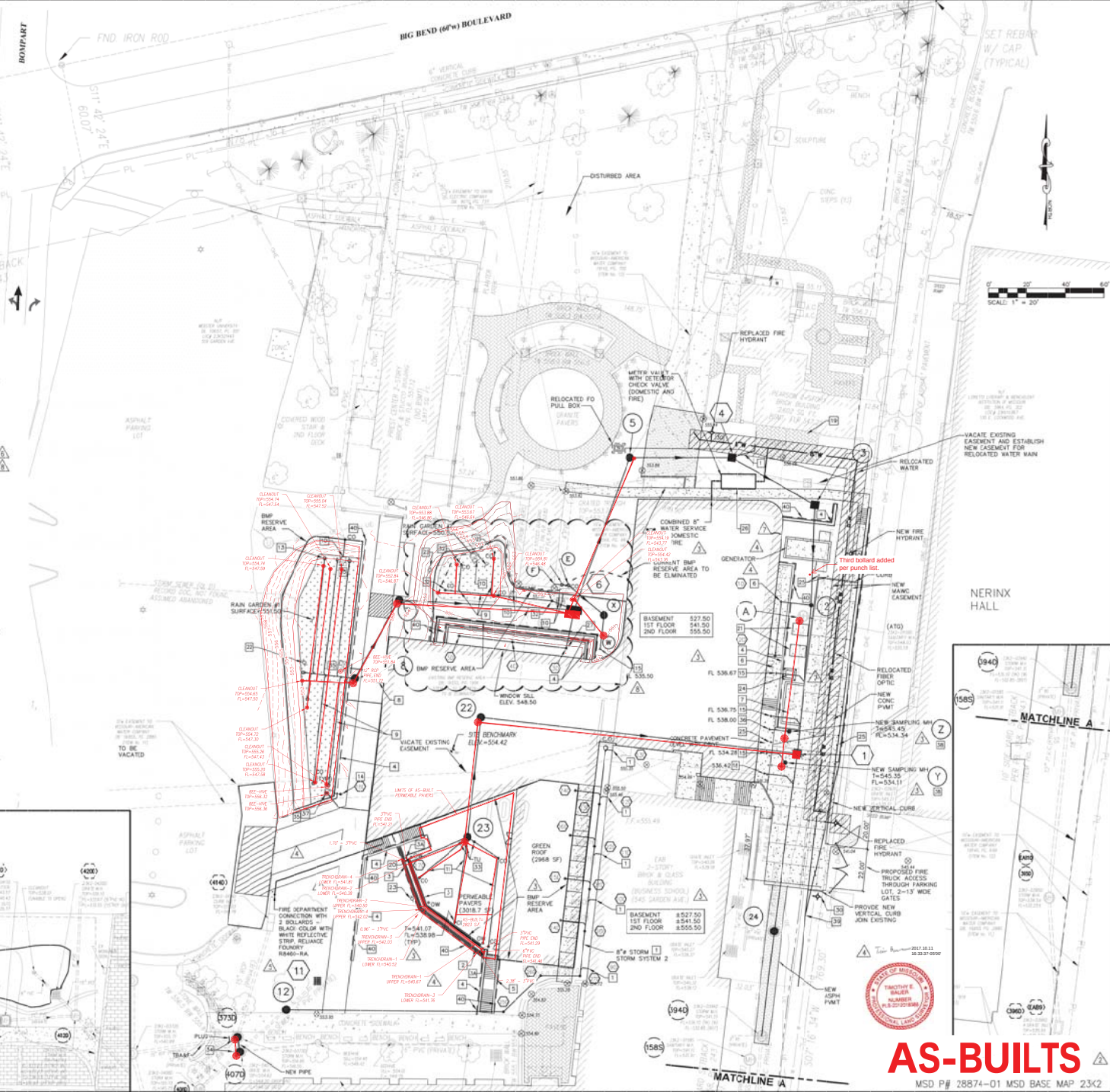
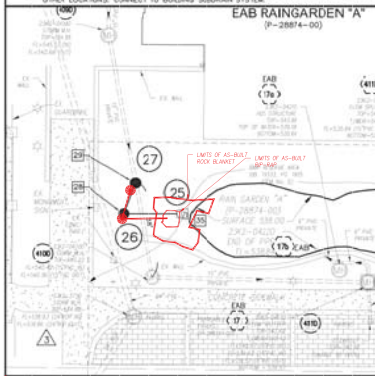


