

Sydney
WATER

MODULE 2 – PROCESS

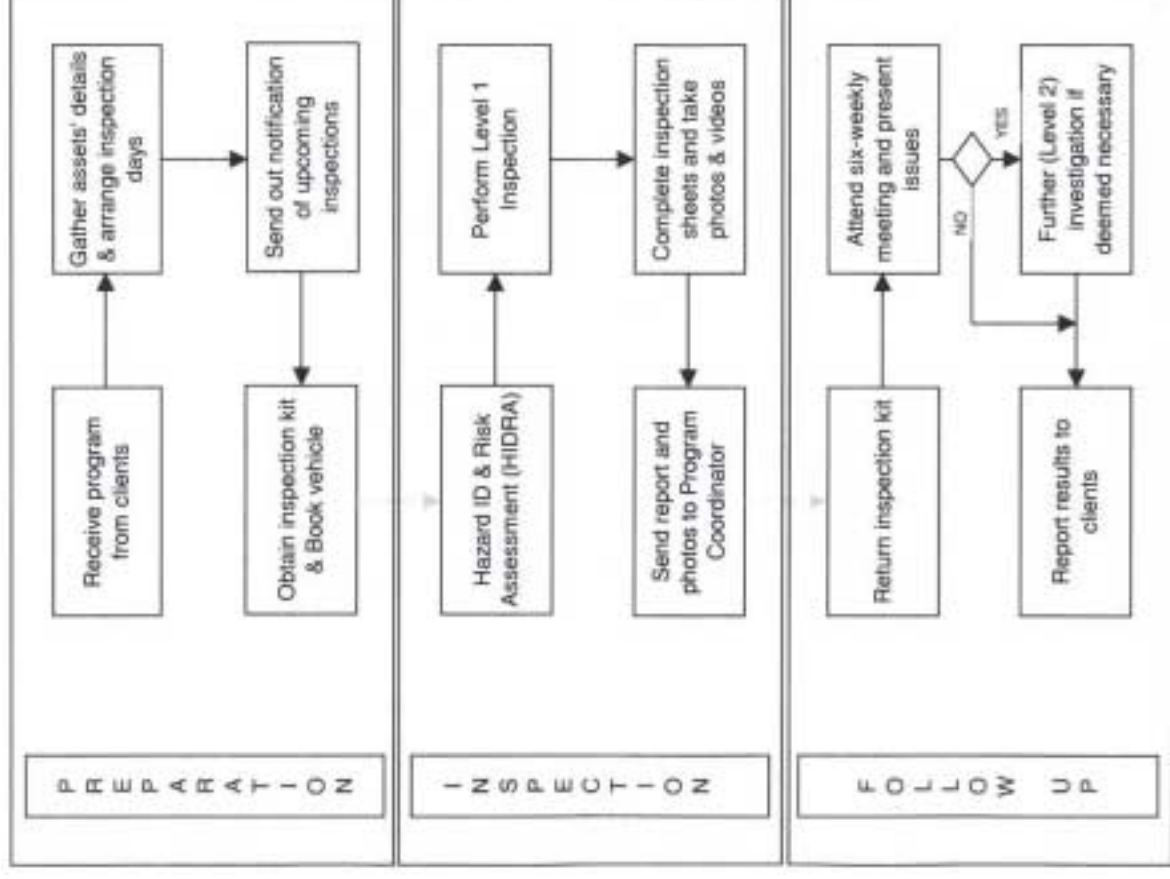
‘Level 1’ Civil/Structural Inspections



Process Overview

Three main stages

- Preparation
- Inspection
- Follow-up



Inspection Program

- Two inspectors per inspection day
- Pumping Stations Inspections run in conjunction with SAM and MEM
- Arrange a vehicle early – use one vehicle between two if possible



Obtaining Site Information

- The Plan Room
- Facilities Maximo
- Hydra [WAMS]



Plan Room

- Stores drawings of most SWC assets
- Fax form at least 3 working days prior
- Most recent “General Arrangement” plans are usually sufficient

Sydney WATER

REQUEST TO SWC PLAN ROOM
FACSIMILE No. (02) 9746 4363

NAME:

P/A No.:

FAX:

PHONE:

OR BY DX TO: DX.....W

LOCATION

1.

2.

3.

4.

5.

