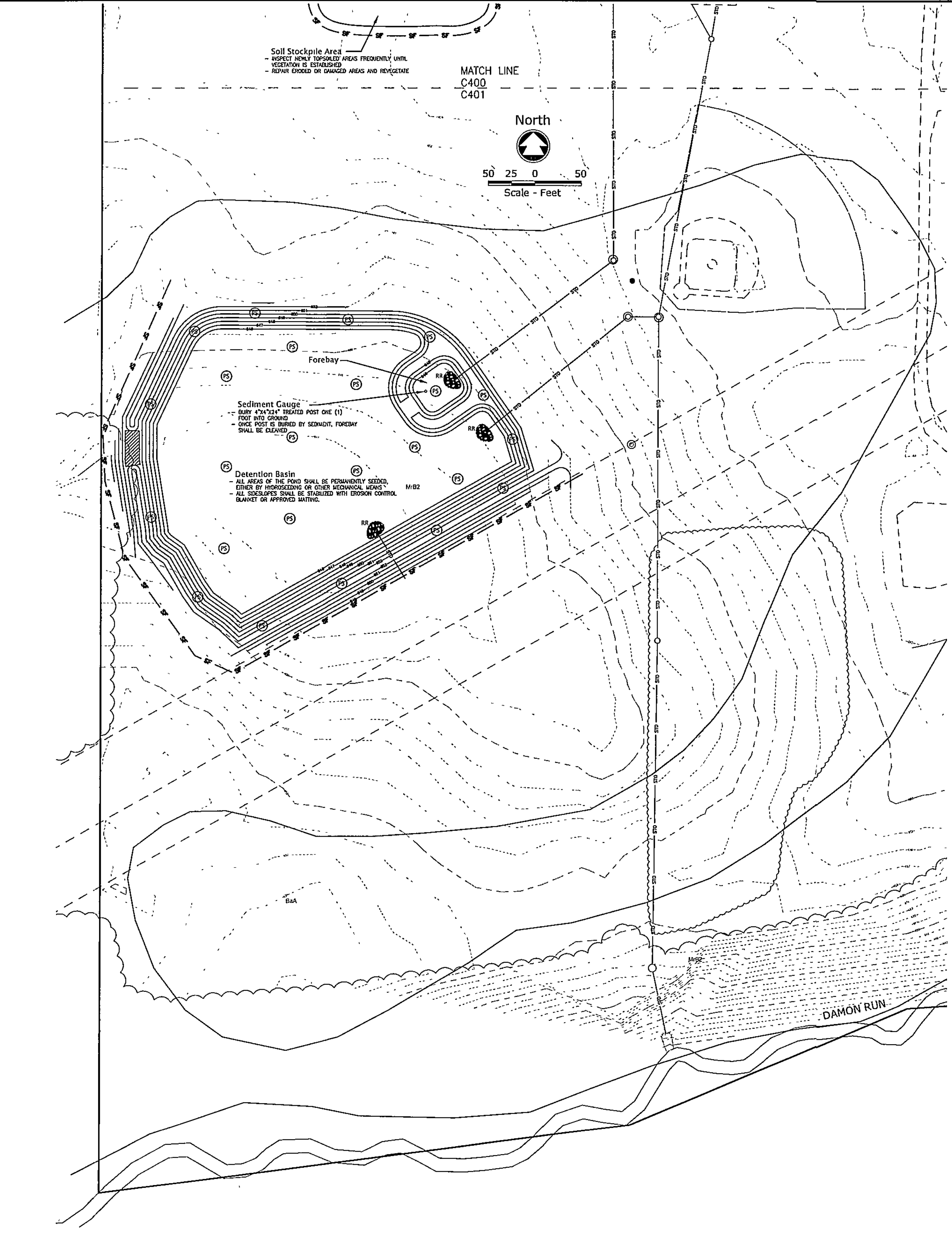


PROJECT INFORMATION

Project Name: Liberty School Addition

County: Porter

City: Chesterton

Address: 50 West 900 North, Chesterton IN 46385

Project Location: Southwest of the Intersection of County Road 900 North and County Road 50 West

Hydrologic Unit Code: 040400010500 10

Receiving Waters: Damon Run

Latitude and Longitude: N 41°33'47" W 87°04 43"

Civil Township: Liberty

Quarter: NW Section: 23 Township: 36N Range: 6W

Project Owner Name: Duneland School Corporation

Contact Person: Mark McKibben

Address: 601 West Morgan Street

City: Chesterton State: IN Zip: 46304

Telephone: 219-983-3600 Fax:

