

ADDENDUM No. 1

Project: Wyandotte High School Renovation

Date 02/09/2024 Project Number 24-304

iDS – incite Design Studio, LLC 7200 W. 75th Street Overland Park, KS 66204 (913) 381-4437

NOTICE TO BIDDERS: Amend the Project Manuals and Drawings to the above referenced project as follows:

DRAWINGS

END OF ADDENDUM NO. 1

GENERAL

ITEM NO. 1 - G3.00 - SPECIFICATIONS

a. Add sections to Concrete for polished concrete.

ARCHITECTURAL

ITEM NO. 2 - A1.95 - PAC MAIN LEVEL SEATING AND STAGE LIFT

a. Revise keynote.

*If you have any questions about the release of this addendum, please contact:

Anthony Winkelmann (913) 381-4437 awinkelmann@incitedesignstudio.com

ADDENDUM No. 1

A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of school. 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to

3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.

4. Remove temporary barricades and protections where hazards no longer exist. B. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows: 1. Proceed with selective demolition systematically. Complete selective demolition operations above

each floor or tier before disturbing supporting members on the next lower level. 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.

3. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing. 4. Dispose of demolished items and materials promptly.

C. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with walkways and other adjacent occupied and used facilities.

1. Clean and repair items to functional condition adequate for intended reuse. 2. Pack or crate items after cleaning and repairing. Identify contents of containers.

3. Protect items from damage during transport and storage. 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition, cleaned and reinstalled in their original locations after selective

F. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least 3/4 inch at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions

G. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.

A. All concrete for foundations (walls, grade beams and footings) shall develop minimum ultimate compressive design strength of 3500 psi in 28 days, but not less than 500 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 6 gallons of water per 100 pounds of cement and not over 4 inches of slump.

B. All concrete for interior flatwork shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 540 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.40 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawing shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when tested according to ASTM C157 (air drying method only).

C. All concrete for exterior flatwork shall have a minimum design compressive strength of 4500 psi in 28 days, with not less than 560 pounds of cement per cubic yard of concrete, not over 5 gallons of water per 100 pounds of cement, with 6% +/- 1% air entrainment, and a maximum of 4 inches of slump.

D. The preceding minimum mix requirements may have water-reducing admixtures conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability. E. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced

with an approved ASTM C618 Class C fly ash, provided the total minimum cementitious content is not F. All interior concrete slabs on grade shall be placed over 15 mil, Class A Vapor Barrier per ASTM E1745

with less than 0.01 perms, tested after mandatory conditioning. All joints shall be lapped and sealed per manufacturer's recommendations. All penetrations, as well as damaged vapor barrier material shall also be sealed per manufacturer's recommendation prior to concrete placement. Install barrier per manufacturer recommended details at all discontinuous edges (at interior columns, exterior edge of slab, etc.) to ensure terms of warranty are followed. The vapor barrier shall be placed over free-draining granular material as prescribed by the project soils report. G. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not

otherwise shown with same steel as in similar sections or areas. Any details not shown shall be detailed per ACI 315 and meet requirements of ACI 318, current editions H. Control joints in dirt formed slab to be as shown on plans. Where not shown, limit controlled areas to not

more than 144 square feet, or 12 feet on any side. Slab panel side ratio shall not exceed 1 1/2 to 1. I. Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to concrete placement.

J. Construction joints in beams, slabs, and grade beams shall occur at midspan (middle third) unless noted otherwise. Provide 2 x 4 horizontal keys at construction joints for shear transfer.

L. Geofoam to be expanded polystyrene, EPS 15.

M. Molded Sheet Drainage Panel: Geocomposite Drainage Board shall consist of a dimple raised molded polystyrene core with a non-woven geotextile fabric bonded to the dimples of the core. 1. Basis of Design: Mel-Drain 5012 by W.R. Meadows, Inc.

