

Project Profile

Murdoch Drive South Street Intersection Upgrade



Has significantly improved traffic through-flow and user safety at this busy intersection.

PROJECT DESCRIPTION

Located on the western side of Kwinana Freeway's South Street exit, works to upgrade the Murdoch Drive/South Street intersection form part of the State's commitment to provide better access and flow for the predicted increase in traffic volumes in coming years.

The Murdoch Drive South Street intersection handles heavy traffic volumes on a daily basis (including heavy haulage vehicles accessing the Port of Fremantle) with traffic modelling predicting a rise to more than 50,000 vehicles per day by 2021. The nearby Murdoch Bus and Train stations also deliver hundreds of pedestrians and cyclists daily, who routinely cross the intersection to access Murdoch University and College and the St John of God Hospital. This foot and cyclist traffic was also predicted to increase with the opening of Fiona Stanley Hospital and continuing development of the Murdoch Activity Centre.

Highway Construction, working in close collaboration with Main Roads, was responsible for all aspects of project delivery apart from the design. This included heritage and community relations management, traffic management, earthworks, traffic signalling, service relocation management, road resurfacing and landscaping.

PROJECT OBJECTIVES

- A reduction in traffic congestion and queue lengths at the intersection;
- An improvement to the traffic capacity of the intersection;
- An improvement to the pedestrian and cycling facilities;
- A safer access and egress for the hospital and surrounding areas;
- Creating greater aesthetic appeal through careful design of amenity walls and public art; and
- A reduction in accident rates through improved road safety.

PROJECT COMPONENTS

- Added a right turn pocket on the eastern approach on South Street;
- Two additional right turn pockets on the southern approach on Murdoch Drive;
- Increased other turn pocket lengths to accommodate the increased traffic volumes;

CONTRACT

155/11 construct only

CLIENT

Main Roads WA

LOCATION

Perth WA

TIMEFRAME

Jan 2013 – Jan 2014

PROJECT VALUE

\$13 million



- Provided an extended left turn access from South Street eastbound onto Kwinana Freeway's northbound on ramp;
- Extended the right turn access on the southern approach on Murdoch Drive northbound from the entry to the St John of God Hospital access road;
- Associated drainage works;
- Constructed noisewalls along the extent of the project works;
- Construction of amenity walls;
- Relocated and/or protected all services to facilitate the road construction works;
- Full-Depth-Asphalt pavement construction and marking;
- New traffic signals and street lighting installation;
- New landscaping and revegetation; and
- Public Art.

SPECIAL FEATURES AND CHALLENGES

Although a relatively small construct-only contract, this Project was no ordinary road intersection upgrade, displaying characteristics and challenges usually found on larger traditional design and construct contracts.

These challenges included:

- Highly trafficked area with high profile stakeholders;
- Heavy foot and cyclist traffic through the intersection;
- A complex web of underground services (many undocumented and therefore unknown);
- Access issues for emergency services;
- Treatment of significant amounts of friable asbestos discovered along edges of the eastern carriageway; and
- An extremely tight project area bound on all sides by private property and a conservation area.

Driven by Highways' experience and solution-orientated approach and supported by Main Roads expertise, the Project team was able to implement a mix of alternative construction methods, sophisticated project and program management and communication initiatives to overcome these issues and ensure a quality on time delivery.

Awards and Accolades

The Murdoch Drive South Street Interchange project won a Civil Contractors Federation (CCF) Earth Award for project delivery in 2014.

PROJECT REFEREES

Chris Raykos, Superintendent, Main Roads WA

Yaqoob Siddiqui, Superintendents Representative, Main Roads WA

