PROFORM CIVIL

ENGINEERING DESIGN CONSULTANTS

Company Profile

Proform Civil
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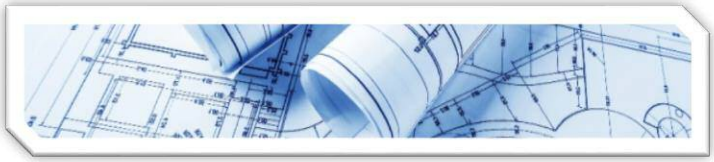
ABN 56 492 398 579



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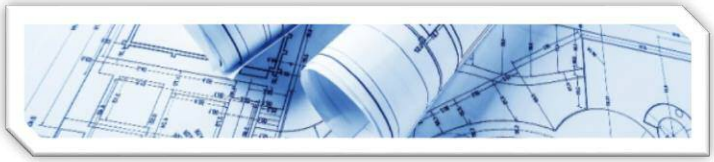


1. Introduction & Capabilities

Proform Civil is a small local civil design firm and we specialise in road and drainage design's mostly for local government road projects. Our services are tailored for local governments and fill a vital role in the market place in the following areas:

1.1. Civil Engineering

- Our low overheads enable us to provide competitive pricing (quotations are based on a flat rate of $110/hr)

- We work closely with the client to ensure the delivered product is suitable for the project requirements.

We Also:

- Have a strong skillset in the delivery of local major urban and rural road design projects.

- Are fully insured and possess licenced 12D & AutoCad civil design software.

- Have an excellent reputation in delivering road & drainage design projects to local council's such as the City of Rockingham, Armadale, Swan, Greater Geraldton, The Shire of Mundaring, Carnarvon, Kondinin, Quairading and the Shire of Toodyay.

1.2. Surveying

To compliment and add quality assurance to our civil design services we are now providing surveying services in-house having recruited an experienced surveyor.

- Provision of our own survey's enables us to provide adequate quality control measure's and suitable, consistent surveying techniques to suit our core services of civil design.

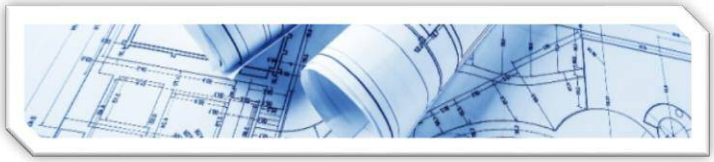
- We have successfully undertaken feature survey and setout projects in both urban in rural environments for council's including the City of Swan and the Shire of Quairading.

- Quotations are based on a competitive rate of $110/hr with discounts available for civil design and survey project combinations.

1.3. Our Surveys

We have unique methodology and quality assurance procedures to improve efficiencies and accuracy which rule out anomalies commonly found among industry feature survey's, specifically for civil design.

- Stringent cross sectional break line pick up's which eliminate problematic horizontal and vertical inconsistences within the final data terrain model and cater's for the highest presentation.



- In additional to contour checking procedures, regular interval cross sections and longitudinal profiles are inspected to ensure typical height anomalies within the data are rectified.

- Filtering of two dimensional or null levels from the main data set with a tolerance only for survey text. This ensure's a usable and tinable surface for the main data set and improves efficiencies' for the civil designer.

- We utilise Main Roads standard survey code library as a generic product and can adapt to client requirements.

- We can utilise client standard layer & symbol conventions or provide Proform Civil standard layer & symbol convention highly optimised for civil design.

- We utilise GPS/RTK and total station methodology to optimise accuracy and efficiency

- We resource Leica total station and Trimble GPS/RTK equipment for our survey's.

Recent Design Projects:

Abraham St & Utakarra Rd Roundabout - City of Greater Geraldton

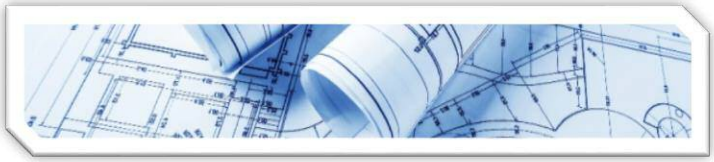
Approximate Design Fee: $8k

Great Northern Hwy & Bishop Rd Roundabout - Midland - City of Swan

Approximate Design Fee: $19k

Hillsden Road & Darlington Road - Darlington - Shire of Mundaring

Approximate Design Fee: $4k



2. Key Personnel

We will allocate sufficient resources to the project in order to achieve your targets and goals.

Courtney Weerts – Administration Officer

Dale Weerts - Senior Civil Consultant – Dip. Civil Engineering

Dale Weerts will be the contact for this project and will be undertaking the civil design component outlined in this proposal.

Dale has over ten years of experience in civil design, primarily on government road and drainage projects. Dale has an excellent understanding of the requirements in local government road projects and is very familiar with the relevant standards such as Austroads & Main Roads published standards and guidelines.

Dale also has an excellent skillset with relevant civil design and drafting software such as 12D & AutoCad.

Curriculum Vitae – Dale Weerts

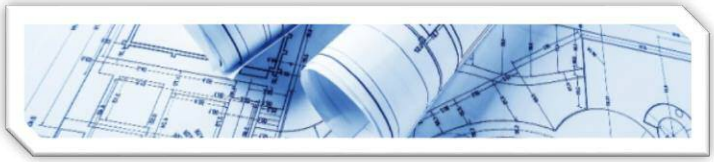
Education & Courses:

Central Tafe Subiaco
Diploma Civil/Structural Engineering
12D Software Course
Advanced Civil Design
Eastern Hills Senior High School, Mt Helena, WA
Completed Year 12
IPWEA Courses
Stormwater Drainage Design
Road Pavement Design
Road Maintenance
Road Safety Audit

Professional Experiences:

Proform Civil – Senior Civil Consultant
2013 to present
City of Swan – Civil Designer
November 2012 to August 2014
Calibre Rail – Civil Designer
September 2011 to October 2012
Shire of Mundaring – Engineering Technical Officer Design
February 2009 to August 2011
Shire of Mundaring – Trainee Engineering Technical Officer
February 2007 to August 2009

