



PROJECT MANUAL FOR:

**VILLAGE OF RAPIDS CITY**  
**17<sup>TH</sup> STREET RECONSTRUCTION**

Rapids City, Illinois

**Issued for Construction:** March 20, 2023

**Bid Location:** Village of Rapids City Hall  
1204 4<sup>th</sup> Avenue  
Rapids City, Illinois 61278



60 E. COURT ST, IOWA CITY, IOWA 52240 | 319.519.6220

AXIOM PROJECT #: 21-0237

**SECTION 00 0102  
PROJECT INFORMATION**

**PART 1 - GENERAL**

**1.1 PROJECT IDENTIFICATION**

- A. Project Name: 17th Street Reconstruction, located at Rapids City, Illinois
- B. Engineer's Project Number: 21-0237.
- C. The Owner, hereinafter referred to as Owner: Village of Rapids City.
- D. Owner's Project Manager: Axiom Consultants, LLC.
  - 1. Project Lead: Brian Boelk
  - 2. Address: 60 East Court Street, Unit 3.
  - 3. City, State, Zip: Iowa City, IA 52240.
  - 4. Phone/Fax: (319) 519-6220.
  - 5. E-mail: bboelk@axiom-con.com.

**1.2 NOTICE TO PROSPECTIVE BIDDERS**

- A. These documents constitute an Invitation to Bid to General Contractors for the construction of the project described below.
- B. Prevailing Wage is required on all projects completed for the Village of Rapids City. Payroll reporting will need to be coordinated with the Village of Rapids City Clerk at vorc@rapidscity.us or 309-496-2321. Please follow the link to the State of Illinois' Prevailing Wage website: <https://data.illinois.gov/dataset/idol-2018-prevailing-wage-rates/resource/0c95f063-aed9-4db7-adc3-c224acee8fc2>
- C. This project does not have any "American made" requirements as it relates to material supply. It is preferred by the Village of Rapids City if products are manufactured in the USA but it is not a necessity.
- D. Performance, Payment and Maintenance Bond
  - 1. Each successful bidder will be required to furnish a corporate surety bond in an amount equal to 100% of its contract price. Said bond shall be issued by a responsible surety approved by Village of Rapids City and shall guarantee the faithful performance of the contract and the terms and conditions therein contained and shall guarantee the prompt payment of all material and labor, and protect and save harmless Village of Rapids City from claims and damages of any kind caused by the operations of the contract and shall also guarantee the maintenance of the improvement caused by failures in materials and construction for a period of two years from and after acceptance of the contract. The guaranteed maintenance period for new paving shall be four years.
- E. Insurance by Contractor: The limits of liability for the insurance required shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations, possess a financial rating of A- or better and be in place prior to project commencement and throughout the construction period:
  - 1. Workers' Compensation, and related coverages:
    - a. State: Statutory
    - b. Applicable Federal (e.g., Longshoreman's): Statutory
    - c. Employers Liability: Bodily Injury by Accident - \$100,000 Each Accident  
Bodily Injury by Disease - \$100,000 Each Employee  
Bodily Injury by Disease - \$500,000 Policy Limit
  - 2. Contractor's General Liability shall include completed operations and product liability coverages:

**VILLAGE OF RAPIDS CITY  
17TH STREET RECONSTRUCTION**

**21-0237**

- a. General Aggregate (per project) \$2,000,000
- b. Products Completed Operations Aggregate \$2,000,000
- c. Personal and Advertising Injury \$1,000,000
- d. Each Occurrence (Bodily Injury and Property Damage) \$1,000,000
- e. Property Damage Liability Insurance will provide Explosion, Collapse and Underground coverages where applicable Provide X, C, U Standard
- 3. Excess or Umbrella Liability:
  - a. General Aggregate \$5,000,000
  - b. Each Occurrence \$5,000,000
- 4. Automobile Liability:
  - a. Combined Single Limit (Bodily Injury and Property Damage Each Accident) \$1,000,000
- 5. The Contractual Liability coverage required shall provide coverage for not less than the following amounts:
  - a. Bodily Injury: Each Person \$1,000,000 Each Accident \$2,000,000
  - b. Property Damage: Each Accident \$1,000,000 Annual Aggregate \$2,000,000

**1.3 PROJECT DESCRIPTION**

- A. Summary Project Description: Village of Rapids City's 17th Street Reconstruction improvements includes the full reconstruction of approximately 1,735 linear feet of an existing rural HMA street section to a 27-foot wide, 7" PCC street with curb, gutter and storm sewer. Improvements include all labor, materials and equipment necessary to construct 7" PCC on a 6" modified subbase, longitudinal subdrain, driveways, intakes, storm sewer, 6" PVC water main, water services, HMA paving transitions, traffic control, earthwork, erosion control, seeding, tree removal and miscellaneous associated work including clean-up and restoration.
- B. Contract Scope: Construction.
- C. Contract Terms: Unit Price .
  - 1. The Base Bid with an HMA Option to include work along 17th Street from 7th Avenue A to approximately 410 17th Street property.
  - 2. Alternate 1 with an HMA Option will include work along 17th Street from 7th Avenue A to Route 84/2nd Avenue.
- D. Project Parameters: 17th Street work to be completed between 7th Avenue A to Route 84/2nd Avenue.
- E. The site is readily accessible and can be viewed at any time by interested contractors.

**1.4 PROCUREMENT TIMETABLE**

- A. Last Request for Substitution Due: 3 days prior to due date of bids.
- B. Last Pre-Bid Request for Clarification Due: 2 days prior to due date of bids.
- C. Pre-Bid Meeting: January 23rd, 2023 at 10:00 AM. Location: Village Hall, 1204 4th Avenue, Rapids City, Illinois 61278.
- D. Bid Due Date: February 1, 2023, before 2 PM local time.
- E. Bid Opening: Same day, 2 PM local time. Location: Village Hall, 1204 4th Avenue, Rapids City, Illinois 61278.
- F. Notice to Proceed: Within 7 days after the Village of Rapids City Board Meeting, to be held February 7, 2023.
- G. Desired Construction Start: Early Start - March 13, 2023; Late Start - April 3, 2023.
- H. Desired Substantial Completion Date: Not later than October 27, 2023.
- I. Desired Final Completion Date: Not later than November 17, 2023.
- J. Liquidated Damages in the amount of \$500.00 per calendar day will be assessed for work not completed within the designated contract terms.

- K. The Owner reserves the right to change the schedule or terminate the entire procurement process at any time.

**1.5 PROCUREMENT DOCUMENTS**


- A. Availability of Documents: Complete sets of procurement documents may be obtained:
  - 1. From Engineer: Axiom Consultants, LLC.
  - 2. Via email: [abricker@axiom-con.com](mailto:abricker@axiom-con.com); Phone: (319) 519-6220
  - 3. Documents can be viewed at the following address: Village of Rapids City, 1204 4th Avenue, Rapids City, Illinois 61278.

