

JOHNSON COUNTY EMA STORAGE BUILDING

ADDENDUM NO. 1

March 18th, 2026

The information contained in this Addendum modifies supplements or replaces information contained in the Project Manual and on the Drawings and is hereby made a part of the Contract Documents.

Acknowledge receipt of this addendum on the Bid Form.

BIDS DUE: March 23rd, 2026

APPLICABLE TO THE PROJECT MANUAL

A. REVISED PROJECT MANUAL PAGES:

DIVISIONS 1 THROUGH 32 SPECIFICATIONS:

The replacement pages identified below include modifications made to the original Project Manual sections. Revised or added information is indicated by **shaded** type in the text. Areas where information has been deleted are identified by ~~striking out~~ the text. Insert replacement pages into the Project Manual ahead of the pages they replace.

Document or Section

00 00 30 – TABLE OF CONTENTS

13 34 00 - PRE-ENGINEERED POST FRAME BUILDING SYSTEMS

B. ADDED / DELETED DOCUMENTS AND SECTIONS

The Documents and Sections identified below shall be added / removed in the Project Manual.

Document or Section Document or Section Name

~~07 42 00~~ ~~PANELIZED STONE VENEER~~

C. SUBSTITUTIONS/APPROVED MANUFACTURERS

The following products and manufacturers are approved for bidding. Approved products shall conform to all the requirements specified. Final acceptance is contingent upon receipt and approval of final shop drawings and product information.

07 25 00 – WEATHER BARRIER - Under Slab Vapor Barrier
Viper II, ISI Building Products, www.isibp.com

13 34 00 – PRE-ENGINEERED POST FRAME BUILDING SYSTEMS - Metal Panels
Affordable Metal Manufacturing, 563-264-8212

JOHNSON COUNTY EMA STORAGE BUILDING

ADDENDUM NO. 1

March 18th, 2026

APPLICABLE TO THE DRAWINGS

A. DRAWING REVISIONS: Incorporate the following revisions into the respective contract drawings.

Drawing No.

C120 - DETAILED SITE LAYOUT AND DIMENSION PLAN

1. Replace sheet with attached.

C500 - GENERAL NOTES AND DETAILS

1. Replace sheet with attached.

A2.00 – BUILDING ELEVATIONS

1. Replace sheet with attached.

A4.10 – WALL TYPES & ARCHITECTURAL DETAILS

1. Replace sheet with attached.

A4.20– ARCHITECTURAL DETAILS

1. Replace sheet with attached.

M000 – MECHANICAL GENERAL INFORMATION

1. Replace sheet with attached.

M001 – MECHANICAL GENERAL INFORMATION, ALT 1

1. Replace sheet with attached.

E000 – ELECTRICAL GENERAL INFORMATION

1. Replace sheet with attached.

E100 – ELECTRICAL POWER & DATA PLAN

1. Replace sheet with attached.

END OF DOCUMENT 00 90 10

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END SECTION 00 00 30

SECTION 13 34 00

PRE-ENGINEERED POST FRAME BUILDING SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Metal roof panels.
 - 2. Metal wall panels.
 - 3. Metal soffit panels.
 - 4. Thermal insulation.
 - 5. Accessories.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of metal building system component.
- B. Shop Drawings: Indicate components by others. Include full building plan, elevations, sections, details and attachments to other work.
- C. Samples: For units with factory-applied finishes.

1.4 INFORMATIONAL SUBMITTALS

- A. Letter of Design Certification: Signed and sealed by manufacturer include the following:
 - 1. Name and location of Project.
 - 2. Order number.
 - 3. Name of manufacturer.
 - 4. Name of Contractor.
 - 5. Building dimensions including width, length, height, and roof slope.
 - 6. Governing building code and year of edition.
 - 7. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure, seismic design category or effective peak velocity-related acceleration/peak acceleration, and auxiliary loads (cranes).
 - 8. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
 - 9. Building-Use Category: Indicate category of building use and its effect on load importance factors.
- B. Material test reports.
- C. Source quality-control reports.
- D. Field quality-control reports.
- E. Sample warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.6 WARRANTY

- A. Special Warranty on Metal Panel Finishes: Manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

- 1. Finish Warranty Period: 20 years from date of Substantial Completion.

- ~~B. Special Weathertightness Warranty for Metal Roof Panels: Manufacturer agrees to repair or replace metal roof panel assemblies that leak or otherwise fail to remain weathertight within specified warranty period.~~

- ~~- 1. Warranty Period: 20 years from date of Substantial Completion.~~

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Building systems to withstand the effects of gravity loads and the following loads and stresses:

- 1. Design Loads: As indicated on Drawings.
 - 2. Deflection and Drift Limits: As indicated on Drawings.

- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

- 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

- C. Structural Performance for Metal Roof and Wall Panels: Provide metal panel systems capable of withstanding the effects of the following loads:

- 1. Wind Loads: As indicated on Drawings.

- D. Air Infiltration for Metal Roof Panels: Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E1680 or ASTM E283 at the following test-pressure difference:

- 1. Test-Pressure Difference: 1.57 lbf/sq. ft. (75 Pa).

- E. Air Infiltration for Metal Wall Panels: Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E283 at the following test-pressure difference:

- 1. Test-Pressure Difference: 1.57 lbf/sq. ft. (75 Pa).

- F. Water Penetration for Metal Roof Panels: No water penetration when tested according to ASTM E1646 or ASTM E331 at the following test-pressure difference:

- 1. Test-Pressure Difference: 2.86 lbf/sq. ft. (137 Pa).

- G. Water Penetration for Metal Wall Panels: No water penetration when tested according to ASTM E331 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 2.86 lbf/sq. ft. (137 Pa).
- H. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 - 1. Uplift Rating: UL 90

~~I. FM Global Listing: Provide metal roof panels and component materials that comply with requirements in FM Global 4471 as part of a panel roofing system and that are listed in FM Global's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Global markings.~~

~~1. Fire/Windstorm Classification: Class 1A-90~~

~~2. Hail Resistance: SH.~~

2.2 STRUCTURAL FRAMING

- A. See structural drawings and specifications for requirements.