Alan Buchanan – Senior Engineering Surveyor

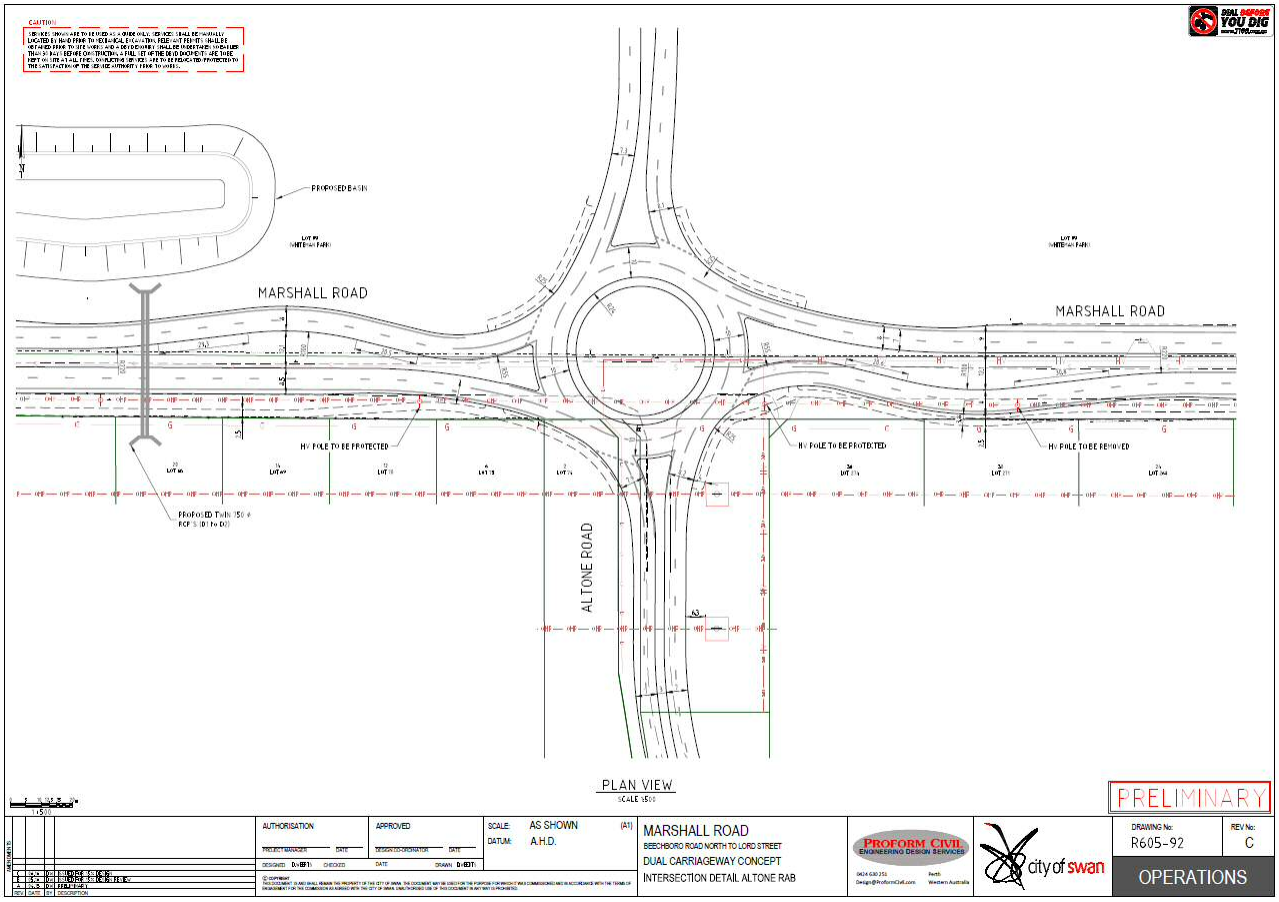


- 20+ years experience in surveying
- Possess tertiary survey education certificates:
  - Bachelor of Applied Science – WA Institute of Technology
  - Diploma engineering – Bunbury Tech
  - Currently studying Masters in Spatial Sciences – Curtin University
- Conversant with geodesy, geoid models and datum's
- Competent with large scale GPS networks and adjustments for engineering works and regional network upgrades
- Competent with 12D, Civil 3D & Carlson software packages
- Experienced providing engineering survey's and setout for Proform Civil including compliance criteria

3. Relevant Experience

Proform Civil has vast experience providing conceptual and detailed civil designs, construction plans and specifications on urban and rural road design projects in WA. Listed below are some recent civil projects which provide relevance to this tender.

3.1. Dual Carriageway – Marshall Road – Lord Street to Beechboro Road North



Proform Civil was engaged by the City of Swan to undertake detailed concept designs to upgrade Marshall Road to a dual carriageway. The project required hydrological analysis of the area and the upgrade of seven intersections which included three roundabouts and one signalised intersection. The project included challenges of overcoming minimal longitudinal grades, working around services and reducing the amount of land acquisition.

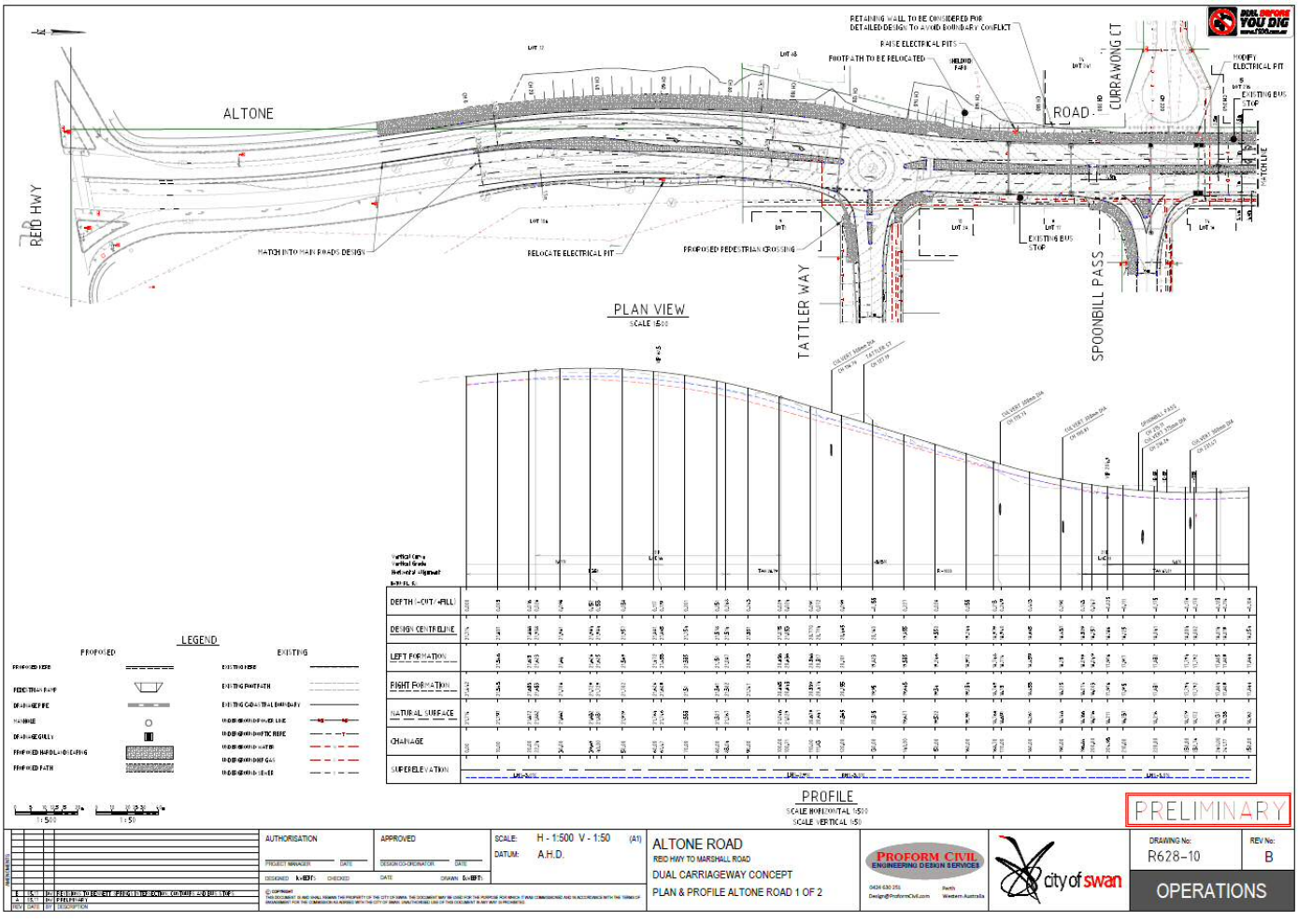
The Marshall Road corridor has an existing underground 1.5m diameter steel high pressure sewer main which presented challenges to meet both road design requirements and Water Corporations strict specifications for construction within the vicinity of the main. As constructed design drawings were sort for the sewer main and Proform Civil investigated a suitable road design to strattle the median of the proposed road over the main. The design would meet tight parameters for works around the main without sacrificing serviceability to the road or cost effective construction methodology.

