

process

ARCH-GRAMS

Based on a belief that architecture should be available to a wider range of the public, an abbreviated service, is offered for new structures, alterations and additions. **ARCH-GRAMS** (acronym for **ARCH**itectural-**DIAGRAMS**) are a streamlined process offering the most effective use of an Architect's time; establishing and developing a design, and preparing construction documents. Condensed to the essentials, the system incorporates the creativity of individual **DESIGN**, the assurances of architectural **DOCUMENTATION**, and the reliance of professional **DILIGENCE**.

1. **DESIGN**; An Architect exercises the artistic, relatively inexplicable domain of design. Design requires a rational knowledge of how buildings are put together, how they function, intelligent use of materials, mechanical systems, structures and so on. Architecture, as opposed to mere building, steps beyond just satisfying the particular functional and budgetary requirements. The production of successful architecture possesses that "something extra", an appeal or creative distinction that elevates the value of a project, not the cost.
2. **DOCUMENTATION**; An Architect prepares documents illustrating a project's physical appearance and identifying exactly what a budget is purchasing. Detailed drawings and outline specifications define the scope of work, quality of materials, and workmanship required. Clarity refines costs and insures a project is built as intended, avoiding costly problems, changes and delays.
3. **DILIGENCE**; An Architect is required to be licensed by the State in order to practice. Licensure is governed by rigorous training qualifications and examinations. These regulations serve as a means to protect the public health, safety and welfare. Responsiveness to life safety issues is an obligation to every project. Stamped drawings by a licensed Architect, assures that a capable and competent professional has carefully prepared the documents.

METHOD

Each project is addressed with an open-minded mix of frank pragmatism and artistic invention. Good design and pragmatic problem solving are mutually inclusive. Emphasis is placed on a clear, unified concept generated by the project program, budget and context. The solution graphically evolves through an overlay transformation, refining the simplest means to produce the most powerful results. The concept is initiated and developed in the **DESIGN-GRAM PHASE**, and detailed for implementation in the **CONSTRUCT-GRAM PHASE**.

1. **DESIGN-GRAM PHASE**; This phase includes evaluating the existing conditions, program requirements and design criteria. From this a concept is initiated through sketches and developed into a final design for client approval.
2. **CONSTRUCT-GRAM PHASE**; This phase includes the preparation of working drawings and outline specifications describing in detail the construction required. These drawings are adequate for obtaining competitive prices, standard building permits, financing, and the physical construction of the project.

FEES

The fairest system of compensation for architectural services on small projects is by the hour at an hourly rate. The client only pays for the amount of time required for services. For clients requiring that a specific amount be stated up-front, an hourly not-to-exceed proposal is prepared. The Architect must maintain accurate time records submitted to the client as an invoice at the end of each phase. Arch-grams are an abbreviated process utilizing the time saving practice of **DRAWING ECONOMIZING** and the use of simplified **OUTLINE SPECIFICATIONS**.

1. **DRAWING ECONOMIZING**; The most efficient use of drawing time is a shorthand system of just enough carefully organized, clear and simple drawings, avoiding multiplicity of information. There is no need for overly drawn repetitive details that a builder will do routinely or installation instructions that will be supplied by the respective manufacturers. Minimal details that are adequate to ease the builder's comprehension produces less confusion and better work.
2. **OUTLINE SPECIFICATIONS**; Overly wordy specifications are avoided. Instead, project requirements are direct and to the point with just enough information to insure the intentions of the project. Compliance to minimum criteria is placed in an outline format right on the drawings. Itemizing of individual brand name materials and specific manufacturer's catalogue numbered products often consumes more time than can be justified to a client. If specific proprietary products are desired, these materials can be highlighted in a separate product specification for individual pricing.

SAMPLES

The arch-gram process is a quick, low-tech sketch approach. While the drawings are to scale and as complete as needed, they are drawn freehand. The hand-drawn line, for all its vagaries, invites one to enter the drawing, to explore its contents and to examine its details. Computer generated drawings, however impressive technically, are ultimately intimidating and uninviting. Furthermore, the time consumption and expense of digital conventions are rarely justifiable on small projects. As the purpose of the arch-gram process is to convey a design in a clear and readily understandable format, getting lost in a display of technical draftsmanship is avoided, however spectacular. If a project requires it, I work with an associate who does computer-drafting.

The following drawings are a sample of the sparingly simple and clear **DESIGN-GRAMS** and **CONSTRUCT-GRAMS** used for a custom residence, a community residence, a small fire hall and a lakeside cottage. The size, date and cost of each project is identified, along with how many hours and the cost to prepare the design and drawings. As a percentage of the construction cost, the design and drawing fees range from around 1% to almost 3% depending on the complexity; this isn't even half of the typical 6% fee that a realtor would charge to help market a building.

1. **PETRONIO-DAVID RESIDENCE**; Custom Residence
Building Size: 2,207 SF House + 698 SF Garage = 2,905 SF
Building Date: 2001
Building Cost: \$233K (\$80/SF)
Builder: Don Hibsich Contracting
Design-grams: 24 Hours = \$960
Construct-grams: 50 Hours = \$2,000
Total Architectural Fee: 74 Hours \$2,960 = 1.2% of costs
Builder/Permit Set Construct-grams (no plumbing, mechanical or electrical drawings)
[design-gram](#)
[construct-gram](#)
2. **TRACIANN COMMUNITY RESIDENCE**; Community Residence
Building Size: 2,756 SF House + 504 SF Garage = 3,260 SF
Building Date: 2007
Building Cost: \$360K (\$112/SF)
Builder: J.C. Pilato, Inc.
Design-grams & Estimates: 16 Hours = \$640
Construct-grams: 100 Hours = \$4,000
Contract Administration: 27.7 Hours = \$1,110
Total Architectural Fee: 143.7 Hours \$5,750 = 1.5% of costs
Bid Set Construct-grams (included complete site, plumbing, mechanical & electrical drawings)
[design-gram](#)
[construct-gram](#)
3. **BROCKPORT FIRE STATION #5**; Fire Hall
Building Size: 2,467 SF
Building Date: 2013
Building Cost: \$375K (\$152/SF)
+ \$50K sitework
+ \$30K water main extension
+ \$20K salvage memorial tower
\$475K total
Builder: Allied Builders, Inc.
Design-grams & Estimates: 32 Hours = \$1,536
Construct-grams: 151 Hours = \$7,248
Contract Administration: 20 Hours = \$1,536
Added Design Services*: 20 Hours = \$960
Total Architectural Fee: 235 Hours \$11,280 = 2.3% of costs
Bid Set Construct-grams for a Public Works Project (included complete site, plumbing, mechanical & electrical drawings)
* Water main extension & memorial tower salvage design.
[design-gram](#)
[construct-gram](#)
4. **BARNETT/LESTER COTTAGE**; Lakeside Cottage
Building Size: 1,356 SF
Building Date: 2015
Building Cost: \$98K (\$72/SF)
Builder: Warren Construction
Design-grams: 7 Hours = \$350
Municipal Approvals*: 14 Hours = \$700
Construct-grams: 22 Hours = \$1,100
Total Architectural Fee: 43 Hours \$2,150 = 2.1% of costs
Builder/Permit Set Construct-grams (no plumbing, mechanical or electrical drawings)
* This property required Site Plan Approval from the Town Planning Board, requisition of 7 variances from the Zoning Board of Appeals & a Certificate of Consistency from the Waterfront Advisory Committee.
[design-gram](#)
[construct-gram](#)

DAVID STRABEL R.A.

Brockport, New York 14420
585-637-5346
dave@davidstrabel.com

architect