**1.6 PROJECT COORDINATION**

- A. General working hours are considered to be 7:00 AM to 7:00 PM. Contractor shall request approval to work beyond such hours via Axiom Consultants or Vaillge or Rapids City if so desired.
- B. Axiom Consultants will provide all construction staking as deemed necessary by the Contractors.
  - 1. Contractor to coordinate directly with Brad Geater at [bgeater@axiom-con.com](mailto:bgeater@axiom-con.com) or 515-205-7268.
  - 2. Two (2) business day's notice will be required when requesting construction staking.
- C. 17th Street serves as a school bus route for the Riverdale School District. Coordination will be required during the time of road closures or impacts to access along 17th Street.
  - 1. Contractor to coordinate with Axiom Consultants and/or Riverdale School District via the Bus Barn Superintendent, Lori Ortiz at [lortiz@riverdaleschools.org](mailto:lortiz@riverdaleschools.org) or 309-523-3185.
  - 2. At minimum, two (2) business day's notice will be required by the school to provide bus re-routing and communication with the residences.
- D. Access to all properties throughout the project shall be provided to the property owners.
- E. US Postal Services (USPS) mail is delivered to the post office for all properties within the 17th Street Road Reconstruction project limits. Access to all properties throughout the project shall be provided for any direct package deliveries not associated with USPS.
- F. Private utility relocations are expected to be needed and take place prior to or during construction. Contractor to coordinate with all private utilities.
- G. Water shut-off notice coordination will be required with the property owners.
  - 1. Contractor to coordinate with Axiom Consultants and/or Village of Rapids City Public Works Superintendent, Ryan Bump at [publicworks@rapidscity.us](mailto:publicworks@rapidscity.us) or 309-558-4627.
  - 2. At minimum, two (2) business day's notice will be required by the Village of Rapids City. The Village will provide notice to the residents.

**END OF SECTION**

SECTION 00 0107  
SEALS PAGE

	I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.
	<p>BRIAN A. BOELK, P.E. <i>Brian Boelk</i> 1/11/2023 LICENSE NUMBER 062-074137. DATE</p>
	MY LICENSE RENEWAL DATE IS NOVEMBER 30, 2023.
	PAGES OR SHEETS COVERED BY THIS SEAL: ALL

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DATE: JANUARY 11, 2023

LICENSE NUMBER: 062-074137

MY LICENSE RENEWAL DATE IS: NOVEMBER 30, 2023

PAGES OR SHEETS COVERED BY THIS SEAL: ALL

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.

END OF SECTION

**SECTION 00 0110  
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**FRONT END**

**DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS**

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- 00 4100 - BID FORM

**SPECIFICATIONS**

**DIVISION 01 -- GENERAL REQUIREMENTS**

- 01 2300 - ALTERNATES
- 01 3323 - SUBMITTALS
- 01 4000 - QUALITY REQUIREMENTS
- 01 5713 - TEMPORARY EROSION AND SEDIMENT CONTROL
- 01 7000 - EXECUTION AND CLOSEOUT REQUIREMENTS
- 01 7800 - CLOSEOUT SUBMITTALS

**CONTRACTORS SHOULD APPLY AND USE THE FOLLOWING SPECIFICATIONS AND  
STADNARDS FOR THIS PROJECT:**

- A. Illinois Department of Transportation Standard and Specifications for Road and Bridge Construction.
- B. Illinois Urban Manual.
- C. Standard Specifications for Water and Sewer Main Construction in Illinois.

**END OF SECTION**

**SECTION 00 2113  
INSTRUCTIONS TO BIDDERS**

SEALED PROPOSALS FOR THE CONSTRUCTION OF SAID IMPROVEMENTS WILL BE RECEIVED BY THE VILLAGE OF RAPIDS CITY, IN THE VILLAGE HALL LOCATED AT 1204 4TH AVENUE IN RAPIDS CITY, ILLINOIS 61278, UNTIL 2:00 P.M., FEBRUARY 1, 2023. SEALED PROPOSALS WILL BE OPENED AND PUBLICLY READ IMMEDIATELY THEREAFTER.

THE PROJECT SHALL CONSIST OF PROVIDING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO INSTALL THE WORK AS DEFINED AS FOLLOWS:

THE OVERALL SCOPE OF THE VILLAGE OF RAPIDS CITY'S 17TH STREET RECONSTRUCTION IMPROVEMENTS INCLUDES THE FULL RECONSTRUCTION OF APPROXIMATELY 1,735 LINEAR FEET OF AN EXISTING RURAL HMA STREET SECTION TO A 27-FOOT WIDE, 7" PCC STREET WITH CURB, GUTTER AND STORM SEWER. IMPROVEMENTS INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO CONSTRUCT 7" PCC ON A 6" MODIFIED SUBBASE, LONGITUDINAL SUBDRAIN, DRIVEWAYS, INTAKES, STORM SEWER, 6" PVC WATER MAIN, WATER SERVICES, HMA PAVING TRANSITIONS, TRAFFIC CONTROL, EARTHWORK, EROSION CONTROL, SEEDING, TREE REMOVAL AND MISCELLANEOUS ASSOCIATED WORK INCLUDING CLEAN-UP AND RESTORATION.

THE BIDDER AGREES TO PERFORM ALL OF THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS FOR THE FOLLOWING UNIT PRICES OR LUMP SUMS. BIDS SHALL INCLUDE ALL APPLICABLE TAXES AND FEES EXCEPT FOR SALES TAX. BIDS SHALL NOT INCLUDE SALES TAX. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE NECESSARY INFORMATION FOR THE ISSUANCE OF THE SALES TAX EXEMPTION CERTIFICATES BY THE VILLAGE.

ALL WORK AND EQUIPMENT IS TO BE IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS.

PAYMENT FOR THE PROJECT WILL BE MADE FROM FUNDS AS ARE LEGALLY AVAILABLE FOR SUCH PURPOSE. MONTHLY PROGRESS PAYMENTS WILL BE MADE TO THE CONTRACTOR AS THE WORK PROGRESSES. THESE PAYMENTS WILL BE MADE BASED ON APPROVED "REQUEST FOR PAYMENT" FORMS PROVIDED BY THE CONTRACTOR ON A MONTHLY BASIS. THESE REQUESTS WILL BE REVIEWED BY THE DESIGN PROFESSIONAL AND APPROVED BY THE VILLAGE OF RAPIDS CITY.

APPROVED AMOUNTS PAID WILL INCLUDE A FIVE PERCENT (5%) RETAINAGE TO BE WITHHELD UNTIL FINAL ACCEPTANCE OF THE PROJECT. PAYMENTS SHALL REPRESENT THE COST OF ALL MATERIALS AND LABOR COMPLETED WITHIN THE MONTH PRIOR TO THE REQUEST AND WHICH HAVE BEEN INCORPORATED INTO THE SITE PER THE APPROVED CONTRACT DOCUMENTS. MONTHLY PROGRESS PAYMENTS SHALL IN NO WAY BE CONSTRUED AS AN ACT OF ACCEPTANCE FOR ANY PART OF THE WORK, PARTIALLY OR TOTALLY COMPLETED. FINAL PAYMENT OF THE REMAINING AMOUNT DUE THE CONTRACTOR WILL BE MADE NOT LATER THAN THIRTY-ONE (31) DAYS FROM THE FINAL ACCEPTANCE OF THE WORK BY THE VILLAGE.