SHEET GENERAL NOTES:

- IF STORM AND SANITARY SEWERS ARE PARALLEL AND IN THE SAME TRENCH, THE UPPER PIPE SHALL BE PLACED ON A SHELVE AND THE LOWER PIPE SHALL BE RECESSED IN COMBATED GRANULAR FILL TO THE FLOW LINE OF THE UPPER PIPE. NOTE - PIPE JOINTS WITH ADAPTERS AND COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 1/8" STAINLESS STEEL NUT AND BOLT CLAMPS (T-BOLT) CONFIGURATION, AND WITH STAINLESS STEEL SUGAR BUNCH, BEING A MINIMUM OF 12 (12) MILS (MSD STD. CROST SPEC. PT. 2, SUGGESTION H 11). NORM DRIVE HOSE CLAMPS AND CRISTE BUCKLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT JOINTS. GRANULAR BACKFILL SHOULD BE USED. IF FLOWABLE FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TAPE THE ADAPTERS AND COUPLINGS WITH A 54 (50) MI. POLYETHYLENE SHEET. LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL STAY WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHENEVER POSSIBLE.
- CONSTRUCTION OF STRAPPED PLUMBING SHALL BE CONSISTENT WITH MSD RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES (FEBRUARY 2006), FIGURES 1-11 & 1-12.
- A BACKWATER VALVE SHALL BE REQUIRED ON ALL SANITARY BUILDING LATERALS PER ST. LOUIS COUNTY PLUMBING CODE.
- THE OWNER ACKNOWLEDGES THE POTENTIAL OF FLOODING DUE TO THE 100-YR OVERLAND FLOW PATH BEING BLOCKED BY THE PROPOSED IMPROVEMENTS. THE POTENTIAL FLOODING LOCATIONS ARE IDENTIFIED AS THE FOLLOWING AREAS: PROPOSED AREA DRAINS #10 THROUGH #30 AND PROPOSED TRENCH DRAIN #170.
- 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 MID SAMPLING MANHOLE WILL BE LOCATED ON A PRIVATE LATERAL IN AN ACCESSIBLE LOCATION FOR MSD SAMPLING. THE SAMPLING MANHOLE WILL BE LOCATED DOWNSTREAM OF THE GREASE TRAP AND OTHER COMMERCIAL SANITARY LATERAL CONNECTIONS TO FACILITATE AND SAMPLING. GREASE TRAPS AND SAMPLING MANHOLES WILL BE SHOWN ON THE PLANS AND NOT BE LOCATED IN DRIVE-THRU LANES OR WITHIN PARKING SPACES.
- THE ENTIRE EXISTING RAIN GARDEN "A" MIGHT HAVE TO BE REPLACED DURING CONSTRUCTION IF THE MSD INSPECTION BELIEVES THAT THE RAIN GARDEN GETTING FLOODED UP DURING THE CONSTRUCTION OF THE PROPOSED FLOW CUTTER, DOWNSTREAM EXTENSION AND ASSOCIATED PIPING.
- AN INTERNAL GREASE INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING AS SHOWN ON PLUMBING PLAN SHEET P011. THIS ITEM SHALL BE CONNECTED TO THE BUILDING SANITARY SEWER.
- A SAND INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING FOUNDATION DRAIN TILES AS SHOWN ON PLUMBING PLAN SHEET P011. THIS ITEM SHALL BE CONNECTED TO THE BUILDING STORM SEWER.

KEYED SITE PLAN NOTES:

- CONTRACTOR TO FIELD LOCATE EXISTING DOWNSLOPE LINE AND RELOCATE WITH 8" PVC TIED INTO PROPOSED STORM SEWER SYSTEM.
- TOP LANDSCAPE PLANS FOR HARDSCAPE DETAIL.
- CONTRACT TRENCH DRAIN BEHIND SEAT WALL ON GRASS SEE AND AT THE BASE OF THE SEAT WALL ON THE PLAZA SEE. DISCHARGE UPPER TRENCH DRAIN TO PLAZA (3A) DISCHARGE LOWER TRENCH DRAIN TO MANHOLE 23 (PRIVATE).
- CONCRETE RETAINING WALL WITH ARCHITECTURAL FINISH.
- CONCRETE RETAINING WALL WITH FIBER/CEMENT PANEL FINISH.
- PLAZA 2 AREA DRAINS IN AREA WELL AND CONNECT WITH 8" PVC TO MANHOLE, SEE PROFILE.
- CONSTRUCT DAMPER PAD AND ENCLOSURE.
- 8" DIAMETER PVC W/IR WITH 1725 SS COVER TO BUILDING DOWNSLOPE, SEE PLUMBING FOR CONTINUATION. FL AT WALL = 552.00. ROCK BLANKET 5'x5'x10'.
- 6" DIAMETER PERFORATED SIB DRAIN, (TYP) SOLID OUTSIDE BMP BOUNDARY.
- DISCHARGE EXISTING STORM DRAINS TO BACK EITHER DIRECTLY IF FLOWLINE ALLOWS WITH END OF PIPE HEADLAMP OR VIA BUBBLER, MATCH EXISTING PIPE TYPE, DIAMETER AND SLOPE. ROCK BLANKET 5'x5'x10'.
- 4" DIAMETER PERFORATED SIB DRAIN, (TYP) INSTALL CLEANOUT AT END PER DETAIL.
- SAMPLING "T".
- CLEANOUT (C3) TOP = 552.00, FL = 547.25 (TYP).
- PAVEMENT 180 IS SIMILAR TO INLET 30, DRAIN THRU RETAINING WALL WITH 8" PVC TOP = 554.70, FL = 552.87, FL = 552.00. 1/4" RAIN GARDEN, ROCK BLANKET 5'x5'x10'.
- PRIVATE 8" PVC SANITARY SEWER LATERAL, AT 25 MIN.
- SAMPLING MANHOLE.
- GREASE INTERCEPTOR, SEE PLUMBING.
- BUILDING DOWNSLOPE, SEE PLUMBING.
- PAVERS TO BE REMOVED AND REPLACED IN KIND TO FACILITATE CONSTRUCTION OF WATER LINE.
- PLAZA OBSERVATION WELL TOP = 540.85, FL = 538.87 (TYP).
- CONDENSING UNITS, SEE MECHANICAL FOR LOCATION.
- RAIN GARDEN INFORMATIONAL SIGN.
- POP INFORMATION SIGN.
- 6AS METER, 12" THICK CONCRETE PAD WITH 4 BOLLARDS, ONE IN EACH CORNER. SEE SHEET C701 FOR DETAIL, MECHANICAL, FOR PIPING, ARCH FOR COLOR.
- 20'-6" DIAMETER CONCRETE FILLED STEEL BOLLARDS, SEE ARCH FOR COLOR AND LAYOUT.
- INTERNAL CURB AND SIDEWALK.
- ADJUST LOCATION OF DRAINS AND PIPING BASED ON DOUBLE WALL CONFIGURATION.
- NEW HYDRO INTERNATIONAL 48" DOWNSTREAM DEFENDER.
- NEW FLOW SPLITTER MANHOLE.
- REMOVE AND REPLACE EXISTING BRICK SCREEN WALL, SEE ARCHITECTURAL AND STRUCTURAL.
- CLEANOUT (C3) TOP = 551.00, FL = 548.25 (TYP).
- TRAPPED UNDERDRAIN (20) TOP = 541.26, FL = 538.64 (TYP).
- FL = 538.98 (TYP).
- TORNA AT MID WARDSTORY DISCRETION.
- ROCK BLANKET (20'x10'x10').
- PRIVATE 8" PVC SANITARY SEWER LATERAL, 2" MIN FOR INTERIOR GREASE INTERCEPTOR.
- 8" FIVE BOLLARDS, TOP ELEVATION 552.50, CONNECT TO 4" BUILDING DOWNSLOPE PER DETAIL.
- NEW SAMPLING MANHOLE, CONSTRUCT OVER EXISTING SEWER.
- 4" RETAINING WALL, SUBGRADE, PERFORATED WHEN ADJACENT TO WALL AND SOLID AT ALL OTHER LOCATIONS, DAYLIGHT VIA BUBBLER.
- 4" RETAINING WALL, SUBGRADE, PERFORATED WHEN ADJACENT TO WALL AND SOLID AT ALL OTHER LOCATIONS, CONNECT TO BUILDING SUBGRADE SYSTEM.



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Interdisciplinary Science Building

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KEY PLAN

Drawing Title: **SITE IMPROVEMENT PLAN**

Project No.: 00871.00 Checked by:

C400

MSD P# 28874-01 MSD BASE MAP 23K2
MSD FIELD CHANGE 1 (SHEET 1 OF 4)