

MEDICAL IMAGING FIT OUT | CHS DIAGNOSTICS



Client

CHS Diagnostics

Architect

IA Design

Project Size

600 m²

Delivery Model

Medical Imaging
Fit Out

Location

Madeley, WA

Completed

November 2017

Duration

6 Weeks

OVERVIEW

CHS Diagnostics recently expanded their operations into Perth's Northern Suburbs under the auspices of Advanced Diagnostic Imaging.

Total Project Solutions were engaged to attend to the fit out of the new premises, which included the construction and installation of new CT Scanner, MRI and a digital X-Ray machine, reception and waiting areas, consult and treatment rooms as well as tea prep, staff and patient amenities.

The design by IA Group included modern, open plan waiting and reception areas with clean lines, feature lighting and custom joinery. The space was functional for both client operations and patient treatment.

Not without challenges, TPS's previous medical imaging project experience led to a timely identification of insufficient protection from the effects of radiation. This meant that a revision to the scope of works could be made prior to commencement of works. This intervention by TPS ensured on time delivery of materials compliance to both health and building regulations upon completion of the fitout.

The technical nature of the fitout required high level of supervision and client involvement.

Close liaison with specialist equipment suppliers led to seamless integration for their delivery installation and commissioning which ultimately led to an outstanding outcome for the client with the project completed of an extremely compressed timeframe

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

EXTENSION AND FIT OUT | SPEARWOOD DIALYSIS CLINIC



Client

Fresenius Medical Care Australia

Project Price

\$1,645,000

Architect

Swanbury Penglase Architects

Project Size

800 m²

Delivery Model

Selected Tenderer

Location

Spearwood, WA

Completed

June 2019

Duration

5 months

OVERVIEW

TPS was engaged by Fresenius Medical Care (FMC) through Swanbury Penglase Architects (SPA) for the expansion and refurbishment of their existing dialysis clinic operations in Spearwood.

The facility was required to remain fully operational throughout the life of the project. As their operational hours were 07:00 – 22:30 Monday – Saturday, there was significant requirement for after hours and Sunday works as well as high emphasis on dust and noise mitigation at all times.

TPS established a staging plan that saw areas of construction segregated from the clients operational spaces. Full height cool room panel hoardings were installed to ensure maximum containment of construction noise, dust and vibration which enabled a majority of the works to be completed during normal working hours.

The scope of works included the take-over of 2 vacant commercial/retail tenancies and extension into the existing courtyard space. An additional 8 dialysis treatment bays, 3 HHD training bays, 3 training rooms, dirty utility room, clean utility room, new reception, patient lounge, nurse station, staff offices, UAT and storage areas were all added.

The project required significant modification and addition to existing services infrastructure including expansion of reverse osmosis network, nurse call, installation of new FIP with DBP connection, replacement of comms rack and installation of sub DB's.

Compounding what was a highly technical and challenging build was that the design and engineering teams are stationed interstate with the architect attending site fortnightly and engineering team attending every 6 weeks.

Clear and concise reporting was critical to meeting the client and design teams objectives as challenges were exposed throughout the project.

TPS delivered the project on time and budget, and have been engaged by FMC/SPA for their next expansion project in Cannington.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

DESIGN & CONSTRUCT | SCGH – FAST TRACK ED



Client

Sir Charles
Gairdner Hospital

Project Value

\$900,000

Architect

HHA Architects

Project Size

250sqm

Delivery Model

Design &
Construct

Location

Nedlands, WA

Completed

May, 2020

Duration

4 Weeks

OVERVIEW

In response to the World Health Organisation's announcement of the global pandemic, COVID 19, Total Project Solutions was approached by the Senior Medical Team at Sir Charles Gairdner Hospital (SCGH) to expedite a design and construct project to create a FastTrack Treatment Area in the Emergency Department of SCGH.

Collaborating with HHA Architects, TPS engaged with stakeholders to design a dedicated Fast Track Treatment Area which consisted of Five treatment bays, an Anteroom, Isolation Room, Ensuite complete with Shower Facilities, Treatment Room, Nurses Station and Store Rooms.

The time frame was tight, our Client needed the project designed and constructed in 4 weeks, a challenge in itself. Adding to the enormity, SCGH is one of Perth's largest Public Hospitals, located in Nedlands it is surrounded by the Perth Children's Hospital and PathWest Laboratories. The traffic and footprint is much like a small city.

With the Emergency Department in full swing 24 hours a day, 7 days a week, work was strategically staged so the hospital could still provide a full service to patients. This meant that at times we had teams working day and night and through weekends to meet the deadline. The site coordination, manpower and subcontractor management was enormous. Deliveries were scheduled almost to the minute to coordinate movement through the already busy Emergency Department.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

DESIGN & CONSTRUCT | PERTH CHILDREN'S HOSPITAL – ORTHOTICS WORKSHOP



Client

Department of Health – Perth Children's Hospital

Project Value

\$217,000

Architect

Project Size

250sqm

Delivery Model

Design & Construct

Location

Nedlands, WA

Completed

Work Under Construction

Duration

4 Weeks

OVERVIEW

TPS provided a successful bid at tender to carry out Design and Construct works to modify the existing Orthotics Workshop at Perth Children's Hospital. The Workshop provides prefabricated and custom made orthoses for children and adolescents requiring physical support for a range of musculoskeletal problems.

Upon contract award, we engaged with our design partners and client end user group to deliberate and create a functional design outcome consistent with design features already in place at the hospital.

The TPS Project Management Team are working closely with PCH staff to decrease impact on patients, and allow the workshop to remain operational for the duration of the project. Relocation of existing equipment, supplies and staff/patient access have been implemented and will continue to be assessed as the project progresses.

