



Turnkey - Distributed Antenna System (DAS) Network Buildings

# AMERICAN TOWER CORP.

## NASCAR Distributed Antenna System (DAS) Building Projects

- Daytona Speedway, Daytona, FL
- Chicagoland International Speedway, Joliet, IL
- Phoenix International Speedway, Phoenix, AZ

American Tower Corporation (ATC) signed an agreement to design and install DAS and other wireless infrastructure solutions at all 12 of International Speedway Corporation's (ISC) NASCAR motorsports facilities to enhance wireless signal strength and distribute radio capacity for customer use and general track operations during events. ISC selected American Tower due to its experience and proven solutions to help ISC overcome these challenges and enhance the fan experience at ISC facilities. American Tower was selected for its customized wireless infrastructure solutions that support wireless coverage and capacity. Oldcastle Infrastructure was contracted

by ATC to supply a portion of the customized wireless infrastructure solution. Oldcastle Infrastructure supplied the turnkey wireless equipment shelters known as Distributed Antenna System (DAS) Network Buildings for these projects.

### PRECAST SOLUTION

Contracted to manufacture and provide comprehensive turnkey services for the speedway (DAS) Network Buildings, Oldcastle Infrastructure provided a 12' x 28' DAS Equipment shelter for the Daytona Speedway; a two piece, 42' x 24' DAS Equipment Shelter for the Phoenix International Speedway and three (3) DAS Equipment Shelters for the

**"This significant award, to provide turnkey shelter solutions, once again validates Oldcastle Infrastructure as a significant market leader in the shelter industry, offering a combination of innovative technology, manufacturing skill and comprehensive turnkey services, while above all improving the customer experience for clients who choose to partner with Oldcastle Infrastructure"**

John Albert, Oldcastle Infrastructure Director of Sales for Shelter Solutions.

### DESIGN & CONSTRUCTION TEAM

#### General Contractor

American Tower Corporation (ATC)

#### Owner

ISC, NASCAR

#### Contract Amount:

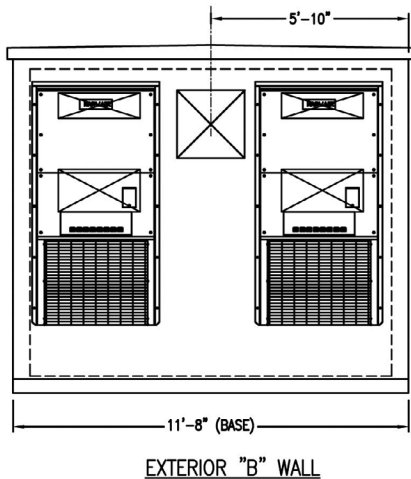
\$249,345

#### Precaster

Oldcastle Infrastructure

#### Manufacturing Facility

Oldcastle Infrastructure  
Newnan, GA



Chicagoland International Speedway - (1) 12' x 28' DAS Equipment Shelter and (2) two 12' x 20' DAS Equipment Shelters. Oldcastle Infrastructure's total turnkey services offered the client single vendor responsibility for the DAS Equipment Shelters from installation of all electrical, environmental systems, alarms, lighting, on-site delivery and site construction, zoning, permitting and foundations, in addition to on-site architectural enhancements.

## **DAYTONA SPEEDWAY**

### Daytona, FL

#### **SCOPE OF WORK**

##### **Precast Structure**

- A. Structure Engineering  
Detailed engineering:  
Drawings: Detailed drawings
- B. Oldcastle Model RCS11828 precast shelter building
- C. Design and Permitting
- D. Project Management and Site Supervision: Manage the design, budget, schedule and quality on the shelter project
- E. On-Site Supervision: Manage field activities, coordination of Oldcastle provided trades and quality assurance of Oldcastle provided trades
- F. Testing: Field Testing of Oldcastle provided Services. Oldcastle start-up and function tested the shelter electrical and HVAC

