



City of Auburn

COMMERCIAL

INSPECTION SERVICES DEPARTMENT POLICIES & PROCEDURES

2020 E

DRAFT

Contents

1.1	PERMITTING.....	9
1.1.1	Building Permits.....	9
1.1.2	Technical Permits (Sub Permits)	9
1.1.3	Fees:.....	9
1.2	Preparing your plan.....	9
1.2.1	Site Plan	9
1.2.2	Architectural Drawings.....	10
1.2.3	Wall-bracing plan review & inspection requirements.....	10
1.2.4	Structural Information.....	11
1.2.5	Mechanical	11
1.2.6	Plumbing	11
1.2.7	Electrical	12
1.2.8	Automatic Fire Extinguishing System Plans.....	12
1.2.9	Exterior Elevations.....	12
1.2.10	Energy Compliance Documentation	12
1.3	INSPECTIONS.....	12
1.3.1	GENERAL:.....	12
1.3.2	EROSION INSPECTION:.....	13
1.3.3	REQUESTED INSPECTIONS:.....	13
1.3.4	Re-Inspection Policy and Fee.....	14
1.3.5	Mandatory Building Inspections	15
1.3.6	Additional Inspections	16
1.3.7	Written Release.....	16
1.3.8	Stop Work Orders	17
1.3.9	Starting Construction without Permits:.....	17
1.3.10	Covering Work without Required Inspections:.....	18
1.3.11	Failure to Request & Pass Final Inspection & Obtain A Certificate of Occupancy (CO) For Work.....	18
1.4	CERTIFICATES OF OCCUPANCY & COMPLETION.....	18
1.4.1	Obtaining CO's & CC's	19
1.4.2	Temporary Certificate of Occupancies and Completions:	19
1.5	ADDITIONAL CITY CONSTRUCTION REQUIREMENTS	20
1.5.1	Temporary Toilet Facilities:	20
1.5.2	Structural Fill and Back Fill:	20
1.5.3	Construction Working Hours:.....	20
1.5.4	Plan Changes after Permit Issued:.....	21
1.6	Third Party Plan Review Program	21
1.6.1	Overview	21
1.6.2	Third Party Reviewer Certification	21
1.6.3	Third Party Plan Review Process.....	21
1.6.4	Third Party Plan Review Costs:	22
1.6.5	Third Party Plan Review Agency Responsibilities.....	22
2	Special Inspections.....	24
3	Site and Right of Way Policy and Procedures	26

3.1	GENERAL.....	27
3.1.1	Scope.....	27
3.1.2	STORAGE AND PLACEMENT.....	27
3.1.3	Safety measures and standards.....	27
3.1.4	Inspection.....	27
3.1.5	Unsafe conditions and equipment.....	27
3.1.6	Design, sizes, and capacity of materials, structures, temporary construction, and equipment.....	27
3.1.7	Documents to be kept on site.....	28
3.1.8	Accidents and damage to adjoining property.....	29
3.1.9	Use and tampering prohibited.....	29
3.1.10	signs.....	30
3.2	DEFINITIONS:.....	31
3.3	CONSTRUCTION SAFEGUARDS.....	42
3.3.1	Scope.....	42
3.3.2	Utilities.....	42
3.3.3	Alterations, repairs and additions.....	42
3.3.4	Fire safety during construction.....	43
3.3.5	Housekeeping.....	43
3.3.6	CONTROL AND REMOVAL OF MATERIAL AND DEBRIS.....	44
3.3.7	Control and Removal of combustible debris.....	45
3.3.8	Dropping or throwing prohibited.....	45
3.3.9	Clogging.....	45
3.3.10	Free from obstruction.....	47
3.3.11	Elements to be maintained in existing buildings.....	47
3.3.12	Operations in occupied buildings.....	48
3.3.13	Stairs during construction or demolition.....	48
3.3.14	INTERRUPTED OR ABANDONED AND DISCONTINUED OPERATIONS.....	48
3.3.15	Drainage.....	49
3.4	SITE WORK.....	50
3.4.1	Scope.....	50
3.4.2	Inspections.....	51
3.4.3	Retaining walls.....	52
3.4.4	Access.....	52
3.4.5	Drainage.....	52
3.4.6	Utilities.....	52
3.4.7	Dewatering.....	52
3.4.8	Slurry.....	52
3.4.9	Excavation and fill.....	52
3.5	DEMOLITION.....	53
3.5.1	Construction documents.....	53
3.5.2	Pedestrian protection.....	53
3.5.3	Notification.....	53
3.5.4	DEMOLITION OF WEAKENED STRUCTURES.....	53
3.5.5	DEMOLITION SEQUENCE.....	54
3.5.6	Structural steel, reinforced Concrete, and heavy timber Buildings.....	54
3.5.7	Safeguards.....	54
3.5.8	Removal of foundations and slabs.....	58
3.5.9	Completion of demolition operations.....	58

3.5.10	Means of egress.....	58
3.5.11	Vacant lot.....	58
3.5.12	Utility connections.....	58
3.5.13	Fire safety during demolition.....	58
3.5.14	Sanitary facilities required.....	59
3.6	PROTECTION OF PEDESTRIANS	59
3.6.1	Scope.....	59
3.6.2	Streets, Including Sidewalks, Walkways, and Pathways.....	59
3.6.3	Covered walkways and Fences.....	60
3.6.4	Warning Signs, Personnel, and Barriers.....	60
3.6.5	Watchperson and Flag person.....	62
3.6.6	Covered Walkways.....	62
3.6.7	Fences / Barrier Protection Required.....	68
3.6.8	Maintaining Standard Specifications and Details Pedestrian Protection in Place..	71
3.6.9	Facilitating City Work.....	71
3.7	PROTECTION OF UNENCLOSED PERIMETERS	72
3.7.1	Scope.....	72
3.7.2	Permit.....	72
3.7.3	Safety netting design and documentation.....	72
3.7.4	Responsibility and supervision.....	73
3.7.5	Vertical safety netting systems.....	73
3.7.6	Horizontal safety netting systems.....	75
3.7.7	Guardrail system.....	77
3.7.8	Modifications and alternative systems.....	79
3.7.9	Unenclosed perimeter protection inspection, use, adjustment, maintenance, and repair.....	80
3.8	TEMPORARY USE OF STREETS, ALLEYS AND PUBLIC PROPERTY.....	82
3.8.1	Storage and handling of materials.....	82
3.8.2	Utility fixtures.....	82
4	Third-Party Inspection Program (TPIP)	83
4.1	INTRODUCTION.....	84
4.1.1	Purpose:.....	84
4.1.2	Basis for third-party inspections.....	84
4.2	APPLICABILITY.....	84
4.3	DEFINITIONS AND QUALIFICATIONS.....	86
4.4	PRE-PERMIT PHASE.....	90
4.4.1	Statement of third-party inspections.....	90
4.4.2	Fees and Cost.....	90
4.4.3	Relevant Codes and Standards.....	90
4.4.4	Independence.....	91
4.4.5	Third Party Inspector Insurance Requirements.....	91
4.4.6	Independent Contractor.....	92
4.4.7	Indemnification.....	92
4.4.8	Business License.....	92
4.4.9	Training & Meetings.....	92
4.4.10	Third Party Inspector and Laboratory Qualifications.....	92
4.5	PRE-CONSTRUCTION MEETING:	95
4.5.1	Pre-construction meeting.....	95

4.5.2	Participants in the pre-construction meeting:.....	95
4.5.3	Purpose:.....	95
4.6	CONSTRUCTION PHASE	96
4.6.1	Reports and communications flow.....	96
4.6.2	Routine Inspection Reports Guidelines	97
4.6.3	Changes in critical services.....	98
4.7	PERFORMANCE REVIEWS.....	98
4.7.1	Third party inspector revocation	99
4.8	POST CONSTRUCTION PHASE.....	99
4.8.1	Final Report of Third Party Inspections.....	99
ATTACHMENT 1.....		101
Statement of Third-Party Inspections.....		101
ATTACHMENT 2.....		110
GENERAL RESPONSIBILITIES		110
Principal Parties		110
4.8.2	Owner (Owner’s Representatives):.....	110
4.8.3	Architect of Record (AR):.....	110
4.8.4	Design Engineers of Record:.....	111
4.8.5	General Contractor (GC):.....	111
4.8.6	Third-Party Inspectors of Record (TPIR):.....	111
4.9	FIELD SPECIFIC RESPONSIBILITIES	112
4.9.1	Soils and Foundations	112
4.9.2	Earth and Retention systems.....	114
4.9.3	Concrete (Pre-cast and Cast-in-place)	115
4.9.4	Pre-Cast Concrete.....	117
4.9.5	Cast-In-Place Concrete	117
4.9.6	Masonry.....	118
4.9.7	Wood.....	121
4.9.8	Structural Steel.....	121
4.9.9	Inspections for Steel Materials	122
4.9.10	Fire Protection.....	123
4.9.11	Electrical Systems.....	125
4.9.12	Mechanical Systems.....	126
ATTACHMENT 3.....		127
CITY OF AUBURN THIRD-PARTY INSPECTION PROGRAM CERTIFICATION		
FORM.....		127

City of Auburn

Commercial

Inspection Services Department Policies & Procedures

NOTICE

The information within this document is prepared by the City of Auburn Alabama Inspection Services Department (ISD), hereinafter referred to as “the City.” The intent of this document is to reasonably inform our citizens, designers, developers, contractors, and the general public of the codes and laws related to commercial building construction in effect within the city and also to communicate the policies and procedures developed by the city over time to enforce these laws for safe and code compliant commercial construction.

This document is a building official interpreted “plain language” compilation of various sections of federal, state, county, and city building construction laws and the rules and regulations related to improving commercial property in the City. The information within is not all inclusive, nor is it designed to be, but rather presents a general overview of construction laws and processes relative to planning, permitting, constructing, inspecting, and completing a commercial construction project in the City. The contents of this document are intended to convey general information only and not to provide legal advice or opinions. The contents of this document should not be construed as, and should not be relied upon for, legal advice in any particular circumstance or fact situation. The City does not guarantee or warrant the accuracy of the information contained in this document and disclaims any responsibility or liability for interpretations or decisions based thereon. Prior to use, the information contained herein should be verified by a review of the applicable laws, rules and regulations by a licensed attorney.

For the purpose of this document, the following shall apply to the use of words and phrases: words used in present tense include future tense. Words used in singular tense include plural tense. The word “he” also means “she.” The words “shall” or “must” are always mandatory. The words “may” or “can” are permissive. The word “and” indicates all conditions, requirements, or factors so connected must be met or fulfilled, whereas the word “or” indicates that at least one condition, requirement, or factor so connected must be met. The word “structure” means anything that is built and includes the word “building.” The word “person” means any individual, corporation, association, firm, partnership or other legal entity. The word “permit” means written governmental permission issued by an authorized official, empowering the holder thereof to do some act not forbidden by law, but not allowed without such authorization.

This document may be updated as codes, laws, rules, regulations, and policies change. This document has been prepared by the City of Auburn Building official, and specific requirements and policies not mandated by law may be modified or waived by the building official. This and other construction related procedures may be accessed and downloaded at: www.auburnalabama.org



**City of Auburn
Inspection Services Department**

**GENERAL PERMITTING AND
INSPECTION GUIDELINES**

2020 Edition

1.1 PERMITTING

Permits are required for all new construction, alterations, and remodels. Every project is unique, so there is no standard group of permits required. Below is a list of commonly required permits that may be applicable to your project. To see if your project could require a permit, please see our "*do I need a permit?*" section on our web page. Building permits will be submitted, reviewed and permits issued by ISD.

1.1.1 BUILDING PERMITS

Building Permit - Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit.

1.1.2 TECHNICAL PERMITS (SUB PERMITS)

Some technical permits may require plan review. Contact ISD personnel at (334) 501- 3170 to determine whether a plan review is required for your project.

Plumbing Permit: A plumbing permit authorizes installation of drain, waste and vent piping; potable water piping; fuel gas piping; and plumbing appliances and fixtures.

Mechanical Permit: A mechanical permit authorizes installation of furnaces and ducts, boilers and circulation piping, and exhaust fans and ducts.

Electrical Permit: An electrical permit authorizes installation of wiring, receptacles, switches, light fixtures, electrical equipment, fixed-in-place appliances and connection of these systems to utility service.

Fire Sprinkler, Suppression and Alarm Permits: These permits require submittals by a certified professional for review prior to permitting or installation.

1.1.3 FEES:

On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by chapter five of the Adopted City Code.

Additional fees associated with Third Party Plan Review and Third Party Inspections will be the sole responsibility of the permit holder or owner. Fees associated with Special Inspections will be the sole responsibility of the Owner of the project per chapter 17 of the IBC.

1.2 Preparing your plan

1.2.1 SITE PLAN

A site plan is a drawing that depicts the placement of the project on the property. (See Appendix A). Site plans must be drawn to scale. Two versions are required: one that shows the existing site, and one which shows the site with proposed work.

It should show all buildings, including sheds, and the setbacks of a proposed project to the property line. It should also include the direction of drainage, landscaping, sidewalks, and other site features. It should show property dimensions, the location of adjoining streets and alleys,

and location of all existing and proposed structures on the property with distances from other buildings and property lines specified.

1.2.2 ARCHITECTURAL DRAWINGS

1. Name and address of project
2. Name, address and occupation of the author of the construction documents
3. Scaled and dimensioned floor plans with all room names labeled; doors and windows shown; and special features clearly noted
4. Exterior elevations, showing all openings
5. All door and window sizes noted either on elevations, plans or door and window schedules referenced to plans. Indicate sleeping room and basement egress.
6. Complete sections and details for foundations, floors, walls and roofs, with components of assemblies completely noted, properly cross-referenced, with floor-to-floor heights dimensioned
7. Indicate compliance with braced wall requirements, indicating the specific methods used and details of the method(s) in the construction documents. (see below for additional information)
8. Indicate compliance with Energy Code. Show insulation values plus mechanical drawings as required below.
9. Indicate stair dimensions, tread and riser dimensions, and handrail and guardrail information.
10. Life Safety aspects of the project.
11. Accessibility aspects with adopted and applicable codes or standards
12. For additions and renovations, make clear the distinction between existing construction, alterations to existing, and new work.
13. For two-family residences, duplexes and townhouses, indicate rated walls, provide a copy of the testing agency design detail(s) on the drawings, and show compliance with other required dwelling unit separation

1.2.3 WALL-BRACING PLAN REVIEW & INSPECTION REQUIREMENTS

1. The IBC wall-bracing method must be noted on the submitted plans, with areas of braced walls shown on elevations and interior braced wall length shown on floor plans. The areas of braced wall must be clearly and obviously shown and noted, by darker shading or some other standard black and white graphic method. Connections, details and nailing schedule must be shown on plans. Details showing continuous load path and uplift resistance must be shown (i.e. wall sheathing lapped over rim joists or metal strap connections of walls to floor system, etc.).
2. Construction drawings must include design details of portal frame, standard manufactured shear panels or other pre-engineered approved methods, if used.
3. Structural calculations bearing the dated signature and seal of a design professional registered in the State of Alabama are acceptable as an alternative to prescriptive design.
4. Before installing building wrap or windows, approved braced wall panel and nailing inspections are required.

