

PROJECT NOTES:

1. PARCEL DATA:
TAX MAP NO: 26-009.10-001
2. DNREC SEDIMENT AND STORMWATER PROGRAM NO.: 2017-104
3. ADDRESS: 701 W. THIRTY FOURTH STREET, WILMINGTON, DE, 19802
4. LATITUDE/LONGITUDE: N 39.7375 / W 75.5555 (AT SITE BENCHMARK)
5. EXISTING SITE AREA: 21.26± ACRES
6. SOURCE OF TOPOGRAPHY: FIELD SURVEY BY VANDEMARK & LYNCH, INC. MARCH 1999, APRIL 2006, AND OCTOBER 2016.
7. VERTICAL DATUM: NORTH AMERICA VERTICAL DATUM 1988 (N.A.V.D. 88)
8. HORIZONTAL DATUM: DELAWARE STATE PLANE (N.A.D. 83)
9. SITE BENCHMARK: TOP OF CONCRETE MONUMENT ALONG FRANKLIN PLACE ELEVATION 129.49
10. AS SCALED FROM THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP, NUMBER 1005302089L, WITH AN EFFECTIVE DATE OF JANUARY 17, 2007 AND 1003302089K, WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015, THIS PROPERTY DOES NOT LIE WITHIN A 100-YEAR FLOODPLAIN.
11. PROPOSED DISCHARGE LOCATION: CITY OF WILMINGTON COMBINED SEWER
12. PROPOSED TOTAL LIMIT OF DISTURBANCE: 5.3± ACS.
13. OWNER DATA:
JOHN W. READ
SUPERVISOR OF FACILITIES
BRANDYWINE SCHOOL DISTRICT
1311 BRANDYWINE BLVD.
WILMINGTON, DE, 19809
PHONE: 302-529-3110
14. LAND DEVELOPER DATA:
JOHN W. READ
SUPERVISOR OF FACILITIES
BRANDYWINE SCHOOL DISTRICT
1311 BRANDYWINE BLVD.
WILMINGTON, DE, 19809
PHONE: 302-529-3110
15. DESIGNER DATA:
STEPHEN H. ROSENFELD, P.E.
VANDEMARK & LYNCH, INC.
4305 MILLER ROAD
WILMINGTON, DE, 19802
PHONE: 302-764-7635
FAX: 302-764-4170
16. REVIEW AGENCY DATA:
ELANE WEBB
DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF WATERSHED STEWARDSHIP, SEDIMENT AND STORMWATER PROGRAM
89 KINGS HIGHWAY
DOVER, DE, 19901
PHONE: 302-739-9921
FAX: 302-739-6724

SEDIMENT AND STORMWATER CONSTRUCTION NOTES:

1. THE DNREC SEDIMENT AND STORMWATER PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATED AGENCY.
4. FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
6. AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
7. APPROVED PLANS REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL.
8. ~~POST-CONSTRUCTION-VERIFICATION-DOCUMENTS-ARE-TO-BE-SUBMITTED-TO-THE-DNREC-SEDIMENT-AND-STORMWATER-PROGRAM-WITHIN-60-DAYS-OF-STORMWATER-MANAGEMENT-FACILITY-COMPLETION.~~
9. APPROVAL OF A SEDIMENT AND STORMWATER PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
10. THE NOTICE OF INTENT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT FOR THIS PROJECT IS 5641. AT ANY TIME THE OWNERSHIP FOR THIS PROJECT CHANGES, A TRANSFER OF AUTHORIZATION OR A CO-PERMITTEE APPLICATION MUST BE SUBMITTED TO DNREC. THE PERMITTEE OF RECORD SHALL NOT BE RELIEVED OF THEIR RESPONSIBILITIES UNTIL A NOTICE OF TERMINATION HAS BEEN PROCESSED BY DNREC.
11. THE OWNER SHALL BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT ASSOCIATED WITH THE PROJECT, INCLUDING, BUT NOT LIMITED TO, PERFORMING WEEKLY SITE INSPECTIONS DURING CONSTRUCTION AND AFTER RAIN EVENTS, AND MAINTAINING WRITTEN LOGS OF THESE INSPECTIONS.
12. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL CALL MISS UTILITY AT 811 OR 1.800.282.8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ON-SITE.
13. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
14. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7 DEL. C. CH. 60, REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 9.1.02, KNOWN AS SPECIAL CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND DEPARTMENT POLICIES, PROCEDURES, AND GUIDANCE.
15. DOCUMENTATION OF SOIL TESTING AND MATERIALS USED FOR TEMPORARY OR PERMANENT STABILIZATION INCLUDING BUT NOT LIMITED TO SOIL TEST RESULTS, SEED TAGS, SOIL AMENDMENT TAGS, ETC. SHALL BE PROVIDED TO THE DEPARTMENT OR DELEGATED AGENCY TO VERIFY THAT THE PERMANENT OR TEMPORARY STABILIZATION HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN AND THE STANDARDS AND SPECIFICATIONS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THE DEPARTMENT OR THE DELEGATED AGENCY SHALL HAVE THE DISCRETION TO REQUIRE ADDITIONAL SOIL TESTING AND REAPPLICATION OF PERMANENT OR TEMPORARY STABILIZATION IN ACCORDANCE WITH THE SPECIFICATION PROVIDED WITHIN THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, OR ALTERNATIVE MEASURES THAT PROVIDE FUNCTIONAL EQUIVALENCY.

UTILITY NOTE:

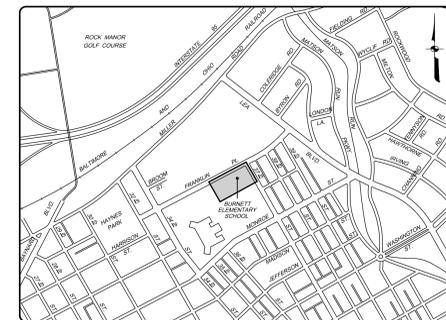
EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO THE CONTRACTORS' NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT CONTRACTORS' EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA (TELEPHONE 800-282-8555). THE FOLLOWING UTILITIES HAVE BEEN IDENTIFIED BY MISS UTILITY AS HAVING UNDERGROUND FACILITIES IN THE AREA OF THIS PROJECT (MISS UTILITY NO. 162750697):

DE. DEPT. OF NAT. RESOURCES & ENV. NEW CASTLE DEPARTMENT OF SPECIAL SERVICES
DELMARVA POWER DELAWARE POWER GAS CITY OF WILMINGTON
COMCAST - UTILIQUEST VERIZON



MARGUERITE H. BURNETT MIDDLE SCHOOL DEMOLITION PROJECT SEDIMENT AND STORMWATER MANAGEMENT PLANS

CITY OF WILMINGTON
SHELLPOT WATERSHED
TAX PARCEL: 26-009.10-001
NEW CASTLE COUNTY, DELAWARE



1621 N. Lincoln Street
Wilmington, DE 19806
(P)302-658-6426
(F)302-658-8431
abhagen@ABHA.com
www.ABHA.com

CONSULTANTS
Vandemark & Lynch, Inc.
Civil Engineers
4305 Miller Road
Wilmington, DE 19899

LEGEND

---	EXISTING PROPERTY LINE	NA
---	ADJACENT PROPERTY LINE	NA
+	SITE BENCHMARK	NA
---	EASEMENT LINE	NA
---	CONTOURS	(30)
---	SPOT GRADES	(27.00)X
---	BUILDING	NA
---	CONCRETE	NA
---	BRICK SIDEWALK	NA
---	ASPHALT	NA
---	CURB	NA
---	CONCRETE WALL	NA
---	STORM CATCH BASIN	NA
---	COMBINED SEWER LINE & MANHOLE	NA
---	CLEANOUT	NA
---	STORM SEWER LINE & MANHOLE	NA
---	WATER LINE	(W)
---	WATER VALVE	(WV)
---	FIRE HYDRANT	NA
---	UNDERGROUND ELECTRIC	(UE)
---	OVERHEAD ELECTRIC	NA
---	GAS LINE	NA
---	FENCE POLE	NA
---	UTILITY POLE	NA
---	ELECTRIC MANHOLE	NA
---	TELEPHONE MANHOLE	NA
---	GAS MANHOLE	NA
---	GAS VALVE	NA
---	SIGN	NA
---	LIGHT POLE	NA
---	MONUMENT	NA
---	EDGE OF TREES	NA
---	DECIDUOUS TREE/SIZE	NA
---	EVERGREEN TREE/SIZE	NA
---	FLOW PATH	←
---	INLET PROTECTION TYPE 1	(IP-1)
---	INLET PROTECTION TYPE 2	(IP-2)
---	COMPOST FILTER LOG	(CFL)
---	SILT FENCE	(SF)
---	CONCRETE WASHOUT	(CW)
---	STABILIZED CONSTRUCTION ENTRANCE	(SCE)
---	STABILIZATION MATTING-CHANNEL	(SM-C)
---	LIMIT OF DISTURBANCE	(LOD)
---	SOILS BOUNDARY	NA

