

Hawkins Street Elementary School  
Green Infrastructure Information Sheet

<p><b>Location:</b> 8 Hawkins Street Newark, NJ 07105</p>	<p><b>Site Use:</b> School</p>
<p><b>Ward:</b> East</p>	<p><b>Watershed Name:</b> Newark Airport Peripheral Ditch</p> <p><b>Targeted Pollutants:</b> total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS) in surface runoff</p>
<p><b>Green Infrastructure Description:</b> Cistern</p>	<p><b>Estimated Stormwater Captured and/or Treated Per Year:</b> 6,264 gallons</p>
<p><b>Implementation Date:</b> 10/24/2017 <b>Green Infrastructure System:</b> 265 gallon cistern <b>Drainage Area:</b> 975 square feet (rooftop)</p>	
<p><b>Funding Sources:</b> Passaic Valley Sewerage Commission</p>	
<p><b>Partners/Stakeholders:</b> Passaic Valley Sewerage Commission, Rutgers Cooperative Extension Water Resources Program, Hawkins Street Elementary School, and Newark Public Schools Board of Education and School Facilities</p>	
<p><b>Appendix A:</b> Site Photograph – Previous Condition</p> <p><b>Appendix B:</b> Hawkins Street Elementary School Design Plans</p> <p><b>Appendix C:</b> Site Photograph – Current Condition</p>	

# Site Photograph August 25, 2016



# HAWKINS STREET ELEMENTARY SCHOOL

## PVSC DEMONSTRATION PROJECT 8 HAWKINS STREET, NEWARK ESSEX COUNTY, NEW JERSEY

### PROJECT DESCRIPTION:

THIS PROJECT IS A PARTNERSHIP BETWEEN THE PASSAIC VALLEY SEWERAGE COMMISSION AND RUTGERS COOPERATIVE EXTENSION WATER RESOURCES PROGRAM. THE FOLLOWING ARE PLANS FOR A PROPOSED CISTERN, AND OUTDOOR EDUCATION SPACE AT HAWKINS STREET ELEMENTARY SCHOOL IN NEWARK, NJ. GUTTERS WILL BE INSTALLED ON THE MODULAR CLASSROOM BUILDING ALONG COURTLAND STREET. A 265 GALLON CISTERN TANK WILL BE CONNECTED TO A DOWNSPOUT AND HARVEST ROOFTOP RUNOFF FOR REUSE. PICNIC TABLES AND RAISED WOODEN PLANTER BEDS WILL ALSO BE INSTALLED TO PROVIDE AN EDUCATIONAL EXPERIENCE.

### LOCATION MAP:



### LEGEND:

- +—+—+— EXISTING FENCE
- - - - - EXISTING DRAINAGE AREA
- +—+—+— EXISTING TREELINE
- EXISTING TREE
- +—+—+— EXISTING CONTOURS
- +100.00  
T CODE EXISTING SPOT ELEVATIONS
- SPOT ELEVATION CODES:  
TC - TOP OF CURB GS - GROUND SHOT  
BLDG - BUILDING CORNER TW - TOP OF ROCK WALL  
PL - PARKING LOT UP - UTILITY POLE  
EP - EDGE OF PAVEMENT
- +—+—+— EXISTING CENTERLINE
- ▭ EXISTING BUILDING
- ⊙ EXISTING UTILITY POLE
- ▨ EXISTING CATCH BASIN
- +—+—+— EDGE OF PAVEMENT
- \*\*\*\*\* EXISTING RAILROAD TRACKS
- - - - - EXISTING DRAINAGE DITCH
- - - - - PROPERTY LINES
- +—+—+— STREAM BANK
- +—+—+— 25 FT STREAM BANK OFFSET
- +—+—+— 100 YEAR FLOOD LEVEL
- - - - - LIMIT OF WORK
- ▨ AREA TO BE DEPAVED
- ▨ PROPOSED GREEN INFRASTRUCTURE
- ▨ PROPOSED POROUS ASPHALT
- ▨ PROPOSED PERVIOUS CONCRETE
- PROPOSED TREE
- +—+—+— PROPOSED SWALE CHANNEL
- +—+—+— PROPOSED SWALE TOP OF BANK
- +—+—+— PROPOSED CONTOURS
- +100.00  
T CODE PROPOSED SPOT ELEVATIONS
- SPOT ELEVATION CODES:  
G - GROUND SHOT CH - SWALE CHANNEL  
TOB - TOP OF BERM TC - TOP OF CURB