2.3 METAL ROOF PANELS

- A. Exposed Fastener, Tapered-Rib, Metal Roof Panels : Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps.
 - 1. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 24 gauge 0.022-inch (0.558-mm) nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A755/A755M.
 - a. Exterior Finish: Kynar 500
 - b. Color: As selected by Architect from manufacturer's full range
 - c. With manufacturers standard, Factory Applied Anti-Condensation Membrane
 - 2. Major-Rib Spacing: 12 inches (305 mm).
 - 3. Panel Coverage: 36 inches (914 mm)
 - 4. Panel Height: 1.25 inches (32 mm)

2.4 METAL WALL PANELS

- A. Exposed-Fastener, Tapered-Rib, Metal Wall Panels. Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps.
 - 1. Manufacturer: Basis of Design
 - a. McElroy Metals, R Panel
 - b. Affordable Metal Manufacturing, Muscatine Iowa
 - c. Architect Approved Equivalent

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2. Material: Coated steel sheet, 26 gauge, 0.018-inch (0.61-mm) nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A755/A755M.
 - a. Exterior Finish: Kynar 500
 - b. Color: Roman Blue
3. Major-Rib Spacing: 12 inches (305 mm)
4. Panel Coverage: 36 inches (914 mm)
5. Panel Height: 1.25 inches (32 mm)

2.5 METAL SOFFIT PANELS

- A. General: Provide factory-formed metal soffit panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners in side laps. Include accessories required for weathertight installation.
- B. Metal Soffit Panels: 12" vented soffit, .019 aluminum 12".
 1. Finish: Match finish and color of metal roof panels.
 2. Basis of Design: Norandex AST12FV
 - a. Or architect approved equivalent

2.6 THERMAL INSULATION

- A. Building Wrap
 1. See section 072500 Weather Barriers
- B. Building Wall Insulation:
 1. Building wall insulation to be installed in stud exterior wall.
 - a. Formaldehyde free poly encapsulated, fiberglass batt insulation, R-21.
 - 1) Basis of design: Johns Manville ComfortTherm, 5 ½" thick
 - 2) Architect approved equivalent
 2. Building wall insulation to be installed in cavity between exterior columns.
 - a. Faced mineral wool, R-25, with ECOSE. Rolls 8' wide to minimize joints.
 - 1) Basis of design: Silvercote Pole Barn Faced Insulation 8" thick
 - 2) Architect approved equivalent
- C. Roof Insulation:
 1. Roof insulation to be blow-in installed in attic space. Install to achieve an R-49.
 - a. Formaldehyde free fiberglass
 - 1) Basis of design: Johns Manville Climate Pro B-7700
 - 2) Architect approved equivalent
- D. Vapor Barrier
 1. Vapor Barrier in ceiling, installed on bottom of trusses, above interior liner panel.
 - a. StegoHome® Wrap 10-Mil Vapor Retarder
 - 1) Architect approved equivalent
 - b. StegoHome® Tape for all seams and terminations.
 - 1) Architect approved equivalent

2.7 INTERIOR LINER PANELS

- A. A through-fastened sidewall panel with 1 1/4 inch (32mm) ribs at 12 inches (305mm) on center. The area between the ribs is reinforced to minimize oil-canning. All interior walls and ceiling.
 1. Gauge: 26 (Std.)
 2. Dimensions: 36 inches (915mm) wide by 1 1/4 inch (32mm) high

3. Finish: As selected by Architect from manufacturer's full range

2.8 ACCESSORIES

- A. General: Provide accessories as standard with metal building system manufacturer and as specified. Fabricate and finish accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes. Comply with indicated profiles and with dimensional and structural requirements.
 - 1. Form exposed sheet metal accessories that are without excessive oil-canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
- B. Roof Panel Accessories: Provide components required for a complete metal roof panel assembly including copings, fasciae, corner units, ridge closures, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.
- C. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including copings, fasciae, mullions, sills, corner units, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels unless otherwise indicated.
- D. Flashing and Trim: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match adjacent metal panels.
- E. Gutters: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match roof fascia and rake trim. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2438-mm-) long sections, sized according to SMACNA's "Architectural Sheet Metal Manual."
 - 1. Gutter Supports: Fabricated from same material and finish as gutters.
 - 2. Strainers: Bronze, copper, or aluminum wire ball type at outlets.
- F. Downspouts: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match metal wall panels. Fabricate in minimum 10-foot- (3-m-) long sections, complete with formed elbows and offsets.
 - 1. Mounting Straps: Fabricated from same material and finish as gutters.

2.9 FABRICATION

- A. General: Design components and field connections required for erection to permit easy assembly.
- B. Metal Panels: Fabricate and finish metal panels at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.
 - 1. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of metal panel.

PART 3 - EXECUTION

3.1 ERECTION OF STRUCTURAL FRAMING

- A. Erect building system according to manufacturer's written instructions and drawings.

- B. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.
- C. Set structural framing accurately in locations and to elevations indicated, according to AISC specifications referenced in this Section. Maintain structural stability of frame during erection.
- D. Align and adjust structural framing before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with framing. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.

3.2 METAL PANEL INSTALLATION, GENERAL

- A. General: Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Field cut metal panels as required for doors, windows, and other openings. Cut openings as small as possible, neatly to size required, and without damage to adjacent metal panel finishes.
 - a. Field cutting of metal panels by torch is not permitted unless approved in writing by manufacturer.
 - 2. Install metal panels perpendicular to structural supports unless otherwise indicated.
 - 3. Flash and seal metal panels with weather closures at perimeter of openings and similar elements. Fasten with self-tapping screws.
 - 4. Locate and space fastenings in uniform vertical and horizontal alignment.
 - 5. Locate metal panel splices over structural supports with end laps in alignment.
 - 6. Lap metal flashing over metal panels to allow moisture to run over and off the material.
- B. Lap-Seam Metal Panels: Install screw fasteners using power tools with controlled torque adjusted to compress EPDM washers tightly without damage to washers, screw threads, or metal panels. Install screws in predrilled holes.
 - 1. Arrange and nest side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply metal panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.
- D. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal panel assemblies. Provide types of gaskets, fillers, and sealants indicated; or, if not indicated, provide types recommended by metal panel manufacturer.
 - 1. Seal metal panel end laps with double beads of tape or sealant the full width of panel. Seal side joints where recommended by metal panel manufacturer.