Email -

Plan Preparer Name: McMahon Associates, Inc

Affiliation: Engineer

Address: 952 S State Road 2

City: Valparaiso State: IN Zip: 46383

Telephone: 219-462-7743 Fax: 219-464-8248

Email: mcm@mcmgrp-in.com

A1 – Plan Index – Contained herein
A2 – 11x17 drawing – An 11x17 version of the construction plans is enclosed herewith
A3 – Narrative – The site is currently the location of Liberty Elementary and Liberty Middle Schools. The site totals nearly 70 acres where only approximately 15 acres are developed, the remainder is a used as athletic fields and an actively farmed corn field. The site is considered flat to rolling as there are areas with 20 feet relief from high to low. The development plans includes a building addition to the elementary school, detention pond construction, demolition of asphalt parking areas, reconstruction of parking and driveway facilities and overall renovations of the grounds.
A4 – Vicinity map – See Sheet C000
A5 – Legal description – See Sheet C105
A6 – Location of all lots and proposed site improvements – See Sheets C100, C101 and C200
A7 – HUC – 04040001050040
A8 – Any state and federal water quality permits? – None required
A9 – Specific points of storm water discharge – See Sheet C200 – numerous points of discharge to Damon Run
A10 – Location and name of wetlands and water bodies adjacent to the site – Damon Run
A11 – Ultimate receiving water – Damon Run
A12 – Identification of potential discharges to groundwater – Sources where storm water may potentially enter ground water are from the ponds
A13 – 100-year floodplains, floodways and floodway fringes – Parcel is in Flood Zone 'C', areas of minimal flooding by scaled location
A14 – Preconstruction and post construction estimate of peak discharge.

Estimated Peak Discharge of a 10-year Storm Event

Pre Construction	Post Construction
61.0+/ cfs	38.0 cfs

A15 – Adjacent Land Use
North – Residential, agricultural
South – Residential, agricultural
East – Residential, agricultural
West – Residential

A16 – Location and approximate boundaries of disturbed areas – See Sheets C200 and C400
A17 – Identification of existing vegetative cover. – C050 and C051. The undeveloped areas are covered with either existing vegetation (Grass or trees) or actively farmed row crops. Areas that are to be disturbed shall be permanently seeded
A18 – Soils map including descriptions and limitations. – See Sheet C400
A19 – Locations, size, and dimension of proposed stormwater systems. – See Sheet C300
A20 – Plan for any off site construction activities associated with this project. – None
A21 – Locations of proposed soil stockpiles, borrow and/or disposal areas. – See Sheet C400
A22 – Existing site topography at an interval appropriate to show detailed drainage patterns. – See Sheet C050, C051
A23 – Proposed final topography at an interval appropriate to show detailed drainage patterns. – See Sheet C200
A24 – Proposed Description of Dust Control. – Contractor shall provide dust control measures. Dust control measures shall be used during all phases of construction. If use of water is not effective, an environmentally friendly chemical agent such as a polymer emulsion shall be used. All dust control agents shall be rated as safe for use in wetland areas regardless of site location. An acceptable example of a polymer emulsion product is DustGlue. Calcium Chloride is not acceptable at anytime

LEGEND

(RR) = RIP-RAP APRON
(PS) = PERMANENT SEED
☐ = AREA NOT TO BE DISTURBED DURING CONSTRUCTION

B1 – Description of potential pollutant sources associated with the construction activities.
- Motor oils (in construction equipment)
- diesel fuel (in construction equipment)
- cleaning solvents (for construction equipment)
- concrete washout
- construction litter

B2 Sequence describing stormwater quality measure implementation relative to land disturbing activities. –
1 Install perimeter type temporary sediment control measures (i.e. silt fence)
2 Install sediment barriers around site features that are to remain or be left undisturbed
3 Site Demolition
4 Strip topsoil in parking and building area. Stockpile topsoil in designated location
5 Stabilize topsoil stockpile by seeding with temporary vegetative cover, covering with tarps and/or placing perimeter sediment barriers around the stockpile
6 Mass earthwork. Construct pond. Stabilize immediately
7 Prepare sub grade
8 Prepare parking / begin parking construction
9 Building construction may be occurring simultaneously
10 Protect subsoil stockpiles with temporary vegetative cover, artificial cover, or perimeter sediment barriers wherever possible
11 Construct underground storm water management system
12 Provide temporary protection of all storm sewer inlets and construct permanent erosion control measures at all storm sewer inlets at the detention ponds
13 Construct other underground utilities (i.e. sanitary sewer, water, gas, and electric, etc.) Per the project plans.
14 Building Completion. Permanently seed and landscape as time permits
15 Prepare final grading on sub-grade and place sub-base material for all paved areas
16 Install concrete curbing and walks.
17 Place binder course of asphalt in parking areas
18 Provide permanent seeding / erosion control measures for remaining green space

