

CROSSING

Site-Specific Proposal · Streamway Trail Public Art

CHATLAIN PARK · CITY OF MERRIAM, KANSAS

ASHEER AKRAM · KANSAS CITY METALWORKS



FRONT VIEW

Three arches, graduated in scale, set in sequence.

Tallest 20'-6" to the peak; shortest 10'-9".



SITE PLAN

Three arches set in sequence; three benches placed off the path.

Composition developed from a LiDAR scan of the site.



THE APPROACH

From outside, the work reads as weathering steel alone.

The reflective faces are turned inward and cannot be seen.



INSIDE

Stepping in, the piece becomes a different object — sky, canopy, and you.

A mirror needs somebody standing in front of it.



THE ARCHES

Three frames in weathering steel, set in sequence rather than in a row.



THE BENCHES

Three benches at three heights. Each top carries a sculpted water surface —
a level that was reached, and dropped back down.



BENCH · SEAT SURFACE

Formed stainless, 1½" peak-to-trough relief.

Material samples & study models

FINAL SAMPLES AND THE STUDY MODEL WILL BE PRESENTED TO THE COMMITTEE IN PERSON.

ARCH STUDY MODELS

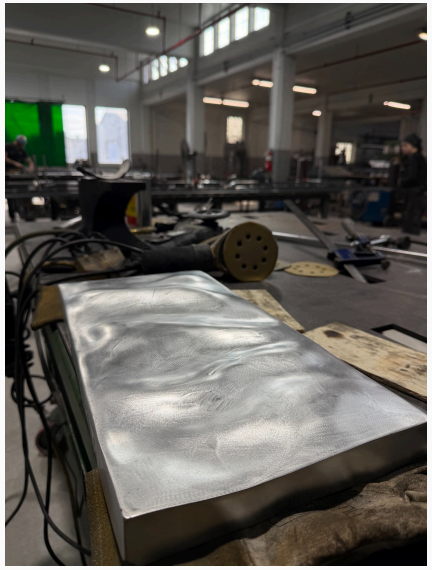


ARCH MOCK-UP
View 01



ARCH MOCK-UP
View 02

BENCH WAVE SAMPLES



WAVE RELIEF IN THE SHOP
In progress



TRIAL SEAT ASSEMBLY
Reflective wave surface

Introduction & Concept

Three weathering steel arches and three curved benches, set in the open field along the Streamway Trail at Chatlain Park.

From the trail you see only the steel. Warm, matte, quiet, nothing announcing itself. The reflective surfaces face inward and are not visible from the path. You discover the work as you walk toward it, and you complete it as you pass through the piece itself.

WHERE THE FORM COMES FROM

The arch is modeled on the gable of the Merriam Frisco depot.

That building is why this town has a name. Merriam was called Campbellton until 1880, when it was renamed for Charles Merriam of the Kansas City, Fort Scott and Gulf Railroad. The depot went up beside the tracks with the name across the front.

It is gone. Nobody wrote down when it came down. The Johnson County Museum holds photographs of it, and the Kansas Historical Society holds Howard D. Killam's photograph made on January 1, 1958, which is what I took the profile from.

The rail line is still there. BNSF runs freight through Merriam on the same alignment, a few hundred yards from this site.

> **The building passed through. The line stayed. The town stayed. Perseverance, and growth defining home. That is what this piece is about, and it already happened here.**

The three arches put that profile back on the ground at a size you walk through rather than wait inside. Somebody who has never heard of the depot still reads the shape as a building — as a home. That recognition is enough.

WHY IT IS HIDDEN

I wanted this to be something you come upon rather than something you are shown.

The inner faces of the arches and the tops of the benches are mirror polished, and you cannot see any of it from the trail. You find the work by stepping off the path and walking in. Once you are inside, the piece is a completely different object than it was from outside — sky, canopy, creek, and you.

A mirror needs somebody standing in front of it. Until then those surfaces are only holding trees and weather. So the work is not finished when we install it. It is finished every time somebody walks into it and back out.

