

SECTION 01 11 00

SUMMARY OF WORK

PART 1 – GENERAL

1.01 SUMMARY

- A. Project summary:
 - 1. Construction and completion of the O'Reilly Auto Parts Store for the Owner's intended use of wholesale and retail sale of auto parts at the location described in Invitation To Bid under a single lump sum contract and quantity of time as described in the Contract.
- B. Work Owner, or Others, furnished and installed (Refer to drawings - Scope of Work Schedule).
- C. Work Owner furnished, Contractor installed (Refer to drawings – Scope of Work Schedule). Contractor scope of work shall include coordination with Owner for ordering, receipt, handling, storage, and installation requirements of Owner furnished materials.
- D. Permits and Fees: Apply for, obtain, and pay for permits, fees, and utility company back charges required to perform the work. Submit copies and invoices to Owner for reimbursement. No overhead and profit charges are allowed.
- E. Industry Standards:
 - 1. Applicability of Standards: Except where more explicit or stringent requirements are written into the Contract Documents, applicable construction industry standards have the same force and effect as if bound into or copied directly into the Contract Documents. Such industry standards are made a part of the Contract Documents by reference. Individual specification sections indicate which codes and standards the Contractor must keep available at project site for reference.
 - 2. Publication Dates: Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of Contract Documents.
 - 3. Conflicting Requirements: Where compliance with two or more standards is specified, and where these standards establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the Contract Documents specifically indicate otherwise. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the Owner for a decision before proceeding.
 - 4. Copies of Standard: The Contract Documents require that each entity performing work be experienced in that part of the work being performed. Each entity is also required to be familiar with industry standards applicable to that part of the work. Copies of standards are needed for proper performance of the work; the Contractor is required to obtain such copies directly from the publication source.
 - 5. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where acronyms or abbreviations are used in the specifications or other Contract Documents they are defined to mean the recognized name of the trade association, standards generating organization, governing authority, or other entity applicable to the context of the text provisions.
- F. Codes: Comply with applicable codes and regulations of authorities having jurisdiction. If pertinent codes and standards conflict with any instruction, process or material stated in the Contract Documents, the more stringent shall govern. Submit copies of inspection reports, notices and similar communications to Owner.
- G. Definitions:
 - 1. Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.

2. Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. Refer to limitations of 'Approved' in General and Supplementary Conditions.
 3. Match Existing: Match existing as acceptable to the Owner.
- H. Intent: Drawings and specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonably implied or necessary for proper performance of the project shall be included.
- I. Writing style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, 'Provide tile' means 'Contractor shall provide tile'.

PART 2 – PRODUCTS – Not Applicable To This Section

PART 3 – EXECUTION – Not Applicable To This Section

SECTION 01 20 00

PROJECT PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

- A. Follow project procedures for proper submission of payment request, schedules, contract correspondence documents, coordination of work, and communication with Owner and Architect.
- B. Submit information on Owner provided Project Forms where referenced by AIA, CSI, ORL, or ES numbers. Refer Section 00 90 00 for listing.

1.02 PROCEDURES PRIOR TO CONSTRUCTION

- A. Within 72 hours of Contractor's receipt of Notice to Proceed or letter of intent.
 - 1. Submit Subcontractors and Major Material Suppliers to be used for the project, (ORL-G).
- B. Within 10 days upon Contractor's receipt of Notice to Proceed or letter of intent.
 - 1. Submit proposed progress schedule, bar-chart type, indicating a time bar for each trade or operation or work to be performed at the site. Time bar shall demonstrate planned work, properly sequenced and intermeshed, for expeditious completion of the project.
 - 2. Forward copy of building permit within 48 hours of issuance by Government Agency.
- C. Prior to commencing work on the project, Contractor must record Notice of Commencement or similar notices to the extent applicable in the state where the project is located. Provide copy of recorded notice to Owner.

1.03 PROCEDURES DURING CONSTRUCTION

- A. Progress Payment Request Procedures: Application for payment and lien waivers to be received together on a monthly basis. Submit electronically to OREILLYPAYME@YAHOO.COM. Refer to Article 21.2c of the General Conditions of the Contract for electronic submittal requirements.
 - 1. Submit Application and Certificate for Payment (AIA G702 and G703).
 - a. Itemize separate line cost for each major item of work and each subcontracted item of work (Sections under Division 2 through 33 in Table of Contents as a basis for listing).
 - b. Application to include a summary of approved Change Orders. Actual copies of change orders are not required.
- B. Requirements for sequencing or scheduling:
 - 1. Coordination:
 - a. Coordinate the work of all trades.
 - b. Verify location of utilities and existing conditions.
 - c. Schedule 10 days after notice to proceed with local utility companies for installation of utility service connections.
 - d. Coordinate date of installation of temporary key storage device and combination code.
 - 2. Work: Owner Furnished, Contractor Installed (Refer to drawings – Scope of Work Schedule)
 - a. Section 07 21 00 – Building Insulation. Refer to GBP Silvercote Insulation Delivery Procedures attached to end of this section.

