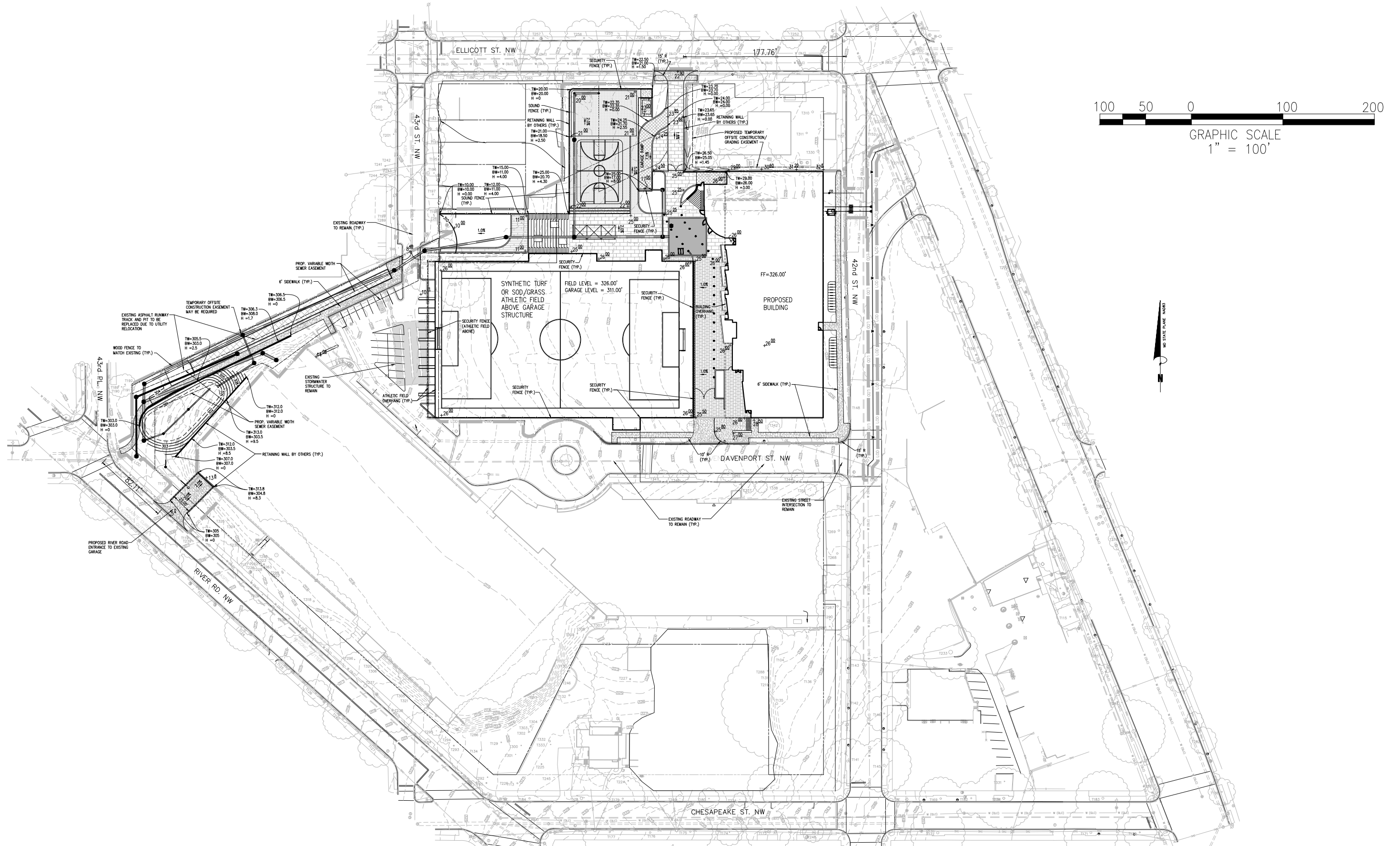


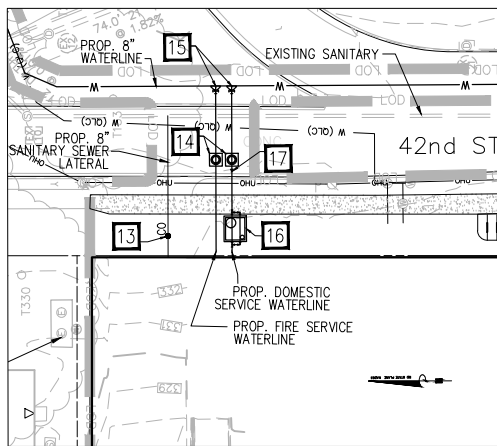
