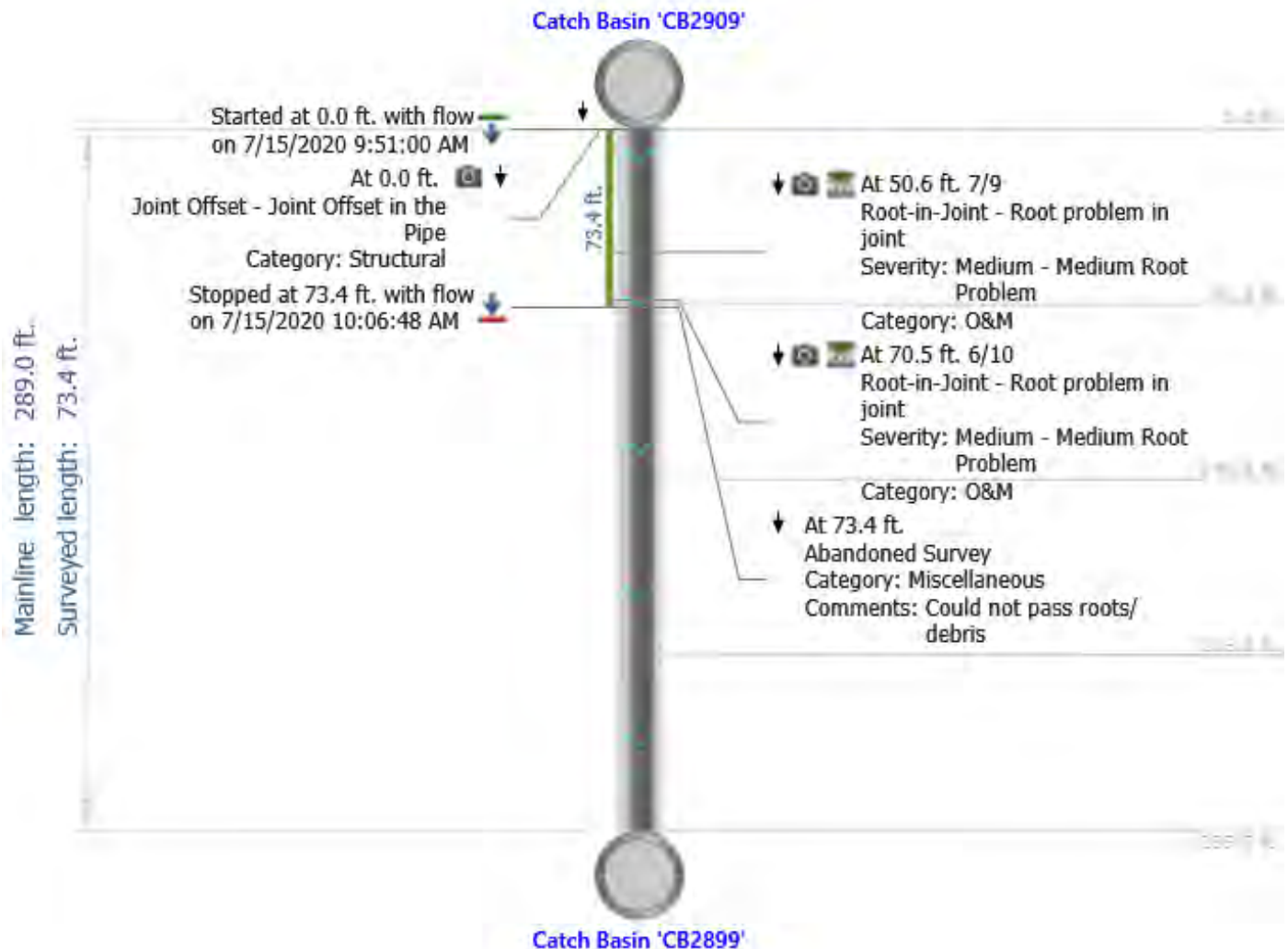




DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB2909-CB2899

|  |  |   |                                     |
|--|--|---|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/15/2020 9:51 AM</b> | Direction:<br><b>With the flow</b>     | Field-measured mainline length:<br><b>289.0 ft.</b> | Surveyed length:<br><b>73.4 ft.</b> |
| Upstream node:<br><b>CB2909</b>              | Downstream node:<br><b>CB2899</b>      | Depth US:   | Weather:<br><b>Dry</b>              |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>15.0 in.</b>   |
| Comments:                                    |  |   |                                     |





DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB2909-CB2899

|  |  |   |                                     |
|--|--|---|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/15/2020 9:51 AM</b> | Direction:<br><b>D</b>                 | Field-measured mainline length:<br><b>289.0 ft.</b> | Surveyed length:<br><b>73.4 ft.</b> |
| Upstream node:<br><b>CB2909</b>              | Downstream node:<br><b>CB2899</b>      | Depth US:   | Weather:<br><b>Dry</b>              |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>15.0 in.</b>   |
| Comments:                                    |  |   |                                     |

### Observations


| Distance | Dir. | Length   | From/To | Code         | Modifier/Severity | Rating | Comments |
|----------|------|----------|---------|--------------|-------------------|--------|----------|
| 0.0 ft.  | D    | 73.4 ft. | /       | Joint Offset |                   |        |          |



|          |   |       |               |        |
|----------|---|-------|---------------|--------|
| 50.6 ft. | D | 7 / 9 | Root-in-Joint | Medium |
|----------|---|-------|---------------|--------|



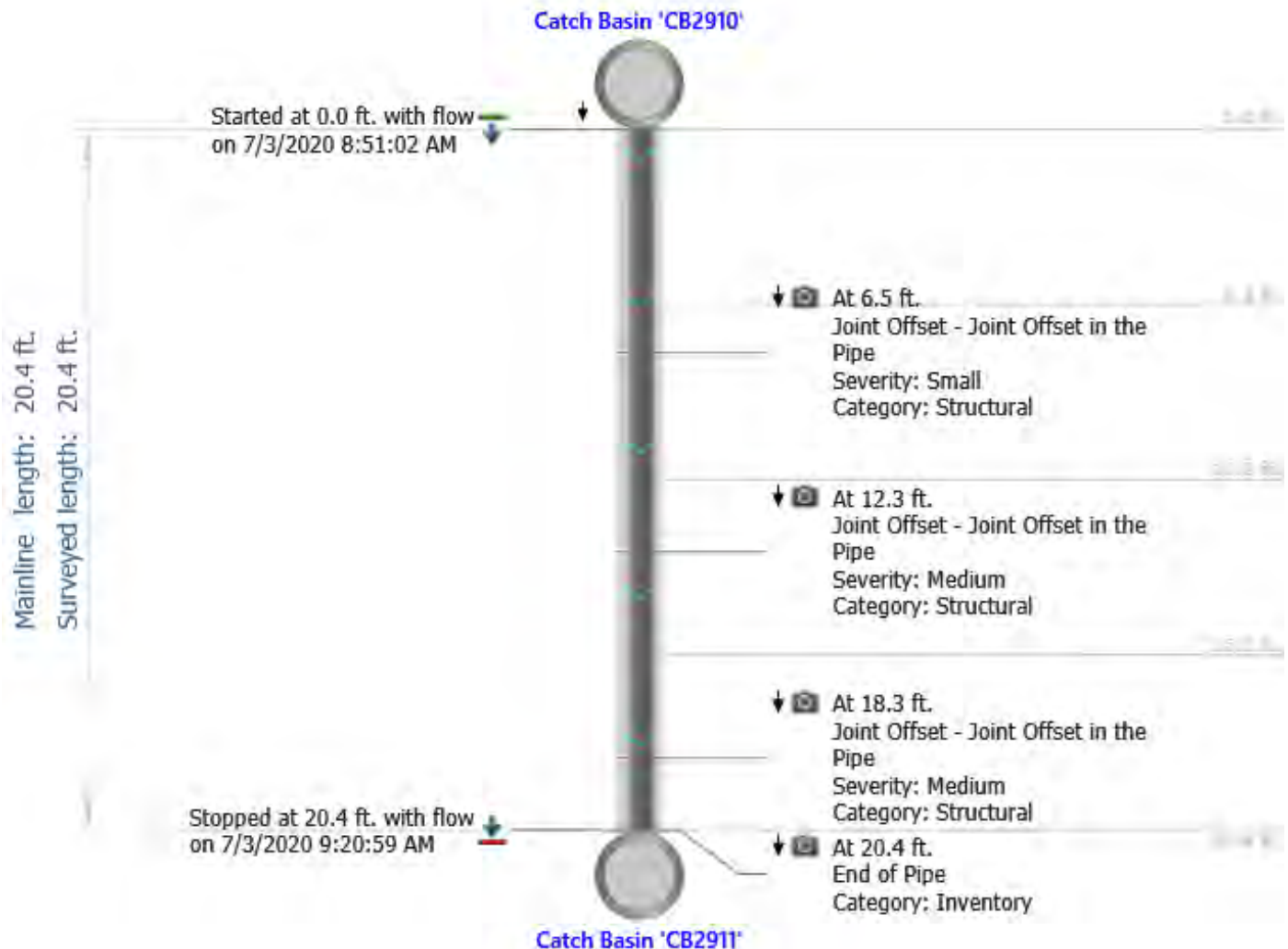
## Observations

| Distance  | Dir. | Length | From/To | Code             | Modifier/Severity | Rating | Comments                    |
|---|------|--------|---------|------------------|-------------------|--------|-----------------------------|
| 70.5 ft.  | D    |        | 6 / 10  | Root-in-Joint    | Medium            |        |                             |
| <div> <div> Distance: 70.5 ft.<br/> Root-in-Joint - Root problem in joint<br/> Medium<br/> Clock from: 6 o'clock<br/> Clock to: 10 o'clock<br/> Rating: </div>  </div> |      |        |         |                  |                   |        |                             |
| 73.4 ft.  | D    |        | /       | Abandoned Survey |                   |        | Could not pass roots/debris |



## LONG-SD-CB2910-CB2911

|   |  |  |                                     |
|---|--|--|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>              | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>               | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 8:51 AM</b> | Direction:<br><b>With the flow</b>     | Field-measured mainline length:<br><b>20.4 ft.</b> | Surveyed length:<br><b>20.4 ft.</b> |