With current traffic modelling for 2031 predicting high demands at the varius intersections, Proform Civil provided a solution for dual carriageway roundabouts at three of the intersections. Vehicle Paths were modelled to accommodate the swept paths of right of way vehicles around the roundabouts. With design speeds of 90km/h pre-deflection was included along with 24m radius diameters for the annulus.

Proform Civil undertook detailed catchment analysis to determine the scope for drainage pipes, basins and open drains. The project lies within the vicinity of the Bennet Brook catchment and to accommodate modern water sensitive urban design techniques Marshall Road was designed with open swale drains that had longitudinal grades towards Bennet Brook. Sizing for drainage compensating basins were also calculated and indicative locations designed strategically near intersections for reduced land acquisition.

The valuable services provided by Proform Civil for the Marshall Road project are currently been used by the City of Swan to undertake further investigation and planning for land acquisition and future funding for the project.

3.2. Dual Carriageway – Altone Road – Reid Highway to Marshall Rd



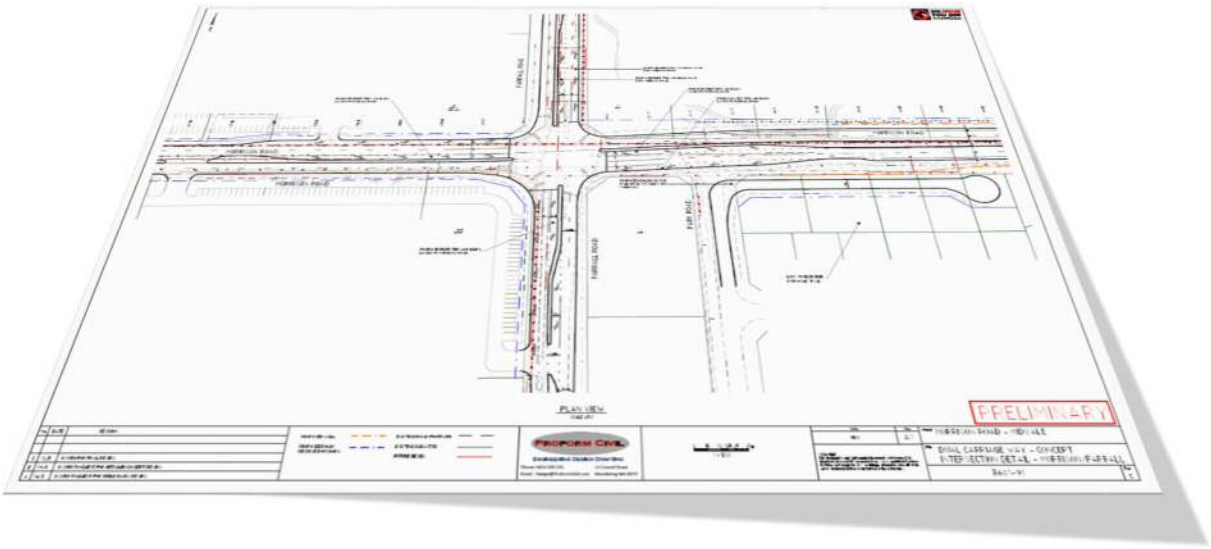
Proform Civil was contracted by the City of Swan to provide a 15% concept design to develop Altone Road into a dual carriageway from Reid Hwy to Marshall Road. The project incorporated a busy section of Altone road approximately 500m in length from Reid Highway to Gnangara Rd with two intersections and a concept roundabout at Bennett Springs.

The design was challenged with a narrow road corridor, underground services and adjacent residential developments. Land acquisition was to be kept to a minimum and therefore the design cross section was reduced as a solution to minimise the footprint. A path was proposed on only one side of the road with a 2.5m median and no cycle lanes.

The concept roundabout at Bennett Springs provided an excellent solution to cater for future traffic volumes however raised feasibility concerns for forward planning and land acquisition. Proform Civil developed an alternative intersection design with a signalled intersection layout which provided a smaller footprint and lessened the impact to nearby properties.

The project has presented an example of our consultancy's ability to provide detailed concept road & drainage designs to enable road authorities to undertaken future planning for funding and land acquisition.

1.1. Morrison Road Concept Design – Midvale WA



Proform Civil was engaged to provide civil engineering and consultant services to develop a conceptual design for a feasibility study to upgrade Morrison Road from Reid Highway to Myles Road to a dual carriageway.

The project incorporated several intersections within the scope including Farrall Road which was to be designed to accommodate a large development on the south western corner as well as the turning path of a network 6 vehicle. The design was undertaken in conjunction with the analysis of recent traffic volume study reports to ensure the intersection configuration and auxiliary lane lengths would be adequate to cope with 2031 volumes.

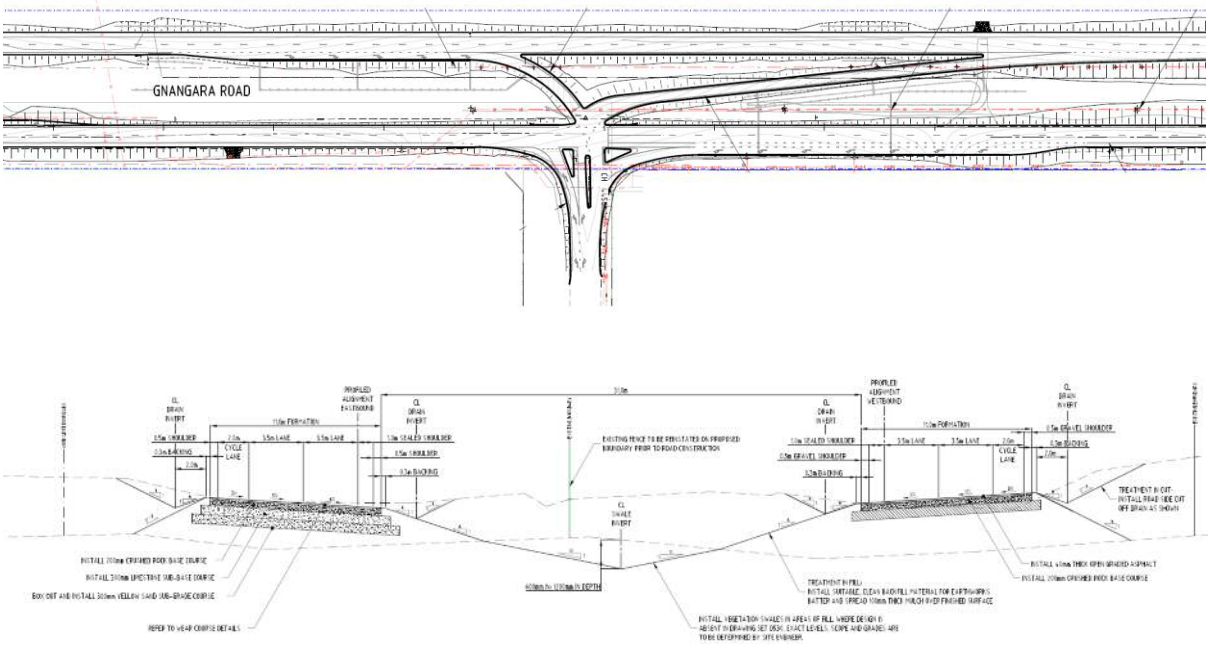
Due to a large future development north of Morrison Road a multi lane roundabout at Orchard Road and Morrison Road intersection was also investigated with a concept horizontal design.

The project also incorporated the concept of engineering Morrison Road into an underpass at the existing level crossing east of Farrall Road. Through liaison with Main Roads engineering department the design investigated different bridge depths across the span to enable the underpass. The concept also established a feasible horizontal and vertical geometric road design to enable minimum vertical clearance and sight lines through the underpass.

The project involved meeting with relevant stake holders such as the City of Swan, The Shire of Mundaring and the Department of Planning to discuss the feasibility of the concept throughout the design process.