### LIST OF DRAWINGS:

SHEET NAME	TITLE
COVER	COVER SHEET
P-1	EXISTING CONDITIONS AND DEMOLITION PLAN
P-2	PROPOSED SITE PLAN
DT-1	DETAILS

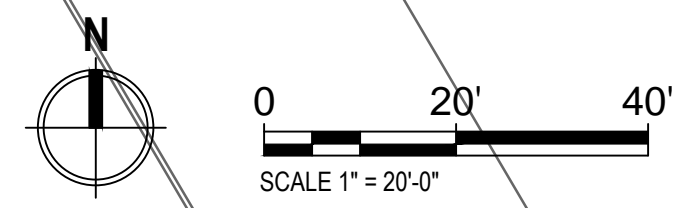
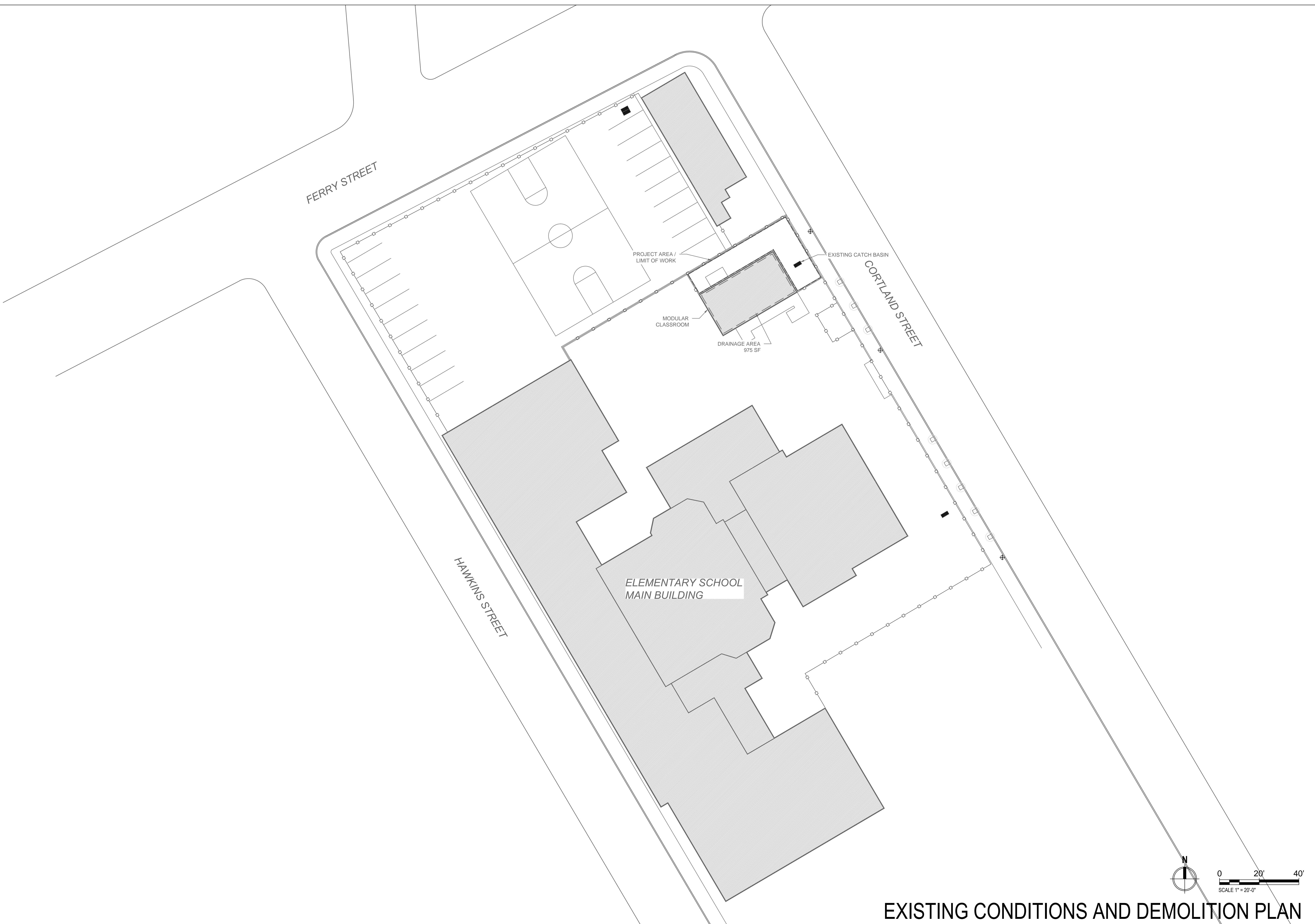
CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
PROFESSIONAL ENGINEER - NJ LICENSE # 37532  
*Christopher C. Obropta*  
DATE 04/20/2017  
APPROVED CCO  
CHECKED JB  
DRAWN CFP

