



110 Armour Rd
North Kansas City, MO 64116
p. 816.300.4101
wskfarch.com

March 13, 2023

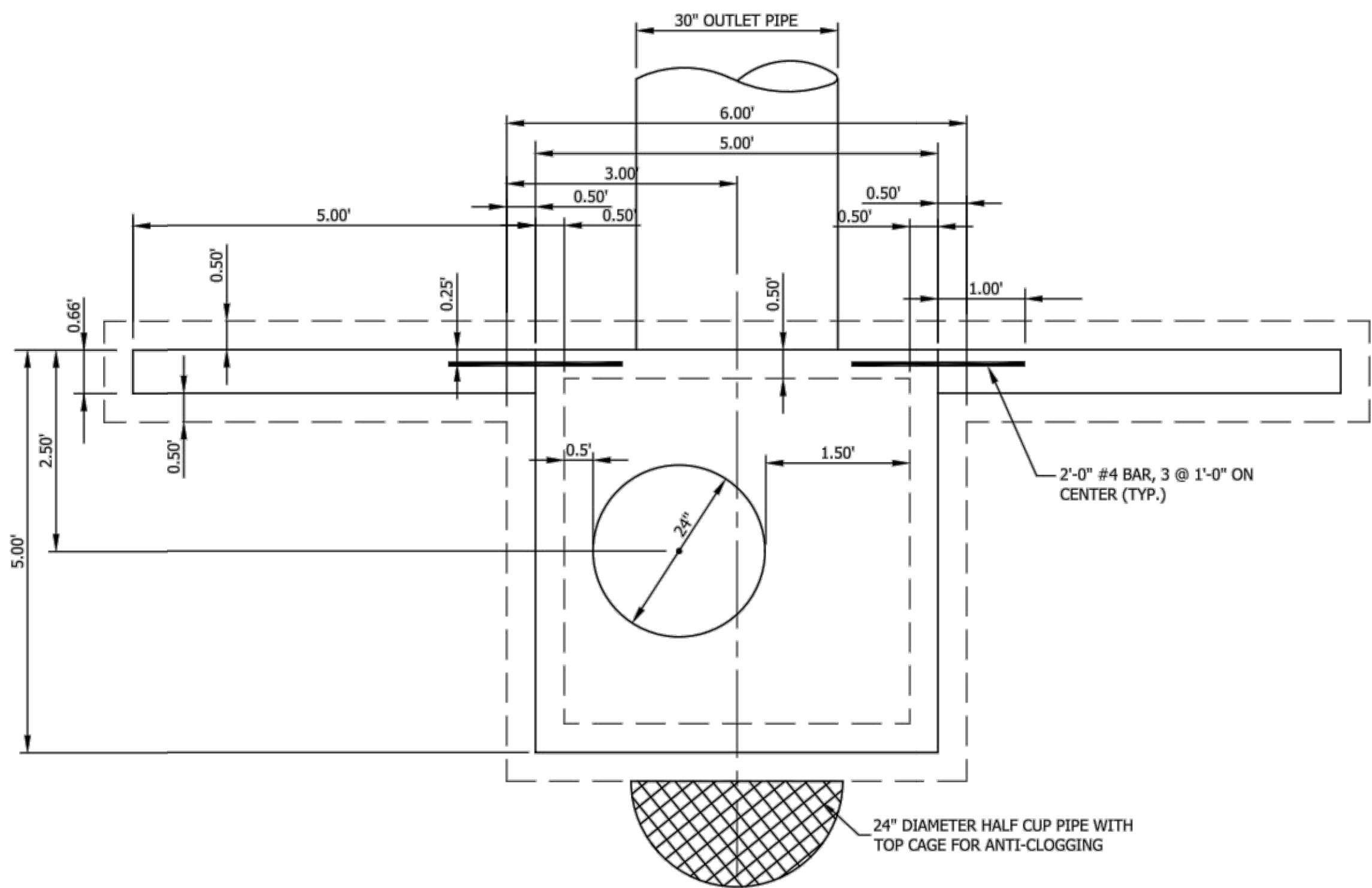
**Re: Developing Potential Detention Basin As-built Drawing
Lee's Summit, MO**

Attached is the Civil Engineer's as-built drawing revised in response to review comments from Gene Williams received via email on 2/28/23.

