SECTION 11 13 00

LOADING DOCK EQUIPMENT

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* McGuire: Loading Dock Levelers, vehicle restraints, dock seals and shelters.
This section is based on the products of McGuire, which is located at:
W194 N11481 McCormick Drive
Germantown, WI 53022
Toll Free: 800-624-8473
Phone: 262-257-7309
Fax: 262-255-4199
Email: info@wbmcguire.com
Web: www.wbmcguire.com
[Click Here] for additional information.
McGuire, a division of Systems LLC, has been a leading manufacturer of hydraulic and mechanical dock levelers for over 50 years. McGuire also provides complete loading dock solutions, including vertical storing levelers, truck restraints, dock levelers, bascule bridges, dock seals and shelters, dock lights, overhead door operators, communication packages, control panels, safety barriers, and maintenance/service packages. McGuire loading dock equipment also utilizes IoT technology to connect to the cloud with iDock, a complete package of advanced dock controls and web-based software to monitor dock activity and analytics online.
McGuire currently manufactures and ships standard hydraulic and mechanical pit style dock levelers and edge of docks from Malvern, AR, vehicle restraints and specialty products from Germantown, WI, and all seals and shelters from Upper Sandusky, OH. McGuire's distribution/service network is the largest in the industry.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Loading Dock Levelers:
			1. Hydraulic. (H Series) (HP Series)
			2. Air-Powered. (CA Series) (MA Series)
			3. Mechanical. (MP Series)
			4. Specialty. (VSH Series) (RRH Series) (Portable Yard Ramp)
		2. Edge of Dock Levelers:
			1. Hydraulic. (HED Series)
			2. Mechanical. (MEDLF Series)
		3. Loading dock communication and controls (iDock)
		4. Vehicle restraints. (TPR UniLock) (TPR Restraint) (StopTite Automatic) (StopTite Manual) (UniChock)
		5. Dock seals. (TS101 Fixed head) (TS500 Adjustable) (TS103 Head Curtain)
		6. Dock shelters. (TC400 Rigid wood frame) (TC300 Flexible steel frame) (TC900 Soft sided) (TC1000 Weather sentry)
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
		2. Section 05 50 00 - Metal Fabrications.
		3. Division 16 - Electrical; electrical connections to dock equipment.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. Underwriters Laboratories (UL):
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data:
			1. Manufacturer's data sheets on each product to be used.
			2. Preparation instructions and recommendations.
			3. Storage and handling requirements and recommendations.
			4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern and color.
		2. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
		2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
		3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
			1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
			2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
			3. Retain mock-up during construction as a standard for comparison with completed work.
			4. Do not alter or remove mock-up until work is completed or removal is authorized.
	1. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
		2. Protect from damage due to weather, excessive temperature, and construction operations.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: McGuire, which is located at: W194 N11481 McCormick Drive; Germantown, WI 53022; ASD Toll Free: 800-624-8473; Phone: 262-257-7309; Fax: 262-255-4199; Email: info@wbmcguire.com; Web: www.wbmcguire.com.

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. HYDRAULIC LOADING DOCK LEVELERS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design option not required.

* + 1. Basis of Design: Autodok H Series Hydraulic Leveler as manufactured by McGuire. For heavy duty applications. Structural steel deck support to handle more challenging dock operations.
			1. Features:
				1. Structural steel "C" channel and "I" beam deck support.

Four-sided box construction.

* + - * 1. Hydraulic Velocity Fuse Fail Safe: Stops platform in 1 to 3 inches (25 to 76 mm) in free fall situation.
				2. Operation: Push button; smooth, and consistent.
				3. Full float all positions.
				4. Powered lip extension and retraction with true regenerative hydraulic control.
				5. Aircraft grade hydraulic fluid.
				6. Below dock end-loading capability.
				7. Full width rear hinge mounted in compression with structural channel support.
				8. Rear frame vertical uprights supported by structural C channels.
				9. Full width Piano style hinge tubes on front header for maximum strength.
				10. Subframe allows for easy pit clean out.
				11. Integral Maintenance Inspection Strut: Lockout/tagout compliant.
				12. Laminated dock bumpers.
				13. Full Range Telescoping Toe Guards: Close off sides even in highest position.
				14. Controls come standard with dock door interlock.
				15. Lip keepers for cross traffic support and automatic night lock security against theft.
			1. Lip: 16 inch (406 mm); standard.
			2. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 45000 lbs (20411 kg) CIR.
				4. Capacity: 55000 lbs (24947 kg) CIR.
				5. Capacity: 75000 lbs (34019 kg) CIR.
				6. Capacity: 100000 lbs (45359 kg) CIR.
				7. Width: 6 ft (1829 mm).
				8. Width: 6.5 ft (1981 mm).
				9. Width: 7 ft (2134 mm).
				10. Length: 6 ft (1829 mm).
				11. Length: 8 ft (2438 mm).
				12. Length: 10 ft (3048 mm).
				13. Length: 12 ft (3658 mm).
				14. Extended Lip: 18 inches (457 mm).
				15. Extended Lip: 20 inches (508 mm).
				16. Weather Seal: Brush.
				17. Weather Seal: Rubber.
				18. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 6 piece curb steel.
				19. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 4 piece curb steel with 2 bumper mounting brackets.
				20. Pit Steel: 3 sided box.
				21. Pit Steel: 4 sided box - leveler pre installed.
				22. Dock Bumpers: B410-14 Laminated; standard.
				23. Dock Bumpers: B410-14 Steel face.
				24. Dock Bumpers: B610-14 Laminated.
				25. Dock Bumpers: B610-14 Steel face.
				26. Dock Bumpers: VB420-11 Laminated.
				27. Dock Bumpers: VB420-11 Steel face.
				28. Dock Bumpers: VB620-11 Laminated.
				29. Dock Bumpers: VB620-11 Steel face.
				30. Foam insulated deck.
				31. Integrated control panel.
				32. Auto return to dock.
				33. Emergency Stop: Mushroom button.
				34. Independent lip control
				35. Safety Barrier Lip: 5 inches (127 mm) high.
				36. Connect online to myQ Dock Management.
			1. Operation:
				1. Press and Hold Raise Button on Dock Controls:

Raises leveler and automatically extends lip

* + - * 1. Releasing Raise Button:

Permits leveler to float down to trailer bed.

* + - * 1. Operating Range: Plus or minus 12 inches (305 mm) from dock level.
				2. Platform compensates for canted truck beds up to 4 inches (102 mm) and remains flush with dock floor.
				3. Platform and lip move up and down under constant hydraulic pressure.
			1. Hydraulics and Electrical:
				1. Platform: Raised by hydraulic cylinder.
				2. Lip: Controlled by hydraulic cylinder.
				3. Hydraulic Pump: Manifold and translucent reservoir.

Route hoses under platform away from debris.

\*\* NOTE TO SPECIFIER \*\* Delete motor option not required.

