



COMPASS
IRONWORKS



F-01

FENCE DESIGN GUIDE

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COMPASS IRONWORKS

Elegance and Integrity

At Compass Ironworks, we carry into the 21st century the Amish traditions that forged our artistic sensibilities: honesty, integrity, and dedication to family, community, and craft. We do no mass production here; every installation reflects your unique needs. We are master craftsmen who work with both traditional and 21st century tools. At the end of the day, we close the doors and leave our tools at the shop, not to be touched until the next workday begins.

For more information about Compass Ironworks, please contact us Monday through Friday at (717) 442-4500.



FENCE DESIGN GUIDE

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When you see these icons on pages throughout the Design Guide, it indicates the following:



Enhanced Physical Perimeter Security



Shore Environment Approved

Please use this guide as a tool to selecting the design, style, and finish that best suits your property, lifestyle, and needs. Most of the work we do for our clients is custom, and if you have an idea that is not in this guide, we will work together to custom-craft the appropriate design for your property. Before meeting with us, please consider what ideas you have for the design, finish, and detail of your project.

The (big) difference between a production aluminum fence and a custom built aluminum or iron fence.



Iron fence has been the ultimate choice for providing security and stately aesthetics to distinctive properties for centuries. Beautiful hand-wrought iron fences remain sturdy to this day and provide design inspiration for today's craftsmen and homeowners alike.

The past few decades have seen an astounding influx of lightweight, mass-produced, and imported fence—made from thin, hollow tube, loosely riveted or screwed together—that attempts to resemble genuine “iron” fence. Some of these imitation fence manufacturers have

factories that produce an eight-foot-long fence panel every twenty-six seconds! You can easily find these “McFences” in large building supply stores everywhere, all looking exactly like your neighbors’ fence, with absolutely no character or expression. A large dog can easily force his way between the pickets. An adolescent boy can bend and twist a passable hole in no time. Small children are relatively confined, but not protected from intrusion.

The only benefits of these fences are fast installation and cheap prices, at the expense of durability, beauty and security. Cheap fences can be twisted to fit sloping ground; the sections simply clip into the posts. In contrast, custom-welded panels are built specifically for the angle of slope under each panel and sized so that each panel is the same length in a given stretch of fence, providing strength and stability. After fabrication, it is impossible to twist custom panels to fit in a different spot.

FENCE DESIGN GUIDE

Exceptional fences from repurposed material

Another stark difference in production fence is the material it is made from. It utilizes thin-wall tubing that is simply smashed together at the top of the picket to resemble a tip. If it does feature a small cast-aluminum finial, it is often glued or sometimes even just pressed on.

Custom fences by Compass Ironworks, however, are built with solid-iron pickets made from 98% recycled metal. These pickets are welded into heavy wall, punched channels top and bottom, and sections are fastened to the posts using the centuries-old bracket and bolt system with stainless steel or plated bolts.

Finials, rings, scrolls, and other customizable design elements are a vital element in a custom fence, but are severely limited (or eliminated) by an assembly line production model. If offered at all, they are often glued or pressed on and sometimes break by the time they arrive at their destination.

A custom fence lets you dictate the size, pattern, and detail of your design elements—limited only by your artistic imagination and budget.

Customized ornate additions give your fence individual character and set it apart from other fences in the neighborhood.

Mass produced fences must be installed in a series of awkward angles to accommodate lawns or pools with curved or rounded sides. This is where a custom fence really stands apart. Our skilled craftsmen will carefully template and photograph the site and make a fence that perfectly follows the contours of your property.



YOUR FENCE, YOUR SECURITY, AND YOUR SELF-EXPRESSION



F-04

Your fence, your security, and your self-expression ultimately are dictated by your choice of product. If you want a plain, cheap fence, the local big-box store has a crate of fence panels ready to go. Or a local fence contractor can buy the same shoddy materials and install them for you.

On the other hand, if you need a fence with elegance and character that defines your property as uniquely you, then call a custom fence shop—where the craftsmen take pride in their craft and you can dictate your desires to the smallest degree. The finished quality product will last several lifetimes.

Production-line fence is usually made from thin-wall, hollow aluminum tubing, so many people believe that an “aluminum fence” must be a step backwards in quality. That is true for this type of aluminum fence.

