PATRICK M. BENJAMIN, P.E.

Connecticut Professional Engineer Lic. # 19,907

Principal, Professional Engineer – Civil, Hydraulic/Environmental

EDUCATION:

University of Connecticut, B.S. Geology/Geophysics 1984
University of Connecticut,
Civil Engineering 1988

PROFESSIONAL AFFILIATION:

American Society of Civil Engineers; Member American Society of Civil Engineers; Connecticut Connecticut Association of Land Surveyors

The following projects are <u>"representative"</u> of his experience:

Industrial Conceptual Planning

Town of Middlefield, CT, 2007: 50 Acres; Prepared planning layout of Industrial Subdivision showing boundary, proposed lot layout, proposed road layout, existing and proposed topography, utilities, storm drainage and grading.

Industrial Land Development

1) BYK-Chemie, Wallingford, CT. 2) Commerce Circle, Durham, CT. 3) Ozick Drive, Durham, CT. Site development for industrial design including lot and road layout, driveway layouts, stormwater management, sanitary sewers and septic system design, site utilities, grading, permitting, etc.

Gravel Quarry Design

1) ML & P Trucking, Portland, CT. 2) Xenelis Construction, Durham, CT. 3) Harmon Development, Portland, CT. Designed site development plans for all phases of gravel quarry design including grading and erosion and sedimentation control plans.

Commercial Land Development

Unilever site – Trumbull, CT, Goodwill / CT Beverage Mart Plaza – Middletown, CT, Site development design including stormwater management with detention, sanitary sewage disposal, parking layout, public water supply, utilities, site grading and permitting.

Erosion and Sedimentation Control Design

Project Engineer for the design of numerous Soil Conservation plans involving sediment basins and traps, both above and belowground, to control erosion and sedimentation during and after construction. Design of erosion and sedimentation

control plans for site development of residential subdivisions, gravel quarries, golf courses, and out-door recreational facilities.

Cluster or / Multi-Family / Active Adult Housing

Peters Lane, Middlefield, CT: Design Engineer and Construction Administrator for 16-unit active adult complex including design of: entrance road, site grading, construction details, drainage analysis and permitting.

Watershed Studies (Stormwater Management)

Project engineer for numerous stormwater management studies including design of drainage collection systems, detention and retention facilities, created wetlands, culvert and bridge designs utilizing computer models such as the U.S. Soil Conservation services TR-55, TR-20, Texas hydraulic systems program, the U.S. Army Corp. of Engineers HEC-2, HEC-RAS, HEC-12, HEC-18, HEC-1, HEC-5 programs, and Haesteads Pond 2 Program.

Residential Land Development

Durham, Middlefield, Middletown, Haddam, Connecticut - Project Engineer for numerous developments which included site assessment, road and lot design, computer modeling for stormwater management, subsurface sewage disposal and permitting, boundary survey, and road stakeout, construction management.

Stream & River

Durham, Connecticut. Project engineer for stream restoration project where channelization had occurred due to past farming practices. Designed a plan to return river to original condition and character, also responsible for numerous small-scale stream restoration projects.

Recreational Facilities

Involved in engineering design and surveying of numerous outdoor and indoor stadiums for NCAA track and field events, as well as stakeout for baseball fields, basketball courts, tennis courts, volleyball courts, soccer fields, etc.

Construction Administration

Haddam, Connecticut - Resident Inspector and Design Engineer for the reconstruction of 8000 LF of a Town Collector road. Duties included preparation of bid documents, review of shop drawings, construction inspection and administration, review and approval of contractor's application for payment, and preparation of final As-Built plans.

Golf Course Construction, Design, & Planning

Provided Civil Engineering & Surveying Services to Lyman Meadow Golf Course for design and construction of 18-hole Gary Player Championship Course, and a 9-

hole teaching course. Services included: topographic and boundary mapping, assisted in preliminary course layout, stormwater management, construction services such as surveying stakeout, as-builts, review of shop drawings, engineering inspection, etc.

Provided site planning and engineering services for pre-development site assessment on numerous parcels to determine golf course viability. Service included aerial topography and reconnaissance, preliminary 18-hole layout, water source viability, site layout (parking, clubhouse, access road, etc.), etc. Services were performed in Durham, Killingworth, Colchester, Suffield, & Middlefield, CT.