- b. Section 08 11 19 – Steel Doors and Frames. Refer to GBP Silvercote Delivery procedures attached to end of this section.
 - c. Section 08 71 00 – Door Hardware. Refer to GBP Silvercote Delivery procedures attached to end of this section.
 - d. Section 13 34 19 - Pre-Engineered Metal Building System Erection. Owner to schedule with Contractor 28 days prior to anticipated shipping date of Owner supplied Pre-Engineered Metal Building.
 - e. Division 20, 21, 22, 23 and 25 – Mechanical. Contractor to schedule with Owner's Mechanical Equipment Supplier 14 days prior to completion of building areas being prepared for installation of mechanical systems for ordering, shipping, and receiving of equipment. Orders are to be filled out and submitted by fax on Supplier provided form (ES 1.1). Refer to procedures attached to end of this section.
 - f. Division 26 – Electrical.
 - 1) Light fixture package and switchgear. Refer to procedures attached to end of this section
 - 2) EMS package. Refer to procedures attached to end of this section.
- C. Inspection:
- 1. Contractor to notify Owner's testing and inspection company prior to beginning major portions of the work as required by individual specification sections, but not less than 48 hours.
 - 2. Coordinate with local, state or federal organizations having jurisdiction over the project for notification and inspection requirements. Forward copies of reports to Owner.
 - 3. Meetings or correspondence between Contractor and Entities having jurisdiction over the project which result in requested modifications to the Work shall be summarized in writing within 72 hours of such meeting and forwarded to Owner for review and response.
- D. Testing:
- 1. Comply with Section 01 45 16 – Quality Control Procedures.
 - 2. Unless otherwise indicated, Owner shall provide testing and inspection professional services as required by General Conditions and individual sections. Refer to sections for testing types and frequency requirements.
 - 3. Owner and/or Architect reserve the right to have tests made when deemed necessary.
 - a. Tests not specified as part of a section shall be paid for by the Owner. Should test reveal a failure of the work to meet Contract Document requirements, subsequent tests, related to the failure, will be paid by the Owner, with cost deducted from monies owed to the Contractor by change order.
 - b. Tests shall be made in accordance with recognized standards by a competent, independent testing laboratory.
 - c. Materials found defective or not in conformance with the Contract Document requirements shall be promptly replaced or repaired at the expense of the Contractor.
- E. Field engineering:
- 1. Secure the services of a registered civil engineer, land surveyor, or employ qualified personnel for setting, maintaining and establishing finished elevations and lines.
 - 2. If the site conditions indicated in the Contract Documents differ materially from those the Contractor encounters in the performance of the work, the Contractor shall within 48 hours and before such conditions are disturbed, notify the Owner in writing.
- F. Construction contract administration correspondence to be submitted as follows:
- 1. Weekly report (ORL-R) and supporting photos, summarizing site conditions and activities for the specified period. Report to be submitted by e-mail to

OREILLYWEEKLYREPORTS@YAHOO.COM and received not later than 9:00 am the following Monday or first available business day of Owner operations.

- a. Photos shall be submitted as follows:
 - 1) Minimum acceptable resolution is approximately 1152 x 864. Maximum is 1400 x 1200.
 - 2) Set the photo quality and/or image resolution on the camera to the "fine" setting.
 - 3) Photos should be date stamped
 - 4) Send the photos as an attachment of the e-mail, not as embedded images.
 - 5) Photos should be submitted as a .jpg/.jpeg file format
 - 6) Weekly reports should have a minimum of 10 photos attached.
2. Contractor's Request for Interpretation (CSI 13.2A).
3. Contractor's Change Order Request Proposal (CSI 13.6A).
4. Contractor's Proposal Worksheet (CSI 13.6C and CSI 13.6D).
- G. Contractor to maintain record drawings and specifications on site by annotation as work progresses.

1.04 GENERAL PROCEDURES

- A. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. DO NOT scale drawings.
- B. Cutting and Patching:
 1. Provide cutting and patching work to properly complete the work. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decreased energy performance, increased maintenance, decreased operational life, or decreased safety.
 2. Perform work with workmen skilled in the trades involved. Use proper tools to minimize damage to adjacent work. Check for concealed utilities and structure before cutting.
 3. Match existing materials with new materials conforming to project requirements.
 4. Make patches, seams, and joints durable and inconspicuous. Comply with tolerances of new work.
- C. General Installation Requirements
 1. Inspect substrates and report unsatisfactory conditions in writing.
 2. Do not proceed until unsatisfactory conditions have been corrected.
 3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
 4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
 5. Install materials in proper relation with adjacent construction and with proper appearance.
 6. Restore construction and site damaged during installation. Replace construction, which cannot be restored, at no additional expense to the Owner.
 7. Refer to additional installation requirements and tolerances specified under individual specification sections.
- D. Existing conditions: Notify Owner of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval. Inspect conditions prior to work to identify scope and type of work required. Protect adjacent work.

1.05 PROCEDURES PRIOR TO CONTRACT CLOSEOUT

- A. The following are prerequisites to substantial completion. Provide the following:
 1. Punch list (ORL-H).