Respectfully,

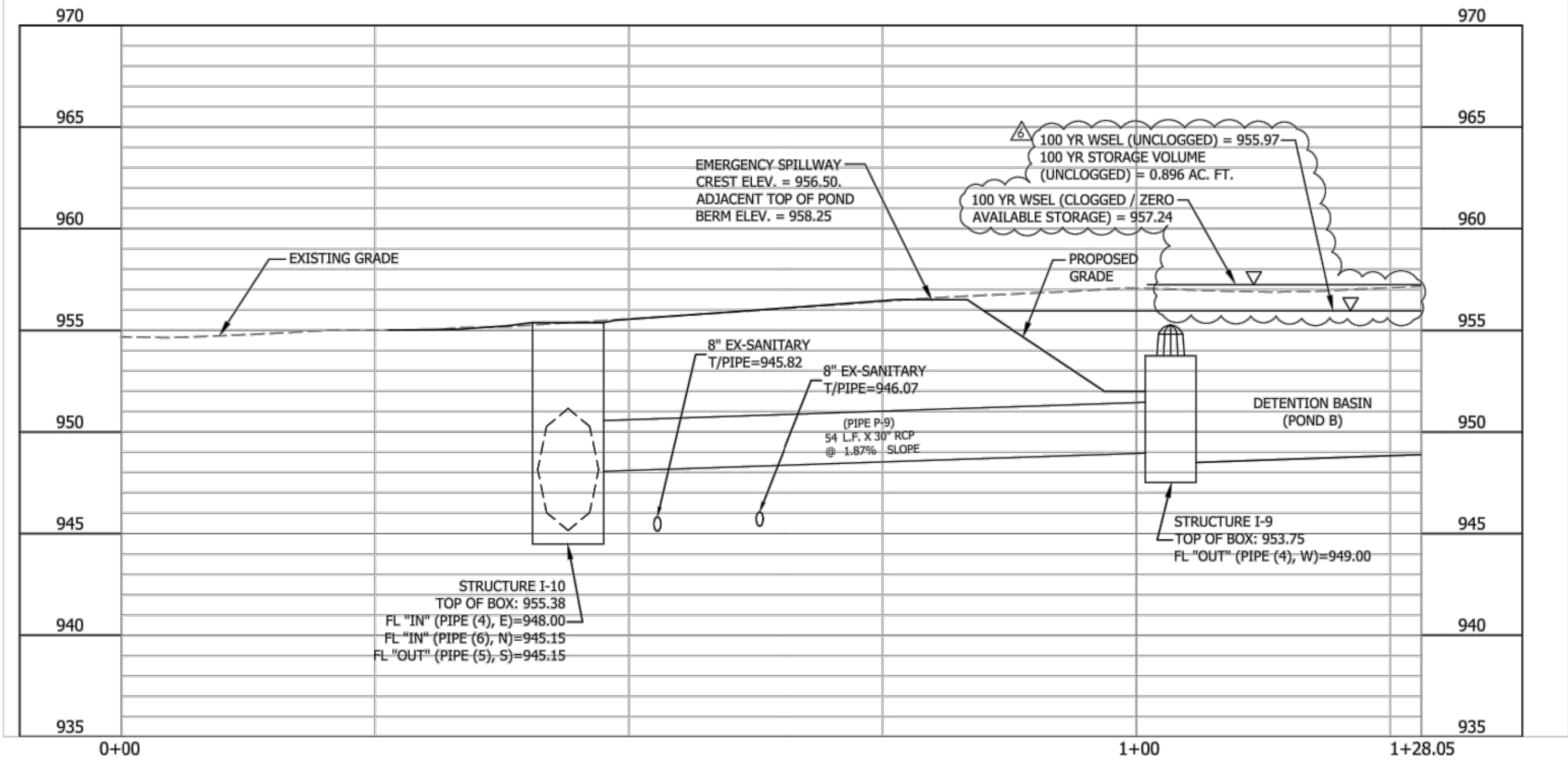
Chris O'Connor
WSKF Architects

Attachments:
Sheets: C10.1



DETENTION POND: OUTLET STRUCTURE PLAN VIEW

