

CCTV Survey Report

Network: WCC_Wastewater

Selection

NZWWA4 Standard

18 April 2024

Summary of CCTV Survey:

Number of Surveys: 58

Total Length of Surveyed Pipes(m): 0.00

Total Length of Survey(m): 1659.58

| Start Manhole | Finish Manhole | ID | System Type | Width (mm) | Total Length (m) | Survey Length (m) | Grade | Category | Comments |
|---------------|----------------|-----------|-------------|------------|------------------|-------------------|-------|----------|----------|
| W30-041 | W30-099 | RM_4601_1 | - | - | - | 4.600 | 1 | - | - |
| W30-099 | W30-054 | RM_4602_1 | - | - | - | 40.200 | 2 | - | - |
| V31-002 | V31-014 | RM_6272_1 | - | - | - | 42.100 | 4.2 | - | - |
| V31-014 | U31-001 | RM_6273_1 | - | - | - | 43.800 | 2 | - | - |
| V31-002 | V30-060 | RM_6274_1 | - | - | - | 85.000 | 2 | - | - |
| V30-060 | V30-053 | RM_6275_1 | - | - | - | 21.600 | 2 | - | - |
| V30-053 | V30-093 | RM_6276_1 | - | - | - | 11.400 | 2 | - | - |
| V30-093 | V30-066 | RM_6277_1 | - | - | - | 29.400 | 4 | - | - |
| V30-066 | V30-073 | RM_6278_1 | - | - | - | 44.100 | 5 | - | - |
| V30-073 | V30-079 | RM_6279_1 | - | - | - | 50.700 | 4.2 | - | - |
| V31-006 | U31-039 | RM_6280_1 | - | - | - | 45.200 | 4 | - | - |
| V31-006 | V31-007 | RM_6281_1 | - | - | - | 30.200 | 5 | - | - |
| V31-007 | V31-017 | RM_6282_1 | - | - | - | 12.500 | 5 | - | - |
| V31-017 | V31-024 | RM_6283_1 | - | - | - | 26.700 | 1 | - | - |
| V31-024 | V30-059 | RM_6284_1 | - | - | - | 43.800 | 3 | - | - |
| V30-059 | V30-057 | RM_6285_1 | - | - | - | 11.200 | 2 | - | - |
| V30-057 | V30-063 | RM_6286_1 | - | - | - | 22.500 | 5 | - | - |
| V30-063 | V30-071 | RM_6287_1 | - | - | - | 54.500 | 5 | - | - |
| V30-071 | V30-082 | RM_6288_1 | - | - | - | 25.500 | 5 | - | - |
| V30-082 | V30-071 | RM_6289_1 | - | - | - | 25.100 | 5 | - | - |
| V30-082 | V30-084 | RM_6290_1 | - | - | - | 6.800 | 5 | - | - |
| V30-084 | V30-082 | RM_6291_1 | - | - | - | 84.500 | 5 | - | - |
| V30-084 | W30-110 | RM_6292_1 | - | - | - | 73.400 | 4.6 | - | - |
| W30-049 | V30-086 | RM_6293_1 | - | - | - | 72.800 | 3 | - | - |
| V30-086 | V30-080 | RM_6294_1 | - | - | - | 61.800 | 3.8 | - | - |

| Start Manhole | Finish Manhole | ID | System Type | Width (mm) | Total Length (m) | Survey Length (m) | Grade | Category | Comments |
|---------------|----------------|----------------------------|-------------|------------|------------------|-------------------|-------|----------|----------|
| W30-049 | W30-045 | RM_6295_1 | - | - | - | 8.200 | 4.8 | - | - |
| W30-045 | W30-044 | RM_6296_1 | - | - | - | 11.100 | 2 | - | - |
| WW21329 | WW36252 | RM_6297_1 | - | - | - | 18.500 | 2 | - | - |
| W30-044 | W30-051 | RM_6298_1 | - | - | - | 14.000 | 2 | - | - |
| U30-059 | U30-058 | RM_6317_1 | - | - | - | 14.500 | 1 | - | - |
| U31-058 | U31-012 | RM_6318_1 | - | - | - | 12.500 | 1 | - | - |
| U31-012 | U31-014 | RM_6319_1 | - | - | - | 1.900 | 1 | - | - |
| U30-036 | U30-080 | RM_6348_1 | - | - | - | 56.400 | 2 | - | - |
| U30-036 | U30-041 | RM_6349_1 | - | - | - | 57.200 | 3.8 | - | - |
| U30-041 | U30-045 | RM_6350_1 | - | - | - | 59.700 | 2 | - | - |
| U30-045 | U30-022 | RM_6365_1 | - | - | - | 7.400 | 3 | - | - |
| U30-045 | U30-046 | RM_6366_1 | - | - | - | 4.300 | 1 | - | - |
| U30-045 | U30-051 | RM_6367_1 | - | - | - | 47.600 | 2 | - | - |
| U31-012 | U31-058 | RM_6368_1 | - | - | - | 12.500 | 1 | - | - |
| U31-012 | U31-014 | RM_6369_1 | - | - | - | 52.400 | 3.8 | - | - |
| U31-014 | U31-017 | RM_6370_1 | - | - | - | 22.100 | 2 | - | - |
| U31-017 | U31-018 | RM_6371_1 | - | - | - | 9.200 | 5 | - | - |
| U30-051 | U30-054 | RM_6372_1 | - | - | - | 4.500 | 5 | - | - |
| U30-051 | U30-148 | RM_6373_1 | - | - | - | 4.200 | 2 | - | - |
| U30-148 | U30-057 | RM_6374_1 | - | - | - | 8.000 | 2 | - | - |
| U30-054 | U30-055 | RM_6375_1 | - | - | - | 32.600 | 2 | - | - |
| U30-055 | U31-018 | RM_6376_1 | - | - | - | 32.800 | 2 | - | - |
| U30-059 | U30-046 | RM_6377_1 | - | - | - | 15.000 | 5 | - | - |
| WW35200 | WW35193 | RM_7485_1 | - | - | - | 14.600 | 4.2 | - | - |
| WW27929 | WW28946 | RM_10807_1 | - | - | - | 40.500 | 1 | - | - |
| WW28946 | WW21328 | RM_10808_1 | - | - | - | 5.000 | 1 | - | - |
| WW35193 | WW06800 | RM_7634_1_0 | - | - | - | 11.911 | 4.6 | - | - |
| WW35193 | WW06800 | RM_7634_1_1 | - | - | - | 34.889 | 4.6 | - | - |
| WW35200 | WW35201 | WW35200.WW35201.1.42409. | - | - | - | 10.700 | 3.0 | - | - |
| WW21328 | WW27929 | WW21328.WW27929.1.42908._1 | - | - | - | 4.621 | 1.0 | - | - |

| Start Manhole | Finish Manhole | ID | System Type | Width (mm) | Total Length (m) | Survey Length (m) | Grade | Category | Comments |
|---------------|----------------|-----------------------------|-------------|------------|------------------|-------------------|-------|----------|----------|
| WW21328 | WW27929 | WW21328.WW27929.1.42908_0 | - | - | - | 26.579 | 2.0 | - | - |
| WCC_WW033647 | WCC_WW006275 | WW033647.WW006275.1.43860_1 | - | - | - | 17.081 | 1.0 | - | - |
| WCC_WW020633 | WCC_WW035487 | WW035487.WW020633.1.44099. | - | - | - | 17.700 | - | - | - |