2. Within Fourteen (14) days prior to substantial completion, submit As-Built Survey and photographic documentation of completed construction complying with Section 02 21 00.
- B. Provide the following prerequisites for final acceptance:
1. Final payment request (AIA G702 and G703).
 2. Completed punch list (ORL-H).
 3. Notice of Owner's review and approval of As-Built Survey.
 4. Occupancy Permit.
- C. Provide the following closeout items:
1. Submission of electronic media of approved As-Built Survey and photographic documentation of completed construction.
 2. Submission of one set of As-Built drawings in hard copy and electronic scans in PDF format, prepared by the Contractor showing in red ink, on-site changes to the original construction documents.
 3. Submission of Warranties, where indicated.
 4. Comply with requirements of Section 20 02 00 - Contract Closeout & Commissioning. Submit Operation and Maintenance Manuals.
 5. Store Turn Over Walkthrough (ORL-1)
 6. Final cleaning and touch-up.
 7. Removal of temporary facilities.

PART 2 – PRODUCTS – Not Applicable To This Section

PART 3 – EXECUTION – Not Applicable To This Section

GBP Silvercote Insulation Delivery Procedures

When receiving delivery of insulation materials and doors from GBP Silvercote the following items must be completed.

- 1) The person accepting delivery of the materials for O'Reilly Automotive must sign both Bill of Lading and packing slip showing the number of rolls of insulation, tapes, pallets and packages received.
- 2) The receiving party should retain copies of the Bill of Lading and packing slip for their job records.
- 3) Any discrepancies between the number of rolls shown on the packing slip and the number counted by the person accepting the delivery should be noted on the packing slip. Any visible damage to the items received should also be noted on the Bill of Lading. Any notes on damage or count discrepancies must be made in the presence of the truck driver delivering the materials and must be legible on all copies of the Bill of Lading and/or packing slips. Count discrepancies and visible damage should also be reported immediately to GBP/Silvercote.

PROCEDURES FOR FREIGHT DAMAGED OR SHORT SHIPMENTS FOR LIGHTING AND GEAR

FREIGHT DAMAGE:

Damage

If any of the pieces are [damaged](#), or if boxes are not in good condition, or if there is internal rattling, **ACCEPT** goods and mark the freight bill indicating what is wrong and the extent of the damage. A copy of the freight bill must be faxed to Graybar at 888-280-0128 within **3 days** of receipt of goods.

Concealed loss or damage

When the delivery receipt is signed clear and upon inspection you find concealed damage, you must report to Graybar within **3 days** of receipt .

1) Write and circle the number of pieces you received, and also write the number of pieces damaged. Be sure to write **DAMAGED**. The specific exception noted on a delivery receipt should:

- record the number of damaged or missing pieces.
- identify the affected products and, if available, pallet or carton ID number of damaged goods.
- describe the damage precisely.

SHORTAGES

Short Cartons

If any pieces/cartons are missing, **ACCEPT** goods, and write and circle the total pieces you receive. Be sure to write **SHORT** on the Freight Bill and fax within **3 days** to Graybar at 888-280-0128 .

Short Goods

If upon further inspection of goods you find an internal shortage (not full carton shortage, but item(s) shortage), indicate shortage on packing slip and fax to Graybar at 888-280-0128 within **3 days**.

Call Kathy Schrupf with questions at 314-573-2083



Contractor Instructions: Delivery, Storage, & Handling

- A. Sara Tilton, 866-389-4658, should coordinate Carrier HVAC Equipment to jobsite.
- B. Each site contractor is responsible for following the Damaged and Defective Product Procedures outlined below. Should there be questions on any of this information contact Carrier National Accounts at the listed number.
- C. Carrier's return policy is 30 days. Anything over 30 days is subject to be denied for return. Or possible allowance with a restocking fee.
- D. All equipment, parts, and accessories that are being returned must be in its original packaging. If it is not, distribution will charge us with a restocking fee that will have to be passed on to O'Reilly's.

DAMAGED AND DEFECTIVE PRODUCT REPLACEMENT PROCEDURES FOR O'REILLY AUTO, INC.

IN ORDER TO INSURE PROMPT REPLACEMENT AND/OR REIMBURSEMENT FOR HVAC PRODUCTS PROVIDED FOR O'REILLY AUTO, INC. BY CARRIER CORPORATION FOR THIS PROJECT THE JOBSITE CONSIGNEE (CONTRACTOR), IS RESPONSIBLE FOR THE FOLLOWING:

FAILURE TO COMPLY WITH THESE GUIDELINES MAY RESULT IN ADDITIONAL CHARGES TO THE JOBSITE CONTRACTOR.

Damaged Freight

When receiving a shipment from freight carrier, please inspect all cartons/units carefully for damage. If you suspect damage, but cannot confirm it at the time, please make a note on the freight bill of "possible concealed damage." When damage is visible, please describe the type of damage on the delivery papers as well. The truck driver must also sign the delivery receipt acknowledging the damage or shortage.

1. If possible, the packaging and crating material should be kept intact. The material should not be moved for the original location unless absolutely necessary. Concealed damage requires that the trucker be notified within seven (7) days of receipt.
2. A packing slip is provided with each shipment. Please use this to take an inventory of all items received, making note of anything missing or damaged.
3. The jobsite contractor is responsible for filing the freight claim with the trucking company on any damaged product. As well as taking pictures to support the freight claim.

4. For assistance contact Carrier National Accounts immediately when shipping damage or shortages are identified. Call Carrier National Accounts: Sara Tilton, 866-389-4658 for assistance.
5. Carrier will accept responsibility for the cost of repair or replacement, and freight claim resolution only if the above procedures are followed.