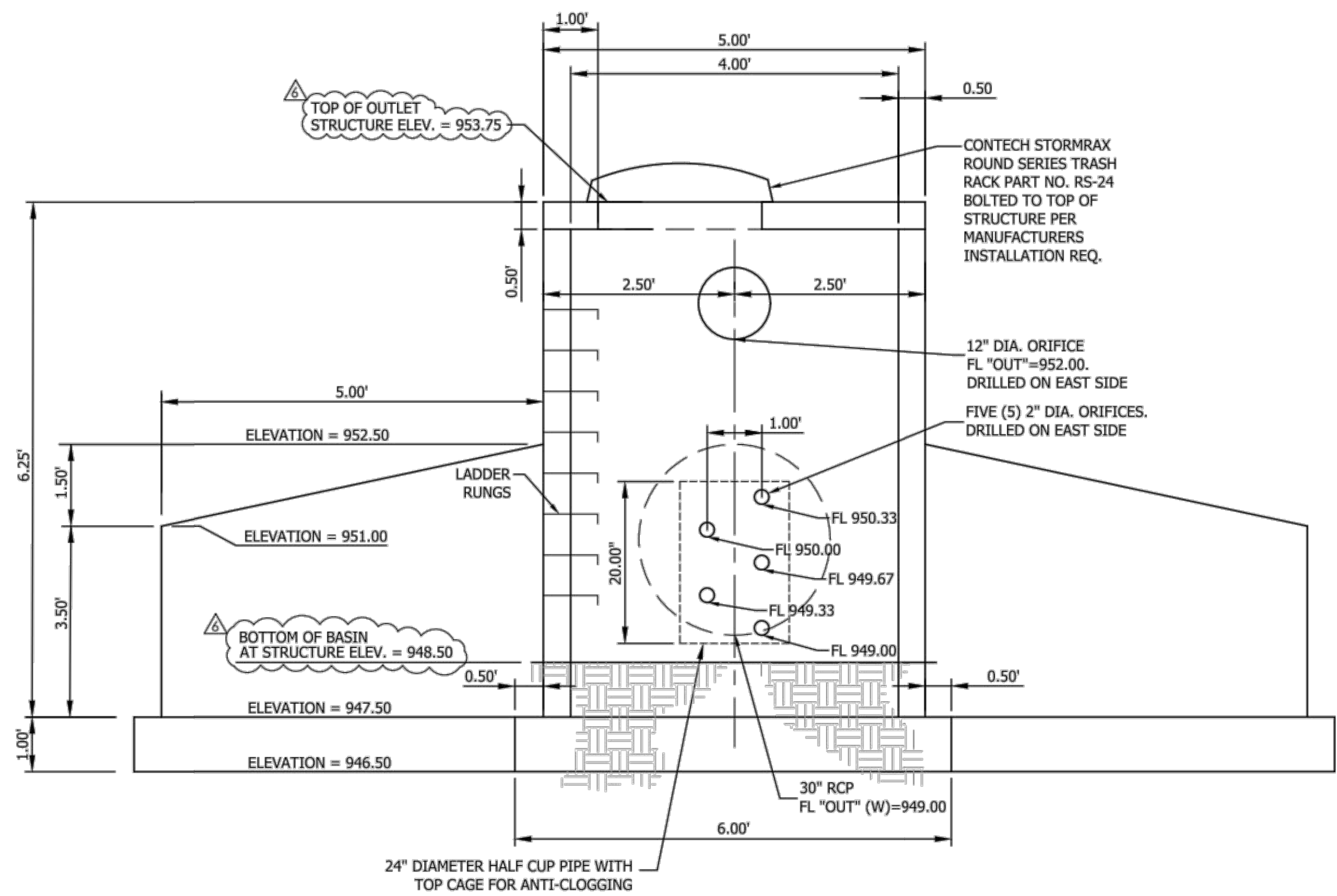
NTS



REFER TO SHEET C6.0 FOR PLAN VIEW

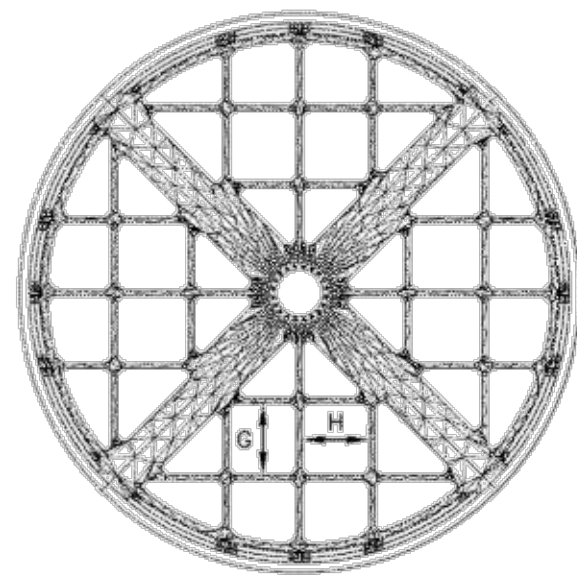
OUTLET PROFILE

SCALE: VERT. 1"=5'
HORIZ. 1"=10'