EACH PROPOSAL SHALL BE MADE ON THE BID FORM (00 4100) PREPARED FOR THIS PURPOSE AND SEALED IN A SEPARATE ENVELOPE, THIS FORM MAY BE OBTAINED FROM THE PROJECT SPECIFICATIONS AND/OR THE DESIGN ENGINEER, AXIOM CONSULTANTS, LLC, AT 60 E COURT STREET, UNIT #3, IOWA CITY, IOWA 52240. EACH PROPOSAL MUST BE ACCOMPANIED BY A BID BOND, CASH DEPOSIT, CASHIER'S CHECK, OR A CERTIFIED CHECK FROM A SOLVENT BANK CHARTERED UNDER THE LAWS OF THE UNITED STATES IN THE AMOUNT OF 5% OF THE BID. AIA DOCUMENT A310-2010 'BID BOND' IS THE RECOMMENDED FORM TO BE UTILIZED FOR A BID BOND. BID SECURITY SHALL BE SUBMITTED IN A SEPARATE ENVELOPE THAN THE PROPOSAL FORM WITH THE IDENTIFICATION:

"VILLAGE OF RAPIDS CITY 17TH STREET RECONSTRUCTION"

A PERFORMANCE AND PAYMENT BOND WILL BE REQUIRED AT THE TIME OF CONTRACT FOR THE WINNING BIDDER AND DURING THE EXECUTION OF THE FORMAL NOTICE OF AWARD BY THE OWNER.

THE VILLAGE RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS BASED ON INACCURATE OR INCOMPLETE PROVISION OF INFORMATION.

BY VIRTUE OF STATUTORY AUTHORITY, PREFERENCE WILL BE GIVEN TO PRODUCTS AND LABOR ORIGINATING IN THE STATE OF ILLINOIS AND TO THE EXTENT LAWFULLY ALLOWED UNDER ILLINOIS STATUTES. THIS PROVIDES THAT THE AWARD OF THE CONTRACT WILL BE MADE TO THE LOWEST RESPONSIVE, RESPONSIBLE BIDDER SUBMITTING THE LOWEST ACCEPTABLE BID, WHICH SHALL BE WITHOUT REGARD TO STATE OR LOCAL LAW WHEREBY PREFERENCE IS GIVEN ON FACTORS OTHER THAN THE AMOUNT OF THE BID.



PLANS AND SPECIFICATIONS GOVERNING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS HAVE BEEN PREPARED BY AXIOM CONSULTANTS, LLC. THESE PLANS AND SPECIFICATIONS, AND THE PROCEEDINGS OF THE VILLAGE REFERRING TO AND DEFINING SAID PROPOSED IMPROVEMENTS, ARE HEREBY MADE A PART OF THIS NOTICE, AND THE PROPOSED CONTRACT BY THIS REFERENCE SHALL BE EXECUTED IN COMPLIANCE THEREWITH.

SAID PLANS, SPECIFICATIONS AND PROPOSED CONTRACT DOCUMENTS ARE NOW ON FILE WITH THE VILLAGE OF RAPIDS CITY AND CAN BE VIEWED. COPIES OF THE CONTRACT DOCUMENTS ARE AVAILABLE FROM AXIOM CONSULTANTS, 60 E COURT STREET, UNIT #3 LOCATED IN IOWA CITY, IOWA 52240. PLEASE CONTACT ADRIANNE BRICKER AT [ABRICKER@AXIOM-CON.COM](mailto:ABRICKER@AXIOM-CON.COM) OR (319) 519-6220 TO REQUEST A COPY OF THE BID DOCUMENTS. AT THE TIME OF THE REQUEST, BIDDERS WILL RECEIVED AN ELECTRONIC COPY OF THE BIDDING PLANS AND SPECIFICATIONS. IF A PAPER COPY IS REQUESTED, A FULL SET OF SPECIFICATIONS AND AN 11"X17" SIZE SET OF BIDDING PLANS WILL BE MAILED ONE TIME, FREE OF CHARGE TO THE PROSPECTIVE BIDDER.

SETS OF PLANS AND SPECIFICATIONS ARE AVAILABLE TO BIDDERS AT NO COST FROM AXIOM CONSULTANTS IN ACCORDANCE WITH CURRENT STATE LAW.

PUBLISHED UPON ORDER OF THE VILLAGE OF RAPIDS CITY.

**END OF SECTION**

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SECTION 00 4100  
BID FORM

**THE PROJECT AND THE PARTIES**

**TO:**

Owner

Village of Rapids City  
1204 4th Avenue  
Rapids City, Illinois 61278

Engineer

Axiom Consultants, LLC  
60 East Court Street #3  
Iowa City, IA 52240

**FOR:**

Project: Village of Rapids City, 17th Street Reconstruction  
Owner's Project Number: n/a  
17th Street Roadway between 7th Avenue A to approximately 410 17th Street property  
Rapids City, Illinois 61278

**SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)**

Bidder's Full Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_

**SEE ATTACHED 00 4100 BID FORM: BASE BID UNIT PRICING WITH HMA OPTION**

**NOTES:**

1. Complete the attached 00 4100 Bid Form: Base Bid Unit Pricing and fill in the totals for the Base Bid and HMA Option below.
2. Complete and include Section 00 4323 ALTERNATES FORM.
2. The Base Bid with HMA Option will include the scope of work from 7th Avenue A to property located at 410 17th Street. The Alternate with HMA Option pricing will include the scope of work from 7th Avenue A to Route 84/2nd Avenue.

**CERTIFICATION AND BASE BID**

Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Axiom Consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

**HMA OPTION**

ADD / DEDUCT \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

It is understood by the bidder that this project is tax-exempt per State of Illinois law.  
We have included the required Bid Bond as required by the Notice of Public Bid Letting.

**CONTRACTOR LICENSE**

The undersigned further states that it is a duly licensed contractor, for the type of work proposed, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

**GUIDELINES**

The bidder must bid all sections and items of the work intended within a single bid form.  
The bidder acknowledges the intended completion date included within the specifications.  
The undersigned bidder certifies that this proposal is made in good faith, without collusion or in connection with any other person or person bidding on the work.  
The undersigned bidder certifies that this proposal is made in conformance with the Contract Documents and agrees that in the event of any discrepancies or differences between the conditions of the bidder's proposal and the Contract Documents prepared by Axiom Consultants, LLC, the provisions of the latter shall prevail.  
The bidder understands that the Owner reserves the right to reject any and all bids, waive irregularities or technicalities in any bid, and accept any bid, which meets the requirements of the bid documents.  
The bidder shall not make any revisions to the Bid Form or the Schedule of Bid Prices and shall not devise any alternates other than those provided. Any such notes, revisions or comment shall be grounds for rejection of the bid as not being responsive.  
The bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 calendar days after the opening of the bids.  
Bidder please fill out the application item(s) listed below:  
Note: If bid is submitted by an agent of bidder, please attach a current Power-of- Attorney certifying the agents authority to bind the bidder.