STORMWATER LEGEND

---	LIMIT OF DISTURBANCE
---	DRAINAGE BOUNDARY
---	FLOW PATH
+	P.O.I POINT OF INTEREST

THE TYPES OF SOILS LOCATED ON THIS SITE HAS BEEN IDENTIFIED AS:
NxB, NESHAMINY-URBAN LAND COMPLEX, 0 TO 8% SLOPES,
UoB, UDORTHEMETS, BEDROCK SUBSTRATUM, 0 TO 8% SLOPES,
AND Uy, URBAN LAND, BEDROCK SUBSTRATUM

SHEET INDEX:

CS-101	COVER SHEET AND GENERAL NOTES
CS-102	PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
CS-103	CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
CS-104 TO CS-106	CONSTRUCTION SITE DETAILS AND NOTES
CS-107	POST LIMIT-OF-DISTURBANCE DRAINAGE AREA PLAN
CS-108	PRE LIMIT-OF-DISTURBANCE DRAINAGE AREA PLAN

EXISTING IMPERVIOUS COVER IN LIMIT OF DISTURBANCE: 1.90± ACS.
PROPOSED IMPERVIOUS COVER IN LIMIT OF DISTURBANCE: 0.70± ACS.
PERCENT REDUCTION: 63%

OWNER'S CERTIFICATION:

I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED PLAN AND THAT RESPONSIBLE PERSONNEL (I.E. BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT. AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON-SITE REVIEWS, AND I UNDERSTAND MY RESPONSIBILITIES UNDER THE NPDES CONSTRUCTION GENERAL PERMIT, AS REFERENCED ON THIS COVER SHEET.

JOHN W. READ
SUPERVISOR OF FACILITIES
BRANDYWINE SCHOOL DISTRICT
100 PENNSYLVANIA AVENUE
CLAYMONT, DE 19703
302-529-3110

SITE DESIGNER CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES.

STEPHEN H. ROSENFELD, P.E.
VANDEMARK & LYNCH, INC.
4305 MILLER ROAD
WILMINGTON, DE, 19802
PHONE: 302-764-7635
FAX: 302-764-4170



PROJECT
**MARGUERITE H. BURNETT
MIDDLE SCHOOL
DEMOLITION PROJECT**

701 West 34th Street
Wilmington, Delaware 19802

OWNER
Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

MARK	DATE	DESCRIPTION
1	1-02-18	PER DNREC COMMENTS

PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-SWM-C1
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

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SHEET TITLE
**COVER SHEET AND
GENERAL NOTES**

SCALE: 1" = 30'

CS-101



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CONSULTANTS

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PROJECT

MARGUERITE H. BURNETT
MIDDLE SCHOOL
DEMOLITION PROJECT

701 West 34th Street
Wilmington, Delaware 19802

OWNER

Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

MARK	DATE	DESCRIPTION
1	1-02-18	PER DNREC COMMENTS

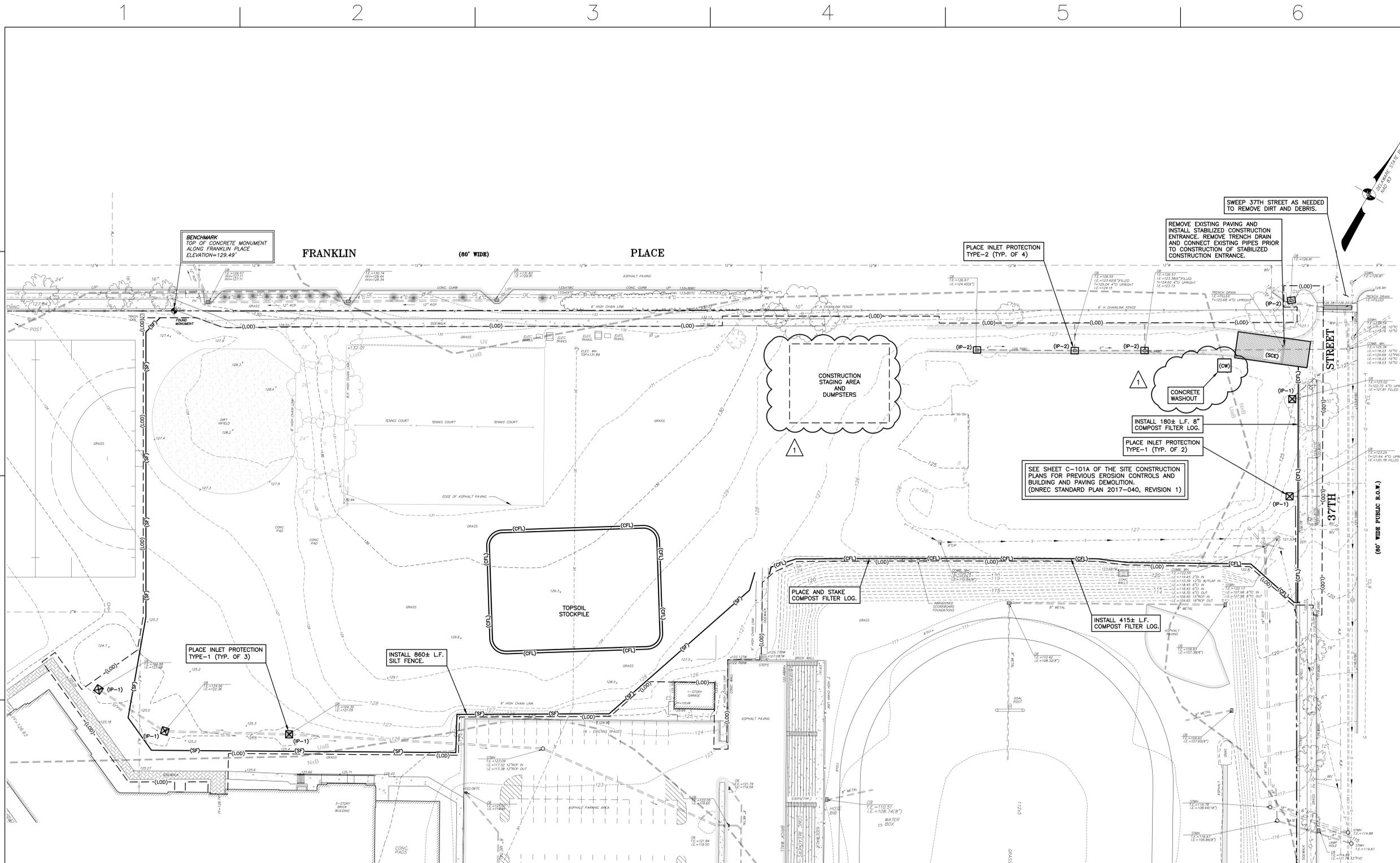
PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-EROS-01
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

SHEET TITLE
PRE-CONSTRUCTION
SITE SWM PLAN

SCALE: 1" = 30'

CS-102

24369.00-EROS-01



- LEGEND:**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - FENCE LINE
 - BUILDING
 - CONCRETE
 - ASPHALT
 - CURB
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - SPOT GRADE
 - CATCH BASIN
 - STORM LINE
 - SANITARY SEWER LINE
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
 - CLEANOUT
 - GAS SERVICE
 - GAS LINE
 - ELECTRIC METER
 - UNDERGROUND ELECTRIC BOX
 - LIGHT POLE
 - TELEPHONE MANHOLE
 - WATER VALVE
 - FIRE HYDRANT
 - WATER MAIN
 - BOLLARDS
 - PLANTER
 - SITE BENCHMARK

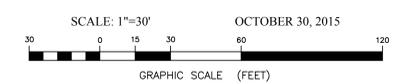
- ES LEGEND**
- (IP-1) INLET PROTECTION TYPE 1
 - (IP-2) INLET PROTECTION TYPE 2
 - (CFL) 8" COMPOST FILTER LOG
 - (SF) SILT FENCE
 - (SCE) STABILIZED CONSTRUCTION ENTRANCE
 - (CW) CONCRETE WASHOUT
 - (-LOD) LIMIT OF DISTURBANCE
 - (H&B) SOILS BOUNDARY

REFER TO CONTRACT GENERAL CONDITIONS FOR REQUIREMENTS FOR CONSTRUCTION FENCING, SECURITY, AND SAFETY.