The design brief consists of relocating 2 existing consult/exam rooms and installing new perimeter fire walls and door. Changes to the workshop layout will require mechanical works including new exhaust locations and ductwork modifications.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

EXTENSION AND FIT OUT | STIRLING DIALYSIS CLINIC



Client

Fresenius Medical Care Australia

Project Price

\$3,137,222

Architect

Swanbury Penglase Architects

Project Size

1750 m²

Delivery Model

Selected Tender

Location

Stirling, WA

Completed

September, 2020

Duration

9 months

OVERVIEW

TPS was engaged by Fresenius Medical Care (FMC) through Swanbury Penglase Architects (SPA) for the expansion and refurbishment of their existing dialysis clinic operations in Spearwood.

Stirling was the third build that TPS was engaged to carry out for FMC. Once again, the facility was required to remain fully operational throughout the life of the project. As their operational hours were 07:00 – 22:30 Monday – Saturday, there was significant requirement for after hours and Sunday works as well as high emphasis on dust and noise mitigation at all times.

The Construction work was carried out in 3 stages. A staging plan was developed in conjunction with FMC's requirements to provide care for existing patients. Full height cool room panel hoardings were installed to ensure maximum containment of construction noise, dust and vibration which enabled a majority of the works to be completed during normal working hours.

The scope of works included additional Dialysis Treatment Bays, Patient Amenities, Storage Areas, Tea Prep, Staff Breakout and Amenities, Nurses Stations, Consult Rooms and Office Space.

The project required significant modification and addition to existing services infrastructure including expansion of reverse osmosis network, nurse call, installation of new FIP with DBP connection, replacement of comms rack and installation of sub DB's.

The location of this building was challenging as it was surrounded by residential homes. TPS developed a Noise Management Plan which was reviewed and approved by the Local Council with strict noise monitoring conditions. Letterbox drops and face to face discussions were carried out with local residents advising of afterhours noisy works. Residents were provided with contact details of TPS's Management Team and encouraged to discuss concerns.

As with previous Projects for FMC the design and engineering teams are stationed interstate with the architect attending site fortnightly and engineering team attending every 6 weeks.

Clear and concise reporting was critical to meeting the client and design team objectives.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

EXTENSION AND FIT OUT | CANNINGTON DIALYSIS CLINIC



Client

Fresenius Medical
Care Australia

Project Price

\$1,900,000

Architect

Swanbury
Penglase
Architects

Project Size

600 m²

Delivery Model

Selected Tenderer
Repeat Client

Location

Cannington, WA

Completed

February 2020

Duration

5 months

OVERVIEW

TPS was engaged by Fresenius Medical Care (FMC) through Swanbury Penglase Architects (SPA) for the expansion and refurbishment of their existing dialysis clinic operations in Cannington.

Cannington was the second build that TPS was engaged to carry out for FMC. Once again, the design team and major stakeholders were based interstate. The TPS Project team worked very hard to build strong rapport's with both the design team and staff on site. Having previously completed the Spearwood Dialysis Clinic together, the SPA design team and TPS refined critical project success factors such as reporting, communication and expectation.

The facility was required to remain fully operational throughout the life of the project. As their operational hours were 07:00 – 22:30 Monday – Saturday, there was significant requirement for after hours and Sunday works as well as high emphasis on dust and noise mitigation at all times.

The physical location of the Clinic created its own challenges, set between an extremely popular shopping centre and a residential apartment construction site, access for patients, staff and deliveries was constantly under review.

During Construction it became evident that the existing roof structure was not sound and had to be replaced. There were large amounts of water ingress causing areas to flood. TPS worked with SPA, FMC and the building owner to assist with temporary roof cover whilst reports and quotes were prepared and the scope of work was identified.

TPS have been successful in tendering for FMC's third Dialysis Clinic refurbishment in Perth and, look forward to working with the team on that Project in Stirling, commencing December 2019.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

REFURBISHMENT | SIR CHARLES GARDINER HOSPITAL – WARD G75 REDEVELOPMENT



Client

North
Metropolitan
Health Service

Project Value

\$920,000

Architect

HHA
Architecture

Project Size

400 m²

Delivery Model

Refurbishment

Location

SCGH - Nedlands

Completion

March 2021

Duration

6 Weeks

OVERVIEW

TPS was awarded this project via a tender process. The project is Stage 1 of a multi staged project which will see Gastro Procedures from Interventional Radiology (IR) moved to Ward G75 to allow for the refurbishment of IR 20.

North Metropolitan Health Service (NMHS) required forward works to be carried out to re-purpose and re-configure existing office space in G75 to accommodate a new procedure room and associated supporting services.

The project was carried out over two stages which saw handover of the staff lockers and breakout area followed by delivery of the procedure room.

Working together with HHA Architecture and NMHS staff, the TPS Project Management Team was able to successfully deliver this project despite the challenges of working in such a busy part of the hospital. Strategies and Contingencies were put in place, assessed and re-assessed regularly to ensure the Ward would continue to operate with minimal disruption during the construction period.

We had our Project Supervisor on site full time for management of the technical and intricate requirements that this type of project demands. He was also responsible for management of subcontractors, receipt of materials and the movement of those items through the busy corridors, coordination of safe, efficient waste removal, forward planning and to supervise and liaise with stakeholders whilst carrying out pre-approved noisy works.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

MEDICAL | ORTHODONTICS ON BERRIGAN



Client

Orthodontics on Berrigan

Project Price

\$450,000.00

Architect

Campion Design Group

Project Size

300 m²

Delivery Model

Medical Suite Fit Out

Location

Jandakot, WA

Completed

October, 2018

Duration

10 Weeks

carried

OVERVIEW

Total Project Solutions was engaged by Campion Design Group after successfully tendering for the partial demolition, refurbishment and internal fit out of the 'Smile With Confidence' existing premises in Jandakot.