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 25 Nov 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 14 |
| ID: RM_4601_1 | | PLR / Asset ID: WWP028957 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-041 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-099 | Depth (m): - | Surveyed Length (m): 4.600 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 1 | Service Grade: 1 | Total Score: 0.0 | | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH W30-041 | |
| | | 4.60 | | | | 12 | | CF | NODE CHAMBER | |
| | | 4.60 | | | | | | IE | AT US NODE W30-099 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 25 Nov 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 32 |
| ID: RM_4602_1 | | PLR / Asset ID: WWP028958 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-099 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-054 | Depth (m): - | Surveyed Length (m): 40.200 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 2 | Service Grade: 1 | Total Score: 5.0 | | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS NODE W30-099 | |
| | | 11.80 | | | | 12 | | LF | 100MM | |
| | | 31.80 | | | | 12 | | LO | 100MM | |
| | | 39.80 | | | | 9 | | LO | 100MM | |
| | | 40.20 | | | | | | IE | AT US NODE W30-054 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 1 |
| ID: RM_6272_1 | | PLR / Asset ID: WWP006910 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-002 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V31-014 | Depth (m): - | Surveyed Length (m): 42.100 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 4.2 | | Service Grade: 1 | Total Score: 88.0 | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V31-002 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 41.6M | |
| | | 3.50 | | | | 3 | | LF | 100MM SD AT SEAL | |
| | | 3.80 | | | | | | GC | FLOW LEVEL RISES | |
| | | 3.80 | | | | | | DP | TO 33.0M | |
| | | 9.30 | | | | 3 | | LF | 100MM REINFOR EXPOSED | |
| | | 9.70 | | | | 12 | | LF | 100MM SEAL LEAKING | |
| | | 11.40 | | | | 12 | | LO | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 25.00 | | | | 3 | | LF | 100MM GAPS IN SEAL | |
| | | 25.20 | | | | 12 | 2 | PH | APPEAR TO LEAK TO 25.3M | |
| | | 33.90 | | | | 3 | | LF | 100MM SD AT SEAL | |
| | | 42.10 | | | | | | IE | AT SITE OF US NODE V31-014 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 2 |
| ID: RM_6273_1 | | PLR / Asset ID: WWP017760 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-014 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-001 | Depth (m): - | Surveyed Length (m): 43.800 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 33.0 | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

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|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V31-014 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 43.3M | |
| | | 3.00 | | | | 3 | | LF | 100MM SD AT SEAL | |
| | | 14.20 | | | | 12 | 4 | JF | SD REINFORC EXPOS | |
| | | 35.00 | | | | 6 | 9 | CC | REINFORC EXPOS | |
| | | 43.70 | | | | | | LR | AT US MH | |
| | | 43.80 | | | | | | IE | AT US MH U31-001 | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 3 |
| ID: RM_6274_1 | | PLR / Asset ID: WWP035716 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-002 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-060 | Depth (m): - | Surveyed Length (m): 85.000 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 3 | Total Score: 51.0 | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

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|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V31-002 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 84.5M | |
| | | 8.00 | | | | 6 | 6 | CC | | |
| | | 16.70 | | | | 9 | | LO | 100MM | |
| | | 26.50 | | | | 6 | 6 | CC | | |
| | | 41.50 | | | | 3 | 9 | CC | | |
| | | 50.20 | | | | 9 | | LO | 100MM | |
| | | 51.60 | | | | | | DE | GRAVEL ETC TO 52.3M | |
| | | 56.30 | | | | 12 | | LO | 100MM | |
| | | 69.20 | | | | 10 | 3 | CC | | |
| | | 73.60 | | | | 3 | 4 | JF | SD | |
| | | 79.00 | | | | 9 | | LO | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------------|---------|
| | | 81.40 | | | | 9 | | LO | 100MM | |
| | | 82.40 | | | | | | DE | GRAVEL ETC TO 84.3M | |
| | | 85.00 | | | | | | IE | AT DS MH V30-060 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 4 |
| ID: RM_6275_1 | | PLR / Asset ID: WWP033709 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-060 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-053 | Depth (m): - | Surveyed Length (m): 21.600 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 3.0 | |
| Comment: - | | | | |

