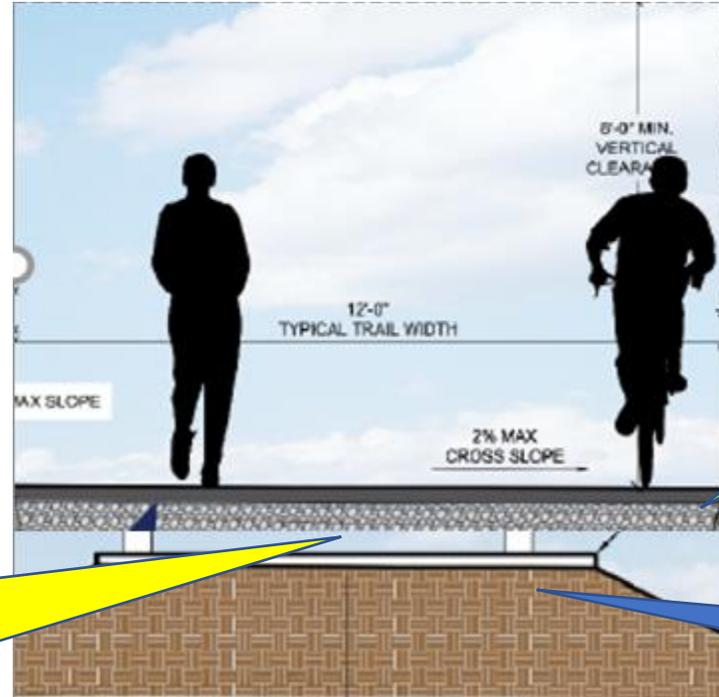


# Trail Mat *Non-Disruptive* Rails-to-Trails System



Composite, concrete, timber or other Trail Mat "boardwalk" elements installed over and secured onto existing rails

Void between existing rails, ties and **Trail Mat** Patent Pending used as a secure linear "vault" for utilities – i.e. fiber optic cable, natural gas, irrigation, and low-voltage electric line conduit for LED lighting, etc.

Below illustrated existing railroad ballast, railroad ties and rails left in place



## Existing abandoned rail path



Re-Purposed to linear Rails-to-Trails Community Amenity without destruction of the existing rails, ties, ballasts, fasteners and grade crossings



## Trail Mat Patent Pending

Thousands of miles of abandoned railroad lines lie dormant across North America that once served commerce and emerging economies. Now neglected and in various states of disrepair, these corridors are an eyesore for the communities which once built the thriving economies.

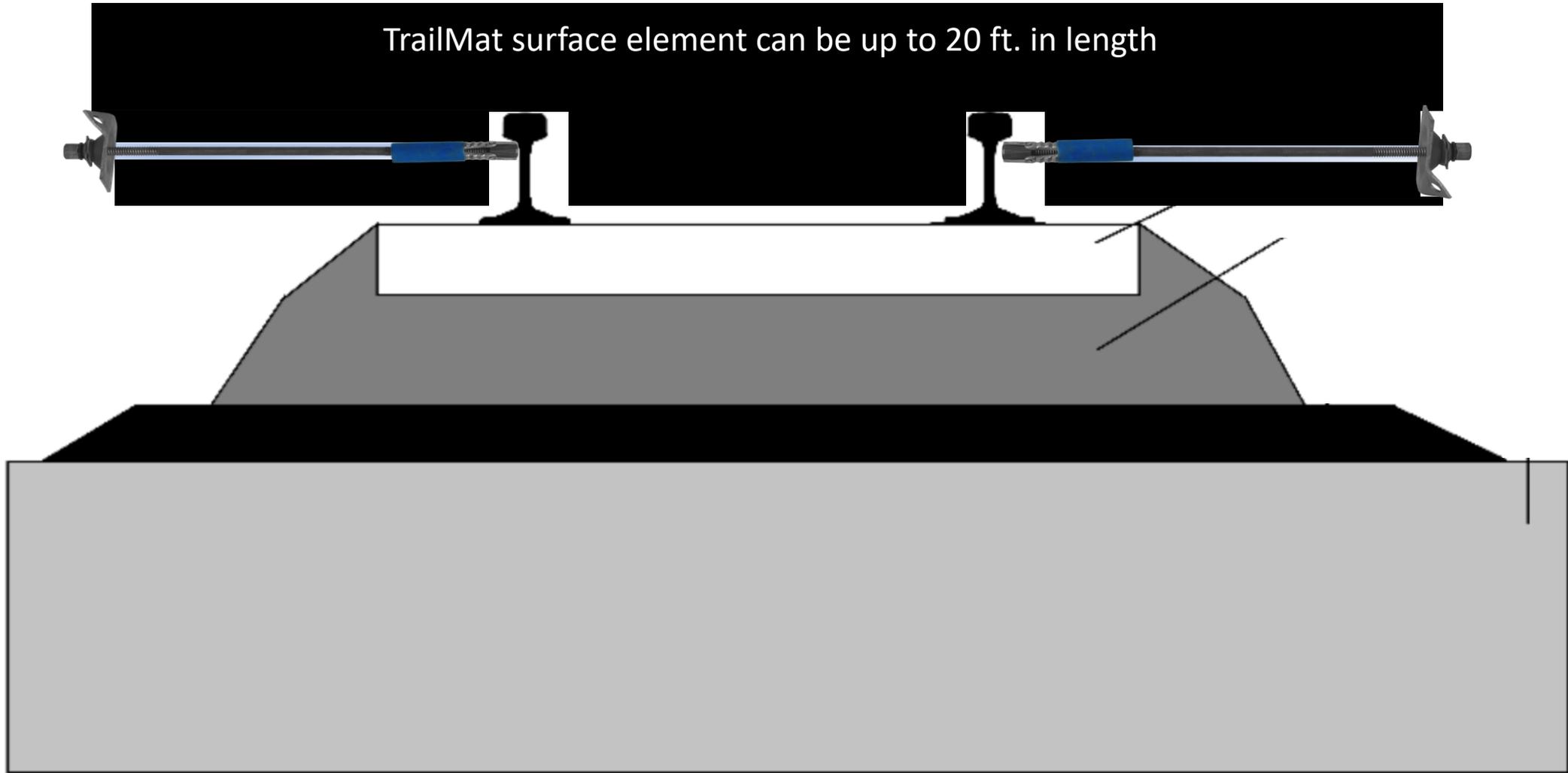
It is common practice that once existing rails are removed that railbanked Railroad right-of-way (ROW) would be lost forever. The Trail Mat allows for prospective Rails-To-Trails projects that have been in negotiation for long-term possibly benefit and move forward if the existing owner Rail Company could ground lease their property and infrastructure (which at present and future requires long term maintenance), make their line available to a community to lease the easement with the promise to restore it to its pre-repurposed condition in the future, if required.