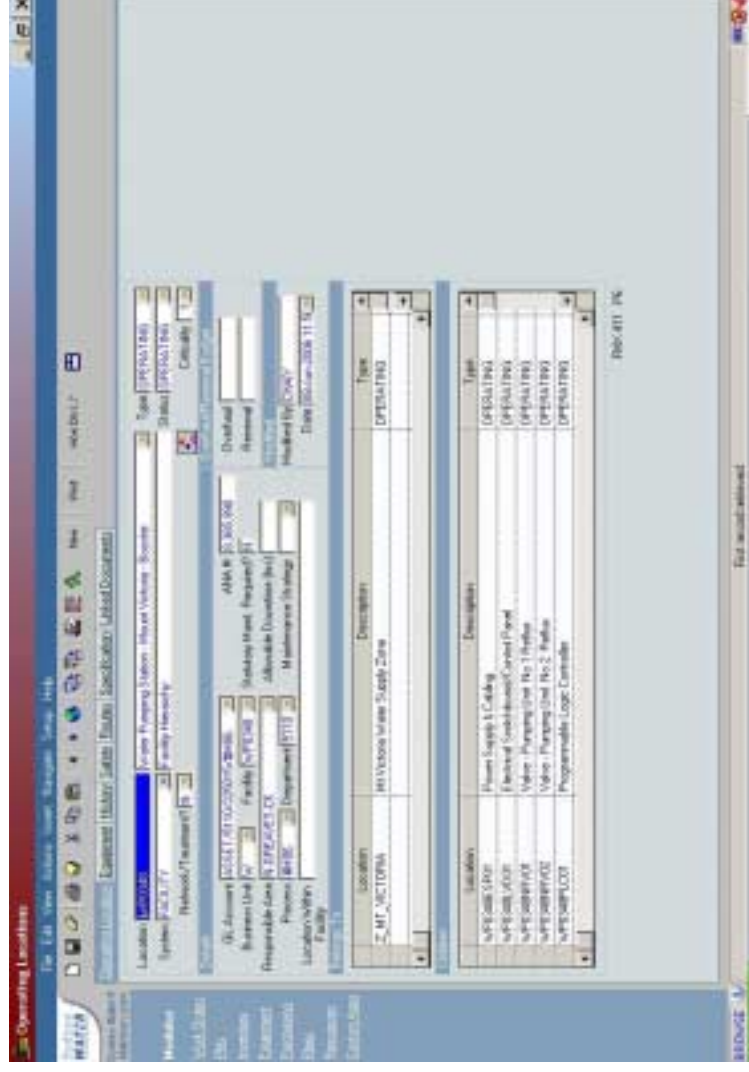
6.

7.

IF PLANS NOT AVAILABLE PLEASE ORDER PRINT FROM LTO
YES NO

Facilities Maximo

- Contains detailed Pumping Stations information
- Site Hazard Warnings sheets can be found here