**CONTRACT TIME**

If this Bid is accepted, we will:

Substantially Complete the Work by October 27, 2023 with Final Completion not later than November 17, 2023.

**ADDENDA**

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

1. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
2. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
3. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
4. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.

**BID FORM SIGNATURE(S)**

Authorized Signature:

\_\_\_\_\_ (handwritten)

Signed By:

\_\_\_\_\_ (type or print name)

Title:

\_\_\_\_\_ (owner/partner/principal/president/etc)

Phone Number:

Email:

**IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.**

**END OF SECTION**

**00 4100 BID FORM: BASE BID UNIT PRICING - 17TH STREET RECONSTRUCTION**

ITEM	ITEM CODE	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED PRICE
1	20100500	TREE REMOVAL, ACRES	ACRE	0.8	\$	\$
2	20200100	EARTH EXCAVATION	CY	2,015	\$	\$
3	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CY	1,070	\$	\$
4	25000XXX	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING-CLASS 1	ACRE	1.2	\$	\$
5	25100630	EROSION CONTROL BLANKET	SY	2,710	\$	\$
6	28000315	AGGREGATE DITCH CHECK	EACH	12	\$	\$
7	28000400	PERIMETER EROSION CONTROL	LF	1,198	\$	\$
8	28000400	FILTER SOCK, 9"	LF	2,440	\$	\$
9	28000500	INLET AND PIPE PROTECTION	EACH	19	\$	\$
10	28000XXX	FILTER SOCKS, REMOVAL	LF	2,440	\$	\$
11	28100XXX	RR-4 REVETMENT	TON	42	\$	\$
12	30103000	SHAPING AND GRADING ROADWAY	UNIT	14	\$	\$
13	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CY	200	\$	\$
14	<del>35101600</del>	<del>AGGREGATE BASE COURSE, TYPE B 4" (SIDEWALK)</del>	<del>TON</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
15	35101800	AGGREGATE BASE COURSE, TYPE B 6" (CONCRETE DRIVEWAY)	TON	162	\$	\$
16	35101800	AGGREGATE BASE COURSE, TYPE B 6" (STREET)	TON	1,301	\$	\$
17	40200500	AGGREGATE SURFACE COURSE, TYPE A 6" (GRANULAR DRIVEWAY)	TON	168	\$	\$
18	42000201	PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SY	3,776	\$	\$
19	35100700	AGGREGATE BASE COURSE, TYPE B 8" (HMA DRIVES AND TRANSITIONS)	TON	157	\$	\$
20	35501295	HOT-MIX ASPHALT BASE COURSE 3.5" (HMA DRIVES AND TRANSITIONS)	TON	68	\$	\$
21	40604062	HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (HMA DRIVES AND TRANSITIONS)	TON	44	\$	\$
22	42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6"	SY	540	\$	\$
23	<del>42400100</del>	<del>PORTLAND CEMENT CONCRETE SIDEWALK 4"</del>	<del>SY</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
24	<del>42400300</del>	<del>PORTLAND CEMENT CONCRETE SIDEWALK 6"</del>	<del>SY</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
25	<del>42400800</del>	<del>DETECTABLE WARNINGS</del>	<del>SF</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
26	44000100	PAVEMENT REMOVAL	SY	3,652	\$	\$
27	44000200	DRIVEWAY PAVEMENT REMOVAL	SY	817	\$	\$
28	<del>44000600</del>	<del>SIDEWALK REMOVAL</del>	<del>SY</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
29	50105220	PIPE CULVERT REMOVAL	LF	1,093	\$	\$

30	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12", TYPE 2	EACH	2	\$	\$
<del>31</del>	<del>54214929</del>	<del>PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ARCH, EQUIVALENT ROUND SIZE 24", TYPE 2</del>	<del>EACH</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
<del>32</del>	<del>54248130</del>	<del>GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND SIZE 24", TYPE 2</del>	<del>EACH</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
33	550A0350	STORM SEWER, TRENCHED, RCP, 12", TYPE 2	LF	147	\$	\$
34	550A0360	STORM SEWER, TRENCHED, RCP, 15", TYPE 2	LF	237	\$	\$
35	550A0380	STORM SEWER, TRENCHED, RCP, 18", TYPE 2	LF	757	\$	\$
<del>36</del>	<del>550A4900</del>	<del>STORM SEWER, TRENCHED, ARCHED RCP, 18" X 28.5", TYPE 2</del>	<del>LF</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
37	56100600	WATER MAIN 6"	LF	759	\$	\$
38	56104900	WATER VALVES 6"	EACH	4	\$	\$
39	56107100	WATER MAIN REMOVAL, 6"	LS	1	\$	\$
40	56108800	TAPPING VALVES AND SLEEVES 6"	EACH	2	\$	\$
41	56109210	WATER VALVES TO BE ADJUSTED	EACH	1	\$	\$
42	56200300	WATER SERVICE LINE 1"	LF	263	\$	\$
43	56201400	CORPORATION STOPS 1"	EACH	11	\$	\$
44	56400500	FIRE HYDRANTS TO BE REMOVED	EACH	1	\$	\$
45	56400700	FIRE HYDRANT AND VALVE (SPECIAL)	EACH	2	\$	\$
46	56500800	DOMESTIC WATER SERVICE BOXES	EACH	11	\$	\$
47	60108106	PIPE UNDERDRAINS, TYPE 1, 6" PVC	LF	2,025	\$	\$
48	60108XXX	UNDERDRAIN OUTLET	EACH	15	\$	\$
49	60108XXX	UNDERDRAIN SERVICE, 6" PVC, INCLUDING 6" WYE	LF	135	\$	\$
50	60200XXX	MANHOLE, STORM TYPE 401, 48"	EACH	1	\$	\$
<del>51</del>	<del>60200XXX</del>	<del>MANHOLE, STORM TYPE 401, 72"</del>	<del>EACH</del>	<del>N/A</del>	<del>--</del>	<del>--</del>
52	60200XXX	INTAKE, TYPE 501	EACH	3	\$	\$
53	60200XXX	INTAKE, TYPE 502 WITH 48" MANHOLE	EACH	5	\$	\$
54	60200XXX	INTAKE, TYPE 505	EACH	1	\$	\$
55	60200XXX	INTAKE, TYPE 512, 24"	EACH	2	\$	\$
56	60200XXX	INTAKE, TYPE 512, 30"	EACH	1	\$	\$
57	60200XXX	INTAKE, TYPE 513	EACH	2	\$	\$
58	60200XXX	INTAKE, TYPE 541 WITH 542 EXTENSION	EACH	1	\$	\$
59	60300350	MANHOLE FRAMES TO BE ADJUSTED	EACH	2	\$	\$
60	60500040	REMOVING MANHOLES	EACH	5	\$	\$
61	60500050	REMOVING CATCH BASINS	EACH	1	\$	\$
62	60602500	CONCRETE GUTTER, TYPE A	LF	110	\$	\$
63	66900200	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	\$	\$