That matters here specifically. Thirteen thousand people drive into Merriam for work every day; about four hundred both live and work here. This is a town made of people moving through it, and it always has been. I wanted a piece that works the same way — one that requires passage in order to exist at all.



MERRIAM FRISCO DEPOT · H. D. KILLAM, 1958



CROSSING · ARCH PROFILE, ABSTRACTED

Introduction & Concept

THE BENCHES

Turkey Creek has flooded this ground over and over. 1844, 1903, 1951, 1993, 1998, and again this past July. The City has been working on flood control with the Army Corps for more than twenty years.

The three benches sit at three different heights, standing for the different levels of water this ground has seen. Their tops carry a sculpted wave surface, so each one reads as a level that was reached and then dropped back down.

They sit low, in the grass, where the water actually goes. The arches stand over them. What already happened is recorded at the ground, what remains stands above it, and nobody knows where the next mark lands. What matters is the space between the two.

WHAT THE VISITOR EXPERIENCES

The sequence is deliberate and unfolds over roughly two minutes of walking.

- From the trail: three weathering-steel arches in silhouette, stepping back into the tree line. Low curved forms in the grass. Everything warm, matte, still.
- Approaching: the arches resolve in scale. At full height they read as thresholds — you understand that you are meant to walk through rather than around.
- Entering: the inner faces reveal themselves. Sky, canopy, and the visitor appear in the polished surfaces. The quietest object in the field becomes the brightest.
- Moving through: the reflections shift continuously. No two positions give the same image, and no photograph taken from the trail predicts what happens inside.
- Sitting: the bench tops hold the sky in a moving-water surface. From a seated position the arches frame the creek corridor and the trail beyond.
- Leaving: the work closes behind you. From the far side it is weathering steel again.

It is different at every hour. Low morning and evening sun rakes across the wave relief and lights the crests while the troughs stay dark, so the surface appears to move. Midday flattens it into pure sky. Overcast turns the mirrors to pewter. In winter, with the canopy gone, the arches hold more sky and less green. There is no lighting in this work and it does not need any. The site lights it.

ACCESS

Everything is open at ground level with no step, curb, or threshold. A wheelchair passes through the arches exactly the way anyone else does, and the reflections read the same from a seated height. The benches have clear approach on both sides.

The arches are engineered to be climbed, because children are going to climb them. That was a design condition from the start, not a risk we tried to discourage.

WHO IS BUILDING IT

I am the artist and the fabricator. Kansas City Metalworks is fifteen minutes from this site, and the same shop that designed this work will cut it, form it, weld it, finish it, and set it. There is no third party between the drawing and the object.

My work has always been community based, with a focus on architectural elements and their role in defining the social fabric of a community. For the past ten years I have been focused on windows, doorways, passages and portals. Crossing is a natural continuation of that work.

> **Selecting us keeps the funding as local as it can be. And we can offer something no other applicant can — one or two shop visits opened to the public, for Q&A and project review in real time as the work is being built.**

We have built full-scale material samples of the bench surface and a three-dimensional study model of the arches. I will have them with me for the presentation, along with a recent small work from the portal series I am currently making.

Design Elements

Crossing is six elements — three weathering-steel arches and three curved benches. The arches are thresholds you walk through. The benches are seating and climbing surfaces at three different heights, each standing for a water level reached and receded. The levels are symbolic, not surveyed.

THE ARCHES

A1	19'-0" W × 20'-6" H
A2	16'-10" W × 15'-8" H
A3	12'-1" W × 10'-9" H

Profile taken from the gable of the Merriam Frisco depot and abstracted. Weathering-steel plate frames with mirror-polished stainless inner faces. Set in sequence rather than in a row, so the apertures align and separate as a visitor moves past them.

THE BENCHES

B1	15'-0" L · 2'-0" W · 3'-3" H
B2	17'-0" L · 2'-0" W · 2'-2" H
B3	20'-6" L · 2'-0" W · 2'-8" H

Bodies are 3/16" weathering steel formed to a continuous curve. Seat surfaces are 18 gauge stainless, formed to a 1½" peak-to-trough wave relief and carried on a stainless substructure that takes all live load. The visible skin carries none, which allows the full relief without structural compromise and keeps each bench light enough to set without heavy rigging.