EXISTING CONDITIONS PLAN



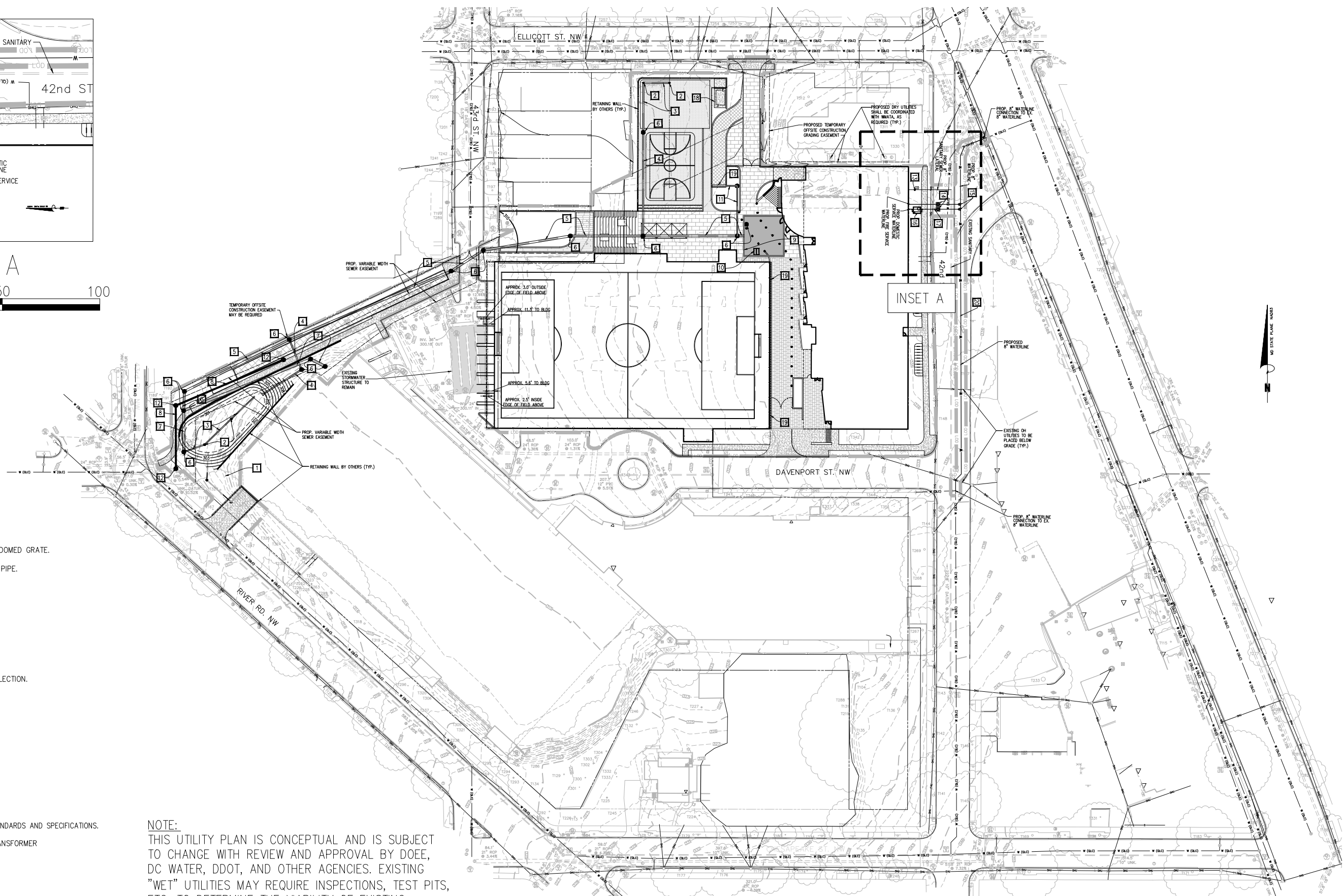
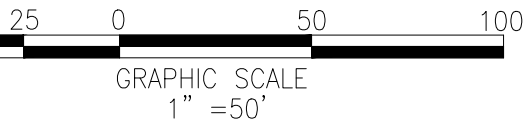