##### **Precast Building**

- Exterior Finish (wall): Washed Exposed Aggregate Sealed w/ two coats Thorosheen
- Exterior Finish (roof): Sealed with two coats of Dura Cool
- Insulation (walls): R-11, Rigid board type with foil facing
- Insulation (ceiling): R-22, Rigid board type with foil facing
- Interior Finish (walls & ceiling): ½" Tk. moisture board finished
- Interior finish (floor): VCT Tile, 12"x12" Square
- Interior finish (base): 4" Rubber base / Color: Gray
- Door: 4'0" x 7'0", 16ga. Heavy Duty steel galvanized primed & painted
- Door Frame: 4'0" x 7'0" 14ga. Heavy Duty steel galvanized primed & painted
- Door Closer: Hydraulic closer with hold open feature on the arm. Pick plate / Lock Guard
- Door Key Box: Heavy Duty cast box for key storage with combo lock
- Entry Panels: (4) 24" x 24" Blank plates covering wall openings (primed & painted)

##### **Power and Electrical**

- Disconnect: 200A, 1Ø, 120/240V, Exterior Mounted Fused Disconnect Switch
- Transfer Switch: 200A, 1Ø, 120/240V, Exterior Mounted Manual Transfer Switch
- Generator Receptacle: 200A, 1Ø, 120/240V, Appleton Generator Receptacle
- Main Distribution Panel: 200A, 1Ø, 120/240V, 42 Space Panel
- Surge Suppression: AC Data B82XXR
- Receptacles: (6) 20A, 1Ø, 125V, Interior Wall Mounted Convenience
- Receptacles: (1) 20A, 1Ø 125V, Exterior Wall Mounted GFCI
- HVAC Unit: (2) 5 Ton, 60,000btu, Wall mounted units with 5kW Heat strip
- HVAC Grille: (2) Wall mounted adjustable supply grilles
- HVAC Grille: (2) Wall mounted adjustable return grilles
- Alarm Box: 12" x 10" x 6" Deep hinge cover box with back plate  
Power Fail Alarm; HVAC Fail Alarms; High Temp Alarm; Low Temp Alarm; Smoke Alarm
- Fluorescent light fixtures (8) with acrylic lens cover; Incandescent Exterior light fixture mounted on back box, photo-cell/motion sensor control
- Emergency: Exit fixture w/illuminated sign
- 90 LF Cable Ladder: 12" Wide
- Fire Extinguisher: 5 lb. CO2 Wall Mounted

##### **Oldcastle Infrastructure provided turnkey deployment of a 12' x 28' DAS Equipment shelter.**

The 12' x 28' RCS Design shelter was engineered and manufactured by Oldcastle Infrastructure for seismic zone: 50% G. The outside dimension is 28' Long x 11'8" Wide x 10'-4" High and the finished inside dimension is 27' Long x 10'8" Wide x 9" high. The project included total outfitting of the shelter from installation of all electrical, environmental systems, alarms, lighting and on-site delivery and site construction, in addition to on-site architectural enhancements.



# CHICAGOLAND INTERNATIONAL SPEEDWAY

Joliet, IL

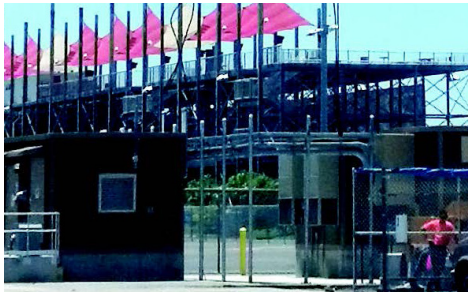
## SCOPE OF WORK

### Precast Structure

- A. Structural Engineering: Detailed engineering & Detailed drawings
- B. Oldcastle Model RCS11828 and (2) RCS11520 precast shelter buildings
- C. Design and Permitting
- D. Project Management and Site Supervision: Manage the design, budget, schedule and quality on the shelter project
- E. On-Site Supervision: Manage field activities, coordination of Oldcastle provided trades and quality assurance of Oldcastle provided trades.
- F. Testing: Field Testing of Oldcastle provided Services. Oldcastle start-up and function tested the shelter electrical and HVAC.

