



# Storm Sewer Apron & Pond Inventory Report

City of Isanti, MN

September, 2016

**Submitted by:**

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*Storm Apron Inventory*

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*2016 Storm Sewer Aprons & Ponds Inventory*

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*5-Year Storm Sewer Aprons & Ponds Maintenance Plan*

**CERTIFICATION**

**Storm Sewer Apron & Pond Inventory**

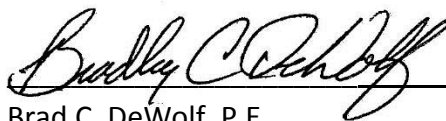
**For**

**The City of Isanti, Minnesota**

**Bolton & Menk Project No. R13.110980**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By:



Brad C. DeWolf, P.E.

License No. 24000

Signed Date: September 21, 2016

## **INTRODUCTION**

The maintenance of storm ponds and adjacent storm sewer structures are vital to the effectiveness of the surface water conveyance system. Once a structure or pond becomes full of debris or breaks down structurally it will no longer perform as intended and have adverse effects on the surrounding land use. The city of Isanti has over 500 inlet/outlet structures along ditches, wetlands and storm water ponds.

The City has been designated as a Municipal Separate Storm Sewer System (MS4) community. One of the requirements of this MS4 permit is to document, inspect and maintain all storm water discharge points and ponds on a set schedule.

The goal of this report is to assist the City with understanding its current system condition, assist with management of these assets, and provide recommendations for maintenance over the next 5 years.

Over the past year Bolton & Menk, Inc. staff has conducted visual inspections of all storm water ponds and appurtenances. This process was undertaken to determine the current condition of these assets and rate their condition relative to each other. The City can use this baseline data for determining the appropriate timing of cost effective maintenance treatments.

The visual conditions were evaluated using a series of rating systems. These ratings were used to identify locations of need and to prioritize those needs through comparative analysis of segment rating values. This information provides the mechanism for the City of Isanti to analyze the condition of the assets in the future.

## **EXISTING CONDITIONS**

The storm sewer system in the City has been developed in multiple different segments. As each subdivision is constructed a new storm sewer system is created. Most of these systems are comprised of catch basins, storm sewer pipe and ponds that ultimately discharge into wetlands, ditches, and creeks. Some of these systems have been in place for many years without being inspected for failures. The current maintenance program has been to address issues only after they have caused property damage or have received complaints.

The majority of the storm sewer system is comprised of reinforced concrete pipe (RCP) and concrete catch basins, manholes and aprons. Many of the existing RCP aprons also have trash guards on them. Many of the culverts within the City are corrugated metal pipes (CMP) without separate aprons.

There are two types of ponds within the City, dry ponds and wet ponds. Dry ponds utilize infiltration to reduce runoff and treat the storm water. Wet ponds utilize standing water called dead storage to slow the storm water runoff and allow sediment to settle out before discharging into wetlands and streams.

The City of Isanti has Type A soils which are sandy and are optimal for dry pond construction due to their high infiltration rate.

## **EVALUATION & EXECUTION**

Each pond and apron in the City was evaluated in the field during the winter of 2015 and spring of 2016 by Bolton & Menk, Inc staff. The evaluation was completed using a field map, GIS, and spreadsheets. Bolton & Menk, Inc. staff visually inspected and documented each component's condition extents by assigning a rating, recording pertinent field note information, and capturing important defect information and locations. This process was undertaken to determine the current condition of these assets and rate their condition relative to each other. The City can use this baseline data for determining the appropriate timing of cost effective maintenance treatments and future inspections.

The visual conditions were evaluated using a series of rating systems. These ratings were used to identify locations of need and to prioritize those needs through comparative analysis of segment rating values. This information provides the mechanism for the City of Isanti to analyze the condition of the assets in the future.

### **STORM SEWER APRONS**

The condition of storm sewer aprons are affected by several factors, including:

- Age and Structural Degradation
- Material
- Sediment Accumulation
- Vegetation
- Erosion
- Current Maintenance Frequency

Each of the above listed items were taken into account when determining a timely need for maintenance and restoration. Upon visual inspection each structure was giving a rating of 1 to 5. The methodology is based on rating several factors on a scale ranging from 1 for a newly installed apron or culvert to a 5 for fully defective. Submerged aprons were not able to be assessed. The majority of the structures in the City follow a general condition rating curve.

### **PONDS**

The condition of storm water ponds are affected by several factors, including:

- Sediment Accumulation
- Vegetation
- Erosion
- Current Maintenance Frequency

Each of the above listed items were taken into account when determining a timely need for maintenance and restoration. Upon visual inspection each pond was giving a rating of percent sediment accumulation and vegetation overgrowth in the surrounding area. Inadequate maintenance of vegetation can lead to inlets and outlets becoming blocked and inefficient. The vast majority of the ponds are in good condition.

To better understand the rating methodology, the following photos are examples of each rating:



*Figure 1: Storm Sewer Apron with a 1 Rating*



*Figure 2: Storm Sewer Apron with a 2 Rating*



*Figure 3: Storm Sewer Apron with a 3 Rating*



*Figure 4: Storm Sewer Apron with a 4 Rating*



*Figure 5: Storm Sewer Apron with a 5 Rating*



*Figure 6: Storm Pond with Heavy Vegetation Growth*



*Figure 7: Storm Pond with Medium Vegetation Growth*



*Figure 8: Storm Pond with Light Vegetation Growth*

## **RATING RESULTS**

The results of the evaluation are shown in Appendices A & B. Tables 1, 2 and 3 below show a summary of typical recommended maintenance options based on the current condition via the rating systems utilized. This strategy aided in finding patterns that will produce cost effective maintenance solutions.

Charts 1, 2 and 3 on the following pages graph the findings according to rating.

**Table 1: Typical Apron Condition Rating**

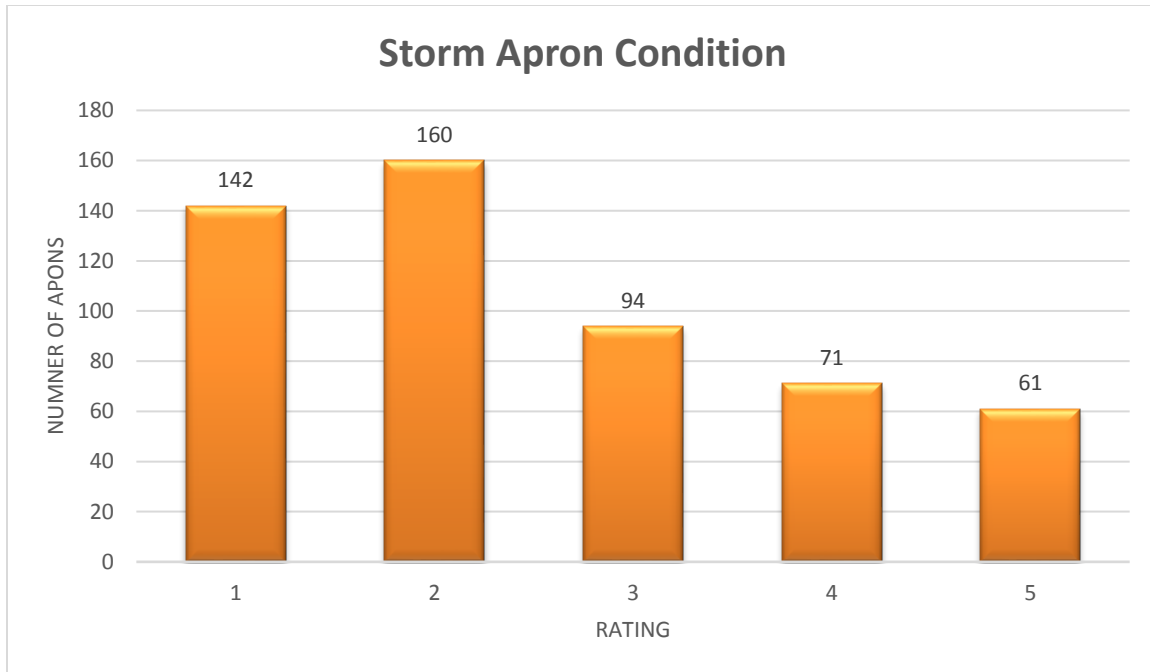
| <b>Apron Rating Condition</b> | <b>Typical Recommended Maintenance</b>                                                            |
|-------------------------------|---------------------------------------------------------------------------------------------------|
| 1                             | Do Nothing, Reassess in 5 years                                                                   |
| 2                             | Do Nothing, Reassess in 5 years                                                                   |
| 3                             | Do Nothing, Reassess in 2 years                                                                   |
| 4                             | Remove Sediment and Debris, Repair Apron as Needed,<br>Install Erosion Control Measures as Needed |
| 5                             | Remove Sediment and Debris, Repair Apron as Needed,<br>Install Erosion Control Measures as Needed |

**Table 2: Typical Pond Condition Rating (Sediment Accumulation)**

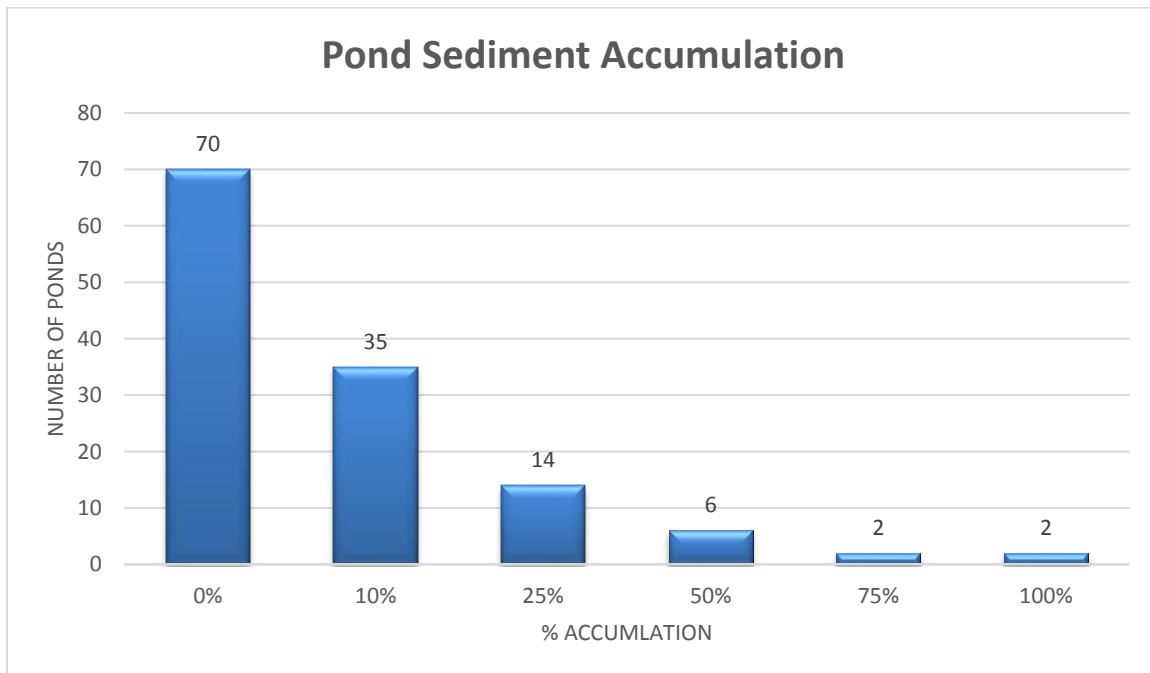
| <b>Pond Rating Condition (% full)</b> | <b>Typical Recommended Maintenance</b>                            |
|---------------------------------------|-------------------------------------------------------------------|
| 0%                                    | Do Nothing, Reassess in 5 years                                   |
| 10%                                   | Do Nothing, Reassess in 5 years                                   |
| 25%                                   | Do Nothing, Reassess in 5 years                                   |
| 50%                                   | Do Nothing, Reassess in 2 years                                   |
| 75%                                   | Dredge Pond Bottom,<br>Install Erosion Control Measures as Needed |
| 100%                                  | Dredge Pond Bottom,<br>Install Erosion Control Measures as Needed |

**Table 3: Typical Pond Condition Rating (Vegetation Growth)**

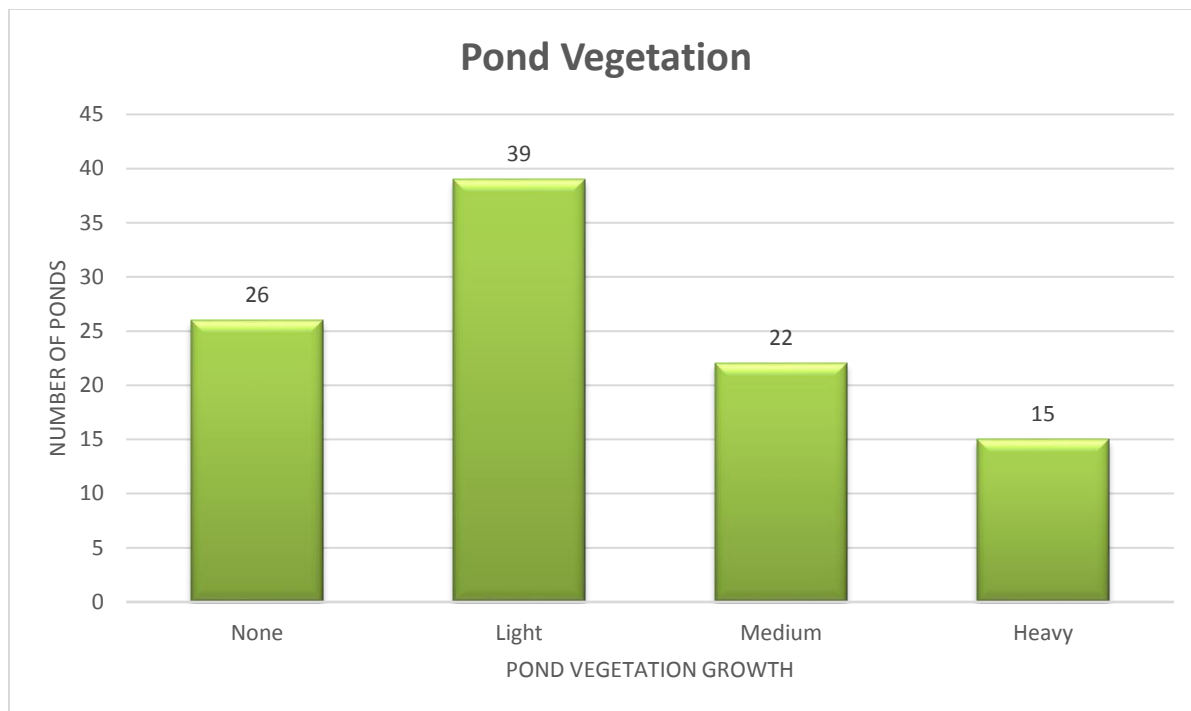
| <b>Pond Rating Condition (vegetation)</b> | <b>Typical Recommended Maintenance</b>           |
|-------------------------------------------|--------------------------------------------------|
| None                                      | Do Nothing, Reassess in 5 years                  |
| Light                                     | Do Nothing, Reassess in 5 years                  |
| Medium                                    | Do Nothing, Reassess in 2 years, Clear as Needed |
| Heavy                                     | Clear Overgrown Vegetation                       |



**CHART 1: STORM APRON RATING QUANTITIES**



**CHART 2: STORM POND SEDIMENT & DEBRIS ACCUMULAITON QUANTITIES**



**CHART 3: POND VEGETATION QUANTITIES**

The figure in Appendix C provides an all-encompassing map of the inventory.

Ponds rated as 75%-100% full as well as those with heavy brush were determined to require maintenance in the next 5 years. Fifteen ponds are considered overgrown with vegetation and four require dredging.

Storm aprons rated at a 4 and above require maintenance in the next 5 years. Approximately 25% of all storm sewer apron structures require maintenance.

This action will help ensure the efficiency and longevity of the system. The majority of ponds and aprons do not require any action at this time.

## **MAINTENANCE MANAGEMENT**

### **STORM SEWER TREATMENT OPTIONS**

Storm ponds are designed to allow sediment to settle out of storm water before it discharges into wetlands, streams, and adjacent properties. This sediment accumulates until the pond can no longer function as designed and may discharge sediment laden water prematurely. Pond dredging is required to maintain the dead storage required from the original pond design to continue to allow sediment to settle out. Pond Dredging is the act of going into an existing storm water pond and excavating out the accumulated sediment from the pond bottom. This material needs to be tested for toxins and may need to be treated as hazardous waste and disposed of properly. This work is commonly performed in winter months to limit possible discharges from the pond, and minimize disturbing the access points across manicured lawns. Dry ponds also require accumulated sediment to be removed. The sediment can build up and block inlet/outlet pipes from functioning correctly, cause the pond to flood due to reduced

volume within the dry pond, and it can reduce the rate the storm water can infiltrate into the soil by sealing up the surface. This restoration requires excavating the accumulated soil to the native soil and restoring the vegetation.

Brush clearing is also required to maintain access to storm aprons and ensure the pond slopes are stabilized. Once brush is too large to see storm aprons or drive equipment to perform needed repairs, the brush & trees should be removed. This work is commonly performed in the winter to reduce disturbing the soil.

Storm apron maintenance is site specific. The required maintenance is specific to each apron.

Generally ditch culverts will be less expensive to clean and maintain as rip rap is not used and they are more accessible. Storm pond aprons may require more action depending on the severity of the failures. In general the following items will need to be achieved when completing maintenance of the aprons:

- Clear apron and pipe of sediment, debris and vegetation
- Stabilize side slopes adjacent to the apron, discharge points are generally stabilized with rip rap, inlet points are not.
- Replace apron or trash guard if faulty
- Grade area around apron to allow for proper discharge of flow
- Clear existing rip rap of sediment accumulation

## **STORM SEWER TREATMENT COST ESTIMATING**

The costs associated with preventative maintenance and rehabilitation will vary depending on the process required. The costs to re-stabilize the existing side slopes, add or replace rip rap and possibly add or replace the entire apron will be greater than simply removing sediment and debris from aprons. In addition, pond dredging and clearing will be based on the size of the pond, the amount of sediment that needs to be removed, if that sediment is deemed hazardous waste, and accessibility.

The following table summarizes the unit costs developed per treatment option for the average storm sewer pond, pond apron, and ditch culvert within the City. The unit costs were developed based on local and statewide experience with similar type improvements and reflect input from local construction industry contacts.

**Table 4: Average Storm Sewer Maintenance Unit Costs**

| <b>Maintenance Item</b>  | <b>Avg Cost Per Each</b> |
|--------------------------|--------------------------|
| Ditch Culvert Apron      | \$ 2,500                 |
| Pond Apron               | \$ 3,000                 |
| Pond Dredging            | \$ 10,000                |
| Pond Vegetation Clearing | \$ 2,000                 |

## MAINTENANCE COSTS

Based on the unit costs established for each item in need of maintenance and geographical location of each item, a 5-year maintenance plan was developed to address the items in need of maintenance in a timely manner. The figure in Appendix D exhibits a map of the 5-year maintenance plan.

The costs associated with the Isanti 5-year maintenance plan are compiled in tables 5 – 10 and include a 3% annual inflation rate.