STRUCTURE AND FOUNDATIONS

The arches will likely be welded to a structural member below grade tying all three together as a single assembly, with that assembly carried on piers specified by the project structural engineer. Final configuration is the engineer's to set.

- Anchorage sized to resist buoyant uplift during submersion
- No horizontal ledges that would catch floating debris; weep drainage where enclosed sections occur

The site is in the regulated floodplain. Final foundation design is subject to the City's floodplain development permit and the accompanying review of effects on floodwater elevation and velocity.

MATERIALS

WEATHERING STEEL
ASTM A606-4 — arch frames, bench bodies

STAINLESS
Types 304 and 316 in combination, #8 mirror — arch inner faces and bench seat surfaces, on a stainless substructure

FASTENERS
Stainless with EPDM/HDPE isolation at every stainless-to-weathering-steel joint

Stainless grade is selected by exposure rather than applied uniformly. 316 carries added molybdenum, which resists the pitting and tea-staining 304 can develop where chlorides are present — relevant on a site that floods and sits near a salted path. 304 performs well wherever that exposure is lower, and the trail here runs ten to twenty feet from the arches. We place each grade where it earns its cost, with the final distribution set during construction documents.

FABRICATION AND SOURCING

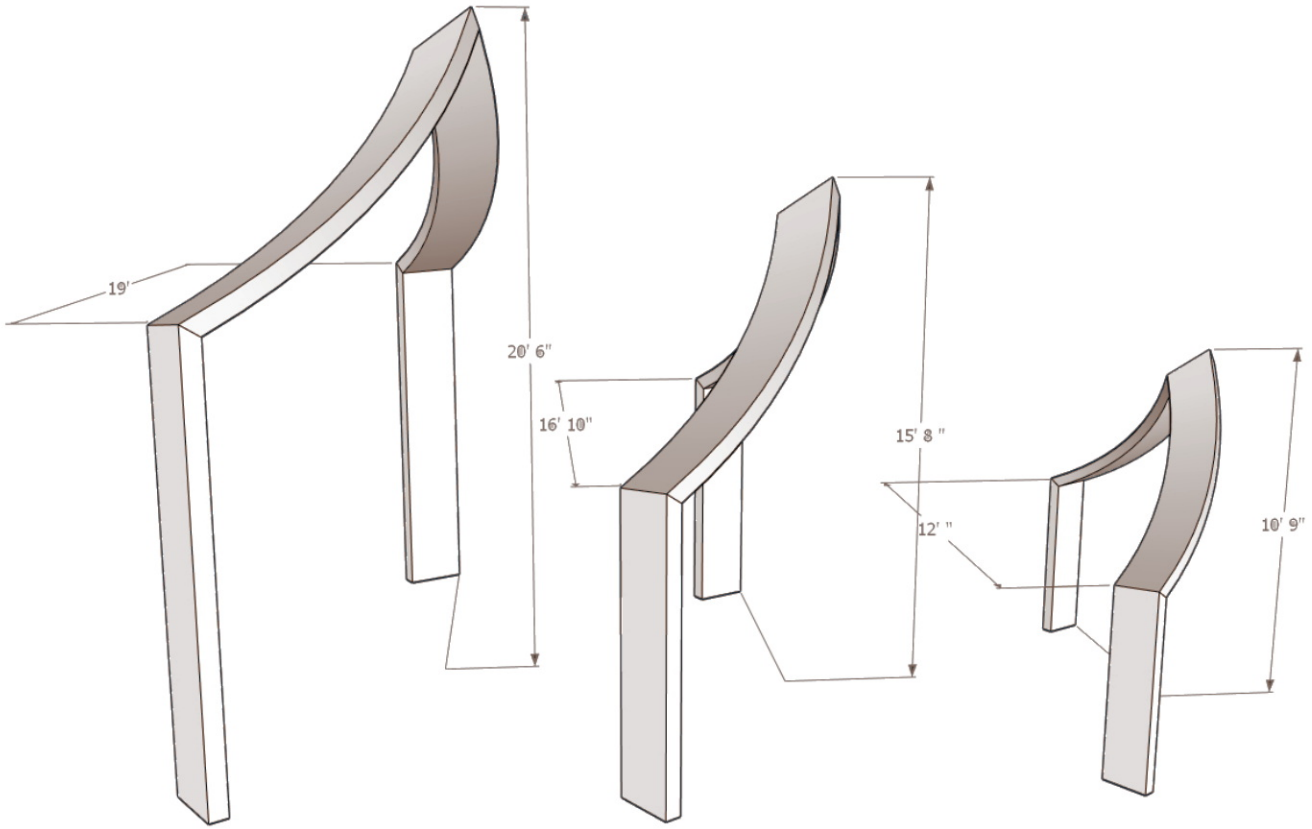
All design, cutting, forming, welding, finishing and installation is performed in-house by Kansas City Metalworks, fifteen minutes from the site. Arches are CNC profile cut, formed, and fully trial-assembled in the shop before disassembly for finishing. Weathering steel is pre-weathered in the shop so first-season patina runoff is controlled before the work reaches the park.