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|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-060 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 20.8M | |
| | | 9.40 | | | | 12 | | LO | 150MM | |
| | | 21.60 | | | | | | IE | AT US MH V30-053 | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|------------------------------------|-------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 | |
| ID: RM_6276_1 | | PLR / Asset ID: WWP019068 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-053 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-093 | Depth (m): - | | Surveyed Length (m): 11.400 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP | Lining: - |
| Structural Grade: 2 | | Service Grade: 3 | | Total Score: 3.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30- 053 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 11.4M | |
| | | 8.60 | | | | | | DE | GRAVEL TO | |
| | | 11.40 | | | | 12 | | LO | 150MM | |
| | | 11.40 | | | | | | IE | AT SITE OF US NODE V30-093 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|------------------------------------|--------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 6 | |
| ID: RM_6277_1 | | PLR / Asset ID: WWP029838 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-093 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-066 | Depth (m): - | | Surveyed Length (m): 29.400 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: AC | Lining: - |
| Structural Grade: 4 | | Service Grade: 3 | | Total Score: 53.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS NODE V30-093 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 28.9M | |
| | | 3.50 | | | | | | DE | GRAVEL ETC TO 17.9M | |
| | | 15.20 | | | | 12 | | LO | 150MM | |
| | | 15.30 | | | | 3 | 6 | CC | | |
| | | 15.70 | | | | 11 | 1 | PH | LEAKING TO 15.8M | |
| | | 22.60 | | | | | | DP | TO 28.5M | |
| | | 29.40 | | | | | | IE | AT US MH V30-066 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 7 |
| ID: RM_6278_1 | | PLR / Asset ID: WWP029839 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-066 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-073 | Depth (m): - | Surveyed Length (m): 44.100 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: AC |
| Structural Grade: 5 | | Service Grade: 1 | Total Score: 60.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-066 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 43.5M | |
| | | 16.40 | | | | 12 | | LO | 150MM EW | |
| | | 44.10 | | | | | | IE | AT US MH V30-073 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 8 |
| ID: RM_6279_1 | | PLR / Asset ID: WWP029842 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-073 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-079 | Depth (m): - | Surveyed Length (m): 50.700 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: AC Lining: - |
| Structural Grade: 4.2 | Service Grade: 1 | Total Score: 108.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-073 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 49.6M | |
| | | 19.30 | | | | 12 | | LF | 150MM GAPS IN SEAL | |
| | | 19.50 | | | | 6 | 6 | JF | IP | |
| | | 19.50 | | | | 11 | 1 | IP | | |
| | | 21.60 | | | | 6 | 6 | CC | IP STAINING | |
| | | 21.70 | | | | 6 | 6 | CC | IP STAINING | |
| | | 49.60 | | | | | | MC | FROM RC TO EW | |
| | | 50.70 | | | | | | IE | AT US MH V30-079 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 9 |
| ID: RM_6280_1 | | PLR / Asset ID: WWP009918 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-006 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-039 | Depth (m): - | Surveyed Length (m): 45.200 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 4 | Service Grade: 1 | Total Score: 82.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V31- 006 | |
| | | 2.30 | | | | 3 | 6 | JF | CC | |
| | | 2.90 | | | | 3 | 6 | JF | CC | |
| | | 3.50 | | | | 2 | 3 | JF | CL | |
| | | 4.20 | | | | 6 | 8 | JF | CC | |
| | | 4.30 | | | | 5 | 6 | CL | TO 4.8M | |
| | | 4.80 | | | | 12 | 6 | JF | CM | |
| | | 4.90 | | | | 3 | 4 | CL | TO 5.5M | |
| | | 5.30 | | | | 9 | | LX | JD | |
| | | 5.30 | | | | 9 | | LO | 100MM | |
| | | 7.30 | | | | 10 | 12 | JF | CM | |
| | | 9.60 | | | | 9 | | LB | 100MM | |
| | | 12.80 | | | | 3 | | LO | 100MM | |
| | | 16.10 | | | | 9 | 1 | JF | CC | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 24.20 | | | | 3 | | LB | 100MM | |
| | | 24.70 | | | | 9 | | LB | 100MM | |
| | | 27.30 | | | | 3 | | LF | 100MM CC | |
| | | 27.30 | | | | 3 | | LX | POSSIBLE BLOCKAGE | |
| | | 32.60 | | | | 1 | 4 | JF | CM | |
| | | 34.60 | | | | 12 | 6 | JF | CC | |
| | | 36.30 | | | | 3 | 6 | JF | CC | |
| | | 45.20 | | | | 10 | 2 | CF | DROP PIPE | |
| | | 45.20 | | | | 2 | 6 | GC | CM IN DROP PIPE | |
| | | 45.20 | | | | | | IE | AT US MH U31-039 | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 10 |
| ID: RM_6281_1 | | PLR / Asset ID: WWP035719 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-006 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V31-007 | Depth (m): - | Surveyed Length (m): 30.200 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | Service Grade: 1 | Total Score: 102.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V31-006 | |
| | | 1.30 | | | | 5 | 11 | JF | CM | |
| | | 1.30 | | | | | | JD | | |
| | | 2.50 | | | | 6 | 8 | CM | TO 2.6M | |
| | | 2.90 | | | | 3 | | LO | 100MM | |
| | | 5.00 | | | | 1 | 2 | JF | CL | |
| | | 8.00 | | | | 9 | | LO | 100MM | |
| | | 8.20 | | | | 9 | 12 | JF | CM | |
| | | 9.50 | | | | 9 | 4 | JF | CM | |
| | | 10.50 | | | | 9 | | LO | 100MM | |
| | | 15.70 | | | | 4 | 8 | JF | PB EDGES | |
| | | 16.10 | | | | 3 | | LB | 100MM | |
| | | 18.20 | | | | 3 | 9 | JF | CC | |
| | | 18.60 | | | | 9 | | LF | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | | | | | | | | CL | |
| | | 19.50 | | | | 12 | 3 | JF | CM | |
| | | 20.10 | | | | 5 | 6 | JF | MINOR RI | |
| | | 22.50 | | | | 9 | | LO | 100MM | |
| | | 27.00 | | | | 3 | | LX | 150MM CL | |
| | | 27.00 | | | | 3 | | LO | 150MM | |
| | | 27.10 | | | | 10 | 3 | JF | CM | |
| | | 28.10 | | | | 3 | | LB | 100MM | |
| | | 29.00 | | | | 12 | 3 | CL | TO 29.3M | |
| | | 29.40 | | | | 9 | | LO | 100MM | |
| | | 30.20 | | | | | | IE | AT DS MH V31-007 | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 11 |
| ID: RM_6282_1 | | PLR / Asset ID: WWP035718 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-007 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V31-017 | Depth (m): - | Surveyed Length (m): 12.500 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | Service Grade: 1 | Total Score: 106.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V31- 007 | |
| | | 1.30 | | | | 9 | 1 | JF | CM | |
| | | 1.90 | | | | 1 | 2 | JF | PB | |
| | | 2.30 | | | | 3 | | LF | 100MM CC | |
| | | 2.50 | | | | 2 | 4 | JF | PB | |
| | | 3.80 | | | | 3 | 8 | JF | PB EDGES | |
| | | 6.30 | | | | 4 | 8 | JF | PB | |
| | | 6.90 | | | | 9 | 10 | JF | CL | |
| | | 8.20 | | | | 1 | 2 | JF | PB | |
| | | 8.80 | | | | 3 | | LF | 100MM | |
| | | 9.30 | | | | 9 | | LB | 100MM | |
| | | 9.50 | | | | 1 | 2 | JF | CL | |
| | | 9.90 | | | | 3 | | LX | 100MM DE SILT | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 10.80 | | | | 8 | 9 | JF | PB | |
| | | 12.00 | | | | 2 | 4 | CC | | |
| | | 12.30 | | | | | | GC | DE-S DS BLOCKS | |
| | | 12.50 | | | | | | IE | AT DS MH V31-017 | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|----------------------------------|----------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 12 |
| ID: RM_6283_1 | | PLR / Asset ID: WWP035717 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-017 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V31-024 | Depth (m): - | Surveyed Length (m): 26.700 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: No code allocat | Material: EW |
| Structural Grade: 1 | | Service Grade: 3 | Total Score: 0.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|-------------------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V31- 017 | |
| | | 0.50 | | | | | | DE | GRAVEL ETC TO 3.0M | |
| | | 17.50 | | | | 3 | | LO | 100MM | |
| | | 26.70 | | | | | | IE | AT SITE OF DS NODE V31-024 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 13 |
| ID: RM_6284_1 | | PLR / Asset ID: WWP020990 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V31-024 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-059 | Depth (m): - | Surveyed Length (m): 43.800 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 3 | Service Grade: 1 | Total Score: 40.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------------|---------|
| | | 0.00 | | | | | | IS | FROM SITE US NODE V31-024 | |
| | | 26.10 | | | | 3 | | LO | 100MM | |
| | | 27.50 | | | | 4 | 9 | CC | | |
| | | 38.90 | | | | 6 | 6 | CC | | |
| | | 41.30 | | | | 12 | | LF | 100MM GAPS IN SEAL | |
| | | 43.80 | | | | | | IE | AT DS MH V30-059 | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|------------------------------------|-------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 14 | |
| ID: RM_6285_1 | | PLR / Asset ID: WWP020988 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-059 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-057 | Depth (m): - | | Surveyed Length (m): 11.200 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: AC | Lining: - |
| Structural Grade: 2 | | Service Grade: 1 | | Total Score: 3.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-059 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 10.7M | |
| | | 4.10 | | | | 9 | | LO | 100MM EW | |
| | | 4.10 | | | | 9 | | LP | | |
| | | 9.90 | | | | 9 | | LO | 100MM | |
| | | 9.90 | | | | 9 | | LP | | |
| | | 11.20 | | | | | | IE | AT US MH V30-057 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 15 |
| ID: RM_6286_1 | | PLR / Asset ID: WWP005237 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-057 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-063 | Depth (m): - | Surveyed Length (m): 22.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | | Service Grade: 1 | Total Score: 86.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-057 | |
| | | 0.90 | | | | 6 | 10 | CM | TO 1.3M | |
| | | 2.00 | | | | 3 | | LO | 100MM | |
| | | 3.10 | | | | 7 | 9 | JF | CM | |
| | | 3.60 | | | | 3 | | LO | 100MM | |
| | | 4.30 | | | | 9 | | LB | 100MM | |
| | | 4.40 | | | | 10 | 11 | JF | CL | |
| | | 14.60 | | | | 12 | | LF | 100MM GAPS IN SEAL | |
| | | 16.30 | | | | 3 | | LB | 100MM LEAKING SEAL | |
| | | 16.30 | | | | 3 | 4 | IP | | |
| | | 17.10 | | | | 11 | 2 | JF | PB | |
| | | 22.50 | | | | | | IE | AT US LAMPHOL | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------|---------|
| | | | | | | | | | E V30-063 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 16 |
| ID: RM_6287_1 | | PLR / Asset ID: WWP009919 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-063 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-071 | Depth (m): - | Surveyed Length (m): 54.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | Service Grade: 1 | Total Score: 219.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS LAMPHOLE V30-063 | |
| | | 1.00 | | | | 6 | 6 | CL | TO 1.6M | |
| | | 1.60 | | | | 6 | 7 | CL | TO 1.9M | |
| | | 6.20 | | | | 9 | | LB | 100MM | |
| | | 6.90 | | | | 3 | | LB | 100MM LEAKING SEAL | |
| | | 6.90 | | | | 3 | 4 | IP | | |
| | | 7.60 | | | | 9 | | LO | 100MM | |
| | | 8.40 | | | | | | DP | WATER LEVEL RISES TO 13.0M | |
| | | 18.20 | | | | 3 | | LX | OT POSSIBLY ROOTS | |
| | | 18.20 | | | | 3 | | LO | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 18.90 | | | | 3 | | LF | 100MM GAPS IN SEAL | |
| | | 19.70 | | | | 1 | 4 | JF | PB EDGES | |
| | | 21.40 | | | | 3 | | LB | 100MM | |
| | | 22.10 | | | | 9 | | LO | 100MM | |
| | | 26.00 | | | | 2 | 10 | JF | CC | |
| | | 28.00 | | | | 6 | 10 | JF | IP STAINING | |
| | | 28.60 | | | | 2 | 3 | IP | | |
| | | 28.60 | | | | 2 | 10 | JF | IP | |
| | | 29.80 | | | | 3 | 9 | JF | IP STAINING | |
| | | 31.30 | | | | 9 | | LB | 100MM | |
| | | 31.70 | | | | 4 | 8 | IP | | |
| | | 31.70 | | | | | | JD | | |
| | | 31.70 | | | | 3 | 9 | JF | IP | |
| | | 32.10 | | | | 3 | | LX | 100MM CC | |
| | | 32.60 | | | | | | DP | WATER LEVEL RISES TO 36.4M | |
| | | 33.30 | | | | 9 | | LO | 100MM | |
| | | 34.00 | | | | 3 | | LB | 100MM | |
| | | 35.00 | | | | 12 | | LF | 100MM PVC GAP AT SEAL | |
| | | 37.30 | | | | 10 | 12 | JF | CM | |
| | | 46.10 | | | | 12 | 6 | JF | CC | |
| | | 47.10 | | | | 3 | | LB | 100MM | |
| | | 53.50 | | | | 9 | | LB | 100MM | |
| | | 54.50 | | | | | | IE | AT US LAMPHOLE V30-071 | |