LIMIT OF DISTURBANCE: 5.3± ACS.

PRE-CONSTRUCTION SITE
STORMWATER MANAGEMENT PLAN
MARGUERITE H. BURNETT
MIDDLE SCHOOL DEMOLITION PROJECT
CITY OF WILMINGTON NEW CASTLE COUNTY
DELAWARE



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PROJECT
**MARGUERITE H. BURNETT
MIDDLE SCHOOL
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701 West 34th Street
Wilmington, Delaware 19802

OWNER
Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

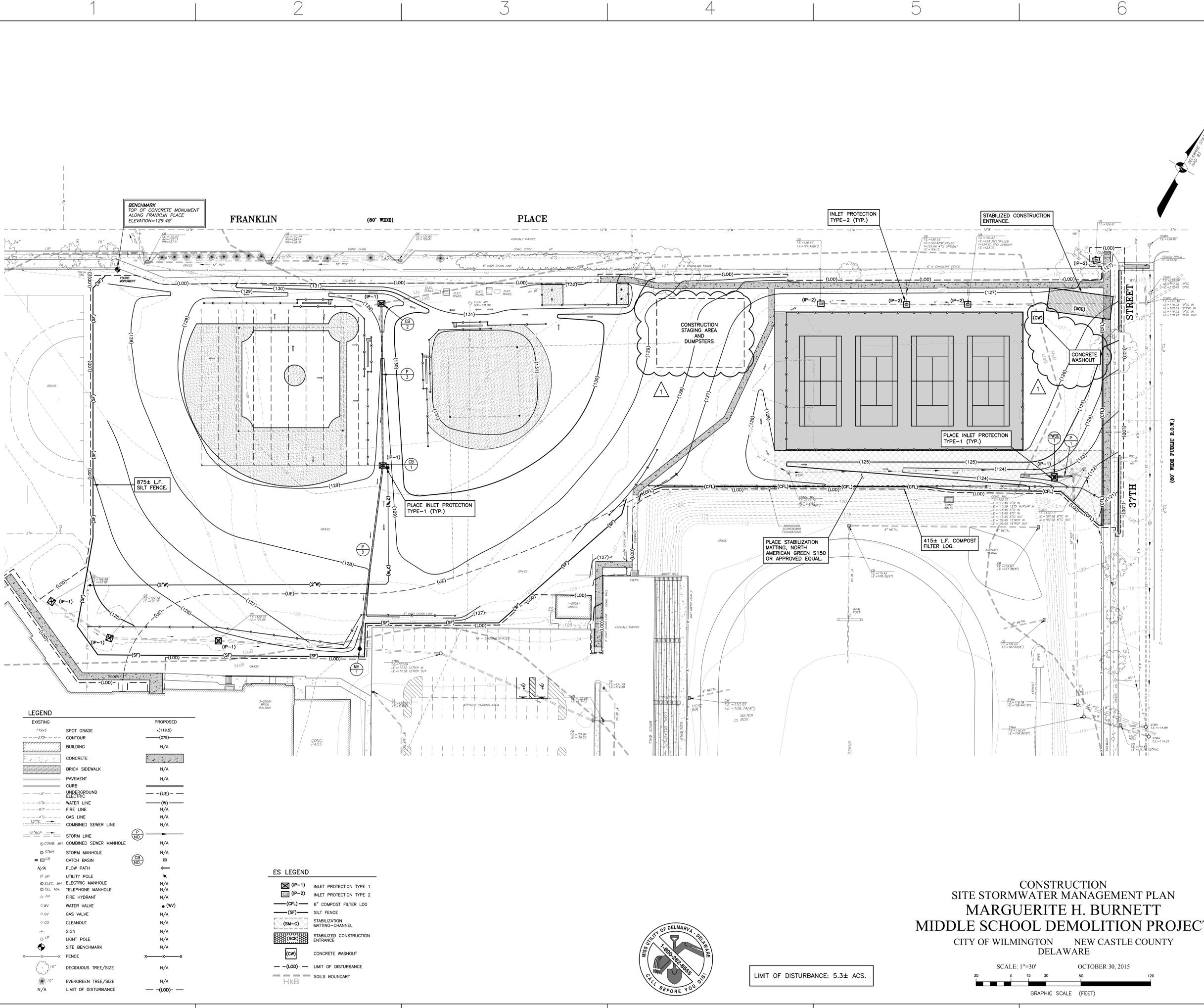
MARK	DATE	DESCRIPTION
1	1-02-18	PER DNREC COMMENTS

PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-EROS-02
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

SHEET TITLE
**CONSTRUCTION
SITE SWM PLAN**
SCALE: 1" = 30'

CS-103

24369.00-EROS-02



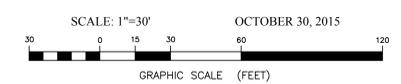
EXISTING	PROPOSED
119x5	SPOT GRADE
279	CONTOUR
[Symbol]	BUILDING
[Symbol]	CONCRETE
[Symbol]	BRICK SIDEWALK
[Symbol]	PAVEMENT
[Symbol]	CURB
[Symbol]	UNDERGROUND
[Symbol]	ELECTRIC
[Symbol]	WATER LINE
[Symbol]	FIRE LINE
[Symbol]	GAS LINE
[Symbol]	COMBINED SEWER LINE
[Symbol]	STORM LINE
[Symbol]	COMBINED SEWER MANHOLE
[Symbol]	STORM MANHOLE
[Symbol]	CATCH BASIN
[Symbol]	FLOW PATH
[Symbol]	UTILITY POLE
[Symbol]	ELECTRIC MANHOLE
[Symbol]	TELEPHONE MANHOLE
[Symbol]	FIRE HYDRANT
[Symbol]	WATER VALVE
[Symbol]	GAS VALVE
[Symbol]	CLEANOUT
[Symbol]	SIGN
[Symbol]	LIGHT POLE
[Symbol]	SITE BENCHMARK
[Symbol]	FENCE
[Symbol]	DECIDUOUS TREE/SIZE
[Symbol]	EVERGREEN TREE/SIZE
[Symbol]	LIMIT OF DISTURBANCE

ES LEGEND	
[Symbol]	INLET PROTECTION TYPE 1
[Symbol]	INLET PROTECTION TYPE 2
[Symbol]	8" COMPOST FILTER LOG
[Symbol]	SILT FENCE
[Symbol]	STABILIZATION MATTING-CHANNEL
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	CONCRETE WASHOUT
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	SOILS BOUNDARY

