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REQUEST FOR INFORMATION DATE: August 24, 2016 **NO.:** RFI-252

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Final Storm Modifications

Response Required By: August 31, 2016

Drawing / Spec Reference:

Information Requested:

See attached markup. Please advise the modifications that have been made for constructability are acceptable.

Response:

MSD does not take exception to the suggested revisions. The pipe slope between 5 and 6 needs to be a minimum of 1%. The pipe between structures 6 and 7 needs to be lowered to avoid conflict with the rain garden. If the outgoing pipe from structure 7 is lowered to 542.00 this should provide the necessary clearance. The contractor will need to document these revisions in the as-builts set of plans submitted to MSD.

ARCHITECT'S RESPONSE:

This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.

Answered By: Mark Davis

Date: 9/8/2016

1. IF STORM AD SANITARY SEWERS ARE PARALLEL AND IN THE SAME TRENCH, THE UPPER PIPE SHALL BE PLACED ON A SHELF AND THE LOWER PIPE SHALL BE BEDDED IN COMPACTED GRANULAR FILL TO THE FLOW LINE OF THE UPPER PIPE.
2. MANHOLE JOINTS WITH ADAPTING COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 316 STAINLESS STEEL NUT AND BOLT CLAMP (7-BOLT) CONFIGURATION; AND WITH STAINLESS STEEL SHEAR BARS, BEING A MINIMUM OF 12 (12) MILS (MSD STD. CONST. SPECS. PT. 2, SUBSECTION H 11). WORM DRIVE HOSE CLAMPS AND CONCRETE BACKFILLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT THOSE JOINTS. GRANULAR BACKFILL SHOULD BE USED. IF FLOOD FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TIE THE ADAPTERS AND COUPLINGS WITH A SIX (6) MIL POLYETHYLENE SHEET.
3. LIMITS OF DISTURBANCE: THE CONTRACTOR SHALL WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHENEVER POSSIBLE.
4. DISTRIBUTION OF STRAPPED FLOODING SHALL BE CONSISTENT WITH MSD RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES (FEBRUARY 2006), FIGURES 3-1 & 3-2.
5. A BACKWATER VALVE SHALL BE INSTALLED ON ALL SANITARY BUILDING LATERALS AND SEWERS, COUNT PLUMBING CODE.
6. THE OWNER ACKNOWLEDGES THE POTENTIAL OF FLOODING DUE TO THE 100-YR OVERLAND FLOW PATH BEING BLOCKED WITH THE PROPOSED IMPROVEMENTS. THE POTENTIAL FLOODING LOCATIONS ARE IDENTIFIED AS THE FOLLOWING AREAS: PROPOSED AREA DRAINS #1D THROUGH #5D AND PROPOSED TRENCH DRAIN #1D.
7. EXTERNAL GREASE TRAPS AND SAMPLING MANHOLE: AN EXTERNAL GREASE TRAP IS REQUIRED TO BE LOCATED IN AN ACCESSIBLE LOCATION FOR MSD INSPECTION, PROVIDE MEANS FOR VISUAL INSPECTION FROM ABOVE FOR BOTH INFLUENT AND EFFLUENT SIDES. A MSD SAMPLING MANHOLE WILL BE LOCATED ON THE SAME LATERAL IN AN ACCESSIBLE LOCATION. MSD INSPECTION OF THE SAMPLING MANHOLE WILL BE LOCATED DOWNSTREAM OF THE GREASE TRAP AND ALL OTHER COMMERCIAL SANITARY LATERAL CONNECTIONS TO FACILITATE MSD SAMPLING. GREASE TRAPS AND SAMPLING MANHOLES WILL BE SHOWN ON THE PLANS AND NOT BE LOCATED IN DRIVE-THRU LANES OR WITHIN PARKING SPACES.
8. THE ENTIRE EXISTING RAIN GARDEN "A" MIGHT HAVE TO BE REPLACED DURING CONSTRUCTION IF MSD INSPECTOR BELIEVES THAT THE RAIN GARDEN IS GETTING PLUGGED UP DURING THE CONSTRUCTION OF THE PROPOSED FLOW PATH DOWNSTREAM DEFENSES ASSASSINATION.
9. AN INTERNAL GREASE INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING AS SHOWN ON PLUMBING PLAN SHEET P0011. THIS ITEM SHALL BE CONNECTED TO THE BUILDING SANITARY SEWER.
10. A SAND INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING FLOODATION DRAIN AS SHOWN ON PLUMBING PLAN SHEET P0010. THIS ITEM SHALL BE CONNECTED TO THE BUILDING STORM SEWER.