00 4100 Bid Form: Base Bid Unit

64	67100100	MOBILIZATION	LS	1	\$	\$
65	70100XXX	TEMPORARY TRAFFIC CONTROL	LS	1	\$	\$
66	M2800250	TEMPORARY SEEDING, FERTILIZING, AND MULCHING-CLASS 7	ACRE	1.2	\$	\$
67	X0326806	CONCRETE WASHOUT	LS	1	\$	\$
68	Z0045452	PRESSURE REDUCING VALVE 6" WITH VAULT	EACH	1	\$	\$
69	Z0051500	REMOVING AND RESETTING STREET SIGNS	EACH	6	\$	\$
70	--	PAVEMENT LUGS	EACH	8	\$	\$
<b>TOTAL BASE BID CONSTRUCTION COST</b>						\$

### HMA OPTION

ITEM	ITEM CODE	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED PRICE
16	35101800	DEDUCT - AGGREGATE BASE COURSE, TYPE B 6" (STREET)	TON	(1301)	\$	\$
18	42000201	DEDUCT - PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SY	(3775.90)	\$	\$
19	35100700	DEDUCT - AGGREGATE BASE COURSE, TYPE B 8" (HMA DRIVES AND TRANSITIONS)	TON	(157)	\$	\$
20	35501295	DEDUCT - HOT-MIX ASPHALT BASE COURSE 3.5" (HMA DRIVES AND TRANSITIONS)	TON	(68)	\$	\$
21	40604062	DEDUCT - HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (HMA DRIVES AND TRANSITIONS)	TON	(44)	\$	\$
70	--	DEDUCT - PAVEMENT LUGS	EACH	(8)	\$	\$
18B	60608572	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	LF	2525	\$	\$
19B	35100700	AGGREGATE BASE COURSE, TYPE B 8" (STREET, HMA DRIVES AND TRANSITIONS)	TON	1,905	\$	\$
20B	35501295	HOT-MIX ASPHALT BASE COURSE 3.5" (STREET, HMA DRIVES AND TRANSITIONS)	TON	645	\$	\$
21B	40604062	HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (STREET, HMA DRIVES & TRANSITIONS)	TON	378	\$	\$
<b>TOTAL ADD/DEDUCT (TO BASE BID) FOR HMA OPTION COST</b>						\$



**SECTION 01 2300  
ALTERNATES**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Price and Contract Time.

**1.2 ACCEPTANCE OF ALTERNATES**

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

**1.3 SCHEDULE OF ALTERNATES**

- A. Alternate No. 1 - 17th Street Roadway between 7th Avenue A and Route 84/2nd Avenue:

**SEE ATTACHED 01 2300 ALTERNATES FORM: ALTERNATE 1 UNIT PRICING**

NOTES:

- 1. Complete and attach 01 2300 Alternates Form: Alternate 1 Unit Pricing
- 2. The Base Bid with HAM Option will include the scope of work from 7th Avenue A to property located at 410 17th Street. The Alternate with HMA Option pricing will include the scope of work from 7th Avenue A to Route 84/2nd Avenue.

**ALTERNATE 1 BID:**

\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

**HMA OPTION:**

ADD / DEDUCT \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**01 2300 ALTERNATES FORM: ALTERNATE 1 UNIT PRICING - 17TH STREET RECONSTRUCTION**

ITEM	ITEM CODE	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED PRICE
1	20100500	TREE REMOVAL, ACRES	ACRE	0.8	\$	\$
2	20200100	EARTH EXCAVATION	CY	2,560	\$	\$
3	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CY	1,395	\$	\$
4	25000XXX	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING-CLASS 1	ACRE	1.4	\$	\$
5	25100630	EROSION CONTROL BLANKET	SY	2,840	\$	\$
6	28000315	AGGREGATE DITCH CHECK	EACH	12	\$	\$
7	28000400	PERIMETER EROSION CONTROL	LF	1,444	\$	\$
8	28000400	FILTER SOCK, 9"	LF	3,046	\$	\$
9	28000500	INLET AND PIPE PROTECTION	EACH	18	\$	\$
10	28000XXX	FILTER SOCKS, REMOVAL	LF	3,046	\$	\$
11	28100XXX	RR-4 REVETMENT	TON	66	\$	\$
12	30103000	SHAPING AND GRADING ROADWAY	UNIT	19	\$	\$
13	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CY	200	\$	\$
14	35101600	AGGREGATE BASE COURSE, TYPE B 4" (SIDEWALK)	TON	6	\$	\$
15	35101800	AGGREGATE BASE COURSE, TYPE B 6" (CONCRETE DRIVEWAY)	TON	274	\$	\$
16	35101800	AGGREGATE BASE COURSE, TYPE B 6" (STREET)	TON	1,827	\$	\$
17	40200500	AGGREGATE SURFACE COURSE, TYPE A 6" (GRANULAR DRIVEWAY)	TON	195	\$	\$
18	42000201	PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SY	5,306	\$	\$
19	35100700	AGGREGATE BASE COURSE, TYPE B 8" (HMA DRIVES AND TRANSITIONS)	TON	177	\$	\$
20	35501295	HOT-MIX ASPHALT BASE COURSE 3.5" (HMA DRIVES AND TRANSITIONS)	TON	94	\$	\$
21	40604062	HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (HMA DRIVES AND TRANSITIONS)	TON	60	\$	\$
22	42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6"	SY	914	\$	\$
23	42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4"	SY	17	\$	\$
24	42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6"	SY	5	\$	\$
25	42400800	DETECTABLE WARNINGS	SF	8	\$	\$
26	44000100	PAVEMENT REMOVAL	SY	5,005	\$	\$
27	44000200	DRIVEWAY PAVEMENT REMOVAL	SY	1,345	\$	\$
28	44000600	SIDEWALK REMOVAL	SY	17	\$	\$
29	50105220	PIPE CULVERT REMOVAL	LF	1,406	\$	\$