The initial concept stages of this project were completed with the submission of conceptual land requirement and road design plans to assist in the establishment of planning control lines. Planning and design for this project is still taking place.

3.3. Dual Carriageway Design - Gnangara Road - Gnangarra WA



Dale Weerts undertook the design and drafting to upgrade Gnangara Road to a Dual Carriageway from Alexander Drive to Drumpelier Drive whilst under the employment as a Civil Designer at the City of Swan. The final design consisted of approximately 140 construction drawings and 8kms road duplication.

The western 2.5kms was designed to a semi-urban standard and was required accommodate a busy commercial zone to the north. The duplication of the road required a separated median which was

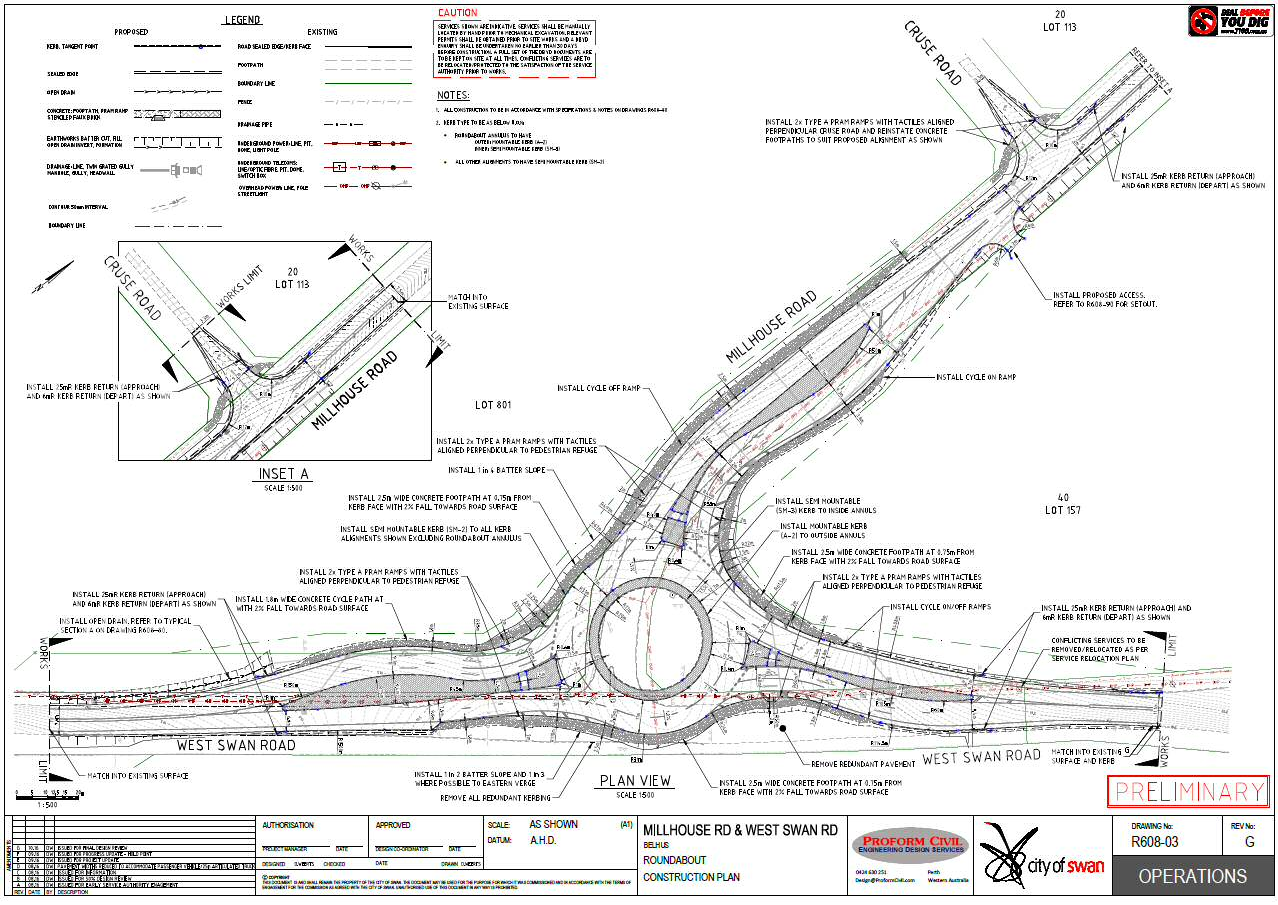
restrictive to some of the northern lots. After consultation with business owners, “U Turn” facilities were designed in strategic locations to maintain access and minimise the impact on local business.

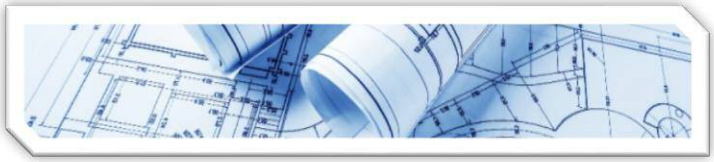
The existing topography was challenged with flat grades and a large portion of the existing road had to be reconstructed to suit minimum longitudinal grades. Multiple crest and sag locations of the longitudinal design were tragically placed to suit drainage requirements and maximise the aesthetics of the road.

The eastern portion was designed to a rural standard and the carriageways were separated by a 30m median to accommodate existing services. This central median became an essential part of the drainage design which used water sensitive urban design parameter’s. Located in the Gnangara Mound, special consideration had to be taken into account for drainage design. Multiple drainage designs were considered for the project with an initial pit and pipe design specifically requested by the department of water to accommodate any spills hazardous to the environment. After further investigation, a final drainage design utilising open swales was adopted.

The road has since been constructed and presents a valuable and safe transport route for motorists.

3.4. Millhouse Road & West Swan Road Roundabout – Belhus WA





Proform Civil was recently engaged to provide civil design consultant services to develop construction plans for a roundabout at the intersection of Millhouse Road and West Swan Road – Belhus WA.

The project was arose from demanding traffic volumes to the current tee intersection and failed pavements. The dual lane roundabout layout was deemed suitable to meet 2031 traffic volumes.

Steep verges to the south of West Swan road presented challenges within the geometric design as this area was unable to be utilised pushing the roundabout to the north. Proform Civil carefully developed a geometric design which accommodated the required turning path of a RAV Network 4 vehicle, provided suitable pre-deflection at entry and required the acquisition of minimal land to the north of West Swan Road.

Several vertical designs were presented to the client to optimise fill batters and drainage sheet flow. We were motivated to focus on accommodating drainage, as well as smooth transitions circulating the roundabout.

The outcome for the design developed into a highly serviceable roundabout with excellent aesthetics. Given the challenges presented, this design is an excellent example of our skills and experience in dual carriageway roundabout design. We believe the roundabout will be an impressive civil design landmark for our firm once installed.

