



**SPECIAL PROVISIONS
FOR
WAYFINDING SIGNAGE**

**Des Moines County
EDP-0977(650)--7Y-29**

**Effective Date
~~October 20, 2020~~ June 15, 2021**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

155070a.01 DESCRIPTION.

A. General.

1. Wayfinding signage for the project includes signage directing the public to publicly available parking areas, ~~city amenities, guides,~~ and kiosks. The wayfinding signage elements in the project are based on the designs established in the City of Burlington Signage Masterplan.
2. Implementation of the signage components includes, final artwork (based on masterplan artwork, to be provided to Contractor), final design and engineering of the signpost and kiosk structures, anchoring design and implementation, furnishing necessary materials, labor, and tools for sign procurement, delivery and installation. Extent of site signage is shown on the plans.

B. Submittals.

1. Shop Drawings: Submit complete shop drawings for each sign type. Shop drawings shall consist of plans, elevations and sections showing all sides of signage. Plans to cover fabrication, mounting, footings, engineering data and erection of site signage including internal construction, all materials, ~~electrical, lighting~~ and all fasteners. Additionally, provide to scale proofs for layout of all text lettering and symbols indicating styles, dimensions and colors.
2. Final shop drawings to be signed and sealed by an Iowa licensed engineer.
3. Samples: Submit three 2 inch by 2 inch minimum size samples of each paint and ~~vinyl~~ material color and finish.
4. Submit fabrication and installation schedule that includes lead times identifying artwork and other Engineer directed materials or decisions are needed to meet the project schedule.

5. Maintenance instructions and product specifications for all sign components including finishes, ~~electrical and lighting, etc.~~ shall be provided to Contracting Authority upon completion of accepted work.

C. Design Criteria.

1. Details on plans indicate a construction approach for the proposed signs, but do not include all detailing or information required for the complete structural integrity of the signs. Written dimensions shall be followed over scaled dimensions. It shall be the responsibility of the fabricator to perform the complete structural design of the signs and to incorporate all the safety features necessary to adequately support the sign for its intended use. Designs that meet or exceed industry and local code engineering requirements will be required. The sign fabricator shall submit engineer stamped calculations for foundations, other sign components that effect the structural design.
2. Unless otherwise directed by Engineer, design to withstand severe abuse and souvenir theft vandalism, but not less than equivalent of resisting simple hand implements and tools (screwdrivers, knives, coins, keys and similar items), and adult physical force. All hardware and fasteners shall be vandal resistant.
3. ~~It shall be the responsibility of the sign fabricator to provide the electrical service and lighting for the illuminated signs. All lighting and electrical service to be UL approved and meet all required codes.~~
4. ~~Contractor is responsible to position illuminating elements within internally lighted signs at such spacing as will assure uniform light distribution across the portion of the sign faces intended to be illuminated. Sign faces which exhibit "hot-spots" will be unacceptable.~~
5. ~~Provide disconnect switches for all illuminated signs in accordance with electrical code requirements. Locate disconnect and on/off switches in an accessible location, out of sight.~~
6. ~~Provide photocell for all illuminated signs.~~
7. ~~Verify location of power service provided by CMS Energy prior to sign fabrication.~~
3. Digital files for Kiosk map and graphics will be provided by the City of Burlington. Contact for final artwork:

Jesse Howe, P.E.
City Engineer
3510 Division St.
Burlington, IA 52601
(319) 753-8176 ext. 418

D. Warranty.

Signage Warranty: Contractor shall provide a 5 year full replacement warranty to the Contracting Authority to warrant all work against failure because of faulty materials or workmanship from the date of acceptance from the Contracting Authority. Warranty shall include, but not be limited to:

- Fading, bubbling, cracking, warping, peeling, delaminating, chalking, rusting or other disintegration of the sign panel, bases, graphics or of the edges.
- Corrosion of sign panels or cabinets, brackets and mounting hardware, fasteners, posts or other support pieces.
- Sign foundation or support failure causing signage to become crooked or not plumb and true as originally accepted. Contractor shall provide written warranty covering the above dated with the approved acceptance date.

155070a.02 MATERIALS.**A. General.**

1. Metal Surfaces, General: Use only materials that are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness. Prepare surface in compliance with Matthews Paint or Akzo Nobel Paint Company requirements.
2. **Aluminum Plate and Tubing.**
 - a. ASTM B-209, Alloy 5005-H15
 - b. Tubing shall be 0.25 inch thickness.
 - c. Aluminum sign and graphic panels shall be .080 guage.
 - d. Aluminum base plate shall be 3/4 inch thickness.
 - e. Aluminum plate to meet minimal thicknesses as shown on plans.
 - f. Clean, prepare and paint surfaces per Matthews Paint or Akzo Nobel requirements. All unexposed or concealed surfaces to be mill powder coat black satin finish unless otherwise shown.
3. Fasteners: Stainless steel, heads painted to match color panels. If exposed surface is sealed, galvanized fasteners may be used.
4. Paint: Premium acrylic polyurethane with matte or low luster finish with UV and graffiti inhibitors. Use either Matthews Paint or Akzo Nobel Paint systems or approved equal.
5. Graphic Map basis of design material is digitally printed custom color 3M Scotchlite sheeting with graffiti-resistant and ultra violet protective laminate, or approved equal.
6. Approximate PMS colors are as follows:
 - Teal Red PMS 3165 186
 - Copper Sand PMS 876G 726
 - Ivory Old Brick PMS 1205 1955
 - Eggplant PMS 7421
 - White
7. Exact colors to be determined during mock up and submittals.
8. Reflective vinyl lettering and trim to be super engineer grade reflective vinyl 3M Gerber 280 or approved equal. Color to be determined during mock ups and submittals.
9. Concrete: Provide concrete consisting of Portland cement, ASTM C-150, aggregates ASTM C33, and clean water. Mix materials, to obtain concrete with a minimum 28 day compressive strength of 2500 psi using at least four sacks of cement per cubic yard, 1 inch maximum size aggregate, maximum 3 inch slump, and 2% to 4% entrained air or as determined by sign-fabricator engineer.