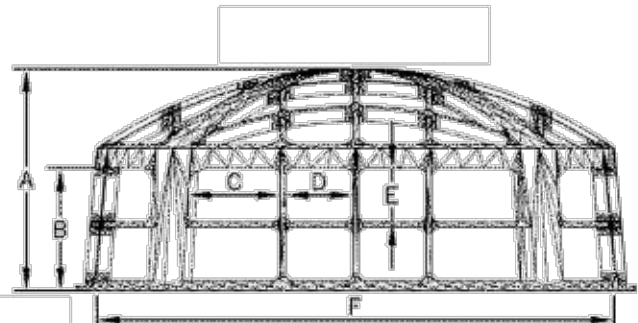


DETENTION POND: OUTLET STRUCTURE SECTION VIEW

NTS



PLAN VIEW



SIDE VIEW

| ROUND SERIES TRASH RACKS | | | | | | | | | |
|--------------------------|----------------------|--------------------------|---------|---------|--------|--------|--------|---------|--------|
| PART NO. | RISER | | A | B | C | D | E | F | G |
| | CONCRETE INSIDE DIA. | CMP OR HDPE NOMINAL DIA. | | | | | | | |
| RS-24 | 24" | 12" x 18" | 17 1/3" | 13 1/3" | 7 3/4" | 6 1/4" | 6 1/4" | 27 1/2" | 8 1/4" |

DETENTION POND: OUTLET STRUCTURE TRASH RACK

NTS

| STORMWATER STRUCTURE ITEMS TO BE AS-BUILT | DESIGN VALUE | SURVEYED AS-BUILT VALUE |
|--|--------------|-------------------------|
| TOP OF POND BERM (BASIN) EL ADJACENT TO SPILLWAY | 958.25 | 958.08 |
| EMERGENCY SPILLWAY CREST EL | 956.50 | 956.82 |
| 100 YEAR WSEL (UNCLOGGED) | 955.97 | 955.97 |
| 100 YEAR STORAGE VOLUME (UNCLOGGED) | .896 AC-FT | .7789 AC-FT*** |
| 100 YEAR WSEL (CLOGGED/ZERO AVAILABLE STORAGE) | 957.24 | 957.24 |
| TOP OF OUTLET STRUCTURE EL | 953.75 | 953.72 |
| 12" DIA ORIFICE DIAMETER | 12" | 12" |
| 12" DIA ORIFICE FLOWLINE EL | 952.00 | 952.04 |
| 2" DIA ORIFICE 5 DIAMETER | 2" | 2" |
| 2" DIA ORIFICE 5 FLOWLINE EL | 950.33 | 950.35 |
| 2" DIA ORIFICE 4 DIAMETER | 2" | 2" |
| 2" DIA ORIFICE 4 FLOWLINE EL | 950.00 | 950.02 |
| 2" DIA ORIFICE 3 DIAMETER | 2" | 2" |
| 2" DIA ORIFICE 3 FLOWLINE EL | 949.67 | 949.67 |
| 2" DIA ORIFICE 2 DIAMETER | 2" | 2" |
| 2" DIA ORIFICE 2 FLOWLINE EL | 949.33 | 949.39 |
| 2" DIA ORIFICE 1 DIAMETER | 2" | 2" |
| 2" DIA ORIFICE 1 FLOWLINE EL | 949.00 | 949.02 |
| BOTTOM OF BASIN EL AT STRUCTURE EL | 948.50 | 947.47 |

OUTLET STRUCTURE AS-BUILT TABLE

*** AT THE 100 YEAR WSEL (UNCLOGGED) OF 955.97 THE 100 YEAR STORAGE VOLUME (UNCLOGGED) IS .7789 AC-FT. HOWEVER THE STORAGE VOLUME AT THE EMERGENCY SPILLWAY CREST EL OF 956.82 IS .9132 AC-FT WHICH EXCEEDS THE REQUIRED STORAGE VOLUME OF .896 AC-FT.

THE AS-BUILT VALUES ARE WITHIN ACCEPTABLE TOLERANCES OF THE ORIGINAL DESIGN VALUES.

BRIAN L. WENNINGHOFF, P.E.
3/10/2023

AS-BUILT DATA COLLECTED BY
KYLE PETER WITH ENGINEERING
SOLUTIONS ON 12/28/2022

BASIN CONSTRUCTION NOTE:
BASIN TO BE CONSTRUCTED PRIOR TO ANY OTHER IMPROVEMENTS WITH THE EXCEPTION OF EROSION AND SEDIMENT CONTROL SHOWN ON SHEET C7.0

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
05/19/2022

AS-BUILT