Defective Products

1. If a product is found to be defective upon installation the installer must immediately contact: Carrier National Accounts, Sara Tilton, 866-389-4658. At this time a determination will be made on how to most efficiently correct the problem.
2. All parts replacement will be handled within the normal manufacturer's warranty guidelines. For questions regarding warranty parts replacement contact: Sara Tilton, 866-389-4658.

Delivery shortages/Missing products

1. If an order is found to have parts missing at a jobsite contact: Sara Tilton, 866-389-4658. Proof of Delivery will be provided by the carrier involved.

IT IS IMPORTANT THAT THE ABOVE PROCEDURES BE FOLLOWED CONCERNING DAMAGED OR DEFECTIVE PRODUCTS. WE WISH TO THANK YOU IN ADVANCE FOR YOUR COOPERATION.

VENSTAR FREIGHT CLAIM POLICY

Occasionally items are lost in transit or shipping damage occurs. Resolving the problem of transit damage or loss depends on the cooperation of all parties. Venstar makes every effort to ensure that your shipment arrives on time and in good condition and when a claim arises, we work with our customers to satisfy all parties

All claims for damage or missing items must be made within three days of receipt of the original shipment. All such requests for replacement merchandise shall be made in writing by email to Venstar with a copy to the O'Reilly Project Manager and the O'Reilly National Accounts Supervisor. Failure to do so may result in the General Contractor or Developer/Owner accepting full responsibility for the cost of replacing damaged or short merchandise and associate freight costs incurred.

Freight damage claims must be made against the common carrier; therefore, it is imperative that you follow these guidelines:

1. Inspect all shipments upon arrival. If damage or loss is apparent upon delivery, do not accept the shipment until you make a notation of the damage on all copies of the carrier's Bill Of Lading. Have the driver sign all copies to acknowledge the notation.
2. In the event you have signed for a shipment and there is concealed damage do not throw away the packing materials or cartons or there will be no basis for a claim. Contact Venstar at (818) 341-8760 and speak to the shipping department (extension 203) and to the local branch of the carrier immediately. Venstar must file a claim with the carrier but cooperation between the consignee and Venstar are essential to secure a claim. Please note: much of this process will be done in writing.
3. If you do not follow the instructions in Paragraph 1, Venstar will not be able to file a claim and bears no responsibility for freight claims or for damage.
4. Even if the driver acknowledges the damage in writing, an inspection by the carrier will have to take place so retain the merchandise, carton, and packing materials at the address to which shipment was made until the carrier authorizes further action. If you have a camera or digital camera, photographs that record the date on which they were taken will help to speed the claim process.
5. Please advise Venstar immediately of all damage(s). Do not return merchandise to Venstar. File your claim by calling the shipping department at Venstar and be prepared to fax copies of the bill of lading (signed by the driver). Keep all packing materials and boxes with the damaged product. Do not throw anything away until the claim is settled. Although Venstar will file the claim with the carrier, Venstar is not responsible for paying for the freight nor does it accept liability for freight claims or the cost of the repair. The consignee is responsible to pay all freight charges under the terms of Venstar invoices.

Questions or comments may be addressed to:

Venstar, Inc.
9250 Owensmouth Ave.
Chatsworth, CA 91311
Attn: Shipping Dept.
(818) 341-8760
construction@venstar.com

END OF SECTION

SECTION 01 33 00

SUBMITTALS AND SUBSTITUTIONS

PART 1 – GENERAL

1.01 SUMMARY

- A. Provide types of submittals including shop drawings, product data, samples, schedules, reports, and request for substitutions, as required by the Bidding and Contract Documents in strict accordance with provisions listed in individual sections and quantity and format indicated. Provide required resubmittals if original submittals are not approved. Provide distribution of approved submittals including modifications after submittals have been approved.
- B. Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Warranties shall be signed by contractor, supplier or installer responsible for performance of warranty.

PART 2 – PRODUCTS

2.01 PRE-BID SUBSTITUTIONS

- A. The naming of specified items on the drawings or in the specifications mean that such named items are specifically desired by the Owner. If the words “or acceptable equal” or “or approved equal” follows such named items, substitution request may be submitted. REQUEST FOR SUBSTITUTION MUST BE RECEIVED BY OWNER 5 DAYS PRIOR TO BID SUBMITTAL, UNLESS OTHERWISE NOTED.
- B. Substitution Request Forms (Refer Section 00 90 00): Request must be submitted to Owner by e-mail electronically in PDF format on copies of form (CSI 1.5C) and must name the exact item proposed with complete information filled out and back-up data attached as specified on that form. Use separate Substitution Request Form for each item. Request showing only brand name or manufacturer, or otherwise incomplete, will not be reviewed. Submit samples if requested.
- C. The Owner is the sole judge as to the equality of proposed substitutions. Only written acceptances will be held valid by the Owner.
- D. If any substitution will affect a correlated function, adjacent construction, or the work of other trades or contractors, the necessary changes and modifications to the affected work will be considered as part of the substitution, to be accomplished without additional cost to the Owner, if and when accepted.
- E. Under no circumstances shall the Owner’s acceptance of any such substitution relieve the Contractor from timely, full and proper performance of the work.