Pipeline View

Survey Report

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|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 17 |
| ID: RM_6288_1 | | PLR / Asset ID: WWP029843 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-071 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-082 | Depth (m): - | Surveyed Length (m): 25.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | Service Grade: 1 | Total Score: 120.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS LAMPHOLE V30-071 | |
| | | 1.10 | | | | 3 | 9 | JF | IP | |
| | | 1.50 | | | | 3 | 9 | JF | IP | |
| | | 2.70 | | | | 3 | 9 | JF | IP | |
| | | 3.90 | | | | 3 | 7 | JF | IP STAINING | |
| | | 6.30 | | | | 3 | | LO | 100MM | |
| | | 15.00 | | | | 3 | | LO | 100MM | |
| | | 16.50 | | | | 6 | 6 | JF | CC | |
| | | 17.00 | | | | 9 | | LO | 100MM | |
| | | 17.00 | | | | 9 | | LX | DE SILTY DEBRIS | |
| | | 17.30 | | | | 9 | 11 | CL | TO 17.7M | |
| | | 19.40 | | | | 3 | | LB | 100MM | |
| | | 24.50 | | | | 3 | | LP | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------------|---------|
| | | 24.50 | | | | 3 | | LX | 100MM DE | |
| | | 24.50 | | | | | | GC | CAMERA STOP LP VIEW AHEAD | |
| | | 25.50 | | | | | | IA | CAMERA STOP LP | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|------------------------------------|--------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 18 | |
| ID: RM_6289_1 | | PLR / Asset ID: WWP029843 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-082 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-071 | Depth (m): - | | Surveyed Length (m): 25.100 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: 5 | | Service Grade: 3 | | Total Score: 87.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V30-082 | |
| | | 0.40 | | | | | | GC | 2ND PART OF INSPECTION | |
| | | 0.50 | | | | | | GC | BWTN V30-082 AND V30-071 | |
| | | 0.50 | | | | | | GC | 1ST PT WAS 1130 17 | |
| | | 1.40 | | | | 9 | | LX | DE & CL AT 1ST JOINT | |
| | | 1.40 | | | | 9 | | LO | 100MM | |
| | | 1.50 | | | | 5 | 10 | JF | CL | |
| | | 2.20 | | | | 6 | 7 | CL | TO 2.4M | |
| | | 5.30 | | | | 8 | 10 | JF | CL | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------------------------|---------|
| | | 5.60 | | | | 9 | | LO | 100MM | |
| | | 7.50 | | | | 3 | | LB | 100MM | |
| | | 8.40 | | | | 11 | 12 | JF | CL | |
| | | 9.00 | | | | 10 | 12 | JF | CM | |
| | | 17.50 | | | | 9 | | LB | 100MM | |
| | | 17.60 | | | | 5 | 7 | OT | PIPE PIECE | |
| | | 18.80 | | | | 9 | | LX | OT BLOCKA GE | |
| | | 18.80 | | | | 9 | | LO | 100MM | |
| | | 22.60 | | | | 5 | 7 | OT | PIPE PIECE | |
| | | 23.90 | | | | 9 | | LP | 150MM | |
| | | 24.10 | | | | | | DE | GRAVEL ETC TO 24.7M | |
| | | 24.70 | | | | 3 | | LO | 100MM | |
| | | 25.10 | | | | | | IA | CAMERA STOPPR OTRUDIN GLAT | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 1 |
| ID: RM_6290_1 | | PLR / Asset ID: WWP029844 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-082 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-084 | Depth (m): - | Surveyed Length (m): 6.800 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 5 | Service Grade: 3 | Total Score: 26.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V30-082 | |
| | | 1.00 | | | | 9 | 4 | JF | CC | |
| | | 1.40 | | | | 5 | 7 | JF | OP GLASS SHARD | |
| | | 3.70 | | | | 9 | | LB | 100MM | |
| | | 4.30 | | | | 3 | | LB | 100MM | |
| | | 6.30 | | | | 3 | | LO | 100MM | |
| | | 6.40 | | | | 5 | 7 | DE | MORTAR SILT TO 6.8M | |
| | | 6.80 | | | | | | IA | MORTAR STOPS CAMERA | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|------------------------------------|---------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 2 | |
| ID: RM_6291_1 | | PLR / Asset ID: WWP029844 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-084 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-082 | Depth (m): - | | Surveyed Length (m): 84.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: 5 | | Service Grade: 1 | | Total Score: 298.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30-084 | |
| | | 0.10 | | | | | | GC | RESUME D FROM 1132-01 | |
| | | 2.40 | | | | 3 | | LO | 100MM | |
| | | 2.90 | | | | 3 | | LO | 100MM | |
| | | 5.20 | | | | 2 | 9 | JF | CC | |
| | | 6.40 | | | | 7 | 12 | JF | CC | |
| | | 8.70 | | | | 9 | | LX | 6-6 CM | |
| | | 8.70 | | | | 9 | | LO | 100MM | |
| | | 10.80 | | | | 8 | 3 | JF | CC | |
| | | 11.20 | | | | 3 | | LB | 100MM | |
| | | 12.10 | | | | 6 | 6 | JF | CC | |
| | | 13.40 | | | | 7 | 11 | JF | CC | |
| | | 13.50 | | | | 9 | | LO | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------------------|---------|
| | | 13.50 | | | | 9 | | LX | JD | |
| | | 16.30 | | | | 2 | 9 | JF | CL PB | |
| | | 16.70 | | | | 6 | 12 | LX | CC | |
| | | 16.70 | | | | 3 | | LO | 100MM | |
| | | 17.40 | | | | 3 | | LF | 100MM CC | |
| | | 17.50 | | | | 8 | 4 | JF | CM | |
| | | 17.80 | | | | 9 | | LF | 100MM CM | |
| | | 22.60 | | | | 2 | 4 | JF | CM | |
| | | 23.80 | | | | 2 | 8 | JF | CL X 2 | |
| | | 26.10 | | | | 9 | | LB | 100MM SEALED FLUSH | |
| | | 26.70 | | | | 9 | | LO | 100MM | |
| | | 30.70 | | | | 9 | | LO | 100MM | |
| | | 31.10 | | | | 3 | | LB | 100MM | |
| | | 32.80 | | | | | | JD | | |
| | | 33.00 | | | | 9 | | LO | 100MM | |
| | | 34.60 | | | | 7 | 3 | JF | PB CC | |
| | | 35.20 | | | | 10 | 3 | JF | PH OP PROTRU DES | |
| | | 35.80 | | | | 7 | 10 | JF | CC | |
| | | 38.10 | | | | 9 | | LO | 100MM | |
| | | 40.90 | | | | 6 | 6 | JF | CC | |
| | | 43.20 | | | | 9 | | LO | 100MM | |
| | | 43.70 | | | | 3 | | LB | 100MM | |
| | | 50.40 | | | | 6 | 6 | JF | CC PB | |
| | | 50.70 | | | | 9 | | LO | 100MM | |
| | | 55.40 | | | | 1 | 4 | CL | TO 56.0M ACROSS LATERAL | |
| | | 55.40 | | | | 6 | 6 | JF | PB CL X 2 | |
| | | 55.70 | | | | 3 | | LF | 100MM CM | |
| | | 56.00 | | | | 4 | 8 | JF | CC | |
| | | 56.20 | | | | 3 | | LF | 100MM CM | |
| | | 61.40 | | | | 9 | | LB | 100MM | |
| | | 62.90 | | | | 6 | 6 | JF | CC PB | |
| | | 63.50 | | | | 10 | 2 | PH | SEALED TO 63.6M | |
| | | 66.20 | | | | 8 | 4 | CC | | |
| | | 66.80 | | | | 12 | 4 | JF | CC | |
| | | 67.00 | | | | 3 | | LB | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 68.60 | | | | 6 | 6 | JF | CC PB | |
| | | 69.20 | | | | 2 | 4 | JF | CL | |
| | | 71.20 | | | | 9 | 11 | JF | CC | |
| | | 74.00 | | | | 9 | | LX | JD | |
| | | 74.00 | | | | 9 | | LO | 100MM | |
| | | 74.60 | | | | 3 | | LB | 100MM | |
| | | 77.40 | | | | 3 | 5 | JF | CL | |