1 CONTRACTOR TO FIELD LOCATE EXISTING DOWNSPOUT LINE AND RELOCATE WITH 8" PVC
TIED INTO PROPOSED STORM SEWER SYSTEM.

2 SEE LANDSCAPE PLANS FOR HARDSCAPE DETAILS.

3 CONSTRUCT TRENCH DRAIN BEHIND SEAT WALL ON GRASS SIDE AND AT THE BASE OF THE
SEAT WALL ON THE PLAZA SIDE. DISCHARGE UPPER TRENCH DRAIN TO PLAZA (3A).
DISCHARGE LOWER TRENCH DRAIN TO MANHOLE 23 (PRIVATE).

4 CONCRETE RETAINING WALL WITH ARCHITECTURAL FINISH.

5 CONCRETE RETAINING WALL WITH FIBER/CEMENT PANEL FINISH.

6 PLACE 2 AREA DRAINS IN AREA WALL AND CONNECT WITH 8" PVC TO MANHOLE, SEE
PROFILE.

7 CONSTRUCT DUMPSTER PAD AND ENCLOSURE.

8 8" DIAMETER PVC. TO BUILDING DOWNSPOUT, SEE PLUMBING FOR CONTINUATION. FL AT
WALL = 552.00, ROCK BANKLAND 5'Lx5'x1'D.

9 6" DIAMETER PERFORATED SUB DRAIN, (TYP)

10 DISCHARGE EXISTING STORM DRAINS TO BASIN EITHER DIRECTLY IF FLOWLINE ALLOWS WITH
END OF PIPE HEADWALL OR VIA BUBBLER. MATCH EXISTING PIPE TYPE, DIAMETER AND
SLOPE. ROCK BANKLAND 5'Lx5'x1'D.

11 4" DIAMETER PERFORATED SUB DRAIN, (TYP) INSTALL CLEANOUT AT END PER DETAIL.

12 SAMPLING "T"

13 CLEANOUT (CO) TOP = 552.00, FL = 547.25 (TYP)

14 INLET 180 IS SIMILAR TO INLET 3D, DRAIN THRU RETAINING WALL WITH 8" PVC. TOP =
554.70, FL = 552.67, FL = 552.00 AT RAIN GARDEN. ROCK BANKLAND 5'Lx5'x1'D.

15 PRIVATE 6" SANITARY SEWER LATERAL AT 2% MIN.

16 SAMPLING MANHOLE

17 GREASE INTERCEPTOR, SEE PLUMBING.

18 BUILDING DOWNSPOUT, SEE PLUMBING

19 PAVERS TO BE REMOVED AND REPLACED IN ORDER TO FACILITATE CONSTRUCTION OF WATER
LINE.

20 PLAZA OBSERVATION WELL TOP = 540.85, FL = 538.67 (TYP)

21 CONDENSING UNITS, SEE MECHANICAL FOR LOCATION

22 RAIN GARDEN INFORMATIONAL SIGN

23 PICIP INFORMATION SIGN

24 GAS METER, 6"x6"x6" THICK CONCRETE PAD WITH 4 BOLLARDS PAINTED YELLOW, ONE IN
EACH CORNER. SEE SHEET C701 FOR DETAIL AND MECHANICAL FOR PIPING.