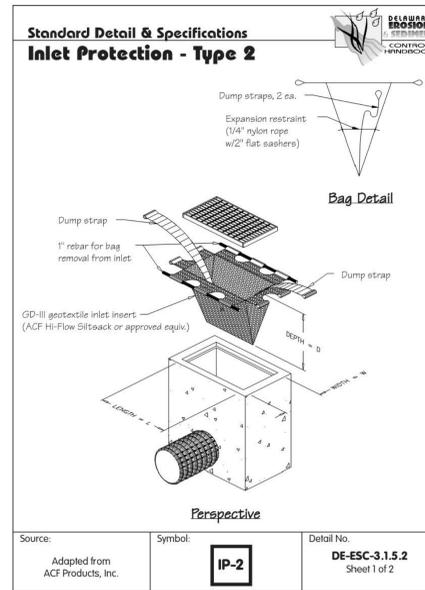
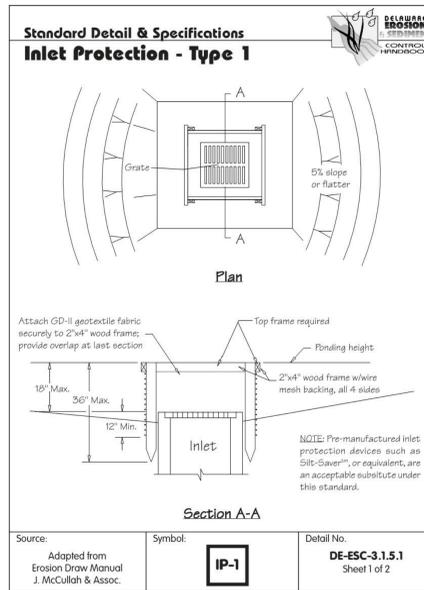
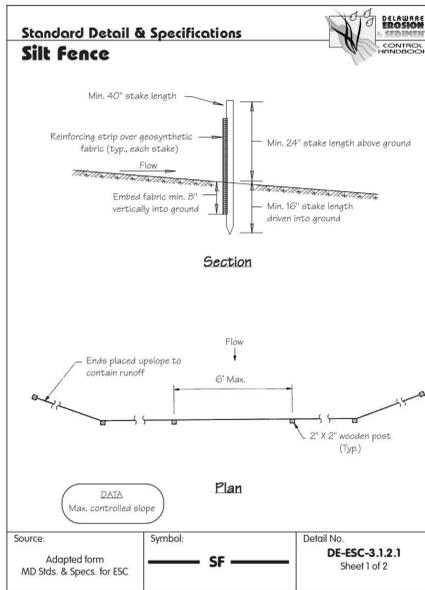
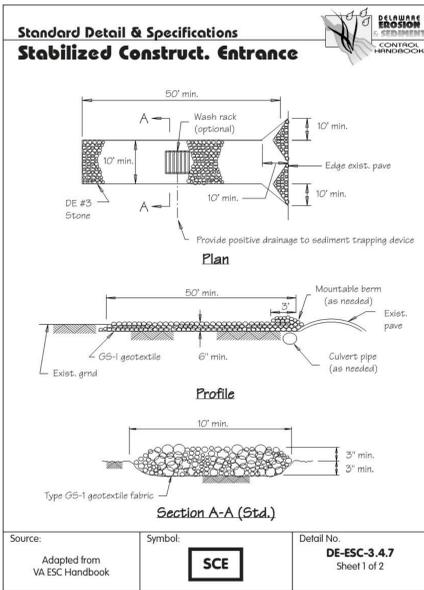


LIMIT OF DISTURBANCE: 5.3± ACS.

**CONSTRUCTION
SITE STORMWATER MANAGEMENT PLAN
MARGUERITE H. BURNETT
MIDDLE SCHOOL DEMOLITION PROJECT**
CITY OF WILMINGTON NEW CASTLE COUNTY
DELAWARE



P:\Land Projects\24369 Burnett Elen School\Plan Prod\Setback and SWM Plan\03_24369.00-EROS-02.dwg, 2/6/2018 1:41:56 PM, David J. Sheeky, Vandemark & Lynch, Inc.



SEQUENCE OF CONSTRUCTION

- NOTIFY THE DNREC SEDIMENT AND STORMWATER PROGRAM AND THE CITY OF WILMINGTON DEPARTMENT OF PUBLIC WORKS IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
- PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES, OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH THE DNREC SITE REVIEWER. THE DEVELOPER, CONTRACTOR, AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE. THE DESIGNER IS RECOMMENDED TO ATTEND.
- INSTALL PERIMETER CONTROLS: STABILIZED CONSTRUCTION ENTRANCE, INLET CONTROL, SILT FENCE, AND COMPOST FILTER LOG. ALL PERIMETER CONTROLS SHALL BE REVIEWED BY THE DNREC SITE REVIEWER PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS-LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, AS DIRECTED BY THE CERTIFIED CONSTRUCTION REVIEWER OR DNREC SITE REVIEWER.
- BEFORE SITE DEMOLITION, COORDINATE ANY UTILITY DEMOLITION AND CONSTRUCTION WITH THE CITY OF WILMINGTON AND UTILITY COMPANIES.
- STRIP AND STOCKPILE TOPSOIL, ROUGH GRADE, BEGIN INSTALLING UTILITIES. PLACE INLET PROTECTION AROUND NEW CATCH BASINS AS CONSTRUCTION PROCEEDS.
- FINE GRADE, INSTALL FIELD SURFACES, TENNIS COURTS, FENCES, EQUIPMENT AND APPURTENANCES. STABILIZE ALL AREAS OUTSIDE OF PAVING WITH TOPSOIL, SEED, AND MULCH AT THE SPECIFIED RATES.
- REMOVE EROSION AND SEDIMENT CONTROL DEVICES ONLY AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED AND AFTER RECEIVING WRITTEN APPROVAL FROM THE DNREC CONSTRUCTION SITE REVIEWER.
- STABILIZE ANY AREAS DISTURBED WHEN REMOVING TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WITH PERMANENT SEED AND MULCH.
- THE TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE. ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN, IF APPLICABLE.

ADDITIONAL EROSION CONTROL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROL PRACTICES DURING CONSTRUCTION AND UTILITY INSTALLATION.
- IF DUST BECOMES A PROBLEM, SPRINKLE WITH WATER EVERY HOUR.

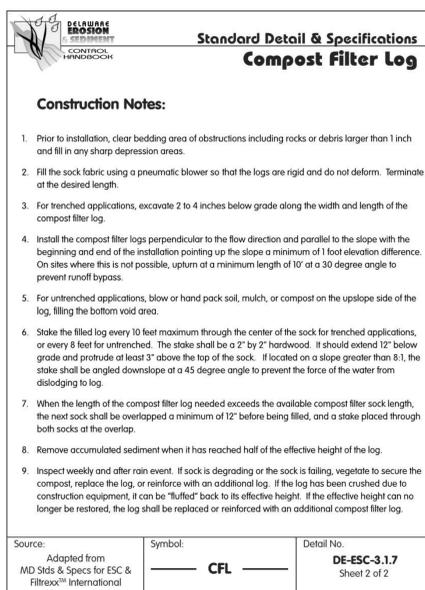
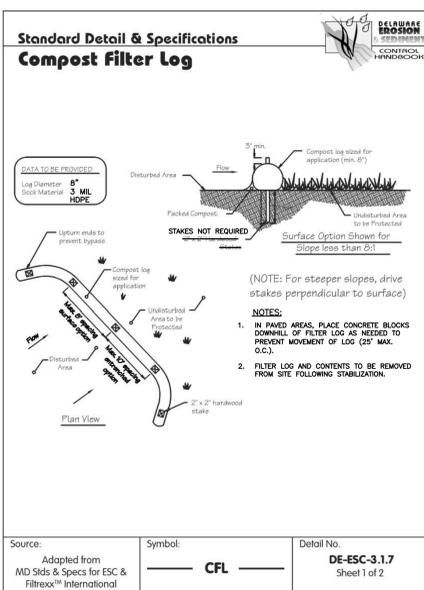
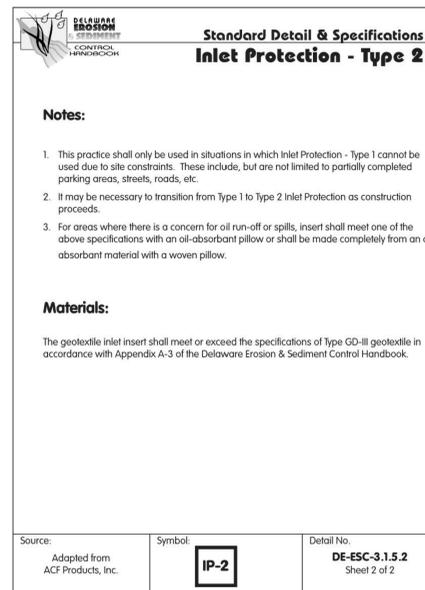
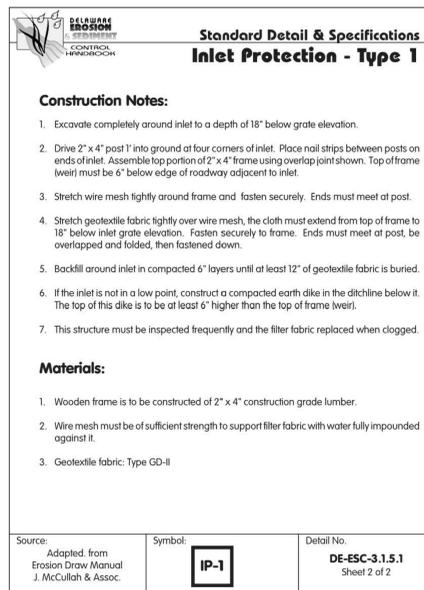
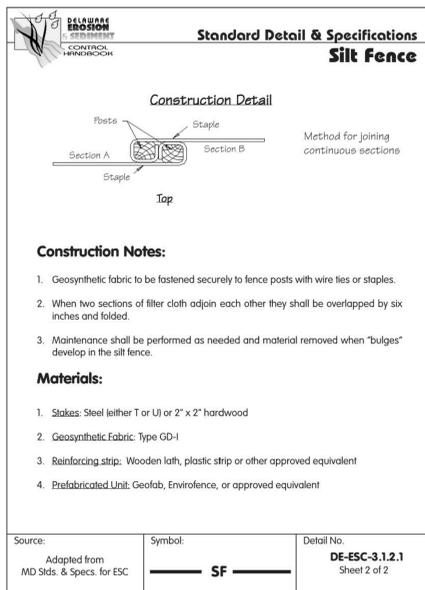
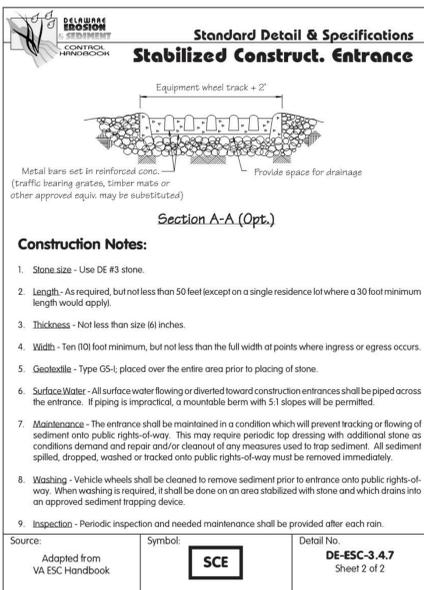
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 Civil Engineers