2.02 AFTER AWARD OF CONTRACT SUBSTITUTION REQUEST

- A. Substitution request will be considered only under one of the following conditions:
 - 1. Unavailability of specified product due to a strike, lockout, bankruptcy, discontinuance of manufacturing of a product, or natural disasters. Submit proof that orders were placed within 10 days after review by Owner of item listed in specifications. Failure to order materials in time for proper delivery is not an acceptable condition.
 - 2. When warranty of performance is required and, in the judgement of the Contractor, the specified product or process will not produce the desired result.
- B. Submit request for such substitution in writing electronically to Owner within 10 days of date of ascertaining unavailability of material or equipment specified, or that the performance cannot be warranted.

- C. If any substitution will affect correlated function, adjacent construction, or work of other trades or contractor, the necessary changes and modifications to the affected work will be considered as part of the substitution, to be accomplished without additional cost to Owner, if and when accepted.
- D. Approved substitutions will be effected by a Change Order. Under no circumstances shall the Owner's acceptance of any such substitution relieve the Contractor from timely, full and proper performance of the work.

2.03 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

- A. Prior to submittal to Owner, Contractor shall review shop drawings, product data, and samples for compliance with Contract Documents and shall affix Contractor's approved stamp to each submittal. Failure to follow these procedures will result in rejection of submission and no additional contract time will be allowed for delay for this cause. Refer to individual specifications sections for required submittal types.
- B. Submit by e-mail, Contractor's stamped approved shop drawings electronically in PDF format for Owner's review. Required shop drawings shall be drawn to a scale sufficiently large to show pertinent features of item and its method of connection to work. Submit related shop drawings together; partial submittals will not be accepted. Reproduction of contract documents in any form for use as shop drawings will not be permitted. Provide manufacturer's name and model number of prefabricated items and indicate methods of attachment and clearances required relative to other trades affecting all elements of work. Identify deviations from Contract Documents, (if any). Check dimensions, check that trades have been coordinated and that no conflict will develop in installation.
- C. Submit by e-mail, Contractor's stamped approved product data electronically in PDF format for Owner's review. Mark data clearly to indicate exact items submitted, and note deviations from Contract Documents, (if any).
- D. Submit by delivery service, physical material samples for Owner's review.
- E. The Owner will review submittals and stamp electronically with indication of action as appropriate. The Owner will retain record of electronic files, and return copy of electronic files to the Contractor. For submittal returned "Rejected/Resubmit" or "Revise/Resubmit", correct the submittal, and resubmit. For submittal returned "Reviewed", "Approved", or "Approved as Noted", provide such number of electronic files and/or prints as may be needed for field distribution. Submittal returned "Not Subject to Review", are for submittals not required by the Contract Documents and require no action by Owner. Owner shall retain physical material samples until project completion.

PART 3 – EXECUTION

3.01 IDENTIFICATION OF SUBMITTALS

- A. Completely identify each submittal and re-submittal by showing at least the following information in e-mail subject line or by physical transmittal cover:
 - 1. Name of project and Owner's project number as it appears on Construction Documents.
 - 2. Name and address of submitter, plus name and telephone number of the individual who may be contacted for further information.
 - 3. Drawing number and specifications section number to which the submittal applies.
 - 4. Whether this is an original submittal or re-submittal.

3.02 TIMING OF SUBMITTALS

- A. General: Make all submittals far enough in advance for schedule dates of installation to provide all required time for reviews, for securing necessary approvals, for possible revision and re-submittal, and for placing orders and securing delivery.
- B. Make submission affecting section of color, texture, and/or pattern within thirty (30) days after signing the Contract.
- C. Delays: Costs of delays due to late submittals may be back-charged as necessary and shall not be borne by the Owner.

END OF SECTION

SECTION 01 45 16

QUALITY CONTROL PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Specification Sections, apply to this Section.

1.02 SUMMARY

This Section includes administrative and procedural requirements required for compliance with the International Building Code, Chapter 17, Structural Tests and Special Inspections.

- 1. Exceptions: Portions of special inspections shall not be required where the fabricator is approved in accordance with building code requirements and agencies having jurisdiction.
- A. Structural and construction material testing and special inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve contractor of responsibility for compliance with other construction document requirements.
 - 1. Specific quality-assurance and quality-control requirements for individual construction activities are specified in their related Sections. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and control procedures that facilitate compliance with the construction document requirements.
 - 3. Requirements for contractor to provide quality-assurance and control services required by architect, owner, or authorities having jurisdiction are not limited by provisions of this section.
- B. The Owner will engage one or more qualified special inspectors and/or testing agencies to conduct structural tests, construction material testing and special inspections specified in this section and related sections and as may be specified in other divisions of these specifications.
- C. Related Sections include but are not limited to the following:
 - 1. 03 30 00 CAST-IN-PLACE CONCRETE
 - 2. 03 38 00 POST-TENSIONED SLABS-ON-GRADE
 - 3. 04 20 00 UNIT MASONRY
 - 4. 05 12 00 STRUCTURAL STEEL
 - 5. 05 21 00 STEEL JOIST
 - 6. 05 31 00 STEEL DECK
 - 7. 05 40 00 COLD-FORMED METAL FRAMING
 - 8. 07 24 00 EXTERIOR INSULATION AND FINISH SYSTEMS
 - 9. 13 34 18 PRE-ENGINEERED METAL BUILDING SYSTEM ERECTION
 - 10. 13 34 19 PRE-ENGINEERED METAL BUILDING SYSTEM
 - 11. 31 00 00 EARTHWORK
 - 12. 31 40 10 HELICAL SCREW FOUNDATIONS
 - 13. 31 62 00 DRIVEN PILES
 - 14. 31 63 00 BORED AND BELLED CONCRETE PIERS