30	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12", TYPE 2	EACH	2	\$	\$
31	54214929	PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ARCH, EQUIVALENT ROUND SIZE 24", TYPE 2	EACH	1	\$	\$
32	54248130	GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND SIZE 24", TYPE 2	EACH	1	\$	\$
33	550A0350	STORM SEWER, TRENCHED, RCP, 12", TYPE 2	LF	38	\$	\$
34	550A0360	STORM SEWER, TRENCHED, RCP, 15", TYPE 2	LF	263	\$	\$
35	550A0380	STORM SEWER, TRENCHED, RCP, 18", TYPE 2	LF	970	\$	\$
36	550A4900	STORM SEWER, TRENCHED, ARCHED RCP, 18" X 28.5", TYPE 2	LF	146	\$	\$
37	56100600	WATER MAIN 6"	LF	1,107	\$	\$
38	56104900	WATER VALVES 6"	EACH	5	\$	\$
39	56107100	WATER MAIN REMOVAL, 6"	LS	1	\$	\$
40	56108800	TAPPING VALVES AND SLEEVES 6"	EACH	3	\$	\$
41	56109210	WATER VALVES TO BE ADJUSTED	EACH	1	\$	\$
42	56200300	WATER SERVICE LINE 1"	LF	328	\$	\$
43	56201400	CORPORATION STOPS 1"	EACH	16	\$	\$
44	56400500	FIRE HYDRANTS TO BE REMOVED	EACH	3	\$	\$
45	56400700	FIRE HYDRANT AND VALVE (SPECIAL)	EACH	2	\$	\$
46	56500800	DOMESTIC WATER SERVICE BOXES	EACH	16	\$	\$
47	60108106	PIPE UNDERDRAINS, TYPE 1, 6" PVC	LF	2,537	\$	\$
48	60108XXX	UNDERDRAIN OUTLET	EACH	18	\$	\$
49	60108XXX	UNDERDRAIN SERVICE, 6" PVC, INCLUDING 6" WYE	LF	194	\$	\$
50	60200XXX	MANHOLE, STORM TYPE 401, 48"	EACH	1	\$	\$
51	60200XXX	MANHOLE, STORM TYPE 401, 72"	EACH	1	\$	\$
52	60200XXX	INTAKE, TYPE 501	EACH	3	\$	\$
53	60200XXX	INTAKE, TYPE 502 WITH 48" MANHOLE	EACH	5	\$	\$
54	60200XXX	INTAKE, TYPE 505	EACH	2	\$	\$
55	60200XXX	INTAKE, TYPE 512, 24"	EACH	2	\$	\$
56	60200XXX	INTAKE, TYPE 512, 30"	EACH	0	\$	\$
57	60200XXX	INTAKE, TYPE 513	EACH	2	\$	\$
58	60200XXX	INTAKE, TYPE 541 WITH 542 EXTENSION	EACH	2	\$	\$
59	60300350	MANHOLE FRAMES TO BE ADJUSTED	EACH	4	\$	\$
60	60500040	REMOVING MANHOLES	EACH	11	\$	\$
61	60500050	REMOVING CATCH BASINS	EACH	1	\$	\$
62	60602500	CONCRETE GUTTER, TYPE A	LF	110	\$	\$
63	66900200	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	\$	\$

64	67100100	MOBILIZATION	LS	1	\$	\$
65	70100XXX	TEMPORARY TRAFFIC CONTROL	LS	1	\$	\$
66	M2800250	TEMPORARY SEEDING, FERTILIZING, AND MULCHING-CLASS 7	ACRE	1.4	\$	\$
67	X0326806	CONCRETE WASHOUT	LS	1	\$	\$
68	Z0045452	PRESSURE REDUCING VALVE 6" WITH VAULT	EACH	1	\$	\$
69	Z0051500	REMOVING AND RESETTING STREET SIGNS	EACH	9	\$	\$
70	--	PAVEMENT LUGS	EACH	8	\$	\$
<b>TOTAL ALTERNATE 1 CONSTRUCTION COST</b>						\$

### HMA OPTION

ITEM	ITEM CODE	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED PRICE
16	35101800	DEDUCT - AGGREGATE BASE COURSE, TYPE B 6" (STREET)	TON	(1827)	\$	\$
18	42000201	DEDUCT - PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SY	(5306)	\$	\$
19	35100700	DEDUCT - AGGREGATE BASE COURSE, TYPE B 8" (HMA DRIVES AND TRANSITIONS)	TON	(177)	\$	\$
20	35501295	DEDUCT - HOT-MIX ASPHALT BASE COURSE 3.5" (HMA DRIVES AND TRANSITIONS)	TON	(94)	\$	\$
21	40604062	DEDUCT - HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (HMA DRIVES AND TRANSITIONS)	TON	(60)	\$	\$
70	--	DEDUCT - PAVEMENT LUGS	EACH	(8)	\$	\$
18B	60608572	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	LF	3510	\$	\$
19B	35100700	AGGREGATE BASE COURSE, TYPE B 8" (STREET, HMA DRIVES AND TRANSITIONS)	TON	2,613	\$	\$
20B	35501295	HOT-MIX ASPHALT BASE COURSE 3.5" (STREET, HMA DRIVES AND TRANSITIONS)	TON	886	\$	\$
21B	40604062	HOT-MIX ASPHALT SURFACE COURSE 2", IL-9.5, MIX "D", N70 (STREET, HMA DRIVES & TRANSITIONS)	TON	520	\$	\$
<b>TOTAL ADD/DEDUCT (TO ALT 1) FOR HMA OPTION COST</b>						\$

**SECTION 01 3323  
SUBMITTALS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Submittal procedures.
- B. Required submittals

**1.2 PROCEDURES**

- A. Prior to material, product, or equipment fabrication and/or purchase, Constructor shall submit the following to Design Professional for review:
  - 1. Shop Drawings and Product Data
  - 2. Samples
  - 3. Manufacturer's Instructions
  - 4. Manufacturer's and Installer's Certificates
- B. No work shall commence until all related submittals have been reviewed by the Design Professional and there is no further action required.
- C. Failure of the Constructor to submit requirements in a timely manner may result in the Owner withholding Constructor payment. (See Division 00 Specifications.)
- D. The Constructor shall identify each submittal item with the following:
  - 1. Project Name
  - 2. Project Number
  - 3. Date
  - 4. Supplier's name and address
  - 5. Manufacturer name and address
  - 6. Constructor name and address
  - 7. Specification Section and Article Number and/or Drawing Number
  - 8. Deviations from Contract Documents and/or product or system limitations, which may be detrimental to successful performance of the completed Work.
  - 9. Deviations from or revisions to previous submittals
- E. Submittals shall contain the Constructor's and Subcontractor's review stamp indicating that the following items have been verified:
  - 1. Contains only listed manufacturers
  - 2. Equipment connections coordinated with affected trades.
  - 3. Dimensions and service clearances are suitable for the intended location.
  - 4. Dimensions and capacities coordinate with structural support, pads, etc.
  - 5. Coordination with adjacent work.
- F. Provide space for Design Professional's review and action designations.
- G. Revise and resubmit submittals as required, identifying changes made since previous submittal.