REVISIONS	No.	DATE	DESCRIPTION

HAWKINS STREET ELEMENTARY SCHOOL  
PVSC DEMONSTRATION PROJECT  
8 HAWKINS STREET, NEWARK  
ESSEX COUNTY, NJ  
COVER SHEET



SHEET NAME  
COVER



**EXISTING CONDITIONS AND DEMOLITION PLAN**

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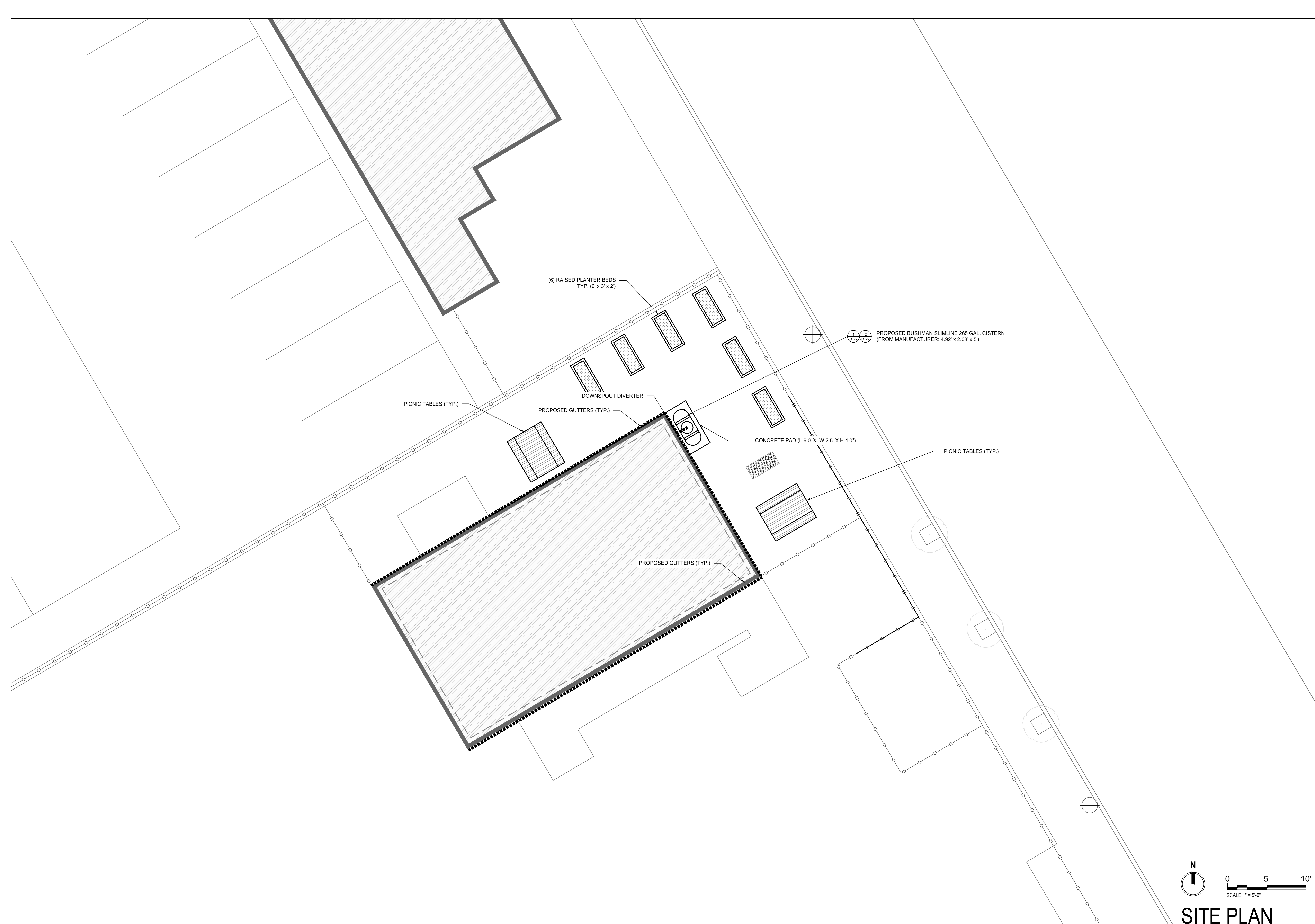
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**HAWKINS STREET ELEMENTARY SCHOOL  
 PVSC DEMONSTRATION PROJECT  
 8 HAWKINS STREET, NEWARK  
 ESSEX COUNTY, NJ**