| | | 78.70 | | | | 6 | 6 | JF | CC | |
| | | 79.40 | | | | 6 | 6 | JF | CC | |
| | | 79.80 | | | | 4 | 8 | OT | MORTAR SHARD TO 80.0M | |
| | | 81.10 | | | | 4 | | OT | 87 MORTAR TO 84.5M | |
| | | 84.50 | | | | | | IE | REACHED PREVIOUS 1132-01 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 3 |
| ID: RM_6292_1 | | PLR / Asset ID: WWP033736 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: V30-084 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-110 | Depth (m): - | Surveyed Length (m): 73.400 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 4.6 | Service Grade: 2 | Total Score: 201.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH V30-084 | |
| | | 0.10 | | | | | | GC | WRONG DSMH ON CCTV | |
| | | 2.80 | | | | 3 | | LX | JF 7-11 CC | |
| | | 2.80 | | | | 3 | | LO | 100MM | |
| | | 4.80 | | | | 9 | | LB | 100MM | |
| | | 5.30 | | | | 3 | | LO | 100MM | |
| | | 8.60 | | | | 9 | | LO | 100MM | |
| | | 9.40 | | | | 3 | 7 | RI | | |
| | | 9.40 | | | | 3 | 7 | JF | RI | |
| | | 10.40 | | | | 3 | | LO | 100MM | |
| | | 10.60 | | | | 10 | 2 | JF | CC PB | |
| | | 17.40 | | | | 3 | | LB | 100MM | |
| | | 19.30 | | | | 9 | | LB | 100MM | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------------|---------|
| | | 19.80 | | | | 9 | | LB | 100MM | |
| | | 28.00 | | | | 9 | | LO | 100MM | |
| | | 28.70 | | | | 3 | | LB | 100MM | |
| | | 28.80 | | | | 1 | 4 | JF | PB | |
| | | 29.30 | | | | 9 | | LO | 100M | |
| | | 30.20 | | | | 10 | 8 | JF | CC | |
| | | 42.00 | | | | 9 | | LO | 100MM | |
| | | 42.50 | | | | 3 | | LO | 100MM | |
| | | 43.30 | | | | 2 | 4 | CL | TO 43.9M | |
| | | 44.30 | | | | 12 | 2 | CL | TO 44.7M | |
| | | 44.90 | | | | 3 | | LB | 100MM | |
| | | 45.90 | | | | 3 | | LO | 100MM | |
| | | 47.60 | | | | 9 | | LB | 100MM | |
| | | 52.80 | | | | 1 | 9 | JF | CL X 2 | |
| | | 54.50 | | | | 9 | | LB | 100MM | |
| | | 55.20 | | | | 3 | | LO | 100MM | |
| | | 55.80 | | | | 3 | | LX | JD | |
| | | 55.80 | | | | 3 | | LO | 100MM | |
| | | 56.00 | | | | 9 | 12 | IP | | |
| | | 56.00 | | | | 8 | 3 | JF | PB IP | |
| | | 57.60 | | | | 12 | | LO | 100MM | |
| | | 57.90 | | | | 2 | 5 | JF | PB | |
| | | 58.60 | | | | 8 | 11 | JF | PB | |
| | | 61.60 | | | | 10 | 4 | JF | CC | |
| | | 62.30 | | | | 5 | 6 | CL | TO 62.9M | |
| | | 63.50 | | | | 6 | 6 | JF | CC IP | |
| | | 66.30 | | | | 9 | 12 | SD | GLAZE FLAKED AWAY | |
| | | 68.40 | | | | 7 | 11 | IP | | |
| | | 68.40 | | | | 9 | | LB | 100MM IP | |
| | | 69.00 | | | | 3 | | LO | 100MM | |
| | | 69.30 | | | | 2 | 4 | JF | CL | |
| | | 73.40 | | | | | | IE | AT DS MH W30-110 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 4 |
| ID: RM_6293_1 | | PLR / Asset ID: WWP033737 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-049 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: V30-086 | Depth (m): - | Surveyed Length (m): 72.800 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 3 | Service Grade: 2 | Total Score: 75.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH W30-049 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 72.2M | |
| | | 2.30 | | | | 6 | 6 | CC | ASSUMED | |
| | | 7.10 | | | | 12 | | LO | 100MM EW | |
| | | 7.10 | | | | 12 | | LP | | |
| | | 12.00 | | | | 3 | | LO | 100MM | |
| | | 18.20 | | | | 12 | | LO | 100MM | |
| | | 19.80 | | | | 1 | | LF | 100MM SEAL BREACHED | |
| | | 21.60 | | | | 6 | 6 | CC | ED ASSUMED | |
| | | 31.90 | | | | 12 | | LF | 100MM RI | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 31.90 | | | | 11 | 1 | RI | | |
| | | 43.30 | | | | 12 | | LF | 100MM | |
| | | 44.10 | | | | 6 | 6 | CC | ED | |
| | | 68.50 | | | | 12 | | LO | 100MM | |
| | | 71.90 | | | | 6 | 6 | CC | ED | |
| | | 72.80 | | | | | | IE | AT US MH V30-086 | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|------------------------------------|--------------------------|------------------|
| Date: 05 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 | |
| ID: RM_6294_1 | | PLR / Asset ID: WWP029835 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: V30-086 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: V30-080 | Depth (m): - | | Surveyed Length (m): 61.800 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP | Lining: - |
| Structural Grade: 3.8 | | Service Grade: 2 | | Total Score: 75.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|------------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH V30- 086 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 61.4M | |
| | | 15.50 | | | | | | DP | TO 41.3M | |
| | | 22.20 | | | | 12 | | LO | 100MM EW | |
| | | 25.20 | | | | 9 | 3 | CC | | |
| | | 56.00 | | | | 6 | 6 | CC | IP ED | |
| | | 57.20 | | | | 12 | | LO | 100MM | |
| | | 57.60 | | | | 11 | 1 | PH | REINFOR C EXP TO 57.7M | |
| | | 58.30 | | | | 12 | | LO | 100MM EW | |
| | | 59.70 | | | | 3 | | LO | 100MM | |
| | | 59.80 | | | | 4 | 8 | OT | COMPAC T DEBRIS | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------|---------|
| | | | | | | | | | TO 61.5M | |
| | | 60.90 | | | | | | GC | CAMERA STOPS | |
| | | 61.80 | | | | | | IE | AT US MH V30-080 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 06 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 6 |
| ID: RM_6295_1 | | PLR / Asset ID: WWP036325 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-049 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-045 | Depth (m): - | Surveyed Length (m): 8.200 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 4.8 | | Service Grade: 1 | Total Score: 23.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH W30-049 | |
| | | 1.10 | | | | 4 | 8 | SD | CORROSION TO 8.2M | |
| | | 5.10 | | | | 6 | 6 | CC | ED | |
| | | 7.90 | | | | 9 | 11 | PH | REPAIRED TO 8.0M | |
| | | 8.20 | | | | 9 | | LO | 150MM EW | |
| | | 8.20 | | | | | | IE | AT DS NODE W30-045 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 06 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 7 |
| ID: RM_6296_1 | | PLR / Asset ID: WWP021572 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-045 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-044 | Depth (m): - | Surveyed Length (m): 11.100 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 5.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US NODE W30-045 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 10.5M | |
| | | 10.30 | | | | 6 | 6 | CC | | |
| | | 10.50 | | | | | | LR | IN TO MANHOL E | |
| | | 11.10 | | | | | | IE | AT DS MH W30-044 | |