25 12"-DIAMETER PRECAST CONCRETE BOLLARDS

26 INTEGRAL CURB AND SIDEWALK.

27 ADJUST LOCATION OF DRAINS AND PIPING BASED ON DOUBLE WALL CONFIGURATION.

28 NEW HYDRO INTERNATIONAL 48" DOWNSTREAM DEFENDER.

29 NEW FLOW SPLITTER MANHOLE.

30 NEW FIRE HYDRANT

31 REMOVE AND REPLACE EXISTING BRICK SCREEN WALL. SEE ARCHITECTURAL AND
STRUCTURAL.

32 CLEANOUT (CO) TOP = 551.00, FL = 546.25 (TYP)

33 TAPPED UNDERDRAIN (TU) TOP = 541.26±, FL = 539.64 (TYP).

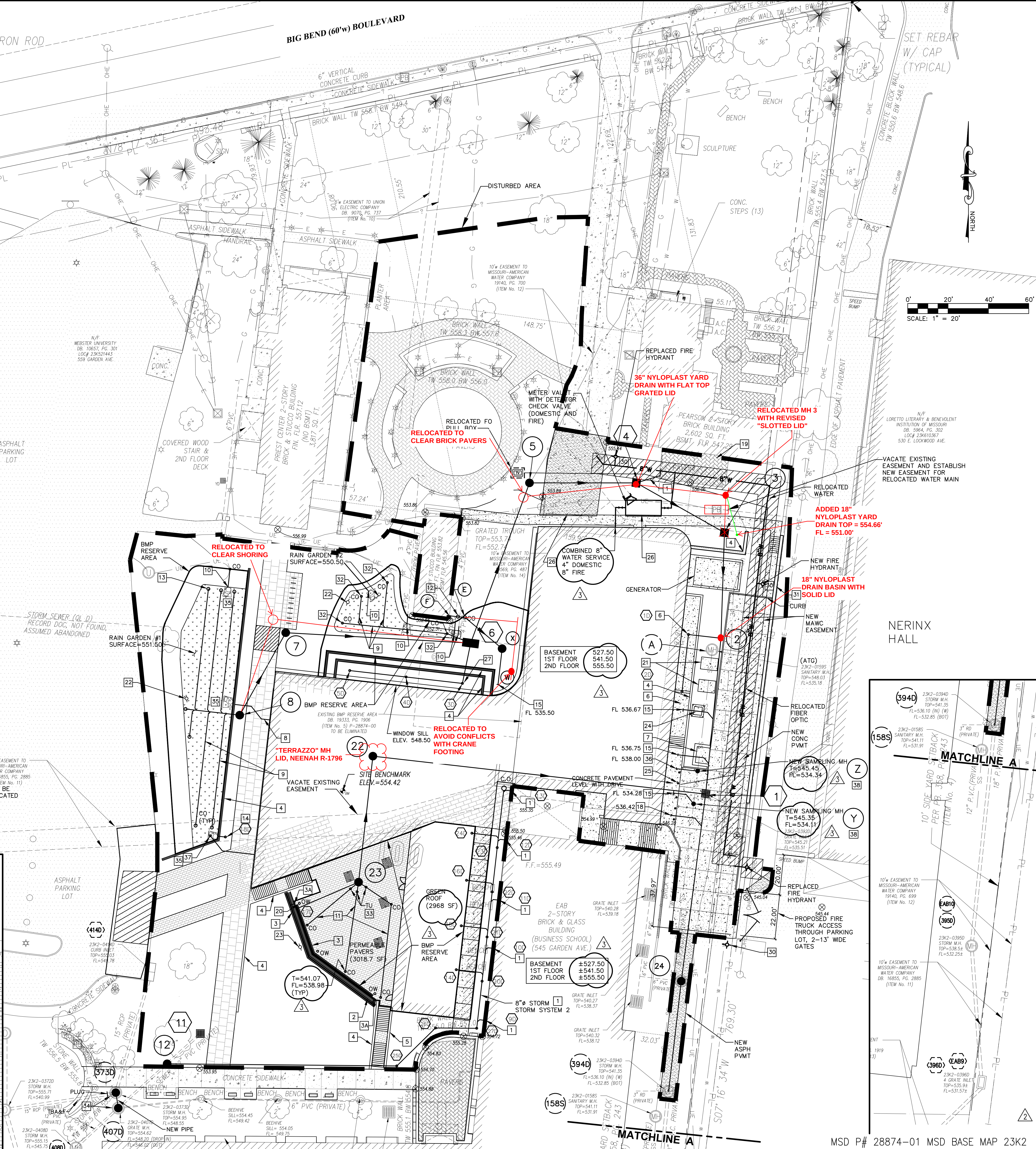
34 FL = 538.98 (TYP)

35 TRER&R AT MSP INSPECTORS DISCRETION

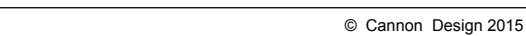
36 ROCK BANKLAND (5'x5'x1'x1'D)