| Upstream node:<br><b>CB2910</b>             | Downstream node:<br><b>CB2911</b>      | Depth US:  | Weather:<br><b>Dry</b>              |
| Pipe type:<br><b>Storm Drain (SD)</b>       | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>       | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                   |  |  |                                     |





DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB2910-CB2911

|   |  |  |                                     |
|---|--|--|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>              | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>               | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 8:51 AM</b> | Direction:<br><b>D</b>                 | Field-measured mainline length:<br><b>20.4 ft.</b> | Surveyed length:<br><b>20.4 ft.</b> |
| Upstream node:<br><b>CB2910</b>             | Downstream node:<br><b>CB2911</b>      | Depth US:<br><b>12.3 ft.</b>                       | Weather:<br><b>Dry</b>              |
| Pipe type:<br><b>Storm Drain (SD)</b>       | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>       | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                   |  |  |                                     |

### Observations

| Distance | Dir. | Length | From/To | Code         | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|--------------|-------------------|--------|----------|
| 6.5 ft.  | D    |        | /       | Joint Offset | Small             |        |          |



|          |   |  |   |              |        |  |  |
|----------|---|--|---|--------------|--------|--|--|
| 12.3 ft. | D |  | / | Joint Offset | Medium |  |  |
|----------|---|--|---|--------------|--------|--|--|



## Observations

| Distance | Dir. | Length | From/To | Code         | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|--------------|-------------------|--------|----------|
| 18.3 ft. | D    |        | /       | Joint Offset | Medium            |        |          |



|          |   |  |   |             |  |  |  |
|----------|---|--|---|-------------|--|--|--|
| 20.4 ft. | D |  | / | End of Pipe |  |  |  |
|----------|---|--|---|-------------|--|--|--|