* + - * 1. Motor: 1.25 HP TENV at 120 V or 208 V single phase,
				2. Motor: 1.25 HP TENV at 208V, 230 V, or 460 V three phase.
				3. UL Listed or recognized: Control components, connections and wiring recognized.
				4. Control Panels: Manufactured in McGuire's UL-approved control panel shop.
		1. Basis of Design: HP Series Hydraulic Leveler as manufactured by McGuire. Designed with dependability and toughness in mind for medium to light duty applications.
			1. Features:
				1. Structural Steel frame. Four-sided box construction.
				2. Hydraulic Velocity Fuse Fail Safe: Stops platform in 1 to 3 inches (25 to 76 mm) in free fall situation.
				3. Operation: Push button; smooth, and consistent.
				4. Powered lip extension and retraction with true regenerative hydraulic control.
				5. Below dock end-loading capability.
				6. Full width rear hinge mounted in compression with structural channel support
				7. Rear frame vertical uprights supported by structural C channels.
				8. Full width Piano style hinge tubes on front header for maximum strength.
				9. Subframe design allows for easy pit clean out.
				10. Integral Maintenance Inspection Strut: Lockout/tagout compliant.
				11. Laminated Dock Bumpers (TxHxW): Two, 4 x 12 x 13 inches (100 x 305 x 330 mm).
				12. Full range telescoping toe guards close off sides even in highest position.
				13. Controls come standard with dock door interlock.
				14. Lip keepers for cross traffic support and automatic night lock security against theft.
			2. Lip: 16 inch (406 mm); standard.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 25000 lbs (11339 kg) CIR.
				4. Capacity: 30000 lbs (13607 kg) CIR.
				5. Capacity: 35000 lbs (15875 kg) CIR.
				6. Capacity: 40000 lbs (18143 kg) CIR.
				7. Width: 6 ft (1829 mm).
				8. Width: 6.5 ft (1981 mm).
				9. Width: 7 ft (2134 mm).
				10. Length: 6 ft (1829 mm).
				11. Length: 8 ft (2438 mm).
				12. Length: 10 ft (3048 mm).
				13. Length: 12 ft (3658 mm).
				14. Extended Lip: 18 inches (457 mm).
				15. Extended Lip: 20 inches (508 mm).
				16. Weather Seal: Brush.
				17. Weather Seal: Rubber.
				18. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 6 piece curb steel.
				19. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 4 piece curb steel with 2 bumper mounting brackets.
				20. Pit Steel: 3 sided box.
				21. Pit Steel: 4 sided box - leveler pre installed.
				22. Dock Bumpers: B410-14 Laminated; standard.
				23. Dock Bumpers: B410-14 Steel face.
				24. Dock Bumpers: B610-14 Laminated.
				25. Dock Bumpers: B610-14 Steel face.
				26. Dock Bumpers: VB420-11 Laminated.
				27. Dock Bumpers: VB420-11 Steel face.
				28. Dock Bumpers: VB620-11 Laminated.
				29. Dock Bumpers: VB620-11 Steel face.
				30. Foam insulated deck.
				31. Integrated control panel.
				32. Auto return to dock.
				33. Emergency Stop: Mushroom button.
				34. Independent lip control
				35. Safety Barrier Lip: 5 inches (127 mm) high.
				36. 3 Wheel Forklift Truck Protection.
				37. Connect online to myQ Dock Management.
			1. Operation:
				1. Press and Hold Raise Button on Dock Controls:

Raises leveler and automatically extends lip

* + - * 1. Releasing Raise Button:

Permits leveler to float down to trailer bed.

* + - * 1. Operating Range: Plus or minus 12 inches (305 mm) from dock level.
				2. Platform compensates for canted truck beds up to 4 inches (102 mm) and remains flush with dock floor.
				3. Platform and lip move up and down under constant hydraulic pressure.
			1. Hydraulics and Electrical:
				1. Platform: Raised by hydraulic cylinder.
				2. Lip: Controlled by hydraulic cylinder.
				3. Hydraulic Pump: Manifold and translucent reservoir.

Route hoses under platform away from debris.

\*\* NOTE TO SPECIFIER \*\* Delete motor option not required.

* + - * 1. Motor: 1.25 HP TENV at 120 V or 208 V single phase,
				2. Motor: 1.25 HP TENV at 208V, 230 V, or 460 V three phase.
				3. UL Listed or recognized: Control components, connections and wiring recognized.
				4. Control Panels: Manufactured in McGuire's UL-approved control panel shop.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. AIR POWERED LOADING DOCK LEVELERS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design option not required.

* + 1. Basis of Design: CentraAir (CA) Air-Powered Leveler as manufactured by McGuire. Utilizes compressed air with steel-belted rubber bellows systems to raise deck. When used with pneumatic controls, leveler can be fully powered without electricity at each unit.
			1. Features:
				1. Structural Steel frame. Four-sided box construction.
				2. Operation: Push button controls.
				3. Full width rear hinge mounted in compression with structural channel support.
				4. Rear frame vertical uprights supported by structural C channels.
				5. Full width Piano style hinge tubes on front header for maximum strength.
				6. Lip Extension: Automatic with yieldable lip.
				7. Below dock end-loading capability.
				8. Integral Maintenance Inspection Strut: Lockout/tagout compliant.
				9. Full Range Telescoping Toe Guards: Close off sides even in highest position.
				10. Lip keepers for cross traffic support and automatic night lock security against theft.
				11. Reduced electrical footprint.
				12. Supply Air: In-plant system or dedicated compressor.
				13. Proven industrial air bellows technology.
				14. Low maintenance: Few moving parts.
				15. Air lubricator for cold weather operation.
				16. Dual pivoting cross traffic legs for multi position safety at stop.
			2. Lip: 16 inch (406 mm); standard.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 25000 lbs (11339 kg) CIR.
				4. Capacity: 30000 lbs (13607 kg) CIR.
				5. Capacity: 35000 lbs (15875 kg) CIR.
				6. Capacity: 40000 lbs (18143 kg) CIR.
				7. Capacity: 45000 lbs (20411 kg) CIR.
				8. Capacity: 55000 lbs (24947 kg) CIR.
				9. Width: 6 ft (1829 mm).
				10. Width: 6.5 ft (1981 mm).
				11. Width: 7 ft (2134 mm).
				12. Length: 6 ft (1829 mm).
				13. Length: 8 ft (2438 mm).
				14. Length: 10 ft (3048 mm).
				15. Extended Lip: 18 inches (457 mm).
				16. Extended Lip: 20 inches (508 mm).
				17. Weather Seal: Brush.
				18. Weather Seal: Rubber.
				19. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 6 piece curb steel.
				20. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 4 piece curb steel with 2 bumper mounting brackets.
				21. Pit Steel: 3 sided box.
				22. Pit Steel: 4 sided box - leveler pre installed.
				23. Dock Bumpers: B410-14 Laminated; standard.
				24. Dock Bumpers: B410-14 Steel face.
				25. Dock Bumpers: B610-14 Laminated.
				26. Dock Bumpers: B610-14 Steel face.
				27. Dock Bumpers: VB420-11 Laminated.
				28. Dock Bumpers: VB420-11 Steel face.
				29. Dock Bumpers: VB620-11 Laminated.
				30. Dock Bumpers: VB620-11 Steel face.
				31. Integrated control panel.
				32. Safety Barrier Lip: 5 inches (127 mm) high.
				33. Push Button Control: Pneumatic.

Requires no electricity. Wash down or explosion proof applications.

* + - * 1. Push Button Control: Electrical.

Utilizes 115 V circuit. 0.073 amp solenoid activates system.

* + - * 1. Dedicated air compressor.
				2. Foam Insulated Deck
				3. Extended Reach Air Wand for Housekeeping
				4. Connect online to myQ Dock Management.
			1. Operation: Existing plant compressed air or a dedicated compressor regulated at approximately 90 psi (625 .5 kPa).
				1. Press and Hold Raise Button on Dock Controls:

Raises leveler and automatically extends lip

* + - * 1. Releasing Raise Button:

Permits leveler to float down to trailer bed.

* + - * 1. Operating Range: Plus or minus 12 inches (305 mm) from dock level.
			1. Platform compensates for canted truck beds up to 4 inches (102 mm).
		1. Basis of Design: MA Series Air-Powered Leveler as manufactured by McGuire. Uses an air bag with mounted blower to raise the deck.
			1. Features
				1. Structural Steel frame. Four-sided box construction.
				2. Push button operation for smooth, consistent operation.
				3. Full width rear hinge mounted in compression with structural channel support.
				4. Rear frame vertical uprights supported by structural C channels.
				5. Full width Piano style hinge tubes on front header for maximum strength.
				6. Lip Extension: Automatic with yieldable lip.
				7. Below dock end load capability.
				8. Integral Maintenance Inspection Strut: Lockout/tagout compliant.

Lip support strut that also allows servicing of the lip.