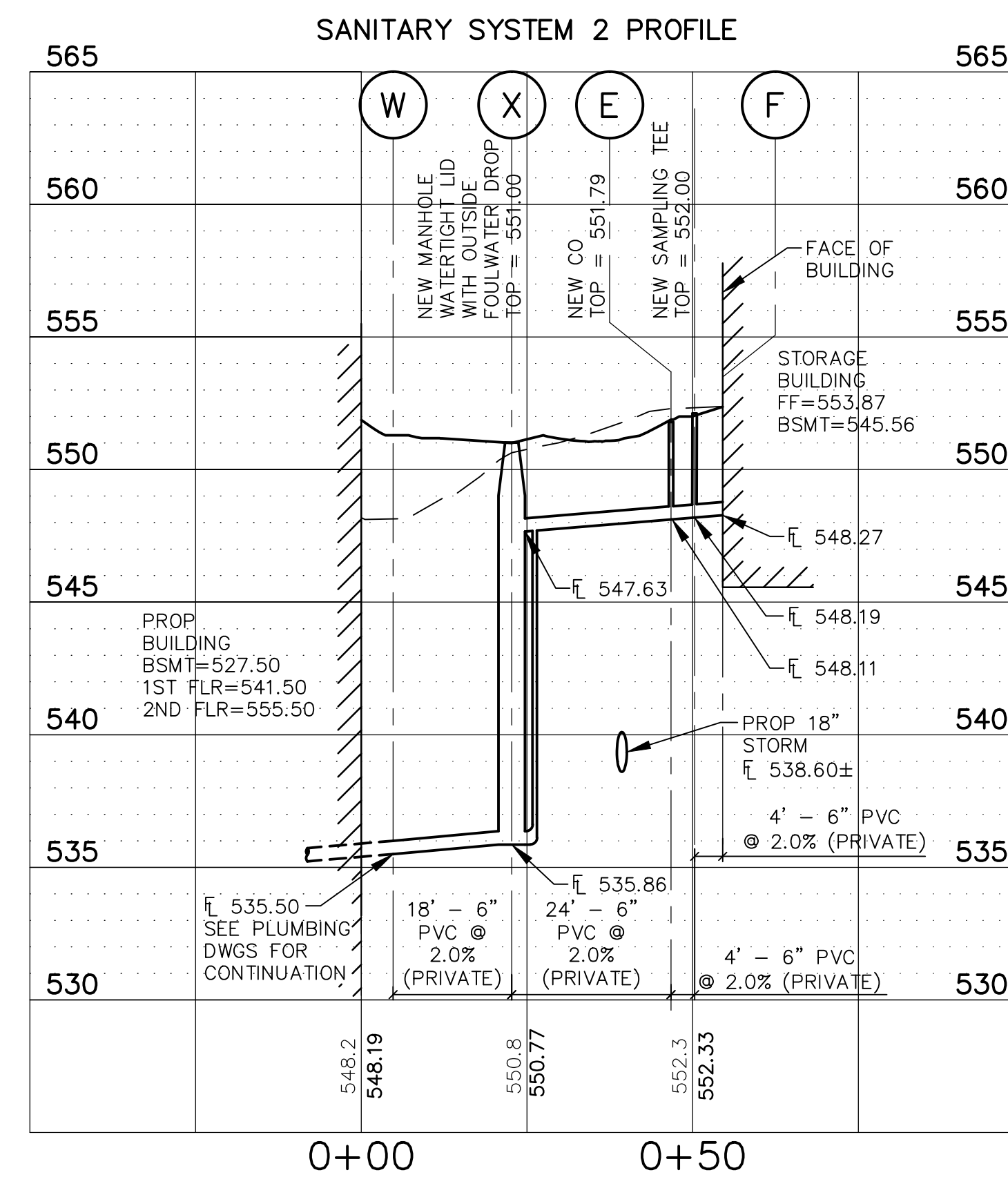
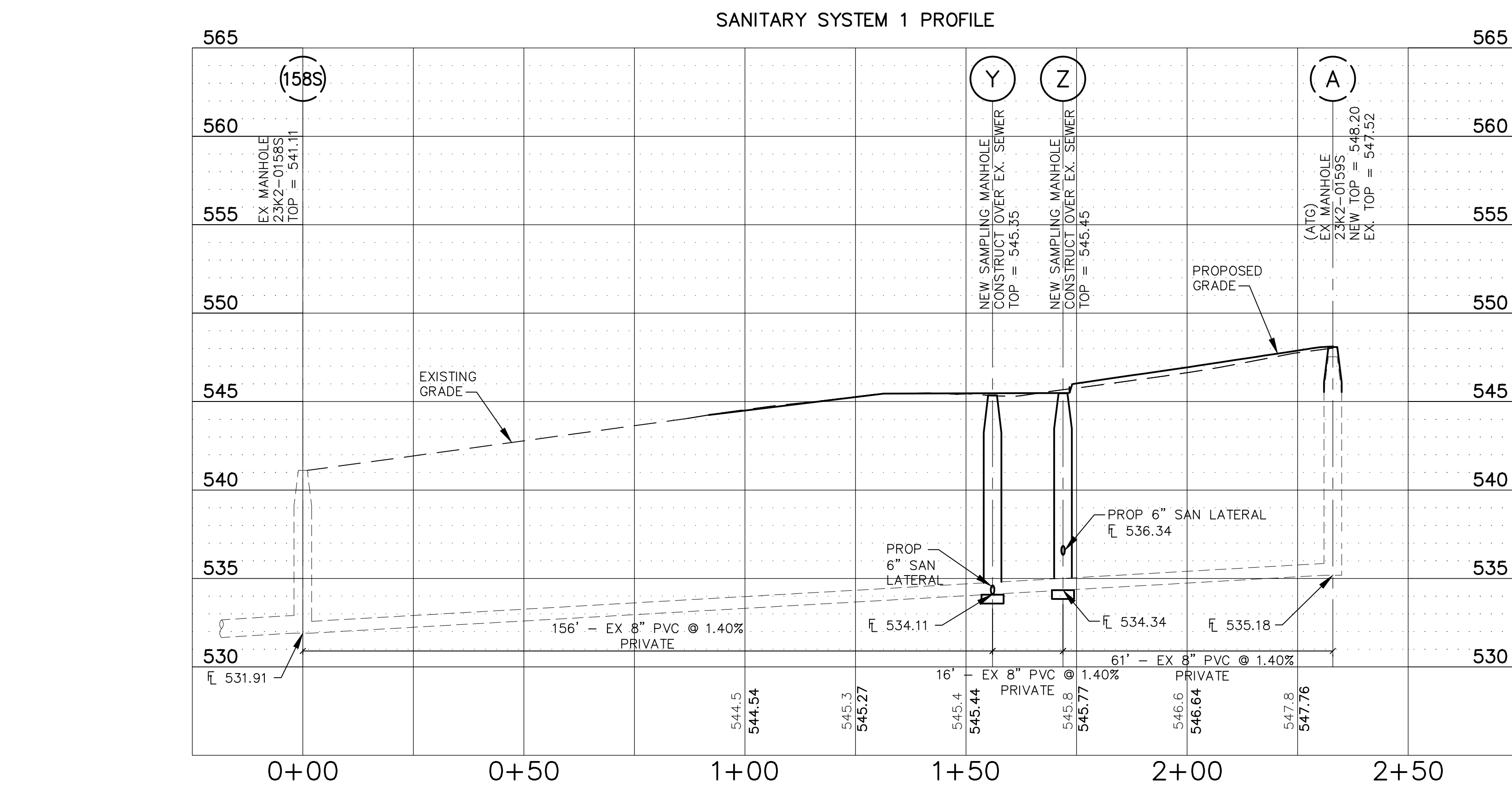
37 PRIVATE 6" PVC SANITARY SEWER LATERAL @ 2% MIN FOR INTERIOR GREASE INTERCEPTOR.
8" PVC BUBBLER, TOP ELEVATION 552.50, CONNECT TO 4" BUILDING DOWNSPOUT PER
DETAIL