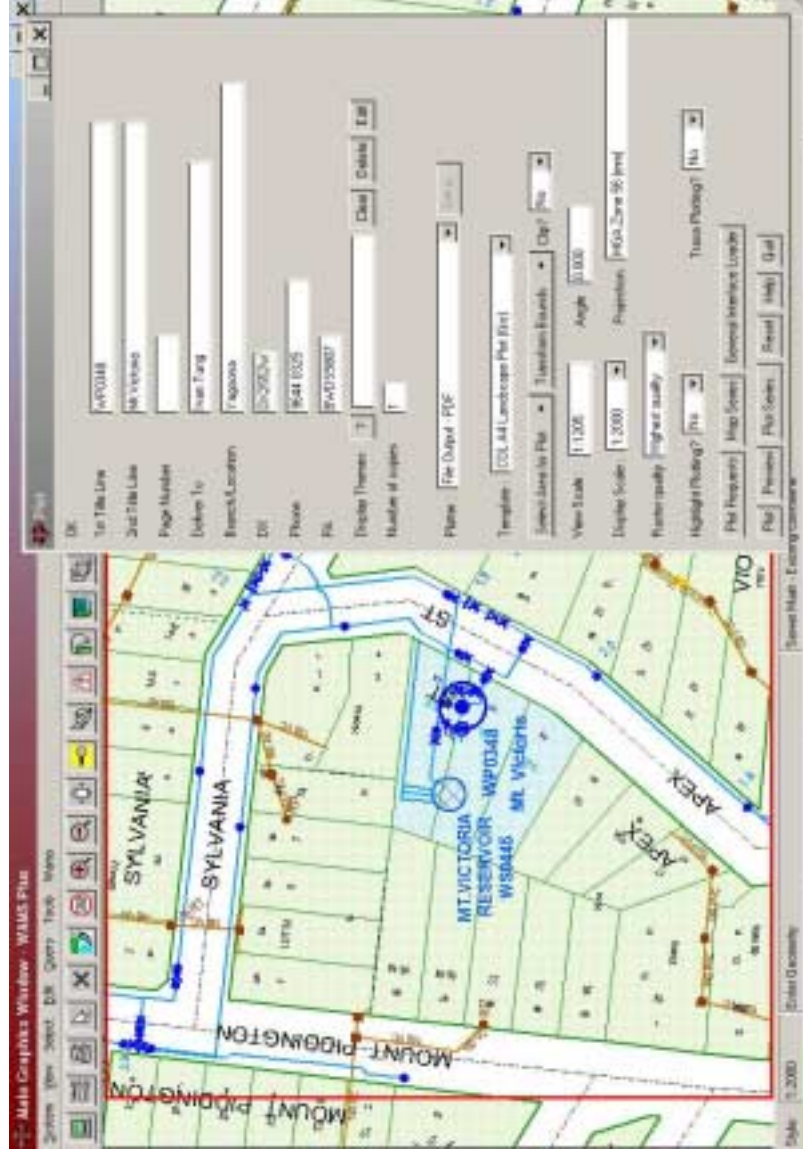
Hydra [WAMS]

- Extremely useful for Aqueduct inspections



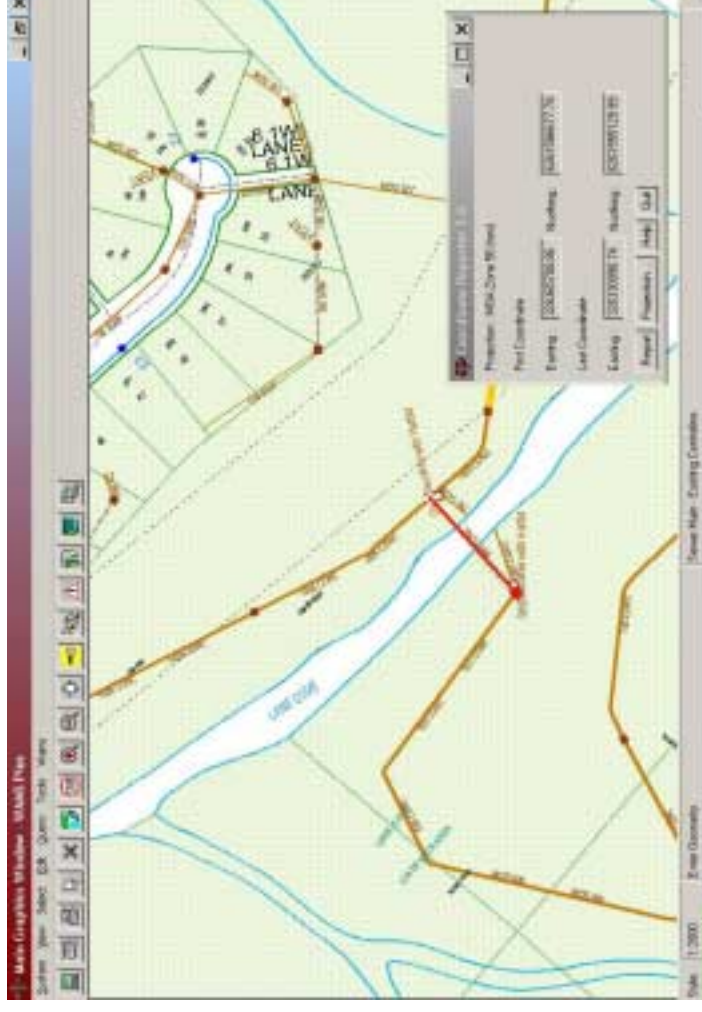
Hydra [WAMS] (cont)

- Maps can be printed or converted to PDF format



Global Positioning Satellite (GPS)

- Critical in Aqueduct inspections
- Improved OH&S
- Obtain coordinates through Hydra
- Be aware of the limitations of the GPS