> **Where scopes must be subcontracted — structural engineering, concrete, crane and rigging — we will make every effort to place that work with Kansas businesses and contractors.**

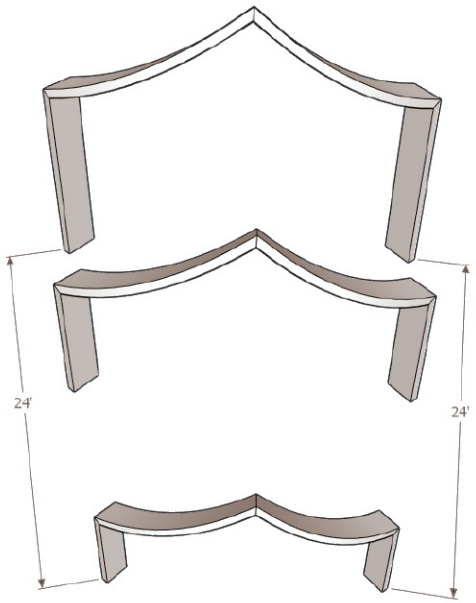
The arches

Three graduated forms in weathering steel with mirror-polished stainless inner faces.

01 / RELATIVE SIZE



02 / SPATIAL SEQUENCE



A1

19' W × 20' 6" H

A2

16' 10" W × 15' 8" H

A3

12' 1" W × 10' 9" H

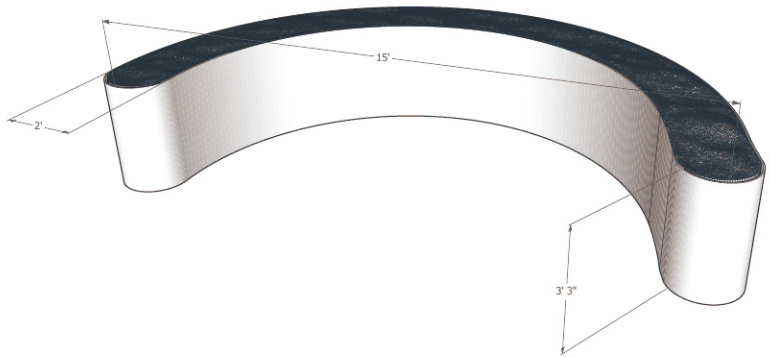
INTENDED SCALE

Original dimensioned views.

Perspective diagrams; not to scale.

The benches

Three curved forms in weathering steel with sculpted, mirror-polished stainless tops.