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 Wilmington, DE 19899



CONSTRUCTION SITE
 DETAILS AND NOTES
**MARGUERITE H. BURNETT
 MIDDLE SCHOOL DEMOLITION PROJECT**
 CITY OF WILMINGTON NEW CASTLE COUNTY
 DELAWARE

SCALE: AS SHOWN
 OCTOBER 30, 2015



PROJECT

**MARGUERITE H. BURNETT
 MIDDLE SCHOOL
 DEMOLITION PROJECT**

701 West 34th Street
 Wilmington, Delaware 19802

OWNER

Brandywine School District
 1000 Pennsylvania Avenue
 Claymont, DE 19703

MARK	DATE	DESCRIPTION
1	1-02-18	PER DNREC COMMENTS

PROJECT NO: 24369.00
 FILE NAME: V&L NO. 24369.00-DETAIL-01
 DRAWN BY: D. SHEEKY
 CHECKED BY: S. ROSENFIELD

SHEET TITLE

**CONSTRUCTION SITE
 DETAILS AND NOTES**

SCALE: AS SHOWN

CS-104

Standard Detail & Specifications Stabilization Matting - Channel

CRITICAL POINTS

- A. Overlaps and seams
- B. Projected waterlines
- C. Channel bottom/side slope vertices

Note: Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

Use manufacturer's recommendations for stapling patterns for channel installations.

Source: Adapted from North American Green, Inc. Symbol: **SM-C** Detail No: **DE-ESC-3.4.6.2** Sheet 1 of 3

Effective April 2016

Standard Detail & Specifications Stabilization Matting - Channel

Construction Notes:

- Prepare soil before installing matting, including application of lime, fertilizer, and seed.
- Begin at top of the channel by anchoring the mat in a 6" deep X 6" wide trench. Backfill and compact the trench after stapling.
- Roll center mat in direction of water flow on bottom of channel.
- Place mats end over end (single styl) with a 6" overlap, use a double row of staggered staples 4" apart to secure mats.
- Full length edge of mats at top of side slopes must be anchored in 6" deep X 6" wide trench; backfill and compact the trench after stapling.
- Mats on side slopes must be overlapped 4" over the center mat and stapled.
- In high flow channel applications, a staple check slot is recommended at 30 to 40 foot intervals. Use a row of staples 4" apart over entire width of the channel. Place a second row 4" below the first row in a staggered pattern.
- The terminal end of the mats must be anchored in a 6" X 6" wide trench. Backfill and compact the trench after stapling.

Source: Adapted from North American Green, Inc. Symbol: **SM-C** Detail No: **DE-ESC-3.4.6.2** Sheet 2 of 3

Effective April 2016

Standard Detail & Specifications Stabilization Matting - Channel

Stapling Patterns

Source: Adapted from North American Green, Inc. Symbol: **SM-C** Detail No: **DE-ESC-3.4.6.2** Sheet 3 of 3

Effective April 2016

Standard Detail & Specifications Vegetative Stabilization

Mix #	Species ¹	Seeding Rate ²	Optimum Seeding Dates ³						Planting Depth ⁴
			Coastal Plain	Piedmont	All	Coastal Plain	Piedmont	All	
1	Bentley	125 L	O	A	O	A	O	1-2 inches	
2	Dora	125 L	O	A	A	O	A	2-3" sandy soils	
3	Rye	125 L	O	A	O	A	O	2-3" sandy soils	
4	Perennial Ryegrass	125 L	O	A	O	A	O	3-5 inches	
5	Annual Ryegrass	125 L	O	A	O	A	O	1-2" sandy soils	
6	Winter Wheat	125 L	O	A	O	A	O	2-3" sandy soils	
7	Frontal Millet	35 FL3	O					0.5 inches	
8	Peanut Millet	20 FL3	O					1.2 inches	

1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization.
2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
3. Applicable on slopes 3:1 or less.
4. Fifty pounds per acre of Annual Ryegrass may be added to 1/2 the seeding rate of any of the above species.
5. Use varieties currently recommended for Delaware. Contact a County Extension Office for information.
6. Warm season grasses such as Millet or Weeping Lovegrass may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid soils. Seed after frost through summer at a depth of 0.5".

Source: Delaware ESC Handbook Symbol: **SM-C** Detail No: **DE-ESC-3.4.3** Sheet 1 of 4

Effective April 2016

Standard Detail & Specifications Vegetative Stabilization

Seeding Mixture	Seeding Rate ¹	Optimum Seeding Dates ²						Remarks
		Coastal Plain	Piedmont	All	Coastal Plain	Piedmont	All	
1. Well Drained Soils	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Low mow only after 1st year. Germination only in top 2 inches.
2. Chesapeake Bluegrass	30	O	A	O	A	O	A	Tolerant of low fertility soils. Good sod water cover and frost resistance.
3. Perennial Ryegrass or Annual Ryegrass	30	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
4. Spring Seeding: Kentucky Bluegrass, Perennial Ryegrass or Rye	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
5. Blue White Clover ³	3	O						Nitrogen fixation. Tolerant of low fertility soils. Good sod water cover and frost resistance.
6. Perennial Ryegrass or Annual Ryegrass	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
7. Bluegrass	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
8. Bluegrass	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.

Source: Delaware ESC Handbook Symbol: **SM-C** Detail No: **DE-ESC-3.4.3** Sheet 2 of 4

Effective April 2016

Standard Detail & Specifications Vegetative Stabilization

Seeding Mixture	Seeding Rate ¹	Optimum Seeding Dates ²						Remarks
		Coastal Plain	Piedmont	All	Coastal Plain	Piedmont	All	
1. Well Drained Soils	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Low mow only after 1st year. Germination only in top 2 inches.
2. Chesapeake Bluegrass	30	O	A	O	A	O	A	Tolerant of low fertility soils. Good sod water cover and frost resistance.
3. Perennial Ryegrass or Annual Ryegrass	30	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
4. Spring Seeding: Kentucky Bluegrass, Perennial Ryegrass or Rye	150	O	A	O	A	O	A	Good erosion control. Tolerant of low fertility soils. Good sod water cover and frost resistance.
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Source: Delaware ESC Handbook Symbol: **SM-C** Detail No: **DE-ESC-3.4.3** Sheet 3 of 4

Effective April 2016

Standard Detail & Specifications Vegetative Stabilization

Construction Notes:

- Site Preparation
 - Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.
 - Final grading and shaping is not necessary for temporary seedings.
- Seedbed Preparation

It is important to prepare a good seedbed to insure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.
- Soil Amendments
 - Lime - Apply liming materials based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.
 - Fertilizer - Apply fertilizer based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soil.
- Seeding
 - For temporary stabilization, select a mixture from Sheet 1. For a permanent stabilization, select a mixture from Sheet 2 or Sheet 3 depending on the conditions.
 - Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.
 - Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.
- Mulching

All mulching shall be done in accordance with detail DE-ESC-3.4.5

Source: Delaware ESC Handbook Symbol: **SM-C** Detail No: **DE-ESC-3.4.3** Sheet 4 of 4

Effective April 2016

Standard Detail & Specifications Topsoiling

Construction Notes:

- Site Preparation (Where Topsoil is to be added)

Note: When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, waterways and sediment basins.