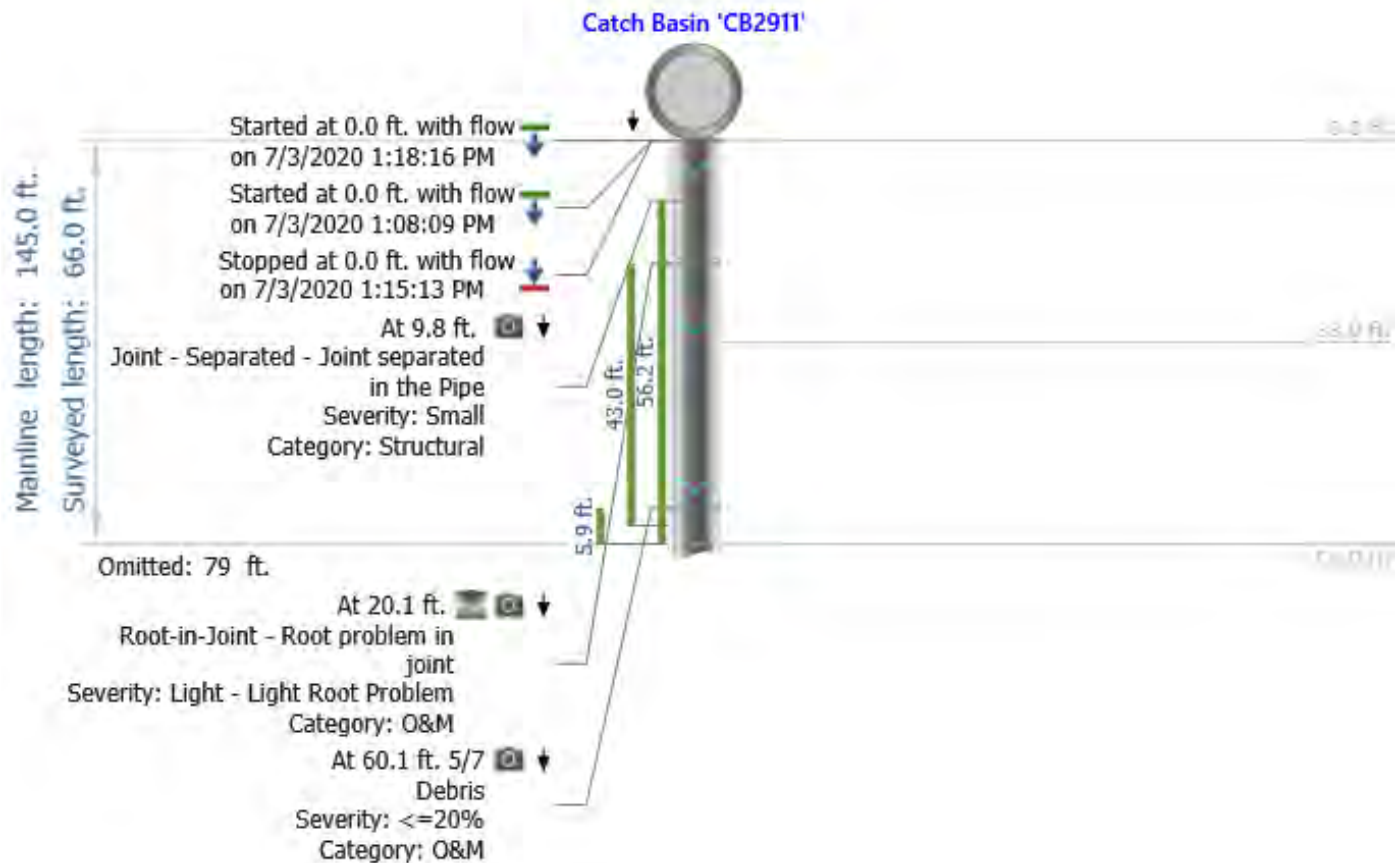






## LONG-SD-CB2911-CB2909

|   |  |   |                                     |
|---|--|---|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>              | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 1:08 PM</b> | Direction:<br><b>With the flow</b>     | Field-measured mainline length:<br><b>145.0 ft.</b> | Surveyed length:<br><b>66.0 ft.</b> |
| Upstream node:<br><b>CB2911</b>             | Downstream node:<br><b>CB2909</b>      | Depth US:   | Weather:<br><b>Light Rain</b>       |
| Pipe type:<br><b>Storm Drain (SD)</b>       | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                   |  |   |                                     |