1.03 DEFINITIONS

- A. Approved Agency: An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official.
- B. Approved Fabricator: An established and qualified person, firm or corporation approved by the building official pursuant to applicable building code requirements. Fabricator shall be registered and approved to perform work on the premises of the fabricator without special inspection as defined in the applicable building code. Approval shall be based upon review of fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. Fabricator shall submit certificate of compliance upon request.
- C. Construction Documents: Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit. Construction Documents include all supplemental instructions, sketches, addenda, and revisions to the drawings and specifications issued by the registered design professional beyond those issued for a building permit.
- D. Shop Drawings/Submittal Data: Written, graphic and pictorial documents prepared and/or assembled by the contractor based on the Construction Documents.
- E. Structural Observation: Visual observation of the structural system by a representative of the registered design professional's office for general conformance to the approved construction documents. Structural observations are not considered part of the structural tests and special inspections and do not replace inspections and testing by the testing agency or special inspector.
- F. Special Inspector: A qualified person who demonstrates competence, to the satisfaction of the code enforcement official and registered design professional in responsible charge, for inspection of the particular type of construction or operation requiring special inspection. The special inspector shall be a licensed professional engineer or engineering intern or a qualified representative from the testing agency.
- G. Special Inspection, Continuous: The full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed.
- H. Special Inspection, Periodic: The part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work.
- I. Testing Agency: A qualified materials testing laboratory under the responsible charge of a licensed professional engineer, approved by the code enforcement official and the registered design professional in responsible charge, to measure, examine, test, calibrate, or otherwise determine the characteristics or performance of construction materials and verify conformance with construction documents.

1.04 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Minimum qualifications of inspection and testing agencies and their personnel shall comply with ASTM E329-03 Standard Specification for Agencies in the Testing and/or Inspection of Materials Used in Construction.
 - a. Inspectors and individuals performing tests shall be certified for the work being performed as outlined in the appendix of the ASTM E329. Certification by organizations other than those listed must be submitted to the building official for consideration before proceeding with work.
- B. In addition to these requirements, local jurisdiction may have additional requirements. It is the responsibility of the testing and inspection agencies to meet local requirements and comply with local procedures.

1.05 CONFLICTING REQUIREMENTS, REPORTS, AND TEST RESULTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to the owner for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to the owner for a decision before proceeding.
- C. The special inspector's reports and testing agencies results shall have precedence over reports and test results provided by the contractor.
- D. Where a conflict exists between the construction documents and approved shop drawings/submittal data, the construction documents shall govern unless the shop drawings/submittal data are more restrictive. All conflicts shall be brought to the attention of the registered design professional in responsible charge and owner.

1.06 SUBMITTALS BY SPECIAL INSPECTOR AND/OR TESTING AGENCY

- A. Special inspectors shall keep and distribute records of inspections. The special inspector shall furnish inspection reports to the building official (if required), contractor, and owner. Reports shall indicate that work inspected was done in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor and Owner for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official, contractor and Owner prior to the completion of that phase of the work. A final report documenting required special inspections and correction of any discrepancies noted in the inspections shall be submitted at a point in time agreed upon by the permit applicant and the building official prior to the start of work.
 - 1. Special inspection reports and test results shall include, but not be limited to, the following:
 - a. Date of inspection.
 - b. Description of inspections or tests performed including location (reference grid lines, floors, elevations, etc.).
 - c. Statement noting that the work, material, and/or product conforms or does not conform to the construction document requirements.
 - 1) Name and signature of contractor's representative who was notified of work, material, and/or products that do not meet the construction document requirements.
 - 2. Name and signature of special inspector and/or testing agency representative performing the work.
- B. Schedule of Non-Compliant Work: Each agent shall maintain a log of work that does not meet the requirements of the construction documents. Include reference to original inspection / test report and subsequent dates of re-inspection/retesting.
- C. Reports and tests shall be submitted within 1 week of inspection or test. Schedule of Non-Compliant Work shall be updated daily and submitted at weekly intervals.
- D. Final Report of Special Inspections. Submitted on forms per local jurisdiction requirements.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION

3.01 CONTRACTOR'S RESPONSIBILITY

- A. The contractor shall coordinate the inspection and testing services with the progress of the work. The contractor shall provide sufficient notice to allow proper scheduling of all personnel. The contractor shall provide safe access for performing inspections and on site testing.
- B. The contractor shall submit construction schedules to the owner, and testing and inspecting agencies. Schedules will note milestones and durations of time for materials requiring structural tests and special inspections.
- C. Each contractor responsible for the construction of a seismic-force-resisting system, designated seismic system, or component listed in the quality assurance plan shall submit a written contractor's statement of responsibility to the building official and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:
 - 1. Acknowledgment of awareness of the special requirements contained in the quality assurance plan.
 - 2. Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official.
 - 3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports.
 - 4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.
- D. Each contractor responsible for the construction of a main windforce-resisting system or a wind-resisting component listed in the quality assurance plan shall submit a written statement of responsibility to the building official and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:
 - 1. Acknowledgment of awareness of the special requirements contained in the quality assurance plan.
 - 2. Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official.
 - 3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports.
 - 4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.
- E. The contractor shall repair and/or replace work that does not meet the requirements of the construction documents.
 - 1. Contractor shall engage an engineer / architect to prepare repair and/or replacement procedures.
 - 2. Engineer/architect shall be registered in the state in which the project is located and shall be acceptable to the registered design professional in responsible charge, code enforcement official, and owner.
 - 3. Procedures shall be submitted for review and acceptance by the registered design professional in responsible charge, code enforcement official, and owner before proceeding with corrective action.
- F. The contractor shall be responsible for costs of:
 - 1. Re-testing and re-inspection of materials, work, and/or products that do not meet the requirements of the construction documents and shop drawings/submittal data.
 - 2. Review of proposed repair and/or replacement procedures by the registered design professional in responsible charge and the inspectors and testing agencies.
 - 3. Repair or replacement of work that does not meet the requirements of the construction documents.

3.02 STRUCTURAL OBSERVATIONS

- A. Structural observations may be made periodically as determined by the registered design professional in responsible charge and/or owner.

3.03 TESTING AND INSPECTIONS

- A. Testing and inspection shall be in accordance with the attached Schedule of Special Inspections.
- B. Reference related specifications for the minimum level of inspections and testing. Provide additional inspections and testing as necessary to determine compliance with the construction drawings and Governing Authority.

PART 4 - SCHEDULES AND FORMS (To be provided on drawings or under separate cover.)

4.01 CODE REQUIRED SPECIAL INSPECTIONS SCHEDULES AND FORMS

- A. The following schedules and forms to be provided on drawings or under separate cover by design professional of record for project specific conditions and local building code requirements.
 - 1. STATEMENT OF SPECIAL INSPECTIONS
 - 2. SCHEDULE OF INSPECTION AND TESTING AGENCIES
 - 3. SCHEDULE OF SPECIAL INSPECTIONS
 - 4. FINAL REPORT OF SPECIAL INSPECTIONS

END OF SECTION

SECTION 01 51 00

TEMPORARY FACILITIES

PART 1 – GENERAL

1.01 SUMMARY

- A. Provide temporary utilities and miscellaneous facilities required during construction, complete, including utility costs, maintenance, and removal.

PART 2 – PRODUCTS

2.01 UTILITIES

- A. Temporary Utilities: Provide and pay for costs of gas, water, and electricity required for performance of the work. Make necessary arrangements with utility companies for temporary service.
 - 1. Gas and Water: Provide necessary temporary piping, fittings, and metering.
 - 2. Electricity: Provide necessary temporary electrical wiring and metering. Provide area distribution boxes so located that individual trades may use their own construction type extension cords to obtain adequate power and lighting for construction operations.

2.02 TEMPORARY SANITARY FACILITIES

- A. Provide on-site temporary toilet facilities for use of construction personnel as specifically required by local or state health department. Maintain in a sanitary condition.

2.03 FIELD OFFICE AND SHEDS

- A. Contractor's option to provide field office and storage facilities adequate in size and accommodation for Contractor's field project representative office, supplies, and tools.

2.04 PROJECT IDENTIFICATION

- A. Contractor's option to provide project sign.

2.05 PARKING AND STAGING AREAS

- A. Provide adequate space for construction activities.
 - 1. Do not unreasonably encumber site with materials or equipment. Confine stockpiling of materials in an orderly fashion. New building may be used to secure materials, tools, and equipment in a manner to allow Work to continue unimpeded.
 - 2. Confine operations at site to areas permitted under Contract. Portions of site beyond areas of which is indicated are not to be disturbed. Conform to site rules and regulations affecting work while engaged in project construction.

2.06 TEMPORARY HEAT AND VENTILATION

- A. Provide temporary heat where needed for proper performance of the work, for curing or drying of work recently installed, and protection of work in place from adverse effects of low temperatures.

- B. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, and gases.

2.07 DEWATERING, SNOW, AND ICE REMOVAL

- A. Maintain site, excavations, and construction free of water, snow, and ice, as necessary for protection and execution of the work.

2.08 TEMPORARY FENCING

- A. Provide temporary fencing, barricades and guards to protect existing construction, trees and other vegetation indicated to remain, against unnecessary damage.
- B. Provide site enclosure fence, barricades, warning signs, and lights as required for compliance with local, state, and national safety regulations.
- C. Provide environmental protection systems required for compliance with local, state, and national regulations.

2.09 TEMPORARY FIRE PROTECTION

- A. During construction period and until fire protection needs are fulfilled by permanent facilities, provide and maintain types and forms of temporary fire protection needed to protect facilities against fire losses. Store combustible materials in recognized fire-safe locations and containers.