**Table 5: 5-Year Maintenance Cost Summary**

| MAINTENANCE COST SUMMARY |           |                         |                  |                     |                   |
|--------------------------|-----------|-------------------------|------------------|---------------------|-------------------|
| Funding Type: Local      |           |                         |                  |                     |                   |
| Year                     | Inflation | Storm Apron Maintenance | Pond Dredging    | Vegetation Clearing | Maintenance Total |
| 2017                     |           | \$ 24,000               | \$ -             | \$ 6,000            | \$ 30,000         |
| 2018                     | 3%        | \$ 79,310               | \$ 20,600        | \$ 4,120            | \$ 104,030        |
| 2019                     | 3%        | \$ 81,159               | \$ 10,609        | \$ 8,487            | \$ 100,255        |
| 2020                     | 3%        | \$ 116,375              | \$ -             | \$ 2,185            | \$ 118,561        |
| 2021                     | 3%        | \$ 100,170              | \$ 11,255        | \$ 9,004            | \$ 120,429        |
| <b>Total</b>             |           | <b>\$ 401,015</b>       | <b>\$ 42,464</b> | <b>\$ 29,797</b>    | <b>\$ 473,275</b> |

**Table 6: 2017 Cost Estimate**

| 2017 MAINTANENCE    |          |            |          |
|---------------------|----------|------------|----------|
| ITEM                | QUANTITY | UNIT PRICE | TOTAL    |
| DITCH CULVERTS      | 0        | \$2,500    | \$0      |
| POND APRONS         | 8        | \$3,000    | \$24,000 |
| POND DREDGING       | 0        | \$10,000   | \$0      |
| VEGETATION CLEARING | 3        | \$2,000    | \$6,000  |
| TOTAL:              |          |            | \$30,000 |

**Table 7: 2018 Cost Estimate**

| 2018 MAINTANENCE (3% Annual Inflation) |          |            |           |
|----------------------------------------|----------|------------|-----------|
| ITEM                                   | QUANTITY | UNIT PRICE | TOTAL     |
| DITCH CULVERTS                         | 2        | \$2,575    | \$5,150   |
| POND APRONS                            | 24       | \$3,090    | \$74,160  |
| POND DREDGING                          | 2        | \$10,300   | \$20,600  |
| VEGETATION CLEARING                    | 2        | \$2,060    | \$4,120   |
| TOTAL:                                 |          |            | \$104,030 |

**Table 8: 2019 Cost Estimate**

| 2019 MAINTANENCE (3% Annual Inflation) |          |            |           |
|----------------------------------------|----------|------------|-----------|
| ITEM                                   | QUANTITY | UNIT PRICE | TOTAL     |
| DITCH CULVERTS                         | 9        | \$2,652    | \$23,870  |
| POND APRONS                            | 18       | \$3,183    | \$57,289  |
| POND DREDGING                          | 1        | \$10,609   | \$10,609  |
| VEGETATION CLEARING                    | 4        | \$2,122    | \$8,487   |
| TOTAL:                                 |          |            | \$100,255 |

**Table 9: 2020 Cost Estimate**

| 2020 MAINTANENCE (3% Annual Inflation) |          |            |           |
|----------------------------------------|----------|------------|-----------|
| ITEM                                   | QUANTITY | UNIT PRICE | TOTAL     |
| DITCH CULVERTS                         | 33       | \$2,732    | \$90,150  |
| POND APRONS                            | 8        | \$3,278    | \$26,225  |
| POND DREDGING                          | 0        | \$10,927   | \$0       |
| VEGETATION CLEARING                    | 1        | \$2,185    | \$2,185   |
| TOTAL:                                 |          |            | \$118,561 |

**Table 10: 2021 Cost Estimate**

| 2021 MAINTANENCE (3% Annual Inflation) |          |            |           |
|----------------------------------------|----------|------------|-----------|
| ITEM                                   | QUANTITY | UNIT PRICE | TOTAL     |
| DITCH CULVERTS                         | 14       | \$2,814    | \$39,393  |
| POND APRONS                            | 18       | \$3,377    | \$60,777  |
| POND DREDGING                          | 1        | \$11,255   | \$11,255  |
| VEGETATION CLEARING                    | 4        | \$2,251    | \$9,004   |
| TOTAL:                                 |          |            | \$120,429 |

## **FUNDING**

### **PROPOSED FUNDING**

In 2013 in anticipation of becoming an MS4 community the City established a Storm Water Utility fee to perform needed maintenance and improvements on the City storm sewer system. This study along with the proposed maintenance plan is a direct result of the City becoming an MS4 City and the cost of this study, and all maintenance recommended in this study are what the Storm Water Utility fee was established to fund.

## **RECOMMENDATIONS**

### **POLICY DECISIONS AND RECOMMENDATIONS**

This report provides information to be used in determining a 5-year annual maintenance budget for the City. After the 5-year maintenance plan is complete all ponds and aprons that did not have maintenance performed should be reassessed and a future maintenance plan for the City storm sewer system could be established. The results of this plan provide a summary of the potential costs and a budgetary scenario that can be used as a model for the City system.

Recommendations are noted below:

- Adopt the 5-year maintenance plan as a framework for future maintenance of City storm sewer system.
- After the initial 5-year maintenance plan is complete, The City should continue performing inspections as required by the MS4 permit and perform ongoing maintenance as it is required.

## APPENDIX A

### *Storm Pond Inventory*

## Storm Pond Inventory

| FID | POND NO. | TYPE   | PERCENT FULL | BRUSH  | APRONS                     | LOCATION            | COMMENTS                                                                                                     | Northing   | Easting    |
|-----|----------|--------|--------------|--------|----------------------------|---------------------|--------------------------------------------------------------------------------------------------------------|------------|------------|
| 87  | P-1      | Wet    | 10           | Medium | 11, 13                     | CO RD 23            | OVERGROWN OUTLET, 2IN SEDIMENT                                                                               | 165198.379 | 453535.418 |
| 14  | P-2      | Dry    | 50           | Medium | 14, 15                     | IRONWOOD AVE SW     |                                                                                                              | 165968.873 | 453309.458 |
| 15  | P-3      | Dry    | 50           | Medium | 19, 20, 21                 | MAPLEWOOD AVE SW    |                                                                                                              | 167277.078 | 453999.656 |
| 16  | P-4      | Dry    | 25           | Light  | 17, 18                     | CO RD 23            |                                                                                                              | 167270.723 | 454332.817 |
| 18  | P-5      | Dry    | 10           | Light  | 30, 31, 167                | MARTINS LANDING RD  |                                                                                                              | 168033.857 | 453540.628 |
| 13  | P-7      | Dry    | 10           | Light  | 73, 74, 75, 77             | 6TH AVE SW          |                                                                                                              | 166709.269 | 455638.275 |
| 10  | P-8      | Dry    | 10           | None   | 110                        | SOUTH PASSAGE       |                                                                                                              | 166453.023 | 455971.315 |
| 9   | P-9      | Dry    | 10           | None   | 111                        | SOUTH PASSAGE       |                                                                                                              | 166442.062 | 456040.46  |
| 8   | P-10     | Dry    | 10           | None   | 154                        | SOUTH PASSAGE       |                                                                                                              | 166424.168 | 456064.571 |
| 7   | P-11     | Dry    | 10           | Medium | 152                        | SOUTH PASSAGE       |                                                                                                              | 166429.356 | 456141.973 |
| 12  | P-12     | Dry    | 10           | Light  | 153                        | 6TH AVE SW          |                                                                                                              | 166790.132 | 455851.615 |
| 11  | P-13     | Dry    | 100          | Light  | 150, 151                   | SOUTH PASSAGE       |                                                                                                              | 166548.731 | 456560.404 |
| 20  | P-14     | Dry    | 75           | Light  | 145, 146, 147              | 4TH AVE SW          |                                                                                                              | 167099.033 | 457150.869 |
| 24  | P-15     | Dry    | 25           | Heavy  | 137, 138                   | DOGWOOD ST SW       |                                                                                                              | 168058.79  | 456243.77  |
| 23  | P-16     | Dry    | 10           | None   | 134, 135, 136, 139         | 5TH AVE SW          |                                                                                                              | 168385.389 | 456503.203 |
| 22  | P-17     | Dry    | 25           | None   | 131, 133, 140, 141         | 4TH AVE SW          |                                                                                                              | 168452.088 | 456749.964 |
| 21  | P-18     | Dry    | 25           | Heavy  | 142, 144                   | DOGWOOD ST SW       |                                                                                                              | 168100.833 | 457103.024 |
| 90  | P-19     | Wet    | 0            | Heavy  | 129, 130                   | NINA CT             |                                                                                                              | 169343.891 | 457051.767 |
| 45  | P-20     | Dry    | 25           | Medium | 79, 80                     | S BROOKVIEW LN SW   |                                                                                                              | 170052.642 | 456157.114 |
| 5   | P-21     | Dry    | 10           | None   | 123, 294                   | CARLSON DR SW       |                                                                                                              | 165113.759 | 456178.336 |
| 6   | P-22     | Dry    | 0            | Light  | 155                        | CARLSON DR SW       |                                                                                                              | 165599.061 | 456238.858 |
| 2   | P-23     | Dry    | 25           | Heavy  | 164, 165                   | DEER HAVEN CT SE    |                                                                                                              | 165205.201 | 457835.397 |
| 4   | P-25     | Wet    | 0            | Light  | 157, 158, 159, 546         | DEER HAVEN DR SE    |                                                                                                              | 166339.69  | 457589     |
| 48  | P-26     | Dry    | 10           | Light  | 7                          | CENTENNIAL DR       |                                                                                                              | 170749.493 | 454367.892 |
| 49  | P-29     | Dry    | 10           | Light  | 108, 109                   | BROOKVIEW CT NW     |                                                                                                              | 171346.32  | 455927.859 |
| 104 | P-30     | Wet    | 0            | None   | 124                        | 2ND AVE NW          | CANNOT DETERMINE SEDIMENT                                                                                    | 169550.401 | 457223.407 |
| 97  | P-32     | Wet    | 0            | None   |                            | RAILROAD AVE SE     |                                                                                                              | 169151.391 | 458006.273 |
| 101 | P-34     | Wet    | 10           | Heavy  | 327, 328                   | ARABIAN LN SE       | 1IN SEDIMENT IN OUTLET                                                                                       | 168692.157 | 459353.856 |
| 37  | P-36     | Dry    | 50           | Medium | 330, 333                   | PALOMINO RD SE      |                                                                                                              | 169093.885 | 460088.475 |
| 33  | P-37     | Dry    | 0            | None   | 501, 502, 503, 504         | MAIN ST W           | CITY HALL                                                                                                    | 170967.249 | 458109.994 |
| 41  | P-38     | Dry    | 25           | Light  | 313, 450, 451, 507         | HERITAGE BLVD NE    |                                                                                                              | 171625.672 | 459251.685 |
| 96  | P-39     | Wet    | 0            | Light  | 314, 315, 316, 317         | CHERRYWOOD ST NE    | NO SEDIMENT IN OUTLET                                                                                        | 171155.845 | 459751.237 |
| 7   | P-40     | Wet    | 0            | Medium | 402, 403, 404, 405         | 8TH AVE CT NE       | CANNOT DETERMINE SEDIMENT                                                                                    | 171039.011 | 462547.664 |
| 3   | P-42     | Dry    | 0            | None   | 411, 412                   | MARION ST SE        |                                                                                                              | 169899.978 | 462775.875 |
| 1   | P-43     | Dry    | 10           | Medium | 413                        | MARION ST SE        | 1IN SEDIMENT IN APRON                                                                                        | 169962.886 | 463311.579 |
| 4   | P-44     | Dry    | 10           | Medium | 423                        | MARION ST SE        | 2IN SEDIMENT IN APRON                                                                                        | 169695.478 | 463491.154 |
| 83  | P-45     | Medium | 0            | Medium | 428, 429, 430, 431         | BUCKSKIN ST SE      | CANNOT DETERMINE SEDIMENT                                                                                    | 169169.149 | 464535.419 |
| 86  | P-46     | Wet    | 25           | Heavy  | 427                        | 11TH AVE SE         | 8IN SEDIMENT IN APRON                                                                                        | 170298.899 | 464289.723 |
| 32  | P-47     | Wet    | 10           | Heavy  | 182, 536, 537              | RUM RIVER DR NW     | NO SEDIMENT IN SKIMMER STRUCTURES                                                                            | 172656.079 | 453250.659 |
| 31  | P-48     | Dry    | 0            | None   | 25, 179, 180               | RUM RIVER DR NW     |                                                                                                              | 172699.05  | 453780.617 |
| 34  | P-49     | Dry    | 10           | Light  | 188, 190, 191              | MELODY CT           | 1IN SEDIMENT IN OUTFALL                                                                                      | 173144.822 | 453750.414 |
| 36  | P-51     | Wet    | 10           | Medium | 193, 194, 195, 196         | BERGMAN CT NW       | 4IN SEDIMENT IN OUTLET                                                                                       | 174075.087 | 453409.575 |
| 35  | P-52     | Dry    | 10           | Light  | 197, 310                   | BLOSSOM BLVD NW     |                                                                                                              | 173929.028 | 453959.122 |
| 46  | P-53     | Dry    | 10           | None   | 198, 199, 200, 201, 202    | FARFIELD PLACE NW   | 2IN SEDIMENT IN APRONS                                                                                       | 174040.557 | 455111.165 |
| 50  | P-54     | Dry    | 50           | Medium | 175, 176, 177, 527         | HERITAGE BLVD NW    |                                                                                                              | 171902.696 | 455427.171 |
| 51  | P-55     | Dry    | 25           | Medium | 168, 528                   | HERITAGE BLVD NW    |                                                                                                              | 171848.672 | 455503.595 |
| 52  | P-56     | Dry    | 10           | Light  | 169, 170, 174              | HERITAGE BLVD NW    |                                                                                                              | 171983.331 | 455505.043 |
| 47  | P-57     | Wet    | 0            | Light  | 239, 240, 241, 242, 243    | PARK BROOK RD NW    | CANNOT DETERMINE SEDIMENT                                                                                    | 173229.776 | 456002.826 |
| 93  | P-58     | Wet    | 0            | Light  | 234, 236, 237              | 3RD AVE NW          | NO SEDIMENT IN OUTLET                                                                                        | 172786.869 | 456949.597 |
| 48  | P-59     | Wet    | 25           | Heavy  | 226, 227, 228, 229         | RODEO DR NW         | 6IN SEDIMENT IN OUTLET                                                                                       | 173720.864 | 456126.305 |
| 92  | P-60     | Wet    | 0            | Light  | 249, 250, 253, 254, 320, 5 | 1ST AVE NW          | NO SEDIMENT IN OUTLET, WATER LEVEL WELL BELOW APRONS                                                         | 172288.011 | 457755.507 |
| 67  | P-61     | Dry    | 25           | Light  | 297, 506                   | E DUAL BLVD NE      | NEXT TO WATER TOWER, 6IN SEDIMENT IN APRON                                                                   | 173333.086 | 458787.556 |
| 52  | P-62     | Wet    | 0            | Light  | 263, 264, 490, 500         | BMX BUILDING        | NO SEDIMENT IN OUTLET                                                                                        | 173948.836 | 458375.895 |
| 53  | P-63     | Dry    | 0            | None   | 498, 499                   | BMX BUILDING        |                                                                                                              | 174062.134 | 458315.303 |
| 54  | P-64     | Dry    | 0            | None   | 496, 497                   | BMX BUILDING        |                                                                                                              | 174158.122 | 458307.372 |
| 55  | P-65     | Dry    | 0            | None   | 494, 495                   | BMX BUILDING        | NOT INFILTRATING                                                                                             | 174269.358 | 458326.989 |
| 56  | P-66     | Dry    | 0            | None   | 492, 493                   | BMX BUILDING        |                                                                                                              | 174354.177 | 458299.104 |
| 57  | P-67     | Wet    | 10           | Light  | 332, 418, 419              | E DUAL BLVD NE      | 1IN SEDIMENT IN OUTLET                                                                                       | 174155.776 | 458948.055 |
| 40  | P-68     | Dry    | 10           | Light  | 214, 215, 216, 217         | BELLAIRE BLVD NW    | 2IN SEDIMENT IN OUTLET                                                                                       | 175017.569 | 454690.806 |
| 38  | P-69     | Wet    | 0            | Light  | 218, 219                   | BELLAIRE BLVD NW    | SEDIMENT IN OUTLET FROM HILL EROSION, NOT POND BUILDUP, POND DOESNT REACH OUTLET, LITTLE SEDIMENT IN SKIMMER | 175555.74  | 454592.161 |
| 39  | P-70     | Wet    | 10           | Light  | 120, 121, 122              | BELLAIRE BLVD NW    | 1IN SEDIMENT IN OUTLET, SKIMMER FILLED WITH SEDIMENT TO INVERTS                                              | 175791.755 | 454638.001 |
| 41  | P-71     | Wet    | 0            | Heavy  | 212, 213                   | ISANTI PARKWAY NW   | NO SEDIMENT IN OUTLET                                                                                        | 175126.834 | 455310.412 |
| 44  | P-72     | Wet    | 10           | Heavy  | 208, 209                   | WHISKEY RD NW       | 1IN SEDIMENT IN OUTLET                                                                                       | 175324.093 | 455610.339 |
| 45  | P-73     | Wet    | 0            | Light  | 203, 204, 205, 206, 207    | WHISKEY RD NW       | CANNOT DETERMINE SEDIMENT                                                                                    | 175383.59  | 456037.712 |
| 65  | P-74     | Dry    | 0            | None   | 442, 484, 486, 489         | ISANTI PUBLIC WORKS | NO SEDIMENT IN OUTLET                                                                                        | 174580.69  | 458055.592 |
| 59  | P-75     | Wet    | 10           | Light  | 462, 463                   | ISANTI PARKWAY NW   | 1IN SEDIMENT IN OUTLET, CANNOT DETERMINE SEDIMENT IN SKIMMER, IN EVERCAT FACILITY                            | 174546.642 | 458925.648 |
| 58  | P-76     | Dry    | 10           | Medium | 459, 460, 461              | E DUAL BLVD NE      | 1IN SEDIMENT IN OUTLET                                                                                       | 174594.418 | 459312.513 |
| 62  | P-78     | Dry    | 10           | Light  | 285, 444, 445, 446, 447    | E DUAL BLVD NE      | 2IN SEDIMENT IN OUTLET                                                                                       | 175315.731 | 459387.405 |
| 22  | P-80     | Dry    | 10           | Medium | 354, 355                   | CAJUMA ST NE        | 1IN SEDIMENT IN APRON                                                                                        | 175993.707 | 461145.683 |
| 60  | P-84     | Wet    | 0            | Heavy  | 276, 289, 290, 292, 453    | E DUAL BLVD NE      | CANNOT DETERMINE SEDIMENT                                                                                    | 174812.107 | 459761.684 |
| 76  | P-85     | Dry    | 10           | None   | 511                        | HERITAGE BLVD       |                                                                                                              | 171761.169 | 461092.149 |
| 78  | P-86     | Wet    | 10           | Light  | 516                        | HERITAGE BLVD NE    |                                                                                                              | 171950.708 | 461191.166 |
| 11  | P-87     | Wet    | 0            | Light  | 393, 394, 396              | 8TH AVE NE          |                                                                                                              | 172243.067 | 463085.021 |
| 12  | P-88     | Wet    | 10           | Light  | 388, 389, 390, 392, 395    | 8TH AVE NE          | LITTLE SEDIMENT IN SKIMMER                                                                                   | 172435.058 | 463274.649 |
| 10  | P-89     | Wet    | 0            | Heavy  | 400, 401                   | WENDOVER ST NE      | CANNOT DETERMINE SEDIMENT                                                                                    | 172146.154 | 464367.971 |
| 28  | P-90     | Wet    | 25           | Medium | 478, 479, 545,             | 6TH AVE NE          | APRONS 4IN TO 6 IN FILLED                                                                                    | 173746.923 | 461140.908 |
| 14  | P-92     | Wet    | 0            | Heavy  | 382, 383                   | 10TH AVE NE         | CANNOT DETERMINE SEDIMENT                                                                                    | 173285.764 | 463181.009 |
| 15  | P-95     | Wet    | 0            | Light  | 523                        | 10TH AVE NE         | IN FARM FIELD, CANNOT DETERMINE SEDIMENT                                                                     | 173856.505 | 462994.671 |
| 27  | P-96     | Wet    | 0            | Medium | 375, 376, 377, 378, 379, 3 | 8TH AVE NE          | CANNOT DETERMINE SEDIMENT                                                                                    | 174743.351 | 462587.696 |
| 19  | P-97     | Wet    | 0            | Light  |                            | 8TH AVE NE          |                                                                                                              | 174451.14  | 462867.958 |
| 25  | P-98     | Wet    | 0            | Medium | 361, 457                   | 7TH AVE NE          | CANNOT DETERMINE SEDIMENT                                                                                    | 174905.955 | 461955.292 |
| 24  | P-99     | Wet    | 0            | Light  | 357, 358, 359, 541         | 6TH AVE CT NE       | CANNOT DETERMINE SEDIMENT                                                                                    | 174919.134 | 461610.915 |
| 32  | P-105    | Dry    | 75           | Heavy  | 127, 321                   | MAIN ST W           |                                                                                                              | 170784.133 | 458282.326 |
| 38  | P-106    | Dry    | 25           | None   |                            | CANDY LN SE         | 6IN PVC TO AP-336                                                                                            | 170193.091 | 460296.896 |