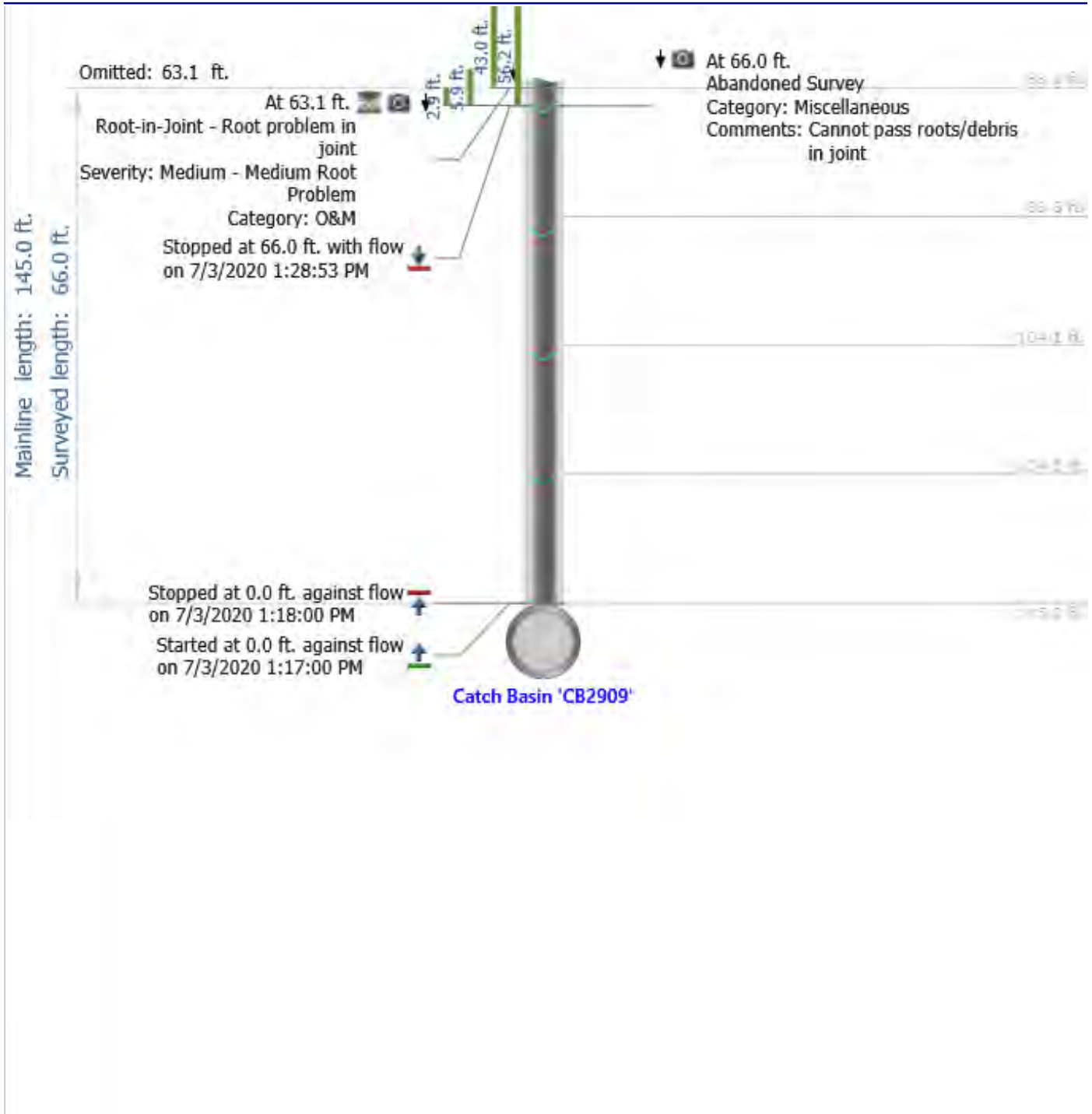
Project name:  
**Longmeadow, MA**

Mainline ID:  
**LONG-SD-CB2911-CB2909**

Start date/time:  
**7/3/2020 1:08 PM**

Direction:  
**With the flow**

Weather:  
**Light Rain**







DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB2911-CB2909

|   |  |   |                                     |
|---|--|---|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>              | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 1:08 PM</b> | Direction:<br><b>D</b>                 | Field-measured mainline length:<br><b>145.0 ft.</b> | Surveyed length:<br><b>66.0 ft.</b> |
| Upstream node:<br><b>CB2911</b>             | Downstream node:<br><b>CB2909</b>      | Depth US:<br><b>Light Rain</b>                      | Weather:<br><b>Light Rain</b>       |
| Pipe type:<br><b>Storm Drain (SD)</b>       | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                   |  |   |                                     |

### Observations

| Distance | Dir. | Length   | From/To | Code              | Modifier/Severity | Rating | Comments |
|----------|------|----------|---------|-------------------|-------------------|--------|----------|
| 9.8 ft.  | D    | 56.2 ft. | /       | Joint - Separated | Small             |        |          |



## Observations

| Distance | Dir. | Length | From/To | Code | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|------|-------------------|--------|----------|
|----------|------|--------|---------|------|-------------------|--------|----------|

|          |   |          |   |               |       |  |  |
|----------|---|----------|---|---------------|-------|--|--|
| 20.1 ft. | D | 43.0 ft. | / | Root-in-Joint | Light |  |  |
|----------|---|----------|---|---------------|-------|--|--|



|          |   |         |       |        |       |  |  |
|----------|---|---------|-------|--------|-------|--|--|
| 60.1 ft. | D | 5.9 ft. | 5 / 7 | Debris | <=20% |  |  |
|----------|---|---------|-------|--------|-------|--|--|



## Observations

| Distance | Dir. | Length | From/To | Code | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|------|-------------------|--------|----------|
|----------|------|--------|---------|------|-------------------|--------|----------|

|          |   |         |   |               |        |  |  |
|----------|---|---------|---|---------------|--------|--|--|
| 63.1 ft. | D | 2.9 ft. | / | Root-in-Joint | Medium |  |  |
|----------|---|---------|---|---------------|--------|--|--|



|          |   |  |   |                  |  |  |  |
|----------|---|--|---|------------------|--|--|--|
| 66.0 ft. | D |  | / | Abandoned Survey |  |  |  |
|----------|---|--|---|------------------|--|--|--|