The fit out included six Treatment Bays, two Consultation Rooms, a purpose built, in house Laboratory facility, Brushing Stations, new Staff Room, Plant Room with all new equipment, a new modified and inviting reception and waiting area.

Clinical finishes were installed throughout incorporating Corian benchtops with integrated Corian sinks & bin chutes, resilient floor finishes, stainless steel lab benches with integrated sinks and full height glazed elevations to the Treatment Rooms.

High emphasis was also implemented through bespoke booth seating, suspended fabric ceiling panels and perforated screens.

Due to extensive requirement and critical placement for services to each treatment chair, trenches were cut into the existing concrete floor, hydraulic, electrical and communications services laid and the concrete re-instated. Such was the extent of floor sawing the entire floor was applied with moisture barrier to prevent excess moisture in the green concrete delaminating the new vinyl from the slab.

This work along with other noisy works was coordinated with the client & carried out after hours where necessary to minimise disruption to neighbouring businesses.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

HOSPITAL REFURBISHMENT | SJOG MURDOCH WARDS



Client

SJOG Murdoch

Architect

Silver Thomas
Hanley

Project Managers

Project Directors
Australia

Project Size

6 wards and
associated facilities

Delivery Model

Head Contractor
Fixed price contract

Location

Murdoch, WA

Completed

May 2017

Duration

24 Months

Project Value

\$17,558,840.78

OVERVIEW

St John of God Murdoch Hospital is a 507-bed private hospital established in 1994. Total Project Solutions was engaged as head contractor in May 2015 for the refurbishment of 6 Wards and associated facilities, including 180 bedrooms and 160 ensuites, nurse's stations, lift facades, clean and dirty utilities, refurbishment of two of the hospitals four air handling units, bariatric and isolation Rooms. The works were located over 3 floors and 6 wings in the hospitals north block.

The scope of work included the removal of all existing ceilings, non-structural walls, floor coverings, fixtures, fittings and equipment to allow for the creation of new layout. Complete replacement of all mechanical & medical gases, pneumatic tube system, electrical communications, security & nurse call and hydraulic services.

The hospital remained fully operational throughout the contract, with only the ward under refurbishment being closed at any one time. Scheduling and planning with key stakeholders of noisy works, dust control and cutting into existing live services was critical, to ensure the quality patient care and caregivers working environment was not compromised.

Without the support of SJOG Key stakeholders, Project Directors Australia, Silver Thomas Hanley, Consultants and our amazing subcontractors this project would not have been delivered to such a high level of finish or on time.

STH and the main consultant team (ETC, SMWC, SPP & BPA) were kept extremely busy finding solutions to the next existing condition we unearthed during the strip out phase.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

To add to the complexity, the project included replacement of the existing purge mechanical fire system with a new zone pressurisation system. The existing system had to remain operational throughout the project and 'cut over' to the new system on completion.

Prior to the projects commencement, additional isolation valves were installed on the hydraulic services and medical gases to allow each of the 6 wards to be isolated without affecting supply to the 5 operational wards. Nurse call and modification to some of the communications system was also required. With the hospital being 25 years old and many changes and upgrades completed overtime, nothing could be taken for granted. Locating some of the existing services without accurate as constructed documentation was a challenge. And when isolating services to one area of the ward on occasions another unrelated area would also be isolated.

To enable the AHU refurbishment, temporary air conditioning was installed to the affected areas of the hospital and the works completed over the Christmas period to limit disruption.

At times we were required to make a daily review of the task by task approach we had already established to ensure we could meet not only the clients' expectations but also complete the project. What was not an issue on one stage became an issue on the next stage at times.

We provided our client with noisy works schedules, shutdown schedules, hoarding plans and schedules for almost every event to ensure they were made aware of future events and they in turn could advise patients and caregivers.

It is not possible to complete a refurbishment project without some degree of noise. How we managed noise and noisy works was critical to the project's success. Times for noisy works were agreed and to limit the impact, the noise was restricted to short bursts rather than continuous. Periods of noisy works were programmed well in advance with specific locations of the area of works identified on a drawing and distributed to Nurse Unit Managers and Redevelopment Manager.

During periods of demolition and cutting, wet cutting was implemented where possible. Where that was not possible or practical, extraction fans were used to exhaust airborne dust. Full height solid hoardings were also used for noise and dust containment and for physical segregation from the public space.

Vibration and impact was kept to a minimum, with some demolition and deconstruction piece by piece, especially when either operational wards or ICU were below.

With the volume of materials to be removed during demolition and the continuous supply of materials and equipment required for the fitout, access was managed by the installation of materials hoists. A section of the wall was removed on each level to allow access to the hoist and was replaced on completion.

CONSTRUCTION | SJOG MURDOCH CHAPEL



Client
SJOG Healthcare

Architect
Silver Thomas
Hanley

Project Size
135 m²

Delivery Model
Head Contractor
Fixed price contract

Location
Murdoch, WA

Completed
March 2016

Duration
6 months

OVERVIEW

St John of God Murdoch Hospital is a 507-bed private hospital established in 1994.

The new chapel was designed by architectural firm, Silver Thomas Hanley. Their brief was to create a space for quiet reflection which could be used by all and at the same time, reinforce the St John of God Health Care Mission.

The chapel is located in a prominent position between the main hospital entry, emergency department and birthing suites. Construction of the chapel took place while the hospital was fully operational and between many of the highest populated areas. Stringent occupational safety, health and environmental policies and procedures were pivotal to minimising risk.