|     |       |     |     |          |                    |                     |                                                                                                 |            |            |
|-----|-------|-----|-----|----------|--------------------|---------------------|-------------------------------------------------------------------------------------------------|------------|------------|
| 40  | P-107 | Dry | 0   | None     | 318                | CHERRYWOOD ST NE    |                                                                                                 | 171064.306 | 459766.551 |
| 50  | P-108 | Dry | 0   | None     |                    | 470 3RD AVE NW      |                                                                                                 | 0          | 176795.741 |
| 51  | P-109 | Dry | 0   | None     |                    | 3RD AVE NW          |                                                                                                 | 0          | 176171.141 |
| 63  | P-110 | Dry | 100 | None     | 448, 542           | E DUAL BLVD NE      | OUTLET FULL OF SEDIMENT                                                                         |            | 175652.771 |
| 64  | P-111 | Dry | 0   | None     |                    | 543 E DUAL BLVD NE  |                                                                                                 |            | 175593.6   |
| 66  | P-112 | Dry | 0   | Medium   | 259, 260           | 1ST AVE NW          | NO SEDIMENT IN OUTLET                                                                           |            | 173352.317 |
| 69  | P-113 | Dry | 10  | Heavy    | 340                | BROADWAY ST NE      | APRON FILLED WITH NEST, NOT SEDIMENT FROM OVERFULL POND. POND SEDIMENT COMES TO BOTTOM OF APRON |            | 170471.62  |
| 70  | P-114 | Dry | 0   | Light    | 342                | 6TH AVE NE          |                                                                                                 |            | 170726.354 |
| 73  | P-115 | Dry | 10  | Light    | 344                | 6TH AVE NE          | SEDIMENT DOESNT REACH APRON                                                                     |            | 171099.56  |
| 72  | P-116 | Dry | 50  | Light    | 345                | OAKWOOD ST NE       | 8IN SEDIMENT IN APRON                                                                           |            | 171179.54  |
| 74  | P-117 | Dry | 50  | Light    | 346                | 6TH AVE NE          | 8IN SEDIMENT IN APRON                                                                           |            | 171572.482 |
| 75  | P-118 | Dry | 0   | Light    | 456, 552, 553, 554 | HERITAGE BLVD NE    |                                                                                                 |            | 171539.122 |
| 77  | P-119 | Dry | 10  | None     | 512, 513, 515      | HERITAGE BLVD NE    | 3IN SEDIMENT IN OUTLET                                                                          |            | 171775.214 |
| 0   | P-120 | Dry | 25  | Medium   | 424, 435           | 9TH AVE SE          | 6IN SEDIMENT IN APRON                                                                           |            | 170267.31  |
| 2   | P-121 | Wet | 0   | Medium   | 414, 415, 416      | 8TH AVE SE          | CANNOT DETERMINE SEDIMENT                                                                       |            | 169510.553 |
| 8   | P-122 | Wet | 0   | Medium   | 406                | 8TH AVE NE          |                                                                                                 |            | 170989.201 |
| 16  | P-123 | Wet | 0   | Light    |                    | 8TH AVE NE          |                                                                                                 |            | 172972.089 |
| 49  | P-124 | Wet | 0   | None     |                    | PARK BROOK RD NW    |                                                                                                 | 0          | 173856.692 |
| 88  | W-1   | Wet | 100 | Heavy    | 22                 | FLINTWOOD ST        | MOUND OF SEDIMENT IN FRONT OF APRON 22, SHOULD BE DUG OUT.                                      |            | 167507.082 |
| 89  | W-2   | Wet | 0   | Heavy    | 128                | NINA CT             | CANNOT DETERMINE                                                                                |            | 169443.691 |
| 91  | W-3   | Wet | 0   | Heavy    | 143                | COTTONWOOD ST       | CANNOT DETERMINE                                                                                |            | 168616.154 |
| 1   | W-4   | Wet |     | 0 Medium | 166                | DEER HAVEN CT SE    |                                                                                                 |            | 165318.441 |
| 99  | W-5   | Wet | 0   | Heavy    |                    | 551 RAILROAD AVE SE | CANNOT DETERMINE SEDIMENT                                                                       |            | 167627.6   |
| 100 | W-6   | Wet | 0   | Heavy    |                    | RAILROAD AVE SE     | CANNOT DETERMINE SEDIMENT                                                                       |            | 167636.731 |
| 98  | W-7   | Wet | 0   | Heavy    | 325, 326, 474, 476 | RAILROAD AVE SE     | CANNOT DETERMINE SEDIMENT                                                                       |            | 168341.004 |
| 71  | W-8   | Wet | 0   | Heavy    |                    | OAKWOOD ST NE       | CANNOT DETERMINE SEDIMENT                                                                       |            | 171167.084 |
| 5   | W-9   | Wet | 0   | Heavy    | 407, 458           | 8TH AVE SE          | CANNOT DETERMINE SEDIMENT                                                                       |            | 170817.878 |
| 9   | W-10  | Wet | 0   | Heavy    |                    | 8TH AVE NE          | CANNOT DETERMINE SEDIMENT                                                                       |            | 171594.579 |
| 80  | W-11  | Wet | 0   | Heavy    | 521                | 285TH ST SE         | CANNOT DETERMINE SEDIMENT                                                                       |            | 169041.543 |
| 82  | W-12  | Wet | 0   | Heavy    |                    | 10TH AVE SE         | CANNOT DETERMINE SEDIMENT                                                                       |            | 169199.248 |
| 81  | W-13  | Wet | 0   | Heavy    | 434, 522           | 285TH AVE SE        | CANNOT DETERMINE SEDIMENT                                                                       |            | 169079.333 |
| 85  | W-14  | Wet | 0   | None     | 433                | MARION ST SE        | CANNOT DETERMINE SEDIMENT                                                                       |            | 169889.12  |
| 84  | W-15  | Wet | 0   | Heavy    |                    | MARION ST SE        | CANNOT DETERMINE SEDIMENT                                                                       |            | 169905.301 |
| 33  | W-16  | Wet | 0   | Heavy    | 183, 184           | RUM RIVER DR NW     | CANNOT DETERMINE SEDIMENT                                                                       |            | 172852.94  |
| 42  | W-17  | Wet | 0   | Heavy    | 210, 211           | ISANTI PARKWAY NW   | CANNOT DETERMINE SEDIMENT                                                                       |            | 175115.732 |
| 79  | W-19  | Wet | 0   | Heavy    | 520                | HERITAGE BLVD NE    | CANNOT DETERMINE SEDIMENT                                                                       |            | 171734.08  |
| 13  | W-20  | Wet | 0   | Heavy    | 387, 391, 399      | WINSOME WAY NE      | CANNOT DETERMINE SEDIMENT                                                                       |            | 172779.596 |
| 29  | W-22  | Wet | 0   | Heavy    |                    | 480 6TH AVE NE      | CANNOT DETERMINE SEDIMENT                                                                       |            | 173511.142 |
| 21  | W-24  | Wet | 0   | Heavy    | 372, 373           | CAJIMA ST NE        | CANNOT DETERMINE SEDIMENT                                                                       |            | 175647.818 |
| 20  | W-25  | Wet | 0   | Heavy    | 381, 524           | 8TH AVE NE          | CANNOT DETERMINE SEDIMENT                                                                       |            | 174342.262 |
| 17  | W-26  | Wet | 0   | Heavy    |                    | 8TH AVE NE          | IN FARMLAND                                                                                     |            | 172786.007 |
| 18  | W-27  | Wet | 0   | Heavy    |                    | 8TH AVE NE          | CANNOT DETERMINE SEDIMENT                                                                       |            | 173393.639 |
| 103 | W-28  | Wet | 75  | Heavy    | 329                | PALOMINO RD SE      | APRON IS FULL                                                                                   |            | 169017.599 |
| 37  | W-29  | Wet | 0   | Heavy    | 192                | BERGMAN CT          | CANNOT DETERMINE                                                                                |            | 173665.745 |
| 23  | W-30  | Wet | 0   | Heavy    | 356                | CAJIMA ST NE        | CANNOT DETERMINE SEDIMENT                                                                       |            | 175694.965 |
| 68  | W-31  | Wet | 0   | Heavy    | 510                | E DUAL BLVD NE      | CANNOT DETERMINE SEDIMENT                                                                       |            | 173750.501 |
| 61  | W-32  | Wet | 0   | Heavy    | 491                | E DUAL BLVD NE      | CANNOT DETERMINE SEDIMENT                                                                       |            | 174731.378 |

## APPENDIX B

### *Storm Apron Inventory*

## Storm Apron Inventory

| FID | CULVERT NO. | SIZE | MATERIAL | TYPE    | PIPE CONDITION | MAINTENANCE | PERCENT FULL | RIPRAP | TRASH GUARD | LOCATION           | COMMENTS                                      | Northing   | Easting    |
|-----|-------------|------|----------|---------|----------------|-------------|--------------|--------|-------------|--------------------|-----------------------------------------------|------------|------------|
| 153 | 3           | 18   | CMP      | Inlet   | Poor           | 5 - Bad     | 50           | No     | No          | CO RD 23           |                                               | 170152.57  | 454717.653 |
| 152 | 4           | 18   | CMP      | Outfall | Poor           | 5 - Bad     | 50           | No     | No          | CO RD 23           |                                               | 170118.436 | 454697.718 |
| 180 | 5           | 18   | CMP      | Inlet   | Standard       | 4           | 75           | No     | No          | CHERRYWOOD LN NW   | DITCH FILLED                                  | 171377.705 | 455096.513 |
| 179 | 6           | 18   | CMP      | Outfall | Good           | 3           | 25           | No     | No          | CHERRYWOOD LN NW   |                                               | 171440.937 | 455102.02  |
| 174 | 7           | 15   | RCP      | Inlet   | Good           | 1 - None    | 0            | Yes    | Yes         | CENTENNIAL DR      |                                               | 170774.025 | 454332.255 |
| 175 | 9           | 12   | CMP      | Outfall | Poor           | 4           | 10           | No     | No          | CENTENNIAL DR      |                                               | 170596.281 | 454384.711 |
| 176 | 10          | 12   | CMP      | Inlet   | Standard       | 2           | 10           | No     | No          | CENTENNIAL DR      |                                               | 170597.019 | 454431.902 |
| 287 | 11          | 24   | RCP      | Inlet   | Standard       | 2           | 10           | Yes    | Yes         | CO RD 23           |                                               | 165205.809 | 453679.041 |
| 2   | 12          | 12   | RCP      | Outfall | Standard       | 2           | 10           | Yes    | Yes         | CO RD 23           |                                               | 165171.266 | 453828.438 |
| 288 | 13          | 18   | RCP      | Outfall | Standard       | 2           | 10           | Yes    | Yes         | CO RD 23           | OVERGROWN WITH GRASS                          | 165248.817 | 453346.586 |
| 35  | 14          | 15   | RCP      | Outfall | Good           | 2           | 10           | Yes    | Yes         | IRONWOOD AVE SW    |                                               | 165874.337 | 453277.844 |
| 36  | 15          | 27   | RCP      | Inlet   | Good           | 4           | 50           | No     | Yes         | IRONWOOD AVE SW    |                                               | 165992.421 | 453298.358 |
| 44  | 16          | 24   | RCP      | Outfall | Standard       | 5 - Bad     | 75           | No     | No          | CO RD 23           |                                               | 167020.919 | 454557.826 |
| 42  | 17          | 24   | RCP      | Outfall | Standard       | 3           | 25           | No     | No          | CO RD 23           | IN DITCH, NOT POND. BIT TRAIL BETWEEN THE TWO | 167019.731 | 454480.568 |
| 41  | 18          | 18   | RCP      | Inlet   | Good           | 4           | 25           | Yes    | Yes         | CO RD 23           |                                               | 167293.319 | 454314.669 |
| 37  | 19          | 18   | RCP      | Inlet   | Standard       | 5 - Bad     | 75           | Yes    | Yes         | MAPLEWOOD AVE SW   |                                               | 167299.21  | 454018.153 |
| 38  | 20          | 24   | RCP      | Inlet   | Good           | 4           | 50           | Yes    | Yes         | MAPLEWOOD AVE SW   |                                               | 167258.903 | 453657.433 |
| 289 | 22          | 24   | RCP      | Inlet   | Standard       | 2           | 10           | Yes    | Yes         | FLINTWOOD ST       | RIPRAP WASHED OUT                             | 167502.526 | 453266.678 |
| 52  | 23          | 21   | RCP      | Outfall | Good           | 3           | 25           | No     | Yes         | BIRCH ST SW        |                                               | 168912.683 | 454441.493 |
| 51  | 24          | 21   | PVC      | Inlet   | Good           | 1 - None    | 10           | No     | Yes         | BIRCH ST SW        |                                               | 168845.942 | 454441.83  |
| 80  | 25          | 24   | RCP      | Outfall | Standard       | 1 - None    | 0            | No     | Yes         | RUM RIVER DR NW    | A FEW LEAVES / NEWSPAPERS                     | 172685.979 | 453716.692 |
| 50  | 26          | 21   | RCP      | Inlet   | Good           | 1 - None    | 0            | Yes    | Yes         | MARTINS LANDING RD |                                               | 169032.395 | 453383.876 |
| 39  | 27          | 18   | RCP      | Outfall | Standard       | 3           | 25           | No     | Yes         | FLINTWOOD ST SW    |                                               | 167504.338 | 454474.427 |
| 40  | 28          | 18   | RCP      | Inlet   | Standard       | 5 - Bad     | 75           | No     | Yes         | FLINTWOOD ST SW    |                                               | 167453.707 | 454474.669 |
| 49  | 29          | 21   | RCP      | Inlet   | Good           | 1 - None    | 0            | Yes    | Yes         | MARTINS LANDING RD |                                               | 168987.839 | 453409.092 |
| 47  | 30          | 21   | RCP      | Outfall | Good           | 2           | 0            | No     | Yes         | MARTINS LANDING RD |                                               | 169021.358 | 453482.518 |
| 46  | 31          | 27   | RCP      | Inlet   | Good           | 2           | 10           | No     | Yes         | MARTINS LANDING RD |                                               | 169046.183 | 453540.247 |
| 53  | 32          | 18   | CMP      | Inlet   | Poor           | 5 - Bad     | 75           | No     | No          | MARTINS LANDING RD |                                               | 169070.999 | 454436.77  |
| 54  | 33          | 18   | CMP      | Outfall | Poor           | 5 - Bad     | 50           | No     | No          | MARTINS LANDING RD |                                               | 169120.672 | 454436.236 |
| 136 | 34          | 18   | CMP      | Inlet   | Poor           | 5 - Bad     | 75           | No     | No          | CO RD 23           |                                               | 169356.088 | 454431.004 |
| 137 | 35          | 18   | CMP      | Outfall | Poor           | 5 - Bad     | 75           | No     | No          | CO RD 23           |                                               | 169385.957 | 454432.603 |
| 138 | 36          | 18   | CMP      | Inlet   | Standard       | 4           | 50           | No     | No          | CO RD 23           |                                               | 169599.825 | 454458.824 |
| 139 | 37          | 18   | CMP      | Inlet   | Standard       | 4           | 50           | No     | No          | CO RD 23           |                                               | 169637.68  | 454466.436 |
| 140 | 38          | 18   | CMP      | Inlet   | Good           | 3           | 25           | No     | No          | CO RD 23           |                                               | 169665.83  | 454468.272 |
| 141 | 39          | 18   | CMP      | Outfall | Good           | 2           | 10           | No     | No          | CO RD 23           |                                               | 169701.843 | 454478.87  |
| 142 | 40          | 18   | CMP      | Inlet   | Standard       | 5 - Bad     | 75           | No     | No          | CO RD 23           |                                               | 169714.616 | 454491.673 |
| 143 | 41          | 18   | CMP      | Outfall | Poor           | 5 - Bad     | 75           | No     | No          | CO RD 23           |                                               | 169742.665 | 454501.823 |
| 148 | 42          | 18   | CMP      | Outfall | Standard       | 3           | 25           | No     | No          | CO RD 23           |                                               | 169909.874 | 454570.541 |
| 149 | 43          | 18   | CMP      | Inlet   | Poor           | 4           | 25           | No     | No          | CO RD 23           |                                               | 169944.958 | 454590.065 |
| 150 | 44          | 18   | CMP      | Outfall | Good           | 3           | 25           | No     | No          | CO RD 23           |                                               | 170026.896 | 454642.611 |
| 151 | 45          | 18   | CMP      | Inlet   | Good           | 4           | 50           | No     | No          | CO RD 23           |                                               | 170054.966 | 454660.133 |
| 161 | 46          | 30   | RCP      | Inlet   | Good           | 5 - Bad     | 0            | Yes    | Yes         | CO RD 23           | SERIOUS EROSION                               | 170299.435 | 454774.484 |
| 155 | 47          | 30   | RCP      | Inlet   | Good           | 1 - None    | 0            | Yes    | No          | S BROOKVIEW LN SW  |                                               | 170314.354 | 454798.198 |
| 154 | 48          | 15   | CMP      | Outfall | Standard       | 3           | 25           | No     | No          | S BROOKVIEW LN SW  | EXTENDED APRON                                | 170227.362 | 454839.296 |
| 156 | 49          | 15   | CMP      | Inlet   | Standard       | 2           | 10           | Yes    | No          | S BROOKVIEW LN SW  |                                               | 170266.081 | 454790.197 |
| 159 | 50          | 72   | CMP      | Inlet   | Good           | 5 - Bad     | 10           | No     | No          | CO RD 23           | GAS AND CHEMICALS ENTERING CREEK              | 170348.838 | 454795.574 |
| 158 | 51          | 72   | CMP      | Outfall | Good           | 4           | 25           | Yes    | No          | CO RD 23           |                                               | 170447.097 | 454999.427 |
| 160 | 52          | 72   | CMP      | Inlet   | Good           | 1 - None    | 10           | No     | No          | CO RD 23           |                                               | 170334.004 | 454793.597 |
| 157 | 53          | 72   | CMP      | Outfall | Good           | 1 - None    | 10           | Yes    | No          | CO RD 23           |                                               | 170431.191 | 454994.892 |
| 166 | 54          | 18   | CMP      | Inlet   | Good           | 4           | 50           | No     | No          | N BROOKVIEW LN SW  |                                               | 170545.236 | 454998.197 |
| 165 | 55          | 18   | CMP      | Outfall | Good           | 2           | 10           | Yes    | No          | N BROOKVIEW LN SW  |                                               | 170597.046 | 455015.231 |
| 167 | 56          | 24   | RCP      | Inlet   | Good           | 1 - None    | 0            | Yes    | Yes         | CO RD 23           |                                               | 170493.713 | 454900.165 |
| 169 | 57          | 15   | CMP      | Inlet   | Standard       | 5 - Bad     | 100          | No     | No          | CO RD 23           | BURIED                                        | 170502.426 | 454883.773 |
| 168 | 58          | 15   | CMP      | Outfall | Good           | 3           | 25           | No     | No          | CO RD 23           |                                               | 170541.005 | 454920.886 |
| 164 | 59          | 24   | RCP      | Outfall | Good           | 1 - None    | 0            | Yes    | Yes         | N BROOKVIEW LN SW  |                                               | 170675.009 | 455026.971 |
| 146 | 60          | 15   | CMP      | Inlet   | Standard       | 3           | 10           | No     | No          | MARION ST SW       |                                               | 170028.511 | 454721.341 |
| 147 | 61          | 15   | CMP      | Outfall | Standard       | 3           | 25           | No     | No          | MARION ST SW       |                                               | 169972.582 | 454886.001 |
| 144 | 62          | 18   | CMP      | Outfall | Poor           | 5 - Bad     | 100          | No     | No          | CO RD 23           |                                               | 169746.817 | 454569.667 |
| 145 | 63          | 18   | CMP      | Inlet   | Poor           | 5 - Bad     | 100          | No     | No          | CO RD 23           | BURIED                                        | 169680.548 | 454549.482 |
| 55  | 64          | 15   | CMP      | Inlet   | Poor           | 3           | 25           | No     | No          | MARTINS LANDING RD |                                               | 169112.487 | 454505.585 |
| 56  | 65          | 15   | CMP      | Outfall | Poor           | 5 - Bad     | 100          | No     | No          | MARTINS LANDING RD |                                               | 169082.443 | 454506.249 |
| 57  | 66          | 15   | CMP      | Inlet   | Poor           | 5 - Bad     | 50           | No     | No          | BIRCH ST SW        |                                               | 168907.534 | 454511.079 |
| 58  | 67          | 15   | CMP      | Outfall | Poor           | 5 - Bad     | 100          | No     | No          | BIRCH ST SW        |                                               | 168847.15  | 454510.396 |
| 59  | 68          | 15   | CMP      | Inlet   | Poor           | 4           | 25           | No     | No          | CEDAR ST SW        |                                               | 168509.504 | 454518.729 |
| 60  | 69          | 15   | CMP      | Outfall | Poor           | 5 - Bad     | 50           | No     | No          | CEDAR ST SW        |                                               | 168449.907 | 454520.228 |
| 62  | 70          | 15   | CMP      | Inlet   | Poor           | 5 - Bad     | 100          | No     | No          | DOGWOOD ST SW      |                                               | 168108.271 | 454528.389 |
| 61  | 71          | 15   | CMP      | Outfall | Poor           | 5 - Bad     | 50           | No     | No          | DOGWOOD ST SW      |                                               | 168048.048 | 454528.917 |
| 43  | 72          | 15   | RCP      | Outfall | Good           | 2           | 10           | No     | Yes         | CO RD 23           |                                               | 166991.432 | 454587.045 |
| 34  | 73          | 24   | RCP      | Inlet   | Good           | 4           | 25           | Yes    | Yes         | 6TH AVE SW         |                                               | 166787.277 | 455599.765 |
| 32  | 74          | 18   | RCP      | Inlet   | Good           | 3           | 25           | Yes    | Yes         | SOUTH PASSAGE      |                                               | 166615.065 | 455357.909 |
| 91  | 75          | 12   | RCP      | Inlet   | Good           | 4           | 25           | Yes    | Yes         | SOUTH PASSAGE      |                                               | 166559.993 | 455600.016 |
| 90  | 76          | 13   | RCP      | Outfall | Good           | 2           | 10           | No     | Yes         | SOUTH PASSAGE      |                                               | 166510.312 | 455898.233 |
| 93  | 77          | 36   | RCP      | Inlet   | Good           | 4           | 25           | Yes    | Yes         | 6TH AVE SW         |                                               | 166782.789 | 455436.747 |
| 128 | 78          | 30   | RCP      | Inlet   | Poor           | 2           | 0            | No     | Yes         | S BROOKVIEW LN SW  |                                               | 170221.379 | 456048.06  |
| 127 | 79          | 18   | RCP      | Inlet   | Good           | 4           | 75           | Yes    | Yes         | S BROOKVIEW LN SW  |                                               | 170066.203 | 456170.883 |
| 126 | 80          | 12   | RCP      | Inlet   | Good           | 1 - None    | 10           | No     | Yes         | S BROOKVIEW LN SW  |                                               | 170060.628 | 456208.529 |
| 124 | 82          | 54   | CMP      | Inlet   | Good           | 1 - None    | 0            | Yes    | No          | 5TH AVE SW         |                                               | 170063.95  | 456322.266 |
| 123 | 83          | 54   | CMP      | Outfall | Good           | 1 - None    | 0            | No     | No          | 5TH AVE SW         |                                               | 170020.392 | 456387.209 |
| 129 | 84          | 12   | CMP      |         | Poor           | 5 - Bad     | 0            |        |             | N BROOKVIEW LN SW  | IN CREEK                                      | 170238.527 | 456071.434 |
| 130 | 85          | 12   | CMP      |         | Poor           | 5 - Bad     | 0            |        |             | N BROOKVIEW LN SW  |                                               | 170245.879 | 456074.017 |
| 301 | 86          | 15   | RCP      | Inlet   | Standard       | 1 - None    | 0            | Yes    | Yes         | ELIZABETH ST NW    |                                               | 170443.947 | 456087.369 |
| 170 | 87          | 24   | RCP      | Inlet   | Good           | 3           | 50           | Yes    | Yes         | MAIN ST W          |                                               | 170910.14  | 455053.42  |
| 171 | 88          | 24   | RCP      | Outfall | Good           | 2           | 10           | No     |             | MAIN ST W          |                                               | 170988.675 | 455062.33  |
| 172 | 89          | 24   | CMP      | Inlet   | Standard       | 3           | 50           | No     | Yes         | OAKWOOD ST NW      |                                               | 171128.256 | 455069.054 |
| 173 | 90          | 24   | CMP      | Outfall | Good           | 1 - None    | 0            | No     | Yes         | OAKWOOD ST NW      |                                               | 171191.169 | 455074.011 |