N. Provide solvent based pentrating dye for polished concrete. 1. Basis of Design Manufacturers and Products:

b. Comparable products from other manufacturers will be considered when submitted to and approved by the Architect prior to bidding 2. Stain color to match existing adjacent finish.

O.Provide an odorless, non-hazardous, penetrating type silicate designed to react with free lime and calcium hydroxide in concrete to produce permanent chemical reaction that hardens and densifies concrete surface. Penetrating hardener/densifier shall be compatible with subsequently applied sealers. Penetrating sealer shall not trigger nor contribute to surface alkali silicate reaction.

a. Bomanite Stabilizer Pro b. Comparable products from other manufacturers will be considered when submitted to and

approved by the Architect prior to bidding. P. Finish for decorative polished concrete slabs shall be as follows:

1. Aggregate exposure and sheen matching existing adjancent finish.

A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded plain wire fabric shall be supplied in sheets and conform to the requirements of ASTM A185.

1. Concrete placed against earth: 3" 2. Formed concrete against earth: 2"

4. Beams or Columns: 1-1/2"

C. All coverage shall be nominal bar diameter minimum.

D. All dowels shall be the same size and spacing as adjoining main bars (splice lap 48 bar diameters or 24" minimum unless noted otherwise).

E. At corners of all walls, beams, and grade beams supply corner bars (minimum 2'-0" in each direction or 48 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply 3 - #4 vertical support bars for corner bars. F. Bars marked continuous and all vertical steel shall be lapped 48 bar diameters (2'-0" minimum) at splices and

embedments, unless shown otherwise. Splice top bars near midspan and splice bottom bars over supports, unless noted otherwise G. At all holes in concrete walls and slabs, add 2 - #5 bars (opening dimension plus 96 diameters long) at each of

four sides and add 2 - #5 x 5'-0" diagonally at each of four corners of hole. Openings in 8" thick walls are reinforced similar, but with 1 - #5 instead of 2 - #5, respectively. H. Unless otherwise covered on architectural plans or specifications, vertical control joints in concrete wall shall be spaced at a maximum of 20'-0" on center and coordinated with the architect. Every other horizontal wall

reinforcing bar shall be discontinuous at control joints except heavy top and bottom bars unless noted otherwise. Provide base seal waterstop style number 772 (by Greenstreak Inc. or approved equal) on dirt face side of wall at all walls below grade.

I. Accessories shall be as specified in latest edition of the ACI Detailing Handbook and the concrete Reinforcing Steel Institute Design Handbook. Maximum accessory spacing shall be 4'-0" on center, and all accessories on exposed surfaces are to have plastic coated feet.

J. All slabs and stairs not shown otherwise shall be 6" thick with #4 bars at 12" on center each way. All exterior porches and stoops not otherwise detailed may be constructed in any standard manner, solid or hollow, but must be reinforced with #4 bars at 12" on center each way minimum. Porches shall be doweled to adjacent walls or grade beams with #4 bars at 12" on center, hooked or embedded 48 diameters into both members. Slope porches 1/8" per foot for drainage unless noted otherwise. K. Allow 0.5 ton of reinforcing bars #4 or larger to be used as directed in the field for special conditions by the

METAL HANDRAILS

A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

B. Steel Pipe: 1-1/2-inch nominal diameter for vertical and horizontal railing. ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.Provide shop-primed finish for interior installations. Plates, Shapes, and Bars: ASTM A36/A36M.

C. Post-Installed Anchors: Fastener systems with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-1. Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941, Class

Fe/Zn 5, unless otherwise indicated. 2. Fastener Type: Concrete slab; 3/8-inch by 8-inch Hilti HAS and HIS-N insert.

D. Shop prime railing prior to install. Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.

E. Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined

F. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing the Work. Form changes in direction by flush bends. Bend members in jigs to produce uniform curvature for each configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.

G. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32-inch unless otherwise indicated. Remove sharp or rough areas on exposed

H. Form work true to line and level with accurate angles and surfaces.

I. Fabricate railings with welded connections unless otherwise indicated. 1. Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

2. Use materials and methods that minimize distortion and develop strength and corrosion

resistance of base metals. 3. Obtain fusion without undercut or overlap.

Remove flux immediately 5. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Type 1 welds; no evidence of a welded joint.

J. Provide necessary floor mounts, inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure. Cut, reinforce, drill, and tap as needed to receive finish hardware, anchors, and similar items unless otherwise indicated.

VERTICAL PORTABLE WHEELCHAIR LIFTS

A. Lift Product: Virtuoso 5460P as manufactured by Ascension. Portable lifting device, unenclosed and self-contained, requiring no additional components or facility modifications. Raises and lowers platform and occupant providing accessibility to stages, platforms, or similar elevated surfaces. Low Profile: No machine tower to maintain viewing lines.

2. Platform: Supported on an electro-hydraulic lifting mechanism with built-in casters for 3. Casters: Permit easy movement of unoccupied lift over hard, level surfaces.

a. With Casters Removed: Lift to rest firmly on any hard, level surface, providing a stable base for operation of lift. 4. Independent Use: By individuals with disabilities

5. ADA Compliant: Includes applicable operating and safety devices. 6. Platform Profile: Low profile facilitating entry to the lift. Eliminates need for a pit or access

ramp at lower landing. B. Physical Characteristics: 1. Lifting Capacity: 750 pounds (340 kg).

2. Weight of Lift: 1025 pounds (465 kg) maximum.

3. Vertical Speed: 7 fpm (2.1 mpm). 4. Vertical Travel: 12 to 60 inches (305 to 1524 mm), infinitely adjustable. C. Gate Configuration:

 Lower Platform Gate: a. Manual Operation: Left-handed. Self-closing. 2. Upper Platform Gate:

a. Manual Operation: Right-handed. Self-closing. 1. No part of the lift to be over 44 inches (1117 mm) high when platform is on the ground

except when equipped with optional stage guard. 2. Space Requirements; Operational, Storage, and Transport (HxLxW): 44 x 66 x 48 inches

(1117 x 1677 x 1219 mm). Height is for platform in the down position. 3. Platform Clear Space: 36 x 54 inches (914 x 1372 mm).

a. Sidewalls and Platform Gates: 43 inches (1092 mm) high E. Materials: 1. Platform, Base Frame, and Lifting Device: ASTM A 36 or similar low-carbon steel.

2. Windows: 1/4 inch (6 mm) thick high impact strength clear thermoplastic. Safety Skirt: Constructed from rigid plastic

1. Exposed Metal Surfaces: Finished by powder coating.

 a. Color: Black. G. Drive Configuration: Direct-acting hydraulic.

1. Synchronized Hydraulic Cylinders: Evenly support both sides of lift platform. 2. Hydraulic Power Unit: Mounted on vibration-isolating supports minimizing vibration transmission and reducing frame-borne noise.

H. Electrical Requirements: 1. Amperage Draw per Lift: 13 Amps maximum. 2. Service: 120 VAC, 60 hertz, single phase, 15 amp service. Three prong grounded electrical cord. Length: 20 feet (6.1 m).

3. A Ground Fault Circuit Interrupter (GFCI). 4. Motor: 1/2 hp, 115 V AC single phase. 5. Electrical System: Certified to ASME A17.5 by independent testing laboratory.

i. Platform Floor: Low profile and slip resistant surface.

I. Lift Safety Devices: 1. Lift Construction: Meet applicable requirements of ASME A18.1, ASME A17.5, ADAAG, ANSI 117.1, and NFPA 70 (NEC).