Inspection Kit

- Digital Camera
- GPS (& spare batteries)
- Mobile Phone
- First Aid Kit
- Keys [Bi-Lock & Jackson]
- Binoculars
- Tape Measure
- Mirror
- Rope
- Hammer, Screwdriver, Chisel & Wire Brush
- Clipboard & Pens
- SWC Asset Listing
- ... and more



Condition Grading Convention

GRADE	SWC ASSET CIVIL CONDITION ASSESSMENT
	Description of Condition
1	<p><u>VERY GOOD</u> Sound physical condition. Assets likely to perform adequately without major work for 25 years or more. Only normal maintenance required.</p>
2	<p><u>GOOD</u> Acceptable physical condition. Minimum short term failure likelihood but potential for deterioration in the long term (10 years plus) Only minor work required (if any).</p>
3	<p><u>FAIR</u> Significant deterioration evident. Failure unlikely within the next 2 years but further deterioration likely within the next 10 years. Minor components or isolated sections need replacement or repair now, but asset still functions safely at adequate level of service. Work required but asset still serviceable.</p>
4	<p><u>POOR</u> Failure likely in the short term. Likely need to replace most or all of the asset within 2 years. No immediate danger to health or safety, work required to ensure asset remains safe. Substantial work required in the short term. Substantial work required in the short term as asset barely serviceable.</p>
5	<p><u>VERY POOR</u> Failed or failure imminent. Immediate need to replace most or all of asset. Health and safety hazards exist which present a possible danger to public safety, or asset cannot be serviced/operated without endangering personnel. Major work or replacement required urgently.</p>
	<p>Mech/elec removed for simplification Advocated by SWC Asset Management Planning Adapted from <i>International Infrastructure Management Manual 2001</i></p>

Consistency & Quality of Data

- Sound business decisions
- Conclusively report to stakeholders
- Benefits in failure analysis
- Focus resources efficiently
- Manage risks
- Professional judgement



Photographic Records

- Wide shot & close shot
- Limit the quantity by filtering
- Rename photos in the set convention
- Example:

SP0001_loose brickwork 1_200907



Pumping Stations Database

- Complete list of SWC Pumping Stations
- Contains latest condition data and comments

The screenshot shows a Microsoft Excel spreadsheet titled 'SWC - Full Database'. The spreadsheet contains a list of pumping stations with the following columns: LOCATION, DESCRIPTION, ATTENTION, DATE, and COMMENTS. The data is organized into rows, with the first row being a header and subsequent rows listing individual stations. The 'LOCATION' column contains codes like 'W11-001', 'W11-002', etc. The 'DESCRIPTION' column contains details about the station's function, such as 'W11-001 - 1000L/s pump'. The 'ATTENTION' column contains dates, and the 'DATE' column contains the date of the last update. The 'COMMENTS' column contains notes about the station's status or any issues.