|     |     |     |         |         |          |          |     |     |     |                    |                                                                 |            |            |
|-----|-----|-----|---------|---------|----------|----------|-----|-----|-----|--------------------|-----------------------------------------------------------------|------------|------------|
| 178 | 91  | 18  | RCP     | Outfall | Good     | 3        | 25  | No  | Yes | OAKWOOD ST NW      |                                                                 | 171257.457 | 454991.993 |
| 177 | 92  | 18  | RCP     | Inlet   | Good     | 4        | 75  | Yes | Yes | OAKWOOD ST NW      |                                                                 | 171204.717 | 455072.191 |
| 183 | 93  | 18  | CMP     | Inlet   | Standard | 3        | 25  | No  | No  | CO RD 23           |                                                                 | 171498.083 | 455000.896 |
| 184 | 94  | 18  | CMP     | Outfall | Standard | 3        | 25  | No  | No  | CO RD 23           |                                                                 | 171557.596 | 455001.94  |
| 182 | 95  | 18  | CMP     | Inlet   | Standard | 5 - Bad  | 75  | No  | No  | CO RD 23           |                                                                 | 171497.18  | 455106.226 |
| 181 | 96  | 18  | CMP     | Outfall | Standard | 3        | 25  | No  | No  | CO RD 23           |                                                                 | 171557.452 | 455108.904 |
| 97  | 18  | CMP | Outfall | Good    | 2        | 10       | No  | No  | No  | HERITAGE BLVD NW   |                                                                 | 171671.379 | 455640.231 |
| 188 | 98  | 18  | CMP     | Inlet   | Standard | 3        | 50  | No  | No  | HERITAGE BLVD NW   |                                                                 | 171669.953 | 455723.474 |
| 191 | 99  | 66  | RCP     | Inlet   | Good     | 1 - None | 10  | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171680.013 | 455867.735 |
| 208 | 100 | 66  | RCP     | Outfall | Good     | 2        | 10  | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171804.004 | 455826.038 |
| 163 | 101 | 12  | CMP     | Inlet   | Standard | 3        | 50  | Yes | No  | N BROOKVIEW LN     |                                                                 | 170672.292 | 455035.933 |
| 162 | 102 | 12  | CMP     | Outfall | Standard | 3        | 25  | Yes | No  | N BROOKVIEW LN SW  |                                                                 | 170666.013 | 455034.095 |
| 192 | 103 | 15  | CMP     | Inlet   | Standard | 3        | 50  | No  | No  | HERITAGE BLVD NW   |                                                                 | 171651.576 | 456138.048 |
| 207 | 104 | 18  | CMP     | Outfall | Poor     | 4        | 25  | No  | No  | HERITAGE BLVD NW   |                                                                 | 171776.642 | 456095.464 |
| 206 | 105 | 18  | CMP     | Outfall | Standard | 1 - None | 0   | No  | No  | HERITAGE BLVD NW   |                                                                 | 171795.035 | 455919.854 |
| 209 | 106 | 18  | CMP     | Inlet   | Good     | 1 - None | 0   | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171814.256 | 455830.124 |
| 210 | 107 | 18  | RCP     | Inlet   | Good     | 4        | 75  | Yes | Yes | HERITAGE BLVD NW   |                                                                 | 171828.12  | 455831.002 |
| 190 | 108 | 12  | RCP     | Inlet   | Good     | 3        | 25  | No  | Yes | BROOKVIEW CT NW    |                                                                 | 171277.559 | 456103.891 |
| 189 | 109 | 18  | RCP     | Inlet   | Standard | 3        | 25  | Yes | Yes | BROOKVIEW CT NW    |                                                                 | 171373.324 | 455930.028 |
| 22  | 110 | 18  | CMP     | Outfall | Standard | 4        | 25  | No  | No  | SOUTH PASSAGE      |                                                                 | 166442.445 | 456001.664 |
| 21  | 111 | 18  | CMP     | Inlet   | Standard | 4        | 25  | No  | No  | SOUTH PASSAGE      |                                                                 | 166441.424 | 456028.419 |
| 305 | 112 | 15  | RCP     | Inlet   | Standard | 1 - None | 0   | Yes | Yes | MAIN ST W          |                                                                 | 170881.796 | 456099.92  |
| 196 | 113 | 96  | CMP     | Outfall | Standard | 1 - None | 0   | No  | No  | MAIN ST W          |                                                                 | 170987.319 | 456111.341 |
| 307 | 114 | 96  | CMP     | Inlet   | Standard | 1 - None | 0   | Yes | No  | MAIN ST W          |                                                                 | 170900.296 | 456108.68  |
| 197 | 115 | 72  | CMP     | Outfall | Good     | 2        | 10  | Yes | No  | MAIN ST W          |                                                                 | 170981.558 | 456119.129 |
| 198 | 116 | 12  | CMP     | Inlet   | Poor     | 3        | 10  | Yes | No  | MAIN ST W          |                                                                 | 170985.567 | 456131.611 |
| 306 | 117 | 24  | CMP     | Inlet   | Standard | 1 - None | 0   | Yes | Yes | MAIN ST W          | NO APRON                                                        | 170896.178 | 456115.627 |
| 304 | 118 | 96  | CMP     | Outfall | Standard | 1 - None | 0   | Yes | No  | ELIZABETH ST NW    |                                                                 | 170495.583 | 456110.355 |
| 302 | 119 | 96  | CMP     | Inlet   | Standard | 1 - None | 0   | Yes | No  | ELIZABETH ST NW    | CREEK                                                           | 170433.538 | 456103.823 |
| 14  | 122 | 12  | HDPE    | Outfall | Good     | 2        | 10  | Yes | Yes | CARLSON DR SE      |                                                                 | 165148.91  | 456137.411 |
| 17  | 123 | 12  | HDPE    | Inlet   | Good     | 1 - None | 0   | Yes | Yes | CARLSON DR SE      |                                                                 | 165141.954 | 456192.359 |
| 321 | 124 | 33  | HDPE    | Inlet   | Standard | 2        | 10  | No  | Yes | 2ND AVE NE         |                                                                 | 169578.303 | 457179.635 |
| 120 | 125 | 12  | RCP     | Outfall | Standard | 2        | 10  | No  | Yes | 1ST AVE SW         |                                                                 | 170269.905 | 457623.259 |
| 121 | 126 | 12  | RCP     | Outfall | Standard | 2        | 10  | No  | Yes | 1ST AVE SW         |                                                                 | 170268.45  | 457688.768 |
| 290 | 128 | 27  | RCP     | Inlet   | Standard | 1 - None | 0   | Yes | Yes | NINA CT            |                                                                 | 169425.145 | 457048.376 |
| 291 | 129 | 27  | RCP     | Outfall | Standard | 1 - None | 0   | Yes | Yes | NINA CT            | RIPRAP PARTIALLY BURIED                                         | 169372.744 | 457035.751 |
| 292 | 130 | 36  | RCP     | Inlet   | Standard | 4        | 25  | Yes | Yes | NINA CT            | 6IN DEBRIS IN TRASH GUARD, RIPRAP BURIED                        | 169129.437 | 456918.301 |
| 70  | 131 | 15  | RCP     | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 4TH AVE SW         |                                                                 | 168396.792 | 456710.926 |
| 72  | 132 | 36  | RCP     | Inlet   | Good     | 2        | 10  | Yes | Yes | 4TH AVE SW         |                                                                 | 168883.137 | 456809.671 |
| 73  | 133 | 24  | RCP     | Inlet   | Standard | 5 - Bad  | 75  | Yes | Yes | 5TH AVE SW         |                                                                 | 168782.162 | 456759.517 |
| 77  | 134 | 15  | RCP     | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | BIRCH ST SW        | LOW POINT UNDER FENCE                                           | 168789.632 | 456306.751 |
| 76  | 135 | 18  | RCP     | Inlet   | Good     | 4        | 75  | No  | Yes | COTTONWOOD ST SW   |                                                                 | 168595.651 | 456114.917 |
| 75  | 136 | 30  | RCP     | Inlet   | Good     | 3        | 25  | Yes | Yes | COTTONWOOD ST SW   |                                                                 | 168375.052 | 456257.079 |
| 79  | 137 | 24  | RCP     | Outfall | Good     | 1 - None | 0   | Yes | Yes | COTTONWOOD ST SW   | IN FENCED BACKYARD                                              | 168132.428 | 456238.677 |
| 78  | 138 | 24  | RCP     | Inlet   | Standard | 4        | 75  | Yes | Yes | DOGWOOD ST SW      | UNDER A TREE, IN FENCED BACKYARD                                | 168059.408 | 456247.126 |
| 74  | 139 | 24  | RCP     | Inlet   | Good     | 2        | 10  | No  | Yes | 5TH AVE SW         |                                                                 | 168398.564 | 456504.391 |
| 71  | 140 | 24  | RCP     | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 4TH AVE SW         |                                                                 | 168403.745 | 456681.448 |
| 69  | 141 | 24  | RCP     | Inlet   | Good     | 1 - None | 0   | No  | Yes | 4TH AVE SW         |                                                                 | 168458.666 | 456754.42  |
| 67  | 142 | 21  | RCP     | Inlet   | Good     | 3        | 25  | No  | Yes | DOGWOOD ST SW      |                                                                 | 168198.416 | 457286.941 |
| 293 | 143 | 18  | RCP     | Inlet   | Standard | 4        | 50  | Yes | Yes | CHERRYWOOD ST      | FABRIC OVER APRON, RIPRAP BURIED                                | 168568.96  | 457690.266 |
| 66  | 144 | 36  | RCP     | Inlet   | Good     | 2        | 10  | No  | Yes | DOGWOOD ST SW      |                                                                 | 168102.578 | 457109.439 |
| 63  | 145 | 12  | RCP     | Inlet   | Standard | 3        | 25  | Yes | Yes | 4TH AVE SW         |                                                                 | 167086.544 | 457159.824 |
| 64  | 146 | 18  | RCP     | Inlet   | Good     | 5 - Bad  | 75  | Yes | Yes | 4TH AVE SW         |                                                                 | 166968.744 | 457156.404 |
| 65  | 147 | 18  | RCP     | Inlet   | Standard | 5 - Bad  | 50  | No  | Yes | 4TH AVE SW         |                                                                 | 166814.525 | 457091.841 |
| 26  | 149 | 15  | RCP     | Outfall | Standard | 2        | 10  | No  | Yes | SOUTH PASSAGE      |                                                                 | 166494.21  | 456625.29  |
| 27  | 150 | 12  | RCP     | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | SOUTH PASSAGE      |                                                                 | 166522.782 | 456532.281 |
| 28  | 151 | 12  | RCP     | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | SOUTH PASSAGE      |                                                                 | 166544.656 | 456318.792 |
| 19  | 152 | 12  | RCP     | Inlet   | Good     | 2        | 10  | No  | Yes | SOUTH PASSAGE      |                                                                 | 166414.884 | 456135.172 |
| 29  | 153 | 12  | RCP     | Inlet   | Good     | 5 - Bad  | 100 | No  | Yes | SOUTH PASSAGE      |                                                                 | 166509.342 | 456031.58  |
| 20  | 154 | 12  | RCP     | Outfall | Good     | 1 - None | 10  | No  | Yes | SOUTH PASSAGE      |                                                                 | 166423.44  | 456068.611 |
| 18  | 155 | 18  | RCP     | Inlet   | Good     | 4        | 25  | Yes | Yes | CARLSON DR SW      |                                                                 | 165582.63  | 456238.146 |
| 7   | 157 | 18  | RCP     | Inlet   | Standard | 4        | 0   | No  | Yes | DEER HAVEN DR SE   | OVERGROWN                                                       | 166267.742 | 457505.329 |
| 8   | 158 | 21  | RCP     | Inlet   | Standard | 4        | 25  | Yes | Yes | DEER HAVEN DR SE   | OVERGROWN                                                       | 166321.81  | 457613.411 |
| 9   | 159 | 18  | RCP     | Inlet   | Standard | 4        | 25  | Yes | Yes | DEER HAVEN DR SE   | OVERGROWN                                                       | 166422.411 | 457628.114 |
| 11  | 160 | 18  | RCP     | Outfall | Standard | 3        | 10  | Yes | Yes | SOUTH PASSAGE      | OVERGROWN                                                       | 166422.017 | 457701.938 |
| 12  | 161 | 15  | RCP     | Outfall | Good     | 2        | 10  | No  | Yes | DEER HAVEN DR SE   |                                                                 | 166413.129 | 458013.707 |
| 13  | 162 | 15  | RCP     | Inlet   | Good     | 4        | 75  | No  | Yes | DEER HAVEN DR SE   |                                                                 | 166240.381 | 458016.256 |
| 6   | 163 | 12  | RCP     | Inlet   | Standard | 4        | 50  | Yes | Yes | DEER HAVEN DR SE   | APRON DOESN'T REACH TO RR DITCH, OUTLETS IN RESIDENT'S BACKYARD | 165821.528 | 457483.283 |
| 5   | 164 | 12  | RCP     | Inlet   | Good     | 2        | 10  | Yes | Yes | DEER HAVEN CT SE   |                                                                 | 165206.878 | 457870.129 |
| 4   | 165 | 21  | RCP     | Outfall | Good     | 1 - None | 0   | Yes | Yes | DEER HAVEN CT SE   |                                                                 | 165160.424 | 457838.285 |
| 3   | 166 | 21  | RCP     | Inlet   | Good     | 1 - None | 0   | Yes | Yes | DEER HAVEN CT SE   |                                                                 | 165151.63  | 457824.534 |
| 48  | 167 | 21  | RCP     | Outfall | Good     | 2        | 0   | No  | Yes | MARTINS LANDING RD |                                                                 | 169067.335 | 453463.939 |
| 221 | 168 | 15  | RCP     | Outfall | Good     | 1 - None | 0   | No  | Yes | HERITAGE BLVD NW   |                                                                 | 171833.285 | 455597.482 |
| 222 | 169 | 12  | HDPE    | Inlet   | Good     | 1 - None | 0   | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171871.88  | 455935.944 |
| 223 | 170 | 12  | HDPE    | Outfall | Good     | 1 - None | 25  | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171911.049 | 455964.787 |
| 213 | 171 | 15  | HDPE    | Inlet   | Good     | 1 - None | 0   | Yes | No  | HILLOCK CT NW      |                                                                 | 171914.688 | 455690.918 |
| 212 | 172 | 72  | CMP     | Inlet   | Good     | 1 - None | 10  | No  | No  | HILLOCK CT NW      |                                                                 | 172072.7   | 455617.554 |
| 211 | 173 | 72  | CMP     | Inlet   | Good     | 2        | 10  | No  | No  | HILLOCK CT NW      |                                                                 | 171981.525 | 455676.082 |
| 224 | 174 | 24  | HDPE    | Inlet   | Good     | 1 - None | 0   | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171959.043 | 455530.908 |
| 216 | 175 | 12  | HDPE    | Inlet   | Good     | 3        | 25  | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171925.459 | 455481.496 |
| 217 | 176 | 12  | HDPE    | Inlet   | Good     | 1 - None | 0   | Yes | No  | HERITAGE BLVD NW   |                                                                 | 171915.715 | 455451.088 |
| 218 | 177 | 12  | RCP     | Inlet   | Poor     | 5 - Bad  | 100 | Yes | Yes | HERITAGE BLVD NW   |                                                                 | 171875.807 | 455458.899 |
| 82  | 179 | 24  | RCP     | Inlet   | Standard | 4        | 50  | Yes | Yes | RUM RIVER DR NW    | SEDIMENT / BURIED RIPRAP                                        | 172698.917 | 453894.603 |
| 81  | 180 | 18  | RCP     | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | RUM RIVER DR NW    | SEDIMENT / CLEAR GRASS                                          | 172754.917 | 453917.884 |
| 83  | 182 | 30  | RCP     | Inlet   | Standard | 1 - None | 0   | Yes | Yes | RUM RIVER DR NW    | REMOVE BRANCHES                                                 | 172676.453 | 453279.112 |
| 86  | 183 | 24  | RCP     | Inlet   | Good     | 1 - None | 0   | Yes | Yes | RUM RIVER DR NW    |                                                                 | 172839.463 | 453112.26  |
| 87  | 184 | 24  | RCP     | Inlet   | Good     | 1 - None | 0   | Yes | Yes | RUM RIVER DR NW    |                                                                 | 172847.508 | 453119.967 |
| 236 | 185 | 72  | CMP     | Inlet   | Good     | 1 - None | 0   | No  | No  | WHISKEY RD NW      |                                                                 | 172639.208 | 455281.205 |
| 235 | 186 | 72  | CMP     | Outfall | Good     | 1 - None | 0   | No  | No  | WHISKEY RD NW      |                                                                 | 172729.543 | 455299.243 |