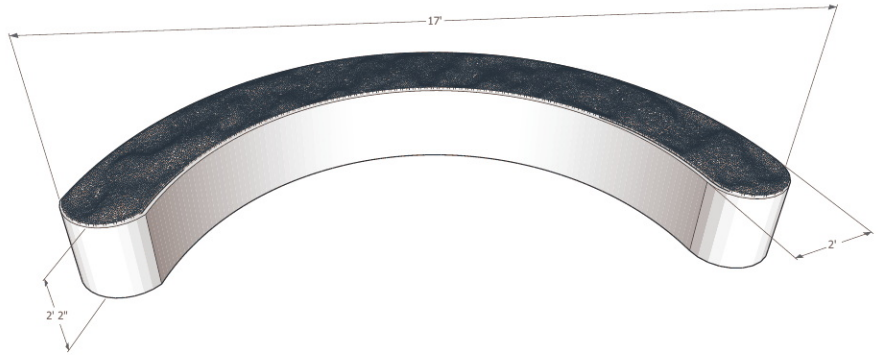


B1 / CURVED BENCH

15'

OVERALL LENGTH

2' W / 3' 3" H

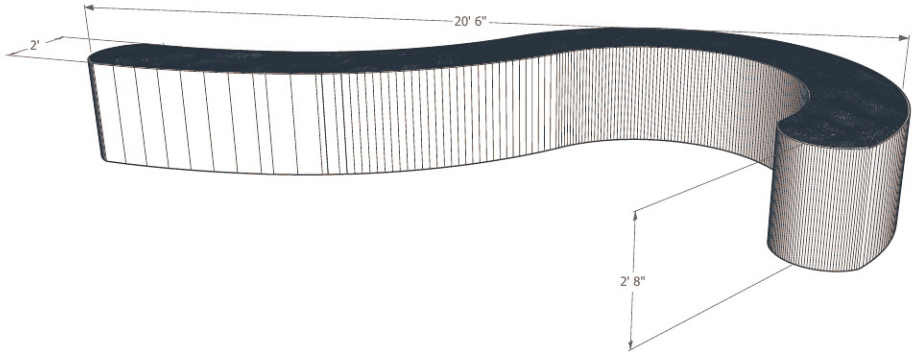


B2 / CURVED BENCH

17'

OVERALL LENGTH

2' W / 2' 2" H



B3 / CURVED BENCH

20' 6"

OVERALL LENGTH

2' W / 2' 8" H

Top relief: 1½" peak to trough · Original dimensioned views · Perspective diagrams; not to scale

Long-Term Care & Maintenance

This work was designed backward from its maintenance requirements. There is no paint, no clear coat, no sealant and no anti-graffiti coating anywhere in it — nothing with a reapplication cycle. The two materials were chosen because damage to them is largely self-correcting.

WHY WEATHERING STEEL

ASTM A606-4. The corrosion product is the finish, so there is nothing to fail and nothing to repaint. The patina stabilizes over roughly 18 to 36 months of wet-dry cycling, after which section loss drops to a negligible rate — on the order of 0.001" to 0.002" per side over fifty years.

> **Weathering steel repairs itself. A scratch, a trimmer mark, a gouge from thrown gravel, a media-blasted graffiti repair — all of it re-patinates and blends within four to eight weeks. There is no colour match problem, because the material makes its own colour.**

WHY STAINLESS, AND WHICH

Types 304 and 316 in combination at the arch inner faces and bench seat surfaces. 316 carries added molybdenum and resists the pitting and tea-staining 304 can develop where chlorides are present. The site floods and the trail is salted in winter, but the path runs ten to twenty feet from the arches, so exposure is not uniform. We specify by location rather than blanketing the work in the more expensive grade.

RESPONSE TO SITE CONDITIONS

WIND
Engineered to ASCE 7. Open frames present minimal sail area. Arches tied on a subgrade member carried on engineered piers.

RAIN
All surfaces shed water. No upward-facing seams. Weep drainage where enclosed sections occur.

SNOW & ICE
Nothing spans horizontally at a scale that accumulates. Do not chip ice off polished surfaces.

ICE MELT
Stainless specified by chloride exposure. Weathering steel tolerates chloride with localized patina darkening — cosmetic and self-correcting.

FLOODING
Piers and anchorage designed for scour and buoyant uplift by the project engineer. Hose off silt afterward.

CLIMBING
Designed for climbing as a condition. Edges radiused. No openings between 3½" and 9" per ASTM F1487. No pinch or shear points.

TRIMMER
Filament burnishes the patina; the mark re-patinates within weeks. No permanent damage.