* + - * 1. Full Range Telescoping Toe Guards: Close off sides even in highest position.
				2. Lip keepers for cross traffic support and automatic night lock security against theft.
				3. Dual pivoting cross traffic legs for multi position safety at dock level and below in event of early departure.
				4. Air powered system providing full float at all positions.
				5. Single phase 115 V motor. One button control.
			1. Lip: 16 inch (406 mm); standard.
			2. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 25000 lbs (11339 kg) CIR.
				4. Capacity: 30000 lbs (13607 kg) CIR.
				5. Capacity: 35000 lbs (15875 kg) CIR.
				6. Capacity: 40000 lbs (18143 kg) CIR.
				7. Capacity: 45000 lbs (20411 kg) CIR.
				8. Capacity: 55000 lbs (24947 kg) CIR.
				9. Width: 6 ft (1829 mm)
				10. Width: 6.5 ft (1981 mm)
				11. Width: 7 ft (2134 mm)
				12. Length: 6 ft (1829 mm)
				13. Length: 8 ft (2438 mm)
				14. Length: 10 ft (3048 mm)
				15. Extended Lip: 18 inches (457 mm).
				16. Extended Lip: 20 inches (508 mm).
				17. Weather Seal: Brush.
				18. Weather Seal: Rubber.
				19. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 6 piece curb steel.
				20. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 4 piece curb steel with 2 bumper mounting brackets.
				21. Pit Steel: 3 sided box.
				22. Pit Steel: 4 sided box - leveler pre installed.
				23. Foam insulated deck.
				24. Dock Bumpers: B410-14 Laminated; standard.
				25. Dock Bumpers: B410-14 Steel face.
				26. Dock Bumpers: B610-14 Laminated.
				27. Dock Bumpers: B610-14 Steel face.
				28. Dock Bumpers: VB420-11 Laminated.
				29. Dock Bumpers: VB420-11 Steel face.
				30. Dock Bumpers: VB620-11 Laminated.
				31. Dock Bumpers: VB620-11 Steel face.
				32. Laminated dock bumpers.
				33. Integrated control panel.
				34. Safety Barrier Lip: 5 inches (127 mm) high.
				35. 3 Wheel Forklift Truck Protection.
				36. Connect online to myQ Dock Management.
			1. Operation: Air bag lifting mechanism with push-button activation.
				1. Press and Hold Raise Button on Dock Controls:

Blower fills air bladder, lifts leveler and automatically extends lip.

* + - * 1. Releasing Raise Button:

Permits leveler to float down to trailer bed.

* + - * 1. Operating Range: Plus or minus 12 inches (305 mm) from dock level.
			1. Platform compensates for canted truck beds up to 4 inches (102 mm) and remain flush with dock floor.
			2. Platform is allowed to automatically float up and down with trailer movement.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. MECHANICAL LOADING DOCK LEVELERS
		1. Basis of Design: MP Series Mechanical Leveler as manufactured by McGuire. Pull-chain activation. Smooth reliable operation via a cam and roller counterbalance assure smooth dependable walk down to trailer bed with below dock capability.
			1. Features
				1. Structural Steel frame. Four-sided box construction.
				2. Pull-chain activation with fingertip release.
				3. Full width rear hinge mounted in compression with structural channel support.
				4. Rear frame vertical uprights supported by structural C channels.
				5. Full width Piano style hinge tubes on front header for maximum strength.
				6. Lip Extension: Automatic with yieldable lip.
				7. Below dock end load capability
				8. Integral Maintenance Inspection Strut: Lockout/tagout compliant.

Lip support strut that also allows servicing of the lip.

* + - * 1. Working Range Toe Guards: Close off sides in service range position.
				2. Lip keepers for cross traffic support and automatic night lock security against theft.
				3. Dual pivoting cross traffic legs for multi position safety at dock level and below in the event of early departure.
				4. Multi Spring Counterbalance with One Adjustment Point.
				5. Complete Range Auto-Releasing Hold Down.
				6. Simple operation with cam and roller counterbalance system that assures smooth dependable walk down
				7. Hold-Down Assembly: Provides full float and automatic release capability with air ride trailers
			1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 25000 lbs (11339 kg) CIR.
				4. Capacity: 30000 lbs (13607 kg) CIR.
				5. Capacity: 35000 lbs (15875 kg) CIR.
				6. Capacity: 40000 lbs (18143 kg) CIR.
				7. Capacity: 45000 lbs (20411 kg) CIR.
				8. Capacity: 55000 lbs (24947 kg) CIR.
				9. Width: 6 ft (1829 mm).
				10. Width: 6.5 ft (1981 mm).
				11. Width: 7 ft (2134 mm).
				12. Length: 6 ft (1829 mm).
				13. Length: 8 ft (2438 mm).
				14. Length: 10 ft (3048 mm).
				15. Extended Lip: 18 inches (457 mm).
				16. Extended Lip: 20 inches (508 mm).
				17. Weather Seal: Brush.
				18. Weather Seal: Rubber.
				19. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 6 piece curb steel.
				20. Pit Steel: 3 x 3 x 1/4 inch (76 x 76 x 6 mm) 4 piece curb steel with 2 bumper mounting brackets.
				21. Pit Steel: 3 sided box.
				22. Pit Steel: 4 sided box - leveler pre installed.
				23. Foam insulated deck.
				24. Dock Bumpers: B410-14 Laminated; standard.
				25. Dock Bumpers: B410-14 Steel face.
				26. Dock Bumpers: B610-14 Laminated.
				27. Dock Bumpers: B610-14 Steel face.
				28. Dock Bumpers: VB420-11 Laminated.
				29. Dock Bumpers: VB420-11 Steel face.
				30. Dock Bumpers: VB620-11 Laminated.
				31. Dock Bumpers: VB620-11 Steel face.
				32. Laminated dock bumpers.
				33. Full Range Toe Guards
				34. 3 Wheel Forklift Truck Protection.
				35. Connect online to myQ Dock Management.
			1. Operation: Manually operated leveler.
				1. Pull Release Chain at Rear of Platform:

A multi-spring counterbalance assembly raises leveler.

A fully yieldable hinged lip automatically extends at top of upward travel.

Walk platform down onto trailer bed.

If trailer bed is below dock level activate a second pull chain at front of platform during walk down.

* + - * 1. Operating Range: Plus or minus 12 inches from dock level.
				2. Platform compensates for canted truck beds up to 4 inch (102 mm) and remain flush with dock floor.
				3. A full float hold down provides platform float for vertical trailer movement.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. SPECIALTY LOADING DOCK LEVELERS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design options not required.

* + 1. Basis of design: VSH Vertical Storing Leveler as manufactured by McGuire.
			1. Features:
				1. Structural steel "C" channel and "I" beam deck support.

Four-sided box construction.

* + - * 1. Operation: Constant pressure push button; smooth, and consistent.
				2. Full float all positions.
				3. Control Panel: Power-up and power-down control. Constant pressure push buttons for safety.
				4. Below dock end load capability
				5. Mechanical Locking Mechanism: With push button release for added safety
				6. Safety Run-Off Guards: 3 inch (76 mm) high on platform
				7. Rear embedded channel with factory installed hinges for ease of installation.
				8. Stores in upright position completely inside exterior door

Safely stored blue indicator light

* + - * 1. Easily accessible to under-deck for cleaning

Ideal for sanitation, security and safety

* + - * 1. Dock Service Range: 10 inches (254 mm) above, 8 inches (203 mm) below.
				2. Infinite lip control.
				3. Stored with slight tilt away from dock attendants
				4. Aircraft grade hydraulic fluid.
				5. Painted McGuire Blue.
			1. Hydraulics and Electrical
				1. Platform is raised by hydraulic cylinder. Route hydraulic hoses under leveler platform, away from debris.
				2. Hoist Cylinder: Hard chrome-plated design. 3-1/2 inch (89 mm) ID bore. Anti-corrosive rode coating.

\*\* NOTE TO SPECIFIER \*\* Remote mounting of motor and pump for easier access is available. Contact manufacturer for more details.

* + - * 1. Motor and Pump Mounting: Deck mounted; standard.

\*\* NOTE TO SPECIFIER \*\* Delete motor option not required.

* + - * 1. Motor: 1.5 HP TENV. 120 V or 208 V, single phase.
				2. Motor: 1.5 HP TENV. 208 V, 230 V or 460 V three phase.
				3. Electrical Components, Connections and Wiring: UL listed or recognized.
			1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 40000 lbs (18143 kg) CIR.
				4. Capacity: 50000 lbs (22680 kg) CIR.
				5. Capacity: 60000 lbs (27215 kg) CIR.
				6. Width: 6 ft (1829 mm).
				7. Width: 6.5 ft (1981 mm).
				8. Width: 7 ft (2134 mm).
				9. Length: 5 ft (1524 mm).
				10. Length: 6 ft (1829 mm).
				11. Length: 8 ft (2438 mm).
				12. Hoist cylinder embed plate.
				13. Extended Lip: 18 inches (457 mm).
				14. Extended Lip: 20 inches (508 mm).
				15. Ramp Type; Stationary.