38 NEW SAMPLING MANHOLE, CONSTRUCT OVER EXISTING SEWER



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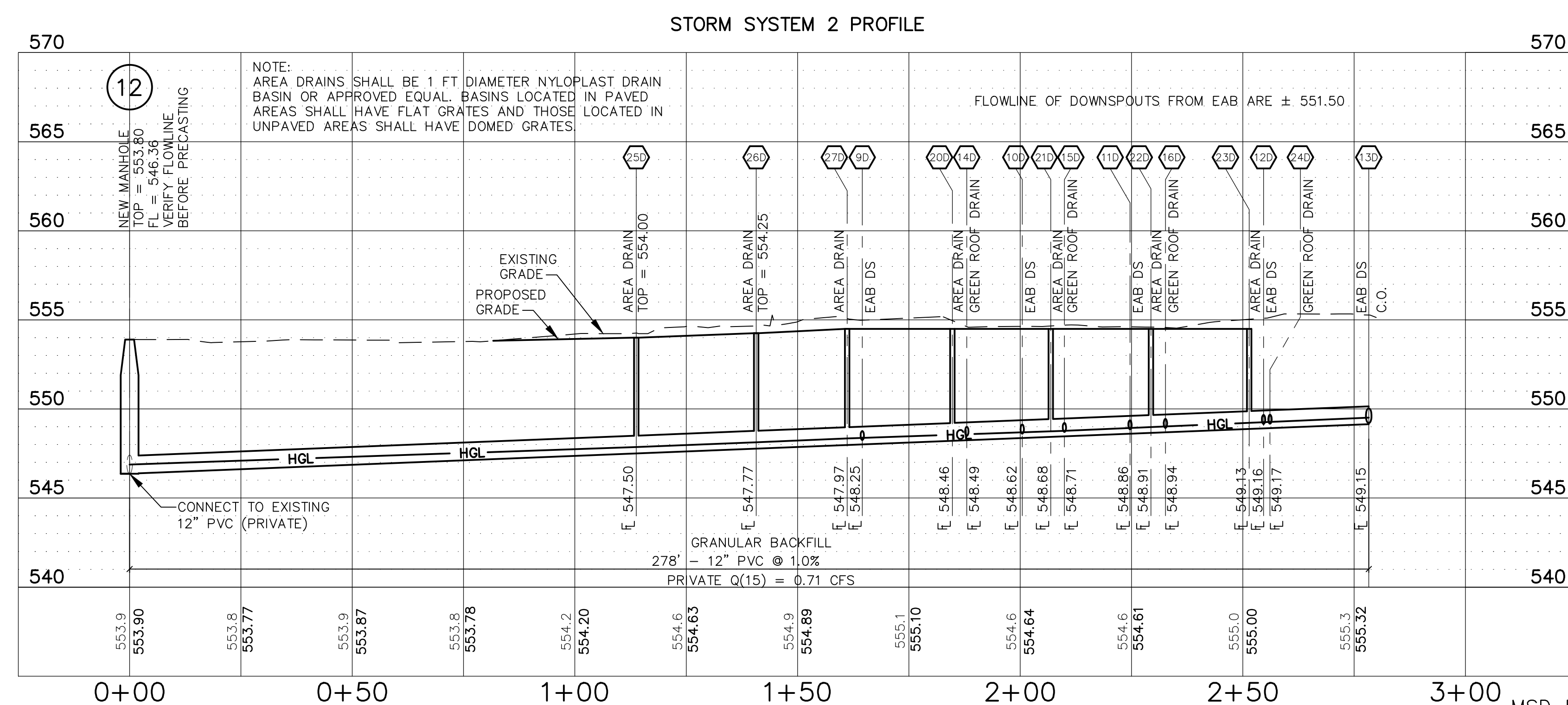
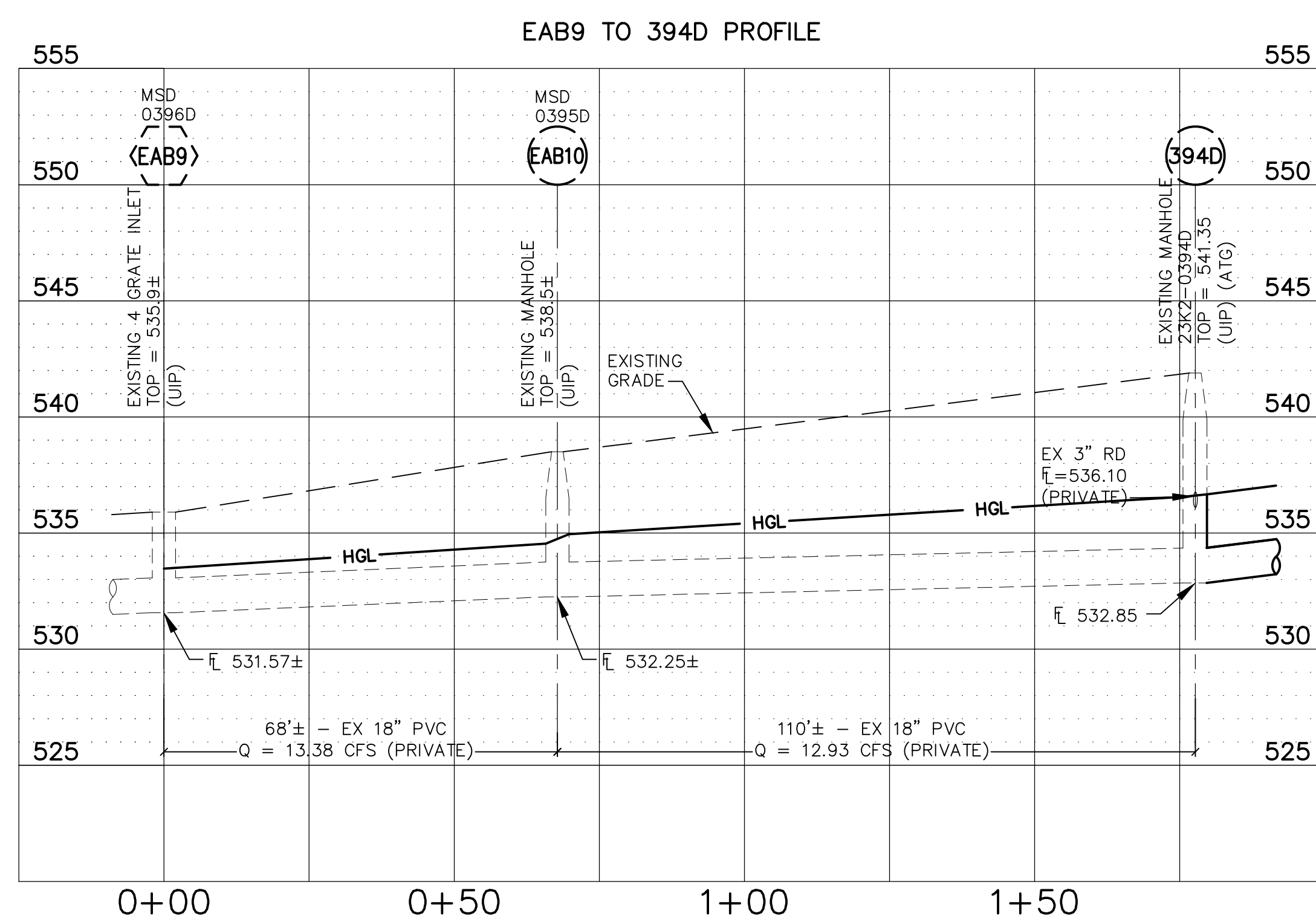
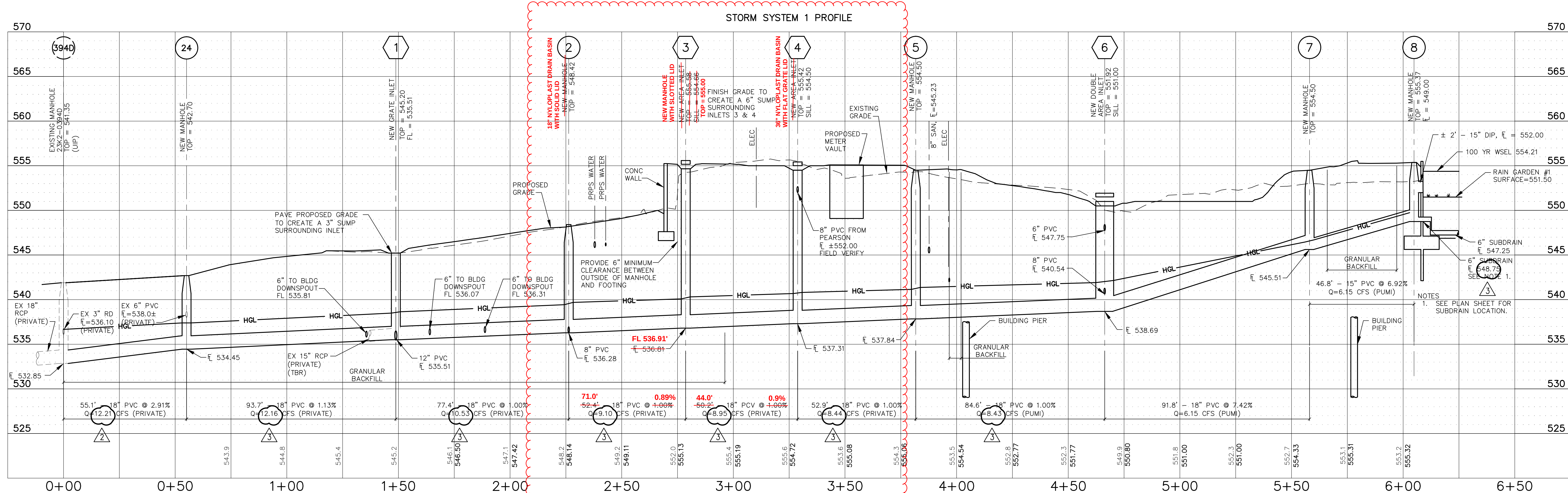




