3. THE STRUCTURAL DRAWINGS SHALL NOT BE SCALED.
- G4. The Structural drawings do not necessarily show details of all features, Inserts, sleeves, plates, openings, plinths, recesses, etc. required for the various trades. All such details shall be approved by the Engineer before proceeding with the relevant construction.
- G5. All variations to the details shown on the Structural drawings shall be approved by the Engineer prior to carrying out the relevant work.
- G6. All structural materials and workmanship shall be in accordance with the relevant current Australian Standards and the Building Code of Australia.
- G7. The Builder shall give 24 hours notice to the Engineer for all intended inspection requirements.
- G8. The design live loads are as follows:-
Roof 0.25KPa,
Floors (interior) 3.00KPa,
(exterior) 3.00KPa.
- G9. During construction the structure shall be maintained in a suitable condition at all times by the Builder.

FOOTINGS :

- F1. Footings shown on the drawings are based on the Geotechnical Report and may need to be varied on site. Changes in footing levels shall be made only with the approval of the Engineer.
- F2. All footings shall be based within material capable of sustaining a safe bearing pressure of 100 KPa, unless noted otherwise.
- F3. Footing dimensions shown on the drawings are for tender purposes only and may need to be varied on site. Tender prices to be based on details shown on the drawings and the Geotechnical Report. All final footing levels shall be approved by the Engineer.
- F4. All excavations shall have water and loose or softened material removed before concreting commences.
- F5. All footing over-excavations shall be backfilled with 15 MPa blinding concrete.
- F6. Adjacent footings shall be based at the same level. Nearby footings shall be based within a 1 vertical to 1 horizontal relationship from the underside of the lower footing unless specifically noted otherwise.
- F7. All footing excavations shall be inspected by the Engineer before proceeding with any further work.

CONCRETE :

- C1. All concrete work and its testing shall comply with the current A.S. 3600 - S.A.A. Concrete Structures Code.
- C2. All concrete shall be ready mixed, dense weight concrete in accordance with A.S. 1379 with continuously graded aggregate of 20mm nominal maximum size, slump = 75mm and maximum shrinkage strain at 56 days of 650 micro strain.
- C3. Concrete compressive strength grade at 28 days to be:
Blinding Concrete 15 MPa,
Footings 25 MPa,
Floor Slabs 25 MPa.
- C4. The following notation is used for the various types and grades of Reinforcement:
Grade 500 deformed bars N20
Grade 230 plain bars R10
Hard drawn steel fabric L32
The number following the reinforcing symbol gives the bar size or the fabric size and spacing in millimeters.
- C5. Clear concrete cover to reinforcement (including fillets) shall be as follows unless noted otherwise:
Slabs on ground 20 top,
Footings 50
Suspended slab (internal) 25
(main bars) 40
(external) 50
Columns (internal) 25
(main bars) 35
(external) 50
Precast Panel 25
- C6. Reinforcement splices shall be in accordance with A.S. 3600.
N bars 40 dia., 500 minimum,
R bars 50 dia., 500 minimum,
Fabric 250 minimum,
Trench Mesh 450 minimum.
Fabric reinforcement shall be in one piece in direction of span. The location and type of all reinforcement splices shall be approved by the Engineer.
- C7. The Builder shall supply and install all necessary bar chairs, support and spacer bars to position all reinforcement correctly within the permissible tolerances. Bar chairs shall be spaced at 900mm maximum centres both ways. For slabs poured on ground chairs shall not penetrate the vapour barrier.
- C8. Horizontal reinforcement in walls, footings and slab beams shall be continuous around corners and intersections.
- C9. All reinforcement shall be securely tied and supported in its correct position so as not to be displaced during concreting.

STRUCTURAL STEEL :

- S1. All structural steelwork shall comply with the current A.S. 4100 and/or A.S. 1250 Steel Structures Code.
- S2. Unless otherwise noted all material to be:
Grade 250 - Hot rolled plates, flats and angles 100 x 100 EA or 125 x 75 UA and smaller,
Grade 300 Plus - UB, UC, PFC and larger angles,
Grade 300 WB and WC,
Grade 350 RHS, CHS and SHS.
- S3. The following notation is used for the various bolt types and bolting procedures:
Commercial bolts snug tightened:
Bolting procedure 4.6S M20
High strength bolts snug tightened:
Bolting procedure 8.8S M20 8.8S
High strength bolts fully tensioned:
Bolting procedure 8.8TF M20 8.8TF
(friction type joints)
Bolting procedure 8.8TB M20 8.8TB
(bearing type joints)
- S4. All welding shall comply with A.S. 1554 and shall be at least 6mm fillet welds Structural Grade (SP) continuous for full contact of members.
Minimum weld length = 75mm. All butt welds shall develop the full tensile strength of the member.
- S5. All structural steelwork is to be finished in accordance with the Architectural Specification.
- S6. Grout (1:2 mixture of sand and cement as dry as practical) shall be thoroughly rammed under all steel baseplate surfaces so that solid support is given to the steelwork over the entire contact surface.
- S7. Two (2) copies of all shop drawings shall be submitted to the Engineer for approval of overall structural sufficiency only, prior to commencement of fabrication.

ALL EXPOSED STEEL SHALL
BE HOT DIP GALVANISED

FINISHES

- All decorated surfaces to be primed & spray painted in 2-Pak automotive finish
- All surfaces to be clear coated, sprayed with 2 x coats of 2-Pak automotive clear @ 5 micron each; total cover 100 microns
- All exposed sign panel backs to be primed and painted as per the sign colour specification including raw edges

