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<th>ITEM DESCRIPTION</th>
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GARAGE BUILDING TO BE DEMOLISHED (NORTH)

GARAGE BUILDING TO BE DEMOLISHED (WEST SIDE)

GARAGE BUILDING TO BE DEMOLISHED (SOUTH)

TOLL BOOTH TO BE SALVAGED/RELOCATED & ACCESS, GATE EQUIPMENT
STRM MH (S-23)
Drainage Structure Design 48-4020
Casting STRM-3
STA. 17+89, 25.00 LT Centerline Structure
STA. 17+89, 25.00 LT Centerline Casting
RIM ELEV 1398.18
INV S 1392.68

STRM MH (S-24)
Drainage Structure Design 48-4020
Casting STRM-3
STA. 18+89, 25.00 LT Centerline Structure
STA. 18+89, 25.00 LT Centerline Casting
RIM ELEV 1398.18
INV S 1392.68

STRM MH (S-25)
Drainage Structure Design 48-4020
Casting STRM-3
STA. 19+89, 25.00 LT Centerline Structure
STA. 19+89, 25.00 LT Centerline Casting
RIM ELEV 1398.18
INV S 1392.68

STRM MH (S-48)
Drainage Structure Design 72-4020
Casting STRM-3
STA. 18+41, 136.34 LT Centerline Structure
STA. 18+41, 136.34 LT Centerline Casting
RIM ELEV 1395.84
INV W 1390.90
INV NW 1390.17
INV NE 1390.17
INV S 1390.07

STRM MH (S-49)
Drainage Structure Design F
Casting STRM-3
STA. 18+41, 136.34 LT Centerline Structure
STA. 18+41, 136.34 LT Centerline Casting
RIM ELEV 1395.84
INV W 1390.90
INV NW 1390.17
INV NE 1390.17
INV S 1390.07

STRM MH (S-50)
Drainage Structure Design 72-4020
Casting STRM-3
STA. 18+41, 136.34 LT Centerline Structure
STA. 18+41, 136.34 LT Centerline Casting
RIM ELEV 1395.84
INV W 1390.90
INV NW 1390.17
INV NE 1390.17
INV S 1390.07

STRM MH (S-01) EXISTING
STA. 21+76.94, 67.87 RT Centerline Structure
RIM ELEV 1396.33
INV NW 1393.53
INV N 1392.48
INV NE 1392.58
INV SE 1392.38
INV S 1392.38

STRM MH (S-66)
Drainage Structure Design 72-4020
Casting STRM-3
STA. 22+22.85, 40.99 RT Centerline Structure
STA. 22+22.85, 40.99 RT Centerline Casting
RIM ELEV 1400.84
INV N 1392.04
INV S 1391.94

STRM MH (S-67)
Drainage Structure Design 72-4020
Casting STRM-3
STA. 22+63.13, 41.00 RT Centerline Structure
STA. 22+63.13, 41.00 RT Centerline Casting
RIM ELEV 1398.97
INV N 1391.71
INV W 1394.47
INV E 1394.37
INV S 1391.61

STRM MH (S-46)
Drainage Structure Design G
Casting STRM-3
STA. 19+61.48, 136.35 LT Centerline Structure
RIM ELEV 1396.20
INV S 1392.10

STRM MH (S-44)
Drainage Structure Design 48-4020
Casting STRM-3
STA. 18+89, 67.00 LT Centerline Structure
STA. 18+89, 67.00 LT Centerline Casting
RIM ELEV 1397.23
INV N 1391.73
INV W 1391.13
INV SE 1391.03

STRM MH (S-45)
Drainage Structure Design G
Casting STRM-3
STA. 19+89, 67.00 LT Centerline Structure
RIM ELEV 1397.23
INV N 1392.23
INV E 1392.13

DRAKE INTERNATIONAL AIRPORT & ASSOCIATES, P.A.
227 WEST FIRST STREET, SUITE 200
DULUTH, MINNESOTA 55802
Ph: 218.727.3282       Fx: 218.727.1216
www.krechjoard.com

REPLACEMENT TERMINAL AREA DEVELOPMENT, LANDSIDE SITE PHASE I
DULUTH INTERNATIONAL AIRPORT & ASSOCIATES, P.A.

4 OF 6
BID DOCUMENTS
STORM CHAMBER SYSTEM EAST (16,700 CF)
INSTALLED SYSTEM VOLUME: 16700 CF

INLET CONTROL STRUCTURE A-A

OUTLET CONTROL STRUCTURE A-A

STORM CHAMBER SYSTEM EAST 16,700 CF
TYPICAL SECTION A-A

C516
BID DOCUMENTS
### NOMINAL MC-3500 CHAMBER SPECIFICATIONS

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<th>PART#</th>
<th>STUB B C</th>
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<tr>
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<tr>
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<td>MC3500TEPE24B</td>
<td>24&quot; (600 mm) N/A 2.06&quot; (52 mm)</td>
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**NOTE:** 24" TOP STUB CORED ENDCAP NOT AVAILABLE

### NOMINAL MC-3500 END CAP SPECIFICATIONS

- **NOTE:** Inspection ports may be connected through any of (6) chamber corrugation valleys
- **CONNECTION DETAIL**
  - 8" SCHED 40 PVC COUPLING
  - 4" SCHED 40 PVC
  - 4" SCHED 40 PVC
  - CORE 4.5" Ø HOLE IN CHAMBER (4.5" HOLE SAW REQ'D)
  - ANY OF (6) VALLEY LOCATIONS

### STORM CHAMBER TECHNICAL SPECIFICATIONS

- **NOTE:** Storm Chamber AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE
  - 3/4 - 2 INCH CLEAN CRUSHED ANGULAR STONE
  - NYLOPLAST 2712AG INLINE DRAIN W/ STANDARD H-20 GRATE OR APPROVED EQUAL
  - PAVEMENT 6.5' MAX.
  - 24" MIN.
  - 8" CONCRETE (MNDOT 3A32) COLLAR EXTEND 12" (MIN.) AROUND DRAIN
  - 2" DULUTH INTERNATIONAL AIRPORT & ASSOCIATES, P.A.
    - 227 WEST FIRST STREET, SUITE 200
    - DULUTH, MINNESOTA 55802
    - Ph: 218.727.3282       Fx: 218.727.1216
    - www.krechjojard.com
WATER QUALITY UNIT (EAST)

R.T.S.
NOTE:
The location of existing electrical, light, storm drain, or other utilities as shown on the plans are approximate. These are not to scale. When the project begins, all work shall be done with the location of the utilities as the field before proceeding.
<table>
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<th>Trench Width</th>
<th>Trench Depth</th>
<th>Base Depth</th>
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<tr>
<td>40 cm</td>
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<tr>
<td>50 cm</td>
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**Utility Details**

- **City of Duluth**
- **Details**
- **Sheet 1 of 2**
- **Bid Documents**
- **Print Number**: C610
- **Drawing No.**: 08-098-003 & 008

**Replacement Terminal Area Development, Landside Site Phase 1**

- **Hardcopy**: 09-098-003 & 008
- **Date**: [Insert Date]
- **Drawing Title**: [Insert Title]
- **Scale**: [Insert Scale]
- **Drawing Symbols**: [Insert Symbols]
- **Drawing Notes**: [Insert Notes]