3.5. Road Design – Baldivis Road – Baldivis WA

Proform Civil was contracted by the City of Rockingham to undertake the design and documentation to upgrade two kilometres of Baldivis Road (Safety Bay Road to Highbury Boulevard) to a boulevard style layout which included nine intersections and two roundabouts. The project commenced August 2014 with an initial duration of 2 months. Stage 1 of construction has since been complete. The project would provide improved amenities to service adjacent residential developments

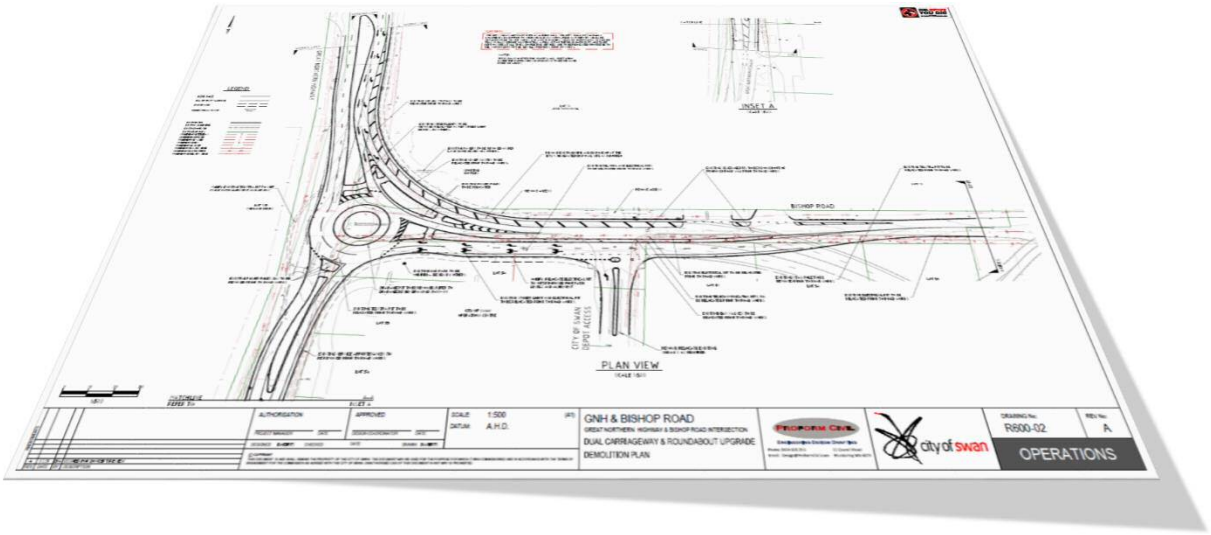
The cross section incorporated a central median, two way traffic and cycle lanes, underground drainage networks and footpaths. The project incorporated the coordination of Geotech investigation and reports, underground service location/surveying and a Road Safety Audit to be undertaken by an independent consultant.

The project presented challenges with the consistent upgrade of underground services, flat topography and a narrow road corridor adjacent to a conservation reserve.

The vertical design was optimised to overcome minimum grades and adhere to relevant standards without drastically affecting adjacent property.

Water sensitive urban design principals were utilised as part of our drainage design. A solution was to obtain soil infiltration tests within adjacent conservation reserve which was subsequently deemed suitable for drainage detention for proposed road developments.

3.6. Roundabout Design - Great Northern Highway and Bishop Road – Middle Swan WA



Proform Civil was contracted to by the City of Swan to undertake the design of a complex roundabout at the intersection of Great Northern Highway and Bishop Road. The project would play a vital part in linking Reid Highway to Lloyd Street, and in turn servicing the area of Midland. The design would also address heavily congested traffic issues due to unbalanced traffic movements from the northern and eastern legs. The roundabout design had to provide access and drainage solutions to busy adjacent commercial areas and cater for network 7 and 4 vehicles on specific legs. The design also had to accommodate the future extension of a dual carriageway to the East. The design was undertaken in December 2014.

Proform Civil developed an ultimate concept that provided right of way from Great Northern Highway to Lloyd Street in the form of a dual carriage way. The concept also had to accommodate a staged design due to budget constraints and private property. A detailed design was produced which matched into Bishop Road prior to Lloyd Street and accommodated the ultimate concept with minimal redundant works.

Levels and alignments were optimised to reduce the impact on nearby properties and a very complex network of existing underground and overhead utilities.

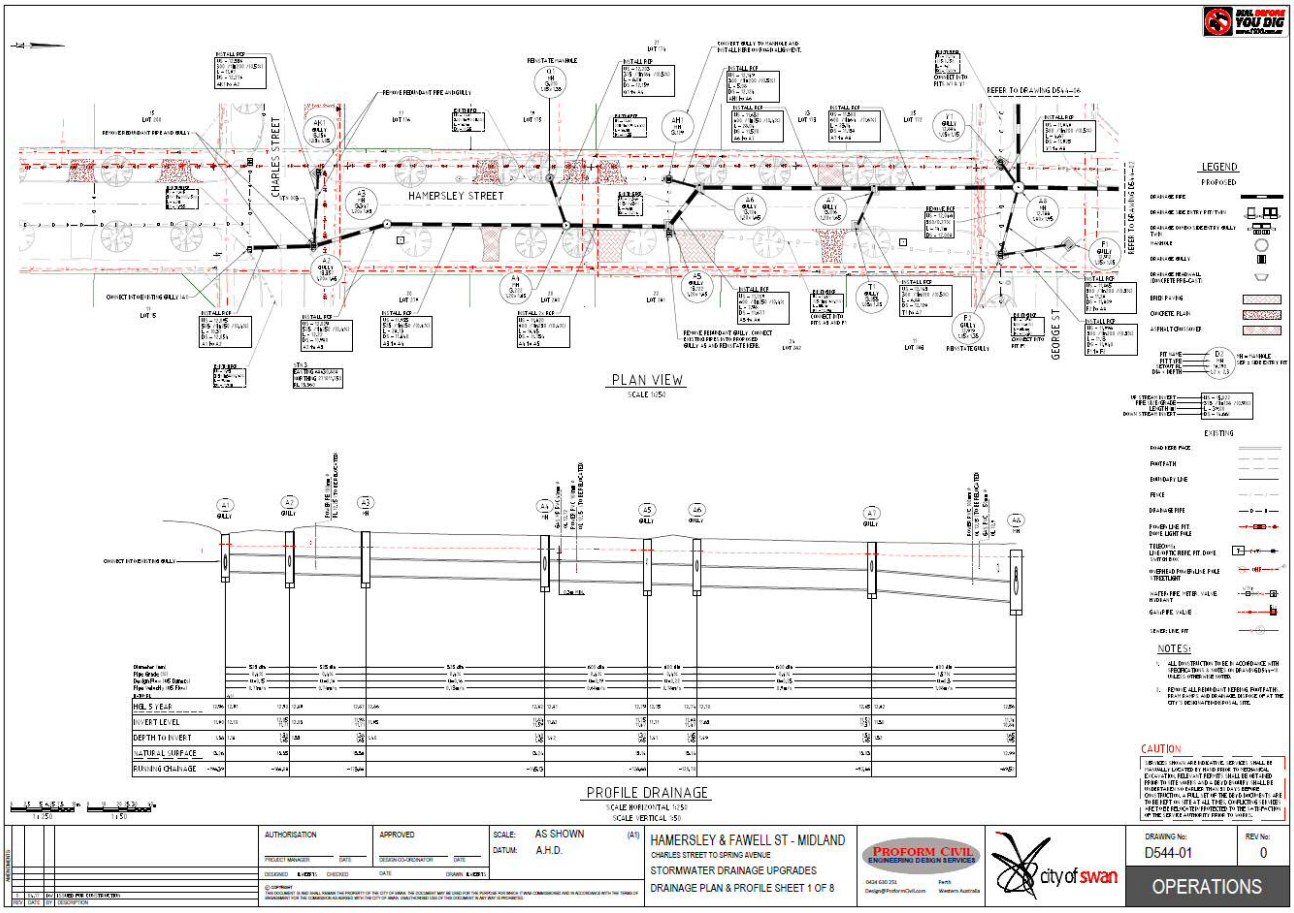
The footprint required land resumptions and came close to existing buildings. Solutions also had to be designed for severed access ways to adjacent car parks and property. A network of underground services was also surveyed and catered for within our design with conflicting services identified for relocation.

The existing topography presented challenging opportunities to reduce storm water gutter flow widths in design storm events as well as keeping earth work batters within the scope. A network of storm water drainage was designed to overcome this along with carefully designed final surface grades.