Pipeline View

Survey Report

| | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------|--------------------------------------|
| Date: 05 May 2014 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 13 |
| ID: RM_6297_1 | | PLR / Asset ID: WWP021572 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: 243 | | Road Name: Thorndon Quay | | |
| Start Manhole: WW21329 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW36252 | Depth (m): - | Surveyed Length (m): 18.500 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 5.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOperations | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US NODE W30-045 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 10.5M | |
| | | 10.30 | | | | 6 | 6 | CC | | |
| | | 10.50 | | | | | | LR | IN TO MANHOL E | |
| | | 11.10 | | | | | | IE | AT DS MH W30-044 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 06 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 8 |
| ID: RM_6298_1 | | PLR / Asset ID: WWP036326 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: W30-044 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: W30-051 | Depth (m): - | Surveyed Length (m): 14.000 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 3.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH W30-044 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 13.6M | |
| | | 14.00 | | | | | | IE | AT DS MH W30-051 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 26 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 7 |
| ID: RM_6317_1 | | PLR / Asset ID: WWP035303 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-059 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-058 | Depth (m): - | Surveyed Length (m): 14.500 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: PE |
| Structural Grade: 1 | | Service Grade: 1 | Total Score: 0.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30- 059 | |
| | | 14.50 | | | | | | IE | AT DS MH U30-058 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 26 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 8 |
| ID: RM_6318_1 | | PLR / Asset ID: WWP013967 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-058 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-012 | Depth (m): - | Surveyed Length (m): 12.500 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: PE |
| Structural Grade: 1 | | Service Grade: 1 | Total Score: 0.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U31-058 | |
| | | 8.00 | | | | | | GC | CAMERA UNDER HIGH FLOW | |
| | | 12.50 | | | | | | IE | AT DS MH U31-012 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 26 Aug 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 9 |
| ID: RM_6319_1 | | PLR / Asset ID: WWP006909 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-012 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-014 | Depth (m): - | Surveyed Length (m): 1.900 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 1 | | Service Grade: 1 | Total Score: 0.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U31-012 | |
| | | 0.10 | | | | | | GC | LINE FULL | |
| | | 0.90 | | | | | | GC | DEBRIS/FLOW STOPS CCTV | |
| | | 1.90 | | | | | | IA | REQUIRE S HEAVY CLEANING | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 01 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 3 |
| ID: RM_6348_1 | | PLR / Asset ID: WWP018988 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-036 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-080 | Depth (m): - | Surveyed Length (m): 56.400 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 3 | Total Score: 4.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-036 | |
| | | 0.50 | | | | 4 | 8 | DE | MORTAR DEBRIS TO 0.8M | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 55.8M | |
| | | 4.40 | | | | 3 | | LO | 225MM EW | |
| | | 11.30 | | | | 5 | 7 | DE | MORTAR DEBRIS TO 56.4M | |
| | | 24.30 | | | | 12 | 3 | JF | OP ORING PROTRUDES | |
| | | 25.90 | | | | 3 | | LO | 150MM EW | |
| | | 56.40 | | | | | | IE | AT US MH U30-080 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 01 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 4 |
| ID: RM_6349_1 | | PLR / Asset ID: WWP018986 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-036 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-041 | Depth (m): - | Surveyed Length (m): 57.200 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 3.8 | | Service Grade: 3 | Total Score: 90.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-036 | |
| | | 0.10 | | | | 4 | 8 | DE | BRICK DEBRIS TO 56.5M | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 56.5M | |
| | | 17.70 | | | | 10 | 12 | PH | PLUGGED | |
| | | 18.30 | | | | 9 | | LF | 100MM EW | |
| | | 38.70 | | | | 9 | | LF | 100MM EW | |
| | | 48.30 | | | | 8 | 11 | PH | IP SD NO REPAIR TO 48.5M | |
| | | 48.30 | | | | 9 | 10 | IP | | |
| | | 49.40 | | | | 10 | 12 | PH | IP NO REPAIR TO 49.5M | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 49.40 | | | | 10 | 12 | IP | | |
| | | 50.10 | | | | 9 | | LF | 100MM EW | |
| | | 57.20 | | | | | | IE | AT DS MH U30-041 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 01 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 |
| ID: RM_6350_1 | | PLR / Asset ID: WWP035296 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-041 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-045 | Depth (m): - | Surveyed Length (m): 59.700 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 3 | Total Score: 28.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-041 | |
| | | 0.90 | | | | 12 | | LF | 100MM EW | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 58.8M | |
| | | 1.80 | | | | 4 | 8 | DE | MORTAR DEBRIS TO 43.4M | |
| | | 7.80 | | | | 9 | | LO | 100MM EW | |
| | | 15.70 | | | | 11 | | LO | 100MM EW | |
| | | 33.00 | | | | 9 | | LO | 100MM EW | |
| | | 44.20 | | | | 9 | | LF | 100MM EW MORTAR EXCESS | |
| | | 55.70 | | | | 6 | 6 | CC | MORTAR SLUMPS | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 59.70 | | | | | | IE | AT DS MH U30-045 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 08 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 3 |
| ID: RM_6365_1 | | PLR / Asset ID: WWP035301 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Moore St | | |
| Start Manhole: U30-045 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-022 | Depth (m): - | Surveyed Length (m): 7.400 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 3 | | Service Grade: 3 | Total Score: 7.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-045 | |
| | | 1.10 | | | | | | SD | CORROSION TO 7.4M | |
| | | 3.90 | | | | | | LR | | |
| | | 7.40 | | | | 9 | | LO | 100MM EW | |
| | | 7.40 | | | | 7 | 12 | DG | AT LATERAL | |
| | | 7.40 | | | | | | IA | LATERAL FAT STOPS CAMERA | |
| | | 7.40 | | | | | | IE | REACHED PREVIOUS INSPN | |
| | | 13.20 | | | | 8 | 11 | JF | PB | |
| | | 13.60 | | | | 9 | | LO | 100MM EW | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 15.10 | | | | | | SD | CORROSION TO 22.4M | |
| | | 15.10 | | | | | | MC | FROM EW TO RC | |
| | | 20.80 | | | | 3 | | LO | 100MM | |
| | | 21.90 | | | | 9 | | LO | 100MM | |
| | | 27.50 | | | | 9 | | LO | 100MM | |
| | | 29.80 | | | | | | GC | FROM US MH U30-022 | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|-------------------------|------------------|
| Date: 08 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 | |
| ID: RM_6366_1 | | PLR / Asset ID: WWP035299 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: U30-045 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: U30-046 | Depth (m): - | | Surveyed Length (m): 4.300 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: 1 | | Service Grade: 1 | | Total Score: 0.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-045 | |
| | | 4.30 | | | | | | IE | AT US MH U30-046 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 08 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 6 |
| ID: RM_6367_1 | | PLR / Asset ID: WWP035300 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-045 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-051 | Depth (m): - | Surveyed Length (m): 47.600 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 11.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-045 | |
| | | 0.80 | | | | 11 | 1 | PH | SEALED | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 2.0M | |
| | | 2.00 | | | | | | MC | FROM RC TO EW | |
| | | 2.70 | | | | | | MC | FROM EW TO RC | |
| | | 2.70 | | | | 6 | 6 | SD | CORROSION TO 47.0M | |
| | | 47.60 | | | | | | IE | AT DS MH U30-051 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 08 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 7 |
| ID: RM_6368_1 | | PLR / Asset ID: WWP013967 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-012 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-058 | Depth (m): - | Surveyed Length (m): 12.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: PE |
| Structural Grade: 1 | | Service Grade: 1 | Total Score: 0.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|---------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U31- 012 | |
| | | 12.50 | | | | | | IE | AT US MH U31-058 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|---------------------|
| Date: 08 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 8 |
| ID: RM_6369_1 | | PLR / Asset ID: WWP006909 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-012 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-014 | Depth (m): - | Surveyed Length (m): 52.400 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 3.8 | | Service Grade: 2 | Total Score: 63.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U31-012 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 51.8M | |
| | | 5.80 | | | | 10 | 12 | PH | PLUGGED | |
| | | 5.90 | | | | 10 | 2 | PH | PLUGGED TO 6.1M RI | |
| | | 6.00 | | | | 10 | 2 | RI | | |
| | | 12.40 | | | | 3 | | LO | 100MM EW | |
| | | 12.40 | | | | 3 | | LX | JD | |
| | | 31.60 | | | | 12 | | LO | 100MM EW | |
| | | 52.40 | | | | | | IE | AT DS MH U31-014 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 9 |
| ID: RM_6370_1 | | PLR / Asset ID: WWP018992 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-014 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-017 | Depth (m): - | Surveyed Length (m): 22.100 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 3.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U31-014 | |
| | | 1.10 | | | | | | SD | CORROSION TO 21.5M | |
| | | 15.60 | | | | 3 | | LO | 100MM EW | |
| | | 21.20 | | | | 3 | | LO | 100MM EW | |
| | | 22.10 | | | | | | IE | AT DS MH U31-017 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 10 |
| ID: RM_6371_1 | | PLR / Asset ID: WWP018991 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U31-017 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-018 | Depth (m): - | Surveyed Length (m): 9.200 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 5 | | Service Grade: 2 | Total Score: 28.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U31-017 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 9.2M | |
| | | 8.00 | | | | 9 | 2 | JF | RI | |
| | | 8.00 | | | | 9 | 2 | RI | | |
| | | 9.20 | | | | | | IA | DEBRIS REQS HVY CLEAN | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 11 |
| ID: RM_6372_1 | | PLR / Asset ID: WWP036743 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-051 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-054 | Depth (m): - | Surveyed Length (m): 4.500 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 5 | | Service Grade: 3.4 | Total Score: 16.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-051 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 4.5M | |
| | | 4.50 | | | | 9 | | LF | 150MM SEAL AWAY | |
| | | 4.50 | | | | 9 | | LP | | |
| | | 4.50 | | | | | | IA | LP STOPS CAMERA | |
| | | 4.50 | | | | | | IE | REACHED PREVIOUS INSPECTION | |
| | | 21.20 | | | | 6 | | SD | CORROSION TO 17.8M | |
| | | 21.80 | | | | 4 | 8 | DE | MORTAR DEBRIS | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------|---------|
| | | | | | | | | | TO 2.2M | |
| | | 22.20 | | | | | | GC | FROM US MH 030-054 | |
| | | 22.30 | | | | | | IS | INSPECTION RESTARTED | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|----------------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 12 |
| ID: RM_6373_1 | | PLR / Asset ID: WWP036745 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-051 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-148 | Depth (m): - | Surveyed Length (m): 4.200 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: No code allocat | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 3.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intru sion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|------------|----|----------|----------|------|-------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-051 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSI ON TO 3.7M | |
| | | 3.80 | | | | | | GC | ENCRUS TED DEBRIS IN MH | |
| | | 4.20 | | | | | | IE | AT DS MH U30-148 | |