1.2.4 STRUCTURAL INFORMATION

Structural plans include foundation, floor framing, roof framing, cross sections, and drawings of specific aspects of the project, such as an eave detail. The detail drawing would show the size and materials required for the construction of the footing, and a reference on the foundation plan to where the footing detail is located in the plan set.

1. Note uniform design loads and any special loading.
2. Scaled and dimensioned foundation plans. Show ventilation and access openings as required.
3. Scaled and dimensioned floor and roof framing plans. Indicate all beam sizes, headers, ledgers, posts and columns. Note species and grade of lumber, or manufactured structural members performance grade.
4. Sections and details properly referenced to plans
5. Reinforcing steel, if used, for slabs, retaining walls, grade beams, foundations and foundation walls
6. For additions and renovations, detail the existing structure and footings that provide bearing for new work.
7. Structural calculations, signed and sealed by a structural design professional, licensed in the State of Alabama, for those structural elements that exceed the tabular values set forth in the code.
8. Structural calculations, signed and sealed by a structural design professional, licensed in the State of Alabama, for retaining walls with a difference in grade of greater than two feet.
9. Signed and stamped truss calculations are required if utilizing roof or floor trusses for the project. The calculations must match the roof and floor plan provided in the plan set.
10. General notes and construction notes

1.2.5 MECHANICAL

New construction require:

1. Heating/cooling load calculations
2. Duct layout
3. Complete mechanical layout and the equipment list (type and size) including exhaust system for kitchen, baths and dryer, venting systems and combustion make up air for fuel-burning appliances prepared and signed by a licensed HVAC contractor, or architect or mechanical engineer with sealed drawings.
4. For alterations or additions to existing structures, the same requirements apply. However, the building official or his designee may make a determination if lessor requirements are allowable.

1.2.6 PLUMBING

1. New structures will show the water service location and pipe size on the site/grading plan.
2. Renovations and additions to existing structures may continue to use the existing water service.

-
3. Complete plumbing layout and the equipment list (type and size) including plumbing riser diagram, potable water, sanitary sewer, grease trap and associated lines, and fuel gas lines prepared and signed by a licensed Plumbing Engineer with sealed drawings.
 4. For alterations or additions to existing structures, the same requirements apply. However, the building official or his designee may make a determination if lessor requirements are allowable.

1.2.7 ELECTRICAL

Compliance with the currently adopted electrical code.

1. New structures will show the location of electrical meters, conduits and associated components on the site/grading plan.
2. Renovations and additions to existing structures may continue to use the existing electrical service.
3. Complete electrical layout and the equipment list (type and size) including power plan, lighting plan, Emergency power components, panels and other electrical components associated with the electrical system prepared and signed by a licensed Electrical Engineer with sealed drawings.
4. For alterations or additions to existing structures, the same requirements apply. However, the building official or his designee may make a determination if lessor requirements are allowable.

1.2.8 AUTOMATIC FIRE EXTINGUISHING SYSTEM PLANS

Automatic Fire Extinguishing System Plans include drawings, calculations, and specifications. These are required for new construction, remodels and tenant improvements when required by the currently adopted Building Code.

Complete fire suppression/alarm layout and the equipment list (type and size) including main sizes, calculations, piping, panels and fire pumps that are designed and signed by a licensed Plumbing Engineer with sealed drawings.

1.2.9 EXTERIOR ELEVATIONS

Exterior elevations show all sides of the building being constructed or remodeled. Exterior elevations also indicate the height of the structure and specify the exterior materials being used.

1.2.10 ENERGY COMPLIANCE DOCUMENTATION

Energy compliance documentation is needed if the area of conditioned space is being increased as necessary to comply with the currently adopted Alabama Commercial Energy Codes.

1.3 INSPECTIONS

1.3.1 GENERAL:

The building official or representative shall inspect, or cause to be inspected, at various intervals all construction or work for which a permit is required. Final inspections shall be made of every building, structure, mechanical, electrical, plumbing, gas, energy conservation, or fire protection systems upon completion by the permittee and prior to the issuance of a Certificate of Occupancy (CO) or a Certificate of Completion (CC) and any occupancy or use of the permitted work.

To expedite inspection approvals, the building official does recommend permit holders and contractors provide responsible construction representatives to accompany the inspector during the inspections. Representatives should have plans or access to plans and be prepared to answer inspector questions regarding the work to be inspected.

Permit holders and contractors should discuss inspection preparedness with inspectors at the start of work.

City inspectors are prohibited from entering and making any interior building inspections at occupied buildings without the permit holder, or property owner, or an authorized adult being present to grant premises entry and staying with the inspector at all times until the inspection has been completed.

1.3.2 EROSION INSPECTION:

No inspections will be made by the City building or fire inspectors on any construction site not having "effective" soil erosion control measures in place.

Site silt fences, rockered construction entrances, and other City Engineering Services Department required erosion control measures shall be constantly maintained in a good state of repair that effectively contains all site erosion within the site limits and out of all State waterways. Mud, silt, or other construction debris must be kept out of public streets and walkways.

City inspectors will not perform the requested inspections when, in the inspectors opinion, the site is in need of erosion control repair. Inspectors will simply leave a Notice of Correction (Red Card) and will immediately leave the site without making the requested inspection.

It is the responsibility of the permit holder to notify the City Engineering Department at **334-501-3000** to obtain written erosion release on the site, regardless to whose fault erosion problems are attributed to.

No further building or fire inspections will be performed at a violation site until the permit holder notifies inspectors that the City Engineering Department has approved the erosion control measures. The permit holder may then request the desired building or fire re-inspection, during normal inspection request hours of **7:30am -4:00am. 334-501-3170**

1.3.3 REQUESTED INSPECTIONS:

It is the responsibility of the permit holder to prepare the work site for any requested inspections or other site inspection that may occur during the construction process.

The city makes every reasonable effort to provide permit holders “**day requested**” inspection service.

To effect this “day requested” service policy, this Department requires the person “in charge” of all construction work on a site, usually the general contractor or his superintendent, to call in all inspections.

Exception:

1. The mechanical, electrical, plumbing, gas or fire system subcontractors must request the inspections related to their trade.
2. Where only one trade is involved in an inspection, such as an outside “sewer” inspection, the hired plumber or utility contractor may call in this inspection. It is the responsibility of the person “in charge”, normally the site superintendent, to coordinate all building and subcontractor trade work, so that all required work for a particular requested inspection is ready to be inspected when the inspector arrives on site.

An example of this required coordination is a typical “insulation” inspection; where wall framing is complete, plus all rough electrical wiring, plumbing piping, and HVAC ductwork located within the wall is complete, under gone all required tests and inspections and ready for inspection.

All inspection requests shall be called in to the ISD at **334-501-3170**, between the hours of 7:30am to 4:30pm at least one business day before the desired inspection.

Callers will talk directly to staff members of the ISD or in some cases need to leave a message with pertinent information and a contact phone number. Inspections will be scheduled, depending upon inspector workloads, AM or PM inspections may be arranged, but never guaranteed.

Note: Inspectors cannot ascertain in advance the kind of inspections or how many inspections will be called in during any given day. We make every reasonable effort to service as many customers as is possible in a given day, however our inspection service is only as good as your preparation for inspection.

When requesting inspections, the site street address or lot and subdivision, type of inspection requested contact person and phone number must be given. Without this basic information, no inspection can be scheduled. **No Exception.**

1.3.4 RE-INSPECTION POLICY AND FEE

The City’s re-inspection policy for any inspection is explained as follows:

1. If a scheduled inspection is Failed, permit holders must correct noted violation(s) and recall the inspection when ready, but not before the next business day, unless so directed by the inspector.
2. The first re-inspection fee is covered under the original permit fee.
3. The City re-inspection policy is to charge a customer a \$25.00 re-inspection fee, when inspectors have to return to a site for a third re-inspection for the same items previously noted. The first re-inspection fee is covered under the original permit fee.
4. When inspectors must return to a site a fourth time and all times thereafter for the same re-inspection for the same items previously noted, a re-inspection fee of \$100.00 per re-inspection will be assessed, until the inspection passes. Re-inspection fees must be paid before any re-inspections will be scheduled.
5. When sites are deemed “**Not Ready**” by the inspector, the inspection is stopped, the permit holder is issued a Notice of Correction (Red card) stating the violation(s) noted during the inspection, plus the words “Not Ready” are affixed to the Notice and reasons for not being ready.
6. If receiving a “Not Ready” Notice of Correction (Red Card), contact the inspector, as advised in the Requesting Inspections section herein, and discuss the violation(s) Inspectors will normally advise you what to do to prepare for inspection.

Warning: Inspectors are not construction “Punch List” preparers. If inspectors deem a permit holder is negligent in preparing for inspections and using inspectors to prepare Punch Lists.

1.3.5 MANDATORY BUILDING INSPECTIONS

The following inspections are required for each building project. Some may not apply to every project. One (1) day notice is required for all inspections.

- Footing
- Plumbing under Slab
- Electrical under Slab
- Slab
- Site Pole
- Sprinkler - exterior
 - Underground pressure test and flush from vault to building
 - Underground pressure test and flush from main to vault
 - Vault installation
 - Vault
- Rough-Ins
 - Electrical Rough-In
 - Heating and Air Rough-In
 - Plumbing Rough-In
 - Gas Rough-In
- Sprinkler
 - 2 hour pressure test and flush
 - Rough in
- Fire alarm Rough- In
- Framing (All rough-ins must pass before requesting the framing inspection)
- Sewer
 - Grease Trap
 - Installation
 - Sewer to and from grease trap
- Temporary Power
- Driveway/sidewalks
- Gas Service
- Final
 - Building
 - Sprinkler
 - Fire Alarm

-
- Grease Trap Final

1.3.6 ADDITIONAL INSPECTIONS

GENERAL: Additional site, building, mechanical, electrical, low voltage, plumbing, or fire inspections may be required as determined by building and fire officials to insure compliance to building and fire codes and other related City, county, and state rules and regulations or laws.

Site inspections are required for all construction projects where land has been disturbed prior to issuing a Certificate of Occupancy or Completion for the permitted work.

Site conditions are normally inspected by Engineering Services and Planning Department personnel at or near the end of construction. Engineering inspectors will check the site for proper drainage, erosion control measures and final condition of curb cuts, driveways, and sidewalks.

Items found to be incomplete, inadequate, damaged, broken, or otherwise not in compliance to City requirements must be completed and repaired to the satisfaction of all governing authorities.

In addition, inspections may be required by other governing authorities, who either at the planning, permitting, or during the course of construction have imposed regulatory issues to be resolved prior to Final approval.

No Certificate of Occupancy or Completion for permitted construction can be issued until all regulatory issues

1.3.7 WRITTEN RELEASE

Construction normally proceeds in steps or stages, usually predetermined by the various mandated inspections sections included in this document. Steps may vary dependent upon the scope of work to be done and at the discretion of the building official.

The important thing to remember when doing permitted construction in the City is to not cover anything up that has not been visually inspected and approved in writing by City inspectors.

If you cover work without written City approval, the City will require the work to be uncovered for inspection, as determined by the inspector, building official, or a court of law.

City inspectors and the building official will not approve any construction steps deemed necessary by the scope of work without first visually inspecting the work for codes compliance.

Work shall not be done on any part of a building or structure, or any mechanical, electrical, plumbing, fuel gas, energy conservation, fire prevention, or other system beyond the point indicated in each successive inspection step without first obtaining a written release from building, fire, or other officials for that inspected work, as applicable.

Release shall be given only after visual inspection has been made of each successive step in the construction or installation as indicated by each of the foregoing inspections.

Work proceeding beyond the City written release point, regardless to reason or fault, shall be removed or uncovered or tested to the acceptance of building or fire officials or both.

No further inspections or written releases of construction shall be made, nor shall any

Certificate of Occupancy or Certificate of Completion be issued for any construction, until the permit holder or property owner demonstrates codes compliance to the satisfaction of the building official.

1.3.8 STOP WORK ORDERS

Stop Work Orders are legal notices to immediately cease and desist all ongoing construction work on a property and to immediately and safely secure all hazardous perils to life and property on the site and to safely evacuate all work forces in an immediate orderly fashion.

Stop Work Orders are issued by City officials or other regulatory agencies and respected by all City departments.

Stop Work Orders are legally binding at issue and contractors and owners failing to immediately comply to a Stop Work Order and conditions stated thereon, can be issued a Summons to Appear for a public hearing in front of the City's Municipal Court to answer violation charges.

Stop Work Orders are the property of the City and shall not be removed from their posted location without written permission from the issuing official, under penalty of law.

Most violations occurring during permitted construction are usually processed by City inspectors issuing a builder a simple Notice of Correction (Red-Tag). The builder corrects the noted violations, calls for the re-the inspection, the inspection passes, and construction continues without further delay.

There are some violations related to construction that are more serious in nature and that can cause expensive repairs, temporary or permanent termination of construction, or severe consequences to a violator's construction rights within the city.

1.3.8.1 The three most common violations of this more serious nature are:

1. Starting construction without required permits.
2. Covering work without required inspections.
3. Not calling and passing Final Inspection and obtaining a Certificate of Occupancy for the work, prior to occupancy or use of the permitted construction.

The City does not process these three violations with a typical Red-Tag violation issued by a building inspector, but rather processes these violations by issuing Stop Work Orders.

1.3.9 STARTING CONSTRUCTION WITHOUT PERMITS:

1. Construction found being built without first having city permits will be issued Stop Work Orders.
2. Stop Work Orders will be posted on site, it will state not to start any construction without a city required building permit, and will advise the property owner and contractor to contact the building official.
3. Continuing construction on a site posted with a Stop Work Order will result to City officers issuing the contractor and/or the homeowner a "Summons to Appear" before the city Municipal Court to answer violation charges.
4. The Stop Work Order will remain in effect at the violation site until released by the building official.

1.3.10 COVERING WORK WITHOUT REQUIRED INSPECTIONS:

1. Sites found covering work without required inspections will be issued Stop Work Orders.
Examples: Covering work without required inspections are; concreting footings without first passing a Footing inspection, or installing drywall without first passing a Rough & Framing inspection.
2. Stop Work Orders will be posted on site and will state and will advise the property owner and contractor to contact the building official.
3. Continuing construction on a site posted with a Stop Work Order will result to City officers issuing the contractor and/or the property owner a “Summons to Appear” before the city Municipal Court to answer violation charges.
4. The Stop Work Order will remain in effect at the violation site until released by the building official.

