

PERMANENT SEEDING APPLICATION RATES:

Seeding: 350 lbs./Acre
 Fertilizer: 12-12-12 @ 800lbs/Acre
 Mulch: 2 Tons/Acre
 (Crimped ryegrass)
 * Test Soils for Lime Requirements

PERMANENT SEEDING PROGRAM

Seed Species *	% by Weight
Turf Type Fescue	
Or	
Seed Mixture	
Fescue Kentucky 31	56%
Perennial Ryegrass	38%
Creeping Red	6%

TEMPORARY SEEDING

Seed Species *	Rate/Acre	Planting Depth	Optimum Dates **
Wheat or rye	150 lbs.	1 to 1 1/2 in.	9/15 to 10/30
Spring Oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	3/1 to 5/1
			8/1 to 9/1
German millet	40 lbs.	1 to 2 in.	5/1 to 6/1
Sudangrass	35 lbs.	1 to 2 in.	5/1 to 7/30

* perennial species may be used as a temporary cover, especially if the area to be seeded will remain idle for more than a year (Practice 3.12).
 ** Seeding dates outside the optimum dates increases the chances of seeding failure.

FROST SEEDING

Seed Species *	Rate/Acre
Wheat or rye	150 lbs.
Spring Oats	150 lbs.
Annual ryegrass	60 lbs.

* perennial species may be used as a temporary cover, especially if the area to be seeded will remain idle for more than a year (Practice 3.12).

HYDRAULIC SUMMARY

LOT 3,4,5 OF EAGLE PLAZA WEST
 VANDERBURGH COUNTY, INDIANA

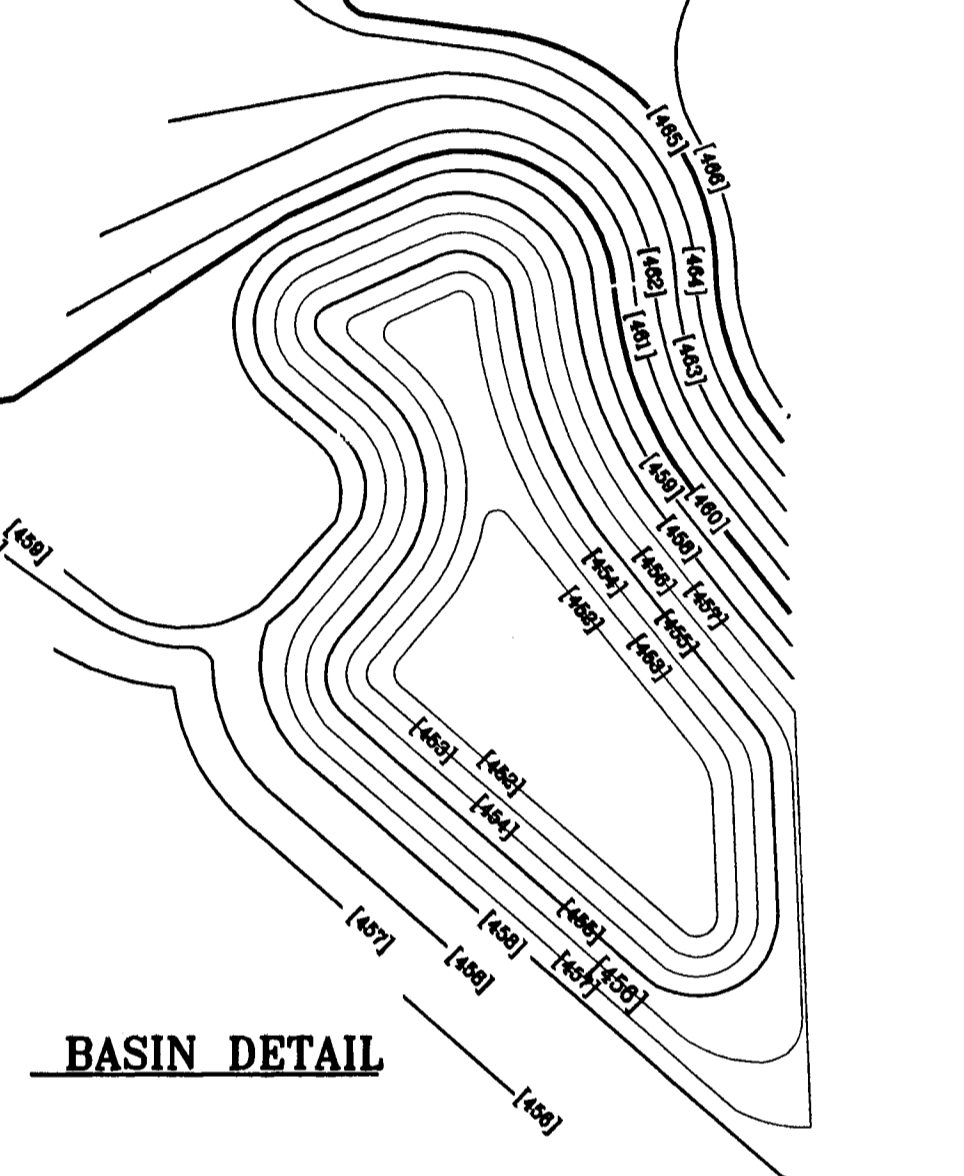
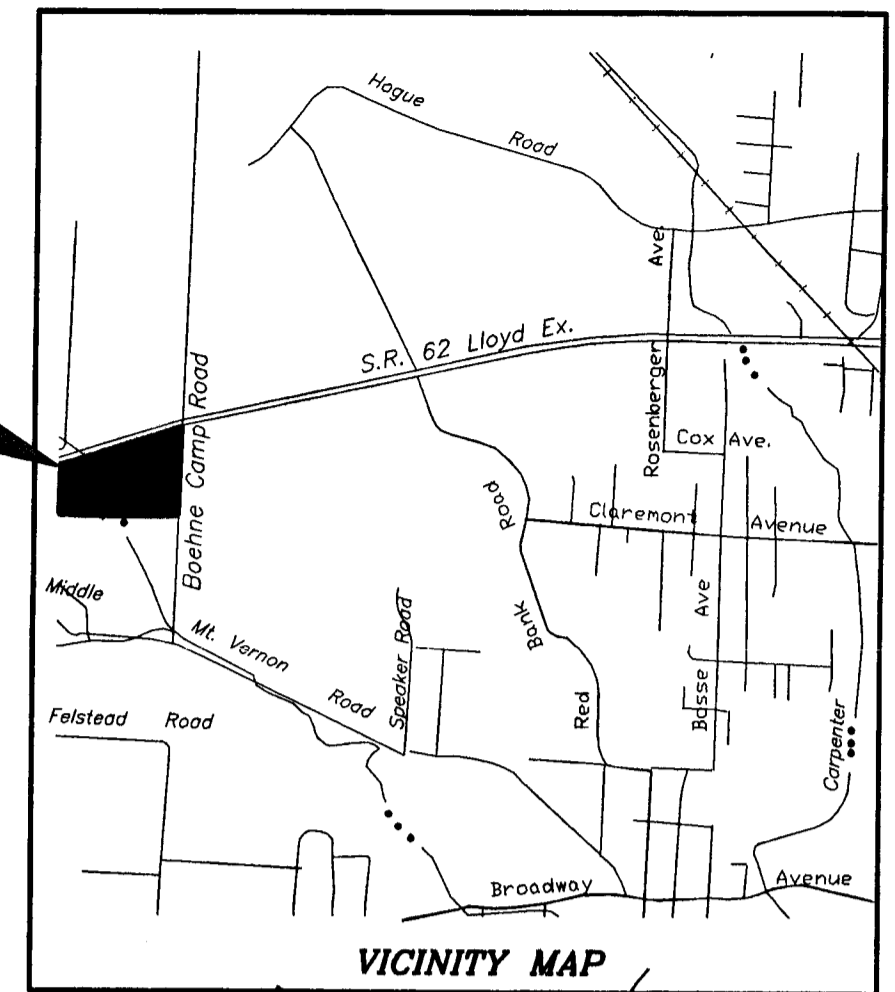
ORIGINAL REPORTED REQUIRED
 25 YEAR STORAGE VOLUME
 (9431 CUBIC FEET)

