

# Assembly Quality Development

Specification No: 01-08

## Design, Manufacture and Supply GPS Vehicle Tracking System

GM Holden Elizabeth Plant



# ELIZABETH OPERATIONS

Press shop  
Body shop  
Paint shop  
Fabrication  
Plastics shop  
General assembly



Land area 124 hectares  
Buildings 23.7 hectares  
(237,000 sq. Metres)

## **Proposed Project**

Design and develop a Vehicle Tracking System to be utilised to Track and Monitor the location and Build status of Prototype and Pilot vehicles that have been built on the Elizabeth Vehicle Assembly line.

Maximum number of vehicles that are to be accommodated by the proposed system is 50.



# SCOPE OF WORK

## Base Unit

Must contain an appropriately configured database that can be updated as required.

Status and Location of all vehicles being tracked by system are to be displayed via a monitor attached to Base Unit.

Updating of system is to occur either in real time or via a definable refresh rate.

Base unit is to be a stand alone component that only requires 240 volt power as an input.

It is to be located in a production environment and is expected to be designed to accommodate this environment.

GM Holden preference is for standard Microsoft Office suite of programs to be used



## In Car Device

Attachment of In Car device is to be designed in such a manner that it meets the following criteria:

Ergonomically acceptable (evidence of how evaluated is required)

Creates no Safety Concerns for Operators.

Has no potential to damage the vehicle.

Completed and pending issues with the vehicle updated via the base unit

Does not require any form of tool to attach the device to the vehicle.

Information contained within the In Car device does not need to be read whilst the vehicle is being driven

Location of the In Car device can not obstruct the drivers' vision beyond acceptable limits.

Can be easily removed.

If recharging is required then a process for charging is to be provided.



# Reporting

On demand by system operators, a report is to be produced by the system that clearly indicates the following:

Location of all vehicles being tracked

Locations that each vehicles has been moved to in previous 24 hours.

Remaining issues to be resolved

Any issues with the In car device (ie status of charge, failure to communicate etc)



You can select the whole project or you can select one component

- Testing of GPS devices to determine accuracy of position reporting
- Interface between GPS and the system operator
- Development of a database
- Attachment of the GPS to the vehicle
- Any other component?