Scheduling and planning with key stakeholders of noisy works, dust control and cutting into existing live services was critical, to ensure the quality patient care and caregivers working environment was not compromised.

Site works included chemical injection below the existing external hospital walls before deep excavation, concrete shaft construction and connection into the existing basement stair pressurisation shaft.

The fit out included a curved feature ceiling with timber infill beams, curved diffusion and recessed lighting. Full height glazed cross in the external stone clad wall, to allow natural light in through the day and form an illuminated cross on the outside at night.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

SHOP FIT OUT | T4 – EAST VICTORIA PARK



Client
T4

Project Price
\$165,000

Architect
KK Design

Project Size
75m²

Delivery Model
Selected Tenderer

Location
East Victoria Park,
WA

Completed
October 2019

Duration
4 weeks

OVERVIEW

TPS was approached by Kathryn King Design to participate in the tender process for a T4 shop fit-out in East Victoria Park having previously worked with Kathryn King Design for a number of years producing some high-end finishes in the retail and hospitality sector.

T4 is located in The Park Centre, a busy local shopping centre. The brief consisted of fitting out the existing but vacant tenancy space to provide T4 a bright, energetic place to trade with high end finishes feature lighting and welcoming atmosphere for customers.

Having worked with Kathryn previously, we were accommodating of her emphasis of meticulous detail and we were accepting of minor detail changes. This generally includes regular site visits, sharing of photos to agree on details and open dialogue throughout the life of the project.

The fit out included new partitions and ceilings throughout, stainless steel kitchen and racking, bespoke joinery, feature wall graphics and painted feature wall, new shopfront and cost effective but impact driven lighting throughout.

As the shop has external frontage close to the main entrance to the shopping centre, liaison with the designer and Centre Management was extensive to ensure that the centres expectations of, customer access to the centre was not impeded, noise management, dust control and housekeeping were upheld at all times. Service isolations and concrete cutting were agreed well in advance and executed only once agreed with all parties.

The existing shopfront was removed and the new shopfront installed on the same day to ensure that security was not impeded and temporary hoarding was not necessary.

The end result of the fit-out was a fresh, high end, vibrant and engaging retail space that exceeded the clients expectations and resulted in the designers favourite project of 2019.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

SHOP FIT OUT | BEAN AROUND THE WORLD - ROCKINGHAM



Client

Bean Around the World Café

Project Price

\$80,000

Architect

KK Design

Project Size

75m²

Delivery Model

Selected Tenderer

Location

Rockingham, WA

Completed

October 2019

Duration

3 weeks

OVERVIEW

TPS was engaged on a construction management basis by a repeat client for a project at Rockingham Shopping Centre which involved refurbishment and re-branding of an existing tenancy with limited budget and short timeframe parameters to work with.

The design was completed by Kathryn King Design who TPS work with on a regular basis. The design included clever use of soft tones and warm timber clad surfaces and use of existing building elements where possible to maximize the impact of financial outlay.

Bespoke false double hung windows were designed by our cabinet maker through close liaison with owner and designer. This also incorporated an operable door to provide access to the tenancy with minimal transition to reveal that a door exists.

Clever use of illuminated signage, menu's and LED lighting combined with clean and refurbished finishes transformed what was a tired and dull facility into a vibrant and trendy eatery.

The work was completed over a 3 week duration in the centre of a fully operational and extremely busy facility.

We worked closely with centre management to ensure high level of dust and noise control strategies while respecting the urgency of both client and centre management.

TPS completed the project on time and below overall budget expectations

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

REFURBISHMENT | FERNS CAFE



Client

SJOG Healthcare

Architect

Silver Thomas Hanley

Project Size

145 m2

Project Cost

\$390,000

Delivery Model

Head Contractor
Fixed price contract

Location

Murdoch

Completed

October 2016

Duration

2 months

OVERVIEW

Located in the central core of St John of God Hospital Murdoch, Ferns Café is not in the ideal location for a refurbishment!

The scope of works included removal of the existing fit out, extending the Café into the former Gift Shop to create space for a commercial grade kitchen, modifications to the existing services and new fit out.

Patient, visitor and caregiver safety was a major focus for the project team. Scheduling and planning with key stakeholders was critical, to ensure the quality patient care and caregivers working environment was not compromised.

The hospital remained fully operational throughout the project, limiting the opportunity to complete noisy and evasive works 'out of business hours'.

Full height sealed cleanroom panel hoardings were installed to separate the work site and public thoroughfare. Ducted extraction fans were set up and the HVAC modified to create negative air pressure within the work site.

Access to the site was created by installing a scaffold tower, stair and hoist to the rear of the building and removing a section of the balcony.

The fit out featured detailed ceilings and bulkheads with intricate lighting in the ceilings and joinery. Curved glass walls formed the separation between the Café and public thoroughfare. The design team from Silver Thomas Hanley selected an amazing range of finishes that provide a calming and relaxing environment for patrons.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

REFURBISHMENT | CITY OF MELVILLE WILLAGEE LIBRARY REFURBISHMENT



Client
City of Melville

Project Value
\$216,000

Architect
Roxby Architects

Project Size
250sqm

Delivery Model
Refurbishment

Location
Willagee, WA

Completed
July 2020

Duration
4 months

OVERVIEW

TPS was engaged by the City of Melville to carry out works at the Willagee Library, to refurbish the existing building to create a more useable, modern space for the community.

The design included removing roller doors and covering the existing brick wall with cladding painted in a charcoal/black colour to contrast with white trims. The existing verandah roof was extended along the length of the building and washed aggregate concrete was layed to create a spacious covered walkway leading to the entrance of the building. Bifold slidings doors were installed to link the inside and outside.