Ramp Width: 6 ft (1829 mm).

Ramp Width: 6.5 ft (1981 mm).

Ramp Width: 7 ft (2134 mm).

Ramp Width: 7.5 ft (2286 mm).

Ramp Width: 8 ft (2438 mm).

Ramp Width: 8.5 ft (2438 mm).

Ramp Length: Application decided.

* + - * 1. Ramp Type: Mobile/Portable Steel:

Overall Width: 70 inches (1778 mm).

Overall Width: 84 inches (2134 mm).

Overall Width: 96 inches (2438 mm).

* + - * 1. Level Off Section: 6 ft (1829 mm).
				2. Under leveler curtain with wedge pads.
				3. Control panel stanchions.
				4. Steel Face Dock Bumpers.
				5. Connect online to myQ Dock Management.
		1. Basis of Design: RRH Hydraulic Rail Car Ramp as manufactured by McGuire.
			1. Features:
				1. Structural steel "C" channel and "I" beam deck support.

Four-sided box construction.

* + - * 1. Operation: Constant pressure push button; smooth, and consistent.
				2. Full float all positions.
				3. Control Panel: Power-up and power-down control. Constant pressure push buttons for safety.
				4. Dual maintenance struts for added safety.
				5. Yellow Safety Run-off Guards: 5 inch (127 mm) with telescoping arms for end-loads to help prevent forklifts from driving over edge.
				6. Rear embedded channel with factory installed hinges for ease of installation.
				7. Hoist Cylinder Flow Control Valve: Meters descent of ramp.
				8. Transformer: For single incoming power feed.
				9. Roller Trolley Assembly: For Lateral Movement.
				10. Dual Maintenance Prop.
				11. Built-in dual maintenance struts.
			1. Construction:
				1. Platform: 1/4 inch (6 mm) thick 4-way high tensile 50,000 minimum yield A572 safety tread plate.

Reinforced and supported by full length structural C channels and wide flanged I beams, with a standard lip length of 20 inches (508 mm).

Front and Rear Header Plates: 1/2 inch (13 mm) thick, hot rolled steel.

Hinge Tubes: 1-7/8 inch (47.62) OD x 3/8 inch (9.5) wall or 2-1/8 inch (54 mm) OD x 1/2 inch (13 mm) wall depending on the CIR.

Lip hinge pins: 1 inch (25 mm) diameter M1044 steel.

* + - 1. Hydraulics and Electrical:
				1. Platform is raised by hydraulic cylinder.

Route hydraulic hoses under leveler platform, away from debris.

* + - * 1. Hoist Cylinder: Hard chrome-plated design. 3-1/2 inch (89 mm) ID bore. Anti-corrosive rode coating.

Equipped with a flow control valve to meter descent of the ramp.

* + - * 1. Lip Operation: Controlled by chrome plated cylinder; 2-1/2 inch (64 mm) ID bore.

\*\* NOTE TO SPECIFIER \*\* Delete motor and pump mounting option not required.

* + - * 1. Motor and Pump Mounting: Carriage mount.
				2. Motor and Pump Mounting: Remote for easier access.

\*\* NOTE TO SPECIFIER \*\* Delete motor option not required.

* + - * 1. Motor: 1.5 HP TENV. 120 V or 208 V, single phase.
				2. Motor: 1.5 HP TENV. 208 V, 230 V or 460 V three phase.
				3. Electrical Components, Connections and Wiring: UL listed or recognized.
			1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 40000 lbs (18143 kg) CIR.
				4. Capacity: 50000 lbs (22679 kg) CIR.
				5. Capacity: 60000 lbs (27215 kg) CIR.
				6. Width: 6 ft (1829 mm).
				7. Width: 6.5 ft (1981 mm).
				8. Width: 7 ft (2134 mm).
				9. Width: 7.5 ft (2286 mm).
				10. Width: 8 ft (2438 mm).
				11. Width: 8.5 ft (2591 mm).
				12. Integrated control panel.
				13. Interlock capabilities.
				14. Power Lateral Movement: 24 inch (610 mm) total travel.
				15. Remote pendant controls on coil cord.
				16. Additional track.
				17. Connect online to myQ Dock Management.
		1. Basis of Design: Portable Steel Yard Ramp as manufactured by McGuire.
			1. Features:
				1. Tow Clamp: Connects ramp pocket and tow hitch of fork truck permitting easy transportation of lift.
				2. Transition at Grade: 60 inch (1524 mm). High strength diamond tread plate beveled and recessed for smooth transition onto and off the ramp.
				3. Transition at Dock Height: 30 inch (762 mm). High strength diamond tread plate beveled and recessed for smooth transition onto and off the ramp.
				4. Fork Clamp: For positioning of ramp over short distances. Inserts into ramp pocket and clamps onto fork blade.
				5. Yellow Run-Off Guards: High visibility 8 inch (203 mm).
				6. Hydraulic Adjustment System: Fast adjustment to match trailer bed height.

Raised Height of 30 ft (9144 mm) Unit: 80 inches (2032 mm) maximum.

Raised Height of 36 ft (1829 mm) Unit: 70 inches (1778 mm) maximum.

* + - * 1. Serrated Bar Grating: Prevents buildup of debris, rain, snow, oil and grease and maximizes traction.

\*\* NOTE TO SPECIFIER \*\* Axle can be removed or raised for permanent dock ramp installations.

* + - * 1. Heavy duty axle assembly: 18 inch (457 mm) industrial solid rubber tires.
				2. Lip section: 15 inch (381 mm) provides smooth transition with the carrier bed.
				3. Safety Chains: Holds ramp tight to carrier and assure adequate lip purchase is maintained with the carrier bed.
				4. Structure: Heavy duty formed steel side girders fully welded to high strength steel joists.
			1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Stationary steel ramp.
				2. Capacity: 16,000 lbs (7257 kg).
				3. Capacity: 20,000 lbs (9071 kg).
				4. Capacity: 25,000 lbs (11339 kg).
				5. Capacity: 30,000 lbs (13607 kg).
				6. Overall Width: 70 inch (1778 mm).

Inside Width: 64 inch (1626 mm).

Length: 30 ft (9144 mm).

Length: 36 ft (1829 mm). Level-Off Section: 72 inch (1829 mm).

Lip Section: 15 inch (381 mm).

* + - * 1. Overall Width: 84 inch (2134 mm).

Inside Width: 78 inch (1981 mm).

Length: 30 ft (9144 mm).

Length: 36 ft (1829 mm). Level-Off Section: 72 inch (1829 mm).

Lip Section: 15 inch (381 mm).

* + - * 1. Overall Width: 96 inch (2438 mm) .

Inside width: 90 inch (2286 mm).

Length: 30 ft (9144 mm).

Length: 36 ft (1829 mm). Level-Off Section: 72 inch (1829 mm).

Lip Section: 15 inch (381 mm).

* + - * 1. Connect online to myQ Dock Management.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. HYDRAULIC EDGE OF DOCK LEVELERS
		1. Basis of Design: HED Hydraulic EOD Leveler as manufactured by McGuire. Hydraulically operated, bridging the gap between building and truck where a minimal variance exists between dock and truck.
			1. Recommended Working Range: Plus or minus 3 inches (76 mm)
			2. Operating Range: Plus or minus 5 inches (127 mm) above and below dock level.
			3. Single Pushbutton Control: Standard Nema 4 enclosure. Activation of deck and lip.
			4. Motor/Pump Mounts: Readily accessible area on a shelf under unit.
			5. Operation: Two cylinder design with deck and lip cylinders.
				1. Automatic and hydraulic restore functions.
				2. Once Trailer Pulls Away: Leveler automatically stores.
				3. If Trailer Stays at Dock: Leveler can be stored hydraulically without need to move trailer.
			6. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 20,000 lbs (9071) CIR.
				4. Capacity: 25,000 lbs (11339) CIR.
				5. Capacity: 30,000 lbs (13607) CIR.
				6. Capacity: 35,000 lbs (15875) CIR.
				7. Operable Widths: 66 inch (1676 mm).
				8. Operable Widths: 72 inch (1929 mm).
				9. Operable Widths: 78 inch (1981 mm).
				10. Operable Widths: 84 inch (2134 mm).
				11. Refrigerated Trailers Lip: 17 inch (432 mm).
				12. U.S. Post Office Model: 3 inch (76 mm) high runoff guard for mail cart and personnel protection.
				13. Tapered lip; tapered at sides.
				14. Abrasive deck surface over 4 way safety tread plate.
				15. Low profile design; flat center plate, pallet jack applications.
				16. Hinge Pins: Stainless steel.
				17. Cold spray metallized.