SITE AND GRADING PLAN





INSET A



**UTILITY KEYNOTES:**

- 1** NEW 6" PVC STORM PIPE.
- 2** NEW 10" NYLOPLAST DRAIN BASIN WITH DOMED GRATE.
- 3** NEW 6" PERFORATED PVC UNDER DRAIN PIPE.
- 4** NEW 15" RCP STORM PIPE.
- 5** NEW 24" RCP STORM PIPE.
- 6** NEW MANHOLE.
- 7** NEW 30" RCP STORM PIPE.
- 8** NEW 18" PVC SANITARY SEWER.
- 9** CONCRETE CISTERN FOR RAINWATER COLLECTION.
- 10** BILCO ACCESS.
- 11** NEW 12" RCP STORM PIPE.
- 12** NEW SANITARY MANHOLE.
- 13** NEW CLEANOUT.
- 14** NEW 6" WATER VALVE.
- 15** NEW 8" x 6" TEE WITH THRUST BLOCK.
- 16** NEW 3" WATER METER.
- 17** NEW 6" x 3" REDUCER PER DC WATER STANDARDS AND SPECIFICATIONS.
- 18** NEW CONCRETE PAD FOR NEW ELEC. TRANSFORMER
- 19** NEW 12" WIDE TRENCH DRAIN
- 20** NEW 8" DUCTILE IRON WATER LINE.

**NOTE:**  
 THIS UTILITY PLAN IS CONCEPTUAL AND IS SUBJECT TO CHANGE WITH REVIEW AND APPROVAL BY DOE, DC WATER, DDOT, AND OTHER AGENCIES. EXISTING "WET" UTILITIES MAY REQUIRE INSPECTIONS, TEST PITS, ETC. TO DETERMINE THE VIABILITY OF EXISTING UTILITIES. DC WATER MAY REQUIRE REPLACEMENT OF CERTAIN PORTIONS OF THE EXISTING OFFSITE SYSTEMS.



UTILITY PLAN



**SWM NARRATIVE:**

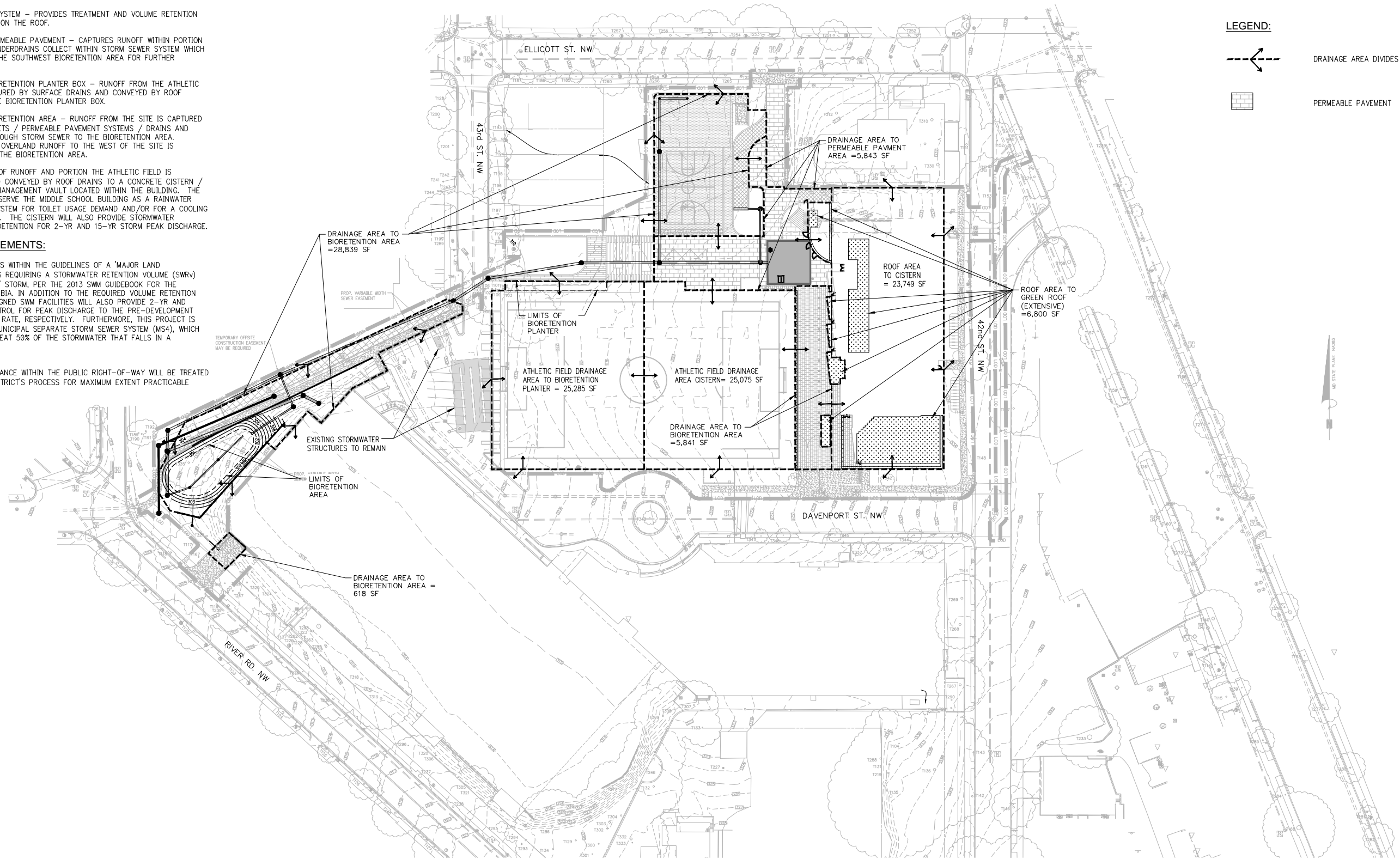
STORMWATER RETENTION IS PROVIDED ON SITE BY THE FOLLOWING FACILITIES:

- GREEN ROOF SYSTEM – PROVIDES TREATMENT AND VOLUME RETENTION FOR RAINFALL ON THE ROOF.
- STANDARD PERMEABLE PAVEMENT – CAPTURES RUNOFF WITHIN PORTION OF PLAZA. UNDERDRAINS COLLECT WITHIN STORM SEWER SYSTEM WHICH CONVEYS TO THE SOUTHWEST BIORETENTION AREA FOR FURTHER TREATMENT.
- STANDARD BIORETENTION PLANTER BOX – RUNOFF FROM THE ATHLETIC FIELD IS CAPTURED BY SURFACE DRAINS AND CONVEYED BY ROOF DRAINS TO THE BIORETENTION PLANTER BOX.
- STANDARD BIORETENTION AREA – RUNOFF FROM THE SITE IS CAPTURED BY STORM INLETS / PERMEABLE PAVEMENT SYSTEMS / DRAINS AND CONVEYED THROUGH STORM SEWER TO THE BIORETENTION AREA. ADDITIONALLY, OVERLAND RUNOFF TO THE WEST OF THE SITE IS CAPTURED BY THE BIORETENTION AREA.
- CISTERN – ROOF RUNOFF AND PORTION THE ATHLETIC FIELD IS CAPTURED AND CONVEYED BY ROOF DRAINS TO A CONCRETE CISTERN / STORMWATER MANAGEMENT VAULT LOCATED WITHIN THE BUILDING. THE CISTERN WILL SERVE THE MIDDLE SCHOOL BUILDING AS A RAINWATER COLLECTION SYSTEM FOR TOILET USAGE DEMAND AND/OR FOR A COOLING TOWER SYSTEM. THE CISTERN WILL ALSO PROVIDE STORMWATER MANAGEMENT DETENTION FOR 2-YR AND 15-YR STORM PEAK DISCHARGE.

**SWM REQUIREMENTS:**

THIS PROJECT FALLS WITHIN THE GUIDELINES OF A 'MAJOR LAND DISTURBANCE' THUS REQUIRING A STORMWATER RETENTION VOLUME (SWRV) BASED ON THE 1.2" STORM, PER THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA. IN ADDITION TO THE REQUIRED VOLUME RETENTION ON-SITE, THE DESIGNED SWM FACILITIES WILL ALSO PROVIDE 2-YR AND 15-YR STORM CONTROL FOR PEAK DISCHARGE TO THE PRE-DEVELOPMENT AND PRE-PROJECT RATE, RESPECTIVELY. FURTHERMORE, THIS PROJECT IS LOCATED IN THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4), WHICH REQUIRES IT TO TREAT 50% OF THE STORMWATER THAT FALLS IN A VEHICULAR ACCESS AREA.

ANY LAND DISTURBANCE WITHIN THE PUBLIC RIGHT-OF-WAY WILL BE TREATED FOLLOWING THE DISTRICT'S PROCESS FOR MAXIMUM EXTENT PRACTICABLE (MEP).



Stormwater Management