2.10 SECURITY

- A. Provide sufficient control to prevent illegal entry or damage during nights, holidays, or other periods when work is not being executed, and such other controls as required during working hours.
- B. Provide temporary key storage on site as follows:
 1. Install during construction when building interior is securable. Mount key storage device on rear entry door pull hardware, unless otherwise directed by Owner.
 2. Temporary key storage device to be combination type with maximum five (5) key capacity. Device to store only keys associated with temporary construction locks. Upon installation submit storage lock combination code to Owner.
 3. Prior to final closes out, schedule remove of temporary key storage device with Owner.

2.11 CLEANING AND TRASH REMOVAL

- A. Provide facilities necessary for storage and confining construction waste materials, debris and rubbish. Maintain site in a clean and orderly condition.

PART 3 – EXECUTION

3.01 REMOVAL

- A. Maintain construction facilities and temporary controls as long as needed for safe and proper completion of work. Remove temporary facilities and controls as rapidly as progress of work will permit or as directed by Owner.

END OF SECTION

SECTION 01 52 40

CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division
 - 1. Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition and construction waste.
 - 2. Recycling nonhazardous demolition and construction waste.
 - 3. Disposing of nonhazardous demolition and construction waste.

1.03 SUBMITTALS

- B. Comply with Section 01 33 00.
- C. Waste Management Plan: Submit 3 copies of plan within 7 days of date established for the Notice to Proceed.

1.04 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the work.

1.05 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 75 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
 - 1. Demolition Waste:
 - a. Asphaltic concrete paving.
 - 2. Construction Waste:
 - a. Site-clearing waste.
 - b. Masonry and CMU.
 - c. Lumber.

- d. Wood sheet materials.
 - e. Wood trim.
 - f. Metals.
 - g. Roofing.
 - h. Insulation.
 - i. Carpet and pad.
 - j. Gypsum board.
 - k. Piping.
 - l. Electrical conduit.
3. Packaging: Regardless of salvage/recycle goal indicated in paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
- a. Paper
 - b. Cardboard
 - c. Boxes
 - d. Plastic sheet and film
 - e. Polystyrene packaging
 - f. Wood crates
 - g. Plastic pails

1.06 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit three copies of report. Use Form CWM-7 for construction waste and Form CWM-8 for demolition waste. Include separate reports for demolition and construction waste. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Total quantity of waste in tons.
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit 3 copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the work.
- C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Qualification Data: For Waste Management Coordinator.

1.07 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of Projects with similar requirements, as waste management coordinator.

- B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference: General Contractor conduct conference at Project site to comply with requirements in Section 01 20 00 – Project Procedures. Review methods and procedures related to waste management including, but not limited to, the following:
 1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 2. Review requirements for documenting quantities of each type of waste and its disposition.
 3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 5. Review waste management requirements for each trade.

1.08 WASTE MANAGEMENT PLAN

- A. General: Develop a waste management plan according to ASTM E 1609 and requirements of this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition waste generated by the Work. Use Form CWM-1 for construction waste and Form CWM-2 for demolition waste. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-3 for construction waste and Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Use Form CWM-5 for construction waste and Form CWM-6 for demolition waste. Include the following:
 1. Total quantity of waste.
 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 3. Total cost of disposal (with no waste management).

4. Revenue from salvaged materials.
5. Revenue from recycled materials.
6. Savings in hauling and tipping fees by donating materials.
7. Savings in hauling and tipping fees that are avoided.
8. Handling and transportation costs. Include cost of collection containers for each type of waste.
9. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by Architect. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
 1. Comply with Section 01 51 00 - Temporary Facilities for operation, termination, and removal requirements.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall monitor the site in conjunction with the Project Superintendent. Job superintendent shall monitor on a daily basis. Coordinator shall still be responsible for all documentation.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 1. Distribute waste management plan to everyone concerned within three days of submittal return.
 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 2. Comply with Section 02 01 00 – Site Preparation for controlling dust and dirt, environmental protection, and noise control.

3.02 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
 1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers.
 3. Store items in a secure area until installation.
 4. Protect items from damage during transport and storage.
 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

3.03 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.

- B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.04 RECYCLING DEMOLITION WASTE

- A. Asphaltic Concrete Paving: Grind asphalt to maximum 1-1/2-inch (38-mm) size.
 - 1. Crush asphaltic concrete paving and screen to comply with requirements in Section 31 00 00 - Earthwork for use as subbase or fill material with prior approved by Geotechnical Engineer.
- B. Asphaltic Concrete Paving: Break up and transport paving to asphalt-recycling facility.

3.05 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 - 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 - 2. Polystyrene Packaging: Separate and bag materials.
 - 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 - 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 - 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 - 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
 - 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.06 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
 - C. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.
 - D. Disposal: Transport waste materials and dispose of at designated spoil areas on Owner's property.
 - E. Disposal: Transport waste materials off Owner's property and legally dispose of them.

3.07 ATTACHMENTS

- A. Form CWM-1 for construction waste identification.
- B. Form CWM-2 for demolition waste identification.
- C. Form CWM-3 for construction waste reduction work plan.
- D. Form CWM-4 for demolition waste reduction work plan.
- E. Form CWM-5 cost/revenue analysis of construction waste reduction work plan.
- F. Form CWM-6 cost/revenue analysis of demolition waste reduction work plan.
- G. Form CWM-7 for construction waste
- H. Form CWM-8 for demolition waste.

END OF SECTION