Aluminium timber look slatting was installed at the Eastern and Western ends of the building to accentuate the signage and compliment the fresh new look

Construction was carried out during winter months which meant planning and scheduling based around weather conditions was paramount. Concrete works were meticulously scheduled and extra labour was brought on to ensure the finish was not compromised by weather.

The library remained open for the duration of the project. Our Project Manager worked closely with the City of Melville to create safe access routes for library patrons, which changed frequently throughout. Communication and signage assisted in ensuring access was not hindered.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

CONSTRUCTION | CITY OF MELVILLE

POINT WALTER GOLF COURSE MAINTENANCE FACILITY



Client
City of Melville

Project Value
\$550,000

Architect
Hodge Collard
Preston

Project Size
2,500sqm

Delivery Model
Construction

Location
Bicton, WA

Completed
September, 2020

Duration
8 Weeks

OVERVIEW

TPS was engaged by the City of Melville to construct new staff facilities and provide adequate extension to existing buildings within the Point Walter Golf Course Maintenance Facility.

The internal portion of the project consisted of a fit out of a transportable building and extending and refurbishing the existing maintenance shed. The shed refurbishment included removal and re-instatement of wall and roof cladding, installation of new evaporative A/C units, relief air cowls and the installation of a new roller door.

The existing internal facilities were demolished and fully refurbished providing a layout change and upgrade to the male and female toilet blocks and staff breakout area.

External works included the installation of border security fencing with multiple access points for machinery. The removal of existing and installation of a new septic system, installation of new soak wells & stormwater network, and construction of twinside retaining wall and a channel drain. The existing asphalt was removed and a new road base and asphalt was installed.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

REFURBISHMENT | PALMYRA RUGBY UNION CLUB BAR, KITCHEN AND AUDIO VISUAL UPGRADE AT TOMPKINS PARK



Client

Palmyra Rugby
Union Club

Project Value

\$770,000

Architect

Finespun
Architecture

Project Size

300 m²

Delivery Model

Design &
Construct

Location

Alfred Cove, WA

Completion

December 2020

Duration

5 Weeks

OVERVIEW

TPS was engaged by the Palmyra Rugby Union Club & City of Melville to provide and upgrade to existing facilities at their premises in Tompkins Park. The work zone extended from the Sports Bar to the Bar and Kitchen Area.

The refurbishment, modernises the existing space making it more functional by providing acoustic ceiling systems and installing acoustic treatments to the walls. New furniture and an upgrade to the Audio Visual Equipment has created a multifunctional space which allows the client to host functions on large screens, provide music and entertainment for their patrons to enjoy either dining on the Alfresco or playing pool inside.

The Bar and kitchen areas were also designed to create more streamlined walkways and a passover from the kitchen to service staff. Flooring was replaced ready for the Stainless Steel commercial kitchen including cool room and ice machine to be installed. The Bar Area was modernised by installing new timber countertops, tiles to the front and a foot rest along the base.

The work was carried out on a design and construct basis with TPS engaging Finespun Architecture for design services which enabled an EPC to be compiled. The EPC was presented to CoM for deliberation and allocation of funding.

The budget was approved on the back of the EPC with the design then going to construction issue stage, and the works being tendered. Costs were presented in open book format and the works completed over an extremely short time frame from initial budgetary stage through to execution to ensure our client could host a function to be attended by the Mayor in early December, 2020.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

BUILDING REFURBISHMENT | SANDALWOOD HOUSE



Client

Kenneth and
Berta Von Bibra

Project Size

400 m²

Delivery Model

Refurbishment

Location

Perth, WA

Duration

8 Months

OVERVIEW

When Sandalwood House owners, Kenneth and Berta Von Bibra, made the decision to reclassify the building for character premium-grade boutique office accommodation it was in need of a major upgrade to maintain its building classification and suit modern commercial usage.

MEETING THE CHALLENGE

Rescuing a building more than 100 years old from a condemned state is a challenging task, especially when that building is in one of Perth CBD's busiest streets and its staircase has been stolen.

Total Project Solutions took on an eight month refurbishment program which presented some interesting challenges. These included:

- issues with access and safety where condemned parts of the building were so derelict that they had to be demolished before they could be rebuilt;
- having to incorporate air-conditioning and data cabling into a 100 year old building; and
- recreating a Victorian-style staircase to replace the stolen one, ensuring it met current standards to comply with disabled access.

The final result transformed the building from a dilapidated building of about 250m² of usable space to just over 400m² of boutique office space.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

REFURBISHMENT | MLC BOARDING HOUSE



Client
MLC

Architect
CODA

Project Size
138 Rooms

Delivery Model
Head Contractor
Fixed price contract

Location
Claremont

Completed
February 2016

Duration
Staged over a 14-month period

Project Value
\$3,037,150.74

OVERVIEW

Transformation of the Boarding House at MLC offered TPS an exciting opportunity to work with CODA Architects and deliver an extensive refurbishment and modification of the three interconnecting boarding house facilities, including the prestigious Heritage Building (1907 Centenary Building). Due to the history of the building and unknown pre-existing conditions, that were only exposed following careful deficit, CODA were kept extremely busy finding solutions to ensure the project progressed.

Refurbishment and modifications of the 98-bed facility included, bathrooms, studies, craft and utility rooms stripped back to their bones and a colourful and lively environment has emerged, with theatre rooms and modern bathrooms created. Custom made beds and sleeping modules were fabricated and installed which eliminated the traditional boarding house look and feel.

The combination of unique textiles, colour pallets and bespoke furniture has created a new energy running throughout the interior spaces, which has catapulted the MLC boarding house into the most exciting one in Perth.