3.3 METAL ROOF PANEL INSTALLATION

- A. General: Provide metal roof panels of full length from eave to ridge unless otherwise indicated or restricted by shipping limitations.
 - 1. Install ridge and hip caps as metal roof panel work proceeds.

2. Flash and seal metal roof panels with weather closures at eaves and rakes. Fasten with self-tapping screws.
- B. Lap-Seam Metal Roof Panels: Fasten metal roof panels to supports with exposed fasteners at each lapped joint, at location and spacing recommended by manufacturer.
1. Provide metal-backed sealing washers under heads of exposed fasteners bearing on weather side of metal roof panels.
 2. Provide sealant tape at lapped joints of metal roof panels and between panels and protruding equipment, vents, and accessories.
 3. Apply a continuous ribbon of sealant tape to weather-side surface of fastenings on end laps and on side laps of nesting-type metal panels, on side laps of ribbed or fluted metal panels, and elsewhere as needed to make metal panels weatherproof to driving rains.
 4. At metal panel splices, nest panels with minimum 6-inch (152-mm) end lap, sealed with butyl-rubber sealant and fastened together by interlocking clamping plates.
- C. Metal Fascia Panels: Align bottom of metal panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws. Flash and seal metal panels with weather closures where fasciae meet soffits, along lower panel edges, and at perimeter of all openings.

3.4 METAL WALL PANEL INSTALLATION

- A. General: Install metal wall panels in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts, extending full height of building, unless otherwise indicated. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement.
1. Unless otherwise indicated, begin metal panel installation at corners with center of rib lined up with line of framing.
 2. Shim or otherwise plumb substrates receiving metal wall panels.
 3. When two rows of metal panels are required, lap panels 4 inches (102 mm) minimum.
 4. When building height requires two rows of metal panels at gable ends, align lap of gable panels over metal wall panels at eave height.
 5. Rigidly fasten base end of metal wall panels and allow eave end free movement for thermal expansion and contraction. Pre-drill panels.
 6. Flash and seal metal wall panels with weather closures at eaves and rakes, and at perimeter of all openings. Fasten with self-tapping screws.
 7. Install screw fasteners in predrilled holes.
 8. Install flashing and trim as metal wall panel work proceeds.
 9. Apply elastomeric sealant continuously between metal base channel (sill angle) and concrete, and elsewhere as indicated on Drawings; if not indicated, as necessary for waterproofing.
 10. Align bottom of metal wall panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws.
 11. Provide weatherproof escutcheons for pipe and conduit penetrating exterior walls.
- B. Metal Wall Panels: Install metal wall panels on exterior side of girts. Attach metal wall panels to supports with fasteners as recommended by manufacturer.

3.5 METAL SOFFIT PANEL INSTALLATION

- A. Provide metal soffit panels the full width of soffits. Install panels perpendicular to support framing.
- B. Flash and seal metal soffit panels with weather closures where panels meet walls and at perimeter of all openings.

3.6 DOOR AND FRAME INSTALLATION

- A. General: Install doors and frames plumb, rigid, properly aligned, and securely fastened in place according to manufacturers' written instructions. Coordinate installation with wall flashings and other components. Seal perimeter of each door frame with elastomeric sealant used for metal wall panels.
- B. Personnel Doors and Frames: Install doors and frames according to NAAMM-HMMA 840.
- C. Door Hardware:
 - 1. Install surface-mounted items after finishes have been completed at heights indicated in Section 087000 "Door Hardware".
 - 2. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 3. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
 - 4. Set thresholds for exterior doors in full bed of sealant complying with requirements for concealed mastics specified in Section 079200 "Joint Sealants."

3.7 WINDOW INSTALLATION

- A. General: Install windows plumb, rigid, properly aligned, without warp or rack of frames or sash, and securely fasten in place according to manufacturer's written instructions. Coordinate installation with wall flashings and other components. Seal perimeter of each window frame with elastomeric sealant used for metal wall panels.
 - 1. Separate dissimilar materials from sources of corrosion or electrolytic action at points of contact with other materials by complying with requirements specified in AAMA/WDMA/CSA 101/I.S.2/A440.
- B. Set sill members in bed of sealant or with gaskets, for weathertight construction.
- C. Install windows and components to drain condensation, water penetrating joints, and moisture migrating within windows to the exterior.
- D. Mount screens directly to frames with tapped screw clips.

3.8 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal roof panel assembly, including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - 2. Install components for a complete metal wall panel assembly, including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - 3. Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturer.
- B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

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1. Install exposed flashing and trim that is without excessive oil-canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).
- C. Gutters: Join sections with lapped-and-sealed joints. Attach gutters to eave with gutter hangers spaced as required for gutter size, but not more than 36 inches (914 mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.
- D. Downspouts: Join sections with 1-1/2-inch (38-mm) telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1524 mm) o.c. in between.
1. Tie downspouts to underground drainage system indicated.
- E. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to panel as recommended by manufacturer.
- F. Roof Vent: Continuous or Sectional-Ridge Type: Factory-engineered and -fabricated, continuous unit; Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match metal roof panels. Fabricated in minimum 10-foot- (3-m-) long sections. Provide throat size and total length indicated, complete with side baffles, ventilator assembly, end caps, splice plates, and reinforcing diaphragms.
1. Bird Screening: Galvanized steel, 1/2-inch- (13-mm-) square mesh, 0.041-inch (1.04-mm) wire; or aluminum, 1/2-inch- (13-mm-) square mesh, 0.063-inch (1.6-mm) wire.