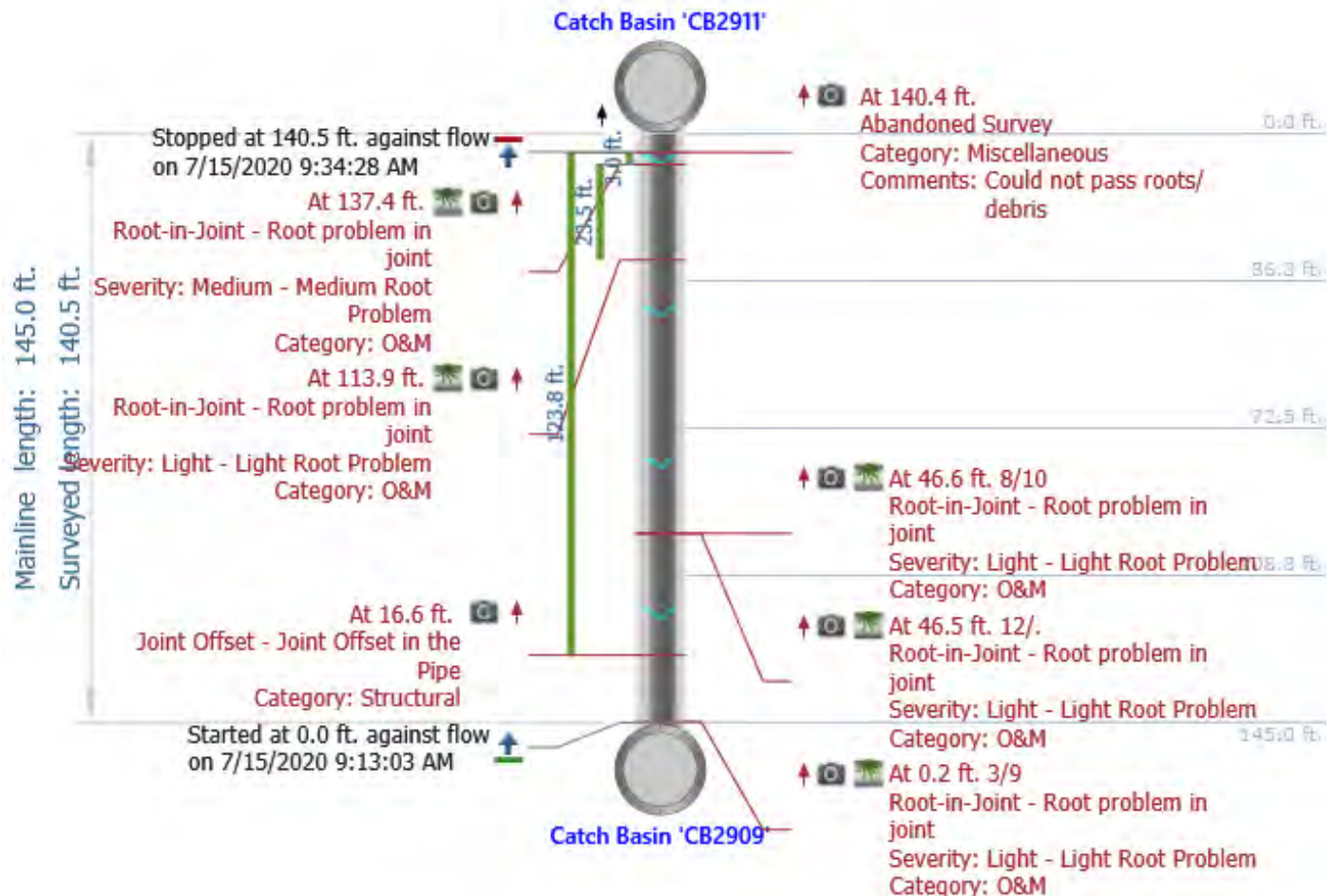
**Cannot pass  
roots/debris in joint**





## LONG-SD-CB2911-CB2909

|  |  |   |                                      |
|--|--|---|--------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>             |
| Start date/time:<br><b>7/15/2020 9:13 AM</b> | Direction:<br><b>Against the flow</b>  | Field-measured mainline length:<br><b>145.0 ft.</b> | Surveyed length:<br><b>140.5 ft.</b> |
| Upstream node:<br><b>CB2911</b>              | Downstream node:<br><b>CB2909</b>      | Depth US:   | Weather:<br><b>Dry</b>               |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>12.0 in.</b>    |
| Comments:                                    |  |   |                                      |





DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB2911-CB2909

|  |  |   |                                      |
|--|--|---|--------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>                | Operator:<br><b>Mike</b>             |
| Start date/time:<br><b>7/15/2020 9:13 AM</b> | Direction:<br><b>U</b>                 | Field-measured mainline length:<br><b>145.0 ft.</b> | Surveyed length:<br><b>140.5 ft.</b> |
| Upstream node:<br><b>CB2911</b>              | Downstream node:<br><b>CB2909</b>      | Depth US:   | Weather:<br><b>Dry</b>               |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>        | Pipe diameter:<br><b>12.0 in.</b>    |
| Comments:                                    |  |   |                                      |

### Observations

| Distance | Dir. | Length | From/To | Code          | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|---------------|-------------------|--------|----------|
| 0.2 ft.  | U    |        | 3 / 9   | Root-in-Joint | Light             |        |          |






16.6 ft. U 123.8 ft. / Joint Offset





## Observations

| Distance  | Dir. | Length   | From/To | Code          | Modifier/Severity | Rating | Comments |
|---|------|----------|---------|---------------|-------------------|--------|----------|
| 46.5 ft.  | U    |          | 12 /    | Root-in-Joint | Light             |        |          |
| <div> <p>Distance: 46.5 ft.<br/> Root-in-Joint - Root problem in joint<br/> Light<br/> Clock from: 12 o'clock<br/> Clock to:<br/> Rating:</p>  </div>            |      |          |         |               |                   |        |          |
| 46.6 ft.  | U    |          | 8 / 10  | Root-in-Joint | Light             |        |          |
| <div> <p>Distance: 46.6 ft.<br/> Root-in-Joint - Root problem in joint<br/> Light<br/> Clock from: 8 o'clock<br/> Clock to: 10 o'clock<br/> Rating:</p>  </div> |      |          |         |               |                   |        |          |
| 113.9 ft.   | U    | 23.5 ft. | /       | Root-in-Joint | Light             |        |          |
| <div> <p>Distance: 113.9 ft.<br/> Root-in-Joint - Root problem in joint<br/> Light<br/> Clock from:<br/> Clock to:<br/> Rating:</p>  </div>                    |      |          |         |               |                   |        |          |



## Observations

| Distance | Dir. | Length | From/To | Code | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------|------|-------------------|--------|----------|
|----------|------|--------|---------|------|-------------------|--------|----------|

|           |   |         |   |               |        |  |  |
|-----------|---|---------|---|---------------|--------|--|--|
| 137.4 ft. | U | 3.0 ft. | / | Root-in-Joint | Medium |  |  |
|-----------|---|---------|---|---------------|--------|--|--|