Major lifestyle changes lead to the inclusion of a series of family rooms with fully appointed kitchens and a private laundry to allow the girls independence. Air-conditioning and new services were installed in every room.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

Multiple Partition walls, floors and ceilings were either removed, modified or constructed to facilitate the installation of a compliant UAT, refurbishment of the existing bathrooms and construction of new amenities.

Construction was split over several stages to reduce the impact on the college community. Due to the size of the project certain aspects of the work were completed whilst the Boarding House and College were occupied and in full operation. Heavy demolition, structural works and services shutdowns were completed during College holidays.

Prior to the commencement of work our site specific HSE Management Plan was completed in consultation with our client and the project control group. All site-specific requirements were in the plan including our client's site-specific rules and regulations, emergency plans and permit to work documents which these are relayed to our subcontractors. Compliance with these requirements is mandatory for anyone attending site. Non-conformance may see the subcontractor removed from site.

Ongoing correspondence is undertaken with our primary point of contact and daily, weekly and fortnightly look ahead schedules are completed. This allows sufficient time for planning and advance warning to staff, students and visitors.

The Centenary (Heritage) Building was refurbished with respect to the original design and construction, with only subtle changes that complemented the original design. The original tin ceilings were retained and carefully restored, along with timber window treatments and feature cornice.

The location and installation of a DDA compliant lift was in a busy thoroughfare and required modifications to the existing amenities block and storage area prior to installation. The existing floor joists were modified to form the shaft opening between floors and ceiling joists on Level 5. Roof supports and bracing required modification to suit the new layout. Microfine grout injection was used to stabilise the ground followed by excavation and formation of the pit and reinforced concrete block retaining walls.

Due to the intrusive nature of the work and timeframe required, the lift installation was scheduled over two college holiday periods. Following the completion of stage 1, temporary floors and ceilings were installed to allow access through the building until the next holiday period, when the corridor was closed permanently and the lift shaft installed.

Stage 2 commenced with the installation of a fire rated shaft through the building, followed by construction of a self-supporting structural tower and installation of the AS1735-1 & AS1735-12 lift.

Part of the Riverside refurbishment was completed during term time, when the Boarding House and College were occupied and in full operation. Access to the Boarding House was not permitted by contractors until the boarders had left for the day or upon their return. This reduced the available number of hours that could be worked each day, so careful planning was required to ensure there was no further lost time.

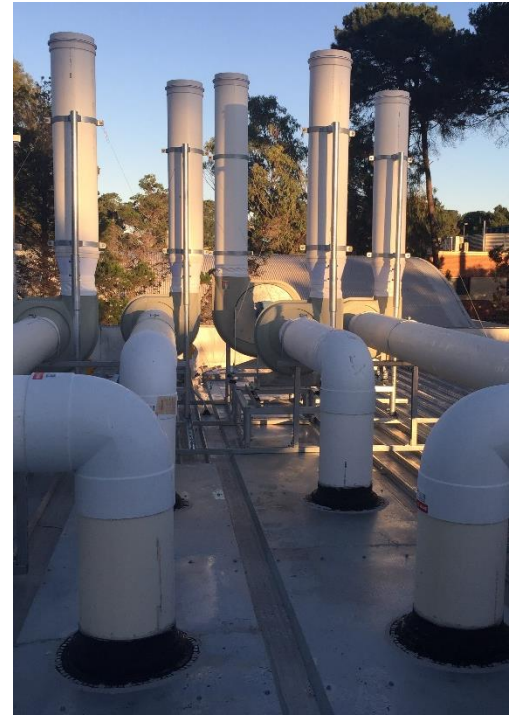
Structural works included modifications to internal masonry walls and forming of new openings. With the feature cornice to remain unaffected by the works, structural support systems were installed below the cornice line to form an archway rather than clear opening.

To limit disruption and ensure staff and student safety, a separate access was established for contractors and included the installation of a materials hoist. Dust creating works are only undertaken with either vacuum systems or water suppressant measures in place.

On occasions, shared work spaces were required and they were managed on a case by case basis with our client and the project control group. At a minimum, solid barriers are installed around the area of work, Zip Walls were installed when required to provide full height screens, with warning and directional signage in place. Spotters were located around the work area for additional safety.

Environmental management was extremely high, to ensure any hazardous materials were removed in a compliant manner. Testing was carried out to ensure no residues were left behind.

MLC are an amazing organisation to work with. The college community embraced the project and were extremely proactive and positive throughout our time on campus. Following completion of this project, TPS and our subcontractors have been invited back to complete many other small projects for MLC.



Client

Epichem Pty Ltd

Architect

Ferguson Architects

Project Size

300 m²

Delivery Model

Internal Design & Construct

Location

Bentley WA

Completed

September 2015

Duration

4 months

OVERVIEW

Total Project Solutions (TPS) was awarded the design and construct contract to convert an existing office building in Technology Park Bentley into a Synthetic and Medicinal Chemistry Laboratory. Service delivery extended from conception to occupation.

TPS partnered with Ferguson Architects for the architectural design and experienced contractors for the services documentation. Planning approval was required for the change of use to research and development laboratories, followed by the requisite building permit.

Significant infrastructure upgrades were required to meet Watercorp, WHS and environmental standards. This included:

- upgrading of the site water main to enable sufficient flow for deluge shower;
- installation of dilution pit to remove chemical contaminants from waste; and
- precise placement of roof mounted mechanical exhaust units.

Due to the size and weight of the HVAC system, significant structural modifications and additions were required to the buildings structure.

Paramount to the project was the successful supply and installation of 14 fume cabinets and meeting the requirements of controlled air for both heating and extraction within the laboratory.



DESIGN & CONSTRUCT | EPICHEM

As a result of the professional service provided by TPS, and the ongoing support of our subcontractors, Epichem have continued to utilise our services on several occasions due to business expansion.