3.9 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform field quality control special inspections and to submit reports.
- B. Product will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

END OF SECTION 133419

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SITE PLAN

LOT 1, PARK PLACE CITY CENTER - PART 3

TIFFIN, JOHNSON COUNTY, IOWA

PLAT PREPARED BY:
MMS CONSULTANTS INC.
1917 S. GILBERT STREET
IOWA CITY, IA 52240

OWNER/APPLICANT:
JOHNSON COUNTY
913 S DUBUQUE ST
IOWA CITY, IA 52240

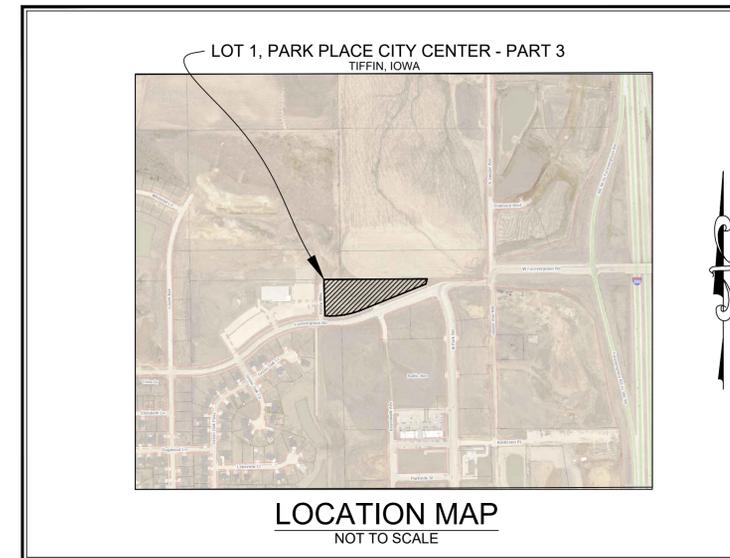
APPLICANT'S ATTORNEY

- C120 OVERALL SITE LAYOUT AND DIMENSION PLAN
- C140 OVERALL SITE GRADING AND EROSION CONTROL AND SWPPP
- C141 DETAILED SITE GRADING PLAN
- C160 SITE UTILITY PLAN
- C500 GENERAL NOTES AND DETAILS
- L100 SITE LANDSCAPE PLAN

PAVING LEGEND	
	PROPOSED 6" PCC PAVING OVER 6" GRANULAR BASE (17,255 SF) (PHASE 1)
	PROPOSED 4" PCC SIDEWALK (801 SF) (PHASE 1)
	PROPOSED 6" PCC PAVING OVER 6" GRANULAR BASE (16,055 SF) (PHASE 2)
	PROPOSED 4" PCC SIDEWALK (314 SF) (PHASE 2)

*SIZE OF PATTERN MAY VARY BASED ON SCALE OF SHEET.
*TOTALS LISTED ARE CALCULATED FOR THE ENTIRE SITE AREA.

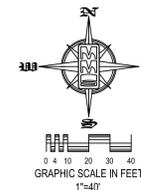
KEYNOTES	
NUMBER	KEYNOTE
101	INSTALL DRIVE/PARKING PER DETAIL ON SHEET C500 (THICKNESS AND MATERIAL AS NOTED)
102	INSTALL 6" CURB PER DETAIL ON SHEET C500
103	INSTALL P.C.C. SIDEWALK PER TIFFIN STANDARDS
104	GRIND EXISTING CURB AND GUTTER AT PROPOSED DRIVE LOCATION
105	INSTALL DUMPSTER ENCLOSURE, PROVIDE WEEP HOLE AT BASE OF SOUTH WALL (PHASE 2)
106	PUBLIC STREET AND UTILITY EXTENSION, BY OTHERS
107	5'x5' CONCRETE STOOP
108	7'x5' CONCRETE TRANSFORMER PAD
109	NO CURB.



LEGAL DESCRIPTION
LOT 1, PARK PLACE CITY CENTER - PART THREE, TIFFIN, IOWA, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 65, PAGE 337, PLAT RECORDS OF JOHNSON COUNTY, IOWA.