**EXISTING CONDITIONS AND DEMOLITION PLAN**



SHEET NAME  
**P-1**



(6) RAISED PLANTER BEDS  
TYP. (6' x 3' x 2')

PROPOSED BUSHMAN SLIMLINE 265 GAL. CISTERN  
(FROM MANUFACTURER: 4.92' x 2.08' x 5')

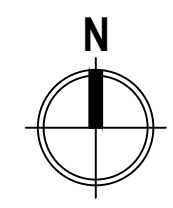
PICNIC TABLES (TYP.)

PROPOSED GUTTERS (TYP.)

CONCRETE PAD (L 6.0' X W 2.5' X H 4.0')

PICNIC TABLES (TYP.)

PROPOSED GUTTERS (TYP.)



0 5' 10'  
SCALE 1" = 5'-0"

**SITE PLAN**

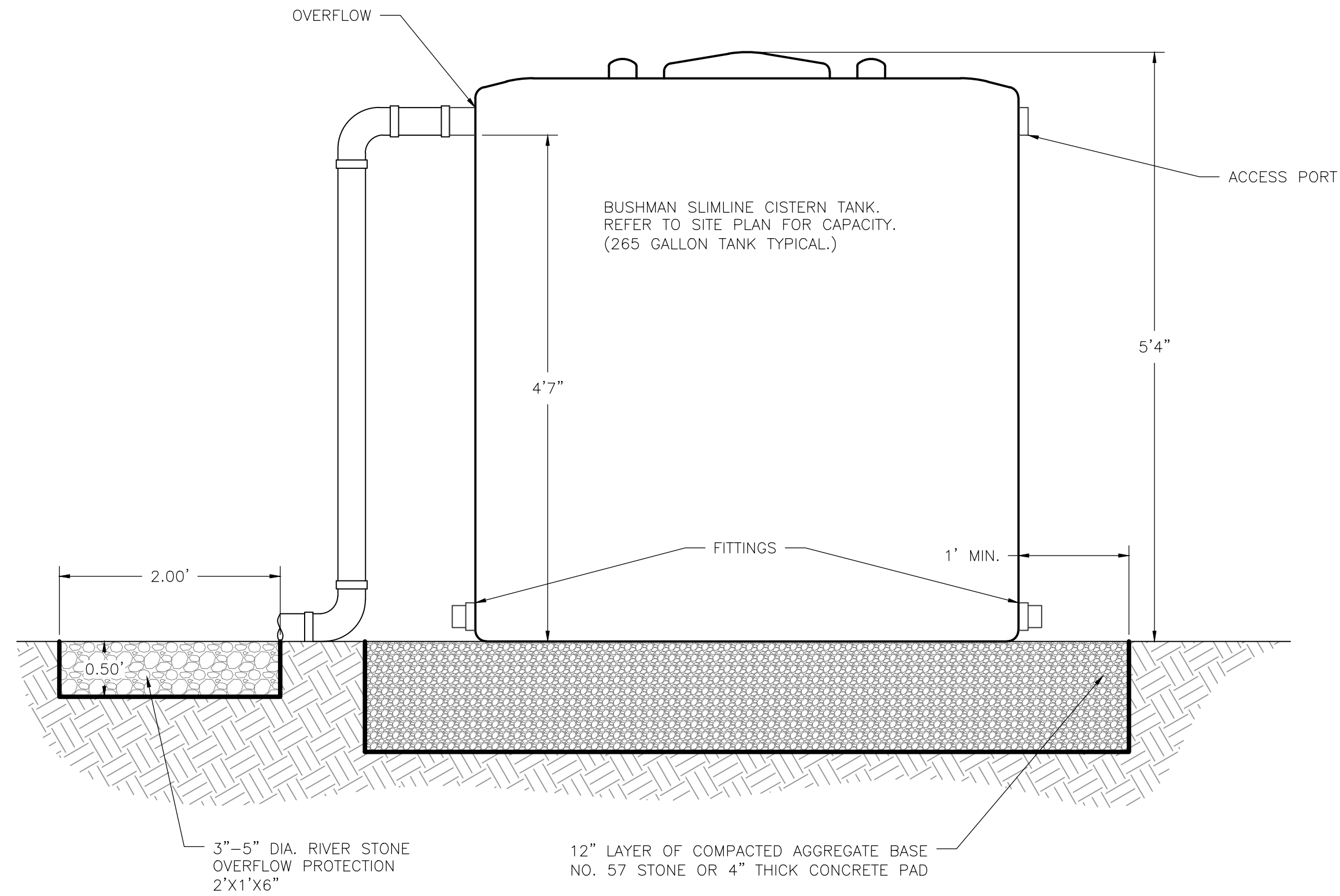
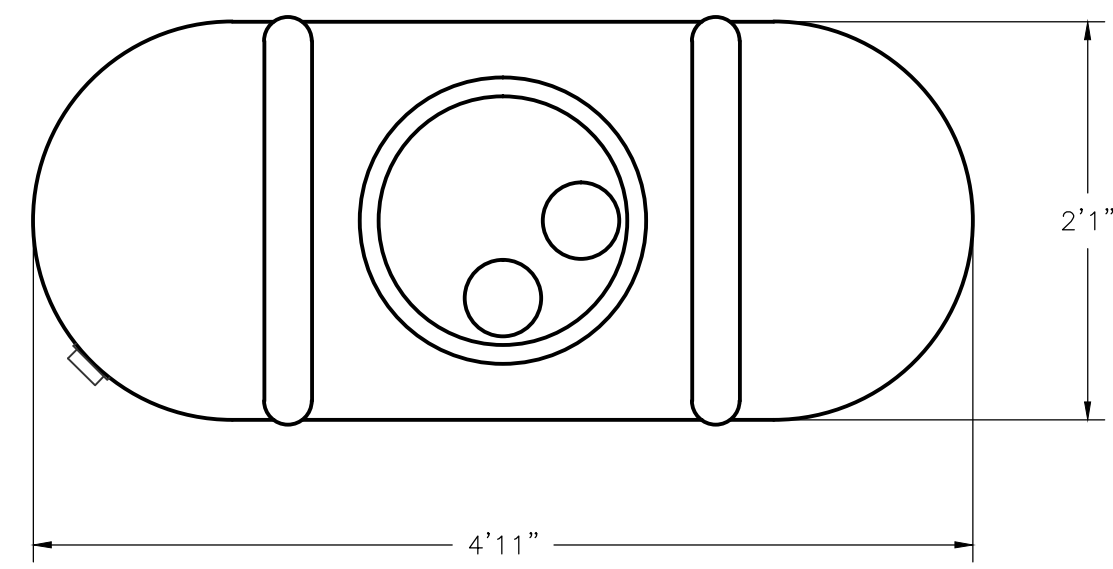