**1.3 SUBMITTAL PROCESSING**

- A. Electronic Submittals via e-mail:
  - 1. Transmit each submittal with transmittal letter indicating: date, project number, project title, Constructor's name and address, and pertinent Specification Section number.
  - 2. Email subject line shall include project number and project title.
  - 3. Sequentially number the transmittal forms. Identify re-submittals with original number and an alphabetic suffix.

4. Distribute copies of reviewed submittals to concerned parties. Instruct parties to report any inability to comply with provisions.
  5. Submittal electronic files shall use the following naming convention: specification section-submittal number-revision (003330-025-0)
  6. The electronic submittal process is not intended for color samples, color charts, or physical material samples.
- B. Electronic Submittals via paid service:
1. If desired, submittal processing may be performed by pre-paid service.
  2. Service must be set up and managed by the general contractor and all subs shall submit through this service via the general contractor
  3. All submittals shall follow a logical and sequential numbering system
  4. Access shall be granted for Owner and Design Professional including whatever staff those entities shall designate as needing said access.
  5. General Contractor and/or their provider shall provide training for the Owner and Design Professional on how to utilize the paid service.
  6. Costs for the service shall be borne by the contractor.

#### **1.4 SHOP DRAWINGS AND PRODUCT DATA**

- A. Contract Drawings shall not be reproduced for submittals.
- B. Submit multi-page .pdf of each submittal within the division folders labeled by CSI number, description. (Example -10 51 16 Custom wood lockers.pdf).
- C. Individual submittal packages shall be prepared for items in each specification section. Items within a single specification section may be packaged together where possible. An individual submittal may contain items from multiple specifications sections if the items are interrelated (e.g., pumps and motors).
- D. Clearly identify submittals with the same name or symbol used in the contract documents. Clearly identify model, size, finish, options, etc.

#### **1.5 SAMPLES**

- A. Submit to the Design Professional two (2) copies of all required samples for the Design Professional's and the Owner's sole use. Additionally, submit copies needed for Constructor's use (number of copies to be determined by Constructor).
- B. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- C. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for the Design Professional's selection.
- D. Include identification on each sample, with pertinent Project information.
- E. Constructor shall maintain an approved set of samples on-site during construction.

#### **1.6 MANUFACTURER'S INSTRUCTIONS**

- A. Submit Manufacturers' Instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing.
- B. Identify conflicts between Manufacturers' Instructions and Contract Documents.

#### **1.7 MANUFACTURER'S AND INSTALLER'S CERTIFICATES**

- A. Submit Manufacturers' and Installer's Certificates to the Design Professional for review, as specified in individual specification Sections.
- B. Verify the material / product conforms to, or exceeds, specified requirements. Submit supporting reference data, affidavits, and certifications, as appropriate.

- C. Certificates may be recent or previous test results on material / product but must be acceptable to the Design Professional.

**END OF SECTION**

**SECTION 01 4000  
QUALITY REQUIREMENTS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Contractor's construction-related professional design services.
- F. Contractor's design-related professional design services.
- G. Control of installation.
- H. Tolerances.
- I. Manufacturers' field services.
- J. Defect Assessment.

**1.2 RELATED REQUIREMENTS**

- A. Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.
- B. Illinois Urban Manual.
- C. Standard Specifications for Water and Sewer Main Construction in Illinois.
- D. Village of Rapids City Requirements.

**1.3 REFERENCE STANDARDS**

- A. ASTM C1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation 2017.
- B. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction 2019.
- C. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection 2021.
- D. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing 2021.
- E. ASTM E699 - Standard Specification for Agencies Involved in Testing, Quality Assurance, and Evaluating of Manufactured Building Components 2016.
- F. IAS AC89 - Accreditation Criteria for Testing Laboratories 2021.

**1.4 DEFINITIONS**

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.
- B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
  - 1. Design Services Types Required:
    - a. Construction-Related: Services Contractor needs to provide in order to carry out the Contractor's sole responsibilities for construction means, methods, techniques, sequences, and procedures.
- C. Design Data: Design-related, signed and sealed drawings, calculations, specifications, certifications, shop drawings and other submittals provided by Contractor, and prepared directly by, or under direct supervision of, appropriately licensed design professional.



**1.5 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES**

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
  - 1. Temporary scaffolding.
  - 2. Temporary bracing.
  - 3. Temporary falsework for support of spanning or arched structures.
  - 4. Temporary foundation underpinning.
  - 5. Temporary stairs or steps required for construction access only.
  - 6. Temporary hoist(s) and rigging.

**1.6 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES**

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Base design on performance and/or design criteria indicated in individual specification sections.
  - 1. Submit a Request for Interpretation to Engineer if the criteria indicated are not sufficient to perform required design services.

**1.7 SUBMITTALS**

- A. See Section 01 3323 for submittal procedures.
- B. Designer's Qualification Statement: Submit for Engineer's knowledge as contract administrator, or for Owner's information.
  - 1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.
    - a. Full name.
    - b. Professional licensure information.
    - c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.
- C. Design Data: Submit for Engineer's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
  - 1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.
  - 2. Include required product data and shop drawings.
  - 3. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.
  - 4. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.
- D. Test Reports: After each test/inspection, promptly submit two copies of report to Engineer and to Owner.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test/inspection.

- h. Date of test/inspection.
- i. Results of test/inspection.
- j. Compliance with Contract Documents.
- k. When requested by Engineer, provide interpretation of results.
- 2. Test report submittals are for Engineer's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- E. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Engineer, in quantities specified for Product Data.
  - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Engineer.
- F. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- G. Manufacturer's Field Reports: Submit reports for Engineer's benefit as contract administrator or for Owner.
  - 1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
- H. Erection Drawings: Submit drawings for Engineer's benefit as contract administrator or for Owner.
  - 1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
  - 2. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

**1.8 QUALITY ASSURANCE**

- A. Testing Agency Qualifications:
  - 1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  - 2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  - 3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.
- B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in the State of Illinois.
- C. Responsibility: responsibility for contracting and coordinating the testing requirements for the project will be that of the Contractor. Owner reserves the right to hire and provide supplemental testing as they see fit, but the Contractor shall hold the inspection and testing contracts for this project.

**1.9 REFERENCES AND STANDARDS**

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with

requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference otherwise in any reference document.

### **1.10 TESTING AND INSPECTION AGENCIES AND SERVICES**

- A. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Contractor Employed Agency:
  - 1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM D3740.
  - 2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
  - 3. Laboratory Qualifications: Accredited by IAS according to IAS AC89.
  - 4. Laboratory: Authorized to operate in Illinois.
  - 5. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
  - 6. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 - EXECUTION**

### **3.1 CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

**3.2 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

**3.3 TESTING AND INSPECTION**

- A. See individual specification sections for testing and inspection required.
- B. Testing Agency Duties:
  - 1. Provide qualified personnel at site. Cooperate with Engineer and Contractor in performance of services.
  - 2. Perform specified sampling and testing of products in accordance with specified standards.
  - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 4. Promptly notify Engineer and Contractor of observed irregularities or non-compliance of Work or products.
  - 5. Perform additional tests and inspections required by Engineer.
  - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
  - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  - 2. Agency may not approve or accept any portion of the Work.
  - 3. Agency may not assume any duties of Contractor.
  - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
  - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
  - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
  - 3. Provide incidental labor and facilities:
    - a. To provide access to Work to be tested/inspected.
    - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
    - c. To facilitate tests/inspections.
    - d. To provide storage and curing of test samples.
  - 4. Notify Engineer and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
  - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  - 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Engineer.
- F. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

**3.4 MANUFACTURERS' FIELD SERVICES**

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

**3.5 DEFECT ASSESSMENT**

- A. Replace Work or portions of the Work not complying with specified requirements.
- B. If, in the opinion of Engineer, it is not practical to remove and replace the work, Engineer will direct an appropriate remedy or adjust payment.