Compass Ironworks builds solid aluminum fences that are extremely sturdy, with the added benefit of customizable design, lighter weight, and zero maintenance. Best of all, our aluminum fences look exactly like true “iron” fences because they are welded, forged, coated, and installed using the exact same process. These fences can withstand saltwater environments, due to our eight-step finishing process on the solid aluminum material.

This is a huge leap in quality for a small additional cost, making it a very good option for many clients.

COMPASS IRONWORKS



Compass Ironworks is a family-owned business based in Lancaster County, Pennsylvania. Our area sports a unique combination of traditional and modern lifestyles, and horse-and-buggy rigs mingle with cars on the country roads.

Lancaster County is Amish country—and is internationally famous for its skilled artisans with impeccable craftsmanship and superb work ethics. It is a fitting home for Compass Ironworks: in our 15,000 square-foot shop, centuries old decorative iron styles are created by a talented team of fewer than ten artisans, using modern tools and up-to-date, highly durable finishing techniques.

Our craftsmen are keenly aware of the demand for high quality iron and aluminum custom fences.

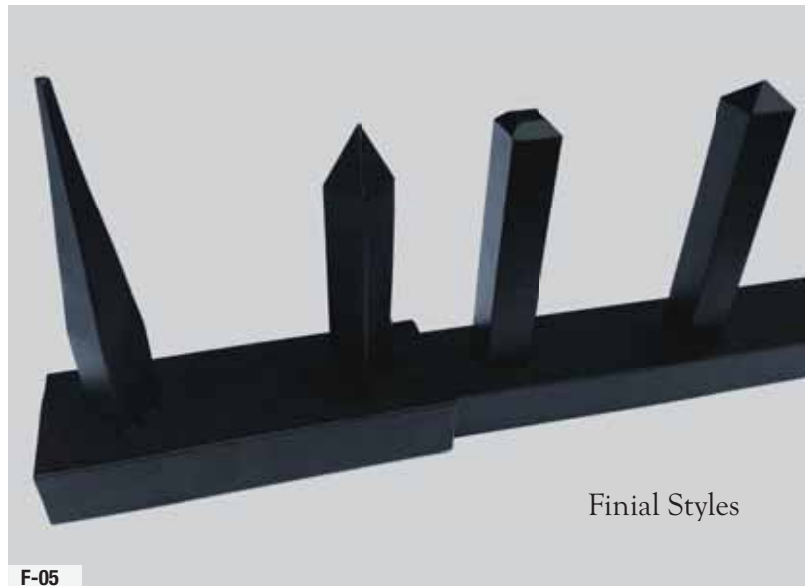
We are happy to lend our expertise and experience to design elegant barrier fences that are both durable and crash-resistant. We also provide guidance for building classic, historically correct perimeter fences to define a client's private residence. We use American-made raw materials whenever possible.

Research, design, and testing are extremely important—not only to replicate historical projects, but also to maximize fence integrity and prevent break ins. We select the proper metal alloys for maximum rigidity and create the actual fence according to the proper finish protocol. Our craftsmen work hard to exceed your expectations and finish your project correctly and on time.

Our desire is to grant our clients the security and privacy of a better fence. We seek to build long-term relationships by creating products that align with our client's landscape, property, and personal taste. The top priority is always a satisfied client.

Finish integrity is what makes it possible for us to view and admire the work of past experts and what keeps your project looking beautiful for decades to come. For this reason, we have our own in-house powder-coat finishing system that allows us to maintain complete control over the quality of the finished product. We begin by sandblasting the raw metal to remove all mill scale, dirt and organic matter. Next, the project is washed with a heated phosphate solution and a double water rinse for extreme cleanliness. If the project is on the waterfront, it is sprayed with a special chemical for salt spray resistance. Finally, a resilient primer is applied, followed by two coats of super-durable powder-coat. We take anti-corrosion very seriously.

In fact, we even had an independent laboratory test our finish integrity in a salt spray chamber known as ASTM B-117. After 2,750 continuous hours of exposure—the equivalent of fifteen years of natural conditions—our test piece came through with flying colors. We realize that our reputation is only as good as our finished product.