THROWN ROCK
Plate stock is unaffected by gravel impact. Seat surfaces sit above mower discharge height.

SAP & DROPPINGS
Neither etches stainless. Weathering steel unaffected. Wipe sap with isopropyl alcohol; rinse droppings when the crew is available.

INSECTS
No cavities or tubular sections open to the air. Nowhere for wasps or mud daubers to build.

GRAFFITI
Weathering steel is media-blasted and left to re-patinate — no scar, no colour match, no repainting. Stainless releases most media with solvent.

UV
No paint, coating, polymer or sealant anywhere in the work.

Long-Term Care & Maintenance

OPTIONAL PROTECTION AT GRADE

No mow strip is proposed as a baseline. Weathering steel does not require protection from trimmer contact — the marks self-correct. If the City would prefer a hard edge, we can provide either of the following at the City's election:

- A weathering steel strip set at grade at the mirrored faces only, protecting the polished surface from contact
- A concrete mow strip at the arches only — not at the benches, where it would read as a plinth and undercut the way the forms sit in the grass

INSPECTION AFTER FLOOD EVENTS

> **Following any flood event that reaches the work, the City should arrange an inspection by a qualified professional structural engineer to verify the integrity of the piers, the subgrade member and all anchorage. This is a third-party structural review, separate from the visual inspection performed by Parks staff.**

MAINTENANCE SCHEDULE

SPRING, ANNUALLY
Hose down all surfaces. Wash seat surfaces and arch mirror faces with pH-neutral detergent and a soft cloth. Rinse. (1–2 hrs)

SPRING, ANNUALLY
Visual inspection. Confirm no soil or mulch has built up against the steel. Check for settlement. (30 min)

AS NEEDED
Sap removal with isopropyl alcohol. Rinse droppings. (minutes)

AFTER FLOODS
Hose off silt. Arrange third-party structural inspection as above.

EVERY 5 YEARS
Check anchorage and inspect isolation gaskets at stainless-to-steel joints. (2 hrs)

EVERY 10 YEARS
Repolish the mirror surfaces — see below.

REPOLISHING THE MIRROR SURFACES

A #8 mirror finish held outdoors will dull gradually from airborne particulate, hard water spotting and fine abrasion. We anticipate a repolishing cycle of approximately ten years, or sooner at the City's discretion if a true mirror is to be maintained.

Repolishing is a standard field procedure — progressive abrasive polishing back to #8. Seat surfaces are horizontal and straightforward. The vertical arch faces need a finisher working in place, and should be budgeted as a specialist visit rather than a Parks crew task. We can perform this work, as can any qualified architectural metal finisher.

REPAIR

Scratches and abrasion. On weathering steel, self-correcting — the exposed metal re-patinates and blends within four to eight weeks. On polished stainless, repaired in place by progressive abrasive polishing back to #8 finish.

Graffiti. Weathering steel: media blast the area and let it re-patinate — the repair disappears within one to two months. Stainless: citrus-based solvent or light polish. Neither requires a sacrificial anti-graffiti coating, the usual failure point on public art.

Major impact damage. In the event of vehicle or major debris impact, an arch would need to be cut free from the subgrade structural member and either returned to our shop or repaired in the field. That work must be performed by the artist or by a qualified fabricator. Benches are independently set and can be removed without disturbing the arches.

WARRANTY

Kansas City Metalworks warrants the work against defects in materials and workmanship for five years from the date of final acceptance. Warranty service during that period is performed at no cost to the City.

The structural design is sealed by a Kansas-licensed professional engineer, who carries professional liability for that design under their own coverage. Kansas City Metalworks' warranty on the structural design runs concurrently, for five years from final acceptance.

After that we remain available on a time-and-materials basis. The warranty transfers with any change in studio ownership. Complete drawings and material certifications are held in permanent archive; a bound O&M Manual is delivered at closeout.

Budget & Timeline

This is a budgetary proposal built to the full $250,000 commission, carrying the complete scope shown: three arches and three benches, with all engineering, materials, fabrication, finishing, foundations, transport and installation included.

