



StarTrack® Railroad Products

TWIN CITIES METRO TRANSIT

Hiawatha Light Rail Line

Minneapolis, MN



The new Minneapolis-Hiawatha Light Rail Line extends 11.4 miles from downtown Minneapolis through Minneapolis - St. Paul International Airport to the Mall of America in nearby Bloomington, MN.

The track work portion of Railworks Corporation's contract included embedded, ballasted, direct-fixation track and special track work; the electrical portion; site improvements; traction power system; catenary; signaling, and Oldcastle Infrastructure's StarTrack grade crossing modules.

CONSTRUCTION CHALLENGE

Oldcastle Infrastructure had extensive experience with manufacturing the StarTrack 17'6" modules allowing fast-track manufacturing and construction. The use of StarTrack on this

project allowed Railworks to install crossings quickly which allowed the crossings to open to vehicle traffic before pulling the rail at several of the locations.

PRECAST SOLUTION

Oldcastle Infrastructure designed, engineered, manufactured, shipped, and installed approximately 5,000 linear track feet of their patented Standard StarTrack 17'6" modules for the railroad grade crossings at the Twin Cities Metro Transit - Hiawatha Light Rail Line.

TIME LINE

Design work began in fall, with construction following in late 2001, continuing through 2004.

DESIGN & CONSTRUCTION TEAM

General Contractor

Railworks

Owner

Twin Cities Metro Transit

Precaster

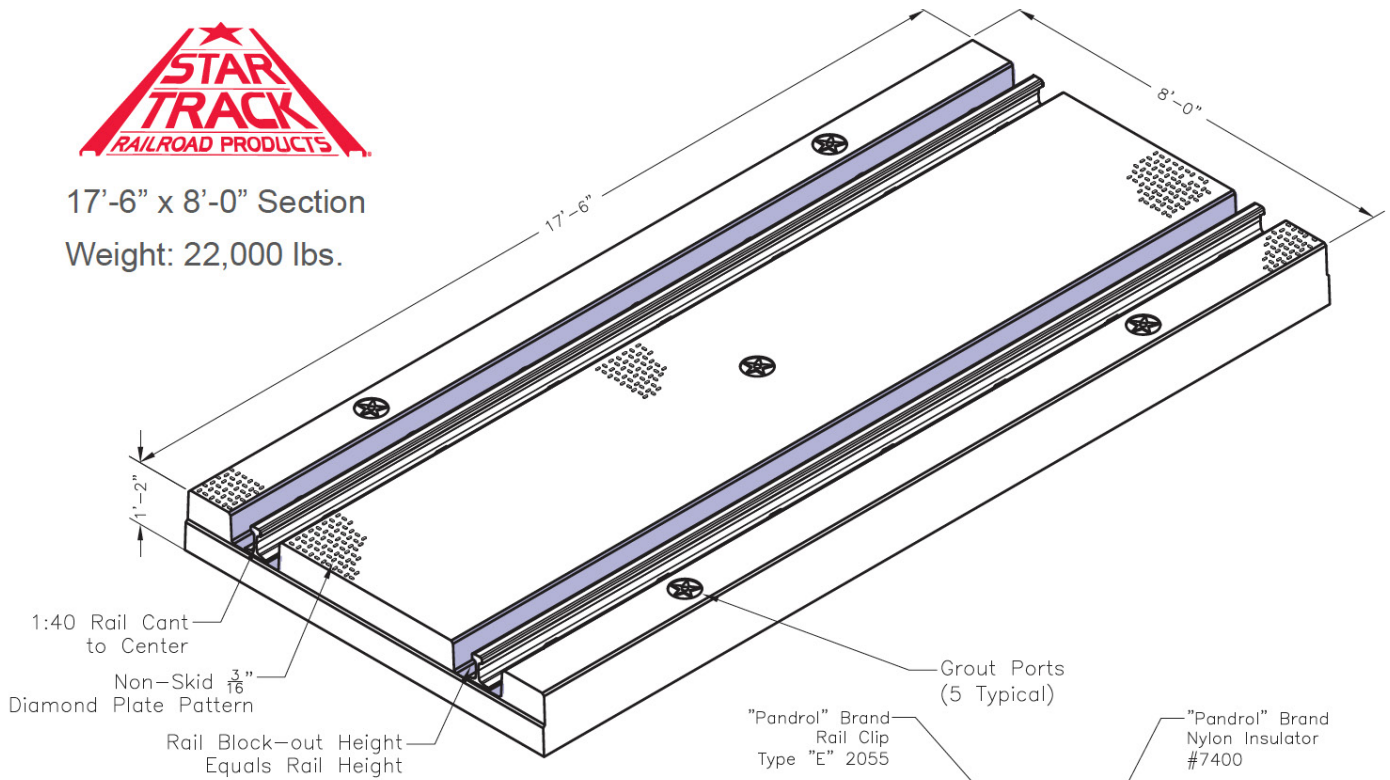
Oldcastle Infrastructure

Manufacturing Facility