2. Included Safety Features: For passenger and general public protection. a. Safety Skirt: Completely encloses and protects area under platform. 1) Switches: Stop platform movement in case of excess skirt deflection.

b. Operating Switches: Constant pressure. c. Emergency Stop Button: Lighted, sounds audible alarm. d. Electro-Mechanical Interlock: Prevents accidental opening of lower platform gate, and

if provided, the upper landing gate. e. Gate Switches: Prevent operation if either platform gate is open. f. Hand Pump: Allows platform to manually be raised or lowered.

g. Sidewalls and Platform Gates: 43 inches (1092 mm) high. 1) Visibility: Unobstructed view. Transparent sidewalls and platform gates. h. Lift platform stop height sensor.

j. No installation pit or external access ramp at the lower landing. 1. Casters: 3-1/2 inches (89 mm) diameter hard rubber. Attachable to platform without tools; stored in base frame when not in use.

a. Once attached, lift rolls easily over hard, smooth, level surfaces. 2. Lift may be moved via fork lift or fork truck.

K. Operating Characteristics: 1. Three Constant Pressure "UP/DOWN" Switches 2. Platform Stop Height: Adjustable without use of tools.

3. Opening Upper Landing Platform Gate: Deploys a dock plate that rests on the upper landing a. Dock Plate: Provides smooth transition between platform and upper landing. Closing

upper landing platform gate retracts the dock plate. L. Compression Capability: May be compressed to 33 inches (838 mm) wide facilitating relocation through a 36 inches (914 mm) wide doorway.

1. Compression Tool Kit: Recommended to facilitate compression of the lift. From Ascension.

passenger restraining arms.

1. Design and fabricate lift to manufacturer's standard design for indoor and outdoor locations. a. Aluminum guide rails and ramps to be anodized aluminum. Steel components shall be painted with electrostatically applied and baked powder coat as follows: 1) Custom color as selected by Architect from an RAL color chart.

STAIR LIFT FOR TURNING STAIRWAYS

Application:

A. Inclined Platform Lift: Garaventa Stair-Lift, Model GSL Artira inclined platform lift for straight and turning stairways. Lift consists of a tubular guide rail system, a folding platform that is moved along the guide rails by a rope sprocket drive system, overspeed safety system and call stations at each landing. Conform to the following design requirements:

 a. Indoor. 2. Platform Load Rating: 660 lbs (330 kg).

3. Travel Speed: 20 fpm (101.6 mm/s), slowing to 50 percent of rated speed before entering and while rounding corners 4. Platform Deck: 16 gauge (1.6 mm) sheet metal coated with electrostatically applied and baked antiskid Sandex black paint

a. Platform Size A (ADA Compliant): 31-1/2 inches (800 mm) wide by 48 inches (1220 mm) long. 5. Platform Operation:

a. Automatic Fold: Folded and unfolded electrically from the call station. b. Emergency Manual Fold: When unit is left in the open position, platform may be manually folded and retained in closed position

6. Under Platform Obstruction Sensing: a. Provide an under platform sensing device to stop the platform from traveling in the downward direction when encountering 4 lbs (1.8 kg) of pressure.

b. Platform is permitted to travel in the opposite direction of obstruction to allow clearing. Passenger Restraining Arms: a. Platform equipped with retractable passenger restraining arms in compliance with ASME A18.1a.

b. Arms stop moving when an obstruction causing 4 lbs (1.8 kg) of pressure is encountered and will immediately retract when the signal is removed. c. Provide with means to manually unlock and open the restraining arms for passenger emergency

d. Arms are folded and unfolded electrically from the call stations or platform controls. e. Top of arms mounted 37-3/8 inches (948 mm) above the platform deck. When in guarding

position the arms are located above the perimeter of the platform. f. The gaps between ends of arms shall not exceed 4 inches (100 mm).