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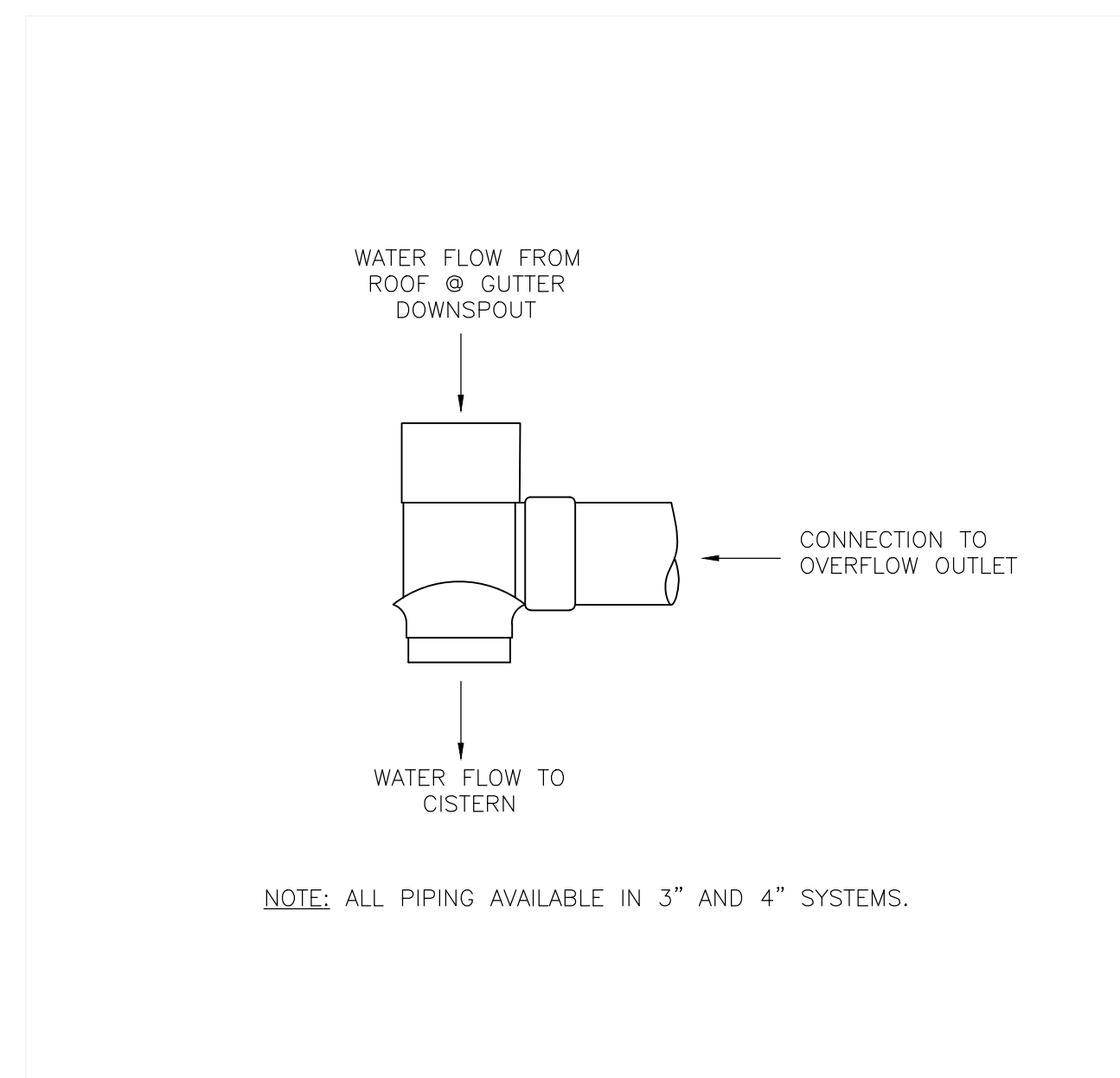
**HAWKINS STREET ELEMENTARY SCHOOL  
PVSC DEMONSTRATION PROJECT**  
HAWKINS STREET, NEWARK  
ESSEX COUNTY, NJ  
**PROPOSED SITE PLAN**