Construction of the roundabout has since been complete and presents an excellent example of our consultancy’s ability to undertaken complex intersection and road design.

3.7. Hamerlsey St/Fawell St Drainage Design

Proform Civil was recently contracted by the City of Swan to provide engineering design services to the Hamersley Street and Fawell Street drainage catchments within the Midland region. The catchment is alternatively known as “MD13”.



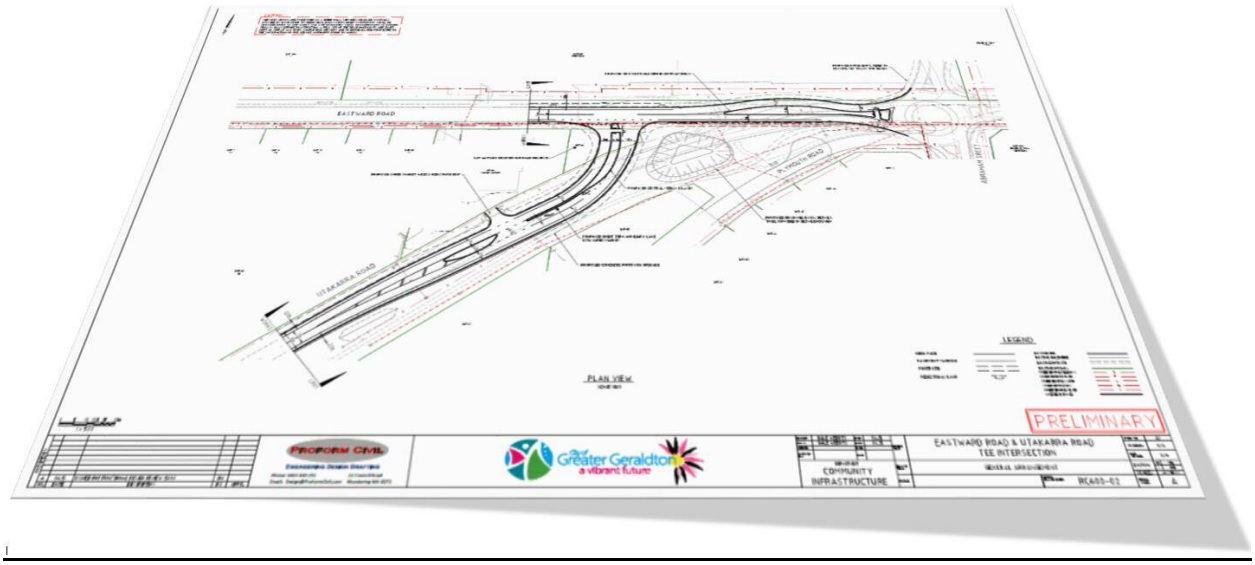
The objective of the project was to review the previous drainage design undertaken by another consultant (deemed not suitable for construction) and determine the most feasible and cost effective design for the proposed drainage alignment using the City’s specific drainage requirements and accommodating future rezoning of the catchment to R40/60.

The catchment was analysed using feature survey and contours. The existing drainage system was to be upgraded, removed or reinstated as suitable. The 750m long alignment designed to accommodate existing and proposed service relocations. Storm events were to meet Q5 for piped systems and Q100 for overland flow with proposals for Q100 trapped low points. A set of plan and profiles was included in the construction set as well as all drainage computations and hydraulic grading been submitted for final review.

All drainage was modelled in 12D’s advanced software for stormwater design using the rational method.

The outcome for the project design has been a significant cost saving with a practical, long term drainage solution for the area.

3.8. Intersection Design - Utakarra Road and Eastward Road – Geraldton WA



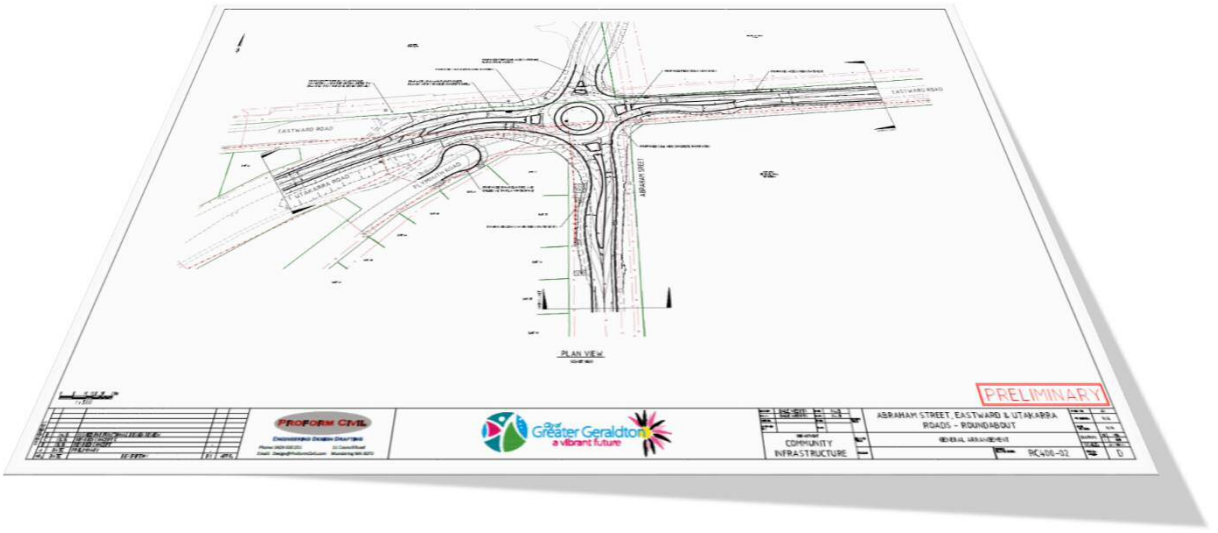
Proform Civil was contracted to produce the geometric design, stormwater drainage, civil construction documents and construction estimates of a future road reconfiguration and tee intersection at Utakarra and Eastward Roads. The design would reconfigure the intersections and address current congestion issues and also accommodate a large redistribution of traffic due to residential and industrial area's been linked by proposed future road network upgrades. The project is a part of the City of Greater Geraldton's "Utakarra Road Network Upgrade Project" or URNUP.

The design project is a current Proform Civil project and is been processed in conjunction with surrounding URNUP intersection design's. The design brief was to accommodate right of way vehicles and pedestrian movements to local existing and future commercial and residential developments. A boulevard treatment has been adopted to accommodate surrounding environments.

The area is very flat with minimal opportunities to dispose of storm water runoff. Nearby streams and existing underground drainage networks were non-existent. Existing subgrade materials also possess minimal hydraulic conductivity properties. Proform Civil designed a storm water basin calculated to withstand run off caused by a 1 in 20 year storm and keep road carriage way gutter flows to safe and traversable widths.

Proform Civil was required to liaise with service authorities to obtain quotations and design advice on relocation of conflicting underground and overhead utilities such as power, water and gas supply.

3.9. Roundabout Design - Abraham Street, Utakarra Road & Eastward Road - Geraldton WA



Proform Civil was contracted to produce the geometric design, stormwater drainage, civil construction documents and construction estimate of a three way roundabout over an existing tee intersection. The roundabout design was to accommodate congestion issues and provide safe free flowing traffic manoeuvres to suit right of way vehicles from all legs. The project is a part of the City of Greater Geraldton's "Utakarra Road Network Upgrade Project" or URNUP.