8. Boarding Ramps: a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6 inches (152 mm) measured vertically above the platform deck. b. Lock ramps in their guarding positions during travel. When the platform is at the landing, only the

retractable ramp servicing the landing shall be operable. c. Ramps shall be folded and unfolded electrically. d. Retractable ramps, in the guarded position, shall withstand a force of 125 lbs (556 N) applied on any 4 inch (100 mm) by 4 inch (100 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less than 6 inches (152 mm) measured vertically above the

platform deck. e. Provide a means to manually unlock the ramps for emergency evacuation when platform is

f. Provide with a bi-directional obstruction sensitive device on the travel direction side end of the platform to stop lift when 1.8 kg (4 lbs.) of pressure is encountered. Platform is permitted to travel in the opposite direction of obstruction to allow clearing. g. When platform folds, passenger restraining arms shall fold down and be covered by the folded

9. Platform Kick Plate: a. Provide non-boarding and non-guide-rail side of the platform with a kick plate barrier not less than 6 inches (152 mm) in height, measured vertically from the platform deck.

b. When the platform is folded the side-wall shall cover the platform controls providing protection 10. Pedestrian Safety Lights: a. Equip platform with amber pedestrian safety lights located at both ends of the platform to alert

pedestrian traffic that the platform is on the stairway.

12. Clearance Dimensions:

11. Hand Grips: a. Equip platform with two 6-7/8 inch (174 mm) long by 1-1/4 inch (32 mm) diameter aluminum hand grips or grab bars on the front face of the platform with the top being 33-1/4 inch (845 mm) above the platform deck.

a. When folded platform shall not protrude more than 12-5/8 inches (321 mm) to 13-5/8 inches (346 mm) from mounting surface. b. When unfolded and in use platform shall not protrude more than 40 inches (1015 mm) to 41 inches (1040 mm) from wall.

13. Controls: a. Platform Controls: 24 V Low Voltage type. b. Platform equipped with emergency stop switch located within reach of the passenger 37-1/8

inches (942 mm) above platform deck. When activated emergency stop button shall cause electric power to be removed from the drive system stopping lift immediately. c. Operating controls shall be two separate 1-1/2 inches (36 mm) round continuous pressure buttons with directional arrows mounted on the front surface of the platform control panel.

e. When platform arrives at landing and the user releases the directional button, the passenger restraining arms and boarding ramp shall unfold automatically allowing passenger to disembark.

d. Directional buttons shall prompt the user with the available travel direction by illuminating the

f. Platform shall equipped for: 1) Keyless operation.

14. Passenger Seat: Fold-down type with safety belt. 15. Attendant Hand Held Pendant Control: Provide with plug-in socket on platform control panel. 16. Pedestrian Audio Alert: Provide chime mounted on platform to indicate platform is folded up and in

17. Platform On Board Emergency Alarm: Provide platform with on board alarm that sounds when emergency stop button is pushed. Provide battery back up for platform on board alarm. 18. Under Hanger Sensing: Provide bottom of platform hanger with a sensing plate to stop the platform from traveling in the downward direction when encountered with 4 lbs (1.8Kg) of pressure. It shall be

possible to drive the platform away from the obstruction. 19. Side of Hanger Obstruction Device: Provide a sensor that detects obstructions in the path of the side of the hanger. Lift shall stop immediately and not travel until the obstruction is removed. It shall be possible to drive the platform away from the obstruction. B. Drive and Guide Rail System

Operation:

a. Motor: 2 H.P. electric motor with an integrated brake. b. Required Power: 208-240 VAC, single phase, 50/60 Hz. on a dedicated 20 amp circuit. Rated current shall be 7 amps for operation with rated load.

c. Locate roped sprocket drive system consisting of a motor, gearbox and PCC controller (Programmable Configuration Controller) at the upper end of the tubes. PCC controller shall be custom programmed to soft start and stop and the slow down platform travel speed for all corners and landings of the lift. Normal operating speed shall be 20 feet per minute (6 m per minute), slowing to 50 percent of this speed before entering and while rounding corners. d. Equip drive with an emergency manual lowering system.