Pipeline View

Survey Report

| | | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-------------------------|------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 13 | |
| ID: RM_6374_1 | | PLR / Asset ID: WWP036748 | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Qy | | | |
| Start Manhole: U30-148 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: U30-057 | Depth (m): - | | Surveyed Length (m): 8.000 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP | Lining: - |
| Structural Grade: 2 | | Service Grade: 1 | | Total Score: 3.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|--------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-148 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 7.5M | |
| | | 8.00 | | | | | | IE | AT DS MH U30-057 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 15 |
| ID: RM_6375_1 | | PLR / Asset ID: WWP019064 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-054 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-055 | Depth (m): - | Surveyed Length (m): 32.600 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 13.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-054 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 32.0M | |
| | | 15.10 | | | | 9 | | LO | 100MM EW | |
| | | 29.00 | | | | 9 | | LF | 100MM EW EXCESS MORTAR | |
| | | 32.60 | | | | | | IE | AT US MH U30-055 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-----------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 16 |
| ID: RM_6376_1 | | PLR / Asset ID: WWP033620 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-055 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U31-018 | Depth (m): - | Surveyed Length (m): 32.800 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 2 | | Service Grade: 1 | Total Score: 28.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|---------------------|---------|
| | | 0.00 | | | | | | IS | FROM DS MH U30-055 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 32.2M | |
| | | 7.60 | | | | 6 | 6 | CC | IP STAIN | |
| | | 15.90 | | | | 6 | 12 | JF | IP STAIN | |
| | | 18.70 | | | | 3 | | LO | 150MM EW | |
| | | 32.70 | | | | | | GC | MH DEBRIS DAMS FLOW | |
| | | 32.80 | | | | | | IE | AT US MH U31-018 | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 09 Sep 2009 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 17 |
| ID: RM_6377_1 | | PLR / Asset ID: WWP035302 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Qy | | |
| Start Manhole: U30-059 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: U30-046 | Depth (m): - | Surveyed Length (m): 15.000 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 5 | | Service Grade: 1 | Total Score: 55.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: - | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------------|---------|
| | | 0.00 | | | | | | IS | FROM US MH U30-059 | |
| | | 1.10 | | | | 6 | 6 | SD | CORROSION TO 5.4M | |
| | | 5.00 | | | | 8 | 4 | OP | PIPE ACROSS TO 5.2M | |
| | | 5.30 | | | | | | OP | MORTAR | |
| | | 5.40 | | | | | | IA | MORTAR STOPS CAMERA | |
| | | 5.40 | | | | | | IE | REACHED PREVIOUS INSPECTION | |
| | | 6.00 | | | | 2 | 4 | JF | PB | |
| | | 9.60 | | | | 6 | | SD | CORROSION TO 9.6M | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------------------|---------|
| | | 9.60 | | | | | | MC | FROM EW TO RC | |
| | | 10.90 | | | | | | MC | FROM RC TO EW | |
| | | 13.90 | | | | 6 | | SD | CORROSION TO 4.1M | |
| | | 14.90 | | | | | | GC | 9/09/2009 FROM DS MH U30-046 | |
| | | 15.00 | | | | | | IS | INSPECTION RESTARTED | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------|
| Date: 03 May 2012 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 17 |
| ID: RM_7485_1 | | PLR / Asset ID: WWP035302 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: 56 | | Road Name: Thorndon Quay | | |
| Start Manhole: WW35200 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW35193 | Depth (m): - | Surveyed Length (m): 14.600 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: CP |
| Structural Grade: 4.2 | | Service Grade: 4.2 | Total Score: 30.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOperations | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 0.50 | | | | | | IS | WW35200 M/HOLE | |
| | | 1.90 | | | | | | DE | PAPER | |
| | | 3.60 | | | | | | DP | | |
| | | 5.00 | | | | | | OP | PIPE THRU TOP OF MAIN | |
| | | 5.30 | | | | | | DE | DEBRIS INVERT | |
| | | 9.60 | | | | | | MC | TO EW PIPE | |
| | | 9.60 | | | | | | GC | DIP ENDS | |
| | | 10.90 | | | | | | MC | TO CONCRETE PIPE | |
| | | 14.60 | | | | | | IE | WW35193 M/HOLE. | |

Pipeline View

Survey Report

| | | | | |
|----------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 20 Sep 2012 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 19 |
| ID: RM_10807_1 | | PLR / Asset ID: WWP028958 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: ?245 | | Road Name: Thorndon Quay | | |
| Start Manhole: WW27929 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW28946 | Depth (m): - | Surveyed Length (m): 40.500 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 1 | Service Grade: 3 | Total Score: 4.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOps | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------|---------|
| | | 0.20 | | | | | | IS | L/HOLE. | |
| | | 0.40 | | | | 3 | | LO | | |
| | | 0.40 | | | | | | DE | METAL INVERT | |
| | | 1.00 | | | | | | JD | | |
| | | 11.90 | | | | | | IP | POSS INFILTRATION | |
| | | 12.20 | | | | 3 | | LO | | |
| | | 27.50 | | | | | | CC | | |
| | | 28.40 | | | | 12 | | LO | | |
| | | 40.50 | | | | | | GC | L/HOLE. | |

Pipeline View

Survey Report

| | | | | |
|----------------------------------|-------------------------------------|-------------------------------------|-----------------------|--------------------------------------|
| Date: 20 Sep 2012 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 19 |
| ID: RM_10808_1 | | PLR / Asset ID: WWP028957 | | |
| Location Type: - | | Place Name: - | | |
| Location Details: ?245 | | Road Name: Thorndon Quay | | |
| Start Manhole: WW28946 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW21328 | Depth (m): - | Surveyed Length (m): 5.000 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 1 | Service Grade: 1 | Total Score: 0.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOps | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------|---------|
| | | 0.00 | | | | | | GC | L/HOLE. | |
| | | 0.50 | | | | | | JD | | |
| | | 3.30 | | | | | | LL | SLIGHT | |
| | | 4.60 | | | | | | LL | IN M/HOLE | |
| | | 5.00 | | | | | | IE | M/HOLE. | |

Pipeline View

Survey Report

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|--------------------------------|-------------------------------------|--|------------------------------------|---------------------------|------------------|
| Date: 28 Jun 2012 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 | |
| ID: RM_7634_1_0 | | PLR / Asset ID: Asset # Reqd | | | |
| Location Type: - | | Place Name: - | | | |
| Location Details: - | | Road Name: Thorndon Quay | | | |
| Start Manhole: WW35193 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: WW06800 | Depth (m): - | | Surveyed Length (m): 11.911 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: 4.6 | | Service Grade: 3 | | Total Score: 121.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOperations | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|-------|-------------------|---------|
| | | 0.50 | | | | | | IS | WW35193 M/HOLE | |
| | | 0.60 | | | | | | CL | TOP | |
| | | 1.30 | | | | | | JD | | |
| | | 3.10 | | | | | | CC | | |
| | | 3.10 | | | | | | IP | AT JOINT | |
| | | 4.70 | | | | 3 | | LO | | |
| | | 5.60 | | | | | | JO | | |
| | | 5.70 | | | | | | CC | TOP | |
| | | 6.60 | | | | 9 | | LO | | |
| | | 6.90 | | | | | | CL | SIDE | |
| | | 7.50 | | | | | | JD | | |
| | | 8.10 | | | | | | JO | | |
| | | 11.20 | | | | | | CL | | |
| | | 11.90 | | | | | | GC | WW30683 | |
| | | 11.91 | | | | | | IN_SP | Survey | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|------------------|---------|
| | | | | | | | | LIT | split by InfoNet | |