1.3.11 FAILURE TO REQUEST & PASS FINAL INSPECTION & OBTAIN A CERTIFICATE OF OCCUPANCY (CO) FOR WORK.

1. Building sites found occupied and being used by occupants, without having first passed a city Final inspection and being issued a Certificate of Occupancy, will be issued Stop Work Orders.
2. **Note:** It is a responsibility of the contractor and the property owner to assure a Final inspection is passed and a Certificate of Occupancy is issued by the City, prior to using any structure.
3. Stop Work Orders will be posted on site and will advise the contractor and property owner to contact the building official.
4. **Note:** The building official can order immediate cessation of use in the interest of life safety, until the structure undergoes and passes a Final inspection to codes compliance.
5. Continued use of a structure on a site posted with a Stop Work Order will result to City officers issuing the contractor and the property owner a “Summons to Appear” before the city Municipal Court to answer violation charges.
6. The Stop Work Order will remain in effect at the violation site until released by the building official.

1.4 CERTIFICATES OF OCCUPANCY & COMPLETION

Certificates of Occupancy and Certificates of Completion, hereinafter referred to as CO's and CC's, are building code required official documents issued by the building official to permit holders or property owners at the completion of construction that has been validly permitted through ISD.

CO's and CC's officially attest that the permitted construction has undergone all required inspections for compliance to building and technical codes and other applicable city, county, or state laws in effect at the time of permit issue and has been released for its intended safe use by the building official.

Note: CO's and CC's are normally required by lending institutions and insurance carriers, prior to committing to permanent financing or providing insurance policies for completed

construction. CO's are issued for construction that is intended for human habitation, such as dwelling units or buildings.

CC's are normally issued for construction that involves a portion of an existing building being altered or remodeled.

CO's and CC's will not be issued for any construction not permitted through the City's Inspection Services Department.

There is no additional fee for CO's or CC's, as fees for these documents were included at permit issue.

1.4.1 OBTAINING CO'S & CC'S

1. To obtain a CO or CC at the end of construction, the permit holder or property owner must;
2. Pass all Final Building and subcontractor inspections.
3. Obtain other City Departments Final inspection approvals. i.e. - Engineering, Planning, Water Resource, etc.
4. Obtain other governing authority Final inspection signatures or provide release documents.

The issue of a CO or CC officially ends a permitted construction project in the City.

1.4.2 TEMPORARY CERTIFICATE OF OCCUPANCIES AND COMPLETIONS:

The codes recognize that unexpected delays can occur near the end of construction that will affect it to such a degree that it is impossible or impractical to have everything completed on a specific date that the construction has been promised or scheduled for a loan closing or other similar occasion.

When such delays occur, the codes allow the building official discretionary authority to issue Temporary Certificates of Occupancy or Completion, hereinafter referred to as TCO's and TCC's, under certain circumstances and agreements and only if the site, building, structure, or area thereof is substantially complete and reasonably safe for the occupants to use in the opinion of the building official.

TCO's and TCC's, when approved by the building official, will be issued for certain number of days and specific uses from the date of issue, but no longer than is reasonably necessary.

It shall be the sole responsibility of the permit holder or property owner to complete all unfinished work and request and pass Final Inspection of all construction and obtain a CO or CC prior to expiration of the TCO or TCC. Failure to obtain a CO or CC within the time allowed can result to prosecution by the City.

To obtain a TCO or TCC, the permit holder or property owner is required to:

1. Make written request to the building official for a TCO or TCC.
2. Identify the construction by permit number and include the site street address, project name, etc.
3. State the time limits requested for the TCO or TCC.
4. State the basis on which the TCO or TCC should be issued and identify all uncompleted construction.

-
5. Identify limits of areas to be used and include a summary of occupant safety measures to be employed.

No TCO shall be issued to any site not connected to the City of Auburn sewer system or having a Lee County approved sanitary sewerage system or approved potable water backflow prevention system in place. In addition, No TCO or TCC will be issued to any site having unresolved life safety issues or property liability damage issues.

Regardless of reasons for requesting TCO's or TCC's, all permit holders and property owners are advised that the building official will not consider, nor issue, any TCO or TCC to any site, building, structure, or construction, or area thereof that is deemed "Unsafe" or that presents any "Life Safety Hazard" to the occupants or users thereof in the opinion of building inspectors, fire inspectors, or the building official.

The issue of a TCO or TCC does not officially end a permitted construction project in the City.

1.5 ADDITIONAL CITY CONSTRUCTION REQUIREMENTS

1.5.1 TEMPORARY TOILET FACILITIES:

All construction sites within the City shall be provided with temporary sanitary non-sewer (portable) toilet facilities for worker use during construction and such toilets shall remain in place until access to permanent sanitary toilets are provided on site.

The developer or general contractor of a permitted construction site shall be responsible for providing and maintaining required toilet facilities throughout the duration of construction.

1.5.2 STRUCTURAL FILL AND BACK FILL:

Materials used for structural fill and backfill under and directly adjacent to buildings, drives, and walks and for backfill behind foundation and retaining walls shall be unfrozen, unsaturated natural soils, clean and free of organic matter, silt, large rocks or stones, or foreign matter and debris.

Additional backfill materials used may be course gravel, crushed natural stone, or sand free of silt, loam or soluble materials, or any combination of the above. Structural fills or backfill shall not be placed on subgrades that contain frost, mud, or are frozen.

In lieu of specific written direction and supervision by a Alabama licensed professional architect or engineer, fills shall be placed and compacted in loose layers of 6"-12" thickness and shall be compacted using sheep foot rollers, vibrating tampers, or other compaction equipment suitable to obtain the required density throughout the entire layer being compacted.

Fills and backfill shall be installed systematically and as early as is possible to allow for natural settlement and shall not be placed over wet, spongy, or porous subgrade materials.

1.5.3 CONSTRUCTION WORKING HOURS:

The City Noise Ordinance limits construction and demolition activity in the city and is enforced by ISD and the Auburn Police Department, as follows:

Permitted Construction and Demolition activity is allowed during the following hours only:

Monday through Sunday	
Adjacent to Single Family Residential	7:00 AM - 7:00 PM
Other areas	6:00 AM - 7:00 PM

Exception: Emergencies and other construction activity pre-approved by the building official on a case by case basis. Contact ISD at 334-501-3170 for more information.

1.5.4 PLAN CHANGES AFTER PERMIT ISSUED:

Often, changes are made to building plans and systems after a permit has been obtained and work has started. If these changes involve code issues, please submit the changes and 1 complete set of plans with the changes in a PDF format to ISD so the changes may be reviewed for code compliance before the changes are actually constructed in the field. If an inspector notices changes have been made to the building and the building does not match the city approved plans, the inspection fails and re-inspection cannot be made until the correct reviewed and stamped plans are available to the inspector at the jobsite.

Submit all revisions which might have code implications, including, but not limited to, structural, electrical, mechanical, plumbing, fire safety, egress, accessibility, occupancy, etc. Do not submit changes which do not have code implications, such as change of interior colors, change of cabinet hardware, etc.

If the exterior of a new building has been approved by the Auburn Planning Department, no changes may be made to the exterior without first obtaining approval from the Planning Department at 334-501-3060.

1.6 Third Party Plan Review Program

1.6.1 OVERVIEW

The Third Party Plan Review Program will allow large and/or complex projects to be submitted to a qualified Third Party Plan Review Agency (Agency) as an alternative to the ISD standard plan review process. This will reduce permitting turnaround time and allow ISD to improve the customer experience.

The scope of authority for Third Party Plan Review includes only plan review for compliance with construction codes. It does not include reviews that fall under the purview of other City of Auburn or State of Alabama authorities (including but not limited to Planning, Historic Preservation, Public Works and Alabama State Fire Marshal). The ISD will continue to perform the field inspections and certify compliance with the approved plans.

1.6.2 THIRD PARTY REVIEWER CERTIFICATION

Currently HRGreen Plan Review Service is the only third party plan review that will be accepted by the City of Auburn.

1.6.3 THIRD PARTY PLAN REVIEW PROCESS

1. Request to Use Third Party Review Agency. The permit applicant for the project must request, at the time of ISD permit application submission, to use a Third Party Plan Review Agency for a project. To do so, the applicant must submit a "Request to Use a Third Party Plan Review Agency" form in an electronic format with all required application materials, including drawings, documents and supplemental materials to ISD. The same Agency must be used for the entire construction code review for the project, including architectural, structural, mechanical, electrical, plumbing, energy and fire protection, as required
2. Review by the City. The City will conduct its review for requirements outside the scope of the Third Party Review, such as Zoning and Historic Review.

-
3. Transmission to the Agency. It is the permit applicant's responsibility to transmit all required documents to the Agency for review and to provide any additional information to the Third Party Plan Reviewer, as requested.
 4. Transmission of Plan Review Findings to ISD. After completion of the Third Party Review, the Agency shall transmit all final documents in an electronic format to the ISD. The final documents submitted to ISD shall include the following:
 5. All code deficiency reports and questions that may require further information from the permit applicant of ISD.
 6. All reports after the deficiencies have been addressed and the review is complete.
 7. Final Drawings. A final set of permit drawings that was approved by the Agency shall be provided to ISD. One set of paper drawings and one full set in PDF format.
 8. Permit Issuance. Approval by the Agency does not automatically guarantee the issuance of the permit. The permit will be issued only once ISD has verified that required final documents have been submitted and all other City reviews have been completed and City Codes complied with to the satisfaction of ISD.

1.6.4 THIRD PARTY PLAN REVIEW COSTS:

The permit applicant is solely responsible for the cost of any Third Party Plan Reviews. The compensation paid to the Agency for its plan review services shall not be contingent upon or affected by the conclusions reached by the Agency or the contents of any of the deliverables described in this policy.

The applicant may request a credit of a portion of the building permit fee paid to ISD, when the permit applicant elects to use Third Party Plan Review. Once the permitted work has been completed to the satisfaction of ISD and the permit has been closed. At its discretion, ISD may issue a partial refund for the cost of the review of plans by the Agency.

1.6.5 THIRD PARTY PLAN REVIEW AGENCY RESPONSIBILITIES

1. Review Assigned Work. The Agency shall review the materials submitted for compliance with all applicable codes and standards. Materials for review shall include, but not be limited to, the following:
 - a. Architectural Construction Plans
 - b. Electrical Engineering Construction Plans
 - c. Fire Protection/Life Safety Construction Plans
 - d. Elevator Engineering Construction Plans
 - e. Mechanical Engineering Construction Plans
 - f. Energy Conservation
 - g. Plumbing Engineering Plans
 - h. Structural Engineering Plans
 - i. Project Specifications
 - j. Accessibility
 - k. Manufacturer's Installation Instructions

-
2. Plan Review Code Deficiency Report. The Agency shall create a Plan Review Code Deficiency report containing a list of non-complying items for each project and round of review. At a minimum, the report shall specify:
 3. Agency's name and address
 4. Name and contact information for the Plan Reviewer(s), including email.
 5. Project address.
 6. Discipline(s) for which plan review was performed.
 7. List of items found to be non-compliant with code sections referenced.
 8. Corresponding response from a design professional confirming that nonconforming items were corrected.
 9. For each noted non-compliance item, the Code Deficiency Report shall cite the relevant code section(s), and the nature and the location of the deficiency. The Agency shall forward a copy of each Code Deficiency Report to the owner or designated recipient(s) and ISD. Following completion of a Code Deficiency Report, the Agency shall communicate with the owner or designated representatives to clarify the requested corrections required for code compliance.
 10. Third Party Plan Review Approval Certification Letter. The Agency shall issue an Approval Certification Letter, which shall be signed and sealed by the plan reviewer. The Third Party Approval Certification Letter shall attest that:
 11. The construction plans of the project were reviewed under the Plan Reviewer's direct supervision and in the disciplines identified in the certification;
 12. It is the professional judgment of the Plan Reviewer that, to the best of his/her knowledge, the plans reviewed for the disciplines identified were designed in accordance with all applicable codes based upon the Third Party Plan Review performed and substantiating reports.
 13. By undertaking a Third Party Plan Review, the Agency acknowledges that it is in compliance with all of the conditions of this program and attests that the personnel involved are qualified in accordance with the applicable statutes, regulations and this program
 14. Access to Third Party Plan Review Agency. The Agency shall cooperate with ISD and the applicant and/or designated representative with scheduling meetings and/or calls to provide updates and clarification of Third Party Plan Reviews.
 15. Conflicts of Interest. It shall be the responsibility of the Third Party Plan Reviewer to immediately disclose any potential conflicts of interest between the Agency and the parties connected to the project.
 16. Due Diligence. The Agency shall exercise due diligence in the discharge of the duties assigned to the Agency by law and regulation and shall refrain from any arbitrary or capricious action that would unduly penalize or benefit the owner or permit applicant whose project is under the Third Party Plan Review. The Agency shall abide by the highest ethical standards in the discharge of duties as an Agency.

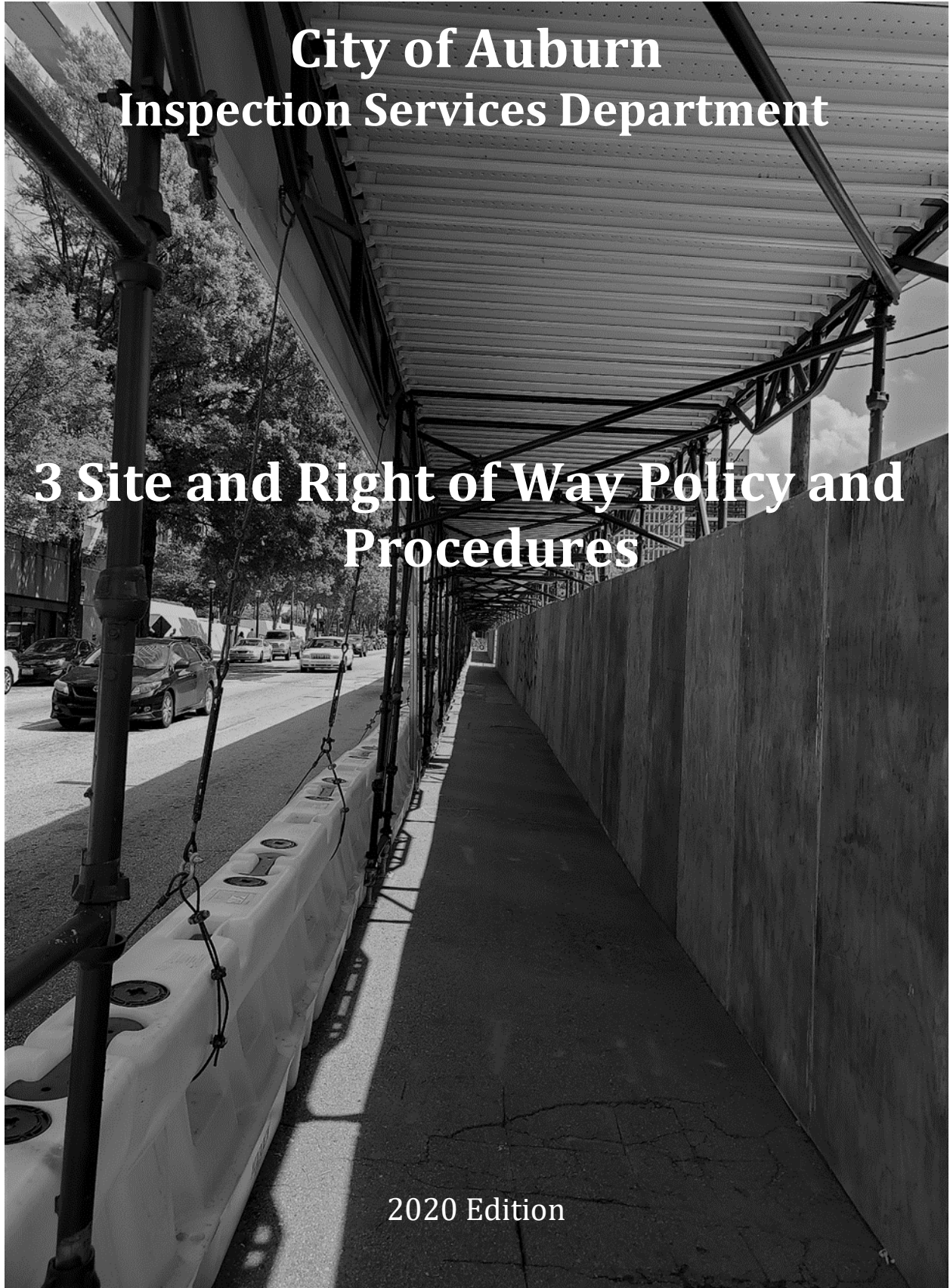


**City of Auburn
Inspection Services Department**

2 Special Inspections

2020 Edition

DRAFT



**City of Auburn
Inspection Services Department**

**3 Site and Right of Way Policy and
Procedures**

2020 Edition

3.1 GENERAL

3.1.1 SCOPE.

The provisions of this chapter shall govern the conduct of all construction or demolition operations with regard to the safety of the public and property. For regulations relating to the safety of persons employed in construction or demolition operations, OSHA standards shall apply.