LOCATION	DESCRIPTION	ATTENTION	DATE	COMMENTS
W11-001	1000L/s pump	1	21/10/07	
W11-002	1000L/s pump	1	21/10/07	
W11-003	1000L/s pump	1	21/10/07	
W11-004	1000L/s pump	1	21/10/07	
W11-005	1000L/s pump	1	21/10/07	
W11-006	1000L/s pump	1	21/10/07	
W11-007	1000L/s pump	1	21/10/07	
W11-008	1000L/s pump	1	21/10/07	
W11-009	1000L/s pump	1	21/10/07	
W11-010	1000L/s pump	1	21/10/07	
W11-011	1000L/s pump	1	21/10/07	
W11-012	1000L/s pump	1	21/10/07	
W11-013	1000L/s pump	1	21/10/07	
W11-014	1000L/s pump	1	21/10/07	
W11-015	1000L/s pump	1	21/10/07	
W11-016	1000L/s pump	1	21/10/07	
W11-017	1000L/s pump	1	21/10/07	
W11-018	1000L/s pump	1	21/10/07	
W11-019	1000L/s pump	1	21/10/07	
W11-020	1000L/s pump	1	21/10/07	
W11-021	1000L/s pump	1	21/10/07	
W11-022	1000L/s pump	1	21/10/07	
W11-023	1000L/s pump	1	21/10/07	
W11-024	1000L/s pump	1	21/10/07	
W11-025	1000L/s pump	1	21/10/07	
W11-026	1000L/s pump	1	21/10/07	
W11-027	1000L/s pump	1	21/10/07	
W11-028	1000L/s pump	1	21/10/07	
W11-029	1000L/s pump	1	21/10/07	
W11-030	1000L/s pump	1	21/10/07	
W11-031	1000L/s pump	1	21/10/07	
W11-032	1000L/s pump	1	21/10/07	
W11-033	1000L/s pump	1	21/10/07	
W11-034	1000L/s pump	1	21/10/07	
W11-035	1000L/s pump	1	21/10/07	
W11-036	1000L/s pump	1	21/10/07	
W11-037	1000L/s pump	1	21/10/07	
W11-038	1000L/s pump	1	21/10/07	
W11-039	1000L/s pump	1	21/10/07	
W11-040	1000L/s pump	1	21/10/07	
W11-041	1000L/s pump	1	21/10/07	
W11-042	1000L/s pump	1	21/10/07	
W11-043	1000L/s pump	1	21/10/07	
W11-044	1000L/s pump	1	21/10/07	
W11-045	1000L/s pump	1	21/10/07	
W11-046	1000L/s pump	1	21/10/07	
W11-047	1000L/s pump	1	21/10/07	
W11-048	1000L/s pump	1	21/10/07	
W11-049	1000L/s pump	1	21/10/07	
W11-050	1000L/s pump	1	21/10/07	
W11-051	1000L/s pump	1	21/10/07	
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W11-067	1000L/s pump	1	21/10/07	
W11-068	1000L/s pump	1	21/10/07	
W11-069	1000L/s pump	1	21/10/07	
W11-070	1000L/s pump	1	21/10/07	
W11-071	1000L/s pump	1	21/10/07	
W11-072	1000L/s pump	1	21/10/07	
W11-073	1000L/s pump	1	21/10/07	
W11-074	1000L/s pump	1	21/10/07	
W11-075	1000L/s pump	1	21/10/07	
W11-076	1000L/s pump	1	21/10/07	
W11-077	1000L/s pump	1	21/10/07	
W11-078	1000L/s pump	1	21/10/07	
W11-079	1000L/s pump	1	21/10/07	
W11-080	1000L/s pump	1	21/10/07	
W11-081	1000L/s pump	1	21/10/07	
W11-082	1000L/s pump	1	21/10/07	
W11-083	1000L/s pump	1	21/10/07	
W11-084	1000L/s pump	1	21/10/07	
W11-085	1000L/s pump	1	21/10/07	
W11-086	1000L/s pump	1	21/10/07	
W11-087	1000L/s pump	1	21/10/07	
W11-088	1000L/s pump	1	21/10/07	
W11-089	1000L/s pump	1	21/10/07	
W11-090	1000L/s pump	1	21/10/07	
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W11-092	1000L/s pump	1	21/10/07	
W11-093	1000L/s pump	1	21/10/07	
W11-094	1000L/s pump	1	21/10/07	
W11-095	1000L/s pump	1	21/10/07	
W11-096	1000L/s pump	1	21/10/07	
W11-097	1000L/s pump	1	21/10/07	
W11-098	1000L/s pump	1	21/10/07	
W11-099	1000L/s pump	1	21/10/07	
W11-100	1000L/s pump	1	21/10/07	

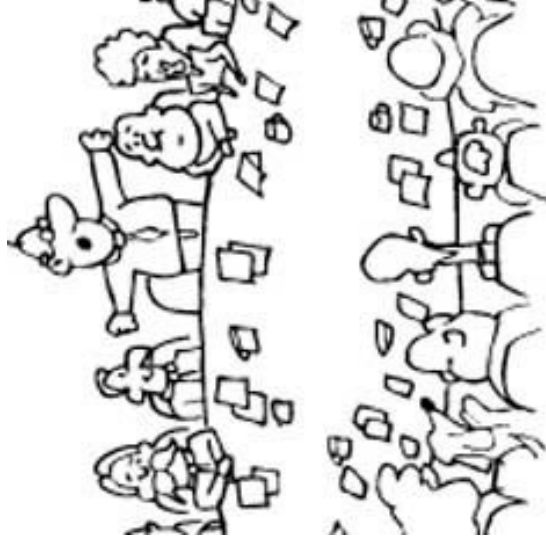
Issues Report Summary

- Email to Program Coordinator within 3 days
- Email photos and DX inspection sheets
- **Urgent issues:**
Call FOC
1800 010 085

The screenshot shows a Microsoft Excel spreadsheet titled "Issues Report Summary". The spreadsheet contains a table with the following columns: Issue No., Area, System, Status, Date Reported, and Resolution. The table lists various issues, such as "Issue 1001" in the "Back" area, "Issue 1002" in the "Front" area, and "Issue 1003" in the "Side" area. The "Status" column includes terms like "Open", "Closed", and "In Progress". The "Resolution" column provides detailed descriptions of the actions taken to address each issue.