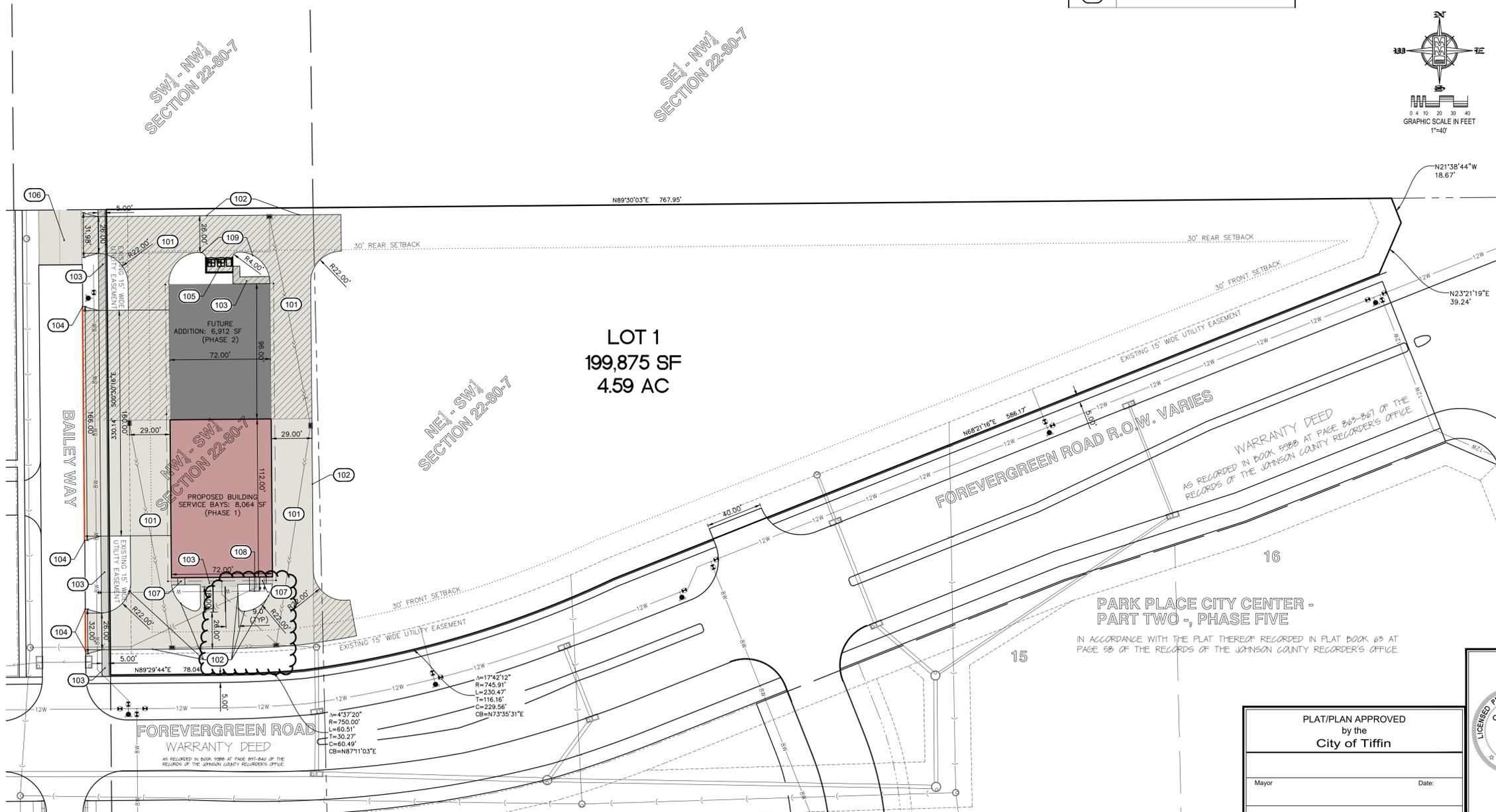
LOT CHARACTERISTICS:
UNDERLYING ZONING: C-1B (4.59 AC)
DEVELOPMENT CONSISTS OF 1 BUILDING TO BE USED AS SERVICE BAYS.(PUBLIC, EDUCATION & UTILITY USES)
SETBACK REQUIREMENTS FOR C-1B:
MINIMUM LOT AREA: N/A
MINIMUM LOT WIDTH: N/A
FRONT YARD SETBACK: 30 FT
INTERIOR SIDE YARD SETBACK: 15 FT
CORNER YARD SETBACK: 30 FT
REAR YARD SETBACK: 30 FT
FLOOR AREA RATIO: 0.4
MAXIMUM HEIGHT OF PRINCIPAL BUILDING: 35 FT
PARKING REQUIREMENTS:
PROVIDED PARKING:

SITE AREA 199,875 SF (100%)
BUILDING AREA 14,976 SF (7.5%)
PAVING AREA 25,923 SF (13.0%)
GREEN SPACE 158,876 SF (79.5%)
THE DEVELOPED LOT IS LOCATED WITHIN FEMA ZONE X, AN AREA OF MINIMAL FLOOD HAZARD, AND IS LOCATED ABOVE THE 500 YEAR FLOOD EVENT ELEVATION



STANDARD LEGEND AND NOTES	
	PROPERTY &/or BOUNDARY LINES
	CONGRESSIONAL SECTION LINES
	RIGHT-OF-WAY LINES
	EXISTING RIGHT-OF-WAY LINES
	CENTER LINES
	LOT LINES, INTERNAL
	LOT LINES, PLATTED OR BY DEED
	PROPOSED EASEMENT LINES
	EXISTING EASEMENT LINES
	RECORDED DIMENSIONS
	CURVE SEGMENT NUMBER
	POWER POLE
	POWER POLE W/DROP
	POWER POLE W/TRANS
	POWER POLE W/LIGHT
	GUY POLE
	LIGHT POLE
	SANITARY MANHOLE
	FIRE HYDRANT
	WATER VALVE
	DRAINAGE MANHOLE
	CURB INLET
	FENCE LINE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	WATER LINES
	ELECTRICAL LINES
	TELEPHONE LINES
	GAS LINES
	CONTOUR LINES (1' INTERVAL)
	PROPOSED GROUND
	EXISTING GROUND
	EXISTING TREE LINE
	EXISTING DECIDUOUS TREE & SHRUB
	EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.



IOWA ONE CALL
SM

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THEREOF. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

UTILITIES

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

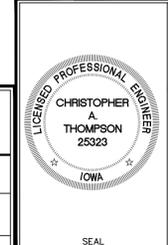
Christopher A. Thompson 03-17-2028
CHRISTOPHER A. THOMPSON, P.E. Iowa Lic. No. 25323

My license renewal date is December 31, 2028.

Pages or sheets covered by this seal:
ALL SHEETS

PLAT/PLAN APPROVED
by the
City of Tiffin

Mayor _____ Date: _____



Date	Revision
02-10-2025	PER CITY COMMENTS
02-19-2025	PER CITY COMMENTS
03-01-2025	PER BID COMMENTS - CAT
04-04-2025	SANITARY SERVICE - CAT
06-11-2025	MOVED INTO THE ROAD CORRECT-CAT
07-03-2025	ADDED PHASING - CAT
12-04-2025	MASS GRADE NOTE FOR BID - CAT
01-09-2026	PHASING CHANGES - CAT
01-20-2026	PHASING CHANGES - CAT
03-18-2026	ADDENDUM #1 - CAT