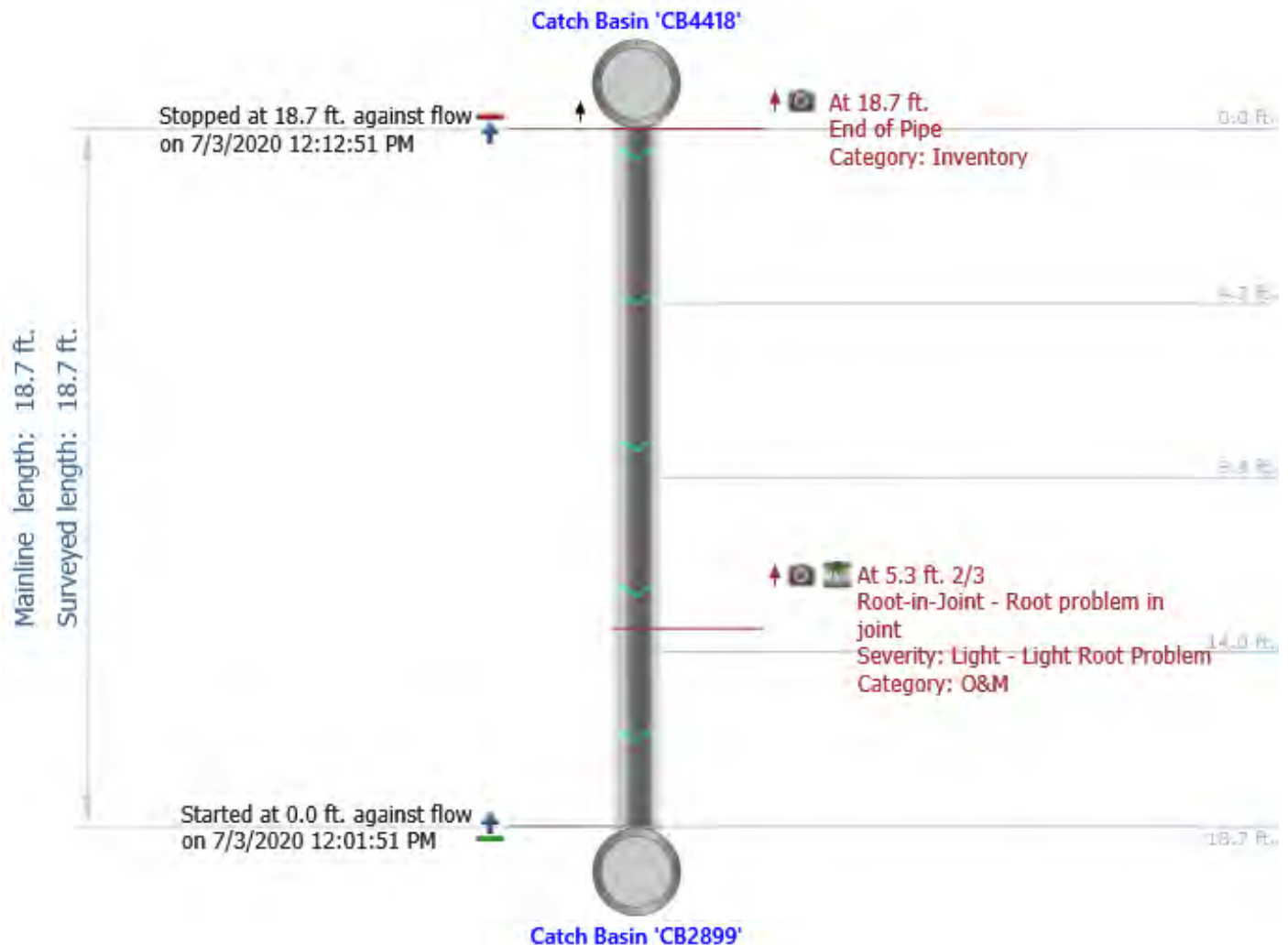
|           |   |  |   |                  |  |  |                             |
|-----------|---|--|---|------------------|--|--|-----------------------------|
| 140.4 ft. | U |  | / | Abandoned Survey |  |  | Could not pass roots/debris |
|-----------|---|--|---|------------------|--|--|-----------------------------|





## LONG-SD-CB4418-CB2899

|  |  |  |                                     |
|--|--|--|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>               | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 12:01 PM</b> | Direction:<br><b>Against the flow</b>  | Field-measured mainline length:<br><b>18.7 ft.</b> | Surveyed length:<br><b>18.7 ft.</b> |
| Upstream node:<br><b>CB4418</b>              | Downstream node:<br><b>CB2899</b>      | Depth US:  | Weather:<br><b>Light Rain</b>       |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>       | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                    |  |  |                                     |





DPC Engineering, LLC  
22 Northfield Road  
Longmeadow, MA 01106  
Phone: 413-567-6310  
Email: cctv@dpcengineering.com

## LONG-SD-CB4418-CB2899

|  |  |  |                                     |
|--|--|--|-------------------------------------|
| City:<br><b>Longmeadow, MA</b>               | Project name:<br><b>Longmeadow, MA</b> | Address:<br><b>Willow Brook Road</b>               | Operator:<br><b>Mike</b>            |
| Start date/time:<br><b>7/3/2020 12:01 PM</b> | Direction:<br><b>U</b>                 | Field-measured mainline length:<br><b>18.7 ft.</b> | Surveyed length:<br><b>18.7 ft.</b> |
| Upstream node:<br><b>CB4418</b>              | Downstream node:<br><b>CB2899</b>      | Depth US:  | Weather:<br><b>Light Rain</b>       |
| Pipe type:<br><b>Storm Drain (SD)</b>        | Pipe shape:<br><b>Circular</b>         | Pipe material:<br><b>Concrete Reinforced</b>       | Pipe diameter:<br><b>12.0 in.</b>   |
| Comments:                                    |  |  |                                     |

### Observations

| Distance | Dir. | Length | From/To       | Code | Modifier/Severity | Rating | Comments |
|----------|------|--------|---------------|------|-------------------|--------|----------|
| 5.3 ft.  | U    | 2 / 3  | Root-in-Joint |      | Light             |        |          |



|          |   |   |             |
|----------|---|---|-------------|
| 18.7 ft. | U | / | End of Pipe |
|----------|---|---|-------------|