\*\* NOTE TO SPECIFIER \*\* Choose type of bumper or bump block and delete what is not required.

* + - * 1. Recessed End-Of-Dock with Laminated Bumpers: 1 pair.
				2. Steel Faced Bumpers: 1 pair.
				3. Bumpers/Blocks: 4 x 12 x 13 inch (102 x 305 x 330 mm) Tuf Cord Bumper. Total Projection: 18 inches (457 mm).
				4. Connect online to myQ Dock Management.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. MECHANICAL EDGE OF DOCK LEVELERS
		1. Basis of Design: MEDLF Mechanical EOD Leveler as manufactured by McGuire. Meant for captive fleet of trucks with similar bed heights. Normally mounted to dock face and placed in a small recessed pit. Alternative to pit style full size dock leveler when pit cannot be utilized or as a retrofit.
			1. Recommended Working Range: Plus or minus 3 inches (76 mm)
			2. Operating Range: Plus or minus 5 inches (127 mm) above and below dock level.
			3. Operation: Two-step process with a "lift free" handle to place unit in trailer.
				1. Pull back on handle to lift.
				2. Push forward to extend unit into trailer.
				3. Eliminates extreme bending, pushing, and lifting.
				4. Lifting Bar Placement puts dock attendant in safest position to operate leveler.
			4. Bumper Block Assemblies:
			5. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Color: Manufacturer's standard slate blue.
				2. Color: As determined by Architect from Manufacturer's range.
				3. Capacity: 20,000 lbs (9071) CIR.
				4. Capacity: 25,000 lbs (11339) CIR.
				5. Capacity: 30,000 lbs (13607) CIR.
				6. Capacity: 35,000 lbs (15875) CIR.
				7. Operable Widths: 66 inch (1676 mm).
				8. Operable Widths: 72 inch (1929 mm).
				9. Operable Widths: 78 inch (1981 mm).
				10. Operable Widths: 84 inch (2134 mm).
				11. Refrigerated Trailers Lip: 17 inch (432 mm).
				12. U.S. Post Office Model: 3 inch (76 mm) high runoff guard for mail cart and personnel protection.
				13. Tapered lip; tapered at sides.
				14. Abrasive deck surface over 4 way safety tread plate.
				15. Low profile design; flat center plate, pallet jack applications.
				16. Hinge Pins: Stainless steel.
				17. Cold spray metallized.
				18. Connect online to myQ Dock Management.

\*\* NOTE TO SPECIFIER \*\* Choose type of bumper or bump block and delete what is not required.

* + - * 1. Recessed End-Of-Dock with Laminated Bumpers: 1 pair.
				2. Steel Faced Bumpers: 1 pair.
				3. Bumpers/Blocks: 4 x 12 x 13 inch (102 x 305 x 330 mm) Tuf Cord Bumper. Total Projection: 15 inches (381 mm).

\*\* \*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. LOADING DOCK COMMUNICATION AND CONTROLS
		1. Basis of Design: iDock Controls as manufactured by McGuire. Technologically advanced push-button controllers and light communication used with various McGuire loading dock equipment. Standard with automatic McGuire vehicle restraints, with or without dock levelers.
			1. Construction: UL 4X Nonmetallic enclosures.
				1. Modular design to reduce maintenance costs.
				2. Light Assembly: 3-in-1. On controller showing state of station and whether it is safe to enter trailer.
				3. LCD Display: Shows status of controls and explains fault conditions.
				4. Metal Dome Buttons: Provide positive feedback to controls.
			2. Messenger Display: LCD interactive message display for equipment information, system information, maintenance history, counters and settings.
				1. Operator presses Menu button, then up and down arrows to navigate menu.
				2. Press Enter to advance one screen, or Menu to go back.
				3. Provide notices of faults, or instructions for Bypass mode or a sequence of operation.
			3. Operation: Used to operate light communication, vehicle restraint, dock leveler, overhead door, and/or light accessories.
				1. Operator presses appropriate dome button to operate each component.
				2. Depending on the options selected, a sequence of operation can be applied to only allow operation of each component in a specific order.
				3. If operation is attempted out of sequence, controller's Message Display will indicate the correct button to press next.
				4. Using Controller Menu: Operator can place dock equipment in Bypass mode if necessary.

Exterior Light: Red.

Interior Light: Green. Accompanied by Amber Caution Light indicating to dock attendant to proceed with caution.

* + - 1. Exterior Lights: Low profile, traffic style, red and green LED lights opposite of interior lights. Standard for communication to truck driver.
				1. A set of caution signs warns truck driver to "Back In or Pull Out On Green Light Only".
			2. Warranty: Full one year base warranty on structural, mechanical and electrical parts, including freight and labor charges in accordance with Systems, LLC's Standard Warranty Policy. Systems, LLC warrants all components to be free of defects in materials and workmanship, under normal use, during the warranty period. This base warranty period begins upon completion of installation or sixtieth day after shipment, whichever is earlier.

\*\* NOTE TO SPECIFIER \*\* Delete voltage options not required.

* + - 1. Voltage: 115V / 1PH / 60HZ
			2. Voltage: 208V / 1PH / 60HZ
			3. Voltage: 230V / 1PH / 60HZ
			4. Voltage: 208V / 3PH / 60HZ
			5. Voltage: 230V / 3PH / 60HZ
			6. Voltage: 460V / 3PH / 60HZ
			7. Voltage: 575V / 3PH / 60HZ
			8. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Door controls: 3-Button.
				2. Audible alarm.
				3. Disconnect: Rotary fused.
				4. Disconnect: Rotary non-fused.
				5. Dock Light Control: Automatic with door position.
				6. Dock Light Control: Automatic with leveler position.
				7. Dock Light Control: Manual.
				8. Edge light controls.
				9. Emergency stop push button.
				10. Guide light controls.
				11. Independent lip control.
				12. LiftMaster Logic 5.0 Maintenance System Monitoring.
				13. Light Communication System: Automatic with leveler position.
				14. Light Communication System: Automatic with door position.
				15. Light Communication System: Manual.
				16. Sensor: Fluid level.
				17. Sensor: Fork lift.
				18. Sensor: Truck present.
				19. Connect online to myQ Dock Management.

\*\* NOTE TO SPECIFIER \*\* If door limits are present and wired into controller, door must be open for leveler to operate.

* + - * 1. Interlocking:

\*\* NOTE TO SPECIFIER \*\* Select one option and delete all others.

None.

Restraint engaged before leveler operate.

Leveler stored before door closed

Restraint engaged before leveler operate.

Leveler stored before restraint release.

Restraint engaged before door open.

Door closed before restraint release.

Door open before restraint engage.

Restraint engaged before leveler operate.

Leveler stored before restraint release.

Leveler stored before door closed.

Restraint engaged before leveler operate.

Restraint engaged before door open.

Leveler stored before restraint release.

Leveler stored before door closed.

Door closed before restraint release.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. VEHICLE RESTRAINTS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design options not required.

* + 1. Basis of Design: TPR UniLock Vehicle Restraint as manufactured by McGuire.
			1. Upgrade to the TPR Series, with added internal safety mechanism, as well as advanced cam design that rotates hook away from trailer's Rear Impact Guard (RIG) to release "RIG Wedge" pressure.
			2. Features:
				1. Automatically releases RIG Wedge pressure without the trailer reversing.
				2. Locking mechanism to prevent the restraint from disengaging the trailer's RIG when pressure is applied.
				3. Universally effective on an obstructed Rear Impact Guard, including intermodal trailers with cover plates.
				4. Restraining force in excess of 32,000 lbs (14515 kg).
				5. Locking mechanism maintains engagement on the trailer's Rear Impact Guard (RIG).
				6. LED 3-light system for communication between truck driver and dock attendant.
				7. Inside iDock control panel. Interactive Message Display Automatic light sequence.
				8. Low profile 9 inch (229 mm) carriage:

Service Range: 9 to 30 inch (229 to 762 mm) off grade.