DETAILED SITE LAYOUT AND DIMENSION PLAN

LOT 1,
PARK PLACE CITY
CENTER - PART 3
TIFFIN
JOHNSON COUNTY
IOWA

MMS CONSULTANTS, INC.
Date: 01-22-2025
Designed by: CAT Field Book No:
Drawn by: ADP Scale: 1"=40'
Checked by: CAT Sheet No:
Project No: C120
0147-017 of 6



CIVIL ENGINEERS
LAND PLANNERS
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ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
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www.mmsconsultants.net

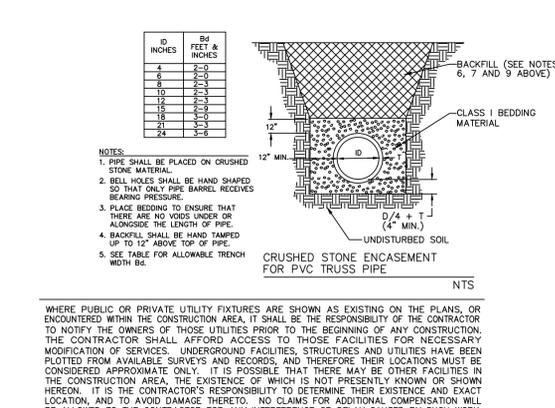
Date	Revision
02-10-2025	PER CITY COMMENTS
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03-01-2025	PER BID COMMENTS - CAT
04-04-2025	SANITARY SERVICE - CAT
06-11-2025	MOVED TIME TO H200 CONJECT - CAT
07-03-2025	ADDED PHASING - CAT
12-04-2025	MASS GRADE NOTE FOR BID - CAT
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01-20-2026	PHASING CHANGES - CAT
03-18-2026	ADDENDUM #1 - CAT

SANITARY SEWER AND WATER MAIN CONSTRUCTION NOTES

- SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SUDAS STANDARD SPECIFICATIONS. CITY OF Tiffin DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
- CONTRACTOR SHALL PROVIDE CRUSHED STONE ENCASMENT BEDDING FOR ALL SANITARY SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
- SANITARY SEWERS TO BE PVC TRUSS PIPE UNLESS NOTED OTHERWISE. SANITARY SEWER SERVICE LINES SHALL BE PVC, SDR 23.5 WITH GASKETED JOINTS. SANITARY SEWER SERVICE LINES SHALL BE 4" DIAMETER UNLESS NOTED OTHERWISE.
- CONTRACTOR TO PROVIDE CLOW "BAND-SEAL" COUPLINGS FOR DISSIMILAR PIPE CONNECTIONS.
- 8" AND 12" DIAMETER WATER MAINS SHALL BE DR-18 PVC PIPE. ALL WATER MAIN FITTINGS SHALL BE DUCTILE IRON WITH RETAINING GLANDS AND MEGALUGS. ALL FITTINGS FOR WATER MAIN SHALL BE RESTRAINED WITH THRUST BLOCKS. ALL WATER MAINS AND SERVICE LINES SHALL HAVE CLASS P-1 BEDDING PER IOWA DOT STANDARD ROAD PLAN SW-104. FOR ALL WATER LINE VALVES, THE VALVE BOX AND GATE VALVE UNDER AWWA SHOULD BE INCLUDED ALONG WITH A VALVE BOX CENTERING ADAPTOR.
- SANITARY SEWER TRENCHES SHOWN ON THE PROFILE VIEW SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 95% STANDARD PROCTOR DENSITY:
 - SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
 - CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL SHALL BE USED.
- GRANULAR TRENCH BACKFILL SHALL BE CLASS A CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 95% STANDARD PROCTOR DENSITY.
- ALL SANITARY SEWER SERVICE LINES CROSSING STREET RIGHT-OF-WAY SHALL BE BACKFILLED IN ACCORDANCE WITH THE PRECEDING NOTE.
- WATER MAINS AND SERVICE LINES WITHIN STREET RIGHT OF WAYS OR WITHIN EASEMENTS ADJACENT TO THE STREET SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 95% STANDARD PROCTOR DENSITY:
 - SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
 - CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL SHALL BE USED.
- ALL SANITARY SEWER SERVICE LINES SHALL BE EXTENDED:
 - TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ON THE OPPOSITE SIDE OF THE STREET FROM THE SEWER MAIN.
 - TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ADJACENT TO THE SEWER MAIN.

THE FOLLOWING MINIMUM CLEARANCES MUST BE MAINTAINED:
- WATER MAIN SHALL BE LOCATED 10 FEET HORIZONTALLY DISTANT FROM ALL SANITARY SEWER AND STORM SEWER.
- WATER MAIN SHALL NOT PASS THROUGH NOR CONTACT A SEWER OR A SEWER MANHOLE. A MINIMUM HORIZONTAL SEPARATION OF 3 FEET SHALL BE MAINTAINED.
- VERTICAL SEPARATION OF WATER MAINS CROSSING OVER ANY SANITARY SEWER SHOULD BE A MINIMUM OF 18-INCHES. MEASURED OUTSIDE TO OUTSIDE FROM THE CLOSEST EDGE OF EACH PIPE. IF PHYSICAL CONDITIONS PROHIBIT THIS SEPARATION, THE WATER MAIN SHALL NOT BE PLACED CLOSER THAN 6-INCHES ABOVE A SEWER OR 18-INCHES BELOW A SEWER. THE SEPARATION DISTANCE SHALL BE THE MAXIMUM FEASIBLE IN ALL CASES. WHERE THE SEWER CROSSES OVER OR LESS THAN 18 INCHES BELOW A WATER MAIN ONE FULL LENGTH OF SEWER PIPE OF WATER MAIN MATERIAL SHALL BE LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM THE WATER MAIN. THE SEWER AND WATER PIPES MUST BE ADEQUATELY SUPPORTED AND HAVE WATERTIGHT JOINTS. A LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10 FEET OF THE POINT OF CROSSING.
- WHERE THE WATER MAIN CROSSES SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. THE WATER AND SEWER PIPES MUST BE ADEQUATELY SUPPORTED AND HAVE WATER TIGHT JOINTS. A LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10-FEET OF THE POINT OF CROSSING.
- NOMINAL DEPTH OF WATER MAIN = 5.5 FEET TO TOP OF PIPE.
- WATER MAIN SHADED ON PLAN VIEW SHALL BE INSTALLED PRIOR TO PAVING.
- ALL SANITARY SEWER AND SERVICE LINES SHALL BE AIR TESTED TO PASS THE FOLLOWING TEST:
 - PERFORM FROM MANHOLE-TO-MANHOLE AFTER BACKFILL.
 - PLACE PNEUMATIC PLUGS: (1) SEALING LENGTH- EQUAL TO OR GREATER THAN PIPE DIAMETER, (2) CAPABLE OF RESISTING INTERNAL TEST PRESSURE WITHOUT EXTERNAL BRACING OR BLOCKING.
 - INTRODUCE LOW-PRESSURE AIR INTO SEALED LINE AND ACHIEVE INTERNAL AIR PRESSURE 4 PSIG GREATER THAN MAXIMUM PRESSURE EXERTED BY GROUNDWATER ABOVE PIPE INVERT.
 - LIMIT INTERNAL PRESSURE IN SEALED LINE BELOW 8 PSIG.
 - ALLOW 2 MINUTES MINIMUM FOR AIR PRESSURE TO STABILIZE. DISCONNECT LOW-PRESSURE AIR HOSE FROM CONTROL PANEL.
 - MINIMUM TIME FOR PRESSURE TO DROP FROM 3.5 TO 2.5 PSIG GREATER THAN MAXIMUM PRESSURE EXERTED BY GROUNDWATER ABOVE PIPE INVERT:

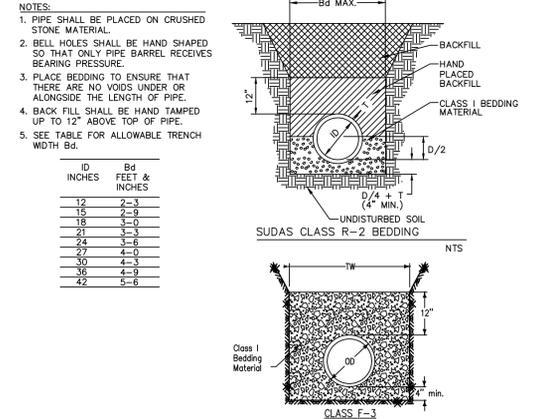
PIPE DIAMETER, INCHES	MINIMUM TIME, MIN.	LENGTH FOR INVERT, FEET	TIME FOR LONGER LENGTH, S
4	3:46	597	0.380 L
6	5:40	398	0.854 L
8	7:34	298	1.620 L
10	9:26	239	2.374 L
12	11:20	199	3.418 L
15	14:10	159	5.342 L
18	17:00	133	7.692 L
21	19:50	114	10.470 L
24	22:40	99	13.674 L
27	25:30	88	17.506 L
30	28:20	80	21.366 L
33	31:10	72	25.852 L
36	34:00	66	30.768 L



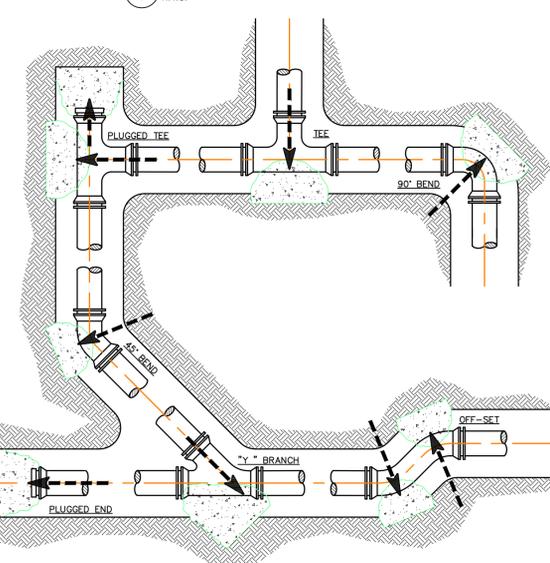
STORM SEWER CONSTRUCTION NOTES

- STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SUDAS STANDARD SPECIFICATIONS. CITY OF Tiffin DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
- ALL STORM SEWERS SHALL BE CLASS 3 RCP WITH CLASS R-2 BEDDING OR ADS N-12 WITH CLASS F-3 BEDDING PER SUDAS.
- RCP STORM SEWERS SHALL BE TONGUE & GROOVE WITH ALL JOINTS WRAPPED WITH FILTER FABRIC A MINIMUM OF 24" WIDE UNLESS NOTED OTHERWISE ON THE PLANS.
- GRANULAR TRENCH BACKFILL SHALL BE CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 95% STANDARD PROCTOR DENSITY.
- ALL PIPE SHALL BE CERTIFIED.
- ALL STORM INTAKES SHALL BE A MINIMUM OF 48 INCHES FROM THE TOP OF CURB/RIM TO SUBGRADE. IF INVERT ELEVATIONS ARE INSUFFICIENT TO PROVIDE THE REQUIRED DEPTH, THE CONTRACTOR IS TO PROVIDE A DEEPER STRUCTURE AND POUR CONCRETE FILLET IN INTAKE TO MAKE INTAKE PIPES DRAIN AT ELEVATIONS LISTED.
- LIFT HOLES IN STORM SEWER WILL NOT BE ALLOWED.
- PROVIDE CONCRETE FILLETS IN ALL NEW & EXISTING DRAINAGE STRUCTURES PER REFERENCED DETAILS.
- ALL STORM MANHOLES SHALL HAVE INTERIOR CHIMNEY SEALS.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS, OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THOSE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THAT THERE MAY BE OTHER FACILITIES IN THE CONSTRUCTION AREA, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN HEREON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.