**END OF SECTION**

**SECTION 01 5713  
TEMPORARY EROSION AND SEDIMENT CONTROL**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Restoration of areas eroded due to insufficient preventive measures.
- D. Compensation of Owner for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

**1.2 REFERENCE STANDARDS**

- A. EPA (NPDES) - National Pollutant Discharge Elimination System (NPDES), Construction General Permit Current Edition.
- B. FHWA FLP-94-005 - Best Management Practices for Erosion and Sediment Control 1995.

**1.3 PERFORMANCE REQUIREMENTS**

- A. Comply with requirements of EPA (NPDES) for erosion and sedimentation control, as specified by the NPDES, for Phases I and II, and in compliance with requirements of Construction General Permit (CGP).
- B. Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.
- C. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
- D. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- E. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
  - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
- F. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
  - 1. Control movement of sediment and soil from temporary stockpiles of soil.
  - 2. Prevent development of ruts due to equipment and vehicular traffic.
  - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- G. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
  - 1. Prevent windblown soil from leaving the project site.
  - 2. Prevent tracking of mud onto public roads outside site.
  - 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
  - 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- H. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary

sewers.

1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
  2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- I. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- J. Open Water: Prevent standing water that could become stagnant.
- K. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

#### **1.4 SUBMITTALS**

- A. See Section 01 3323, for submittal procedures.
- B. Inspection Reports: Submit report of each inspection; identify each preventive measure, indicate condition, and specify maintenance or repair required and accomplished.

#### **PART 2 - PRODUCTS**

#### **PART 3 - EXECUTION**

**END OF SECTION**

**SECTION 01 7000  
EXECUTION AND CLOSEOUT REQUIREMENTS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Surveying for laying out the work.
- D. Cleaning and protection.
- E. Starting of systems and equipment.
- F. Demonstration and instruction of Owner personnel.
- G. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

**1.2 RELATED REQUIREMENTS**

- A. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- B. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.

**1.3 REFERENCE STANDARDS**

- A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations 2022, with Errata (2021).

**1.4 SUBMITTALS**

- A. See Section 01 3323, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of Owner or separate Contractor.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities.

**1.5 QUALIFICATIONS**

- A. Contractor shall employ only competent workers for execution of all work and such work shall be performed under direct supervision of experienced and qualified superintendent.

**1.6 AVAILABILITY**

- A. Contractor shall make any and all arrangements to provide a 24-7 emergency contact for the project who is authorized to make decisions.
- B. Contractor shall make any and all arrangements that supervising members of work crews can be reached by phone any time during the working day.

**1.7 WORK BOUNDARIES**

- A. Work boundaries will be defined on the project plans.
- B. Contractor may request construction limit delineation from the Owner.
- C. Operations shall be confined to the work area allocated and designated.



1. Operations which are not confined to these limits will be the complete responsibility of the Contractor from and restoration, repair, and liability standpoint.
2. Written permission should be requested for known work that will be required outside of work boundaries.

### **1.8 SITE PROTECTION**

- A. Except as noted contractor shall protect all structures, utilities, landscaping and other elements during work progress.
- B. All debris and unused materials shall be removed from site as soon as practicable.
  1. Site shall be maintained in a clean and presentable condition.
- C. Site shall be restored (as nearly as possible) to the original condition including any items that have been damaged or destroyed through contractor negligence.

### **1.9 PROJECT CONDITIONS**

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- C. Perform dewatering activities, as required, for the duration of the project.
- D. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
- E. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  1. Minimize amount of bare soil exposed at one time.
  2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
  3. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- F. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
  1. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
- G. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

### **1.10 COORDINATION**

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.

- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

**PART 2 - PRODUCTS**

**2.1 PATCHING MATERIALS**

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution on AIA standard form.

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

**3.2 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

**3.3 PREINSTALLATION MEETINGS**

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Engineer 3 days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Engineer, Owner, participants, and those affected by decisions made.

**3.4 LAYING OUT THE WORK**

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Engineer of any discrepancies discovered.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.
- F. Utilize recognized engineering survey practices.
- G. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations; and equipment.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, ground floor elevations.
- H. Periodically verify layouts by same means.
- I. Maintain a complete and accurate log of control and survey work as it progresses.

**3.5 GENERAL INSTALLATION REQUIREMENTS**

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

**3.6 CUTTING AND PATCHING**

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.
  - 5. Repair areas adjacent to cuts to required condition.
  - 6. Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.
  - 8. Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
- I. Patching:
  - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  - 2. Match color, texture, and appearance.
  - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

**3.7 PROGRESS CLEANING**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

**3.8 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

**3.9 ADJUSTING**

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

**3.10 FINAL CLEANING**

- A. Use cleaning materials that are nonhazardous.
- B. Clean site; sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

**3.11 CLOSEOUT PROCEDURES**

- A. Make submittals that are required by governing or other authorities.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.

- C. Notify Engineer when work is considered ready for Engineer's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Engineer's Substantial Completion inspection.
- E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Engineer's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Engineer.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Engineer when work is considered finally complete and ready for Engineer's Substantial Completion final inspection.
- H. Complete items of work determined by Engineer listed in executed Certificate of Substantial Completion.

**END OF SECTION**

**SECTION 01 7800  
CLOSEOUT SUBMITTALS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Project Record Documents.
- B. Warranties and bonds.

**1.2 RELATED REQUIREMENTS**

- A. Section 01 3323: Submittals procedures, shop drawings, product data, and samples.
- B. Individual Product Sections: Specific requirements for operation and maintenance data.
- C. Individual Product Sections: Warranties required for specific products or Work.

**1.3 SUBMITTALS**

- A. Project Record Documents: Submit documents to Engineer with claim for final Application for Payment.
- B. Warranties and Bonds:
  - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
  - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
  - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

**3.1 PROJECT RECORD DOCUMENTS**

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Addenda.
  - 3. Change Orders and other modifications to the Contract.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Record Drawings: Legibly mark each item to record actual construction including:
  - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 3. Field changes of dimension and detail.
  - 4. Details not on original Contract drawings.

**3.2 WARRANTIES AND BONDS**

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

**END OF SECTION**