3.1.1.1 Responsibility for safety.

Nothing in this chapter shall be construed to relieve persons engaged in construction or demolition operations from complying with other applicable provisions of law, nor is it intended to alter or diminish any obligation otherwise imposed by law on any party engaged in a construction or demolition operation, including but not limited to the owner, construction manager, general contractor, sub-contractors, material men, registered design professionals, or other party to engage in sound design and engineering, safe construction or demolition practices, including but not limited to debris removal, and to act in a reasonable and responsible manner to maintain a safe construction or demolition site.

3.1.1.2 Building and Fire codes.

In addition to the requirements of this policy, construction or demolition operations shall also be conducted in conformance with the currently adopted building, fire and other applicable codes as well as any manufacturer specifications. All equipment shall be used in accordance with the specifications of the manufacturer, where such specifications exist, and the requirements of this code. Where there is a discrepancy, the stricter requirement shall apply.

3.1.2 STORAGE AND PLACEMENT.

Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project.

3.1.3 SAFETY MEASURES AND STANDARDS.

Contractors, construction managers, and subcontractors engaged in construction or demolition operations shall institute and maintain all safety measures required by this policy and provide all equipment or temporary construction necessary to safeguard the public and property affected by such contractor's operations.

3.1.4 INSPECTION.

Structures, temporary construction, operations, and equipment shall be inspected as required by this policy. Where this policy does not provide for specific inspection criteria, any equipment, except hand tools, that would affect the safety of the public and property when operated shall be inspected by a competent person designated by the contractor using the equipment before the equipment is used at the site and on a periodic basis thereafter throughout the duration of the job. A record of such inspections shall be kept at the site.

3.1.5 UNSAFE CONDITIONS AND EQUIPMENT.

Any structure, temporary construction, operation, or equipment found to be defective or unsafe, and posing a risk to the public and property, shall be immediately secured and corrected, or removed from the site.

3.1.6 DESIGN, SIZES, AND CAPACITY OF MATERIALS, STRUCTURES, TEMPORARY CONSTRUCTION, AND EQUIPMENT.

Design, sizes, and capacities of materials, structures, temporary construction, and equipment shall be in accordance with the requirements of Sections 3.1.6.1 through 3.1.6.3.

3.1.6.1 Design.

Whenever design is specifically required, such design shall be in accordance with the requirements of this policy and other applicable adopted codes and executed by, or under, the supervision of a registered design professional who shall cause his or her seal and signature to be affixed to such documents that may be required for the work.

Exception: Where this policy specifically indicates that the design may be executed by another individual.

3.1.6.2 Sizes.

All sizes and dimensions prescribed in this chapter are minimum requirements. Lumber sizes are nominal or commercial except where stated otherwise.

3.1.6.3 Capacity.

No structure, temporary construction, or equipment shall be loaded in excess of its capacity as specified by the code, manufacturer, and/or designer. Where there is a discrepancy, the stricter standard shall apply.

3.1.7 DOCUMENTS TO BE KEPT ON SITE.

Where this chapter requires construction documents, drawings, inspection reports, logs, checklists, site safety plans, fire safety and evacuation plans, tenant protection plans, occupant protection plans, or monitoring plans, copies of such shall be maintained at the site for the duration of the job and made available to Inspection Services upon request. Copies of such aforementioned construction documents or drawings shall also be maintained by the permit holder, the designer, the entity that performed the inspection and the entity that developed the plan.

Exception: Where this chapter requires inspection reports, logs, checklists, site safety plans, fire safety and evacuation plans, tenant protection plans, occupant protection plans, or monitoring plans to be maintained by a specified entity other than the permit holder, such reports, logs, checklists, or plans shall be maintained by such specified entity.

3.1.7.1 Site Safety Plan

Where a site safety plan is required; such plan shall include the following:

1. Location of all construction fences around work site;
2. Location of all gates in construction fences;
3. Location of standard guardrails around excavations, when required;
4. Horizontal and vertical netting program, including details of the initial installation, schedule of horizontal jumps and vertical installations, and designated crane and derrick lifting are as where horizontal netting is omitted. The program shall include as an attachment any department approval obtained regarding required safety netting during construction or demolition operations; the revised site safety plan shall be approved;
5. Location of all sidewalk sheds;
6. Location of all temporary walkways;

-
7. Location of foot bridges and motor vehicle ramps;
 8. Protection of side of excavation, when required;
 9. Location of all street and sidewalk closing(s)
 10. Approximate location of material and personnel hoist(s) and loading areas;
 11. Approximate location of all crane and derrick loading areas;
 12. Location of all surrounding buildings, indicating occupancy, height and type of any required roof protection;
 13. Location of all standpipe system and Siamese hose connections;
 14. Location of all temporary elevators for fire department use when building is above 75 feet (22 860 mm) in height;
 15. Location of all exterior contractors' sheds;
 16. All required safety netting and scaffolding;
 17. Widths of all sidewalks and roadways; all traffic information; all exits from the work site;
 18. A copy of the proposed site safety manager or site safety coordinator's certificate, as applicable, including the certificate for any alternate site safety manager or site safety coordinator;
 19. Such features requiring special sequencing in order to maintain safe conditions with a written description of those sequences;
 20. A statement that prior to performing any work on the project all workers have successfully completed site safety training.;

3.1.7.2 Phased site safety plans.

Multiple layouts of the site safety features enumerated in 3.1.7.1 may be submitted at any time during construction operations to show phased site safety designs consistent with the phase of anticipated work.

3.1.8 ACCIDENTS AND DAMAGE TO ADJOINING PROPERTY.

Inspection Services shall be notified immediately by the permit holder, or a duly authorized representative, of an accident at a construction or demolition site, or of any damage caused by construction or demolition activity at the site to adjoining property, adjacent public property and ROW including any and all assets and public passerby's on public property or neighboring private property.

3.1.9 USE AND TAMPERING PROHIBITED.

Following an accident, no person shall permit any of the following without the permission of the building official, or without a lawful order from the Auburn Police or Fire Department:

1. Use or operation of any equipment or structure damaged or involved in the accident; or
2. Removal or alteration of any equipment, structure, material, or evidence related to the accident.

Exception: Immediate emergency procedures taken to secure structures, temporary construction, operations, or equipment that pose a continued imminent danger or to facilitate assistance for persons who are trapped or who have sustained bodily injury.

3.1.10 SIGNS.

The placement of signs shall meet the requirements of this section and the City of Auburn Zoning Ordinance. In addition to the requirements of this section, information panels and signs shall also be provided as required by Section 3.1.10.1.

3.1.10.1 Allowed signage.

Banners are the only signage allowed on covered walkways. Banners should only be for existing, impacted businesses at that location. Banners on protective structures do not require a permit, but cannot exceed 50 SF and must be affixed to the structure. Other than as allowed and approved by the Auburn Planning Department, there shall be no sign, information, pictorial representation, or any business or advertising messages posted on a covered walkways, bridge, fence, or other protective structure listed in this section that is erected at the construction or demolition site.

No signs or screens may be placed on the covered walkway between the structure and Street/Public way.

1. The bottom of the banner cannot be closer than 7'6" above the ground,
2. The design of the structure must account for the sign and wind loads that they may impose,
3. Approved by the building official it verify that signage will not impact the covered walkway in a manner inconsistent with its purpose.

3.2 DEFINITIONS:

ACCIDENT. An occurrence directly caused by construction or demolition activity or site conditions that result in one or more of the following:

1. A fatality to a member of the public; or
2. Any type of injury to a member of the public; or
3. A fatality to a worker; or
4. An injury to a worker that requires transport by emergency medical services or requires immediate emergency care at a hospital or offsite medical clinic; or
5. Any complete or partial structural collapse or material failure; or
6. Any complete or partial collapse or failure of pedestrian protection, scaffolding, hoisting equipment, or material handling equipment; or
7. Any material fall exterior to the building or structure.

ADJUSTMENT (SCAFFOLD). The calibration or modification of a scaffold, including any part or component, that does not meet the definition of installation, removal, repair, maintenance, or use, and does not constitute normal use or operation of the scaffold.

ALTERATION. Any construction or renovation to an existing structure other than repair or addition that requires a permit. Also, a change in a mechanical system that involves an extension, addition or change to the arrangement, type or purpose of the original installation that requires a permit.

ARCHITECT. The *Registered Design Professional* retained by the Owner to design and specify architectural construction and whose signature and State of Alabama architectural seal appear on the City-approved architectural construction documents.

ARTICULATING BOOM CRANE. A power-operated machine for lifting or lowering a load and moving it horizontally that utilizes a boom consisting of a series of folding pin connected structural members, typically manipulated to extend or retract by power from hydraulic cylinders, with or without a hoisting mechanism integral to the machine.

AXIS OF ROTATION. The vertical axis around which the crane superstructure rotates.

AXLE. The shaft or spindle with which or about which a wheel rotates. On truck and wheel mounted cranes, it refers to an automotive type of axle assembly, including housing, gearing, differential, bearings and mounting appurtenances.

BASE (MOUNTING). The base or carrier on which the rotating superstructure is mounted, such as a truck, crawler or platform.

BEARER (PUTLOG). A horizontal transverse scaffold member (which may be supported by legs or runners) upon which the scaffold platform rests and joins scaffold uprights, posts, poles, and similar members.

BOOM. A section or strut, of which the heel (lower end) is affixed to a base, carriage or support, and whose upper end supports a cable and sheaves where the load is lifted by means of wire rope and a hook.

BOOM POINT. The outward end of the top section of the boom, containing the hoist sheave assembly.

BRAKE. A device used for retarding or stopping motion by friction or power means.

BUCKET HOIST. A power-or manually operated suspended bucket contained by guide rails used for raising or lowering material, exclusively and is controlled from a point outside the conveyance.

CABLEWAY. A power-operated system for moving loads in a generally horizontal direction in which the loads are conveyed on an overhead cable, track or carriage.

CERTIFICATE OF APPROVAL. A certificate issued by the department upon review and approval of the engineering and testing of a specific make and model of hoisting equipment to ensure compliance with the applicable provisions of this code and its referenced standards

CERTIFICATE OF OPERATION. A certificate issued by Inspection Services annually upon satisfactory inspection of the hoisting equipment holding a certificate of approval to ensure that the equipment continues to be in compliance with this code and its referenced standards.

CERTIFICATE OF ON-SITE INSPECTION. A certificate issued by Inspection Services based on a site-specific approval of the placement, founding and operation of hoisting equipment.

CLAMSHELL. A shovel bucket with two jaws that clamp together by their own weight when it is lifted by a closing line.

CLIMBING/JUMPING. The raising or lowering of a tower or climber crane to different floors or levels of a building or structure.

COMMERCIAL TRUCK MOUNTED CRANE (BOOMTRUCK). A crane consisting of a rotating superstructure (center post or turntable), boom, operating machinery, and one or more operator's stations mounted on a frame attached to a commercial truck chassis, usually retaining a payload hauling capability whose power source usually powers the crane. Its function is to lift, lower, and swing loads at various radii.

COMPETENT PERSON. One who is capable of identifying existing predictable hazards in the surroundings or conditions that are unsanitary, hazardous or dangerous, and who has authorization to take prompt corrective measures to eliminate such hazards.

CONCRETE WASHOUT WATER. Wastewater from the rinsing of equipment used to mix, transport, convey, and/or place concrete. Such equipment shall include, but not be limited to, concrete buckets, concrete hose lines and pumps, boots, shovels, finishing tools, wheelbarrows, motorized concrete carts, concrete pour funnels and the chute of concrete mixer trucks.

Exceptions:

1. This term shall not include wastewater from the rinsing of equipment involved in the preparation, conveyance or application of concrete that is:
 2. Mixed on site if the total quantity of concrete is less than or equal to one and one half cubic yards (1.146m³), or
 3. From bagged ready mix if the total quantity of concrete is less than or equal to sixty (60) eighty pound (36.287 kg) bags, or eighty (80) sixty pound (27.215 kg) bags, or the equivalent.
2. This term shall not include wastewater from the rinsing of the wheels, undercarriage or chassis of concrete mixer trucks.

CONSTRUCTION. The excavation, erection, alteration, and repair of buildings or any component parts, including all operations incidental thereto.

CORNER SCAFFOLD (ANGLE SCAFFOLD). A suspended scaffold consisting of an assembly of two or more platforms connected non linearly and designed and manufactured to fit around a corner or a projecting part of a building.

COUNTERWEIGHT. Weight used to supplement the weight of the machine in order to provide stability for lifting loads.

CRANE. A power-operated machine for lifting or lowering a load and moving it horizontally which utilizes wire rope and in which the hoisting mechanism is an integral part of the machine. The definition of a crane shall also include articulating boom crane, regardless of whether it has a hoisting mechanism integral to the machine.

CRAWLER CRANE. A crane consisting of a rotating superstructure with a power plant, operating machinery, and boom, mounted on a base and equipped with crawler treads for travel. Its function is to lift, lower, and swing loads at various radii.

CRITICAL PICK. The attachment and detachment of loads from the hook of hoisting equipment used to hoist or lower loads on the outside of a building that involves one or more of the following:

1. An article that is at or above 95percentof approved rated capacity of the hoisting equipment or rigging equipment;
2. An article that is asymmetrical and is not provided with standard rigging ears;
3. An article that has a wind sail area exceeding 500 square feet(46 m²);
4. A pick that may present an added risk because of clearance, drift, or other interference;
5. An article that is fragile or of thin shell construction and is not provided with standard rigging ears;
6. A pick that requires multiple power-operated hoisting equipment (tandem pick); or
7. A pick that requires out of the ordinary rigging equipment, methods, or setup.