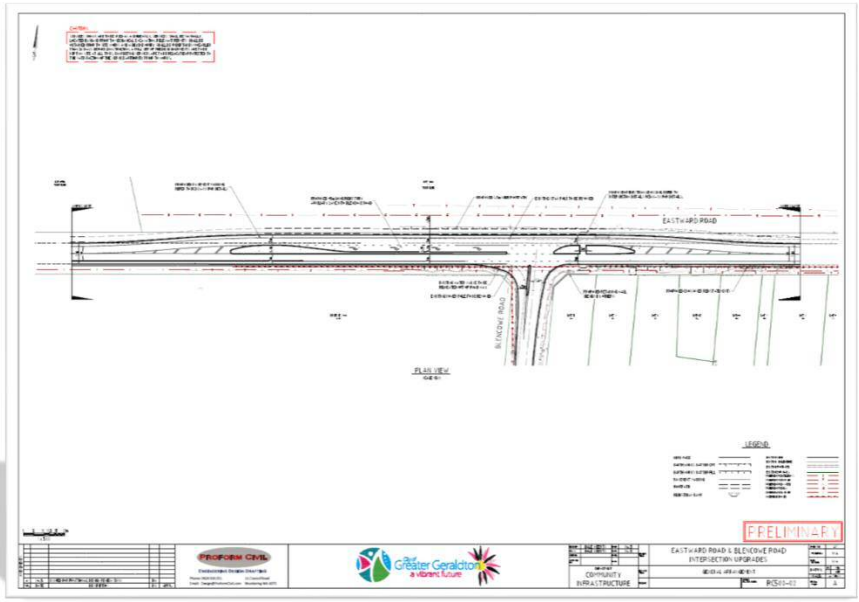
The project presented challenges with limited available land along with a network of underground and overhead services. The design had to incorporate future road network reconfigurations and eliminate unnecessary redundant road pavement.

The project is a current Proform Civil project and is been processed in conjunction with surrounding staged URNUP intersection design's. A part of the project brief was to design the roundabout with minimal land resumptions and service modifications. Proform Civil utilised advanced methods in 12D civil software to tweak the roundabout geometry and obtain the optimum balance between obvious cost savings associated with property/utility modifications and addressing the needs and safety of all road user's which come with a roundabout in this environment.

Due to the location and environment, pre-deflection was designed on the roundabout entrances. Pre-deflection not only slows vehicles to a safe and comfortable approach speed but also creates an awareness of the required driver attention after the long straight and open legs of road network which surround this particular intersection.

Proform Civil liaised with Western Power and other service authorities to negotiate utility relocation options and costs. The outcome was a feasible design for the roundabout which balanced the amenities of the intersection and the expense of relocating existing services.

3.10. Intersection Design - Blencowe Road and Eastward Road– Geraldton WA



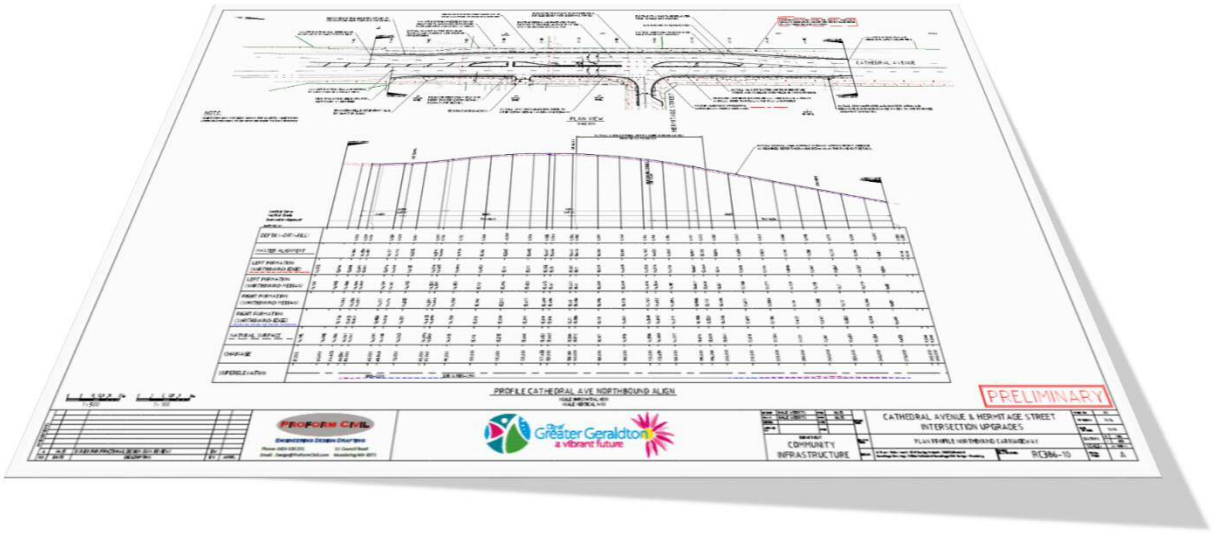
Proform Civil was contracted to produce the geometric design, stormwater drainage, civil construction documents and construction estimate to upgrade the existing intersection of Blencowe Road and Eastward Road to incorporate a protected right turn into Blencowe Road from Eastward Road. The project is a part of the City of Greater Geraldton's "Utakarra Road Network Upgrade Project" or URNUP.

Proform Civil has optimised the available space within the road corridor to construct central median islands which will reduce the risk of head on collision's and provide central stopping locations of turning vehicles and pedestrian crossings.

The project had to be estimated and staged to enable a construction schedule for the City to undertake within specific financial limits of each financial year.

Proform Civil was required to liaise with service authorities to obtain quotations and design advice on the relocation of conflicting underground and overhead utilities such as power, water and telecommunications.

3.11. Intersection Design - Cathedral Avenue and Hermitage Street– Geraldton WA



Proform Civil was contracted to produce the geometric design, stormwater drainage, civil construction documents and construction estimate for the design of a protected right turn auxiliary lane at Cathedral Avenue and Hermitage Street Intersection.

Cathedral Avenue is an existing dual carriageway, low speed road while Hermitage Street is a two way side street providing access to a busy nearby hospital and hotel. Hermitage Street is also used as a back road providing an alternative link to commercial area's from Cathedral Avenue.

Proform Civil was initially contracted to undertake some preliminary concepts for the intersection. The right turn auxiliary lane into Hermitage Street became the predominant treatment for the area not only due to the traffic quantities but an existing sharp crest on Cathedral Avenue prior to the intersection which created an unsafe potential for rear end collisions.

Some findings from the concepts:

- Due to the crest, a solution to poor sight distances for proposed pedestrian crossings and vehicles turning right out of Hermitage Street would need to be catered for in the detailed design.
- An asphalt overlay and thick lift pavement treatment could be utilised to reduce costs with full pavement reconstruction in locations of widening only.