|     |     |    |      |         |          |          |     |     |     |                     |                                                |            |            |
|-----|-----|----|------|---------|----------|----------|-----|-----|-----|---------------------|------------------------------------------------|------------|------------|
| 234 | 187 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | WHISKEY RD NW       |                                                | 172776.938 | 455294.708 |
| 237 | 188 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | WHISKEY RD NW       |                                                | 173062.698 | 455250.027 |
| 89  | 189 | 21 | HDPE | Inlet   | Standard | 4        | 50  | Yes | Yes | MELODY CT           | REMOVE SEDIMENT AND BRANCHES                   | 173121.505 | 453950.332 |
| 90  | 190 | 24 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | MELODY CT           | REMOVE LEAVES AND SEDIMENT                     | 173311.417 | 453868.341 |
| 88  | 191 | 24 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | MELODY CT           |                                                | 173160.928 | 453673.636 |
| 97  | 192 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | BERGMAN CT          |                                                | 173695.9   | 453188.923 |
| 93  | 193 | 36 | CMP  | Outfall | Standard | 2        | 10  | Yes | Yes | BERGMAN CT          | REEDS IN APRON                                 | 174078.854 | 453378.756 |
| 194 | 194 | 15 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | BERGMAN CT          |                                                | 174133.989 | 453389.771 |
| 96  | 195 | 30 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | BERGMAN CT          | OVERGROWN AND 6IN SEDIMENT                     | 174201.764 | 453554.155 |
| 95  | 196 | 12 | CMP  | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | BERGMAN CT          | RIRAP WASHED OUT                               | 174202.138 | 453417.447 |
| 91  | 197 | 30 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | BLOSSOM BLVD NW     | REMOVE SEDIMENT AND LEAVES                     | 173847.041 | 454455.91  |
| 128 | 198 | 12 | RCP  | Inlet   | Standard | 4        | 50  | Yes | No  | FARFIELD PLACE NW   | GOPHER MOUND IN APRON                          | 174126.166 | 455084.382 |
| 127 | 199 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | FARFIELD PLACE NW   |                                                | 174105.739 | 455107.251 |
| 130 | 200 | 12 | HDPE | Inlet   | Standard | 3        | 25  | Yes | Yes | FARFIELD PLACE NW   | REMOVE LEAVES                                  | 174036.081 | 455165.935 |
| 131 | 201 | 24 | HDPE | Inlet   | Standard | 2        | 10  | Yes | Yes | FARFIELD PLACE NW   | REMOVE LEAVES                                  | 174009.457 | 455265.534 |
| 129 | 202 | 12 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | Yes | FARFIELD PLACE NW   |                                                | 174171.557 | 455263.414 |
| 125 | 203 | 24 | HDPE | Inlet   | Standard | 2        | 10  | Yes | Yes | WHISKEY RD NW       |                                                | 175120.634 | 456126.455 |
| 124 | 204 | 24 | HDPE | Inlet   | Standard | 2        | 10  | Yes | Yes | WHISKEY RD NW       | RIPRAP WASHED OUT                              | 175253.928 | 456147.188 |
| 121 | 205 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | WHISKEY RD NW       |                                                | 175353.933 | 456063.828 |
| 122 | 206 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WHISKEY RD NW       |                                                | 175511.168 | 455991.259 |
| 123 | 207 | 15 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | WHISKEY RD NW       | RIPRAP BURIED                                  | 175632.673 | 455983.535 |
| 120 | 208 | 18 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | ISANTI PARKWAY NW   |                                                | 175367.185 | 455628.79  |
| 118 | 209 | 15 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | WHISKEY RD NW       | OVERGROWN WITH BRUSH                           | 175354.146 | 455586.745 |
| 119 | 210 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WHISKEY RD NW       | SMALL RETAINING AREA BEFORE W-17               | 175329.959 | 455563.541 |
| 115 | 211 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | ISANTI PARKWAY NW   |                                                | 175169.057 | 455301.44  |
| 114 | 212 | 18 | RCP  | Outfall | Standard | 1 - None | 0   | Yes | Yes | ISANTI PARKWAY NW   | OVERGROWN WITH BRUSH                           | 175142.197 | 455277.558 |
| 116 | 213 | 24 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | No  | ISANTI PARKWAY NW   |                                                | 175045.718 | 455378.224 |
| 111 | 214 | 18 | HDPE | Inlet   | Good     | 1 - None | 0   | Yes | No  | BELLAIRE BLVD NW    | RIPRAP WASHED OUT                              | 174756.901 | 454771.172 |
| 112 | 215 | 27 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | BELLAIRE BLVD NW    | 3IN SEDIMENT RIPRAP WASHED OUT                 | 174909.83  | 454570.444 |
| 113 | 216 | 27 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | BELLAIRE BLVD NW    | RIPRAP WASHED OUT                              | 174957.229 | 454615.944 |
| 110 | 217 | 27 | RCP  | Outfall | Standard | 2        | 10  | Yes | No  | BELLAIRE BLVD NW    |                                                | 174984.779 | 454749.836 |
| 99  | 218 | 30 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | BELLAIRE BLVD NW    |                                                | 175448.78  | 454729.54  |
| 98  | 219 | 15 | RCP  | Outfall | Standard | 4        | 50  | Yes | Yes | BELLAIRE BLVD NW    | RIPRAP BURIED                                  | 175551.262 | 454642.089 |
| 100 | 220 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | BELLAIRE BLVD       |                                                | 175633.415 | 454614.538 |
| 109 | 221 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | BELLAIRE BLVD NW    |                                                | 175681.116 | 454709.085 |
| 101 | 222 | 24 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | BELLAIRE BLVD NW    | COVERED WITH BRANCHES                          | 175763.042 | 454592.692 |
| 108 | 223 | 27 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | LEGACY PARK         |                                                | 175925.988 | 454520.755 |
| 117 | 224 | 30 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WHISKEY RD NW       |                                                | 175768.473 | 455168.29  |
| 142 | 226 | 21 | RCP  | Inlet   | Standard | 5 - Bad  | 75  | Yes | Yes | RODEO DR NW         | RIPRAP WASHED OUT                              | 174025.638 | 456189.922 |
| 141 | 227 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | RODEO DR NW         |                                                | 173923.512 | 456120.192 |
| 143 | 228 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | PARK BROOK RD NW    | RIPRAP BURIED                                  | 173991.95  | 455920.099 |
| 140 | 229 | 24 | RCP  | Outfall | Standard | 3        | 25  | No  | Yes | RODEO DR NW         | REMOVE SEDIMENT                                | 173568.547 | 456123.471 |
| 152 | 230 | 18 | RCP  | Inlet   | Standard | 3        | 10  | Yes | Yes | ISANTI PARKWAY NW   | RIPRAP BURIED                                  | 174433.084 | 457409.57  |
| 153 | 231 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | ISANTI PARKWAY NW   | BROKEN TRASH GUARD                             | 174379.199 | 457434.948 |
| 154 | 232 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | No  | ISANTI PARKWAY NW   |                                                | 174376.286 | 457390.934 |
| 238 | 233 | 24 | RCP  | Inlet   | Good     | 3        | 25  | Yes | Yes | 3RD AVE NW          |                                                | 172604.994 | 456991.219 |
| 299 | 234 | 21 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 3RD AVE NW          |                                                | 172923.58  | 456812.971 |
| 245 | 235 | 30 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 3RD AVE NW          |                                                | 172782.3   | 456645.955 |
| 300 | 236 | 27 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 3RD AVE NW          |                                                | 172834.628 | 456676.998 |
| 139 | 237 | 21 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | PARK BROOK RD NW    |                                                | 173017.405 | 456493.508 |
| 137 | 238 | 15 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | PARK BROOK RD NW    | REMOVE LEAVES AND SEDIMENT                     | 173117.848 | 456315.818 |
| 132 | 239 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | PARK BROOK RD NW    |                                                | 173203.106 | 456022.248 |
| 133 | 240 | 21 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | PARK BROOK RD NW    | SUBMERGED, SCRAPED MINIMAL SEDIMENT WITH LATHE | 173249.212 | 455888.955 |
| 134 | 241 | 12 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | PARK BROOK RD NW    | SUBMERGED, CANNOT DETERMINE SEDIMENT           | 173278.611 | 455833.167 |
| 135 | 242 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | PARK BROOK RD NW    | SUBMERGED, CANNOT DETERMINE SEDIMENT           | 173272.621 | 455826.566 |
| 136 | 243 | 21 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | PARK BROOK RD NW    |                                                | 173143.601 | 455831.241 |
| 205 | 244 | 12 | HDPE | Inlet   | Good     | 4        | 75  | Yes | No  | HILLOCK CT NW       |                                                | 172880.609 | 456379.124 |
| 239 | 245 | 72 | CMP  | Inlet   | Standard | 2        | 10  | No  | No  | 3RD AVE NW          |                                                | 172596.539 | 456995.249 |
| 241 | 246 | 72 | CMP  | Outfall | Standard | 2        | 10  | Yes | No  | 3RD AVE NW          |                                                | 172593.425 | 457102.051 |
| 240 | 247 | 18 | RCP  | Inlet   | Good     | 3        | 25  | Yes | Yes | 3RD AVE NW          |                                                | 172587.569 | 456990.117 |
| 226 | 248 | 12 | CMP  | Inlet   | Poor     | 5 - Bad  | 0   | No  | No  | 1ST AVE NW          |                                                | 172607.617 | 457441.081 |
| 294 | 249 | 15 | CMP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 1ST AVE NW          | SPECIAL COVER                                  | 172598.26  | 457436.401 |
| 296 | 250 | 12 | CMP  | Inlet   | Poor     | 4        | 50  | No  | No  | 1ST AVE NW          | DEAD FOX IN APRON                              | 172640.464 | 457506.101 |
| 242 | 251 | 18 | RCP  | Inlet   | Poor     | 3        | 0   | No  | No  | 3RD AVE NW          |                                                | 172672.929 | 457284.798 |
| 229 | 252 | 15 | RCP  | Inlet   | Standard | 2        | 10  | No  | No  | 1ST AVE NW          |                                                | 172417.036 | 457820.636 |
| 297 | 253 | 21 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 1ST AVE NW          | REPLACE TRASH GUARD                            | 172340.651 | 457817.949 |
| 298 | 254 | 18 | RCP  | Outfall | Standard | 4        | 50  | Yes | Yes | 1ST AVE NW          | REPLACE TRASH GUARD, REMOVE BRANCHES           | 172258.208 | 457725.575 |
| 235 | 255 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | 1ST AVE NW          | CREEK                                          | 173107.529 | 457491.778 |
| 234 | 256 | 72 | CMP  | Outfall | Standard | 1 - None | 0   | No  | No  | 1ST AVE NW          | CREEK                                          | 173149.751 | 457527.701 |
| 232 | 257 | 12 | CMP  | Inlet   | Standard | 2        | 10  | Yes | No  | 1ST AVE NW          |                                                | 173196.115 | 457712.253 |
| 231 | 258 | 15 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 1ST AVE NW          |                                                | 173254.517 | 457730.462 |
| 230 | 259 | 15 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 1ST AVE NW          |                                                | 173303.488 | 457735.835 |
| 229 | 260 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 1ST AVE NW          | REMOVE BRUSH                                   | 173346.077 | 457830.042 |
| 236 | 261 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | 1ST AVE NW          | CREEK                                          | 173324.18  | 457936.189 |
| 237 | 262 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | 1ST AVE NW          | CREEK                                          | 173366.975 | 457990.185 |
| 169 | 264 | 15 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | BMX BUILDING        |                                                | 173993.134 | 458391.613 |
| 171 | 265 | 15 | RCP  | Inlet   | Standard | 3        | 25  | No  | Yes | BMX BUILDING        |                                                | 173978.863 | 458430.087 |
| 175 | 268 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | BMX BUILDING        | CREEK, ARCH PIPE                               | 174083.524 | 458704.403 |
| 174 | 269 | 72 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | BMX BUILDING        | REMOVE TUMBLEWEED, ARCH PIPE, CREEK            | 174077.477 | 458742.866 |
| 173 | 270 | 60 | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | BMX BUILDING        | CREEK                                          | 174075.345 | 458783.101 |
| 172 | 271 | 60 | CMP  | Outfall | Standard | 1 - None | 0   | No  | No  | BMX BUILDING        | CREEK                                          | 174078.096 | 458811.662 |
| 180 | 272 | 30 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | E DUAL BLVD NE      | CREEK                                          | 174243.736 | 459264.589 |
| 181 | 273 | 30 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | E DUAL BLVD NE      | CREEK                                          | 174237.067 | 459266.485 |
| 182 | 274 | 30 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | E DUAL BLVD NE      | CREEK, REMOVE BRUSH                            | 174295.005 | 459420.781 |
| 183 | 275 | 30 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | E DUAL BLVD NE      | CREEK, REMOVE BRUSH                            | 174288.917 | 459422.295 |
| 197 | 276 | 27 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | E DUAL BLVD NE      |                                                | 174504.594 | 459478.147 |
| 213 | 277 | 15 | CMP  | Outfall | Standard | 1 - None | 0   | No  | No  | ISANTI PUBLIC WORKS |                                                | 174585.584 | 457820.301 |
| 214 | 278 | 15 | CMP  | Inlet   | Standard | 2        | 10  | No  | No  | ISANTI PUBLIC WORKS |                                                | 174584.471 | 457880.575 |
| 218 | 279 | 15 | CMP  | Inlet   | Standard | 3        | 25  | No  | No  | ISANTI PUBLIC WORKS |                                                | 174727.756 | 457900.832 |