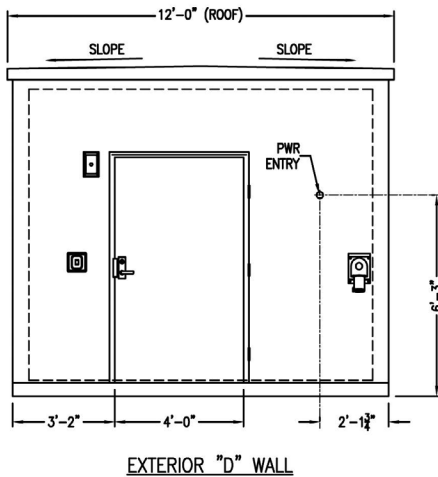
### Precast Buildings

Exterior Finish (wall):	Washed Exposed Aggregate Sealed w/two coats Thorosheen
Exterior Finish (roof):	Sealed with two coats of Dura Cool
Insulation (walls):	R-11, Rigid board type with foil facing
Insulation (ceiling):	R-22, Rigid board type with foil facing
Interior Finish (walls & ceiling):	½" Tk. moisture board finished
Interior finish (floor):	VCT Tile, 12"x12" Square
Interior finish (base):	4" Rubber base / Color: Gray
Door:	4'0" x 7'0", 16ga. Heavy Duty steel galvanized primed & painted
Door Frame:	4'0" x 7'0" 14ga. Heavy Duty steel galvanized primed & painted
Door Closer:	Hydraulic closer with hold open feature on the arm. Pick plate / Lock Guard
Door Key Box:	Heavy Duty cast box for key storage with combo lock
Entry Panels:	(4) 24" x 24" Blank plates covering wall openings (primed & painted)



### Power and Electrical

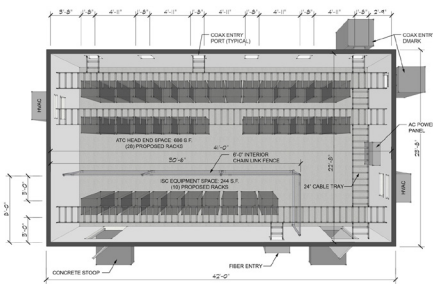
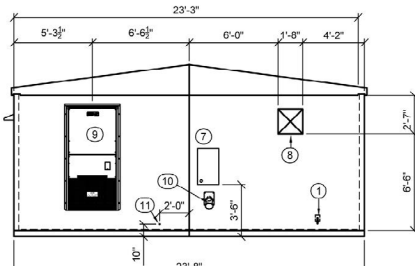
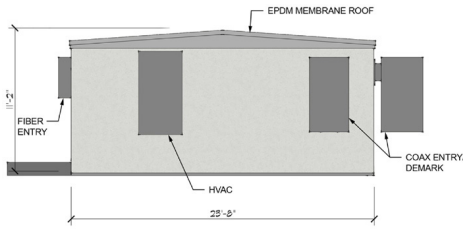
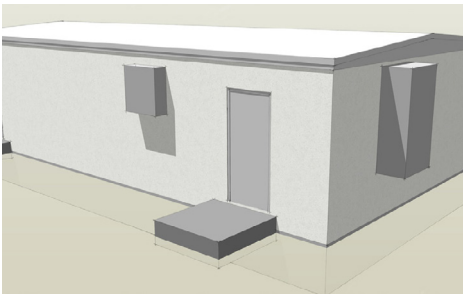
Disconnect:	200A, 1Ø, 120/240V, Exterior Mounted Fused Disconnect Switch
Transfer Switch:	200A, 1Ø, 120/240V, Exterior Mounted Manual Transfer Switch
Generator Receptacle:	200A, 1Ø, 120/240V, Appleton Generator Receptacle
Main Distribution Panel:	200A, 1Ø, 120/240V, 42 Space Panel
Surge Suppression:	AC Data B82XXR
Receptacles:	20A, 1Ø, 125V, Interior Wall Mounted Convenience
Receptacles:	20A, 1Ø 125V, Exterior Wall Mounted GFIC
HVAC Unit:	5 Ton, 60,000btu, Wall mounted units with 5kW Heat strip
HVAC Grille:	Wall mounted adjustable supply grilles
HVAC Grille:	Wall mounted adjustable return grilles
Alarm Box:	12" x 10" x 6" Deep hinge cover box with back plate Power Fail Alarm; HVAC Fail Alarms; High Temp Alarm; Low Temp Alarm; Smoke Alarm
	Fluorescent light fixtures with acrylic lens cover ncandescent Exterior light fixture mounted on back box, photo-cell/motion sensor control
Emergency:	Exit fixture w/illuminated sign
70 LF Cable Ladder:	12" Wide
Fire Extinguisher:	5 lb. CO2 Wall Mounted