Pipeline View

Survey Report

| | | | | |
|--------------------------------|-------------------------------------|--|-----------------------|--------------------------------------|
| Date: 28 Jun 2012 | Drainage Area: Foul | Weather: - | Operator: - | Job No: 5 |
| ID: RM_7634_1_1 | | PLR / Asset ID: Asset # Reqd | | |
| Location Type: - | | Place Name: - | | |
| Location Details: - | | Road Name: Thorndon Quay | | |
| Start Manhole: WW35193 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW06800 | Depth (m): - | Surveyed Length (m): 34.889 | | |
| Use: - | Direction: D (Downstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 4.6 | Service Grade: 3 | Total Score: 121.0 | | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: CitiOperations | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|--------------|-------------------------|---------|
| | | 0.00 | | | | | | IN_SP LIT | Survey split by InfoNet | |
| | | 0.89 | | | | 3 | | LO | | |
| | | 1.19 | | | | | | JD | | |
| | | 1.19 | | | | | | CL | | |
| | | 2.39 | | | | | | JD | | |
| | | 3.89 | | | | 9 | | LO | | |
| | | 4.89 | | | | | | JD | | |
| | | 7.39 | | | | | | CL | | |
| | | 7.99 | | | | | | CL | | |
| | | 11.89 | | | | 9 | | LO | | |
| | | 12.89 | | | | | | JO | | |
| | | 13.59 | | | | | | CL | | |
| | | 14.39 | | | | 9 | | LO | | |
| | | 14.79 | | | | | | JD | | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-----------------------|---------|
| | | 16.09 | | | | | | CL | | |
| | | 16.69 | | | | | | CL | | |
| | | 17.29 | | | | | | CL | | |
| | | 17.29 | | | | | | JD | | |
| | | 18.49 | | | | | | CL | | |
| | | 19.79 | | | | | | DP | | |
| | | 19.79 | | | | | | CL | | |
| | | 20.99 | | | | | | JD | | |
| | | 23.29 | | | | | | DE | DEBRIS INVERT | |
| | | 27.19 | | | | | | JD | | |
| | | 27.99 | | | | | | DP | | |
| | | 28.39 | | | | | | CL | | |
| | | 29.29 | | | | 9 | | LO | | |
| | | 29.69 | | | | | | CL | | |
| | | 30.19 | | | | | | CL | TOP | |
| | | 30.69 | | | | | | CL | | |
| | | 30.89 | | | | 9 | | LO | | |
| | | 31.19 | | | | | | DE | DEBRIS INVERT (PAPER) | |
| | | 31.19 | | | | | | DP | | |
| | | 31.69 | | | | | | CL | | |
| | | 31.69 | | | | | | JO | | |
| | | 32.89 | | | | | | JD | | |
| | | 33.59 | | | | | | CC | | |
| | | 34.19 | | | | | | JO | | |
| | | 34.19 | | | | | | DP | | |
| | | 34.89 | | | | | | IE | WW06800 M/HOLE. | |

Pipeline View

Survey Report

| | | | | |
|--|-----------------------------------|------------------------------------|--------------------------|---------------------|
| Date: 09 Feb 2016 | Drainage Area: - | Weather: - | Operator: ANDY | Job No: - |
| ID: WW35200.WW35201.1.42409. | | PLR / Asset ID: - | | |
| Location Type: - | | Place Name: CITY | | |
| Location Details: - | | Road Name: THORNDON QY | | |
| Start Manhole: WW35200 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW35201 | Depth (m): - | Surveyed Length (m): 10.700 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: AC |
| Structural Grade: 3.0 | | Service Grade: 1 | Total Score: 10.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: WCC CCTV | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------------------------|---------|
| | | 0.50 | | | | | | IS | WW35200 M/HOLE | |
| | | 0.60 | | | | | | JD | | |
| | | 2.60 | | | | | | JF | RUBBER RING EXPOSED INVERT | |
| | | 10.60 | | | | | | GC | POSS M/HOLE FULL OF METAL | |
| | | 10.70 | | | | | | IE | WW35201 AT POSS M/HOLE | |

Pipeline View

Survey Report

| | | | | | |
|--|-----------------------------------|----------------------------------|-----------------------------------|-------------------------|------------------|
| Date: 22 Jun 2017 | Drainage Area: - | Weather: - | Operator: ANDY | Job No: - | |
| ID: WW21328.WW27929.1.42908._1 | | PLR / Asset ID: - | | | |
| Location Type: - | | Place Name: CBD | | | |
| Location Details: - | | Road Name: THORNDON QY | | | |
| Start Manhole: WW21328 | Depth (m): - | | Total Length (m): - | | |
| Finish Manhole: WW27929 | Depth (m): - | | Surveyed Length (m): 4.621 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: 1.0 | | Service Grade: 1 | | Total Score: 0.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: WCC CCTV | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|-----------|-------------------------|---------|
| | | 0.50 | | | | | | IS | WW21328 M/HOLE | |
| | | 0.60 | | | | | | GC | 150 EW PIPE | |
| | | 4.10 | | | | | | CF | WW28946 L/HOLE | |
| | | 4.62 | | | | | | IN_SP LIT | Survey split by InfoNet | |

Pipeline View

Survey Report

| | | | | |
|--|-----------------------------------|------------------------------------|--------------------------|--------------------------------------|
| Date: 22 Jun 2017 | Drainage Area: - | Weather: - | Operator: ANDY | Job No: - |
| ID: WW21328.WW27929.1.42908._0 | | PLR / Asset ID: - | | |
| Location Type: - | | Place Name: CBD | | |
| Location Details: - | | Road Name: THORNDON QY | | |
| Start Manhole: WW21328 | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WW27929 | Depth (m): - | Surveyed Length (m): 26.579 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW Lining: - |
| Structural Grade: 2.0 | | Service Grade: 5 | Total Score: 15.0 | |
| Comment: - | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: WCC CCTV | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|--------------|-------------------------------------|---------|
| | | 0.00 | | | | | | IN_SP LIT | Survey split by InfoNet | |
| | | 11.28 | | | | | | LO | 12 | |
| | | 12.08 | | | | | | CC | CRACK AROUND PIPE | |
| | | 26.58 | | | | | | DE | LARGE AMOUNT OF METAL | |
| | | 26.58 | | | | | | IA | UNABLE TO PUSH FURTHER DUE TO METAL | |

Pipeline View

Survey Report

| | | | | | |
|--|-----------------------------------|----------------------------------|------------------------------------|-------------------------|------------------|
| Date: 30 Jan 2020 | Drainage Area: - | Weather: - | Operator: METUA | Job No: - | |
| ID: WW033647.WW006275.1.43860._1 | | PLR / Asset ID: - | | | |
| Location Type: - | | Place Name: PIPITEA | | | |
| Location Details: - | | Road Name: THORNDON QY | | | |
| Start Manhole: WCC_WW033647 | | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WCC_WW006275 | | Depth (m): - | Surveyed Length (m): 17.081 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: CS | Lining: - |
| Structural Grade: 1.0 | | Service Grade: 1 | | Total Score: 0.0 | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: WCC CCTV | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|-------------------------------|---------|
| | | 0.50 | | | | | | IS | WW03364 7 M/HOLE | |
| | | 2.50 | | | | | | LO | 3 | |
| | | 17.08 | | | | | | GC | Survey split by InfoNet | |

Pipeline View

Survey Report

| | | | | | |
|--|-----------------------------------|----------------------------------|------------------------------------|-----------------------|------------------|
| Date: 25 Sep 2020 | Drainage Area: - | Weather: - | Operator: METUA | Job No: - | |
| ID: WW035487.WW020633.1.44099. | | PLR / Asset ID: - | | | |
| Location Type: - | | Place Name: PIPITEA | | | |
| Location Details: - | | Road Name: THORNDON QY | | | |
| Start Manhole: WCC_WW020633 | | Depth (m): - | Total Length (m): - | | |
| Finish Manhole: WCC_WW035487 | | Depth (m): - | Surveyed Length (m): 17.700 | | |
| Use: - | Direction: U (Upstream) | Size (mm): - | Shape: CP | Material: EW | Lining: - |
| Structural Grade: - | | Service Grade: - | | Total Score: - | |
| Comment: - | | | | | |

| | |
|------------------------------|-------------------------------|
| Actual Duration: - | Actual Cost (\$): - |
| Estimated Duration: - | Estimated Cost (\$): - |

| | |
|-------------------------------------|----------------------------------|
| Schedule Number: - | Completed: N |
| Date/Time Planned: - | Task Status: - |
| Estimated Completion Date: - | Date/Time Started: - |
| Repeat Period: - | Date Completed: - |
| Team Leader: - | Repeat Schedule Number: - |
| Contractor: WCC CCTV | |

| Video | Photo | Distance (m) | % | Intrusion | CD | Clock At | Clock To | Code | Diameter | Remarks |
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------|---------|
|-------|-------|--------------|---|-----------|----|----------|----------|------|----------|---------|

Pipeline View