STORM
SYSTEM

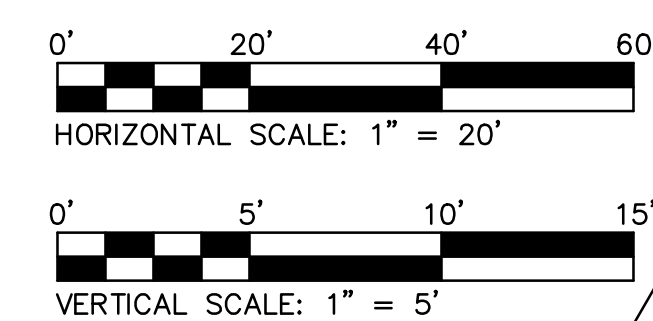
LOCATION

- SYSTEM
1. MAIN STORM SEWER
 2. DOWNSPOUT LATERAL SYSTEM FOR EAB
 3. THRU BUILDING SYSTEM
 4. INLET 11
 5. PLAZA TRENCH DRAIN
 6. AREA WELL EAST SIDE OF ISB
 7. AREA WELL NORTH OF WEST WING



NOTE:

FLOWS (Q) AND HYDRAULIC GRADE LINE
 (HGL) INFORMATION ARE FOR 100 YEAR 20
 MINUTE STORM EVENT EXCEPT AS NOTED.



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Interdisciplinary Science
Building

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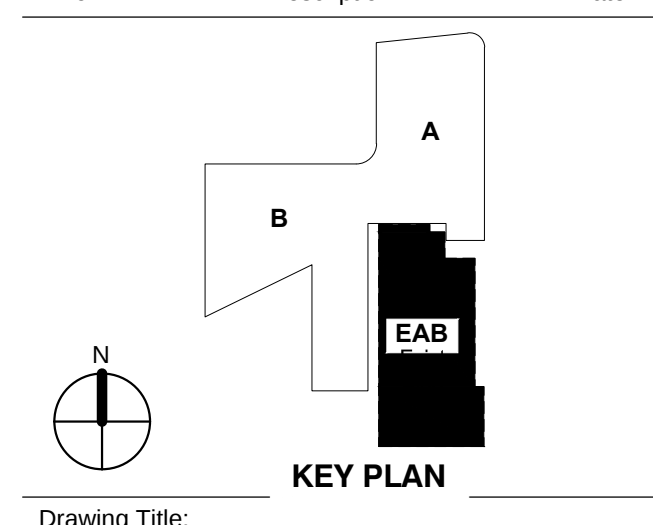
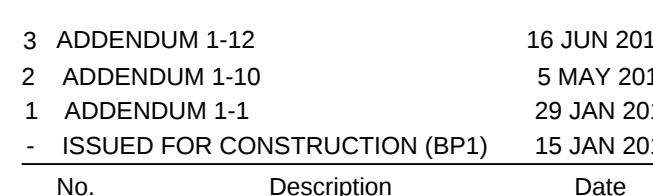
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SEWER PROFILES

Project No.: 04561.00 Checked by:

C600

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