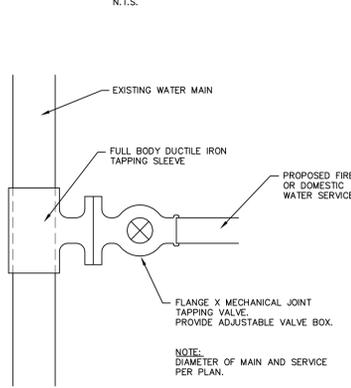
THRUST BLOCK DETAIL



THRUST BLOCK MINIMUM BEARING AREA (IN SQUARE FEET)

PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	11-1/4° BEND	22-1/2° BEND
4"	1.4	1.9	1.0	1.0	1.0
6"	2.8	4.0	2.1	1.1	1.0
8"	4.8	6.8	3.7	1.9	1.0
10"	7.3	10.3	5.8	2.8	1.4
12"	10.3	14.5	7.9	4.0	2.0
16"	17.8	25.2	13.6	7.0	3.5
20"	27.5	38.9	21.0	10.7	5.4
24"	39.2	55.5	30.0	15.3	7.7

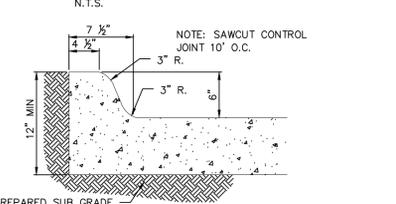
LIVE TAP DETAIL



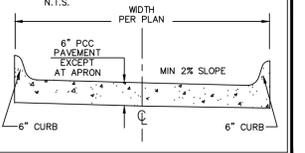
PAVING CONSTRUCTION NOTES

- I.D.O.T. CLASS C-3 CONCRETE SHALL BE USED, UNLESS NOTED OTHERWISE.
- CITY OF Tiffin DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
- PAVEMENT JOINTS SHALL CONFORM TO I.D.O.T. STANDARD ROAD PLANS PV-1 CURRENT REVISION.
- ALL SAWED PAVEMENT JOINTS SHALL BE SEALED.
- INSTALL "CD" TRANSVERSE CONTRACTION JOINTS FOR 8" PCC PAVEMENT. "C" TRANSVERSE CONTRACTION JOINTS SHALL BE USED FOR 7" PCC PAVEMENT.

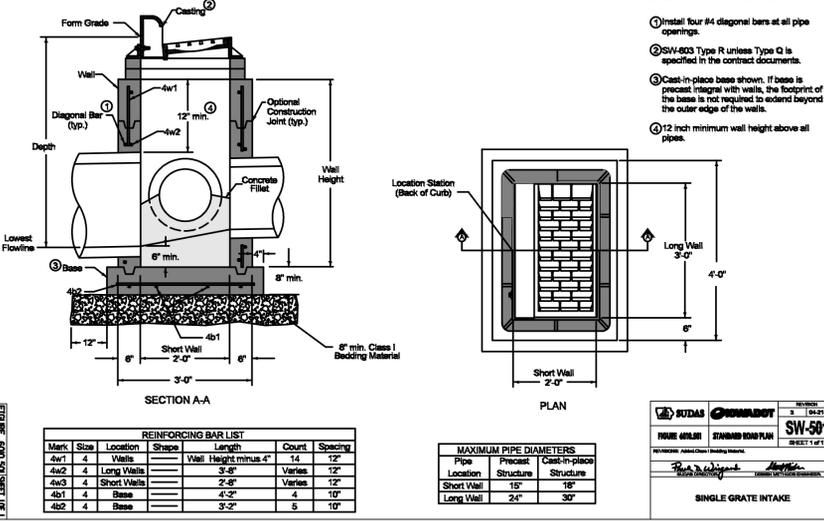
STANDARD CURB DETAIL



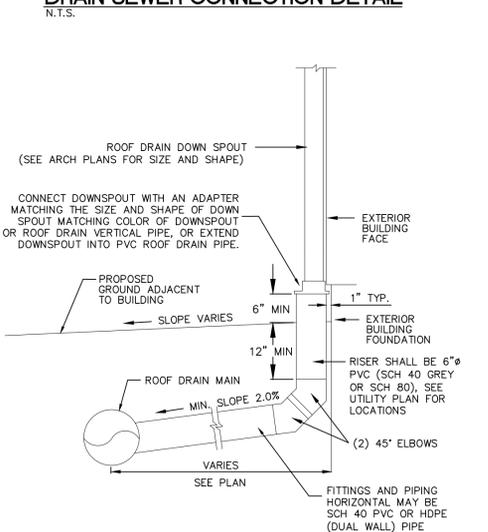
TYPICAL DRIVE SECTION



SECTION A-A



DOWNSPOUT TO ROOF DRAIN SEWER CONNECTION DETAIL



WATER SERVICE DETAIL
NO SCALE

**SIZES PER MECHANICAL CONTRACTOR
**METER FOR THE DOMESTIC LINE IS INTERNAL TO THE BUILDING - FIRE LINE IS NOT METERED.
** 4-INCH SERVICE TO BE TYPE K COPPER.
** 8-INCH FIRE TO BE C900 PVC.

FIRE INSPECTION NOTES

- FIRE LINE THRUST BLOCKS SHALL BE INSPECTED BY THE FIRE MARSHAL PRIOR TO BURIAL.
- NEPA 24 UNDERGROUND HIGH VELOCITY FLUSH SHALL BE CONDUCTED PRIOR TO THE SPRINKLER CONTRACTOR CONNECTING TO THE FIRE LINE.
- FIRE SPRINKLER SYSTEM SHALL BE FLOW TESTED WITHIN 90-DAY SUBMITTAL OF FIRE SPRINKLER PLANS.

TRASH ENCLOSURE TO BE PART OF FUTURE PHASE. NOT PART OF THIS PROJECT.

GENERAL NOTES AND DETAILS

LOT 1,
PARK PLACE CITY
CENTER - PART 3
Tiffin
JOHNSON COUNTY
IOWA

MMS CONSULTANTS, INC.
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Designed by: CAT
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1017-017 of 6