DEBRIS. Rubbish, waste, discarded material, or the remains of something broken down, demolished, or destroyed.

DEBRIS NET or NETTING. A netting of a fine mesh of a size and strength sufficient to catch debris, such as falling tools and materials.

DEMOLITION.

Full or partial demolition. Full demolition. The dismantling, razing, or removal of all of a building or structure, including all operations incidental there to.

Partial demolition. The dismantling, razing, or removal of structural members, floors, interior bearing walls, and/or exterior walls or portions thereof, including all operations incidental thereto.

DERRICK. An apparatus consisting of a mast or equivalent member held at the end by guys or braces, with or without a boom, for use with a hoisting mechanism and operating ropes, for lifting or lowering a load and moving it horizontally.

DEWATERING. The removal of surface or ground water from a site by pumping or evaporation.

DIRECT AND CONTINUING SUPERVISION. Responsible control exercised by a licensed individual, either personally or through one or more, but no more than three, levels of competent supervision over individuals performing the actual work of the licensee's trade who are (i) in the direct employ of an individual who is a licensee, or (ii) in the direct employ of the city agency employing the licensee or (iii) in the direct employ of a business employing the licensee, as allowed by the department, or (iv) where the licensee uses his or her license on behalf of a business, in the direct employ of such business provided that such business is disclosed to the department pursuant to this chapter. Such control shall be evidenced by such licensee's signature, and seal where applicable, upon any required statements, applications and/or permits and by demonstrating involvement of the licensee in the operations of the business, including hiring of employees, responsibility for financial matters, and oversight of work performance. Direct and continuing supervision includes field inspection, supervision of job sites, and the maintenance of records of such supervision and such other requirements as the commissioner may prescribe by rule for a particular license type.

DIRECT EMPLOY. An individual is in the direct employ of a licensee or business or a city agency when such individual is on the payroll of such licensee or business or city agency and under the usual common law rules applicable in determining the employer-employee relationship has the status of an employee. The work performed by such employee shall not exceed the class of license held by the licensee. Direct employment shall be evidenced by payroll records, such as social security payments, income tax withholding or the disbursement of other funds as required by law for the benefit of such employee, timekeeping records, such as time cards and sign-in sheets, work orders, and assignment or route logs.

DISMANTLING. The final process of taking apart, piece by piece, in a specific sequence, the components of a crane. Dismantling shall include climbing and jumping.

DRUM. The cylindrical member around which a rope is wound for raising and lowering the load or boom.

ENGINEER. The *Registered Design Professionals* whose designs are included in the City-Approved Plans (includes: Electrical Engineer of Record, Fire Protection Engineer of Record, Fire Protection Systems Designer of Record, Geotechnical Engineer of Record, Mechanical Engineer of Record, Civil and Structural Engineer of Record).

EQUIPMENT. Implements used to facilitate construction or demolition work.

ERECTION. The assembly and placement of crane sections and components into place, including all operations incidental thereto. Erection shall include climbing and jumping.

EXCAVATION. The removal of earth from its natural position; except for any incidental removal that occurs during the course of auguring, drilling, vibrating, or driving.

GUARDRAIL SYSTEM (SCAFFOLD). A vertical barrier as described in this policy consisting of, but not limited to, top rails, mid rails and posts, erected to prevent falling from a scaffold platform or walkway to lower levels.

GUY. A rope used to steady or secure the mast or other members in the desired position.

HANDHELD DEVICE (DEMOLITION). Equipment, mechanical or non-mechanical, utilized to physically demolish a building or structure, or elements of a building or structure, that is held, lifted, moved, and operated by a single person. A handheld device shall also include any item accessory to such equipment, including but not limited to a compressor, regardless of if such accessory item is held, lifted, moved, and operated by a single person. A handheld device does not include remote controlled equipment.

HEAVY DUTY SCAFFOLD. A supported scaffold capable of supporting loads of up to 75 pounds per square foot (366.15 kg/m²), and not more than those imposed by workers and heavy material, including but not limited to stone.

HEAVY DUTY COVERED WALKWAY. A sidewalk shed designed to carry a live load of at least 300 pounds per square foot (1465 kg/m²).

HISTORIC STRUCTURE. A building or structure which is a designated Alabama landmark or interior landmark, is located within a designated Auburn City historic district, or is listed on the Alabama State or National Register of Historic Places.

HOISTING EQUIPMENT. Equipment used to raise and lower personnel and/or material with intermittent motion. Hoisting equipment does not include scaffolds, mast climbers, and elevators.

HOISTING MACHINE. A power operated machine used for lifting or lowering a load, utilizing a drum and a wire rope, excluding elevators. This shall include but not be limited to a crane, derrick, cableway and hydraulic lifting system, and articulating booms.

HOISTING MECHANISM. A hoist drum and rope reeving system used for lifting and lowering loads.

INDUSTRIAL ROPE ACCESS. The use of rope access equipment in which a person descends or ascends on a rope, or traverses along a rope, and in which the ropes are used as

the primary means of support and positioning. Industrial rope access does not include window washing.

INSTALLING/INSTALLATION/INSTALL (SCAFFOLD). The initial installation or reinstallation of a scaffold at a site. Initial installation (scaffold). The initial assembly, set-up, or placement of a scaffold at a site. Reinstallation (scaffold). The addition, relocation, or removal of any part, component, or attachment to a scaffold at a site, including but not limited to counterweights, tie-backs, anchorages, or connections to the building or structure, that occurs subsequent to the initial installation, and which does not otherwise occur in an automated, automatic fashion, as part of the normal use of the scaffold. An extension attached to the boom point to provide added boom length for lifting specified loads. The jib may be in line with the boom or offset to various angles in the vertical plane of the boom.

JUMP (JUMPING). The process of adding or removing mast or tower sections to equipment that has already been erected.

LAY. That distance measured along a wire rope in which one strand makes one complete helical convolution about the core or center.

LIGHT DUTY SCAFFOLD. A supported scaffold capable of supporting loads of up to 25 pounds per square foot (122.05 kg/m²), and not more than those imposed by workers and lightweight material, including but not limited to wood or paint.

LIGHTDUTY COVERED WALKWAY. A sidewalk shed designed to carry a live load of at least 150 pounds per square foot (732.3 kg/m²).

LOAD (WORKING). The external load, in pounds (kilograms), applied to the crane or derrick, including the weight of auxiliary load attaching equipment, such as lower load blocks, shackles and slings.

LOAD RATINGS. Crane and derrick ratings in pounds (kilograms) established by the manufacturer in accordance with standards set forth in rules promulgated by the commissioner.

LOAD RATING CHART. A full and complete range of manufacturer's crane load ratings at all stated operating radii, boom angles, work areas, boom lengths and configurations, jib lengths and angles (or offset), as well as alternative ratings for use and nonuse of optional equipment on the crane, such as outriggers and extra counterweights, that affect ratings.

LOWER LOAD BLOCK. The assembly of hook or shackle, swivel, sheaves, pins and frame suspended by the hoisting ropes.

MAINTENANCE (SCAFFOLD). Regular or periodic upkeep as specified by the manufacturer to keep the scaffold, including all parts or components, in like new condition and safe working order, and that does not otherwise meet the definition of an installation, removal, or repair.

MAJOR BUILDING. An existing or proposed building 10 or more stories or 125 feet (38 100 mm) or more in height, or an existing or proposed building with a building footprint of 100,000 square feet (30 480 m²) or more regardless of height, or an existing or proposed

building so designated by the commissioner due to unique hazards associated with the construction or demolition of the structure.

MAST CLIMBER. A powered device consisting of an elevating platform mounted on a base or chassis and mast, that when erected is capable of supporting personnel, material, equipment and tools on a deck or platform that is capable of traveling vertically in infinitely adjustable increments to reach the desired work level.

MATERIAL HANDLING EQUIPMENT. A power or manually operated platform, bucket, car or cage that moves horizontally and is mainly used for transporting material during construction, alteration, repair or demolition of a building or structure.

MATERIAL HOIST (MATERIAL HOISTING EQUIPMENT). A power or manually operated platform, bucket, car or cage that moves vertically and is used for raising or lowering material exclusively during construction, alteration, repair or demolition of a building or structure, and is controlled from a point outside the conveyance.

MECHANICAL DEMOLITION EQUIPMENT. Mechanically driven or powered equipment that is utilized to physically demolish a building or structure, or elements of a building or structure, either within or exterior to the building or structure, or that is utilized to move debris or material within the building or structure. Mechanical demolition equipment shall not include mechanically driven or powered equipment that is utilized to move debris or material outside of the building or structure.

MEDIUM DUTY SCAFFOLD. A supported scaffold capable of supporting loads of up to 50 pounds per square foot (244.1 kg/m²), and not more than those imposed by workers and moderate material, including but not limited to brick and pipe.

MINOR ALTERATIONS. Minor changes or modifications in a building or any part thereof, excluding additions thereto, that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Minor alterations shall not include any of the work described as “work not constituting minor alterations or ordinary repairs.”

MOBILE CRANE. A commercial truck mounted crane, crawler crane, wheel mounted crane (multiple control stations), or wheel mounted crane (single control station).

MOBILE SCAFFOLD. A powered or unpowered, portable, caster, track or wheel-mounted supported scaffold.

MULTIPOINT ADJUSTABLE SUSPENDED SCAFFOLD. A suspended scaffold consisting of a platform(s) that is suspended by more than two ropes from overhead supports and equipped with a means to raise and lower the platform to the desired work levels.

ORDINARY REPAIRS. Replacements or renewals of existing work in a building, or of parts of the service equipment therein, with the same or equivalent materials or equipment parts, that are made in the ordinary course of maintenance and that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Ordinary repairs shall include the repair or replacement of any plumbing fixture, piping or faucets from any exposed stop valve to the inlet side of a trap. Ordinary repairs shall not

include any of the work described as “work not constituting minor alterations or ordinary repairs.”

WORK NOT CONSTITUTING MINOR ALTERATIONS OR ORDINARY REPAIRS. Minor alterations or ordinary repairs shall not include:

1. The cutting away of any load bearing or required fire rated wall, floor, or roof construction, or any portion thereof.
2. The removal, cutting, or modification of any beams or structural supports;
3. The removal, change, or closing of any required exit;
4. The addition, rearrangement, relocation, removal or replacement of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements or accessibility requirements, or any fire suppression or fire protection system;
5. Additions to, alterations of, or rearrangement, relocation, replacement, repair or removal of any portion of a standpipe or sprinkler system, water distribution system, house sewer, private sewer, or drainage system, including leaders, or any soil, waste or vent pipe, or any gas distribution system;
6. Any plumbing work other than the repair or replacement of plumbing fixtures, piping or faucets from the exposed stop valve to the inlet side of a trap;
7. The alteration or repair of a sign for which a permit is required; or
8. Any other work affecting health or the fire or structural safety of the building or the safe use and operation of the service equipment therein.

OUTRIGGER (CRANE). Extendable or fixed members attached to the mounting base that rest on supports at the outer ends used to support the crane.

OUTRIGGER (SCAFFOLD). The structural member of a supported scaffold used to increase the base width of a scaffold in order to provide support for and increased stability of the scaffold.

OUTRIGGER BEAM (THRUSTOUT). The structural member of a suspended scaffold or outrigger scaffold that provides support for the scaffold by extending the scaffold point of attachment to a point out and away from the structure or building.

OUTRIGGER SCAFFOLD. A supported scaffold consisting of a platform resting on outrigger beams (thrust outs) projecting beyond the wall or face of the building or structure, the inboard ends of which are secured inside the building or structure.

PERSONNEL HOIST. A mechanism and its hoistway, equipped with a car that moves vertically on guide members, used for hoisting or lowering workers or workers and materials for the construction, alteration, or demolition of a building, structure, or other work.

PLATFORM. A work surface elevated above lower levels. Platforms can be constructed using individual wood planks, fabricated planks or fabricated decks.

POWER BUGGIES. An automotive vehicle designed or used for the transportation of materials on or about construction or demolition sites. It shall not include automobiles, motor trucks, general purpose tractors, or excavating or material handling machinery.

QUALIFIED PERSON. A person who by possession of a recognized degree, certificate or professional standing, or who by knowledge, training and experience, has demonstrated his or her ability to solve or resolve problems related to the subject matter, the work or the project.

REGISTERED DESIGN PROFESSIONAL. A professional licensed in the State of Alabama and practicing within their field of expertise.

REMOVING/REMOVAL/REMOVE (SCAFFOLD). The final process of taking apart a scaffold in a specific sequence and removing it from the site.

REPAIR (SCAFFOLD). Work performed to restore a scaffold, or any part or component, to like new condition and safe working order following decay, wear, or damage. The definition of repair shall also include the replacement of a part or component.

REPLACEMENT (SCAFFOLD). A repair involving the exchange or substitution of one part or component with another identical or similar part or component in order to restore a scaffold, or any part or component, to like new condition and safe working order following decay, wear, or damage.

ROPE. A continuous line of material comprised of a number of twisted or braided strands of fiber (natural or synthetic) or metal wire.

RUNBACK STRUCTURE. A temporary system of hoistway landing runways, vertical supports and horizontal diaphragms designed to bridge between the hoistway and the parent structure and to transmit both vertical and horizontal loads to the supporting structure and/or foundation.

SAFETY NETTING SYSTEM. Debris or structural nets, installed vertically or horizontally, along with all supports, components, and connections. Horizontal safety netting. A safety netting system, installed horizontally, consisting of structural netting lined with debris netting. Vertical safety netting. A safety netting system, installed vertically, consisting of debris netting.

SCAFFOLD. Any temporary elevated platform and its supporting structure (including points of anchorage) used for supporting workers or workers and material, including but not limited to supported scaffolds, suspended scaffolds, and mobile scaffolds.

SCAFFOLD CONTROLLING ENTITY. The contractor or other entity that exercises responsibility for the site where the scaffold is located.

SINGLE-POINT ADJUSTABLE SUSPENDED SCAFFOLD. A suspended scaffold consisting of a platform suspended by one rope from an overhead support and equipped with means to permit the movement of the platform to desired work levels.

SKIP BOX: A large open-topped waste container designed for loading onto a special type of truck.

SOIL AND FOUNDATION WORK (SOIL OR FOUNDATION WORK). Excavation, fill, grading, augering, or drilling, whether in soil or rock; or the installation or removal of foundations, piles, underpinning, sheeting, shoring, or supports of excavation.

STANDARD GUARDRAIL SYSTEM (SCAFFOLD). See “Guardrail system (scaffold).”

STANDARD SPECIFICATIONS AND DETAILS, City of Auburn. The Standard Specifications and Details of Auburn incorporate state and local construction codes, lessons learned from past experiences, best practices, and industry guidelines.

STRIPPING OPERATIONS. Removal on the floor of any parts of the concrete formwork including shoring, bracing and other supports.