B. Fabrication.

1. Use materials of size and thickness shown, or if not shown, of required size, grade and thickness to produce strength and durability in finished product. Shop-paint all items. Signage will be manufactured and installed using industry standard materials that are designed to withstand weather, damage and other factors. They can be updated easily in event that naming or other conventions change. In the event of a change, an overlay is affixed to the current sign.
2. Weld corners and seams continuously; grind exposed welds smooth and flush.

3. Form exposed connections with hairline, flush joints; use concealed fasteners where possible.
4. Separate dissimilar metals with permanent resilient plastic isolator.
5. Copy Application: Sign copy shall be crisp, sharp, clean, and free from "ticks," discontinuous curves, line waver, and similar type imperfections.
 - a. Letterforms shall conform to prescribed proportions.
 - b. Messages shall be set computer generation with photo ~~typesetter~~ typesetter or equivalent quality.
6. Routed Copy: Cutting and routing shall be done in such manner that edges and corners of finished letterforms and symbols shall be sharp and true. Forms with nicked, cut, ragged, rounded (positive or negative) corners, and similar disfigurements will not be acceptable. Forms shall be aligned so as to maintain a base line parallel to the sign format, with margins and layout as indicated on design plans and approved shop drawings. Vertical strokes shall be plumb.
- ~~7. Cut-Out Copy: All letter cut-outs shall be made from material and gauge as indicated on plans. Cutting shall be done in such manner that edges and corners of finished letterforms will be sharp and true. Letterforms with nicked, cut, ragged, rounded (positive or negative) corners, and similar disfigurements will not be acceptable.~~
- ~~8. Vinyl Letters: Vinyl letters and numbers shall be die-cut unless an alternate process is approved by Contracting Authority prior to fabrication. Copy shall be prespaced with 3-M series 2-application tape, prior to installation on sign. No exceptions.~~
9. Digital Print Process, Including Dye-Sublimation: As approved by Engineer (interior and exterior).
 - a. General: Provide professional quality materials intended for high-quality, digital reproduction, by Eastman Kodak Company, Sign Tech USA Ltd. 3M Scotchlite or equal.
 - b. Transparency: Transparent base, Kodak Duratrans or equal.
10. Wayfinding signage is designed to meet accessibility requirements for readability including, but not limited to:
 - a. Letter height
 - b. High Contrast
 - c. Signage height

155070a.03 CONSTRUCTION.

A. Examination.

Installer must examine the conditions under which site signage is to be installed and notify the Engineer of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

B. Application of Paint Finish.

1. Properly prepare aluminum surfaces by pretreatment of etching/wash type as recommended by paint manufacturer. Prime with epoxy primer per paint manufacturer.
2. Apply materials in an environment most favorable for producing best quality work. Apply materials by spray so that:

- a. Finish surfaces shall be free of streaks, laps, runs, or pile-up of paints, with all surfaces uniformly covered.
 - b. Surfaces with overspray are not acceptable.
3. Unless specified or directed otherwise, provide matte or low luster finish for all surfaces.
 4. Unless specified or directed otherwise, provide "clear coat" finish over all exposed, finish painted surfaces consisting of a two-component catalytic, clear, acrylic polyurethane enamel with ultraviolet inhibitors.

C. Installation.

1. Verify and stake the exact sign locations on site walk-thru with Engineer for all sign locations. Notify Engineer of any conditions that may adversely affect satisfactory installation of signage.
2. Except as indicated otherwise on the plans, install signage plumb, level, square and true to line.
3. Securely anchor signage in proper location using foundations, anchors, anchorages, fasteners, or other methods approved on shop drawings. All anchors and fasteners shall be appropriate to the anchorage condition and per sign fabricator's engineer.
4. ~~After final electrical connections have been made, test all electrical systems to assure that all are in proper working order.~~
5. Coordinate work, access to site, staging and traffic control with the Engineer.

155070a.04 METHOD OF MEASUREMENT.

~~Wayfinding Signage will be the quantity of signs measured by the Engineer.~~ Signs and Kiosks will be measured per each, as documented by the Engineer.

155070a.05 BASIS OF PAYMENT.

~~Payment for each Wayfinding Signage is full compensation for all work prescribed in this specification. Payment will be for the measured quantity at the contract unit price for the type and size of each bid item. This payment shall be full compensation for fabrication, delivery to site, furnishing material, labor, tools necessary, and installation of items.~~

- A. Payment for kiosks shall be per each installation. Includes final design, engineering, fabrication, and installation of kiosk. Includes printing, providing and installing graphic content. Digital files for kiosk graphic content to be provided by City.
- B. Payment for parking sign and indicating arrow shall be per each installation.