> **The $250,000 total is not a lever. It is fixed. Line items will move once construction documents are complete and the structural engineer's design is under contract — but that movement is absorbed within the budget, never added to it.**

What will not change is the design intent, the materials, or the level of craft. If pressure appears, the variable is the scale of individual elements or the count of benches. I would rather build six well-made objects than nine compromised ones, and I would rather scale an arch by a foot than substitute a material.

BUDGET

STRUCTURAL ENGINEERING
Kansas-licensed PE. Pier and subgrade member design, wind and live-load analysis, floodplain hydraulic analysis, stamped drawings. $12,000

MATERIALS
A606-4 weathering steel; 304 and 316 stainless, #8 mirror; stainless substructure; fasteners and isolation hardware; consumables. $80,000

FABRICATION & FINISHING
CNC cutting, forming, fit-up, welding, weld dressing. Wave-relief forming. Mirror polishing. Shop pre-weathering. $44,000

FOUNDATIONS & SITE
Concrete piers and subgrade structural member as specified by the project engineer; turf restoration. $16,000

TRANSPORT & INSTALL
Crane and rigging ($15,000); trucking, install crew, site protection and access matting ($4,000). $19,000

INSURANCE & PERMITS
General liability and workers compensation per the City's PSA; permit coordination; photography; bound O&M manual. $5,000

CONTINGENCY
Approximately 5% of direct cost. Held against steel market movement, foundation redesign and floodplain review conditions. $9,000

DIRECT SUBTOTAL
$185,000

DESIGN, OH & PROFIT
Artist design development, construction documents, shop drawings and CNC programming, project management, shop overhead and profit. $65,000

TOTAL CONTRACT
$250,000 — all-inclusive. No additional cost to the City.

Budget & Timeline

PAYMENT SCHEDULE

1 NOTICE TO PROCEED
Contract execution · 20% · $50,000

2 CONSTRUCTION DOCS
CD set complete; PE-stamped drawings delivered and approved · 25% · $62,500

3 FABRICATION START
Material procured and delivered to shop · 30% · $75,000

4 FABRICATION COMPLETE
Released for shipment; City inspection at shop invited · 15% · $37,500

5 FINAL ACCEPTANCE
Installation complete, site restored, O&M manual delivered · 10% · $25,000

TIMELINE

NOV 2026
Notice of selection. Contract negotiation and execution.

DEC – JAN
Design development. Construction documents. Geotechnical borings.

FEB 2027
Structural engineering and PE review. City floodplain development permit and hydraulic review. City design review.

MAR 2027
Material procurement. Mill lead times are the largest schedule risk and are front-loaded for that reason.

MAR – JUL
Fabrication. Cutting, forming, welding, fit-up. Seat wave-relief forming. Full shop assembly and dimensional verification.

JUN 2027
Piers and subgrade structural member set on site.

AUG 2027
Finishing. Shop pre-weathering. Mirror polishing. Final QC.

SEP 2027
Delivery and installation. Crane set. Anchor and alignment.

OCT 2027
Turf restoration, final walkthrough, O&M manual delivery, dedication.

> **This schedule assumes timely approvals, payments and material delivery. Any delay in City approvals, permit issuance, payment milestones or mill lead times will shift the schedule accordingly.**

Included: all design, engineering, materials, fabrication, finishing, delivery and installation; PE structural design and stamped drawings; all foundations and turf restoration; insurance per the City's PSA; bound O&M manual, as-built drawings and material certifications at closeout; five-year warranty. Not included: site utilities — none are required by this design; interpretive signage; maintenance beyond the warranty period.

> **Kansas City Metalworks is fifteen minutes from the site. There is no general contractor markup and no outside fabricator in this budget — which is why this level of material and finish is achievable at this number, and why selecting us keeps the funding as local as it can be.**

CROSSING

Three weathering steel arches and three curved benches for the Streamway Trail at Chatlain Park. Designed, engineered, fabricated, finished and installed by Kansas City Metalworks.

ASHEER AKRAM

Kansas City Metalworks
333 N 6th Street, Kansas City, KS 66101
(816) 321-1885
studio@asheerakram.com