STRUCTURAL NET (STRUCTURAL NETTING). A system of nets capable of complying with the prototype test described in ANSI A10.11.

SUPERSTRUCTURE. The rotating upper frame structure of the machine and the operating machinery mounted thereon.

SUPPORTED SCAFFOLD. One or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, including prefabricated frames that are mechanized but not motorized, or any similar rigid support, including back structures connecting hoistways to buildings, and including structures where sidewalk protection is constructed as an integral part of the apparatus.

SUSPENDED SCAFFOLD. One or more platforms suspended by ropes or other means from an overhead structure.

SUSTAINED WIND. Winds with a 1 minute average duration lasting for a 1-hour period or longer.

SWING. Rotation of the superstructure for movement of loads in a horizontal direction about the axis of rotation.

TEMPORARY CONSTRUCTION. Bracing, shoring, or other elements not part of the permanent structure and which are installed to facilitate construction or demolition work.

TOOL. See “Equipment.”

TOWER. A vertical structural frame consisting of columns and bracing that are capable of supporting working and dynamic loads and transmitting them to the support(s).

TOWER CRANE. A power-operated hoisting machine that utilizes a vertical tower with a rotating superstructure and includes a load boom (jib) in order to lift or lower a load and move it horizontally.

TRANSIT. The moving or transporting of a crane from one jobsite to another.

TRAVEL. The function of the machine moving from one location to another on a job site.

TWO-POINT SUSPENDED SCAFFOLD (SWINGSTAGE). A suspended scaffold consisting of a platform supported by hangers (stirrups) suspended by two ropes from overhead supports and equipped with means to permit the raising and lowering of the platform to desired working levels.

UNENCLOSED PERIMETER. Any exterior portion of a building that is not solidly enclosed with the permanent façade, including the windows; or any exterior edge of a roof that is not enclosed with its permanent parapet or guardrail.

USE/USING (SCAFFOLD). Any work or activity performed on or from the scaffold. In addition, for a suspended scaffold, the use of the scaffold shall include the operation of the scaffold at the site, provided during such operation any vertical or horizontal relocation of the scaffold does not require a modification to the counterweight, or does not require the placement, relocation, or removal of any anchorage, attachment, outrigger beam, tie-back, or connection to the building or structure.

WALKABLE FLOOR (CONCRETE CONSTRUCTION). A floor where the concrete slab has been poured and the formwork stripped.

WALKABLE FLOOR (PRECAST CONCRETE CONSTRUCTION). A floor where the frame is erected and the precast concrete floor is fixed in place.

WALKABLE FLOOR (STEEL CONSTRUCTION). A floor where the frame is erected and the deck is tack welded or fixed in place.

WHEEL MOUNTED CRANE (MULTIPLE CONTROL STATIONS). A crane consisting of a rotating superstructure, operating machinery, and operator's station and boom, mounted on a crane carrier equipped with axles and rubber-tired wheels for travel, a power source(s), and having separate stations for driving and operating. Its function is to lift, lower, and swing loads at various radii.

WHEEL MOUNTED CRANE (SINGLE CONTROL STATION). A crane consisting of a rotating superstructure, operating machinery, and boom, mounted on a crane carrier equipped with axles and rubber-tired wheels for travel, a power source, and having a single control station for driving and operating. Its function is to lift, lower, and swing loads at various radii.

WORKING DECK (CONCRETE CONSTRUCTION). The level where the floor is being formed.

WORKING DECK (DEMOLITION). The level where the floor is being broken up.

WORKING DECK (PRECAST CONCRETE CONSTRUCTION). The level where the floor is being placed.

WORKING DECK (STEEL CONSTRUCTION). The floor where the metal decking and steel components are being placed before concrete is poured.

3.3 CONSTRUCTION SAFEGUARDS

3.3.1 SCOPE.

Sites shall be safeguarded and maintained in accordance with the provisions of this policy and other adopted codes, specifications and policies to protect the public and property.

3.3.2 UTILITIES.

Utilities at a site shall meet the requirements of Sections [3.3.2.1](#) through [3.3.2.4](#).

3.3.2.1 Existing services.

The location of all existing utilities and service lines shall be determined and adequate measures taken, or devices provided, to safeguard the public and property before such utilities are disturbed.

3.3.2.2 Maintaining essential services.

Required means of egress, existing structural elements, fire protection devices, and sanitary safeguards shall be maintained at all times during construction or demolition operations in existing buildings. Required means of egress shall not be obstructed in any manner that would destroy the full effectiveness of such means of egress.

Exception: Where adequate alternate provisions are provided in accordance with the requirements of this code, or where the element is temporarily or permanently disconnected, removed, or demolished in accordance with the requirements of this code and of the agency or authority having jurisdiction to temporarily or permanently disconnect, remove, or demolish such element. Such alternative means, disconnection, removal, or demolition shall be shown on the approved plans. Fire protection systems, including but not limited to sprinklers, standpipes, and fire alarms, shall only be taken out of service in accordance with the requirements of the currently adopted building and fire code.

3.3.2.3 Electrical work.

All temporary electrical equipment and wiring shall meet the requirements of the adopted NEC Code, and shall be maintained in compliance with such requirements. Portions of permanent electrical installations may be used for temporary operations provided the requirements of the NEC Code met.

3.3.2.3.1 Temporary lighting for construction sites.

Temporary lighting for construction sites shall use high-efficacy lamps with the following minimum efficacies:

1. 1.60 lumens per watt for lamps over 40 watts;
2. 2.50 lumens per watt for lamps over 15 watts but less than or equal to 40 watts;
3. 3.40 lumens per watt for lamps 15 watts or less.
4. Provisions of the Zoning Ordinance

3.3.2.4 Sanitary facilities.

Sanitary facilities shall be provided during construction or demolition activities in accordance with the adopted building and plumbing Code.

3.3.3 ALTERATIONS, REPAIRS AND ADDITIONS.

Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure.

Exceptions:

1. Where such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. Maintenance of such elements and devices is not required when the existing building is not occupied.

3.3.4 FIRE SAFETY DURING CONSTRUCTION.

Fire safety during construction shall comply with the applicable requirements of this policy and the applicable provisions of Chapter 33 of the International Fire Code.

3.3.5 HOUSEKEEPING.

Housekeeping at a site shall be in accordance with Sections 3.3.5.1 through 3.3.5.7.

3.3.5.1 Slipping and tripping hazards.

Slipping and tripping hazards in areas used by the public shall be minimized in accordance with Sections 3.3.5.1.1 and 3.3.5.1.2

3.3.5.1.1 Maintenance.

All areas used by the public shall be maintained free from ice, snow, grease, debris, equipment, materials, projections, tools, or other items, substances, or conditions that may constitute a slipping, tripping, or other hazard.

3.3.5.1.2 Location of hose lines, wires, ropes, pipes, chains and conduits.

Hose lines, wires, ropes, pipes, chains, and conduits shall be located so that they will not constitute a tripping hazard to the public. Where it is necessary to carry such across sidewalks, or any public way, they shall either be suspended at least 8 feet (2438 mm) above ground or, if left on the ground, suitable chamfered planks or a pedestrian bridge that meets ADA standards shall be provided to cover such. All electrical shall meet the requirements of the adopted NEC for clearances.

3.3.5.2 Containers.

Sufficient containers, including but not limited to waste dumpsters, debris boxes, and skip boxes, shall be available for the storage of all debris or waste. Such containers shall be made of metal, plastic, or other noncombustible material acceptable to the building official. Such containers shall also comply with the following:

1. Containers with wheels shall be secured at the end of the workday by rope, cable, or chocking at the wheels in order to prevent movement.
2. Containers shall not be placed at the edge of the building at any time, except when being moved from the floor or building.
3. Containers holding debris or waste shall be covered at the end of the workday and at any time when full to near the rim. Containers need not be covered when they are not in use or while stored in a fully enclosed space at the end of the workday.

3.3.5.3 Storage of materials and equipment during construction or demolition.

Material and equipment stored at a site during construction or demolition operations shall comply with Sections 3.3.5.3.1

3.3.5.3.1 Open and exposed areas.

When not being used, material or equipment located on a working deck, unenclosed floor, roof, ground area, or similar exposed area shall be secured against dislodgement by wind or accidental impact.

3.3.5.4 Storage of combustible material and equipment.

Storage of combustible material and other material and equipment that may present a fire hazard shall comply with the currently adopted building and fire code.

3.3.5.5 Storage near sidewalks, walkways, and pathways.

Material stored adjacent to a sidewalk, walkway, or pathway that remains open to the public shall not be piled higher than 3 feet (914 mm), or where a solid fence or barrier is provided, to within one foot (305 mm) of the top of such fence or barrier. For the purposes of this section, the term "adjacent to" shall be any area that is within a horizontal distance that is equal to or less than the vertical height of the piled material.

Exception: Material stored within a dumpster or similar solid container, provided such material is not piled above the top of such dumpster or container.

3.3.5.6 Machinery.

All exposed, electrically charged, moving or otherwise dangerous parts of machines and construction or demolition equipment shall be located, guarded, shielded, or barricaded so as to prevent contact by the public and meet the requirements of section 3316 of the adopted fire code.

3.3.5.7 Internal combustion-powered equipment.

In addition to the requirements of this chapter, the use of internal combustion-powered equipment shall comply with the adopted fire code.

3.3.6 CONTROL AND REMOVAL OF MATERIAL AND DEBRIS.

Material and debris shall be removed in a manner that prevents injury or damage to the public or property.

3.3.6.1 Control of debris.

Debris shall be removed in a manner that prevents injury or damage to persons, adjoining properties and public rights-of-way. Control of debris shall include the following measures:

1. All floors, roofs, and working decks shall be cleaned of debris at least daily, and a daily inspection made by a competent person to verify such has occurred. If the building is a major building, such inspection shall be noted in the site safety log.
2. Debris that cannot be removed from the site by the end of the shift shall be placed in containers meeting the requirements of this section or shall be secured overnight to protect the public and property and shall be removed from the site or placed in containers at the beginning of the next shift.
3. Exception: Combustible debris shall not be permitted to accumulate and shall be removed from the site in accordance with Section 3.3.5.3.1.

3.3.7 CONTROL AND REMOVAL OF COMBUSTIBLE DEBRIS.

Combustible debris shall not be permitted to accumulate, and shall be removed from the site at reasonable intervals in accordance with the requirements of the adopted fire code.

3.3.8 DROPPING OR THROWING PROHIBITED.

No material or equipment shall be intentionally dropped or thrown from a building or structure.

3.3.9 CLOGGING.

Precautions shall be taken to prevent concrete or mortar washings, sand, grit, or any other material that would cause clogging from entering a sanitary or sewer drain. Concrete washout water shall also meet the requirements of the Standard Specifications and Details.

3.3.9.1 Enclosures.

Chute enclosures shall comply with the following requirements:

1. Material chutes that are at an angle of more than 45 degrees (0.79 rad) with the horizontal shall be entirely enclosed on all sides, except for openings at the floor levels for the receiving of materials. Such openings shall not exceed 48 inches (1219mm) in height, measured along the wall of the chute, and all openings, except the top opening, shall be closed and secured when not in use.
2. Chutes at an angle of less than 45 degrees (0.79 rad) with the horizontal may be open on the upper side.

3.3.9.2 Chute construction.

Chute construction shall comply with the following requirements:

1. Every chute used to convey debris from a building or structure shall be rigidly supported and braced throughout its height. Chutes less than 24 inches (610 mm) in maximum dimension shall be constructed of not less than 1-inch (25.4 mm) (nominal) wood, or 1/8-inch thick (3.18 mm) steel, or a material of equivalent strength and durability acceptable to the building official. Chutes more than 24 inches (610 mm) in maximum dimensions shall be constructed of not less than 2-inch (51 mm) (nominal) wood, or 3/16-inch thick (4.76 mm) steel, or a material of equivalent strength and durability acceptable to the building official.
2. Chutes shall be provided with a metal impact plate where material is forced to change direction while falling.
3. A gate shall be provided at the lower end of every chute to control the loading of material into trucks and to close the chute at all other times. Splash-boards or baffles shall be erected to prevent materials from rebounding into the street or under the sidewalk shed.
4. A bumper or curb at least 4 inches by 4 inches (102 by 102 mm) in section shall be provided at each chute opening where such opening is level with, or below, the floor or platform. Every space between the chute and the edge of the opening in the floor or platform shall be solidly planked.

3.3.9.3 Fire prevention and fire protection.

Firefighting equipment, firefighting access at the construction or demolition site, and the conduct of all construction or demolition operations affecting fire prevention and fire

fighting shall comply with the currently adopted building and fire codes and the provisions of Sections 3.3.9.4 through 3.3.9.6.3.

3.3.9.4 Fire extinguishers.

Fire extinguishers shall be provided in accordance with section 3315 of the adopted fire code.

3.3.9.5 Smoking.

Smoking shall be prohibited except in approved areas. Signs shall be posted in accordance with section 310 of the adopted fire code. In approved areas where smoking is permitted, approved ashtrays shall be provided in accordance with section 310 of the adopted fire code.

3.3.9.6 Sprinkler systems.

Existing sprinkler systems in buildings undergoing an alteration or demolition shall comply with the requirements of Section 3.3.9.6.1 through 3.3.9.6.3.

3.3.9.6.1 Sprinklers during alteration.

Existing sprinkler systems in buildings undergoing an alteration shall be maintained in accordance with Section 3.3.9.3, except as provided in Section 3.3.9.3. Section 903.6 of this code shall be maintained during any alteration operation.

3.3.9.6.2 Sprinklers during demolition.

When existing sprinkler systems with fire department hose connections are present in buildings undergoing full or partial demolition, such systems shall be maintained as a non-automatic sprinkler system, except as provided in Section 3.3.9.6.3. When demolition starts, the sprinkler risers shall be capped immediately below the floor being demolished so as to maintain the sprinkler system on all lower floors for Fire Department use. Cutting and capping of sprinklers during demolition work shall be performed only by a licensed master plumber or licensed master fire suppression piping contractor who has obtained a permit for such work. Fire department hose connections shall be kept free from obstruction and shall be marked by a metal sign reading "FDC" and by a red light at night.