### Oldcastle Infrastructure Provided Turnkey Deployment of (3) Three Shelters.

One is a 12' x 28' DAS Equipment shelter. The 12' x 28' RCS Design shelter was engineered and manufactured by Oldcastle Infrastructure for seismic zone: 50% G. The outside dimension is 28' Long x 11'8" Wide x 10'4" High and the finished inside dimension is 27' Long x 10'8" Wide x 9" high.

The other two are 12' x 20' DAS Equipment shelters. The 12' x 20' RCS Design shelters were engineered and manufactured by Oldcastle Infrastructure for seismic zone: 50% G. The outside dimension is 20'0" Long x 11'6" Wide x 10'4" High and the finished inside dimension is 19'0" Long x 10'6" Wide x 9'0" high. The project included total outfitting of the shelter from installation of all electrical, environmental systems, alarms, lighting and on-site delivery and site construction, in addition to on-site architectural enhancements.



# PHOENIX INTERNATIONAL SPEEDWAY

## Phoenix, AZ

### SCOPE OF WORK Precast Structure

- A. Structural Engineering: Detailed engineering: Detailed drawings
- B. Oldcastle Model RCS2442DW Two Piece Precast Reinforced Concrete Building
- C. Design and Permitting
- D. Project Management / Site Supervision: Manage the design, budget, schedule and quality on the shelter project
- E. On-Site Supervision: Manage field activities, coordination of Oldcastle provided trades and quality assurance of Oldcastle provided trades.
- F. Testing: Field Testing of Oldcastle provided Services. Oldcastle start-up and function tested the shelter electrical and HVAC
- G. Building Foundation: 2' wide strip footing, up to 1' above grade and as required below grade for frost. Includes necessary back fill. 174-LF
- H. Stoop(s): 5' x 8' Concrete Pad (Precast or Poured In Place) 2/EA
- I. Compound Stone: 4" of stone cover within 5' perimeter of building 10-CuYd
- J. Fabric: Landscape fabric/weed barrier under compound stone 800-SF
- K. Pipe Bollards: 8" Dia. Sch 40 Steel Pipe Bollard Filled With Concrete, Bollards placed ~ 2' into the ground encased in concrete and painted - 9/EA

Exterior Architectural Enhancements (Installation of Rubber Roof Membrane)  
 Electrical (exterior): Exterior Ground Halo: Perimeter loop (~ 200-LF) with #2 Thinned Copper Wire / (~ 6) 10' Copper Cladded Rods / (1) Inspection port / (~ 10) Grounding Tails From Exterior Ground Loop To Building and Related Building Equipment.  
 Includes conduit to interior ground bar.

Oldcastle Infrastructure provided turnkey deployment of a 42' x 24' DAS Equipment shelter. The 42' x 24', two piece, DAS Equipment shelter was engineered and manufactured by Oldcastle Infrastructure for seismic zone: 50% G. The outside dimension is 42'0" Long x 23'8" Wide x 11'2" High and the finished inside dimension is 41'0" Long x 22'10" Wide x 9'0" High.

The turnkey project included total outfitting of the DAS Equipment shelter from installation of all electrical, environmental systems, alarms, lighting, on-site delivery and site construction, zoning, permitting and foundations, in addition to on-site architectural enhancements.



## 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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