* + - * 1. Universally effective on any obstructed RIG, including intermodal trailers with cover plates.
				2. Advanced cam design rotates hook away from Rear Impact Guard to release "RIG Wedge" pressure.
				3. On-demand motor operation preserves energy.
				4. Gear motor keeps hook continuously engaged.
				5. Automatically ensures safe capture or auto-stores.
				6. Universally effective on any obstructed Rear Impact Guard, including intermodal trailers with cover plates.
				7. Locking mechanism to prevent the restraint from disengaging the trailer's RIG when pressure is applied.
				8. Integrated iDock Controls for safe leveler interlock.
				9. Full communication package with signage and interior exterior, red/green LED lights in opposing mode.
			1. Operation:
				1. As truck is backed into position:

Trailer's Rear Impact Guard (RIG) contacts structural steel housing, lowering UniLock in its track and positioning itself for engagement.

Operator presses "Engage" button, activating hook to rotate up and secure the trailer to loading dock.

* + - * 1. Restraint maintains contact with RIG and adjusts automatically with trailer float motion to ensure proper engagement at all times during loading/unloading.
				2. After loading is complete:

Operator presses "Release" button, rotating hook away from RIG first to remove "RIG wedge" pressure, and then lowering the hook to a safely stored position, releasing the trailer.

* + - * 1. Communication: iDock Controls with LED 3-color light communication system.

As truck approaches:

Exterior Light: Green.

Interior Light: Red.

Once the trailer is restrained:

Interior Light: Green. Dock attendant may safely enter e trailer.

Exterior Light: Red. Warning driver not to pull away from dock.

When trailer is released: Restraint hook is safely stored.

Exterior Light: Green.

Interior Light: Red.

If unable to secure the trailer's RIG due to abnormal trailer conditions:

Restraint will communicate fault condition illuminating amber "caution" light on iDock Controls.

In "By-Pass" mode:

Exterior Light: Red.

Interior Light: Green.

Amber caution light indicating to proceed with caution.

* + - 1. Construction: Durable zinc-plated, steel housing to withstand impact from trailers and protect internal components from weather conditions.
			2. Electrical:
				1. Motor: 1/10 HP TENV 115 V single phase. IP67 rated; submersible in 1 meter of water for 30 minutes.
				2. Control Panel: NEMA 4X. Built in McGuire UL approved control panel shop.
				3. Components, Connections and Wiring: UL listed and/or recognized.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Integrated control panel.
				2. Custom interlock sequence with leveler.
				3. Audible alarm.
				4. Configured back plate for custom hooking range.
				5. Variety of cantilever brackets and installation hardware.
				6. By-Pass Mode: 3-Digit passcode.
				7. Connect online to myQ Dock Management.
		1. Basis of Design: TPR Vehicle Restraint as manufactured by McGuire.
			1. Trailer-positioned vehicle restraint mounted to face of dock and utilizes a motor and gears to rotate a hook and secure the trailer.
			2. Features:
				1. Unit automatically positions itself when impacted by the rear impact guard (RIG).
				2. Locking mechanism maintains engagement on the trailer's RIG
				3. Universally effective on any obstructed RIG, including intermodal trailers with cover plates.
				4. Restraining force in excess of 32,000 lbs (14515 kg).
				5. Advanced cam design rotates hook away from Rear Impact Guard to release "RIG Wedge" pressure.
				6. Motor and gears keep hook continuously engaged with the RIG.
				7. LED 3-light system for communication between truck driver and dock attendant.
				8. Inside iDock control panel. Interactive Message Display Automatic light sequence.
				9. Low profile 9 inch (229 mm) carriage.

Service Range: 9 to 30 inch (229 to 762 mm) off grade.

* + - * 1. On-demand motor operation preserves energy.
				2. Gear motor keeps hook continuously engaged.
				3. Automatically ensures safe capture or auto-stores.
				4. Universally effective on any obstructed Rear Impact Guard, including intermodal trailers with cover plates.
				5. Locking mechanism to prevent the restraint from disengaging the trailer's RIG when pressure is applied.
				6. Integrated iDock Controls for safe leveler interlock.
				7. Full communication package with signage and interior exterior, red/green LED lights in opposing mode.
				8. As truck is backed into position:

Trailer's Rear Impact Guard (RIG) contacts structural steel housing, lowering UniLock in its track and positioning itself for engagement.

Operator presses "Engage" button, activating hook to rotate up and secure the trailer to loading dock.

* + - * 1. Restraint maintains contact with RIG and adjusts automatically with trailer float motion to ensure proper engagement at all times during loading/unloading.
				2. After loading is complete:

Operator presses "Release" button, rotating hook away from RIG first to remove "RIG wedge" pressure, and then lowering the hook to a safely stored position, releasing the trailer.

* + - * 1. Communication: iDock Controls with LED 3-color light communication system.

As truck approaches:

Exterior Light: Green.

Interior Light: Red.

Once the trailer is restrained:

Interior Light: Green. Dock attendant may safely enter e trailer.

Exterior Light: Red. Warning driver not to pull away from dock.

When trailer is released: Restraint hook is safely stored.

Exterior Light: Green.

Interior Light: Red.

If unable to secure the trailer's RIG due to abnormal trailer conditions:

Restraint will communicate fault condition illuminating amber "caution" light on iDock Controls.

In "By-Pass" mode:

Exterior Light: Red.

Interior Light: Green.

Amber caution light indicating to proceed with caution.

* + - 1. Construction: Durable zinc-plated, steel housing to withstand impact from trailers and protect internal components from weather conditions.
			2. Electrical:
				1. Motor: 1/10 HP TENV 115 V single phase, IP67 rated; submersible in 1 meter of water for 30 minutes.
				2. Control Panel: NEMA 4X. Built in McGuire UL approved control panel shop.
				3. Components, Connections and Wiring: UL listed and/or recognized.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Cantilever bracket.
				2. Audible alarm.
				3. Variety of cantilever brackets and installation hardware.
				4. Connect online to myQ Dock Management.
		1. Basis of Design: Stop-Tite Automatic Vehicle Restraint as manufactured by McGuire
			1. Non-impact, hydraulic, exterior mounted to front of loading dock.
			2. Features:
				1. Hydraulic operation to vertically raise the restraint and engage the RIG.
				2. LED 3-light system for advanced communication between the truck driver and dock attendant.
				3. Push Button Activation: 115 V single phase operation.
				4. iDock Controls with interactive message display.
				5. Automatic light sequence
				6. Low profile, non-impact design. Wall or driveway mount.
				7. Remote power pack with translucent reservoir.
				8. Restraining force in excess of 32,000 lbs (14515 kg).
				9. Zinc-plated.
				10. RIG sensor bar. Notifies operator if restraint is not securely engaged to trailer's rear impact guard.
				11. Override passcode.
				12. Protective debris guard.
				13. Automatically ensures safe capture or auto-stores.
				14. Automatic light sequencing with interior/exterior red/green lights always in opposition.
				15. Full communication package with lights, signs and control panel with universal signage pictures for additional communication safety.
			3. Operation:
				1. Once trailer backs into position against dock bumpers:

Operator presses "Engage" button, activating the Stop-Tite to rise vertically to trailer's Rear Impact Guard (RIG), placing a stop behind the RIG and preventing trailer from being able to pull away.

The restraint maintains contact with RIG.

Adjusts automatically with trailer float motion to ensure proper engagement at all times.

* + - * 1. After Loading is Complete:

Operator presses "Release" button, lowering unit to a safely stored position, releasing trailer.

* + - * 1. Communication: iDock Controls with LED 3-color light communication system.

As truck approaches:

Exterior Light: Green.

Interior Light: Red.

Once the trailer is restrained:

Interior Light: Green. Dock attendant may safely enter e trailer.

Exterior Light: Red. Warning driver not to pull away from dock.

When trailer is released: Restraint hook is safely stored.

Exterior Light: Green.

Interior Light: Red.

If unable to secure the trailer's RIG due to abnormal trailer conditions:

Restraint will communicate fault condition illuminating amber "caution" light on iDock Controls.

In "By-Pass" mode:

Exterior Light: Red.

Interior Light: Green.

Amber caution light indicating to proceed with caution.

