

Our business is to deliver fault free solutions that work

Bypass installation is just one part of a much larger project, and often design engineers aren't trained in bypass design, fortunately, Welltech is. Welltech can not only provide high-quality equipment and accessories, we also have the engineering knowledge and installation expertise, so you can be assured we will deliver as promised and support you with Welltech's guarantee, *Commitment = Satisfaction*.

When we're asked to design and construct a temporary or semi-permanent bypass system we know there are two parts to the brief; i) Define the project scope and, ii) Design the solution.

We will scope and design quickly, accurately, and effectively to avoid expensive mistakes and delays. We believe our rigorous assessment ensures we get it right the first time.

Define the Project Scope



Defining the scope upfront is essential, failing to do so may result in the project being over budget and behind schedule. This process allows us to identify the ultimate goal, and how we aim to achieve it. At this point, we will also define the boundaries. Following are six steps we will work through with you to help define the project scope:

Project description. This includes what must be accomplished, the current sewer capacity, equipment in use, location and layout of existing facilities, and duration of the project. Challenges, such as existing buildings, roads, and other structures, or areas of environmental concerns are also considered.

Driving forces. Rehabilitate aging sewer systems, flow diversion while planned upgrades are in progress, or implementation of a fully redundant system before it becomes an emergency.

Specify the deliverables. We will identify the key outcomes and provide the specifications of a suitably designed bypass system that will allow works to proceed without an interruption of service.

Determine the boundaries. We will determine exactly what the sewer bypass system should look like to meet the sewer requirements for as long as the project is active. We take into account PDWF, PWWF, diurnal curves, and system storage to suitably size the system. Manhole access, pressure main tie-ins and limitations are considered at this stage.

Outline the assumptions. We will define the conditions and their likely impact on the project. For example, identifying temporary works requiring engineering, that may impact project time and cost, and generate a change of scope.

Plan for uncertainties and potential impacts. Understand and make allowance for limitations that may affect progress. These can be physical obstructions such as road crossings, other services, and public or private property; and administrative obstructions including issuing permits, obtaining clearance to work, and access permissions.

Design the Solution



The bypass system design needs to be as detailed as possible, or there is a risk of changing orders, higher costs, and a damaged reputation. That's why you can rely on Welltech to design a solution that allows the project to meet the highest standards in the shortest amount of time. Welltech has the expertise in designing and implementing sewer bypass systems. We can provide the known parameters to ensure the designed system will operate as intended.

Define the Project Scope

To assist us in defining the scope and designing a solution for your next bypass project, please complete the following form. Alternatively, complete our online [Bypass Project Scope webform](#)

Contact Name

Email Address

Phone

Bypass Location/Address

Proposed Installation Date

Expected Duration

Flow Rate (estimated flow rate in litres per second (PDWF or PWWF))

L/sec

Fluid Being Pumped

Wastewater

Stormwater

Potable Water

Pumping Location (include MH number if known)

Manhole Access (any of the following that needs to be removed or considered?)

Ladders/Steps

Landings

Existing Telemetry

Odour Control

Depth (depth of pumping manhole in metres)

m

Discharge Location (location of discharge manhole or connection point)

Length of Bypass Alignment (estimate the length of the bypass alignment if known)

m

Stakeholders (list Contractors, Water Corporations, Local Councils involved)

Site Access

Is there adequate access for large vehicles, trucks, and cranes?

Yes

No

Unsure

Further Details (any site constraints or important information we should know about?)

Once complete, save a copy and email to our Technical Specialist Zak Haines zhaines@welltech.com.au