SHEET NAME  
**P-2**



1 CISTERN TANK (TYP.)  
DT-1 N.T.S.



2 DOWNSPOUT DIVERTER DETAIL  
DT-1 N.T.S.

**CONSTRUCTION NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO INSTALLATION INCLUDING ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS DIFFER MATERIALLY FROM THOSE REPRESENTED ON THESE DRAWINGS AND THE SPECIFICATIONS OR IF, IN THE CONTRACTOR'S OPINION, SAID CONDITIONS CONFLICT WITH THE DESIGNS SHOWN HEREON.
3. THE CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER PRIOR TO ANY WORK ON SITE.
4. THE CONTRACTOR SHALL AVOID DISTURBING EXISTING AREA. ANY DISTURBANCE TO SIDEWALKS OR LANDSCAPED VEGETATION AND TREES MUST BE COORDINATED WITH THE PROPERTY OWNER.
5. THE CONTRACTOR SHALL AVOID DISTURBING EXISTING AREA. ANY DISTURBANCE TO SIDEWALKS OR LANDSCAPED VEGETATION AND TREES MUST BE COORDINATED WITH THE PROPERTY OWNER.
6. ALL PIPES USED FOR CONNECTION FROM ROOFTOP TO CISTERN SHALL BE CLEAR OF ANY CLOGS OR OBSTRUCTIONS. ALL PIPES SHALL BE FITTED AND SECURED WITH ADHESIVE IN CONFORMANCE WITH LOCAL PLUMBING CODES.
7. THE CONTRACTOR SHALL PROVIDE A CRUSHED AGGREGATE BASE OR CONCRETE SLAB WITH 4,500 PSI STRENGTH TO SUPPORT THE CISTERN AS INDICATED ON THE PLAN.
8. THE OVERFLOW FROM THE CISTERN SHALL CONNECT TO THE NEAREST STORM SEWER CATCH BASIN INLET.
9. THE CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS AT THE SITE UNTIL CONSULTING WITH THE ENGINEER.
10. THE CONTRACTOR IS REQUIRED TO SUBMIT SHOP DRAWINGS OF ALL MATERIALS AND CONSTRUCTION METHODS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE AND INSTALLATION.
11. ALL SYSTEMS SHALL BE TESTED BY THE ENGINEER FOR LEAKS AND WATER TIGHT FITTINGS PRIOR TO ACCEPTANCE AND PAYMENT.
12. THE CONTRACTOR SHALL USE SIMPSON TIE IN CONNECTORS FOR THE SHADE STRUCTURE.
13. THE CONTRACTOR SHALL USE PRESSURE TREATED LUMBER.
14. THE CONTRACTOR SHALL INSTALL CONCRETE FOOTINGS WITH A MINIMUM 3 FOOT DEPTH.
15. THE CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS AT THE SITE UNTIL CONSULTING WITH THE ENGINEER.
16. THE CONTRACTOR IS REQUIRED TO SUBMIT SHOP DRAWINGS OF ALL MATERIALS AND CONSTRUCTION METHODS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE AND INSTALLATION OF GUTTER.

**SPECIFICATIONS:**

1. CRUSHED AGGREGATE BASE SHALL BE COMPRISED OF NO. 57 STONE. ALTERNATIVE CONCRETE PAD SHALL BE CONCRETE WITH 4,500 PSI STRENGTH.
2. CISTERN SHALL BE 220 GALLON NORWESCO N43870, 130 GALLON BUSHMAN SLIMLINE BSLT130, BUSHMAN SLIMLINE BSLT265E, OR APPROVED EQUIVALENT.
3. ALL DISTURBED AREAS EXCLUSIVE OF THE CISTERN SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR.
4. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF DOWNSPOUT CONNECTIONS TO CISTERN FOR ENGINEERS APPROVAL PRIOR TO INSTALLATION.
5. DIVERTER FILTER BOX SHALL BE FRAINHARVESTING@FIRST FLUSH DOWNSPOUT DIVERTER (PRODUCT CODE: WDDS9X) OR EQUIVALENT.
6. OVERFLOW SHALL DISCHARGE TO LAWN AREA UNLESS SPECIFIED OTHERWISE. STONE PROTECTION COMPRISED OF 3"-5" DIA. CLEAN RIVER STONE SHALL BE INSTALLED AS SHOWN IN DETAIL.

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8 HAWKINS STREET, NEWARK  
ESSEX COUNTY, NJ  
CISTERN DETAILS



# Site Photograph October 24, 2017