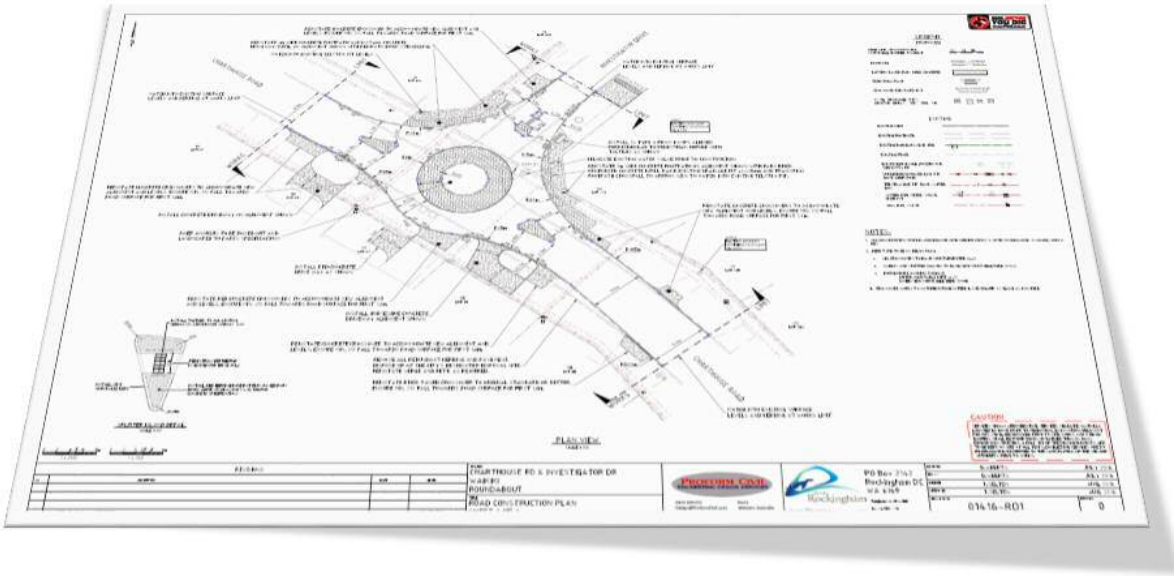
In development of the design, stacking for right turning vehicles into Hermitage Street was reduced. The auxiliary lane length was designed to be suitable for decelerating vehicles which would enable a wider median at the crest of Cathedral Avenue and accommodate a suitable pedestrian crossing with improved site distances.

Proform Civil also optimised the vertical design to reduce the effects of the crest by marginally lifting the intersection of Hermitage Street to improve site distances for vehicles turning right departing Hermitage to

head north on Cathedral Avenue. The optimised vertical design will not only reduce the grades on Hermitage Street but improve driver safety with the added site distances for to see northbound vehicles along Cathedral Avenue.

3.12. Roundabout Design – Investigator Dr & Charthouse Rd - Waikiki WA

Proform Civil was engaged to provide civil design plans geometric alignment, stormwater design and civil construction for a three way roundabout at the existing tee intersection of Investigator Dr & Charthouse Rd.



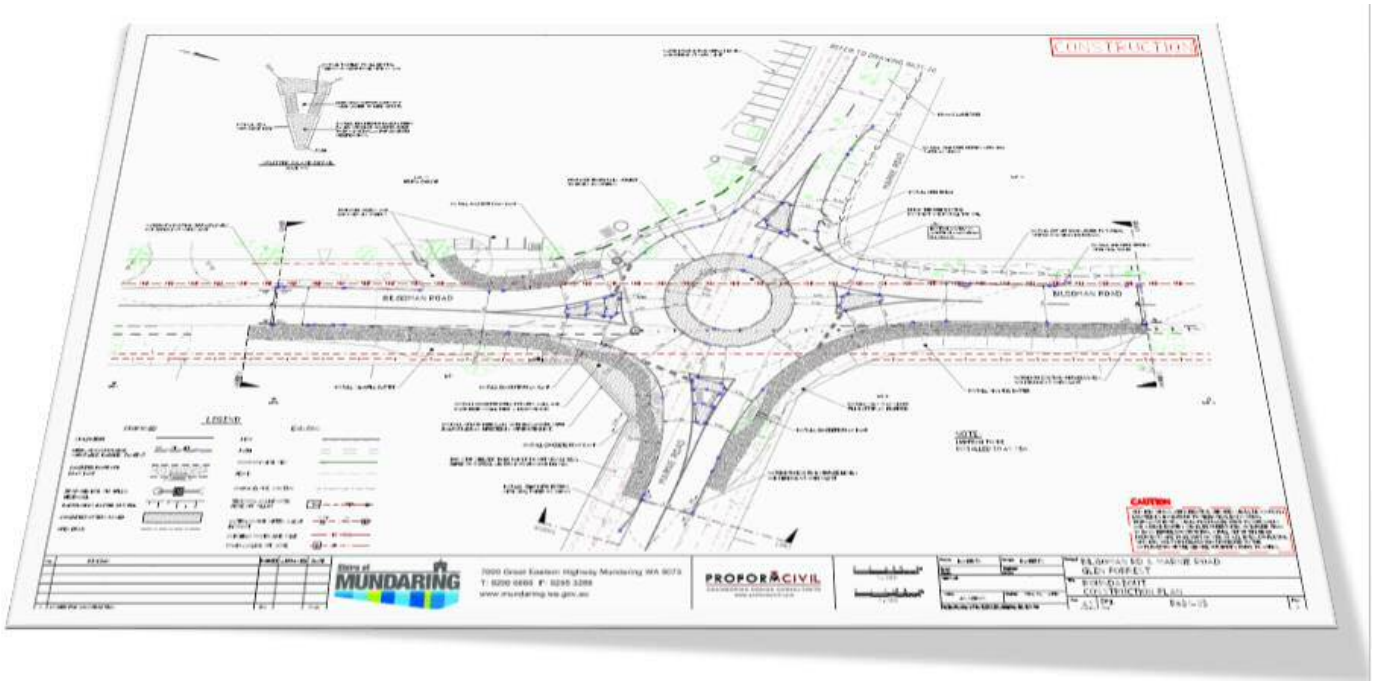
The roundabout is located in a built up residential area and the design needed to maintain access to multiple adjacent driveway's, Proform Civil undertook investigations for each driveway using Vpath vehicle turning path software to ensure some of the shortened driveway's were still accessible and that vehicles could still depart using forward gear.

The geometric alignment also had to consider the reinstatement of pedestrian crossing facilities, and have a minimised impact on conflicting services. Pavement cross falls and levels were carefully designed to ensure minimum longitudinal grades could still be maintained as well as providing a suitable tie to adjacent driveways and verges.

The installation of the roundabout has provided enhanced functionality to the intersection, increasing traffic flow and safety.

1.1. Roundabout Design – Bilgoman & Marnie Roads – Glen Forrest WA

Proform Civil was engaged to provide civil design plans geometric alignment, stormwater design and civil construction for a four way roundabout at the existing tee intersection of Bilgoman & Marnie Roads.



The existing tee intersection was failing from congestion and presented a number of safety issue's been located within the vicinity of Helena College high school.

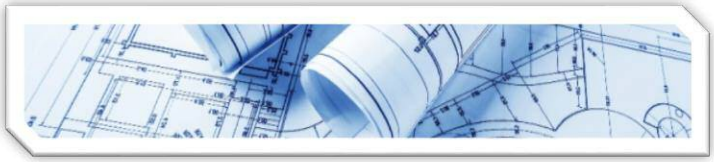
The site presented challenges including steep topography, conflicting services such as high voltage power poles and large underground water trunk mains, and limited land use.

Our design included retaining walls and stabilised fill batter slopes to accommodate steep slopes and a carefully designed geometric alignment to reduce land acquisition and service relocations.

The roundabout has provided substantial traffic flow and safety improvements since it's install early in 2018, and is a remarkable project presenting our firms ability to design small roundabouts.

2. Insurances

CLASS OF BUSINESS:	Professional Indemnity
POLICY NUMBER:	PI-26612116I1
INSURED NAME:	Proform Civil Pty Ltd ATF The Dale Weerts Family Trust
PERIOD:	From 4:00pm on 09/10/2018 to 4:00pm on 09/10/2019
LIMIT OF INDEMNITY:	$5,000,000 Any one claim and in the aggregate
CLASS OF BUSINESS:	Public and Products Liability
POLICY NUMBER:	141U426869BPK
INSURED NAME:	Proform Civil Pty Ltd ATF The Dale Weerts Family Trust



PERIOD:	From 4:00pm on 09/10/2018 to 4:00pm on 09/10/2019
LIMIT:	$20,000,000 any one OCCURRENCE

3. Conclusion

Thank you for the opportunity to provide our capabilities and experience. Should you have any queries please do not hesitate to contact myself.

Kind Regards,

Dale Weerts

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