2. Standard Drive Cabinet: a. Cabinet: 20-1/2 inches (520 mm) wide by 41-1/2 inches (1053 mm) high by 10-5/8 inches (270

b. Cabinet door is key locked and monitored with an electrical cutout safety switch. c. Provide an integrated lockable main disconnect switch and breaker on the drive cabinet. 3. Guide Rail: a. Construct of two 2 inch (51 mm) diameter steel tubes spaced 23-5/8 inches (600 mm) apart

b. When negotiating a horizontal landing a third 2 inch (51 mm) diameter steel tube shall be added to the tube system to guide and stabilize platform.

vertically. Tubes will run parallel to the stairs and horizontal to landings throughout the length of

c. Tube system shall not protrude more than 4-7/8 inches (125 mm) to 5-7/8 inches (150 mm) from

d. Suspension means contained in the tubes shall be a 3/8 inch (8 mm) diameter galvanized steel core wire rope with a breaking strength of 9460 pounds (4300 kg). e. Locate overspeed safety at the bottom of the tube assembly and shall consist of a mechanical overspeed sensor and brake with electrical drive cut-out protection.

f. Provide a final limit switch at the upper end of the tubes to stop the platform if it travels past the normal terminal stopping device.

4. Rail Mounting: a. Tower Mount Struts: Provide with 2-1/2 inches (65 mm) by 2-1/2 inches (65 mm) hollow structural steel tubular posts to support the guide rails.

C. Pedestrian Handrail Integrated with Guide Rail: 1. A third rail acting as a handrail shall be added where existing handrails are either removed or blocked by the lifting equipment. 2. The top of the handrail gripping surface shall be between 34 inches (864 mm) and 38 inches (965 mm)

construction elements or obstructions.

above the stair nosing and have a smooth gripping surface 1-1/2 inch (38 mm) in diameter. 3. Handrail shall be in the same vertical plane as the guide rail system. 4. Handrails shall be mounted to the tube assembly and shall not be interrupted by newel posts, or other

1. Provide a call station at each serviced landing that will automatically shut off if left unattended

for over 2 minutes. 2. Call stations, 24 V low voltage with four illuminated 2 inches (51 mm) by 2 inches (51mm) square membrane touch sensitive buttons: one touch platform fold, one touch platform unfold

and two directional call and send buttons. 3. Provide call stations with Smart-Lite Technology to prompt the user with the next sequential

step of operation. Call station buttons will emit an audible "beep" when pushed to confirm button activation to the user. 4. SpecifiCall stations shall equipped for:

 a. Keyed Operation. 5. Call Station Mounting:

a. Lower and Intermediate landing call station. 1) Provide flush mounting call station painted finish collars to trim all call stations that are recessed into the walls

 b. Upper landing call station 1) Provide flush mounting call station painted finish collars to trim all call stations that are recessed into the walls. c. Provide free-standing mounting pedestals for call stations located as follows: 1) Lower landing

Upper landing. E. Additional Safety or Code Requirements 1. Wall Mounted Audio Visual Alerts: Provide with adjustable volume control that sound while the

2. Painting: After pretreating paint with electrostatically applied and baked powder coat as follows: a. Custom color as selected by Architect from manufacturers standard RAL colors.

1 incite Design Studio

Architect INCITE DESIGN STUDIO 7200 WEST 75TH STREET OVERLAND PARK, KS 66204

913.381.4437 MKEC ENGINEERING, INC. 11827 W 112TH STREET OVERLAND PARK, KS 66210 913.317.9390

Mech., Plumb., Elec., Telecom.