 - Grading - Grades on the areas to be topsoiled which have been previously established shall be maintained.
 - Liming - Where the topsoil is either highly acid or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet). Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - Tilling - After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of at least 3 inches to permit bonding of the topsoil to the subsoil. Pack by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.
- Topsoil Material and Application

Note: Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-SCS in cooperation with Delaware Agricultural Experiment Station.

Source: USDA - NRCS Symbol: **SM-C** Detail No: **DE-ESC-3.4.1** Sheet 1 of 2

Effective April 2016

Standard Detail & Specifications Topsoiling

Construction Notes (cont.)

- Materials - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, slicks, roots, trash or other extraneous materials larger than 1-1/2 inches in diameter. Topsoil must be free of plants or plant parts of bermudagrass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistles, or others as specified. All topsoil shall be tested by a reputable laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0 lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 parts per million shall not be used.

Note: No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.
- Grading - The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

Note: Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil. Compost material used to improve the percentage of organic matter shall be provided by a certified supplier.

Compost amendments that are intended to meet specific post-construction stormwater management goals shall further meet the requirements of Appendix 3.06.2 Post Construction Stormwater Management BMP Standards and Specifications, Section 14.0 Soil Amendments.

Source: USDA - NRCS Symbol: **SM-C** Detail No: **DE-ESC-3.4.1** Sheet 2 of 2

Effective April 2016

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PROJECT
**MARGUERITE H. BURNETT
MIDDLE SCHOOL
DEMOLITION PROJECT**

701 West 34th Street
Wilmington, Delaware 19802

OWNER
Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

MARK	DATE	PER DNREC COMMENTS	DESCRIPTION
1	1-02-18		

PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-DETAIL-01
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

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SHEET TITLE
**CONSTRUCTION SITE
DETAILS AND NOTES**

SCALE: AS SHOWN

CS-105

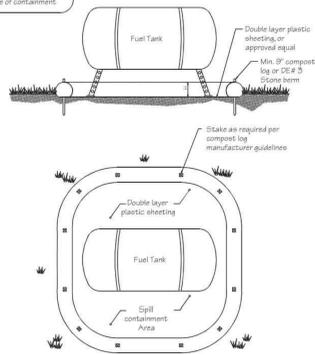


CONSTRUCTION SITE
DETAILS AND NOTES
**MARGUERITE H. BURNETT
MIDDLE SCHOOL DEMOLITION PROJECT**
CITY OF WILMINGTON NEW CASTLE COUNTY
DELAWARE

SCALE: AS SHOWN OCTOBER 30, 2015

Standard Detail & Specifications
Construction Site Waste Mgt & Spill Control

DATA TO BE PROVIDED:
Volume of Potential Pollution
Height of containment
Area of containment
Volume of containment



Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.6.1 Sheet 1 of 5

Effective April 2016

Standard Detail & Specifications
Construction Site Waste Mgt & Spill Control

Pollution Prevention - Spill Prevention

- Fueling should only take place in signed designated areas, away from downstream drainage facilities and watercourses.
- Fueling must be with nozzles equipped with automatic shut-off to control drips. Do not top off.
- Protect the areas where equipment or vehicles are being repaired, maintained, fueled or parked from storm water run-on and runoff.
- Use barriers such as berms to prevent storm water run-on and runoff, and to contain spills.
- Place a "Fueling Area" sign next to each fueling area.
- Store hazardous materials such as fuel, solvents, oil and chemicals in secondary containment.
- Inspect vehicles and equipment for leaks on each day of use. Repair fluid and oil leaks immediately.
- Absorbent spill clean-up materials and spill kits must be available in fueling areas and on fuel trucks.
- If fueling is to take place at night, make sure the fueling area is sufficiently illuminated.
- Properly dispose of used oil, fluids, lubricants and spill clean-up materials.

CLEAN UP SPILLS

- If it is safe to do so, immediately contain and clean up any chemical and/or hazardous material spills.
- Properly dispose of used oil, fluids, lubricants and spill clean-up materials.
- Do not bury spills or wash them down with water.

LEAKS AND DRIPS

- Use drip pans or absorbent pads at all times. Place under and around leaky equipment.
- Do not allow oil, grease, fuel or chemicals to drip onto the ground.
- Have spill kits and clean up material on-site.
- Repair leaky equipment promptly or remove problem vehicles and equipment from the site. Clean up contaminated soil immediately.
- Store contaminated waste in sealed containers constructed of suitable material. Label these containers properly.
- Clean up all spills and leaks. Promptly dispose of waste and spent clean up materials.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.6.1 Sheet 2 of 5

Effective April 2016

Standard Detail & Specifications
Construction Site Waste Mgt & Spill Control

Notes:

The Construction Site Pollution Prevention Plan should include the following elements:

- Material inventory**
Document the storage and use of the following materials:
a. Concrete
b. Detergents
c. Paints (enamel and latex)
d. Cleaning solvents
e. Pesticides
f. Wood scraps
g. Fertilizers
h. Petroleum based products
- Good housekeeping practices**
a. Store only enough product required to do the job.
b. All materials shall be stored in a neat, orderly manner in their original labeled containers and covered.
c. Substances shall not be mixed.
d. When possible, all of a product shall be used up prior to disposal of the container.
e. Manufacturers' instructions for disposal shall be strictly adhered to.
f. The site foreman shall designate someone to inspect all BMPs daily.
- Waste management practices**
a. All waste materials shall be collected and stored in securely lidded dumpsters in a location that does not drain to a waterbody.
b. Waste materials shall be salvaged and/or recycled whenever possible.
c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 3 of 5

Effective April 2016

Standard Detail & Specifications
Construction Site Waste Mgt & Spill Control

Notes (cont.)

- Trash shall be disposed of in accordance with all applicable Delaware laws.
 - Trash cans shall be placed at all lunch spots and littering is strictly prohibited. Recycle bins shall be placed near the construction trailer.
 - If fertilizer bags can not be stored in a weather-proof location, they shall be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.
- Equipment maintenance practices**
a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
b. If performed on-site, vehicles shall be washed with high-pressure water spray without detergents in an area contained by an impervious berm.
c. Drip pans shall be used for all equipment maintenance.
d. Equipment shall be inspected for leaks on a daily basis.
e. Washout from concrete trucks shall be disposed of in a temporary pit for hardening and proper disposal.
f. Fuel nozzles shall be equipped with automatic shut-off valves.
 - All used products such as oil, antifreeze, solvents and tires shall be disposed of in accordance with manufacturers' recommendations and local, state and federal laws and regulations.
 - Spill prevention practices**
a. Potential spill areas shall be identified and contained in covered areas with no connection to the storm drain system.
b. Warning signs shall be posted in hazardous material storage areas.
c. Preventive maintenance shall be performed on all tanks, valves, pumps, pipes and other equipment as necessary.
d. Low or non-toxic substances shall be prioritized for use.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 4 of 5

Effective April 2016

Standard Detail & Specifications
Construction Site Waste Mgt & Spill Control

Notes (cont.)

- Contact information for reporting spills through the DNREC 24-Hour Toll Free Number shall be prominently posted.
- Education**
a. Best management practices for construction site pollution control shall be a part of regular progress meetings.
b. Information regarding waste management, equipment maintenance and spill prevention shall be prominently posted in the construction trailer.

CONTACT INFORMATION

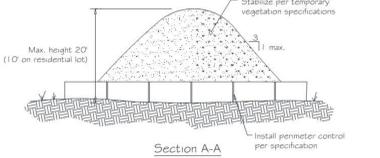
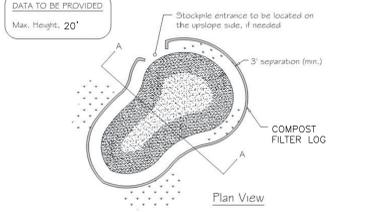
DNREC 24-Hour Toll Free Number 800-662-8802
DNREC Solid & Hazardous Waste Branch 302-739-9403

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 5 of 5

Effective April 2016

Standard Detail & Specifications
Soil Stockpile

DATA TO BE PROVIDED:
Max. Height: 20'



Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	SP	DE-ESC-3.7.3 Sheet 1 of 2

Effective April 2016

Standard Detail & Specifications
Soil Stockpile

Construction Notes:

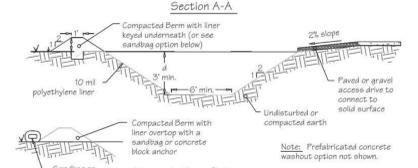
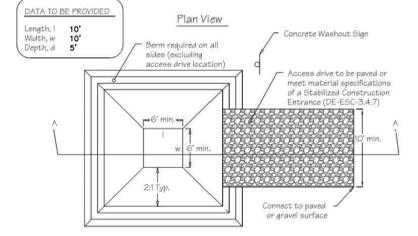
- Locate stockpiles so that they are 50 feet from any storm drain inlet, open channel, wetland or waterbody. Redirect any concentrated flow around the stockpile using an approved erosion and sediment control measure.
- Secure the perimeter of the stockpile with an approved erosion and sediment control perimeter device.
- If stockpile is to remain inactive for more than 14 calendar days, the stockpile must be vegetated. Follow the temporary vegetation specifications. The vegetation chosen shall last the duration of the stockpile; the stockpile shall be restabilized if the temporary vegetation dies or erosion results.

Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	SP	DE-ESC-3.7.3 Sheet 2 of 2

Effective April 2016

Standard Detail & Specifications
Concrete Washout

DATA TO BE PROVIDED:
Length, l
Width, w
Depth, d



Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	CW	DE-ESC-3.6.2 Sheet 1 of 2

Effective April 2016

Standard Detail & Specifications
Concrete Washout

Construction Notes:

- Locate washout area a minimum of 50 feet from open channels, storm drain inlets, wetlands or waterbodies.
- Locate washout area so that it is accessible to concrete equipment (service with a minimum 10 foot wide gravel accessway), but so it is not in a highly active construction area causing accidental damage.
- Minimum dimensions for prefabricated units are 4 feet by 4 feet by 1 foot deep with a minimum 4mil polyethylene plastic liner. Minimum dimensions for constructed concrete washout areas are 6 feet by 6 feet by 3 feet deep, with a minimum 10mil polyethylene liner, 2:1 side slopes, and a 1 foot high by 1 foot wide compacted fill berm.
- The liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. For excavated washouts, anchor the liner underneath the berm or overlap with sandbags or concrete blocks to hold in place.
- Provide a sign designating the washout area, and for large construction sites, provide signs throughout directing traffic to its location.
- Allow washed out concrete mixture to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.
- Apply a new liner before reusing the station for additional washouts after maintenance has occurred.

Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	CW	DE-ESC-3.6.2 Sheet 2 of 2

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DRAWN BY: D. SHEEKY
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SHEET TITLE
**CONSTRUCTION SITE
DETAILS AND NOTES**

SCALE: AS SHOWN

CS-106



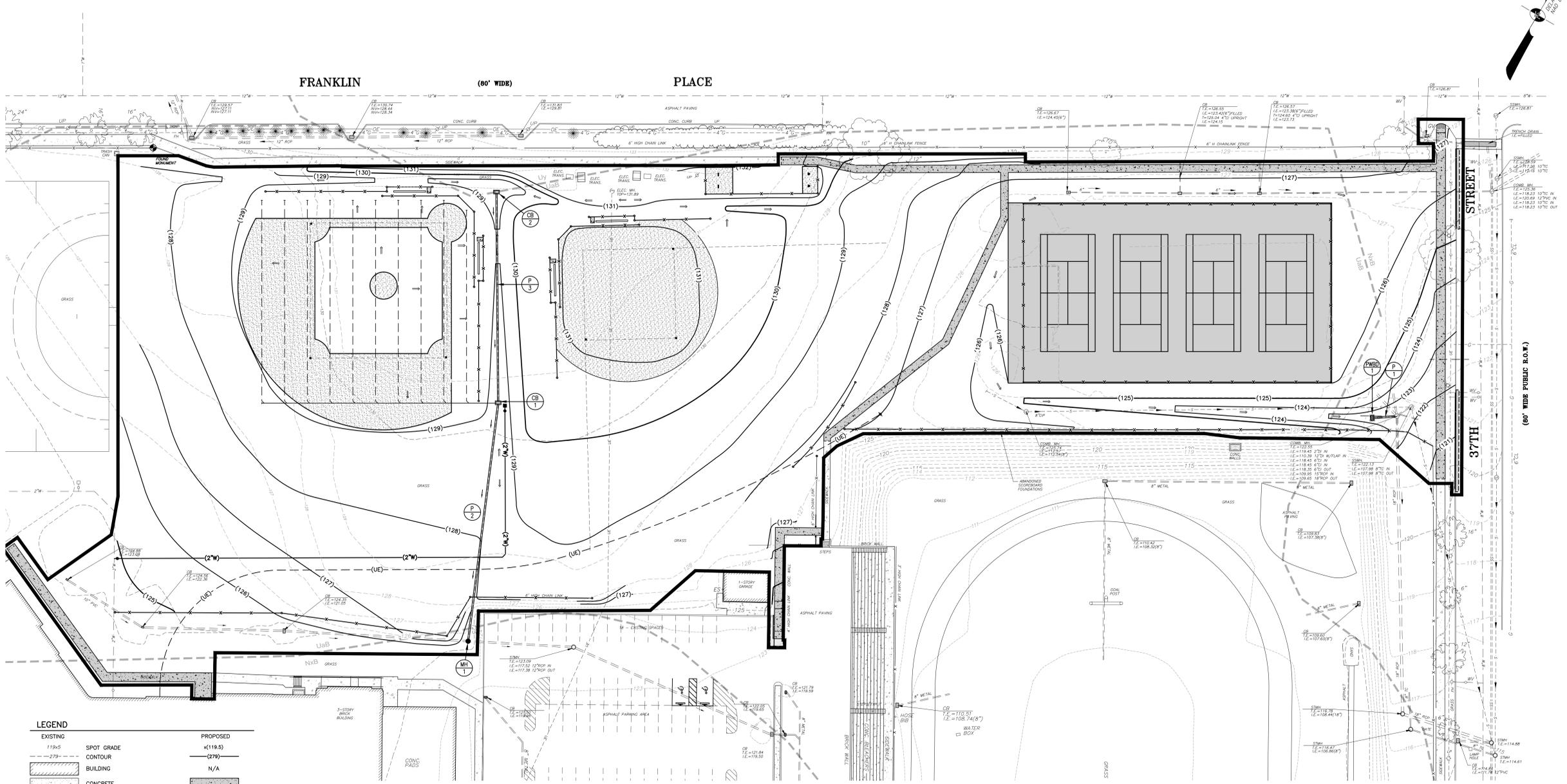
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CITY OF WILMINGTON NEW CASTLE COUNTY
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SCALE: AS SHOWN OCTOBER 30, 2015



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POST-DEVELOPED L.O.D.
AREA = 5.3 ACS.
IMPERVIOUS AREA = 0.7 ACS.
CN = 77



LEGEND	
119x5	SPOT GRADE
279	CONTOUR
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[Hatched Box]	CONCRETE
[Hatched Box]	BRICK SIDEWALK
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[Symbol]	TELEPHONE MANHOLE
[Symbol]	FIRE HYDRANT
[Symbol]	WATER VALVE
[Symbol]	GAS VALVE
[Symbol]	CLEANOUT
[Symbol]	SIGN
[Symbol]	LIGHT POLE
[Symbol]	SITE BENCHMARK
[Symbol]	FENCE
[Symbol]	DECIDUOUS TREE/SIZE
[Symbol]	EVERGREEN TREE/SIZE
[Symbol]	LIMIT OF DISTURBANCE

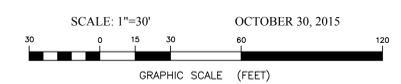
PROPOSED	
x(119.5)	SPOT GRADE
(279)	CONTOUR
N/A	BUILDING
N/A	CONCRETE
N/A	BRICK SIDEWALK
N/A	PAVEMENT
N/A	CURB
-(UE)-	UNDERGROUND
-(W)	ELECTRIC
N/A	WATER LINE
N/A	FIRE LINE
N/A	GAS LINE
N/A	COMBINED SEWER LINE
-(P NO)	STORM LINE
N/A	COMBINED SEWER MANHOLE
N/A	STORM MANHOLE
N/A	CATCH BASIN
N/A	FLOW PATH
N/A	UTILITY POLE
N/A	ELECTRIC MANHOLE
N/A	TELEPHONE MANHOLE
N/A	FIRE HYDRANT
-(WV)	WATER VALVE
N/A	GAS VALVE
N/A	CLEANOUT
N/A	SIGN
N/A	LIGHT POLE
N/A	SITE BENCHMARK
N/A	FENCE
N/A	DECIDUOUS TREE/SIZE
N/A	EVERGREEN TREE/SIZE
-(LOD)-	LIMIT OF DISTURBANCE

STORMWATER LEGEND
LIMIT OF DISTURBANCE DRAINAGE BOUNDARY
HKB SOILS BOUNDARY

THE TYPES OF SOILS LOCATED ON THIS SITE HAS BEEN IDENTIFIED AS:
NxB, NESHAMINY-URBAN LAND COMPLEX, 0 TO 8% SLOPES,
UoB, UDORTHENTS, BEDROCK SUBSTRATUM, 0 TO 8% SLOPES,
AND Uy, URBAN LAND, BEDROCK SUBSTRATUM

LIMIT OF DISTURBANCE: 5.3± ACS.