100 YEAR STORAGE VOLUME
 (13,696 CUBIC FEET)

NEW BASIN GEOMETRY

ELEVATION	AREA	STAGED VOLUME	ACCUMULATED VOLUME
ELEVATION 452-	1421SF	1840CF	1840CF
ELEVATION 453-	2258SF	2265CF	4105CF
ELEVATION 454-	3073SF	3512CF	7617CF
ELEVATION 455-	3951SF	2112CF	9729CF
ELEVATION 455.5	4499SF	2386CF	12116CF
ELEVATION 456-	5045SF	5552CF	17668CF
ELEVATION 457-	6058SF		

NOTE: REQUIRED 25YR VOLUME (9431CF) EXCEEDED @ ELEV 455.5
 NOTE: REQUIRED 100YR VOLUME (13696CF) EXCEEDED @ ELEV 457



LEGEND

- SOILS TYPE AND AREA DELINEATION
- PLAN REVIEW DESIGNATION
- EROSION CONTROL BLANKET
- ROCK CHUTE (REVE. RIPRAP)
- STRAWBALE ASSEMBLY (10 Bales)
- STRAWBALE
- SILT FENCE
- STRAWBALE AND SILT FENCE
- SANDBAG INLET PROTECTION
- SEDIMENT TRAP
- CULVERT PIPE PROTECTION
- PAVED GUTTER