9225 INDIAN CREEK PKWY., SUITE 1075 OVERLAND PARK, KS 66210 913.322.1400 **Construction Manager** UNIVERSAL CONSTRUCTION 1615 ARGENTINE BLVD KANSAS CITY, KS 66105 913.342.1150

RTM ENGINEERING CONSULTANTS

WYANDOTTE HIGH SCHOOL **RENOVATION**

2501 MINNESOTA AVENUE KANSAS CITY, KS

PERMIT SET

24-304

1/31/2024

ADD #1 02/09/2024

Date Issued

Sheet Name **SPECIFICATIONS**

landings and two stops. Lift consists of an extruded aluminum guide rail, a folding platform that is moved along the guide rail by an integrated rack and pinion drive system, overspeed safety system and call stations at each landing and powered by buildings main power supply. Conform to the following design requirements:

 a. Indoor. 2. Platform Load Rating: 550 lbs (250 kg).

STAIR LIFT FOR STRAIGHT STAIRWAYS

Application:

A. Inclined Platform Lift: Garaventa Stair-Lift Model XPRESS II to serve one flight of straight stairs, with two

3. Travel Speed: 13 fpm (4 m/min) traveling up; 16 fpm (5 m/min) traveling down.

4. Platform Deck: Surface shall be slip resistant with the following features: a. Platform Size A (ADA Compliant): 31-1/2 inches (800 mm) wide by 49-1/4 inches (1250 mm) long. 5. Platform Operation: a. Automatic Fold: Folded and unfolded electrically from the call station.

b. Emergency Manual Fold: When left in the open position, platform may be manually folded and retained in the closed position.

Under Platform Obstruction Sensing: a. Provide under-platform sensing device to stop platform from traveling in the downward direction when encountering 4 lb/f (20 N) of pressure. b. Platform is permitted to travel in the opposite direction of the obstruction to allow clearing.

Passenger Restraining Arms: a. Platform equipped with retractable passenger restraining arms in compliance with ASME A18.1a. b. Arms stop moving when an obstruction causing 4 lb/f (20 N) of pressure is encountered and immediately retract when signal is removed.

c. Arms folded and unfolded electrically from the call stations or platform controls d. Provide with means to manually unlock and open the restraining arms for passenger emergency evacuation. e. Top of arms mounted 32 inches (800 mm) to 38 inches (1000 mm) above platform deck. When in

guarding position arms are located above the perimeter of the platform. f. Gaps between ends of the arms shall not exceed 4 inches (100 mm). 8. Boarding Ramps: a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6

inches (150 mm) measured vertically above platform deck. b. Lock ramps in guarding positions during travel. When platform is at the landing, only the retractable ramp servicing the landing shall be operable. c. Ramps folded and unfolded electrically.

any 4 inches (100 mm) by 4 inches (100 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less than 6 inches (150 mm) measured vertically above the platform deck. e. Provide a means to manually unlock the ramps for emergency evacuation when platform is

d. Retractable ramps, in the guarded position, shall withstand a force of 125 lb/f (550 N) applied on

platform to stop the lift when 4 lb/f (20 N) of pressure is encountered. Platform is permitted to travel in the opposite direction of obstruction to allow clearing. 9. Platform Sidewall: a. Provide on the non-boarding and non-guide rail side of the platform a sidewall of not less 6 inches

f. Provide with a bi-directional obstruction sensitive device on the travel direction side end of the

(150 mm) in height, measured vertically from the platform deck. b. When the platform is folded sidewall shall cover the platform controls, providing protection from vandalism. 10. Hand Grips:

platform. Hand grip is to cover the entire width of the platform. 11. Clearances Dimensions: a. Platform shall not protrude more than 10-1/4 inches (260 mm) from the mounting surface when folded and stored. b. Platform shall not protrude more than 40-1/4 inches (1020 mm) from the mounting surface when

a. Equip platform with a 1-1/4 inch (32 mm) tubular steel hand grip or grab bar at the top of the

unfolded and in use. 12. Controls:

control panel.

f. Platform equipped for:

located at landing.

 a. Controls: 24 VDC Low Voltage type. b. Platform equipped with emergency stop switch located within reach of passenger. Emergency stop button shall cause electric power to be removed from the drive system stopping lift immediately. c. Platform operating controls shall be two separate 1-1/2 inch (36 mm) diameter round illuminated continuous pressure buttons with directional arrows, mounted on the front surface of the platform

d. When the platform arrives at landing and the user releases the directional control button, the passenger restraining arms and boarding ramp shall unfold automatically allowing passenger to disembark. e. Platform control panel includes a receptacle for an optional plug-in hand-held attendant pendant

1) Keyless Operation. g. Provide control wiring to allow the platform to be folded into the storage position from the opposite 13. Passenger Seat: Fold-down type with safety belt. Minimum rated load of 250 lbs (115 kg).