* + - 1. Construction: Durable zinc-plated, steel housing to withstand impact from trailers and protect internal components from weather conditions.
			2. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Cantilever bracket.
				2. Remote power pack inside pit or inside building.
				3. Cantilever bracket with a requested projection.
				4. Audible alarm.
				5. Connect online to myQ Dock Management.
		1. Basis of Design: Stop-Tite Manual Vehicle Restraint as manufactured by McGuire.
			1. Non-impact, manually operated, exterior mounted to front of loading dock.
			2. Features:
				1. Low profile, non-impact design.
				2. LED light communication available with the MML and MAL.
				3. Manually activated restraint.
				4. Message display.
				5. Low profile, non-impact design. Wall or Driveway mount.
				6. Restraining force in excess of 32,000 lbs (14515 kg).
				7. Zinc-plated.
				8. Rear impact guard sensor bar.
				9. Protective debris guard.
				10. Caution signs for communication on basic M version.
			3. Operation:
				1. Once trailer backs into position against the dock bumper:

Operate bar is used under release lever to lift up, manually activating restraint.

A visual inspection should confirm restraint has moved vertically and engaged horizontal RIG.

The operate bar can be stored and loading/unloading begins.

* + - * 1. When complete and dock leveler is stored:

Operate bar is used to push down restraint arm until release lever locks restraint arm.

The operating bar is stored again.

\*\* NOTE TO SPECIFIER \*\* MML is optional. Delete if required or if using MAL

* + - * 1. Manual with Manual Light Communication (MML):

As Trailer Approaches:

Exterior Light: Green.

Interior Light: Red.

Once Trailer is in Position and Restraint is Engaged:

Operator presses Dock Alert Status.

Exterior light is red, warning driver not to pull away.

Interior light is green, allowing dock attendant to enter trailer.

When loading/unloading is complete and restraint is safely stored.

Operator presses Dock Alert Status

Exterior Light: Green.

Interior Light: Red.

\*\* NOTE TO SPECIFIER \*\* LED interior and exterior lights are optional. Delete if not required.

LED interior and exterior lights.

\*\* NOTE TO SPECIFIER \*\* MAL is optional. Delete if not required or if using MML.

* + - * 1. Operaton Light Communication: Manual and automatic lights.

As Trailer Approaches:

Exterior Light: Green.

Interior Light: Red.

Once the trailer is in position and Restraint is engaged:

Exterior light is red, warning driver not to pull away.

Interior light is green, allowing dock attendant to enter trailer.

When loading/unloading is complete and the restraint is safely stored.

Exterior Light: Green.

Interior Light: Red.

By-pass mode: In event restraint is unable to secure the RIG.

Exterior Light: Red.

Interior Light: Green.

Secure the trailer by other means before proceeding with loading/unloading process.

\*\* NOTE TO SPECIFIER \*\* The next three paragraphs are options for an MAL installation. Delete options not required or delete all three.

Automatic iDock Light Communication System.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. Connect online to myQ Dock Management.
			2. Construction: Durable zinc-plated, steel housing unit to withstand impact from trailers and protect internal components from weather conditions.
		1. Basis of Design: UniChock Wheel-Based Vehicle Restraint as manufactured by McGuire.
			1. Wheel-based trailer restraint with advanced light communication. Standalone unit or integrated with other dock equipment. Helps prevent unexpected trailer departure or movement from loading dock during loading process.
			2. Construction and Electrical:
				1. Material: Durable and lightweight aluminum.

Traction teeth and Storage Bracket: Zinc-plated steel.

* + - * 1. Finish: Powder coat.
				2. Wired Sensors: Installed in restraint unit and storage bracket.
				3. Control Panel: NEMA 4X. Components, connections and wiring to be UL listed and/or recognized. Built in a UL-approved control panel shop.

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - 1. Options:
				1. Integrated control panel.

\*\* NOTE TO SPECIFIER \*\* Must choose one interlock option for leveler stored switch. Interlock options are listed in "Loading Dock Communications and Controls" Article in the �Interlocking� paragraph.

* + - * 1. Interlock with Leveler Stored Switch: \_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Must choose one interlock option for door limit switch. Interlock options are listed in "Loading Dock Communications and Controls" Article in the �Interlocking� paragraph.

* + - * 1. Interlock with Door Limit Switch: \_\_\_\_\_\_\_\_.
				2. 3-Digit passcode for bypass mode.
				3. Connect online to myQ Dock Management.
				4. Bracket extension for alternate storage positions.
			1. Operation: Advanced iDock Controls with LED 3-color light communication system.
				1. As Trailer Approaches:

Exterior light is green and interior light is red.

* + - * 1. Once Trailer is Parked in Position Against the Dock Bumpers:

Yellow UniChock: Removed from storage bracket and placed under front of one of the trailer's back tires.

Chock Placement: Once correctly positioned.

Sounds an audible indicator and displays a message on the iDock Controller that unit is in a safe position.

Exterior light changes to red and interior light to green.

If Chock is Moved to an Unsafe Position During Loading:

Audible alarm sounds. Interior light changes to alternating red and amber until restraint is back in the correct position.

Dock Attendant: Can proceed to open the door and deploy the leveler.

After Loading is Complete:

Dock attendant stores leveler and closes overhead door.

Interior Light changes to amber, exterior light to alternating red and green, and an audible alarm sounds until chock is placed back on the storage bracket.

Chock is Placed on Storage Bracket:

Exterior light changes to green and interior light to red.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DOCK SEALS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design options not required.

* + 1. Basis of Design: TS101 Fixed Head Dock Seal as manufactured by McGuire.
			1. Three-sided, vinyl covered, foam dock seal with fixed head pad over side pads. Provides tightest possible seal between interior and exterior environments for high volume traffic with consistent trailer widths and heights.
			2. Head and Side Pads:
				1. Polyurethane foam pad chemically welded to frame.
				2. Frame: 2 inch (51 mm) thick, pressure treated wood frame, kiln dried before and after treating.
				3. Frame: Steel.
				4. Vinyl Covers: Wraps over foam pads and around frame forming a Weather-tight construction.

Air exhausts and drain holes.

Designed to prohibit moisture infiltration.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Models: TS111. Base Fabric: 22 oz. Vinyl. Medium usage.
			2. Models: TS121. Base Fabric: 40 oz. Vinyl. Medium to heavy usage.
			3. Models: TS141. Base Fabric: Truk Flex. Heavy usage.
			4. Models: TS151. Base Fabric: Rough Flex. Medium usage.
			5. Color: As determined by Architect from Manufacturer's range.
			6. Side Pad Guide Strips: Full length and highly visible guide stripes.
			7. Hardware: Galvanized steel.
			8. Projection: 10 inch (254 mm).
			9. Dock Bumper: 4 inch (102 mm).

\*\* NOTE TO SPECIFIER \*\* Delete door opening option not required.

* + - 1. Door Opening (WxD): 8 x 8 ft (2438 x 2438 mm).
			2. Door Opening (WxD): \_\_\_\_ x \_\_\_\_ ft (\_\_\_\_ x \_\_\_\_ mm).
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Additional Wear Surfaces: To maximize durability.

Durapleat: 4 inch (102 mm) exposure.

Durapleat: 8 inch (203 mm) exposure.

Durapleat: 16 inch (406 mm) exposure.

* + - * 1. Tapered side pads.
				2. Drop curtains for fixed head pads.
				3. Inside edge reinforcement.
				4. L-Pad
				5. Weather Sentry Header Assembly: TC100.
		1. Basis of Design: TS103 Curtain Head Dock Seal as manufactured by McGuire.
			1. Vinyl covered, with high quality foam side pads and a full width curtain head. Accommodates high volume traffic with differing trailer heights.
			2. Side Pads:
				1. Polyurethane foam pad chemically welded to frame.
				2. Frame: 2 inch (51 mm) thick, pressure treated wood frame, kiln dried before and after treating.
				3. Frame: Steel.
				4. Vinyl Covers: Wraps over foam pads and around frame forming a Weather-tight construction.

Air exhausts and drain holes.

Designed to prohibit moisture infiltration.