- GENERAL NOTES**
- LAND SLOPES FROM EAST TO WEST WEST OF PROJECT IS AN EXISTING EMBANKMENT THAT MUST NOT BE DISTURBED
 - THE EXISTING RETENTION BASIN SHALL BE RECONFIGURED AS SHOWN.
 - THE EXISTING SOILS ARE NON INDICATIVE OF THE SOILS MAP AND ARE HIGH IN SAND CONTENT THUS EXTREMELY ERODIBLE.
 - ALTHOUGH THESE SOILS ARE IDEAL FOR ACHIEVING ADEQUATE COMPACTION LEFT UNVEGETATED THEY ARE VERY SUSCEPTIBLE TO EROSION
 - ADEQUATE PERIMETER PROTECTION MUST BE IN PLACE PRIOR TO ANY STRIPPING.
 - THERE IS VERY LITTLE TOPSOIL WORTH STOCKPILING FOR REUSE. ALL AREAS TO BE REVEGETATED SHOULD BE BLANKETED WITH IMPORTED TOPSOIL TO ACHIEVE ADEQUATE VEGETATIVE COVER.
 - ALL AREAS WITHIN AND SURROUNDING SAID BASIN SHALL BE BLANKETED WITH AN APPROVED EROSION CONTROL BLANKET OR SODDED TO MINIMIZE EROSION.
 - ALL EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL SITE IS SUCCESSFULLY REVEGETATED.
 - ALL AREAS SHALL BE GRADED IN SUCH A MANNER SO AS TO PRESERVE SHEET RUNOFF WHERE POSSIBLE. CONCENTRATED FLOWS WILL PROMOTE EROSION.
 - THE EXISTING BASIN WILL SERVE AS AN IDEAL SEDIMENT BASIN UNTIL SUCH TIME IT IS RECONFIGURED AND CONVERTED INTO A STORM RETENTION FACILITY.
 - THE BASIN OUTLET SHALL BE SURROUNDED WITH STRAW BALES ATTACHED /TIED TO A 6X6 POST FARM FIELD TYPE FENCE.
 - THE BOTTOM OF THE EXISTING BASIN SHALL BE OVERDUG TO ALLOW ROOM FOR 2400 CFT (1800 CFT/ACRE) AS OUTLINED IN THE INDIANA HANDBOOK EROSION CONTROL. THIS QUANTITY CAN BE ACHIEVED BY EXCAVATING THE BASIN BOTTOM 2'±.
 - SUCCESSFULL REVEGETATION IS CRITICAL TO THE SUCCESS OF THIS PLAN REFER TO SEEDING CHARTS FOR ADDITIONAL INFORMATION.

SOILS LEGEND

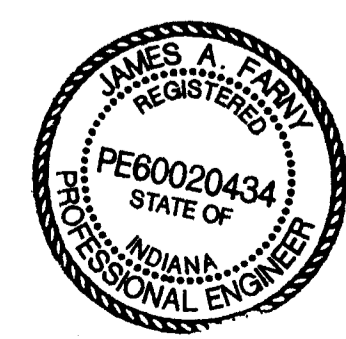
Soil Series & Map Symbols	Residential or Industrial Development	Landscaping and Lawns	Local Roads, Streets & Parking Lots
AIB2 Alfrod Silt Loom, 2%-6 Slopes, Eroded	Slight -----	Slight -----	Slight for roads; moderate for parking lots; slope hinders development of site
AIC3 Alfrod Silt Loom, 6%-12 Slopes, Eroded	Moderate; severely eroded; moderately sloping; some excavation generally required	Moderate; Severely eroded	Moderate; For roads; severe for parking lots; slope hinders development.
Hoc3 Hoamer Silt Loom, 6%-12 Slopes, Severely Eroded	Moderate; Moderately sloping; some excavation generally req'd.	Moderate; Severely eroded	Moderate; For roads; severe for parking lots;

NOTE:
 Temporary Surface Stabilization
 Temporary or permanent surface stabilization is required on all disturbed surfaces. Areas outside of proposed pavements that are to remain inactive for a period of more than 15 days shall be graded, reseeded, and mulched. If final grades are not in place at such time then, temporary seeding or frost seeded shall be implemented when applicable. Erosion control blanket shall be placed on all slopes 4:1 or steeper in areas where earthwork is an ongoing operation. On slope construction, temporary silt fence runs shall be installed along down slope edge of active work areas, to capture loose born sediment. Should a rain event occur, the amount and frequency of silt fence shall be that necessary to prevent erodible soils from being displaced and transported offsite.

NOTE:
 EROSION CONTROL BLANKET DENOTES CONSTRUCTION LIMITS TO EAST AND NORTH OF PROJECT

ALL ROOF DRAINS MUST BE PIPED DIRECTLY TO BASIN AND ONTO PSD. LOCATED IN BOTTOM OF BASIN

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AMENDED STORM DRAINAGE PLAN

LOT 3, EAGLE PLAZA WEST
 VANDERBURGH COUNTY, INDIANA

Prepared by: **BERNARDIN LOCHMULLER & ASSOC., INC.**
 Planners - Engineers - Surveyors
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DATE: 12/9/04
 PROJECT NO.: 04-0137-OPD
 ISSUED:

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