The application patent would allow for existing rails, ballast, ties and all infrastructure to remain in place with a mat system made entirely from recycled plastics, composites, concrete, timber or other suitable materials. With this modular system, a repurposed former rail path could remain intact, and the trail be made available to the public through a long-term land lease with the railroad. **IF**, (in the future) the rail line for some reason needed to be restored to service, the mat system could be removed and recycled for additional projects across the country.

Here are the features and benefits of the system:

- Use of the existing rail line without removal of rails, ties, connections, ballast, etc. The existing railroad infrastructure remains intact and unchanged.
- The Trail Mat Patent Pending system fits the top of the existing rail contour and dimension. Since the system is installed on the top of the existing rails, the new surface retains the same profile elevation and consistent rail-to-rail dimension through both straight-aways and curves.
- The system is securely locked to the existing rails prohibiting movement, buckling or shifting of the surface.
- The system surface is flat, consistent in manufactured dimension and is comprised of recycled plastics. It has the same load strength as existing wooden ties tested to over 1,800 MGT of 39-ton axle loads.
- The surface elements are produced from 100% recycled material and meet or exceed all AREMA standards. Each mile keeps tons of plastic bottles and waste from sitting in landfills and filling our oceans.
- The surface elements will not rust, splinter, crumble, rot, absorb moisture or leach toxic chemicals into the environment and are completely impervious to infestation by insects.
- The surface elements themselves are impervious to wet weather, but drain quickly when configured as a boardwalk surface, removing the chance of ponding water and/or ice.
- The deck can be uniformly prepared with wet weather traction improvement surface for added traction for pedestrians and cyclists.
- The deck surface can be supplied in a full range of sizes with desired trail widths varying up to 25-feet. The deck surface can be equipped with lifetime truncated dome median warning stripes for ADA compliance in ADA approved colors.
- The deck surface can easily permit the installation of side curbs and railings, and bollards. Mileage or other public awareness signage can be attached to the deck surface as desired.
- Since the space between existing rails is maintained and unincumbered, it can serve to locate utilities – fiber optic cable, electrical conduit, water, natural gas and/or other utilities as permitted co-location according to code. This enables a protected and maintained “vault” for ease of access, ingress and egress of the utility lines (i.e. future LED trail lighting and/or off ROW use at a desired location). Current or future trail monitoring, emergency call stations, etc. could emanate from this dedicated utility chase.
- ADA pedestrian and bicycle access can easily be constructed from the same recyclable mat material.
- And, finally, if the rail line owner needs to rescind the long-term lease to reactivate their track and assets to the pre-retrofit condition, the system can be removed, relocated or recycled for future trail developments.

TrailMat surface element can be up to 20 ft. in length



TrailMat surface element can be up to 20 ft. in length