3.3.9.6.3 Removal of damaged sprinklers.

Requests for a variance from the sprinkler requirements of this section shall be limited to requests to remove a damaged or inoperable sprinkler system or a portion of such system in connection with demolitions or gut rehabilitations. Applications for construction document approvals for such requests shall be filed with Inspection Services by a registered design professional in accordance with the following procedure:

1. The filed application shall include a complete report prepared by the professional describing the extent of the damage and attesting as to why the system cannot be restored; and
2. The applicant shall submit the Inspections Service's recommendation to along with proof of satisfactory implementation of such safety measures

3.3.9.7 Standpipe systems shall meet the requirements of Section 3.3.9.8

3.3.9.8 Standpipe systems during construction, alteration or demolition.

During construction, alteration or demolition operations, standpipe systems shall comply with the following:

1. In buildings required to have standpipes by IFC section 905.3, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairways. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring. The standpipe system must meet the requirements of IFC section 905 and shall be kept in a state of readiness at all times for use by fire-fighting personnel. The standpipe system shall serve all floors where the permanent stairs are required per section 3.3.2.1. No standpipe shall be considered to be in a state of readiness unless it is painted red. When freezing conditions may be encountered, the system in whole, or the part of the system subject to freezing conditions, shall be maintained as a dry system.
2. Existing standpipe systems in structures undergoing a full demolition shall be maintained as dry standpipes. At the commencement of demolition, the standpipe risers shall be capped above the outlet on the floor immediately below the floor being demolished so as to maintain the standpipe system on all lower floors for Fire Department use. Cutting and capping of standpipes during demolition work shall be performed only by a licensed master plumber or licensed master fire suppression piping contractor. Standpipe hose, nozzles and spanners are not required to be maintained and may be removed at any time. The red paint required shall be maintained during any demolition operations. All existing house check valves shall remain in place until completion of the demolition work.

3.3.9.9 Air pressurized alarm system for dry standpipe systems during construction or demolition operations.

Dry standpipe systems utilized during construction or demolition operations shall be provided with an air pressurized alarm system as set forth in Items 1 through 3 below and the provisions of **NFPA 14, Chapter 12.**

1. Full demolitions. In buildings and structures undergoing a full demolition, all existing standpipes shall be maintained in a state of readiness as a dry system and shall be provided with an air pressurized alarm system.
2. New construction, alteration, and partial demolition. Where a dry standpipe system is utilized during new construction, alteration, or partial demolition operations, such standpipe system shall be provided with an air pressurized alarm system.
3. Submission of application. An application to install an air pressurized alarm system shall be filed by a registered design professional and a permit obtained by a licensed plumber or licensed fire suppression piping contractor. A licensed electrician shall obtain all required electrical permits.

3.3.10 FREE FROM OBSTRUCTION.

Fire department hose connections shall be kept free from obstruction and shall be marked by a metal sign reading, "Standpipe Connection" and by a red light at night.

3.3.11 ELEMENTS TO BE MAINTAINED IN EXISTING BUILDINGS.

Required means of egress, existing structural elements, fire protection devices, and sanitary safeguards shall be maintained at all times during construction or demolition operations in

existing buildings. Required means of egress shall not be obstructed in any manner that would destroy the full effectiveness of such means of egress.

Exception: Where adequate alternate provisions are provided in accordance with the requirements of this code, or where the element is temporarily or permanently disconnected, removed, or demolished in accordance with the requirements of this code and of the agency or authority having jurisdiction to temporarily or permanently disconnect, remove, or demolish such element. Such alternative means, disconnection, removal, or demolition shall be shown on the approved plans. Fire protection systems, including but not limited to sprinklers, standpipes, and fire alarms, shall only be taken out of service in accordance with the requirements of currently adopted building and fire code.

3.3.12 OPERATIONS IN OCCUPIED BUILDINGS.

When construction or demolition activity occurs in an occupied building, barricades, signs, drop cloths, and other protective means shall be installed and maintained as necessary to provide reasonable protection for the occupants against hazard and nuisance. Such protective means shall be indicated on an occupant protection plan, or where a tenant protection plan is required by Section 3.3.12.1 on a tenant protection plan.

3.3.12.1 Tenant protection plan.

In buildings containing occupied dwelling units, including newly constructed buildings that are partially occupied where work is still ongoing within the building, all construction or demolition work shall be performed in accordance with a tenant protection plan.

3.3.13 STAIRS DURING CONSTRUCTION OR DEMOLITION.

During construction and demolition, stairs shall comply with the following:

1. Where a building has been constructed to a building height of 50 feet (15 240 mm) or four stories, or where an existing building exceeding 50 feet (15 240 mm) in building height is altered, not less than one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.
2. Stairs in an existing building undergoing alteration or a partial demolition shall be maintained in accordance with Section 3.3.18. Stairs in a building undergoing a full demolition shall comply with Section 3.5.7.9. All stairs in a building undergoing construction or demolition shall be lighted at all times and kept free of equipment, debris, and material.

3.3.14 INTERRUPTED OR ABANDONED AND DISCONTINUED OPERATIONS.

Sites where construction or demolition work has been interrupted or abandoned and discontinued shall be protected in accordance with the requirements of Sections 3.3.14.1 through 3.3.14.3

3.3.14.1 Fencing.

A fence meeting the requirements of Section 3.6.7 shall be maintained throughout the duration of time that operations at the site are interrupted or abandoned and discontinued.

3.3.14.2 Safety monitoring plan.

Where work has been interrupted or abandoned and discontinued for a period of at least three months, a safety monitoring plan shall be prepared and submitted to Inspection Services. Such safety monitoring plan shall be specific to the site, shall identify safeguards to

be instituted and maintained to secure the site, and shall specify monitoring to be performed during the duration of suspension of work. The site shall be monitored in accordance with such plan.

3.3.14.3 Filling and grading.

Where work has been interrupted or abandoned and discontinued for a period of at least three months, all open excavations shall be filled and graded to eliminate all steep slopes, holes, obstructions or similar sources of hazard. Fill shall consist of clean, noncombustible material. The final surface shall be graded in such a manner as to drain the lot, eliminate pockets in the fill, and prevent the accumulation of water without damaging any foundations on the premises or on adjoining property.

Exception: Filling and grading is not required for abandoned, discontinued, or interrupted excavations that are:

1. Secured in accordance with Section 3.3.14.2, and
2. Inspected periodically by an engineer to verify continued stability of the excavation, with a record of such inspections signed, sealed, and dated by the engineer.

3.3.15 DRAINAGE.

No condition shall be created as a result of construction or demolition operations that will interfere with natural surface drainage. Water courses, drainage ditches, etc., shall not be obstructed by refuse, waste building materials, earth, stones, tree stumps, branches, or other debris that may interfere with surface drainage or cause the impoundment of surface waters.

3.3.15.1 Protection of foundations.

Provision shall be made to prevent the accumulation of water or water damage to any foundations on the premises or to adjoining property.

3.3.15.2 Drainage of excavations.

All excavations shall be drained, and the drainage shall be maintained as long as the excavation continues or remains. Where necessary, pumping shall be used, provided proper permits are obtained from the Auburn Water Resource Department.

3.3.15.3 Clogging

Precautions shall be taken to prevent concrete or mortar washings, sand, grit, or any other material that would cause clogging from entering a sewer, catch basin, drain or body of water or to leach into the ground. All concrete washout water will also meet the requirements of Section (Public Works Manual).

3.3.15.4 Collection and containment.

All concrete washout water shall be collected and contained in or on the concrete mixer truck or in pre-manufactured watertight containers specifically designed and fabricated for the purpose of collecting and containing concrete washout water on-site. Such containers shall be of sufficient quantity and size to accommodate all rinsing operations required on-site so as not to delay the timely return of concrete ready mix trucks to the concrete plant and shall be protected from breach or overflow at all times.

3.3.15.5 Location.

Rinsing operations and concrete washout water containers shall not be located less than 30 feet from any sewer, drain, catch basin, or body of water without the written approval of the Director of Water Resource.

3.3.15.6 Disposal.

Collected concrete washout water shall be transported off site for treatment and disposal or contained on site until completely evaporated. Any hardened concrete remaining after evaporation shall be disposed of, reused or recycled.

3.4 SITE WORK

3.4.1 SCOPE

The provisions of this section shall apply to all soil and foundation work, including but not limited to excavations made for the purposes of taking earth, sand, gravel, or other material, as well as to soil and foundation work related to accessory uses such as garages, pools, and decks, and also to the underpinning or bracing of buildings or structures, in order to safeguard the public and property from such work.

Exceptions:

1. Soil or foundation work not related to the underpinning or bracing of an existing building or structure, and which is performed in connection with utility or infrastructure work occurring within a public right of way, including but not limited to the construction, alteration, maintenance, repair, or demolition of bridges, streets, sidewalks, highways, railroads, subways, water tunnels, or utility lines.
2. Soil or foundation work on cemetery grounds for burials.
3. Soil or foundation work performed within an industrial or commercial quarry, plant, or yard and not related to the construction or demolition of a building or structure on the property of such quarry, plant, or yard.

3.4.1.1 Measurements.

The depth of all soil and foundation work shall be measured from the level of the adjacent ground surface to the lowest point of the soil and foundation work. The height of all soil and foundation work shall be measured from the level of the adjacent ground surface to the highest point of the soil and foundation work. Where soil and foundation work occurs within a basement or cellar, the soil and foundation work shall be measured from the level of the adjacent slab.

3.4.1.2 Rainstorms.

All sides or slopes of excavations or embankments shall be inspected after rainstorms, or any other hazard-increasing event, and safe conditions shall be restored.

3.4.1.3 Fence.

Every site with an excavation shall be enclosed with a fence that meets the requirements of Section 3.6.7.

3.4.1.4 Guardrail system.

All open edges of an excavation that are 6 feet (1829 mm) or greater in depth shall be protected by a guardrail system meeting the requirements of Sections 3.7.7.23.7.7, or by a solid enclosure at least 3 feet 6 inches (1067 mm) high. For the purpose of a guardrail system installed in accordance with this section to protect the open edge of an excavation, the term "floor" in Sections 3.7.7.2 through 3.7.7.5 shall mean "ground."

Exceptions:

1. The toe board, when installed in conjunction with such excavation guardrail system, shall consist, at a minimum, of 1-inch×6 inches (25 mm by 152 mm) lumber or metal plank and shall be at least 5½ inches (140 mm) high.
2. A toe board is not required where the sheeting, shoring, bracing, or any other support of excavation extends at least 5½ inches (140 mm) above the top of the excavation.
3. A guardrail system or a solid enclosure is not required where access to the adjoining area is precluded.
4. A guardrail system or a solid enclosure is not required where side slopes are three horizontal by one vertical (33-percent slope) or flatter.

3.4.1.5 Openings.

To provide necessary openings for intermittent operations, one or more sections of the guardrail system or solid enclosure may be hinged or supported in sockets. When supported in sockets, rails shall be so constructed that they cannot be jolted out. A button or hook may be used to hold the guardrail system or solid enclosure in a fixed position. Substantial chains or ropes may be used to guard such openings in such guardrail system or solid enclosure. Where so used, the chains or ropes shall be taut at the same height as the rails of the standard guardrail system.

3.4.1.6 Installation of protection.

Required protection for the sides of the excavation shall be installed as the excavation advances. The placement of permanent structures or fill in areas requiring support of excavation shall not begin until the support of excavation has been completed for such areas.

3.4.2 INSPECTIONS.

Soil and foundation work shall be inspected in accordance with the requirements of Sections 3.4.2.1 through 3.4.2.3.

3.4.2.1 Rainstorms.

All sides or slopes of excavations or embankments shall be inspected after rainstorms, or any other hazard-increasing event, and safe conditions shall be restored. This should not be in place of the Erosion and Sediment Control inspections per City of Auburn and State of Alabama requirements.

3.4.2.2 Support of excavation.

Methods employed to protect the sides of excavations meeting the requirements the design and special inspections of the currently adopted IBC and the design of a registered design professional.

3.4.2.3 Slurry.

The requirements of Section 3.4.8 shall apply.

3.4.3 RETAINING WALLS.

The requirements in chapters 1807 and 3307 of the currently adopted IBC shall apply as applicable.

3.4.4 ACCESS.

Every excavation shall be provided with at least one safe means of ingress and egress that is kept available at all times.

3.4.5 DRAINAGE.

The requirements of Section 3.3.15.2 shall apply.

3.4.6 UTILITIES.

The requirements of Section 3.3.2 shall apply.

3.4.7 DEWATERING.

The person causing the soil or foundation work to be performed shall dewater the site, as needed, for the progress of the work. Measures shall be taken to prevent settlement, slope failure, and damage to adjacent buildings, structures, and property affected by dewatering operations

3.4.8 SLURRY.

Where slurry is utilized to support an excavation, trench, or drill or bore hold, slurry mix proportions and installation procedures shall be provided by a registered design professional on signed and sealed design and installation procedures. The installation procedures shall account for all imposed loads, including those from the earth, adjacent structures, and adjacent equipment. The use of slurry to support excavations shall be subject to special inspection in accordance with Section Chapter 17 of the IBC. Where such construction methods are used to install foundation elements, the new foundation elements installed as part of such operations shall be subject to special inspection as a permanent installation in accordance with the applicable sections of this chapter, including but not limited to special inspection for concrete, and welding

3.4.9 EXCAVATION AND FILL.

Excavation and fill for buildings and structures shall be constructed or protected so as not to endanger life or property. Wood forms that have been used in placing concrete, if within the ground or between foundation sills and the ground, shall be removed before a building is occupied or used for any purpose. Before completion, loose or casual wood shall be removed from direct contact with the ground under the building.

3.4.9.1 Surcharge.

No fill or other surcharge loads shall be placed adjacent to any building or structure unless such building or structure is capable of withstanding the additional loads caused by the fill or surcharge. Existing footings or foundations that can be affected by any excavation shall be underpinned adequately or otherwise protected against settlement and shall be protected against lateral movement.

3.4.9.2 Footings on adjacent slopes.

For footings on adjacent slopes, see Chapter 18 of the IBC.

3.4.9.3 Fill supporting foundations.

Fill to be used to support the foundations of any building or structure shall comply with all applicable adopted codes and the approved design documents. Special inspections of compacted fill shall be in accordance with chapter 17 of the IBC.

3.5 DEMOLITION

3.5.1 CONSTRUCTION DOCUMENTS.

Construction documents and a schedule for demolition shall be submitted where required by the building official. Where such information is required, no work shall be done until such construction documents or schedule, or both, are approved.

3.5.2 PEDESTRIAN PROTECTION.

The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by section 3.6.

3.5.2.1 Safety zone.

A safety zone shall be provided around all demolition areas to prevent persons other than workers from entering such zone. Where demolition occurs on the exterior of a building, such zone shall be approved by the building official prior to the commencement of demolition. Where mechanical demolition equipment, other than handheld devices, is to be used for the full demolition of a building, the safety zone shall be equal to or greater than half the height of the building to be demolished; such safety zone may be reduced by the same ratio as the building is being demolished.

3.5.3 NOTIFICATION.

The permit holder shall notify Inspection Services and adjoining building owners prior to the commencement of full and partial demolition operations in accordance with Sections 3.5.3.1 and 3.5.3.2.

3.5.3.1 Notification of Inspection Services.

The permit holder shall notify Inspection Services via phone or electronically at least 24 hours, but no more than 96 hours prior to the commencement of such work.

3.5.3.2 Notification of Adjoining property owners.

Adjoining property owners shall be notified of upcoming demolition operations in writing not less than 10 days prior to the scheduled starting date of the demolition. The written notice shall provide a description of the work to be performed, the timeframe and schedule, and contact information of the person causing the demolition and Inspection Services. Demolition or removal work that is to be done with the use of explosives shall also be subject to the notification requirements set forth in the City of Auburn Fire Code.