Communication and planning was critical to the project's success. Epichem's existing lease was due to expire before the new facility was available. TPS assisted Epichem in obtaining a short-term laboratory lease to ensure their business was not affected by the relocation.

Upon completion of the project, training sessions were arranged with the services contractors and Epichem employees to ensure a seamless transition from site to end user control.

Maintenance Manuals, As Constructed documentation, compliance certificates and warranty documentation was provided on completion.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms



Client

Dr Peter Bremner

Architect

Rodrigues -
Bodycoat
Architects

Project Size

300 m²

Project Cost

\$386,000.00 Inc

Delivery Model

Medical Suite
Fit Out

Location

Wexford Centre
Murdoch, WA

Completed

October 2015

Duration

10 weeks

Wexford Medical Centre Tenancy 20 & 21

Total project Solutions was engaged by Roderigues - Bodycoat Architects following a tender process for the fitout of a new double tenancy in the Wexford Medical Centre after the completion of the new consultancy building in 2015.

The fitout consisted of consultation rooms, treatment rooms, lung function test room, tea room, reception and waiting areas.

As the building was partially occupied with by consultancy teams who completed fitouts early careful co-ordination was required to ensure that materials were transported prior to patients arriving on a daily basis.

Similarly noisy works was required to be completed outside of normal working hours to ensure harmony with existing tenants and building management.

Access to SKG Radiology was required to run hydraulic waste to suit our fitout requirements as this was the floor immediately below. The SKG fitout was brand new, fully complete and operational. A window of 7pm Friday until 5am Monday was permitted to complete the works in their tenancy and have it reinstated and ready for normal business again on the following Monday.

The design by Rodrigues Bodycoat Architects and fitout by TPS delivered the client a modern, impressive and premium outcome in what has become one of Perth's busiest healthcare centre's.

HOSPITAL REFURBISHMENT | AHS NEO-NATAL NURSERY



Client

Armada Health Service

Architect

Cameron Chisholm & Nicol

Project Size

120 m²

Delivery Model

Refurbishment

Location

Armada, WA

Completed

April 2018

Duration

20 Weeks

OVERVIEW

Total Project Solutions was engaged by the East Metropolitan Health Service to complete modification of two existing four-bed wards and create a Neo Natal Nursery at Armada Health Campus.

The completed Neo Natal Nursery consists of 5 General Care Bays, 2 Resus Bays, a new Staff Station, Individual Room and Clean Utility Room and the fitout included installation of medical gasses to all Care Bays, bespoke joinery throughout, detailed wall and floor vinyl, integral venetian windows, body protected electrical outlets CCTV and electronic security

Due to the fully operational environment of the hospital, a scaffold and walkway was constructed to provide access from the contractor parking area to the external of the Neo Natal Ward. A window and section of masonry wall were removed in order to provide access to the work area preventing any form of contractor access through the hospital.

The implementation of external access significantly aided dust and noise containment for the duration of the project. It was also of benefit in terms of security of the maternity ward, general housekeeping requirements and preventing any chance of contaminant spread in the ward.

The completed fitout was required to be inspected and certified on completion by LARU (Licensing and Accreditation Regulatory Unit).

The Neo Natal Unit was officially opened by the WA Health Minister in June 2018

FITOUT | SILVER CHAIN INTEGRUM AGED CARE⁺



Client
Silver Chain

Architect
Finespun
Architecture

Project Value
\$482,000

Project Size
720 m²

Delivery Model
Design and
Construct

Location
Belmont WA

Completed
February 2018

Duration
3 months

OVERVIEW - SILVER CHAIN INTEGRUM AGED CARE⁺

Total Project Solutions were engaged by Silver Chain on a D&C basis for the fitout of their new premises located at 193 Great Eastern Hwy in Belmont. The flag ship facility, is part of a new service provided by Silver Chain under the banner of Integrum Aged Care⁺.

The Integrum Aged Care⁺ service provides existing and new Silver Chain clients the opportunity to be collected from their home, transported to the Belmont clinic where they will be seen by a multiple disciplinary team of health care professionals during the one appointment.

The project brief was to provide a fitout with a non-clinical, relaxed atmosphere where Silver Chain clientele would have a “day out” experience. Our services included assistance with property selection, complete architectural and services design and documentation, local authority approvals and construction. The facility is a combination of Consultation and Treatment Rooms, Nurses Station, Administration Areas. When entering the building the comfortable Reception, Waiting Area and Coffee Lounge is more akin to that of a hotel than a clinic. High emphasis was placed on easy accessibility and access compliance to accommodate client’s needs.

TPS partnered with Finespun Design & Architecture, SWMC Mechanical, ETC Electrical and Phoenix Hydraulic Design. The team worked professionally and collaboratively with the Integrum Aged Care⁺ senior management team, from conception through to opening of the operational facility by Ken Wyatt AM the Minister for Aged Care.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms



Client

Pure IV

Architect

Internally
Managed

Project Price

\$719,086.50

Project Size

480 m²

Delivery Model

Internal Design &
Construct

Location

Shenton Park

Completed

July 2018

Duration

4 months

OVERVIEW

Pure IV is a bespoke state-of-the-art sterile compounding pharmacy located in Shenton Park with 235 m² of Cleanrooms. The purpose-built Class D Compounding Facility, provides a range of sterile compounded medicinal products prepared in VHP serviced isolators.

The Project Control Group was headed by Chris Shenton & Travis Baily from Prue IV and Andrew Watson from CBE.

TPS were engaged during the design phase to manage and deliver the construction of a TGA compliant facility. TPS partnered with Finespun Architecture for the design component, working collaboratively with the PCG, key suppliers and contractors.