POST LIMIT-OF-DISTURBANCE
DRAINAGE AREA PLAN
MARGUERITE H. BURNETT
MIDDLE SCHOOL DEMOLITION PROJECT
CITY OF WILMINGTON NEW CASTLE COUNTY
DELAWARE



PROJECT
MARGUERITE H. BURNETT
MIDDLE SCHOOL
DEMOLITION PROJECT

701 West 34th Street
Wilmington, Delaware 19802

OWNER
Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

MARK	DATE	DESCRIPTION
1	1-02-17	PER DNREC COMMENTS

PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-EROS-02
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

SHEET TITLE
POST LIMIT-OF-DISTURBANCE
DRAINAGE AREA PLAN
SCALE: 1" = 30'

CS-107

24369.00-SWM-02

P:\Land Projects\24369 Burnett Elen School\Plan Prod\Setback and SWM\Plan005 24369.00-SWM-02.dwg, 2/6/2015 1:42:41 PM, David J. Sheehy, Vandemark & Lynch, Inc.



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Civil Engineers
4305 Miller Road
Wilmington, DE 19899

PROJECT
**MARGUERITE H. BURNETT
MIDDLE SCHOOL
DEMOLITION PROJECT**

701 West 34th Street
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OWNER
Brandywine School District
1000 Pennsylvania Avenue
Claymont, DE 19703

MARK	DATE	DESCRIPTION
1	1-02-17	PER DNREC COMMENTS

PROJECT NO: 24369.00
FILE NAME: V&L NO. 24369.00-EROS-01
DRAWN BY: D. SHEEKY
CHECKED BY: S. ROSENFELD

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SHEET TITLE
**PRE LIMIT-OF-DISTURBANCE
DRAINAGE AREA PLAN**

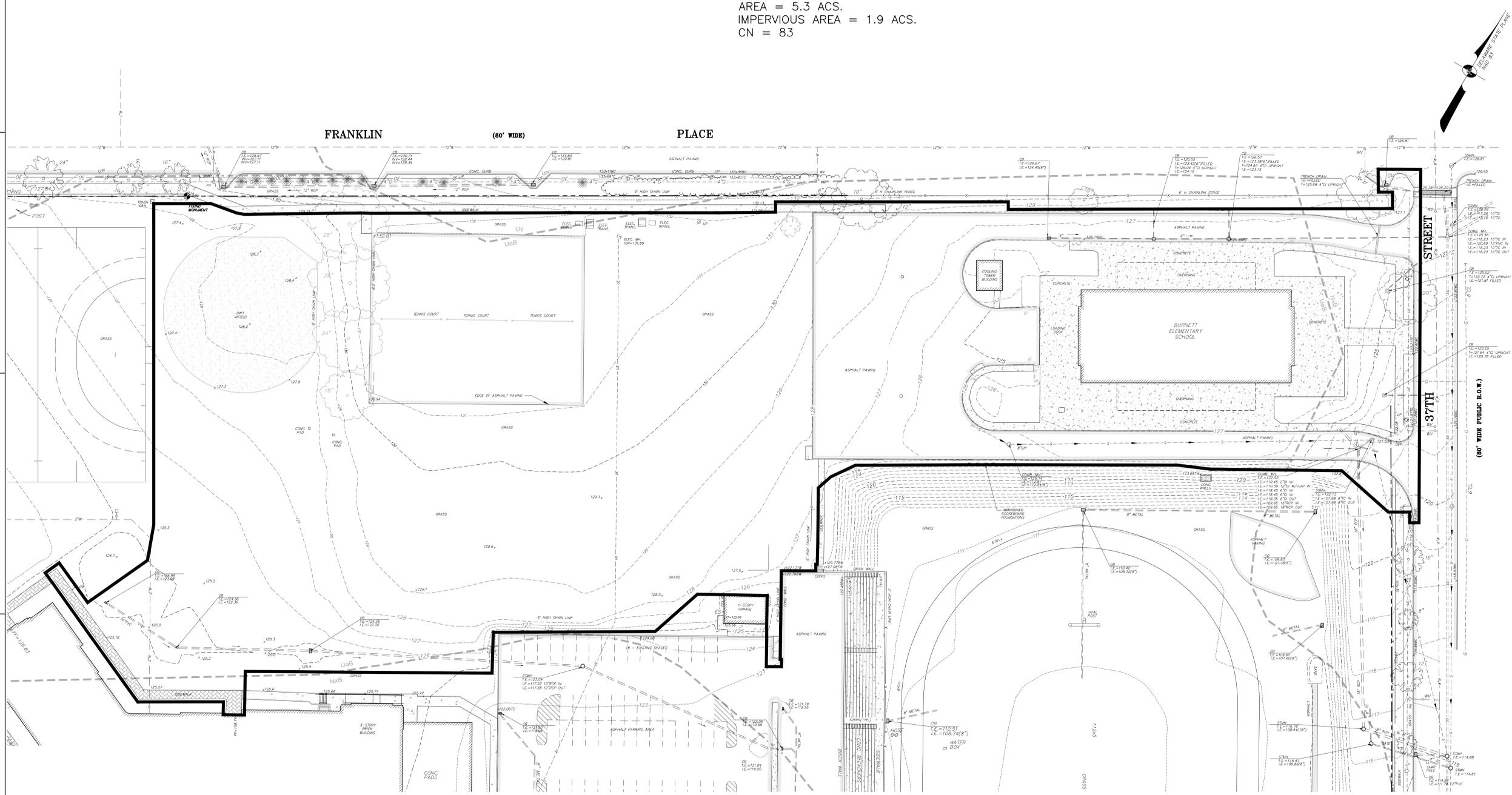
SCALE: 1" = 30'

CS-108

24369.00-SWM-01

PRE-DEVELOPED L.O.D.

AREA = 5.3 ACS.
IMPERVIOUS AREA = 1.9 ACS.
CN = 83



- LEGEND:**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - FENCE LINE
 - BUILDING
 - CONCRETE
 - ASPHALT
 - CURB
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - SPOT GRADE
 - CATCH BASIN
 - STORM LINE
 - SANITARY SEWER LINE
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
 - CLEANOUT
 - GAS SERVICE
 - GAS LINE
 - ELECTRIC METER
 - UNDERGROUND ELECTRIC BOX
 - LIGHT POLE
 - TELEPHONE MANHOLE
 - WATER VALVE
 - FIRE HYDRANT
 - WATER MAIN
 - BOLLARDS
 - PLANTER
 - SITE BENCHMARK

- STORMWATER LEGEND**
- LIMIT OF DISTURBANCE DRAINAGE BOUNDARY
 - SOILS BOUNDARY

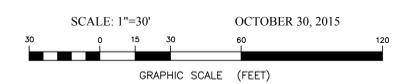
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UgB, UDORTHENTS, BEDROCK SUBSTRATUM, 0 TO 8% SLOPES,
AND Uy, URBAN LAND, BEDROCK SUBSTRATUM

TYPE 'B'
TYPE 'C'
TYPE 'D'



LIMIT OF DISTURBANCE: 5.3± ACS.

**PRE LIMIT-OF-DISTURBANCE
DRAINAGE AREA PLAN
MARGUERITE H. BURNETT
MIDDLE SCHOOL DEMOLITION PROJECT**
CITY OF WILMINGTON NEW CASTLE COUNTY
DELAWARE



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