|     |     |    |      |         |          |          |     |     |     |                     |                                          |            |            |
|-----|-----|----|------|---------|----------|----------|-----|-----|-----|---------------------|------------------------------------------|------------|------------|
| 222 | 280 | 15 | CMP  | Outfall | Standard | 5 - Bad  | 100 | Yes | No  | ISANTI PUBLIC WORKS |                                          | 174846.582 | 457930.733 |
| 224 | 281 | 15 | CMP  | Inlet   | Standard | 4        | 50  | No  | No  | ISANTI PUBLIC WORKS |                                          | 174783.526 | 457797.78  |
| 219 | 282 | 15 | CMP  | Outfall | Poor     | 5 - Bad  | 100 | No  | No  | ISANTI PUBLIC WORKS |                                          | 174842.582 | 457795.843 |
| 220 | 283 | 12 | CMP  | Inlet   | Poor     | 2        | 10  | No  | No  | ISANTI PUBLIC WORKS |                                          | 174845.865 | 457761.883 |
| 221 | 284 | 12 | CMP  | Outfall | Standard | 4        | 50  | No  | No  | ISANTI PUBLIC WORKS |                                          | 174845.982 | 457733.562 |
| 200 | 285 | 21 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      | CBS FILLED WITH SEDIMENT                 | 175291.648 | 459408.719 |
| 201 | 286 | 21 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | E DUAL BLVD NE      | REMOVE BRUSH                             | 175256.796 | 459492.127 |
| 202 | 287 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | E DUAL BLVD NE      |                                          | 175115.62  | 459489.378 |
| 198 | 288 | 36 | RCP  | Outfall | Standard | 2        | 10  | Yes | No  | E DUAL BLVD NE      |                                          | 174941.87  | 459501.175 |
| 199 | 289 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | No  | E DUAL BLVD NE      |                                          | 174891.818 | 459506.176 |
| 189 | 290 | 24 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | E DUAL BLVD NE      | REMOVE BRANCHES                          | 174801.068 | 459733.312 |
| 190 | 291 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | E DUAL BLVD NE      |                                          | 174758.442 | 459771.467 |
| 192 | 292 | 30 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | ENTERPRISE AVE NE   |                                          | 174971.931 | 460325.599 |
| 15  | 293 | 12 | HDPE | Outfall | Good     | 1 - None | 0   | Yes | Yes | CARLSON DR          |                                          | 165094.803 | 456166.255 |
| 16  | 294 | 12 | HDPE | Inlet   | Good     | 1 - None | 0   | Yes | Yes | CARLSON DR SE       |                                          | 165106.394 | 456194.319 |
| 249 | 295 | 54 | RCP  | Inlet   | Standard | 2        | 10  | No  | No  | E DUAL BLVD NE      | CREEK                                    | 173487.788 | 458746.929 |
| 248 | 296 | 54 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | E DUAL BLVD NE      | CREEK                                    | 173468.046 | 458782.142 |
| 244 | 297 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      |                                          | 173343.514 | 458811.712 |
| 247 | 298 | 36 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | E DUAL BLVD NE      | REMOVE BRUSH                             | 173109.659 | 458936.091 |
| 250 | 299 | 24 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | E DUAL BLVD NE      | REMOVE BRUSH                             | 173091.999 | 459150.225 |
| 243 | 300 | 12 | CMP  | Inlet   | Standard | 5 - Bad  | 100 | No  | No  | E DUAL BLVD NE      | REMOVE BRUSH                             | 173112.814 | 459273.445 |
| 242 | 301 | 44 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | E DUAL BLVD         | CREEK, REMOVE BRUSH                      | 173101.733 | 459283.103 |
| 241 | 302 | 44 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | E DUAL BLVD NE      | CREEK, REMOVE BRUSH                      | 173091.645 | 459281.158 |
| 240 | 303 | 44 | RCP  | Outfall | Standard | 3        | 25  | No  | Yes | E DUAL BLVD NE      | CREEK                                    | 173069.114 | 459392.897 |
| 239 | 304 | 44 | RCP  | Outfall | Standard | 3        | 25  | No  | Yes | E DUAL BLVD NE      | CREEK                                    | 173071.739 | 459399.584 |
| 204 | 305 | 18 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | W DUAL BLVD NE      |                                          | 172377.842 | 458523.951 |
| 203 | 306 | 12 | CMP  | Outfall | Poor     | 5 - Bad  | 100 | No  | No  | E DUAL BLVD NE      |                                          | 172368.534 | 459681.728 |
| 201 | 307 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      |                                          | 172263.44  | 459710.375 |
| 200 | 308 | 36 | RCP  | Inlet   | Good     | 2        | 10  | Yes | Yes | E DUAL AVE          |                                          | 172024.546 | 459709.838 |
| 199 | 309 | 12 | RCP  | Outfall | Poor     | 4        | 10  | No  | No  | HERITAGE BLVD NW    |                                          | 171791.933 | 459640.471 |
| 92  | 310 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | BLOSSOM BLVD NW     |                                          | 173998.938 | 453928.272 |
| 117 | 311 | 15 | CMP  | Outfall | Standard | 3        | 50  | Yes | No  | HERITAGE BLVD NE    |                                          | 171676.39  | 459185.724 |
| 118 | 312 | 15 | CMP  | Inlet   | Standard | 3        | 25  | Yes | No  | HERITAGE BLVD NE    |                                          | 171675.569 | 459230.726 |
| 114 | 313 | 24 | RCP  | Inlet   | Standard | 3        | 50  | No  | Yes | HERITAGE BLVD NE    |                                          | 171389.885 | 459361.03  |
| 308 | 314 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | CHERRYWOOD ST NE    | NO SEDIMENT IN SKIMMER                   | 171228.319 | 459745.417 |
| 309 | 315 | 30 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | CHERRYWOOD ST NE    | REMOVE BRUSH                             | 171366.831 | 459812.675 |
| 310 | 316 | 42 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | CHERRYWOOD ST NE    |                                          | 171148.211 | 459845.445 |
| 311 | 317 | 15 | RCP  | Outfall | Standard | 1 - None | 0   | Yes | Yes | CHERRYWOOD ST NE    |                                          | 171084.637 | 459782.107 |
| 110 | 318 | 15 | RCP  | Inlet   | Good     | 1 - None | 0   | No  | Yes | CHERRYWOOD ST NE    |                                          | 171051.662 | 459782.062 |
| 243 | 319 | 6  | CMP  | Inlet   | Standard | 1 - None | 0   | No  | No  | 3RD AVE NW          |                                          | 172625.77  | 457240.228 |
| 295 | 320 | 12 | CMP  | Inlet   | Poor     | 2        | 10  | No  | No  | 1ST AVE NW          |                                          | 172495.702 | 457451.617 |
| 92  | 321 | 15 | RCP  | Inlet   | Poor     | 4        | 50  | No  | No  | MAIN ST W           |                                          | 170782.319 | 458371.849 |
| 87  | 322 | 15 | RCP  | Outfall | Standard | 3        | 25  | No  | Yes | RAILROAD AVE S      |                                          | 169115.038 | 458146.913 |
| 86  | 323 | 24 | RCP  | Inlet   | Standard | 3        | 50  | No  | No  | RAILROAD AVE S      |                                          | 169039.79  | 457946.755 |
| 88  | 324 | 44 | RCP  | Outfall | Standard | 1 - None | 0   |     |     | RAILROAD AVE S      | SUBMERGED                                | 168851.039 | 457914.275 |
| 312 | 325 | 44 | RCP  | Outfall | Standard | 4        | 50  | No  | No  | RAILROAD AVE SE     | SUBMERGED                                | 168820.568 | 457955.105 |
| 319 | 326 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | No  | ARABIAN LN SE       |                                          | 168437.787 | 459259.818 |
| 317 | 327 | 12 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | ARABIAN LN SE       | REMOVE LEAVES                            | 168690.601 | 459320.042 |
| 318 | 328 | 18 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | ARABIAN LN SE       |                                          | 168666.876 | 459375.245 |
| 320 | 329 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 75  | No  | Yes | PALOMINO RD SE      |                                          | 169024.756 | 460093.386 |
| 101 | 330 | 18 | RCP  | Outfall | Good     | 1 - None | 0   | No  | Yes | PALOMINO RD SE      |                                          | 169120.872 | 460095.454 |
| 233 | 331 | 12 | CMP  | Outfall | Standard | 3        | 25  | No  | No  | 1ST AVE NW          |                                          | 172484.949 | 457439.736 |
| 179 | 332 | 15 | HDPE | Inlet   | Standard | 2        | 10  | Yes | No  | E DUAL BLVD         | RIPRAP BURIED                            | 174204.864 | 459043.923 |
| 102 | 333 | 24 | RCP  | Inlet   | Good     | 3        | 25  | Yes | Yes | TH 65               |                                          | 169427.592 | 460238.78  |
| 103 | 334 | 18 | CMP  | Inlet   | Standard | 4        | 50  | No  | No  | CANDY AVE SE        |                                          | 169649.714 | 460336.217 |
| 104 | 335 | 18 | CMP  | Outfall | Standard | 4        | 50  | No  | No  | CANDY LN SE         |                                          | 169707.965 | 460334.856 |
| 105 | 336 | 12 | RCP  | Outfall | Standard | 5 - Bad  | 75  | Yes | Yes | CANDY LN SE         |                                          | 170179.107 | 460326.321 |
| 106 | 337 | 12 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | CANDY LN SE         |                                          | 170174.799 | 460367.322 |
| 252 | 338 | 18 | RCP  | Outfall | Standard | 3        | 25  | No  | Yes | BROADWAY ST NE      | REMOVE BRUSH                             | 170389.123 | 460808.649 |
| 253 | 339 | 18 | RCP  | Outfall | Standard | 4        | 50  | No  | Yes | BROADWAY ST NE      | REMOVE BRUSH                             | 170519.466 | 460618.464 |
| 254 | 340 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | BROADWAY ST NE      |                                          | 170477.867 | 460805.38  |
| 256 | 341 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 6TH AVE NE          | AREA UNDER CONSTRUCTION                  | 170823.163 | 461093.255 |
| 255 | 342 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 6TH AVE NE          |                                          | 170747.254 | 461222.837 |
| 259 | 343 | 15 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 6TH AVE NE          | REMOVE BRANCHES, AREA UNDER CONSTRUCTION | 171090.336 | 461128.687 |
| 258 | 344 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | 6TH AVE NE          | RIPRAP WASHED OUT                        | 171077.812 | 461206.998 |
| 257 | 345 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | OAKWOOD ST NE       | RIPRAP BURIED                            | 171186.694 | 461504.999 |
| 260 | 346 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | 6TH AVE NE          |                                          | 171583.545 | 461204.219 |
| 72  | 347 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | GOLDEN WAY NE       | REMOVE BRUSH                             | 174049.005 | 461031.476 |
| 73  | 348 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | GOLDEN WAY          | REMOVE BRUSH                             | 174062.681 | 461029.396 |
| 74  | 349 | 15 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | GOLDEN WAY          | REMOVE BRUSH                             | 174152.645 | 461036.928 |
| 193 | 350 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | CAJIMA ST NE        |                                          | 175609.556 | 460930.751 |
| 194 | 351 | 18 | RCP  | Outfall | Standard | 5 - Bad  | 75  | No  | Yes | CAJIMA ST NE        |                                          | 175683.692 | 460931.567 |
| 196 | 352 | 24 | RCP  | Inlet   | Standard | 4        | 50  | No  | No  | HWY 65 MEDIAN       |                                          | 175606.417 | 461020.719 |
| 195 | 353 | 24 | RCP  | Outfall | Standard | 4        | 50  | No  | No  | HWY 65 MEDIAN       |                                          | 175686.997 | 461022.326 |
| 45  | 354 | 12 | RCP  | Inlet   | Standard | 4        | 50  | No  | Yes | CAJIMA ST NE        | REMOVE BRUSH                             | 175554.712 | 461138.857 |
| 46  | 355 | 18 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | CAJIMA ST NE        | REMOVE BRUSH                             | 175587.251 | 461176.929 |
| 47  | 356 | 18 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | CAJIMA ST NE        | REMOVE BRUSH                             | 175716.899 | 461228.193 |
| 48  | 357 | 33 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 6TH AVE CT NE       |                                          | 175010.052 | 461633.432 |
| 50  | 358 | 18 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | 6TH AVE CT NE       |                                          | 175107.998 | 461920.082 |
| 51  | 360 | 21 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 6TH AVE CT NE       |                                          | 174832.838 | 461679.797 |
| 53  | 362 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 7TH AVE NE          | REMOVE BRANCHES                          | 174905.713 | 461778.366 |
| 55  | 363 | 54 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 7TH AVE NE          | CREEK                                    | 175009.184 | 461926.391 |
| 56  | 364 | 54 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 7TH AVE NE          | CREEK                                    | 174993.464 | 461934.415 |
| 58  | 365 | 54 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 7TH AVE NE          | CREEK                                    | 175090.16  | 462051.618 |
| 57  | 366 | 54 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 7TH AVE NE          | CREEK                                    | 175105.41  | 462040.03  |
| 59  | 367 | 15 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | 7TH AVE NE          |                                          | 175145.926 | 462165.116 |
| 60  | 368 | 15 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 7TH AVE NE          |                                          | 175201.588 | 462177.834 |
| 61  | 369 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 8TH AVE NE          | REMOVE BRUSH                             | 175332.751 | 462478.873 |
| 62  | 370 | 54 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | CREEK                                    | 175249.646 | 462501.098 |

|     |     |    |      |         |          |          |     |     |     |                     |                                         |            |            |
|-----|-----|----|------|---------|----------|----------|-----|-----|-----|---------------------|-----------------------------------------|------------|------------|
| 63  | 371 | 54 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | CREEK                                   | 175235.907 | 462509.698 |
| 64  | 372 | 54 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          |                                         | 175294.21  | 462639.766 |
| 65  | 373 | 54 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | CREEK                                   | 175280.767 | 462641.26  |
| 66  | 374 | 24 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | 8TH AVE NE          |                                         | 175206.051 | 462454.355 |
| 67  | 375 | 24 | RCP  | Outfall | Standard | 1 - None | 0   |     |     | 8TH AVE NE          | SUBMERGED                               | 175145.622 | 462496.947 |
| 68  | 376 | 0  |      |         | Standard | 1 - None | 0   | Yes |     | 8TH AVE NE          | SUBMERGED                               | 175118.715 | 462543.925 |
| 69  | 377 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | SUBMERGED                               | 174781.407 | 462589.919 |
| 70  | 378 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | SUBMERGED                               | 174338.99  | 462392.423 |
| 71  | 379 | 36 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          |                                         | 174195.09  | 462316.035 |
| 43  | 381 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WINSOME WAY NE      |                                         | 173454.149 | 463226.794 |
| 44  | 382 | 15 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | WINSOME WAY NE      | SUBMERGED                               | 173425.806 | 463255.541 |
| 40  | 383 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 10TH AVE NE         |                                         | 173292.693 | 463157.764 |
| 38  | 384 | 36 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 10TH AVE NE         |                                         | 173479.525 | 463402.322 |
| 39  | 385 | 36 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 10TH AVE NE         |                                         | 173497.119 | 463506.484 |
| 37  | 386 | 21 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WINSOME WAY NE      | REMOVE RIPRAP IN APRON                  | 173118.999 | 463372.964 |
| 36  | 387 | 18 | RCP  | Inlet   | Standard | 3        | 25  | No  | Yes | WINSOME WAY NE      |                                         | 172886.111 | 463455.47  |
| 30  | 388 | 30 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 8TH AVE NE          | REMOVE BRUSH                            | 172493.802 | 462948.19  |
| 31  | 389 | 15 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 172446.205 | 463243.231 |
| 32  | 390 | 24 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | 8TH AVE NE          |                                         | 172435.329 | 463300.287 |
| 33  | 391 | 24 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 172489.589 | 463329.327 |
| 34  | 392 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE NE          | REMOVE BRUSH                            | 172366.392 | 463138.221 |
| 27  | 393 | 18 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | 8TH AVE NE          |                                         | 172264.618 | 463060.652 |
| 28  | 394 | 18 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 172143.147 | 463087.565 |
| 35  | 395 | 30 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 172308.365 | 463237.977 |
| 29  | 396 | 24 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 172108.136 | 463145.228 |
| 23  | 397 | 12 | RCP  | Outfall | Standard | 4        | 50  | No  | Yes | HERITAGE BLVD NE    |                                         | 171662.286 | 463176.578 |
| 24  | 398 | 12 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | HERITAGE BLVD NE    | BURIED                                  | 171662.773 | 463322.404 |
| 25  | 399 | 24 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | WENDOVER ST NE      |                                         | 172450.047 | 464331.818 |
| 26  | 401 | 44 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | WENDOVER ST NE      | ARCH PIPE                               | 172131.046 | 464397.354 |
| 18  | 402 | 24 | HDPE | Inlet   | Standard | 2        | 10  | Yes | Yes | CHERRYWOOD LN NE    |                                         | 171344.252 | 462392.769 |
| 19  | 403 | 33 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE NE          | RIPRAP WASHED OUT                       | 171180.166 | 462629.639 |
| 20  | 404 | 12 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE NE          |                                         | 171132.155 | 462596.065 |
| 21  | 405 | 24 | HDPE | Inlet   | Standard | 3        | 25  | Yes | Yes | 8TH AVE NE          | RIPRAP BURIED                           | 171001.841 | 462506.009 |
| 22  | 406 | 12 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 8TH AVE NE          |                                         | 171084.938 | 462664.372 |
| 16  | 407 | 21 | HDPE | Inlet   | Standard | 2        | 10  | No  | Yes | N BROOKVIEW LN SE   |                                         | 170788.56  | 462040.589 |
| 14  | 408 | 15 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | N BROOKVIEW LN SE   | REMOVE LEAVES                           | 170415.661 | 462371.769 |
| 10  | 410 | 15 | HDPE | Inlet   | Standard | 1 - None | 0   | No  | Yes | 8TH AVE SE          |                                         | 169963.755 | 462400.605 |
| 11  | 411 | 15 | HDPE | Outfall | Standard | 1 - None | 0   | No  | No  | MARION ST SE        |                                         | 169924.134 | 462730.534 |
| 12  | 412 | 15 | HDPE | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | MARION ST SE        |                                         | 169898.32  | 462812.174 |
| 13  | 413 | 12 | HDPE | Inlet   | Standard | 2        | 10  | No  | Yes | MARION ST SE        |                                         | 169960.923 | 463297.838 |
| 6   | 414 | 24 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE SE          |                                         | 169597.593 | 462415.224 |
| 5   | 415 | 12 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 8TH AVE SE          |                                         | 169556.189 | 462449.377 |
| 4   | 416 | 33 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE SE          |                                         | 169402.986 | 462649.505 |
| 3   | 417 | 12 | HDPE | Outfall | Standard | 2        | 10  | No  | Yes | 8TH AVE SE          |                                         | 169516.395 | 463018.088 |
| 178 | 418 | 18 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | No  | E DUAL BLVD NE      |                                         | 174206.322 | 458932.977 |
| 176 | 419 | 12 | HDPE | Outfall | Standard | 2        | 10  | No  | Yes | E DUAL BLVD NE      |                                         | 174156.317 | 458917.088 |
| 7   | 420 | 12 | HDPE | Outfall | Standard | 4        | 50  | No  | Yes | 285TH AVE SE        | REMOVE LEAVES                           | 169125.653 | 462745.759 |
| 8   | 421 | 12 | HDPE | Outfall | Standard | 3        | 25  | No  | Yes | 285TH AVE SE        | REMOVE LEAVES                           | 169103.975 | 462835.159 |
| 9   | 422 | 15 | HDPE | Inlet   | Standard | 3        | 25  | No  | Yes | 285TH AVE SE        | REMOVE LEAVES                           | 169128.213 | 463036.96  |
| 2   | 423 | 15 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | MARION ST SE        | REMOVE BRUSH                            | 169702.609 | 463516.804 |
| 0   | 424 | 12 | HDPE | Inlet   | Standard | 4        | 50  | No  | Yes | MARION ST SE        | REMOVE BRUSH                            | 169839.884 | 463675.857 |
| 285 | 425 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | 10TH AVE SE         | REMOVE BRUSH                            | 169932.364 | 463942.039 |
| 286 | 426 | 12 | RCP  | Outfall | Standard | 1 - None | 0   | No  | Yes | 10TH AVE SE         | REMOVE BRUSH                            | 169933.282 | 464010.056 |
| 284 | 427 | 15 | RCP  | Inlet   | Standard | 4        | 50  | No  | Yes | 11TH AVE SE         |                                         | 170303.888 | 464309.77  |
| 279 | 428 | 24 | RCP  | Inlet   | Standard | 3        | 25  | No  | Yes | BUCKSKIN ST SE      | REMOVE BRUSH                            | 169375.375 | 464029.041 |
| 280 | 429 | 12 | RCP  | Inlet   | Standard | 2        | 10  | No  | Yes | BUCKSKIN ST SE      |                                         | 169382.58  | 464124.06  |
| 281 | 430 | 15 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | BUCKSKIN ST SE      |                                         | 169178.415 | 464564.481 |
| 276 | 431 | 0  | RCP  | Outfall | Standard | 1 - None | 0   |     |     | 285TH AVE SE        | SUBMERGED, SKIMMER FILLED WITH WATER    | 169144.403 | 464570.052 |
| 277 | 432 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 285TH AVE SE        |                                         | 169109.174 | 464380.061 |
| 283 | 433 | 18 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | MARION ST SE        |                                         | 169862.5   | 464882.964 |
| 282 | 434 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | MARION ST SE        |                                         | 169816.452 | 464726.45  |
| 1   | 435 | 12 | HDPE | Inlet   | Standard | 2        | 10  | No  | Yes | 9TH AVE SE          |                                         | 170282.194 | 463656.733 |
| 79  | 436 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | 11TH AVE NW         | SEDIMENT PILE OUTSIDE CULVERT           | 172749.085 | 454058.703 |
| 177 | 437 | 15 | HDPE | Inlet   | Standard | 3        | 25  | Yes | No  | E DUAL BLVD NE      | REMOVE BRUSH                            | 174110.943 | 458925.223 |
| 155 | 440 | 18 | CMP  | Outfall | Standard | 3        | 25  | No  | No  | ISANTI PARKWAY NW   | 6IN SEDIMENT UNDER SNOW                 | 174516.238 | 457648.094 |
| 156 | 441 | 18 | CMP  | Outfall | Poor     | 3        | 25  | No  | No  | ISANTI PARKWAY NW   | 6IN SEDIMENT UNDER SNOW, REPLACE MARKER | 174516.308 | 457698.506 |
| 226 | 442 | 15 | CMP  | Inlet   | Poor     | 5 - Bad  | 75  | No  | No  | ISANTI PUBLIC WORKS |                                         | 174625.646 | 458054.245 |
| 223 | 443 | 6  | CMP  | Outfall | Standard | 1 - None | 0   | No  | No  | ISANTI PUBLIC WORKS |                                         | 174795.232 | 457874.669 |
| 205 | 444 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | E DUAL BLVD NE      |                                         | 175289.625 | 459400.536 |
| 206 | 445 | 12 | PVC  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | E DUAL BLVD NE      |                                         | 175434.971 | 459409.648 |
| 207 | 446 | 18 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | E DUAL BLVD NE      |                                         | 175500.544 | 459405.656 |
| 208 | 447 | 27 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      |                                         | 175513.32  | 459431.218 |
| 209 | 448 | 27 | RCP  | Outfall | Standard | 5 - Bad  | 100 | Yes | Yes | E DUAL BLVD NE      |                                         | 175592.492 | 459452.195 |
| 202 | 449 | 12 | CMP  | Inlet   | Good     | 1 - None | 0   | No  | No  | E DUAL BLVD NE      |                                         | 172366.668 | 459710.475 |
| 119 | 450 | 18 | RCP  | Outfall | Good     | 1 - None | 0   | Yes | Yes | HERITAGE BLVD       |                                         | 171668.997 | 459234.332 |
| 116 | 451 | 18 | RCP  | Inlet   | Good     | 2        | 10  | Yes | Yes | HERITAGE BLVD NE    |                                         | 171638.246 | 459231.779 |
| 191 | 453 | 15 | HDPE | Inlet   | Standard | 2        | 10  | No  | No  | ENTERPRISE AVE NE   | REMOVE BRANCHES                         | 174916.15  | 460350.382 |
| 107 | 454 | 24 | RCP  | Outfall | Good     | 2        | 10  | No  | No  | TH 65               | EXTENDED APRON                          | 170186.326 | 460406.466 |
| 108 | 455 | 24 | RCP  | Inlet   | Good     | 2        | 10  | No  | No  | TH 65               | EXTENDED APRON                          | 170167.609 | 460576.973 |
| 262 | 456 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | HERITAGE BLVD NE    |                                         | 171613.97  | 460910.064 |
| 54  | 457 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 7TH AVE NE          |                                         | 174853.101 | 461931.051 |
| 17  | 458 | 15 | RCP  | Outfall | Standard | 1 - None | 0   | Yes | Yes | 8TH AVE SE          | NO SEDIMENT IN SKIMMER                  | 170904.04  | 462118.165 |
| 186 | 459 | 12 | RCP  | Inlet   | Standard | 2        | 0   | Yes | No  | E DUAL BLVD NE      | REMOVE BIOROLL                          | 174711.847 | 459279.325 |
| 184 | 460 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | No  | E DUAL BLVD NE      | REMOVE BRUSH, NO SEDIMENT IN SKIMMER    | 174561.078 | 459301.841 |
| 185 | 461 | 15 | RCP  | Inlet   | Standard | 3        | 25  | Yes | No  | E DUAL BLVD NE      | REMOVE SEDIMENT AND BRUSH               | 174561.484 | 459156.551 |
| 187 | 462 | 15 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | ISANTI PARKWAY NW   | IN EVERCAT FACULTY                      | 174556.595 | 458934.828 |
| 188 | 463 | 4  | CMP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | ISANTI PARKWAY NW   | MILKY LIQUID, EVERCAT FACILITY OUTLET   | 174591.381 | 458933.623 |
| 138 | 464 | 12 | RCP  | Inlet   | Standard | 3        | 25  | No  | Yes | PARK BROOK RD NW    |                                         | 173071.82  | 456473.375 |
| 144 | 465 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | Yes | 3RD AVE NW          |                                         | 174425.518 | 456981.992 |