15. Platform Security Lock: Provide to prevent unauthorized unfolding of the platform. 16. Attendant Hand-Held Pendant Control: Provide lift with a plug-in pendant control for attendant 17. Platform on-Board Emergency Alarm: Provide platform with an on-board alarm that sounds when

emergency stop button is pushed. The alarm shall have a battery back-up so that it will continue to

14. Side Loading Platform: Provide with automatic folding ramps and kick plates at boarding sides of

function if lift power is lost. B. Drive and Guide Rail System: Operation:

a. Motor: 3/4 HP (0.6 kW) electric motor with an integrated brake. b. Required Power: 208-240 VAC, single phase, 50/60 Hz. on a dedicated 20 amp circuit. c. Power Transmission: Worm gear reduction to a pinion moving on a fixed gear rack. d. Provide a frequency inverter to smoothly start and stop the platform motion. e. Locate drive carriage and associated control devices within the platform conveyance.

f. Provide an upper final limit switch to stop the lift in the event of a failure of the primary limit switch.

g. Equip drive system with an hour counter. 2. Guide Rail System: a. Two-part guide rail system consisting of:

1) Main Upper Rail: Anodized aluminum extrusion weighing 8 lb/ft (11.9 kg/m) with integrally mounted zinc plated gear rack. 2) Lower Rail: 1-1/2 inches (38 mm) by 2-1/2 inches (64 mm) anodized aluminum extrusion. b. Rail Mounting: 1) Rails directly mounted to the stairway wall.

2) Upper rail attached to a 2 inch (51 mm) by 8 inch (203 mm) board that is secured to the wall. Lower rail attached to a 2 inch (51 mm) by 4 inch (102 mm) board secured to the wall. Fasten each board to every available stud with a minimum of two fasteners. 3) Mount rails to steel support posts secured to the lower landing floor and stair treads. Support

posts shall be 2-1/2 inches (64 mm) by 2-1/2 inches (64 mm) hollow structural steel. c. Provide a mechanical stop at the upper landing to prevent over-travel of the drive carriage in the event of a switch failure. 3. Provide overspeed governor and brake on upper carriage drive, containing mechanical overspeed

sensor and lock, with electrical drive cut-out protection. 4. Provide with manual handwheel for emergency operation. C. Call Stations:

1. Provide surface mounted call stations at both landings. 2. Call station: a. Operating voltage 24V wired. 3. Call stations shall be provided with directional control buttons for call and send. 4. A one-touch control system shall be used to automatically fold/unfold the platform, boarding ramps and

Mounting: a. Lower landing call station: 1) Flush mounted call station: Provide powder-coated trim collar. b. Upper landing call station:

1) Pedestal mounted call station: Provide free-standing mounting pedestal.

D. Additional Safety or Code Requirements: 1. Wall Mounted Audio-Visual Alert: Provide wall mounted audio-visual alert(s) with adjustable volume control that sound while the lift is in operation and are visible by pedestrian traffic from all flights and

lift is in operation and are visible by pedestrian traffic from all flights and landings. F. Finish Environment Requirements: . Design and fabricate lift to manufacturer's standard design for indoor location.

> DUANE CASH License KS #7083

> > Cert. of Authority INCITE DESIGN STUDIO, LLC

Project Phase

Project Number

Issue Date

Revision No. Description

Area Plan

Sheet Number

in • cite v. to provoke thought