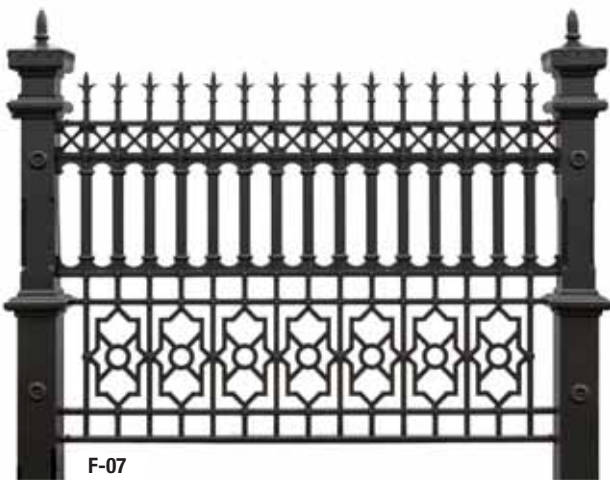




F-06

Bryn Mawr fence adds personality to this property

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F-07

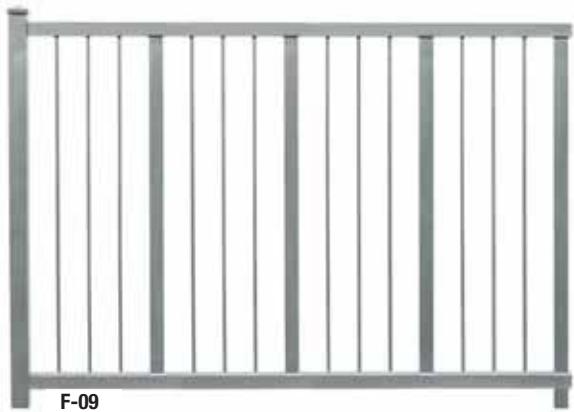
Yorkshire Style



F-08

Mainline Style

CUSTOM FENCE STYLES



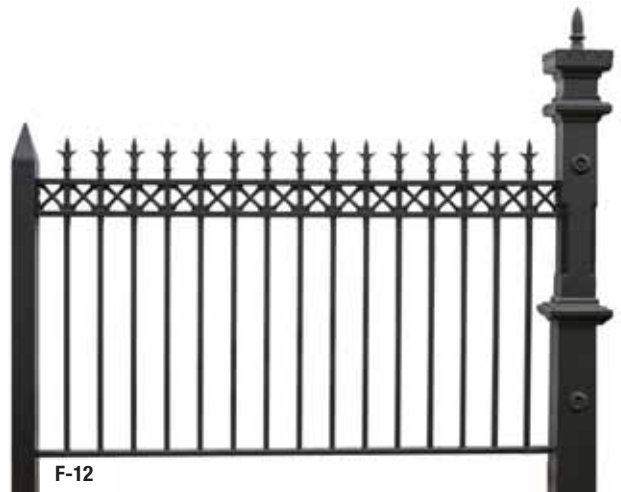
F-09
Modern Style



F-10
Rustic Modern



F-11
Privacy Fence



F-12
Kent Style



F-13
Pradero Style



F-14
Fortuna Style



F-15

Acanthus Post



F-16

Linden Post



F-17

Hampton Post



F-18

Scarsdale



F-19

4" sq. with Post Ball Cap



F-20

Iron Weave Column

POSTS



Beverly Column



Square post with dome cap.



Forged scroll corner pillar



Hand forged scrolls flanking fence post.



Custom English post finial replication.



100 yr old post finial replication



In 1927, utilities entrepreneur Clarence Geist enclosed his fifty-acre estate—including what was the largest private pool in the Main Line area—with a custom, solid wrought iron security fence, eight feet high. The fence is still as beautiful and resolute as ever. This style of fence has become predominant in the Main Line area due to its simplicity and authenticity.

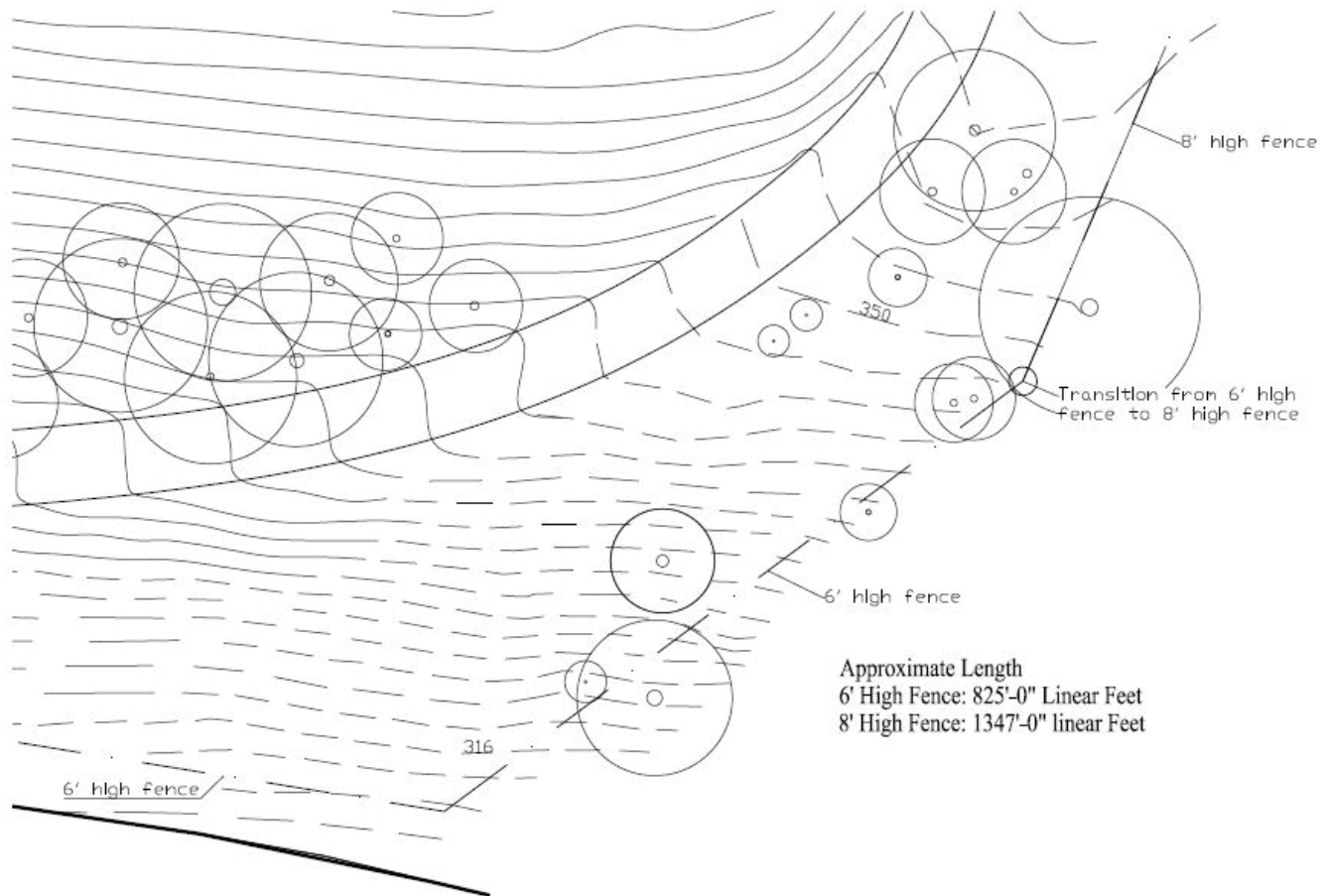
A client of ours wanted a version of this fence reproduced. We carefully recreated the connectors and posts in a solid aluminum material, selecting a specific alloy for the strength that the application required. The estate that this new fence was being built for had eighty-two feet of elevation change from front to back, resulting in significant slopes and some embankments. Huge and ancient trees on the property made it necessary to minimize our footprint during installation, as well as presenting some design challenges.

We carefully staked out the entire perimeter and took specific measurements for each individual fence post and panel. We cataloged the slope factor for each panel before commencing fabrication. As each panel was welded solid, it was assigned a number that corresponded with its location. And through the entire fabrication, pretreatment, and powder-coating process, the panels were treated with care until they were installed in the proper location to match the site's terrain.

This careful protocol ensured that code and security issues were dealt with ahead of time.

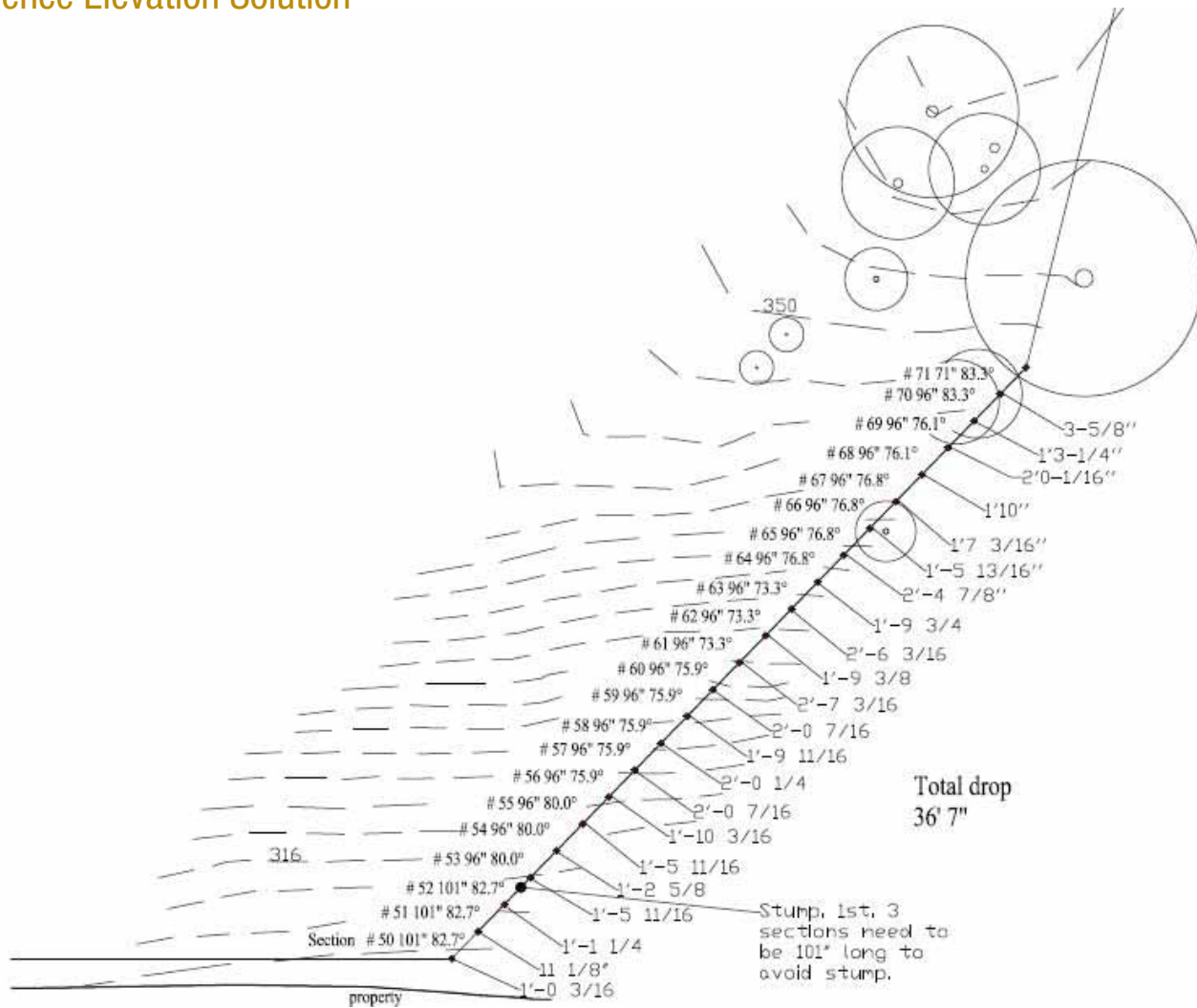
The project was a great success. The finished fence is completely indistinguishable from the 1920s version, yet is maintenance-free and will never corrode. The client now has a solid, durable barrier that enhances the property, expresses beauty for all passersby to see, and will never be mistaken for a production factory fence.

Fence Elevation Challenge



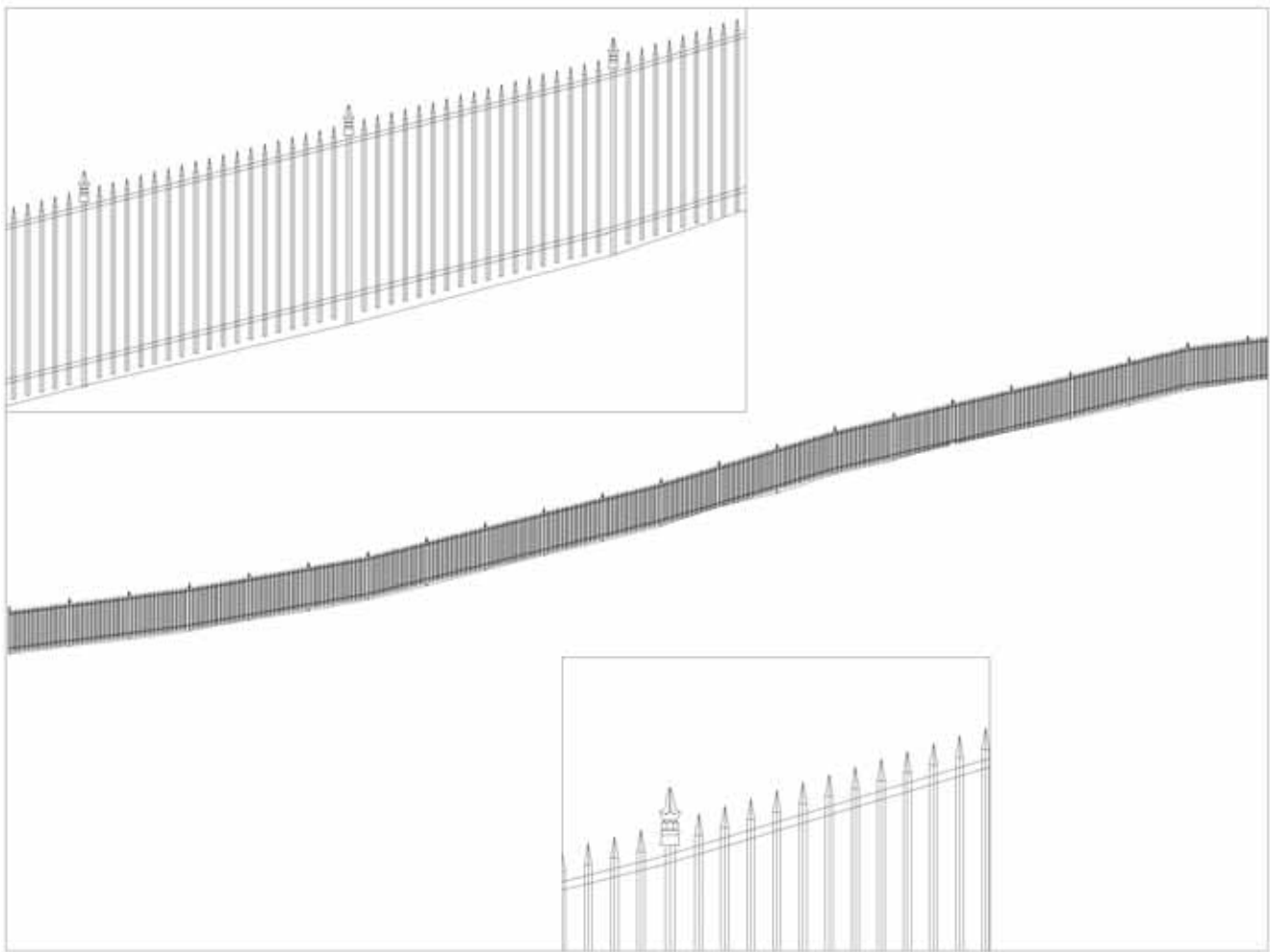
The homeowner and landscape architect desired the rigidity of a custom built fence, replicating a 1927 fence for their specific estate. The property posed some challenges, as there was an elevation change of 82 feet from the front of the property to the back, resulting in various slopes, inclines and embankments. This illustration depicts a layout of part of the property perimeter. In the illustration, each of the lines denote a 2-foot elevation change, showing that the area the fence was to be placed was quite rugged terrain.

Fence Elevation Solution



This drawing shows the survey of the perimeter—the first step in building a custom fence is determining the exact location of every post onsite. Then every post location is staked with a marker. The next step is determining the exact elevation of every post (shown on the right of the fence line). Based on elevations, degrees for each individual panel are calculated, then evaluated for aesthetics, and averaged out (degrees shown on the left of the fence line). The same angles are kept together to eliminate abrupt changes in the line of fence. Then they are reevaluated to best conform to the terrain. The next shop drawing shows the fence as determined for the best look. Then each panel was assigned a specific number, which was attached to the panel immediately upon being built to its specific angle. This number was tracked through blasting, pre-treating and all of the powder-coating stages. Upon arrival onsite, the number was verified and installed in its designated place.

Overall Fence Project



This illustration shows the final installation of the panels on various slopes conforming to the terrain, yet having minimal disruptions in the aesthetics of the fence as it flows up the grade. Another attribute to this project is that it was 100% US made. The channels were custom, the finials were custom cast, the brackets were custom made and pickets were all forged in this country. This project was exceptional, but it also gave the homeowner the assurance of knowing that 100% of his money supported the American economy, instead of going to China.



F-28

Iron Acanthus posts atop brick wall



F-29

Forged Scroll details



F-30

Aesthetically pleasing fence along the top of a wall.

FENCE PROJECTS



All Items on this spread have Enhanced Physical Perimeter Security and are Shore Environment Approved



F-31

Swoping pattern with fleur-de-lis finials provides enhancement and safety.



F-32

Ornate aircraft grade aluminum fence.



F-33

Distinctive beauty while meeting all building and safety codes.

FENCE PROJECTS



Alternating finial heights.



Iron fence creates a resolute barrier



Custom ornamental fence

FENCE PROJECTS

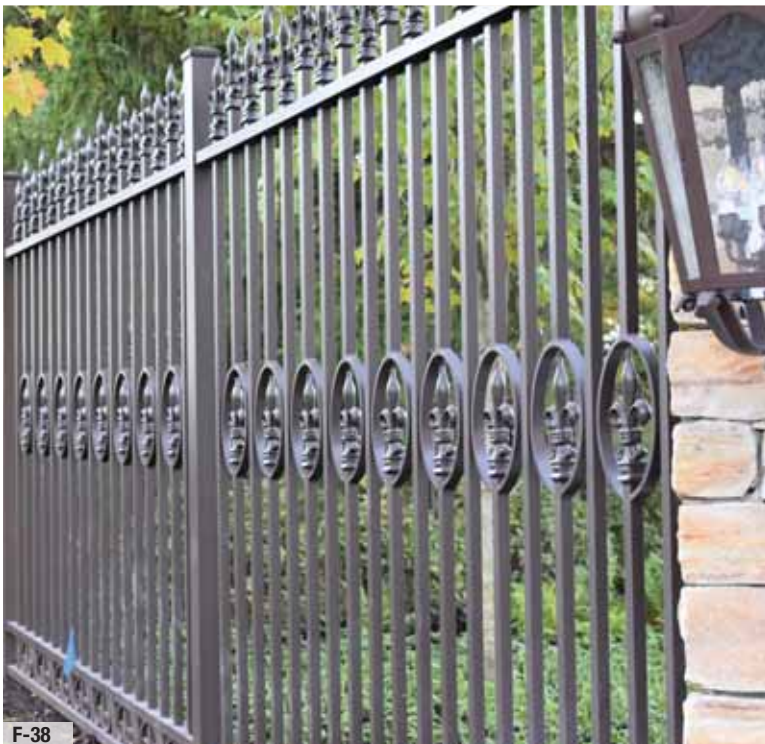


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F-37

Aluminum fence built with marine grade components to withstand elements at a water front location.



F-38

7 ft. high residential security fence with creative design elements and Roman Bronze color.



F-39

Fleur-de-lis finials have beauty for a custom pool fence

FENCE PROJECTS



Snow accentuates scroll design.



Scroll pillar at the corner of a beautiful privacy fence.



Privacy Fence with ornate scrollwork along the top.

FENCE PROJECTS



All Items on this spread have Enhanced Physical Perimeter Security and are Shore Environment Approved



F-43

Custom Curved fence.



F-44

Entry fence against beautiful stone pillars



F-45

Property fence incorporated with Driveway Estate gates.



F-46

Custom Iron Details curving along stone pillars.

FENCE PROJECTS



F-47

Solid aircraft grade aluminum fence provides an aesthetic barrier around the grounds of a family estate.



F-48

Custom fence creates a private haven for this family's shore home.



F-49

Design elements provide a distinct separation from average neighborhood properties.

FENCE PROJECTS



All Items on this spread have Enhanced Physical Perimeter Security. F-47, F-48, and F-49 are Shore Environment Approved



F-50

Custom aircraft grade aluminum yard fence



F-51

Custom Pedestrian gates



F-52

Fleur-de-lis finial and ring detail.

FENCE PROJECTS



Modern Pool Fence and gate.



Railing design enhances pool fence design.



Fence scrollwork detail.



Pool fence and railing that meets all safety requirements beautifully.

FENCE PROJECTS



All Items on this spread have Enhanced Physical Perimeter Security and are Shore Environment Approved



F-57

Corner of a secured property.



F-58

Detail of a forged picket and custom finial



F-59

Enhanced security, yet aesthetically pleasing

FENCE PROJECTS



F-60

Forged Iron Pool Fence



F-61

Short Iron pickets that add character to the design.



F-62

Forged scroll and post detail to add a flare of design.

FENCE PROJECTS



All Items on this spread have Enhanced Physical Perimeter Security and are Shore Environment Approved



F-63

Bronze Pool Fence



F-64

Bronze Pool Fence along the top of a wall.



F-65

Living finish Bronze Pool Fence synchronizes with the beautiful pool design.



F-66

Security without obstructing panoramic views



F-67

Beautiful iron fence for a personal dog park

FENCE DESIGNS



All Items on this spread have Enhanced Physical Perimeter Security. All, except F-68, are Shore Environment Approved.



F-68

Red Rocks Scroll Fence



F-69

8 ft. high Iron fence is part of a revitalization from a 1928 train station.

FENCE DESIGNS



Saratoga fence with classic pickets adorns the top of a retaining wall



Beautiful forged fence at a restaurant overlooking NYC skyline



Custom fence between pillars makes an aesthetic barrier.

FENCE DESIGNS



All Items on this spread have Enhanced Physical Perimeter Security and are Shore Environment Approved



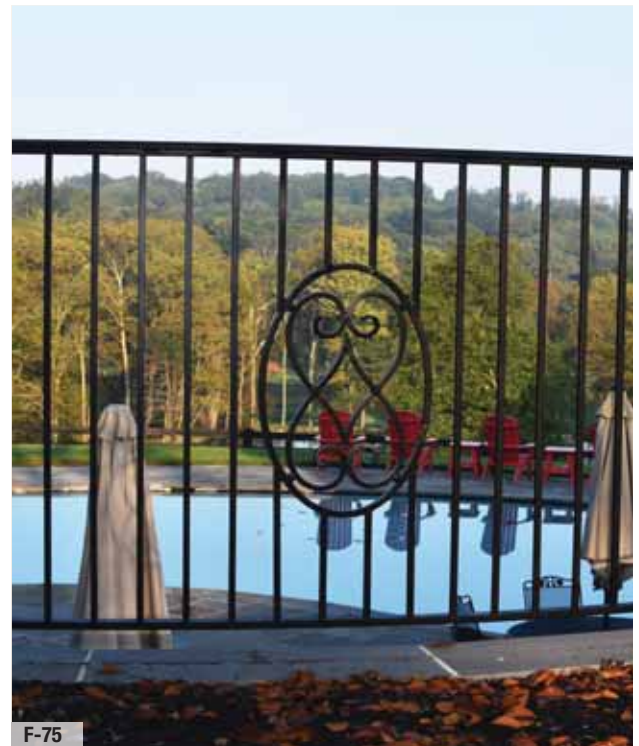
F-73

Modern Poolside fence creates privacy screen.



F-74

Solid aluminum fence provides security at a religious facility.



F-75

Forged pool fence panel.



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