|     |     |    |      |         |          |          |     |     |     |                     |                                   |            |            |
|-----|-----|----|------|---------|----------|----------|-----|-----|-----|---------------------|-----------------------------------|------------|------------|
| 145 | 466 | 15 | RCP  | Inlet   | Good     | 5 - Bad  | 75  | Yes | Yes | 3RD AVE NW          |                                   | 174493.945 | 457103.216 |
| 151 | 467 | 12 | RCP  | Inlet   | Standard | 4        | 50  | No  | Yes | 3RD AVE NW          |                                   | 175331.109 | 456983.105 |
| 150 | 468 | 12 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 3RD AVE NW          |                                   | 175330.279 | 457049.157 |
| 146 | 470 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | 3RD AVE NW          |                                   | 176851.746 | 457060.371 |
| 148 | 471 | 12 | CMP  | Inlet   | Standard | 4        | 50  | No  | No  | 3RD AVE NW          |                                   | 176736.138 | 456982.853 |
| 149 | 472 | 12 | RCP  | Outfall | Standard | 5 - Bad  | 75  | No  | No  | 3RD AVE NW          |                                   | 176675.811 | 456982.729 |
| 246 | 473 | 12 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      | REMOVE BRUSH                      | 173119.895 | 458929.726 |
| 314 | 474 | 15 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | Yes | RAILROAD AVE SE     | CB FULL ALSO                      | 168391.737 | 458339.628 |
| 89  | 475 | 44 | RCP  | Outfall | Standard | 1 - None | 0   |     |     | RAILROAD AVE S      | SUBMERGED                         | 168839.441 | 457911.475 |
| 313 | 476 | 44 | RCP  | Outfall | Standard | 3        | 25  | No  | No  | RAILROAD AVE SE     | SUBMERGED                         | 168812.827 | 457954.286 |
| 303 | 477 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | ELIZABETH ST NW     |                                   | 170428.414 | 456117.871 |
| 76  | 478 | 24 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 6TH AVE NE          | REMOVE BRUSH                      | 173784.761 | 461128.257 |
| 77  | 480 | 15 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 6TH AVE NE          |                                   | 173621.841 | 461057.579 |
| 125 | 481 | 12 | RCP  | Inlet   | Standard | 3        | 25  | Yes | No  | 5TH AVE SW          |                                   | 170073.74  | 456323.356 |
| 216 | 482 | 15 | RCP  | Outfall | Good     | 2        | 10  | No  | Yes | ISANTI PUBLIC WORKS |                                   | 174696.847 | 457880.386 |
| 215 | 483 | 15 | RCP  | Outfall | Good     | 2        | 10  | No  | Yes | ISANTI PUBLIC WORKS |                                   | 174589.82  | 457886.244 |
| 217 | 484 | 18 | RCP  | Inlet   | Good     | 4        | 50  | Yes | Yes | ISANTI PUBLIC WORKS |                                   | 174606.737 | 458012.632 |
| 228 | 485 | 15 | RCP  | Outfall | Good     | 2        | 10  | No  | Yes | ISANTI PUBLIC WORKS | REMOVE BIOROLL                    | 174660.699 | 458273.117 |
| 227 | 486 | 15 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | ISANTI PUBLIC WORKS |                                   | 174621.804 | 458121.97  |
| 157 | 487 | 15 | RCP  | Outfall | Good     | 3        | 25  | No  | Yes | ISANTI PARKWAY NW   | REMOVE BIOROLL                    | 174500.886 | 458351.705 |
| 158 | 488 | 15 | RCP  | Inlet   | Good     | 2        | 10  | No  | Yes | ISANTI PARKWAY NW   | REMOVE BIOROLL                    | 174501.231 | 458403.384 |
| 225 | 489 | 15 | RCP  | Outfall | Good     | 2        | 10  | No  | Yes | ISANTI PUBLIC WORKS | REMOVE BIOROLL                    | 174584.292 | 458024.592 |
| 170 | 490 | 18 | RCP  | Inlet   | Good     | 5 - Bad  | 75  | Yes | Yes | BMX BUILDING        | REMOVE DEBRIS                     | 174001.722 | 458128.378 |
| 159 | 491 | 18 | RCP  | Outfall | Good     | 3        | 25  | Yes | No  | BMX BUILDING        | REMOVE LEAVES                     | 174420.589 | 458291.332 |
| 160 | 492 | 18 | RCP  | Inlet   | Good     | 2        | 10  | Yes | No  | BMX BUILDING        | REMOVE SEDIMENT                   | 174404.525 | 458292.031 |
| 161 | 493 | 18 | RCP  | Outfall | Good     | 1 - None | 0   | Yes | No  | BMX BUILDING        |                                   | 174324.055 | 458297.052 |
| 162 | 494 | 18 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | No  | BMX BUILDING        |                                   | 174298.407 | 458295.671 |
| 163 | 495 | 18 | RCP  | Outfall | Good     | 1 - None | 0   | Yes | No  | BMX BUILDING        |                                   | 174247.884 | 458309.416 |
| 164 | 496 | 18 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | No  | BMX BUILDING        |                                   | 174223.89  | 458311.042 |
| 165 | 497 | 18 | RCP  | Outfall | Good     | 2        | 10  | Yes | No  | BMX BUILDING        | REMOVE WOOD CHIPS                 | 174107.974 | 458310.544 |
| 166 | 498 | 18 | RCP  | Inlet   | Good     | 2        | 10  | Yes | No  | BMX BUILDING        | REMOVE WOOD CHIPS                 | 174083.21  | 458313.313 |
| 167 | 499 | 15 | HDPE | Outfall | Good     | 2        | 10  | Yes | No  | BMX BUILDING        | REMOVE LEAVES                     | 174065.731 | 458331.18  |
| 168 | 500 | 15 | HDPE | Inlet   | Good     | 1 - None | 0   | Yes | No  | BMX BUILDING        | RIPRAP BURIED                     | 174030.444 | 458366.643 |
| 96  | 501 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | MAIN ST W           |                                   | 171134.18  | 458114.111 |
| 95  | 502 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | MAIN ST W           |                                   | 171098.203 | 458092.126 |
| 94  | 503 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | MAIN ST W           |                                   | 171050.92  | 458090.497 |
| 93  | 504 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | Yes | Yes | MAIN ST W           |                                   | 170978.498 | 458080.925 |
| 245 | 506 | 15 | RCP  | Inlet   | Standard | 4        | 50  | Yes | Yes | E DUAL BLVD         |                                   | 173318.719 | 458752.356 |
| 115 | 507 | 18 | RCP  | Inlet   | Good     | 3        | 25  | No  | Yes | HERITAGE BLVD NE    |                                   | 171595.907 | 459260.772 |
| 186 | 508 | 12 | RCP  | Outfall | Good     | 1 - None | 0   | No  | Yes | CO RD 23            | CHURCH PARKING LOT                | 171504.245 | 454977.048 |
| 185 | 509 | 12 | RCP  | Inlet   | Good     | 1 - None | 0   | No  | Yes | CO RD 23            |                                   | 171553.827 | 454977.25  |
| 251 | 510 | 15 | HDPE | Inlet   | Standard | 5 - Bad  | 100 | No  | No  | E DUAL BLVD NE      |                                   | 173724.054 | 459862.273 |
| 265 | 511 | 12 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | HERITAGE BLVD NE    |                                   | 171771.98  | 461109.079 |
| 266 | 512 | 12 | CMP  | Inlet   | Standard | 3        | 25  | No  | No  | HERITAGE BLVD NE    |                                   | 171770.184 | 461177.862 |
| 267 | 513 | 18 | CMP  | Outfall | Poor     | 2        | 10  | No  | No  | HERITAGE BLVD NE    |                                   | 171766.835 | 461189.363 |
| 268 | 514 | 18 | CMP  | Inlet   | Standard | 3        | 25  | No  | No  | HERITAGE BLVD NE    |                                   | 171757.313 | 461260.881 |
| 269 | 515 | 18 | HDPE | Inlet   | Standard | 2        | 10  | Yes | No  | HERITAGE BLVD NE    |                                   | 171794.929 | 461183.27  |
| 270 | 516 | 18 | HDPE | Outfall | Standard | 2        | 10  | Yes | No  | HERITAGE BLVD NE    |                                   | 171822.427 | 461169.524 |
| 271 | 517 | 24 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | No  | No  | HERITAGE BLVD NE    |                                   | 171816.176 | 460767.667 |
| 272 | 518 | 24 | CMP  | Inlet   | Standard | 3        | 25  | No  | No  | HWY 65 MEDIAN       |                                   | 171823.443 | 460689.547 |
| 273 | 519 | 18 | CMP  | Outfall | Poor     | 3        | 25  | No  | No  | HERITAGE BLVD NE    |                                   | 171752.158 | 461478.249 |
| 274 | 520 | 18 | CMP  | Inlet   | Standard | 3        | 25  | No  | No  | HERITAGE BLVD NE    | REMOVE BRUSH                      | 171753.444 | 461550.384 |
| 277 | 521 | 36 | CMP  | Inlet   | Standard | 2        | 10  | No  | No  | 285TH AVE SE        |                                   | 169039.226 | 464694.874 |
| 278 | 522 | 36 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | 285TH AVE SE        |                                   | 169088.315 | 464697.507 |
| 41  | 523 | 18 | RCP  | Outfall | Standard | 2        | 10  | Yes | Yes | 10TH AVE NE         | IN FARMLAND                       | 173894.549 | 463003.72  |
| 42  | 524 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | 10TH AVE NE         | IN FARMLAND                       | 173883.923 | 462956.241 |
| 214 | 525 | 12 | CMP  | Outfall | Standard | 4        | 75  | No  | No  | HERITAGE BLVD NW    |                                   | 171706.514 | 454559.058 |
| 215 | 526 | 12 | CMP  | Inlet   | Standard | 4        | 50  | No  | No  | HERITAGE BLVD NW    |                                   | 171702.667 | 454598.973 |
| 219 | 527 | 6  | PVC  | Inlet   | Good     | 1 - None | 0   | No  | No  | HERITAGE BLVD       |                                   | 171878.988 | 455456.012 |
| 220 | 528 | 6  | PVC  | Inlet   | Good     | 1 - None | 0   | Yes | No  | HERITAGE BLVD NW    |                                   | 171807.267 | 455533.882 |
| 228 | 529 | 6  | PVC  | Inlet   | Standard | 5 - Bad  | 100 | No  | No  | 1ST AVE NW          |                                   | 172635.593 | 457496.737 |
| 103 | 530 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175846.948 | 454394.307 |
| 102 | 531 | 72 | CMP  | Outfall | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175892.986 | 454408.298 |
| 104 | 532 | 60 | CMP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175848.255 | 454406.937 |
| 106 | 533 | 60 | CMP  | Outfall | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175890.373 | 454419.407 |
| 105 | 534 | 72 | CMP  | Inlet   | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175841.463 | 454418.713 |
| 107 | 535 | 72 | CMP  | Outfall | Standard | 1 - None | 0   | Yes | No  | LEGACY PARK         | RIVER                             | 175884.067 | 454429.074 |
| 84  | 536 | 15 | RCP  | Outfall | Poor     | 2        | 10  | No  | No  | RUM RIVER DR NW     | NO APRON, 1IN SEDIMENT IN SKIMMER | 172823.539 | 453124.054 |
| 85  | 537 | 15 | RCP  | Outfall | Poor     | 2        | 10  | No  | No  | RUM RIVER DR NW     | NO APRON, NO SEDIMENT IN SKIMMER  | 172827.848 | 453129.077 |
| 233 | 538 | 12 | CMP  | Outfall | Standard | 2        | 10  | No  | No  | 1ST AVE NW          |                                   | 173175.236 | 457714.645 |
| 204 | 539 | 15 | HDPE | Outfall | Standard | 2        | 10  | No  | No  | E DUAL BLVD NE      | REMOVE BRUSH                      | 175062.936 | 459502.562 |
| 203 | 540 | 15 | HDPE | Inlet   | Standard | 2        | 10  | No  | No  | E DUAL BLVD NE      | REMOVE BRUSH                      | 175021.942 | 459499.681 |
| 49  | 541 | 12 | HDPE | Inlet   | Standard | 1 - None | 0   | Yes | No  | 6TH AVE CT NE       |                                   | 175083.793 | 461788.076 |
| 210 | 542 | 18 | RCP  | Inlet   | Standard | 5 - Bad  | 100 | Yes | Yes | E DUAL BLVD NE      |                                   | 175647.377 | 459448.338 |
| 211 | 543 | 12 | RCP  | Inlet   | Standard | 2        | 10  | Yes | Yes | E DUAL BLVD NE      |                                   | 175578.657 | 459565.888 |
| 212 | 544 | 12 | RCP  | Outfall | Standard | 3        | 25  | Yes | Yes | E DUAL BLVD NE      |                                   | 175569.041 | 459552.175 |
| 75  | 545 | 18 | RCP  | Inlet   | Standard | 3        | 25  | Yes | Yes | 6TH AVE NE          |                                   | 173811.907 | 461125.702 |
| 10  | 546 | 12 | HDPE | Inlet   | Good     | 1 - None | 0   | Yes | Yes | SOUTH PASSAGE       |                                   | 166398.316 | 457580.003 |
| 25  | 547 | 15 | RCP  | Outfall | Good     | 2        | 10  | No  | No  | SOUTH PASSAGE       |                                   | 166481.348 | 457641.991 |
| 24  | 548 | 15 | RCP  | Outfall | Standard | 3        | 25  | No  | No  | SOUTH PASSAGE       |                                   | 166471.206 | 458182.893 |
| 23  | 549 | 15 | RCP  | Outfall | Standard | 3        | 25  | No  | No  | SOUTH PASSAGE       |                                   | 166473.026 | 458429.137 |
| 315 | 550 | 12 | RCP  | Outfall | Standard | 2        | 10  | No  | No  | RAILROAD AVE SE     |                                   | 167366.346 | 458435.605 |
| 316 | 551 | 18 | RCP  | Inlet   | Standard | 2        | 10  | Yes | No  | RAILROAD AVE SE     | SUBMERGED                         | 167663.769 | 458423.591 |
| 261 | 552 | 18 | RCP  | Inlet   | Standard | 1 - None | 0   | Yes | Yes | HERITAGE BLVD NE    |                                   | 171555.09  | 461044.364 |
| 263 | 553 | 12 | CMP  | Inlet   | Standard | 3        | 25  | Yes | No  | HERITAGE BLVD NE    |                                   | 171623.629 | 460875.278 |
| 264 | 554 | 12 | CMP  | Outfall | Standard | 1 - None | 0   | No  | No  | HERITAGE BLVD NE    |                                   | 171645.905 | 460875.48  |

## APPENDIX C

### *2016 Storm Sewer Aprons & Ponds Inventory*

# CITY OF ISANTI

ISANTI COUNTY, MINNESOTA

## 2016 STORM SEWER

### APRONS & PONDS

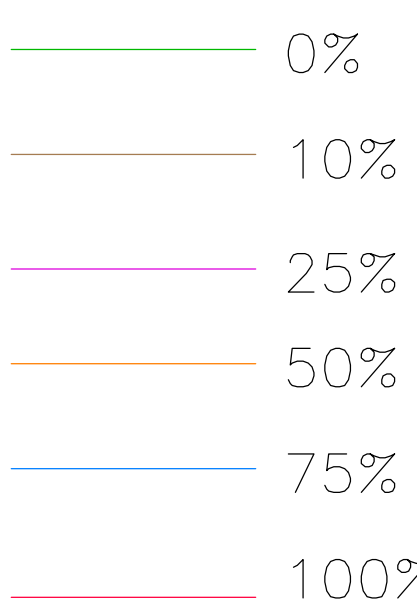
May, 2016

A Community For Generations.