DCM designed and installed the HVAC system. Laftech designed and installed the Environmental Monitoring System. Askin supplied and installed the X-Flam panels.

The facility consists of four Class D Compounding Cleanrooms serviced by a Common Preparation Area.

Each of the compounding cleanrooms (General Aseptic Compounding - Antibiotics 1 - Antibiotics 2 - Chemotherapy) interface with the Common Packaging Room via a continuously ventilated, interlocked ventilated pass through hatch.



ECI PROJECT | PURE IV

The Temperature Controlled Store includes a drug safe and independent Cold Room. Materials enter the Preparation area through a dedicated Materials Trolley airlock from the Temperature Controlled Store, and staff enter from the other side of the Preparation area through a dedicated Change Room.

The facility is constructed from Askin X-Flam panel walls and ceilings, with coving installed at the wall to wall and wall to ceiling junctions. Antibiotic cleanrooms and Chemotherapy cleanroom have escape doors into the adjacent Packaging and Dispatch space.

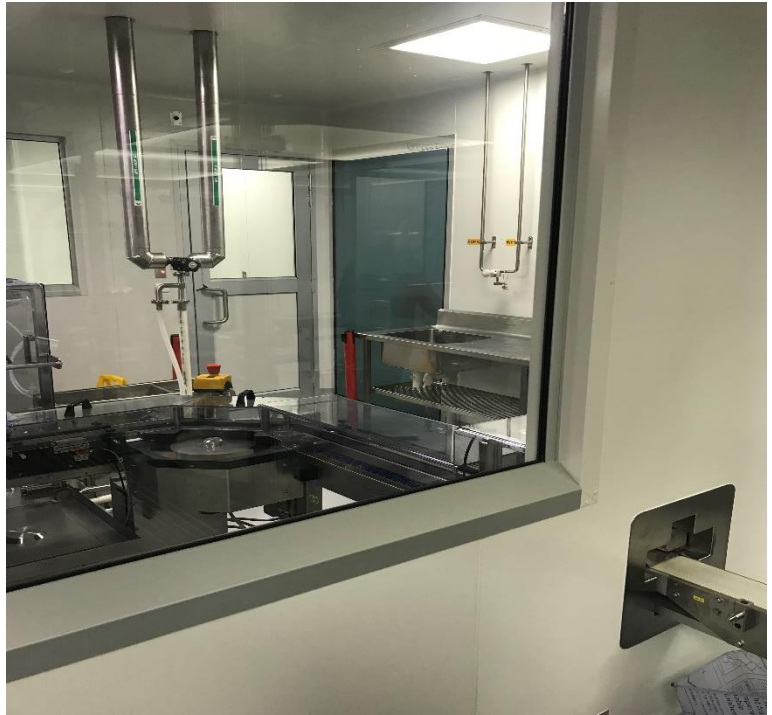
Custom doors were manufactured and installed with security interlocks and double glazed windows were fabricate to suit the facilities operational requirements.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

DESIGN & CONSTRUCT | PFIZER LABORATORIES



Client
Pfizer Australia

Project Price
\$360,000.00

Architect
Finespun
architects

Project Size
220 m²

Delivery Model
Design and
Construct

Location
Bentley WA

Completed
April 2018

Duration
14 days

OVERVIEW

This project involved the demolition of an existing laboratory in the centre of a live pharmaceutical production facility followed by the construction of a new laboratory to include additional rooms, new walls, ceilings, mechanical and electrical upgrades, new floor coverings, doors and windows.

The TPS project team worked together with key stakeholders at Pfizer in the months leading up to the commencement of works, all aspects of the room functionality were taken into consideration along with shutdown periods and new machinery installs.

Given the nature of the room it was designed with custom made aluminium doors and windows, the doors were all “touchless” automated and interlocked to meet stringent cleanroom specifications. The walls and ceilings were pre-cut off site with all edges and joints sealed to avoid time delays and to minimise dust control.

Flooring was finished with wall/wall and wall/floor 3 coat epoxy finish. This was carried out during a minimal shutdown period provided by the client. We engaged our contractors to work night and day shifts back to back to meet the deadline and accommodate the delivery of new machinery arranged by the client.

Building Refurbishment & Commercial Fit Out - New Construction

Healthcare Specialist - Medical Suites - Dental Practice - Medical & Veterinary Imaging Facilities

Hospital Refurbishment - Laboratories & Cleanrooms

FORENSIC IMAGING FIT OUT | PATHWEST



Client

PathWest
Forensic
Pathology

Project Price

\$432,000

Architect

Peter Hunt
Architect

Project Size

100 m²

Delivery Model

Open Tender

Location

Nedlands, WA

Completed

May 2019

Duration

8 Weeks

OVERVIEW

Located at basement level of one of Perth's busiest Hospitals, TPS was engaged to convert an unused area of space into a medical grade Forensic CT Scanner Facility, complete with lead lining to house state of the art Medical Imaging equipment.

The area was purpose built to scan PathWest Mortuary (deceased) patients and construction was completed within a fully operation medical environment. Key to the project was the installation of a Mortuary body hoist which assists staff to manoeuvre patients onto the machine.

The room was to be 100% lead lined and testing was carried out by the hospital's Medical Physics department and reviewed by Radiological Council for formal approval. A documented report along with photos mapped the installation of lead to the room. Doors, window frames and all penetrations were strategically lined to meet the hospitals requirement and uphold the integrity of the room.

This project had the potential to be intrusive as major services were required to run through working areas. Solid hoardings were installed due to the sensitive nature of the area and strict supervision by Mortuary Staff was required on a daily basis.

The project is the first of its kind in Western Australia, and it will become the benchmark going forward for future State based Mortuary Services