B3 – Stable construction entrance locations and specifications. – See Sheets C400
B4 – Sediment control measures for sheet flow areas. – See Sheets C400
B5 – Sediment control measures for concentrated flow areas. – See Sheets C400
B6 – Storm sewer inlet protection measure locations and specifications. – See Sheets C400
B7 – Runoff control measures. – See Sheets C400
B8 – Stormwater outlet protection specifications. – See Sheets C400
B9 – Grade stabilization structure locations and specifications. – See Sheets C400
B10 – Locations, dimensions, specifications and construction details of each stormwater quality measure. – See Sheets C400
B11 – Temporary surface stabilization methods appropriate for each season. – See Sheet C400
B12 – Permanent surface stabilization specifications. – See Sheets C400
B13 – Materials handling and spill prevention plan. – The contractor shall provide a stone surface material staging area. All liquid material shall be stored in a weather proof vandalism resistant enclosure or removed from the site during non work hours. An on site fueling area shall be designated away from drainage channels and inlets that would permit the rapid movement of spilled fuel to adjacent waterways. If more than 200 gallons of fuel is stored on site, appropriate temporary containment facilities shall be installed to prevent migration of spills. All materials shall be handled, applied, and disposed of in strict accordance with manufacturer's recommendations. In the case of emergencies, spills or potential contamination, please call the appropriate number as listed below

1 If an emergency occurs, call 911
2 Minor spills of hazardous material must be reported by calling Porter County HAZMAT 219-465-3593
3 IDEM on scene coordinator 219 757-0285
4 IDEM's 24 hour spill hotline 1 888 233 7745

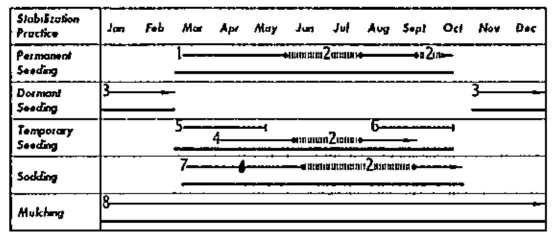
B14 – Monitoring and maintenance guidelines for each proposed pollution prevention measure.
Storm Sewer Inlets – inspect after each storm event. Clean sumps as necessary. Ensure all practices are in working order. Replace damaged practices as necessary
Ponds – Inspect side slopes for erosion and washout. Maintain side slope stability. Where washout occurs, re fill with soil, compact properly and install riprap
Pond Inlets and Outlets – ensure riprap is stable. Replace and re stabilize as necessary

B15 – Erosion and Sediment control specifications for individual building lots. – Not Applicable

C1 – Description of Pollutants relative to proposed land use – The proposed land use for the site is a school. Pollutant sources for this proposed use are related to the sporadic use, routine maintenance of the building grounds, and the parking of motor vehicles on the site. Pollutants could include minor amounts of oils, fuels, coolants, cleaning fluids, paints, herbicides, fertilizers and miscellaneous debris.
C2 – Sequence describing storm water quality measure implementation – See Sheet C400
C3 – Description of proposed post construction storm water quality measures – The most significant post construction pollutant is soil and sediment discharge. The erosion control plan indicates the typical permanent erosion control measures associated with site development. The primary post construction storm water quality measure is the storm water detention basin. The basin will need to be inspected periodically for accumulated sediment and cleaned when necessary. All storm water runoff is to be routed into the detention basin which allows the suspend solids in the storm water to settle to the bottom of the pond over time providing the best possible management of quantity and quality

C4 – Location, Dimensions, Specifications and construction details for each stormwater quality measure. – See Sheets C400
C5 – Description of maintenance guidelines for post construction stormwater quality measures. – See Sheets C400

Seasonal Soil Protection Chart



1 = Optimal planting period for most turf mixes when properly fertilized, hydro-mulched, or straw mulched
2 = 60% Bluegrass, 30% Creeping Fescue, 10% Perennial Ryegrass
3 = Seed only when germination cannot occur and increase seeding rates by 25% during this period.
4 = Annual ryegrass 50 lb per acre
5 = Spring oats 3 bu per acre
6 = Wheat or Rye 2 bu per acre
7 = Sod
8 = Straw mulch 2 ton per acre
= Irrigation needed 2-3 weeks after installation during this period. Irrigate all plantings if installed during June, July, & Sept
Seeding Rates: Bluegrass (40 lb/acre), Fescue (40 lb/acre), Ryegrass (170 lb/acre)

Emergency Contact Information

ANY EMERGENCY, CALL 911
MINOR SPILL OR TO REPORT A CONCERN CALL PORTER COUNTY HAZMAT AT 219-465-3593
ON-SCENE COORDINATOR FOR IDEM OUT OF MERRILLVILLE 219-757-0285
IDEM 24 HOUR SPILL HOTLINE 1-888-233-7745

RANDELL S. PETERSON REGISTERED No. 10403848 STATE OF INDIANA PROFESSIONAL ENGINEER

Randell S Peterson
09-C-09

McMAHON
ENGINEERS \ ARCHITECTS
952 South State Road 2
Valparaiso, Indiana 46385
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NO.	DATE	REVISION

Storm Water Pollution Prevention Plan

Liberty Elementary and Middle Schools - Duneland School Corp.
Liberty Township, Porter County, Indiana

DESIGNED	DRAWN
RSP	RSP

PROJECT NO: D0528 59 0134 00
DATE: July 24, 2009
SHEET NO.: **C401**