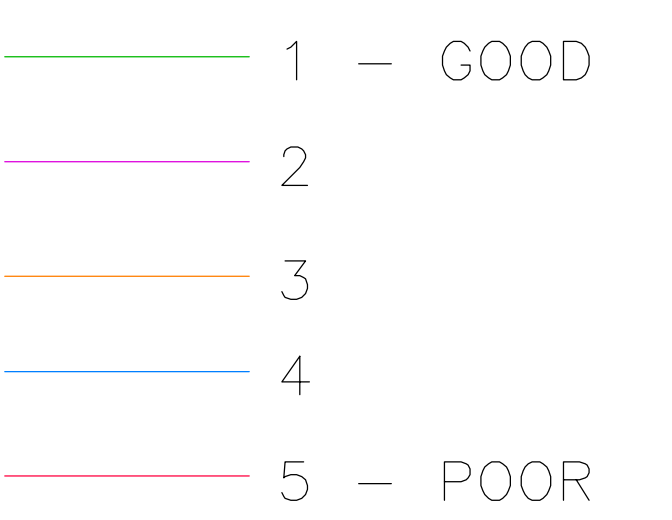


#### LEGEND

POND  
PERCENT FULL

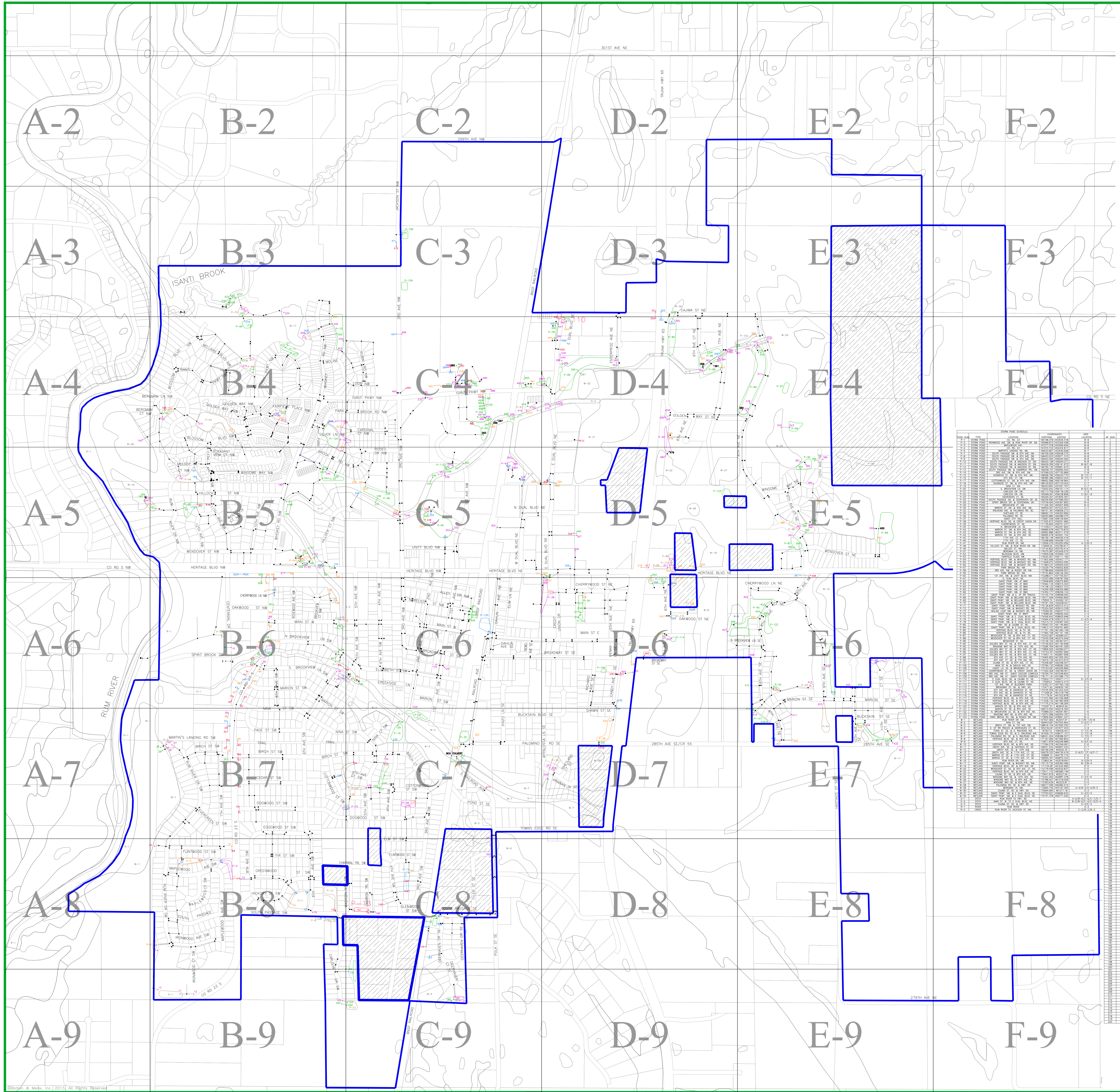


APRON QUALITY



CORPORATE BOUNDARIES

WITH APRONS NUMBERED THROUGH 556



| STORM SEWER APRON SCHEDULE |      |          |             |      |           |      |          |             |      | STORM SEWER APRON SCHEDULE |      |          |             |      |           |      |          |             |      | STORM SEWER APRON SCHEDULE |      |          |             |      |           |      |          |             |      |
|----------------------------|------|----------|-------------|------|-----------|------|----------|-------------|------|----------------------------|------|----------|-------------|------|-----------|------|----------|-------------|------|----------------------------|------|----------|-------------|------|-----------|------|----------|-------------|------|
| APRON NO.                  | TYPE | LOCATION | COORDINATES | DATE | APRON NO. | TYPE | LOCATION | COORDINATES | DATE | APRON NO.                  | TYPE | LOCATION | COORDINATES | DATE | APRON NO. | TYPE | LOCATION | COORDINATES | DATE | APRON NO.                  | TYPE | LOCATION | COORDINATES | DATE | APRON NO. | TYPE | LOCATION | COORDINATES | DATE |
| 1                          | 1    | 1        | 1           | 1    | 1         | 1    | 1        | 1           | 1    | 1                          | 1    | 1        | 1           | 1    | 1         | 1    | 1        | 1           | 1    | 1                          | 1    | 1        | 1           | 1    | 1         | 1    | 1        | 1           | 1    |
| 2                          | 1    | 1        | 1           | 1    | 2         | 1    | 1        | 1           | 2    | 2                          | 1    | 1        | 1           | 2    | 2         | 1    | 1        | 1           | 2    | 2                          | 1    | 1        | 1           | 2    | 2         | 1    | 1        | 2           | 2    |
| 3                          | 1    | 1        | 1           | 1    | 3         | 1    | 1        | 1           | 3    | 3                          | 1    | 1        | 1           | 3    | 3         | 1    | 1        | 1           | 3    | 3                          | 1    | 1        | 1           | 3    | 3         | 1    | 1        | 3           | 3    |
| 4                          | 1    | 1        | 1           | 1    | 4         | 1    | 1        | 1           | 4    | 4                          | 1    | 1        | 1           | 4    | 4         | 1    | 1        | 1           | 4    | 4                          | 1    | 1        | 1           | 4    | 4         | 1    | 1        | 4           | 4    |
| 5                          | 1    | 1        | 1           | 1    | 5         | 1    | 1        | 1           | 5    | 5                          | 1    | 1        | 1           | 5    | 5         | 1    | 1        | 1           | 5    | 5                          | 1    | 1        | 1           | 5    | 5         | 1    | 1        | 5           | 5    |
| 6                          | 1    | 1        | 1           | 1    | 6         | 1    | 1        | 1           | 6    | 6                          | 1    | 1        | 1           | 6    | 6         | 1    | 1        | 1           | 6    | 6                          | 1    | 1        | 1           | 6    | 6         | 1    | 1        | 6           | 6    |
| 7                          | 1    | 1        | 1           | 1    | 7         | 1    | 1        | 1           | 7    | 7                          | 1    | 1        | 1           | 7    | 7         | 1    | 1        | 1           | 7    | 7                          | 1    | 1        | 1           | 7    | 7         | 1    | 1        | 7           | 7    |
| 8                          | 1    | 1        | 1           | 1    | 8         | 1    | 1        | 1           | 8    | 8                          | 1    | 1        | 1           | 8    | 8         | 1    | 1        | 1           | 8    | 8                          | 1    | 1        | 1           | 8    | 8         | 1    | 1        | 8           | 8    |
| 9                          | 1    | 1        | 1           | 1    | 9         | 1    | 1        | 1           | 9    | 9                          | 1    | 1        | 1           | 9    | 9         | 1    | 1        | 1           | 9    | 9                          | 1    | 1        | 1           | 9    | 9         | 1    | 1        | 9           | 9    |
| 10                         | 1    | 1        | 1           | 1    | 10        | 1    | 1        | 1           | 10   | 10                         | 1    | 1        | 1           | 10   | 10        | 1    | 1        | 1           | 10   | 10                         | 1    | 1        | 1           | 10   | 10        | 1    | 1        | 10          | 10   |
| 11                         | 1    | 1        | 1           | 1    | 11        | 1    | 1        | 1           | 11   | 11                         | 1    | 1        | 1           | 11   | 11        | 1    | 1        | 1           | 11   | 11                         | 1    | 1        | 1           | 11   | 11        | 1    | 1        | 11          | 11   |
| 12                         | 1    | 1        | 1           | 1    | 12        | 1    | 1        | 1           | 12   | 12                         | 1    | 1        | 1           | 12   | 12        | 1    | 1        | 1           | 12   | 12                         | 1    | 1        | 1           | 12   | 12        | 1    | 1        | 12          | 12   |
| 13                         | 1    | 1        | 1           | 1    | 13        | 1    | 1        | 1           | 13   | 13                         | 1    | 1        | 1           | 13   | 13        | 1    | 1        | 1           | 13   | 13                         | 1    | 1        | 1           | 13   | 13        | 1    | 1        | 13          | 13   |
| 14                         | 1    | 1        | 1           | 1    | 14        | 1    | 1        | 1           | 14   | 14                         | 1    | 1        | 1           | 14   | 14        | 1    | 1        | 1           | 14   | 14                         | 1    | 1        | 1           | 14   | 14        | 1    | 1        | 14          | 14   |
| 15                         | 1    | 1        | 1           | 1    | 15        | 1    | 1        | 1           | 15   | 15                         | 1    | 1        | 1           | 15   | 15        | 1    | 1        | 1           | 15   | 15                         | 1    | 1        | 1           | 15   | 15        | 1    | 1        | 15          | 15   |
| 16                         | 1    | 1        | 1           | 1    | 16        | 1    | 1        | 1           | 16   | 16                         | 1    | 1        | 1           | 16   | 16        | 1    | 1        | 1           | 16   | 16                         | 1    | 1        | 1           | 16   | 16        | 1    | 1        | 16          | 16   |
| 17                         | 1    | 1        | 1           | 1    | 17        | 1    | 1        | 1           | 17   | 17                         | 1    | 1        | 1           | 17   | 17        | 1    | 1        | 1           | 17   | 17                         | 1    | 1        | 1           | 17   | 17        | 1    | 1        | 17          | 17   |
| 18                         | 1    | 1        | 1           | 1    | 18        | 1    | 1        | 1           | 18   | 18                         | 1    | 1        | 1           | 18   | 18        | 1    | 1        | 1           | 18   | 18                         | 1    | 1        | 1           | 18   | 18        | 1    | 1        | 18          | 18   |
| 19                         | 1    | 1        | 1           | 1    | 19        | 1    | 1        | 1           | 19   | 19                         | 1    | 1        | 1           | 19   | 19        | 1    | 1        | 1           | 19   | 19                         | 1    | 1        | 1           | 19   | 19        | 1    | 1        | 19          | 19   |
| 20                         | 1    | 1        | 1           | 1    | 20        | 1    | 1        | 1           | 20   | 20                         | 1    | 1        | 1           | 20   | 20        | 1    | 1        | 1           | 20   | 20                         | 1    | 1        | 1           | 20   | 20        | 1    | 1        | 20          | 20   |
| 21                         | 1    | 1        | 1           | 1    | 21        | 1    | 1        | 1           | 21   | 21                         | 1    | 1        | 1           | 21   | 21        | 1    | 1        | 1           | 21   | 21                         | 1    | 1        | 1           | 21   | 21        | 1    | 1        | 21          | 21   |
| 22                         | 1    | 1        | 1           | 1    | 22        | 1    | 1        | 1           | 22   | 22                         | 1    | 1        | 1           | 22   | 22        | 1    | 1        | 1           | 22   | 22                         | 1    | 1        | 1           | 22   | 22        | 1    | 1        | 22          | 22   |
| 23                         | 1    | 1        | 1           | 1    | 23        | 1    | 1        | 1           | 23   | 23                         | 1    | 1        | 1           | 23   | 23        | 1    | 1        | 1           | 23   | 23                         | 1    | 1        | 1           | 23   | 23        | 1    | 1        | 23          | 23   |
| 24                         | 1    | 1        | 1           | 1    | 24        | 1    | 1        | 1           | 24   | 24                         | 1    | 1        | 1           | 24   | 24        | 1    | 1        | 1           | 24   | 24                         | 1    | 1        | 1           | 24   | 24        | 1    | 1        | 24          | 24   |
| 25                         | 1    | 1        | 1           | 1    | 25        | 1    | 1        | 1           | 25   | 25                         | 1    | 1        | 1           | 25   | 25        | 1    | 1        | 1           | 25   | 25                         | 1    | 1        | 1           | 25   | 25        | 1    | 1        | 25          | 25   |
| 26                         | 1    | 1        | 1           | 1    | 26        | 1    | 1        | 1           | 26   | 26                         | 1    | 1        | 1           | 26   | 26        | 1    | 1        | 1           | 26   | 26                         | 1    | 1        | 1           | 26   | 26        | 1    | 1        | 26          | 26   |
| 27                         | 1    | 1        | 1           | 1    | 27        | 1    | 1        | 1           | 27   | 27                         | 1    | 1        | 1           | 27   | 27        | 1    | 1        | 1           | 27   | 27                         | 1    | 1        | 1           | 27   | 27        | 1    | 1        | 27          | 27   |
| 28                         | 1    | 1        | 1           | 1    | 28        | 1    | 1        | 1           | 28   | 28                         | 1    | 1        | 1           | 28   | 28        | 1    | 1        | 1           | 28   | 28                         | 1    | 1        | 1           | 28   | 28        | 1    | 1        | 28          | 28   |
| 29                         | 1    | 1        | 1           | 1    | 29        | 1    | 1        | 1           | 29   | 29                         | 1    | 1        | 1           | 29   | 29        | 1    | 1        | 1           | 29   | 29                         | 1    | 1        | 1           | 29   | 29        | 1    | 1        | 29          | 29   |
| 30                         | 1    | 1        | 1           | 1    | 30        | 1    | 1        | 1           | 30   | 30                         | 1    | 1        | 1           | 30   | 30        | 1    | 1        | 1           | 30   | 30                         | 1    | 1        | 1           | 30   | 30        | 1    | 1        | 30          | 30   |
| 31                         | 1    | 1        | 1           | 1    | 31        | 1    | 1        | 1           | 31   | 31                         | 1    | 1        | 1           | 31   | 31        | 1    | 1        | 1           | 31   | 31                         | 1    | 1        | 1           | 31   | 31        | 1    | 1        | 31          | 31   |
| 32                         | 1    | 1        | 1           | 1    | 32        | 1    | 1        | 1           | 32   | 32                         | 1    | 1        | 1           | 32   | 32        | 1    | 1        | 1           | 32   | 32                         | 1    | 1        | 1           | 32   | 32        | 1    | 1        | 32          | 32   |
| 33                         | 1    | 1        | 1           | 1    | 33        | 1    | 1        | 1           | 33   | 33                         | 1    | 1        | 1           | 33   | 33        | 1    | 1        | 1           | 33   | 33                         | 1    | 1        | 1           | 33   | 33        | 1    | 1        | 33          | 33   |
| 34                         | 1    | 1        | 1           | 1    | 34        | 1    | 1        | 1           | 34   | 34                         | 1    | 1        | 1           | 34   | 34        | 1    | 1        | 1           | 34   | 34                         | 1    | 1        | 1           | 34   | 34        | 1    | 1        | 34          | 34   |
| 35                         | 1    | 1        | 1           | 1    | 35        | 1    | 1        | 1           | 35   | 35                         | 1    | 1        | 1           | 35   | 35        | 1    | 1        | 1           | 35   | 35                         | 1    | 1        | 1           | 35   | 35        | 1    | 1        | 35          | 35   |
| 36                         | 1    | 1        | 1           | 1    | 36        | 1    | 1        | 1           | 36   | 36                         | 1    | 1        | 1           | 36   | 36        | 1    | 1        | 1           | 36   | 36                         | 1    | 1        | 1           | 36   | 36        | 1    | 1        | 36          | 36   |
| 37                         | 1    | 1        | 1           | 1    | 37        | 1    | 1        | 1           | 37   | 37                         | 1    | 1        | 1           | 37   | 37        | 1    | 1        | 1           | 37   | 37                         | 1    | 1        | 1           | 37   | 37        | 1    | 1        | 37          | 37   |
| 38                         | 1    | 1        | 1           | 1    | 38        | 1    | 1        | 1           | 38   | 38                         | 1    | 1        | 1           | 38   | 38        | 1    | 1        | 1           | 38   | 38                         | 1    | 1        | 1           | 38   | 38        | 1    | 1        | 38          | 38   |
| 39                         | 1    | 1        | 1           | 1    | 39        | 1    | 1        | 1           | 39   | 39                         | 1    | 1        | 1           | 39   | 39        | 1    | 1        | 1           | 39   | 39                         | 1    | 1        | 1           | 39   | 39        | 1    | 1        | 39          | 39   |
| 40                         | 1    | 1        | 1           | 1    | 40        | 1    | 1        | 1           | 40   | 40                         | 1    | 1        | 1           | 40   | 40        | 1    | 1        | 1           | 40   | 40                         | 1    | 1        | 1           | 40   | 40        | 1    | 1        | 40          | 40   |
| 41                         | 1    | 1        | 1           | 1    | 41        | 1    | 1        | 1           | 41   | 41                         | 1    | 1        | 1           | 41   | 41        | 1    | 1        | 1           | 41   | 41                         | 1    | 1        | 1           | 41   | 41        | 1    | 1        | 41          | 41   |
| 42                         | 1    | 1        | 1           | 1    | 42        | 1    | 1        | 1           | 42   | 42                         | 1    | 1        | 1           | 42   | 42        | 1    | 1        | 1           | 42   | 42                         | 1    | 1        | 1           | 42   | 42        | 1    | 1        | 42          | 42   |
| 43                         | 1    | 1        | 1           | 1    | 43        | 1    | 1        | 1           | 43   | 43                         | 1    | 1        | 1           | 43   | 43        | 1    | 1        | 1           | 43   | 43                         | 1    | 1        | 1           | 43   | 43        | 1    | 1        | 43          | 43   |
| 44                         | 1    | 1        | 1           | 1    | 44        | 1    | 1        | 1           | 44   | 44                         | 1    | 1        | 1           | 44   | 44        | 1    | 1        | 1           | 44   | 44                         | 1    | 1        | 1           | 44   | 44        | 1    | 1        | 44          | 44   |
| 45                         | 1    | 1        | 1           | 1    | 45        | 1    | 1        | 1           | 45   | 45                         | 1    | 1        | 1           | 45   | 45        | 1    | 1        | 1           | 45   | 45                         | 1    | 1        | 1           | 45   | 45        | 1    | 1        | 45          | 45   |
| 46                         | 1    | 1        | 1           | 1    | 46        | 1    | 1        | 1           | 46   | 46                         | 1    | 1        | 1           | 46   | 46        | 1    | 1        | 1           | 46   | 46                         | 1    | 1        | 1           | 46   | 46        | 1    | 1        | 46          | 46   |
| 47                         | 1    | 1        | 1           | 1    | 47        | 1    | 1        | 1           | 47   | 47                         | 1    | 1        | 1           | 47   | 47        | 1    | 1        | 1           | 47   | 47                         | 1    | 1        | 1           | 47   | 47        | 1    | 1        | 47          | 47   |
| 48                         | 1    | 1        | 1           | 1    | 48        | 1    | 1        | 1           | 48   | 48                         | 1    | 1        | 1           | 48   | 48        | 1    | 1        | 1           | 48   | 48                         | 1    | 1        | 1           | 48   | 48        | 1    | 1        | 48          | 48   |
| 49                         | 1    | 1        | 1           | 1    | 49        | 1    | 1        | 1           | 49   | 49                         | 1    | 1        | 1           | 49   | 49        | 1    | 1        | 1           | 49   | 49                         | 1    | 1        | 1           | 49   | 49        | 1    | 1        | 49          | 49   |
| 50                         | 1    | 1        | 1           | 1    | 50        | 1    | 1        | 1           | 50   | 50                         | 1    | 1        | 1           | 50   | 50        | 1    | 1        | 1           | 50   | 50                         | 1    | 1        | 1           | 50   | 50        | 1    | 1        | 50          | 50   |
| 51                         | 1    | 1        | 1           | 1    | 51        | 1    | 1        | 1           | 51   | 51                         | 1    | 1        | 1           | 51   | 51        | 1    | 1        | 1           | 51   | 51                         | 1    | 1        | 1           | 51   | 51        | 1    | 1        | 51          | 51   |
| 52                         | 1    | 1        | 1           | 1    | 52        | 1    | 1        | 1           | 52   | 52                         | 1    | 1        | 1           | 52   | 52        | 1    | 1        | 1           | 52   | 52                         | 1    | 1        | 1           | 52   | 52        | 1    | 1        | 52          | 52   |
| 53                         | 1    | 1        | 1           | 1    | 53        | 1    | 1        | 1           | 53   | 53                         | 1    | 1        | 1           | 53   | 53        | 1    | 1        | 1           | 53   | 53                         | 1    | 1        | 1           | 53   | 53        | 1    | 1        | 53          | 53   |
| 54                         | 1    | 1        | 1           | 1    | 54        | 1    | 1        | 1           | 54   | 54                         | 1    | 1        | 1           | 54   | 54        | 1    | 1        | 1           | 54   | 54                         | 1    | 1        | 1           | 54   | 54        | 1    | 1        | 54          | 54   |
| 55                         | 1    | 1        | 1           | 1    | 55        | 1    | 1        | 1           | 55   | 55                         | 1    | 1        | 1           | 55   | 55        | 1    | 1        | 1           | 55   | 55                         | 1    | 1        | 1           | 55   | 55        | 1    | 1        | 55          | 55   |
| 56                         | 1    | 1        | 1           | 1    | 56        | 1    | 1        | 1           | 56   | 56                         | 1    | 1        | 1           | 56   | 56        | 1    | 1        | 1           | 56   | 56                         | 1    | 1        | 1           | 56   | 56        | 1    | 1        | 56          | 56   |
| 57                         | 1    | 1        | 1           | 1    | 57        | 1    | 1        | 1           | 57   | 57                         | 1    | 1        | 1           | 57   | 57        | 1    | 1        | 1           | 57   | 57                         | 1    | 1        | 1           | 57   | 57        | 1    | 1        | 57          | 57   |
| 58                         | 1    | 1        | 1           | 1    | 58        | 1    | 1        | 1           | 58   | 58                         | 1    | 1        | 1           | 58   | 58        | 1    | 1        | 1           | 58   | 58                         | 1    | 1        | 1           | 58   | 58        | 1    | 1        | 58          | 58   |
| 59                         | 1    | 1        | 1           | 1    | 59        | 1    | 1        | 1           | 59   | 59                         | 1    | 1        | 1           | 59   | 59        | 1    | 1        | 1           | 59   | 59                         | 1    | 1        | 1           | 59   | 59        | 1    | 1        | 59          | 59   |
| 60                         | 1    | 1        | 1           | 1    | 60        | 1    | 1        | 1           | 60   | 60                         | 1    | 1        | 1           | 60   | 60        | 1    | 1        | 1           | 60   | 60                         | 1    | 1        | 1           | 60   | 60        | 1    | 1        | 60          | 60   |

## APPENDIX D

### *5-Year Storm Sewer Aprons & Ponds Maintenance Plan*

# CITY OF ISANTI 5 YR STORM SEWER APRONS & PONDS MAINTENANCE PLAN

ISANTI COUNTY, MINNESOTA  
SEPTEMBER, 2016



## LEGEND

--- CORPORATE BOUNDARY

- 2017 MAINTENANCE
- 2018 MAINTENANCE
- 2019 MAINTENANCE
- 2020 MAINTENANCE
- 2021 MAINTENANCE