Oldcastle Infrastructure
Ramsey, MN



17'-6" x 8'-0" Section
Weight: 22,000 lbs.



MATERIALS:

CONCRETE: The Minimum 28 Day Strength shall be 6000 PSI
Optional: Special design mix utilizing Micro-Silica
Optional: Corrosion inhibitor additive in lieu of epoxy reinforcing

REBAR: ASTM A615, Grade 60
Optional: Epoxy-coated

SHOULDERS: "Pandrol" #6575 Cast
SHOULDER DUCTILE - Iron Grade #65-45-12

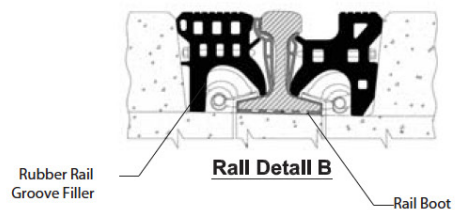
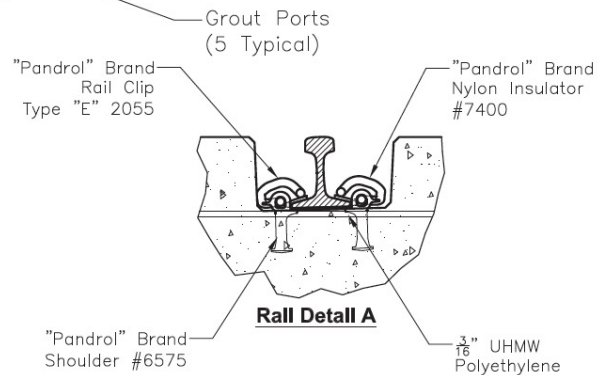
RUNNING STRIPS: $\frac{3}{16}$ " UHMW Polyethylene

CLIPS: "Pandrol" #E2055 Clips-Spring Steel, Galvanized

INSULATORS: "Pandrol" #7400
Thermoplastic/Nylon

EXPOSED SURFACE: Form Cast Concrete
Optional: Hydrozo "Enviroseal" Surface Treatment

DESIGN LOADING: Cooper E-80 with 60% Impact



Dana Goss, Project Manager with Railworks, came away from the project with a great appreciation for StarTrack system.



SCOPE OF WORK

Precast Structure

A. STRUCTURE ENGINEERING

Detailed Engineering
Engineering Calculations
Drawings:

Detailed drawings

B. Precast Concrete Product - StarTrack Grade Crossings

Size: 17'-6" x 8'-0" Section
Concrete: 6000 psi concrete
Quantity: 285 pieces - Totaling 5,000 track feet

About Oldcastle Infrastructure

Oldcastle Infrastructure, A CRH Company, is the leading provider of building materials, products and services for infrastructure projects to several market sectors nationwide, including: Building Structures, Communications, Energy, Transportation and Water.

For More Information Contact:

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