* + - 1. Head Curtain: Drop of 24 inches (610 mm) over side pads.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Models: TS113. Base Fabric: 22 oz. Vinyl. Medium usage.
			2. Models: TS123. Base Fabric: 40 oz. Vinyl. Medium to heavy usage.
			3. Models: TS143. Base Fabric: Truk Flex. Heavy usage.
			4. Models: TS153. Base Fabric: Rough Flex. Medium usage.
			5. Color: As determined by Architect from Manufacturer's range.
			6. Projection: 10 inch (254 mm).
			7. Dock Bumper: 4 inch (102 mm).
			8. Door Opening (WxD): 8 x 10 ft (2438 x 3048 mm).
			9. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Additional Wear Surfaces: To maximize durability.

Durapleat: 4 inch (102 mm) exposure.

Durapleat: 8 inch (203 mm) exposure.

Durapleat: 16 inch (406 mm) exposure.

* + - * 1. Tapered side pads.
				2. Drop curtains for fixed head pads.
				3. Inside edge reinforcement.
				4. L-Pad
				5. Split curtain with Velcro and pull ropes.
				6. Weather Sentry Header Assembly: TC100.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DOCK SHELTERS

\*\* NOTE TO SPECIFIER \*\* Delete basis of design options not required.

* + 1. Basis of Design: TC400 Rigid Wood Frame Dock Shelter as manufactured by McGuire.
			1. Services a wide range of vehicles with varying widths and heights.
			2. Features:
				1. Framing with raked header to permit drainage.
				2. Translucent covering to providing protection from elements and admit light.
				3. Near full access to interior of trailer.
				4. Durapleats on the outer edge protecting against tears.
				5. Flexible ScotchPly stays enable curtain to seal against trailer.
				6. Added layers of fabric on side curtains reinforcing bottom.
				7. Yellow guide stripes to assist positioning trailers.
				8. Foam bottom draft pads at each side preventing air flow into loading dock area.
				9. Steel bumper stops protects from misguided trailers.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Models: TC410. Base Fabric: 22 oz. Vinyl. Medium usage.
			2. Models: TC420. Base Fabric: 40 oz. Vinyl. Medium to heavy usage.
			3. Models: TC440. Base Fabric: Truk Flex. Heavy usage.
			4. Models: TC450. Base Fabric: Rough Flex. Medium usage.
			5. Models: TC460. Base Fabric: Max Flex. Very heavy usage.
			6. Design Standards:
				1. Exterior Frame Corners: Trimmed with aluminum angle.
				2. Structural Steel Channel Protectors: Two. Factory painted.
				3. Head Curtain: Five fiberglass stays, four overlapping wear pleats per side and wind straps.

Curtain Drop: 36 inches (914 mm).

* + - * 1. Side Curtains: Closed cell neoprene sealing edge, bottom wear panels and fiberglass stays; On 16 inch (406 mm) centers.
				2. Bottom Draft Pads. Two. 8 x 2 inches (203 x 51 mm) wedge design.
				3. Yellow Guide Stripes: Assist trailer positioning.
				4. Hardware: Galvanized steel.
				5. Shelter Width: 11 to 13 ft (3353 to 3962 mm).
				6. Shelter Height: 11 to 15 ft (3353 to 4572 mm).
				7. Projection: 24 inches (610 mm).
				8. Color: As determined by Architect from Manufacturer's range.
			1. Optional Equipment:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Common side member.
				2. Pull rope and pulleys to raise head curtain.
				3. Weather Sentry Header Assembly: TC100
		1. Basis of Design: TC900 Soft Sided Dock Shelter as manufactured by McGuire.
			1. Services a Wide Range of Vehicles with Varying Widths and Heights
			2. Features:
				1. Foam side members eliminate wood and fiberglass side frames.
				2. Integral Structural Supported Head Member: Translucent to allow light and raked for drainage.
				3. Near full access to interior of trailer.
				4. Durapleats on the outer edge protect against tears.
				5. Flexible ScotchPly stays enable curtain to seal against trailer.
				6. Added layers of fabric on side curtains reinforcing bottom.
				7. Yellow guide stripes to assist positioning trailers.
				8. Foam bottom draft pads at each side preventing air flow into loading dock area.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Models: TC910. Base Fabric: 22 oz. Vinyl. Medium usage.
			2. Models: TC920. Base Fabric: 40 oz. Vinyl. Medium to heavy usage.
			3. Models: TC940. Base Fabric: Truk Flex. Heavy usage.
			4. Models: TC950. Base Fabric: Rough Flex. Medium usage.
			5. Models: TC960. Base Fabric: Max Flex. Very heavy usage.
			6. Design Standards:
				1. Side Pads: Fabric covered polyurethane foam pad chemically welded to frame.

Frame: 2 inch (51 mm) thick, pressure treated wood frame, kiln dried before and after treating. At point of attachment, stay to be through bolted to polypropylene through the grommeted fabric and stay.

* + - * 1. Exterior Frame Corners: Trimmed with aluminum angle.
				2. Structural Steel Channel Protectors: Two. Factory painted.
				3. Head Curtain: Five fiberglass stays 20 inch (508 mm) on center, four overlapping wear pleats per side and wind straps.
				4. Side Curtains: Closed cell neoprene sealing edge, bottom wear panels and fiberglass stays; 16 inch (406 mm) on center.
				5. Removable side curtains mount to high impact polypropylene on inside edge of foam side pads.
				6. Structurally supported head canopy with translucent fiberglass.
				7. Bottom Draft Pads. Two. 8 x 2 inches (203 x 51 mm) wedge design.
				8. Yellow Guide Stripes: Assist trailer positioning.
				9. Hardware: Galvanized steel.
				10. Shelter Width: 12 to 14 ft (3658 x 4267 mm).
				11. Shelter Height: 11 to 15 ft (3353 to 4572 mm).
				12. Projection: 18 inches (457 mm).
				13. Color: As determined by Architect from Manufacturer's range.
			1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Additional projections beyond 18 inches (457 mm).
				2. Tapered units.
				3. Pull rope and pulleys to raise head curtain.
				4. Access Door: Large projection side frames.
				5. Weather Sentry Header Assembly: TC100
		1. Basis of Design: TC1000 Weather Sentry Dock Shelter as manufactured by McGuire.

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - 1. Model TC1000 Complete Unit:
				1. Rough Flex base with Max Flex reinforcement on header and "L" pads.
				2. Heavy usage.
			2. Model TC1000 Header Assembly for Use over Existing:
				1. Rough Flex base with max flex reinforcement on header.
				2. Heavy usage.
			3. Features:
				1. Consistent and efficient seal across varying trailer heights.
				2. Increases loading dock safety while improving comfort and productivity.
				3. Head Pivot Assembly: Automatic positioning and tension for a tight seal.
				4. Tightly seals entire width of trailer roof, blocks water.
				5. Yellow Guide Stripes: On "L" Pad. Assist driver in positioning trailer.
				6. Bottom Filler Panel: Aids in preventing air flow into the loading dock area.
				7. Rough Flex Base fabric with superior performance Max Flex reinforcement on Header and "L"style side pads, providing maximum durability.
			4. Design Standards:
				1. Head Frame: Structural steel tubing with translucent fiberglass secured to exterior. Raked for drainage.

Houses spring biased head pivot assembly with automatic positioning and tension for air infiltration.

Head Curtain: Front and tear to protect pivot assembly from weather.

* + - * 1. Side and Head Pads: Rough Flex base material; with entire contact face of side and head pads further reinforced with superior performance Max Flex material.
				2. Self-positioning, independent panels: Two, equipped Durapleat pleats designed to close transition gap between face of head and side pads, while providing additional reinforcement to this area.
				3. Guide Strips: Full length and highly visible guide stripes.
				4. Bottom filler panel for air infiltration.
				5. Base Fabric: Rough Flex.
				6. Reinforcement Pleats: On headers and side frames: Max Flex.
				7. Dock Bumper Projection: Minimum of 4 inches (102 mm) required for level approach with standard trailers.
				8. Standard Complete Unit for Door Openings (WxHxProj): 9 x 10 x 1.5 ft (2743 x 3048 x 457 mm).
			1. Color: As determined by Architect from Manufacturer's range.
			2. Hardware: Galvanized steel.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Head pad assembly for use with existing seals or shelters.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly constructed and prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions approved submittals and in proper relationship with adjacent construction.
	4. FIELD QUALITY CONTROL
		1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
	1. CLEANING AND PROTECTION
		1. Clean products in accordance with the manufacturers recommendations.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION