FLX TRAM

FLX Tram **2027**

Macedon, NY

Hello and thank you for contacting FLX Tram / Finger Lakes Tram. We believe we manufacture and install the safest, most aesthetically pleasing, and rugged tram systems available and greatly look forward to working with you on your tram project. To date we have installed over 200 tram systems throughout the northeast, primarily in New York State but also have installations in Ohio, Massachusetts, and New Jersey. We have spent considerable upfront engineer hours designing and redesigning every aspect of our system, from the overspeed braking system to the 25' dark bronze anodized aluminum I-beams - never satisfied until we have achieved a best-in-class design. We also are capable to take on every aspect of the install—from permit and site work to tram install, to all deck construction, service, inspection and maintenance. One of our more valuable traits is that we work with you to custom design the best solution for your site, never taking a "one size fits all" approach. We will not hesitate to take longer on an install, for example, if it means getting the design just right. We design, build, and service every FLX Tram we install.

In regards to cost, since every site is unique we will need a little more information before we can provide an accurate estimate, however we trust you will find our costs to be competitive and our design rivaling the best systems available. For a point of reference, our typical system costs may be:

$82,000 20 degree, single angle tram traveling 50' in length

$95,000 50 degree, single angle traveling 75' in length

$140,000 multi-angle tram 25-55 degree traveling 125' in length

Steeper angles, multiple angles, complex station work, extensive excavating, and longer trams all factor into the final cost. Our simple goal is to provide you the most elegant, cost effective, custom solution for your site that will add significant value to your property, while allowing you to enjoy safe transportation up and down the slope for many years of trouble free operation.

Our system price typically includes 2-5 days of site prep, complete installation of footings, track, carriage, cabin, hoist station and cover. It also includes an upper station (5 x 10 typical) and lower platform (4 x 4) each with composite decking, aluminum railing and switched station gates, station full controls including a keyed station and a wireless cabin controller. Stairs and additional decking and walkways quoted separately, along with any travel costs outside of New York State. We can also help obtain necessary permits and coordinating the installation of a 220V, 30A service line. Egress starsare another rpopular option. (See last page)

Please let us know what additional information you would like at this time. If we are in the ballpark and you want to move forward, we can schedule a site evaluation anytime. You are also welcome to visit any one of our tram sites throughout the region. References can be provided as well.

Thanks again for contacting us and we hope to hear from you soon,

Shawn

Shawn Ritchie President—FLX Tram / Finger Lakes Tram – www.flxtram.com

FLX TRAM SYSTEM:

Straight or multi angle track, 15-65 degree slope, length 20-300+'

Land preparation; Excavation to achieve desired slope. Track and hoist station secured to ground by 2" pipes driven or drilled into ground 42" or until refusal.

Installation of brown/bronze anodized aluminum (T6061) I-beam track, hoist motor and drum station, upper and lower station controls and wireless remote cabin control.

Single or Double 3/8" or 5/16" galvanized or swaged aircraft cables

Skyclimber commercial grade overspeed system w/ independent brake cable

SEW Gearmotor with electric brake

Customer responsible for permits and delivery of 220V, single phase, 30A service to tram control cabinet

New cabin/carriage design enables travel down to 12" of ground

Uphill carrying capacity - 800-1200 lbs depending on angle

FLX Tram System

The tram system has one main purpose, to safely transport you to the water and back to your house. It has to have a comfortable ride and perform flawlessly, with little or no downtime or maintenance. In addition, we believe, the system has to be visually appealing and blend into the surroundings. We also put a great deal of care and effort customizing the design and installation for your specific property; determining the optimal placement of the system, minimizing environmental disturbance, and installing the complete system very quickly.

Below we have described our Tram System along with some pictures for your reference. We have noted where we feel our design is superior to others in the industry, and have highlighted a few areas that some people may have not have considered in their initial investigations.

Design Standards Referenced:

ASME 17.5 NEC 2017 ANSI B77.2

Our engineering staff has over 80 years of design expertise, insuring the system will provide you with many years of safe, trouble free transportation.

The following are some of the design areas we feel makes our tram superior to others in the industry:

T6061 Aluminum I-beam Tracks:

Corrosion resistance anodized aluminum that will last a very long time. Other manufacturers use painted or galvanized steel, which will corrode and degrade over time.

Precision cut 25' T-6061 I beam tracks to minimize number of seams for smooth travel

The 4"x 6" I-beam design is more structurally stable than other track systems. The inherent strength of these beams requires less cross supports which improves appearance.

The aluminum track is anodized bronze. (standard)

Track is secured to hill by Sch 40 aluminum pipe, pile driven to refusal. No digging or concrete.

Safety Brake System:

We design to ANSI specifications regarding maximum decal. (0.31g) during emergency stops.

The safety overspeed is a commercial grade unit utilizing a simple but rugged centrifugal switch to activate a dual shoe brake mechanism. The shoes have a broad surface that, when activated distribute the braking load over a 4" area of cable, similar to the design used to drive the San Francisco trolley cars. Inferior designs use a cam like action that can produce internal stresses in the cable at pinch point pressures.

High Strength Cable:

Our cable is 8,000-12,000 high flex 7x19 Preformed Galvanized Aircraft Cable; 5/16" or 3/8" D

For your slope, 1-2 cables are standard and are properly attached using industry standard connectors and wrapped multiple times around a grooved hoist drum for strength of 14X operating load.

To ensure long life we follow wire rope (cable) design specifications for drive wheels of no less than 20 times the cable diameter.

Other Safety Design Components:

Electric motor brake actuates when power is disconnected.

Heavy duty motor gearbox with low efficiency that reduces back drive.

Electrical switches on platform gates (standard).

Overload reset – If the tram is overloaded, the control system prevents the tram from moving until the weight is removed, and power is cycled.

Tram Cabin:

Complete remote control in cabin includes up, down, stop, and reset.

Aluminum construction with powder coat painted finish

Seating configuration: 1 bench, standard

NEW: Our new cantilever cabin design allows travel to within 18" of the ground

Warranty:

3 Year—Electrical and Mechanical parts and labor

15 Year—Track and Pilings

TRACK

Our track and rails combine to form a very strong and rigid system, due in part to the available force we have with our mini-excavator to drive the support pilings deep into the ground. Our track is aluminum, which far exceeds galvanized steel in rust resistance and longevity. Our excavator also enables us to shape the terrain so that we can blend the system in with the profile of the hill, keeping the track as low to the ground as possible. This low profile, combined with the anodized brown color, helps to minimize the visual impact of the system from the vantage point of the lake. Finally, we angle the ends of each section of track, which removes the typical bump felt at every straight track .

Our new cantilever design enables travel to within 18" of the ground, eliminating the need to dig a cellar or multiple steps to exit at the base.

We also install stair systems, lighting options, and customized landings. Ask for details!