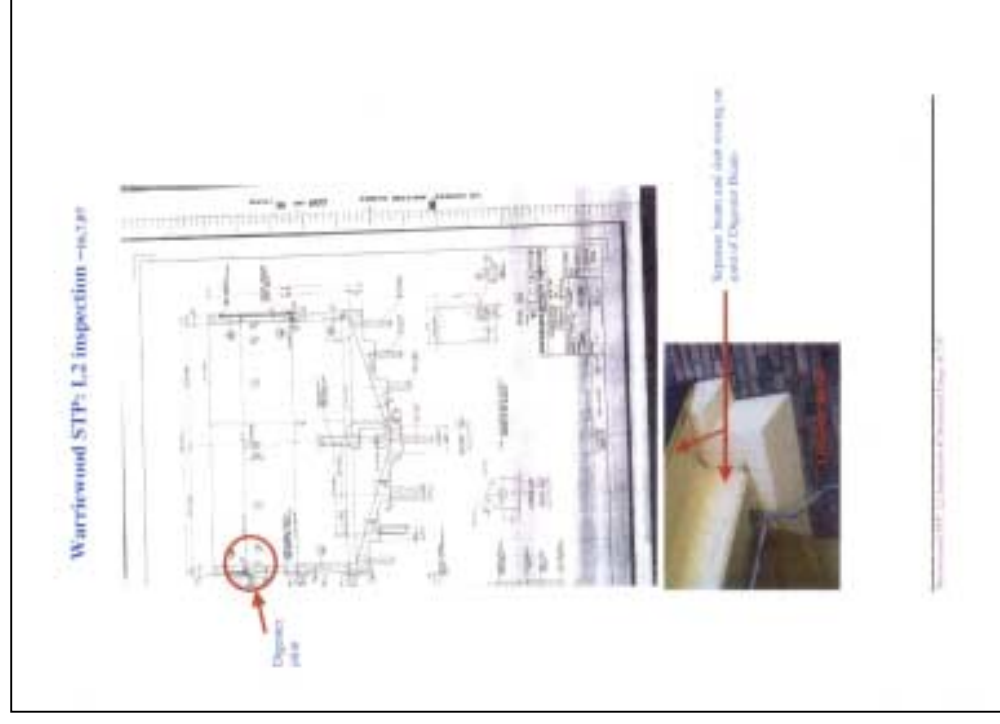
Six-weekly Meeting

- Meeting with specialists
- Discussion of issues collected in the field
- Photographs presented
- Actions:
 - Issues are immaterial
 - Immediate advice given
 - Detailed assessment
 - More information required
- Excellent learning opportunity
- Develop relationships within SWC



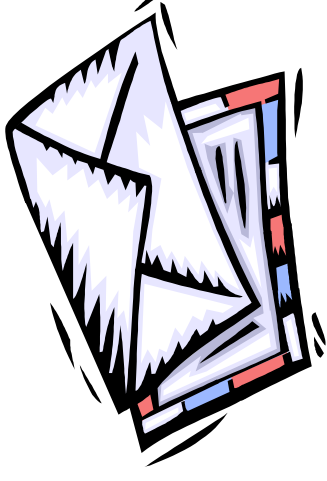
Detailed Assessment

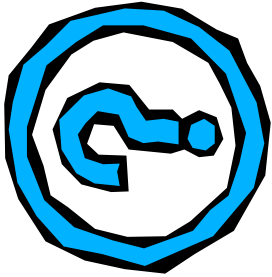
- Revisiting the asset
- Technical drawings
- Specialist involved
- Level 2 Investigation



Reporting to Client

- Issues are filtered and sorted according to:
 - Category of issue
 - Asset type
 - Product type
 - System/network the asset belongs to
 - Risk rating
- Sent to responsible groups & respective clients





Questions