3.5.4 DEMOLITION OF WEAKENED STRUCTURES.

Where a structure to be demolished has been partially wrecked or weakened by fire, flood, explosion, age, or other causes, it shall be shored or braced to the extent necessary to permit orderly full demolition or partial demolition without collapse. The necessary measures to ensure a safe demolition shall be determined by the owner's registered design professional and shall be approved by the building official.

Exception: Shoring or bracing are not required for the full demolition of a building, subject to the approval of the building official:

3.5.5 DEMOLITION SEQUENCE.

Any structural member that is being dismembered shall not support any load other than its own weight. No wall, chimney, or other structural part shall be left in such condition that it may collapse or be toppled by wind, vibration or any other cause. The method of removal of any structural member shall not destabilize remaining members. All handling and movement of material or debris shall be controlled such that it will not develop unaccounted impact loads on the structure.

3.5.6 STRUCTURAL STEEL, REINFORCED CONCRETE, AND HEAVY TIMBER BUILDINGS.

Structural steel, reinforced concrete, and heavy timber buildings, or portions thereof, shall be demolished column length-by-column length and tier-by-tier. Structural members shall be chained or lashed in place to prevent any uncontrolled swing or drop.

Exception: Where the design applicant has demonstrated the adequacy of alternate means of demolition through plans, calculations, or the establishment of safety zones, as appropriate, the building official may accept such alternative means of demolition.

3.5.6.1 Masonry buildings with wooden floors.

Demolition of masonry buildings with wooden floors shall comply with the following requirements:

1. Demolition of walls and partitions shall proceed in a systematic manner, and all work above each tier of floor beams shall be completed before any of the supporting structural members are disturbed.
2. Sections of masonry walls shall not be loosened or permitted to fall in such masses as to affect the carrying capacity of floors or the stability of structural supports.
3. No section of wall with a height more than 22 times its thickness shall be permitted to stand without bracing designed by a registered design professional.

3.5.7 SAFEGUARDS.

Demolition shall be conducted in accordance with the requirements of Sections 3.5.7.1 through 3.5.7.12.

3.5.7.1 Utilities and service lines.

The requirements of section 3.3.2 shall apply.

3.5.7.2 Party wall exits, fire exits.

The requirements of section ?? shall apply.

3.5.7.3 Dust.

Dust producing operations shall be wetted down to the extent necessary to control the dust.

3.5.7.4 Water accumulation.

Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property. The requirements of Section 3.3.15 shall apply.

3.5.7.5 Temporary elevators and standpipe systems.

The requirements of Sections 3.3.9.7 and **Error! Reference source not found.** shall apply.

3.5.7.6 Sprinkler systems.

The requirements of section 3.3.9.6.3 shall apply.

3.5.7.7 Use of explosives.

The use of explosives in demolition operations shall conform to the requirements and limitations imposed by the City of Auburn Fire Code.

3.5.7.8 Hazards to be removed.

Prior to the commencement of demolition operations, hazards shall be removed in accordance with sections 3.5.7.8.1 through 3.5.7.8.4

3.5.7.8.1 Combustible content.

Prior to the commencement of demolition operations, the area authorized to be demolished by the work permit shall be thoroughly cleaned of combustible content and debris, including but not limited to building contents and exterior finishes, down to the structural elements.

3.5.7.8.2 Asbestos.

Prior to the commencement of demolition operations, all asbestos shall be removed from the area authorized to be demolished by Inspection Services, and certification to that effect shall be filed with Inspection Services and the Department of Environmental Protection. Such asbestos removal shall be in accordance with applicable codes and provisions of the Alabama Department of Environmental Management.

3.5.7.8.3 Glass.

Prior to the commencement of demolition operations, all glass located in the area authorized to be demolished by the permit, including but not limited to glass in windows, doors, skylights, and fixtures, shall be removed.

Exception: Demolition operations relating to the alteration, maintenance, or repair of a façade.

3.5.7.8.4 Steam and fuel.

Prior to the commencement of demolition operations, all pipes, tanks, boilers, or similar devices containing steam or fuel and located in the area authorized to be demolished by the permit shall be purged of such steam or fuel.

Exception: Pipes, tanks, boilers, or similar devices containing steam or fuel located in the area authorized to be demolished by the permit and which will not be disturbed during the course of the demolition operation may, in lieu of being purged, be safeguarded so as to prevent their being damaged during the course of demolition operations.

3.5.7.9 Stairs.

All enclosed vertical shafts and stairs shall be maintained enclosed at all floors except the uppermost floor being demolished, and all work on the uppermost floor shall be completed before stair and shaft enclosures on the floor below are disturbed. All hand rails and banisters shall be left in place until actual demolition of such floor is in progress.

3.5.7.10 Floors.

The safeguards of Sections 3.5.7.10.1 through 3.5.7.10.3 shall apply to demolition operations involving floors.

3.5.7.10.1 Bearing partitions and headers.

No bearing partition shall be removed from any floor until the floor framing system on the floor above has been removed and lowered. All header beams and headers at stair openings and chimneys shall be carefully examined and, where required, shall be shored from the cellar floor through successive floors. All operations shall be continually monitored by a qualified person designated by the permit holder as the work progresses to detect any hazards that may develop.

3.5.7.10.2 Floor openings.

Openings in any floor shall not aggregate more than 25 percent of the area of that floor unless it can be shown by submission from a registered design professional to the satisfaction of the building official that larger openings will not impair the stability of the structure.

3.5.7.10.3 Protection of floor openings.

Floor openings used for the removal of debris shall comply with Section 3.5.7.10.6. Every opening not used for the removal of debris in any floor shall be solidly planked over by planking not less than 2 inches (51 mm) in thickness, or equivalent solid material, and laid close.

3.5.7.10.4 Storage of material.

Material shall not be stored on catch platforms, working platforms, floors, or stairways of any structure, except that any one floor of a building to be demolished may be used for the temporary storage of material when such floor can be evaluated by a registered design professional and proven to be of adequate strength to support one and one-half times the load to be superimposed. Such evaluation by the registered design professional shall be maintained by the permit holder and made available to Inspection Services upon request. Storage spaces shall not interfere with access to any stairway or passageway, and suitable barricades shall be provided so as to prevent material from sliding or rebounding into any space accessible to the public. All material shall be safely stored or piled in such storage locations in a manner that will not overload any part of the structure or create any hazard.

3.5.7.10.5 Examination of connections.

Before any material is stored on any floor, the existing flooring adjacent to bearing walls, shear walls, beams and columns shall be removed and the connections of the floor framing system to the bearing walls, shear walls, beams and columns shall be carefully examined by a competent person designated by the permit holder to ascertain their condition and adequacy to support such material. If the connections are found to be in poor condition or inadequate to support the stored material, no material shall be deposited on the floor until these connections are shored from the cellar floor through each successive floor or otherwise strengthened to safely support such material.

3.5.7.10.6 Removal of floor slabs for storage.

In buildings of noncombustible construction, floor slabs to an elevation of not more than 25 feet (7620 mm) above the legally established curb level may be removed to provide temporary storage for debris, provided that:

1. The stored debris is piled with sufficient uniformity to prevent lateral displacement of interior walls or columns as determined by a registered design professional.
2. The height of the piled material will not burst the exterior walls due to horizontal loading as determined by a registered design professional.
3. The operation does not otherwise endanger the stability of the structure.

3.5.7.10.7 Cellar or basement storage.

Debris stored in the cellar or basement shall not be piled above the level of the adjacent exterior grade unless the demolition contractor provides sheet-piling, shoring, bracing, or such other means necessary to insure the stability of the walls and to prevent any wall from collapsing due to horizontal loading created by the debris as determined by a registered design professional. Where debris is stored against a party wall, the requirements of Section 3.5.7.10.8 shall also apply.

3.5.7.10.8 Examination of party walls.

Party walls shall be carefully examined by a competent person designated by the permit holder to ascertain the condition and adequacy of the party wall prior to the placement of any material that will impose a load upon such party wall. If the party wall is to be found to be in poor condition or inadequate to support the stored material, no material shall be deposited on the floor until the party wall is shored or otherwise strengthened as determined by a registered design professional to safely support such material.

3.5.7.10.9 Removal of material.

Debris, bricks, and similar material shall be removed through openings in the floors of the structure, or by means of chutes, buckets, or hoists that comply with the provisions of this policy.

3.5.7.10.10 Protection of floor openings.

Every opening in a floor used for the removal of debris shall be tightly enclosed with a shaftway, extending from floor to floor, with such shaftway enclosed with:

1. Planking not less than 2 inches (51 mm) in thickness, or equivalent solid material;
or
2. Where the opening is used for the removal of noncombustible material, wire mesh may be utilized in lieu of planking, provided such mesh is not less than number 18 gage wire mesh, with openings in the wire no longer than ½ inch (13 mm), and also provided that the wire mesh is securely attached, in accordance with drawings developed by a registered design professional, to the shaftway so that the wire mesh enclosure in any location does not deflect more than 2 inches (51 mm) when a force of at least 200 pounds (890 n) is applied along any horizontal portion of such wire mesh enclosure.

Exceptions:

1. In buildings not more than six stories in height, a shaftway is not required. Instead openings in the floor shall be solidly planked over while not in use by planking not less than 2 inches (51 mm) in thickness, or equivalent solid material, and laid close.
2. A shaftway is not required at the working deck. Instead, openings in the working deck shall be solidly planked over while not in use by planking not less than 2 inches (51 mm) in thickness, or equivalent solid material, and laid close.

3.5.7.10.10.1 Temporary removal of protection.

Wherever such protection required by Section 3.5.7.10.3 has been temporarily removed to permit debris removal, the floor opening shall be protected by a guardrail system that meets the requirements of Sections 3.7.7.1 through 3.7.7.5. Such protection required by Section 3.5.7.10.10 shall be promptly replaced in position upon the ceasing of such work at the end of each workday.

3.5.7.10.11 Protection of wall openings.

In any buildings more than 25 feet high (7620 mm), any window or other exterior wall opening that is within 20 feet (6096 mm) of a floor opening used for the passage of debris from levels above shall be solidly boarded up or otherwise substantially covered, unless such window or opening is so located as to preclude the possibility of any person being injured by material that may fall from such window or opening.

3.5.7.11 Rodent extermination.

A licensed exterminator shall effectively treat the premises for rodent extermination.

Exception: Partial demolition operations.

3.5.7.12 Chimneys.

Where brick or masonry chimneys cannot be safely toppled or dropped, all materials shall be dropped down on the inside of such chimneys.

3.5.8 REMOVAL OF FOUNDATIONS AND SLABS.

Where a building, or any portion, has been demolished to grade, the floor slab or foundation of such building, or portion, shall be removed and the site backfilled to grade.

3.5.9 COMPLETION OF DEMOLITION OPERATIONS.

All work required for structural stability and permanent waterproofing of adjacent buildings must be completed prior to demolition sign-off.

3.5.10 MEANS OF EGRESS.

A horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.

3.5.11 VACANT LOT.

Where a structure has been demolished or removed, the vacant lot shall be filled and maintained to the existing grade or in accordance with the ordinances and policies of the City of Auburn.

3.5.12 UTILITY CONNECTIONS.

Service utility connections shall be discontinued and capped in accordance with the approved ordinances and policies of the City of Auburn and the applicable utility company.

3.5.13 FIRE SAFETY DURING DEMOLITION.

Fire safety during demolition shall comply with the applicable requirements of this code and the applicable provisions of the currently adopted building codes including chapter 33 of the International Fire Code.

3.5.14 SANITARY FACILITIES REQUIRED.

Sanitary facilities shall be provided during construction, remodeling or demolition activities in accordance with the adopted International Plumbing Code.

3.6 PROTECTION OF PEDESTRIANS

3.6.1 SCOPE.

Pedestrians shall be protected during construction or demolition activities as required by this policy, the currently adopted building codes and the City of Auburn Standard Specifications and Details.

3.6.2 STREETS, INCLUDING SIDEWALKS, WALKWAYS, AND PATHWAYS.

Streets, including sidewalks, as well as walkways and pathways, either within the public way or within a site, shall meet the requirements of Sections 3.6.2.1 through 3.6.2.6, and the requirements of the Standard Specifications and Details.

3.6.2.1 Obstruction of Streets or Sidewalks.

The requirements of the Standard Specifications and Details shall apply with regard to the closing of streets or sidewalks, or to the obstruction of any part thereof.

3.6.2.2 Temporary Public Walkway in the Street.

Where authorized by the currently adopted Building Codes and the Standard Specifications and Details, a temporary walkway open to the public may be provided in the street in front of the site. Such temporary walkway shall be protected in accordance with the requirements of this policy, the currently adopted building codes and the Standard Specifications and Details.

3.6.2.3 Temporary Public Walkway within the Site.

Where authorized, a temporary walkway open to the public may be provided through a site that is otherwise fenced and closed to the public. Such temporary walkway shall be:

1. Protected by a covered walkway, or where acceptable to the building official, provided with overhead protection and lighting equivalent to that afforded by a covered walkway;
2. Enclosed along the side facing the site with a solid fence that meets the requirements of Section 3.6.70. Where the covered walkway or equivalent overhead protection extends beyond the height of the fence, the gap shall be enclosed with a wire screen comprised of not less than number 18 gage wire mesh, or equivalent synthetic netting, with openings in the wire or synthetic mesh no larger than 1/2 inch (13 mm); and
3. Enclosed along the side facing the street with a wire screen comprised of not less than number 18 gage wire mesh, or equivalent synthetic netting, with openings in the wire or synthetic mesh no larger than 1/2 inch (13 mm), or where a special hazard exists, protected in accordance with Section 3.6.4.9.

3.6.2.4 Pathways.

Where a means of ingress/egress to the property remains open to the public during the course of construction or demolition, walkways, pathways, and similar areas within the property line that provide a path of travel between the required means of ingress/egress and the public sidewalk or temporary walkway shall remain open.

3.6.2.5 Foot Bridges.

Where footbridges are utilized as part of a sidewalk, walkway, or pathway, they shall be provided with guardrails for the entire length, and shall have cleats to prevent slipping. Where planks are used to pave the walkway of the footbridge, the planks shall be laid close and securely fastened to prevent displacement. Planks shall be of uniform thickness, and all exposed ends of ramps shall be provided with beveled fillers to eliminate tripping hazards.

3.6.2.6 Requirements for Sidewalks, Temporary Walkways, Foot Bridges, and Pathways.

Sidewalks, walkways, footbridges, and pathways that remain open to the public shall be accessible and shall be provided with:

1. A clear path, free of obstruction, at least 5 feet (1524 mm) in width;
2. A durable walking surface capable of supporting all imposed loads and in no case shall the design live loads be less than 150 pounds per square foot (732.3 kg/ m²);
3. Mirrors at all blind corners;
4. For a temporary walkway or foot bridge where there is a change in elevation along the walkway or footbridge, a ramp with a running slope not steeper than one unit vertical in 12 units horizontal (8-percent slope) with a level landing at least 5 feet long at the top and bottom of each run; and
5. For a temporary walkway or foot bridge where the running slope of such walkway or foot bridge is steeper than one unit vertical in 20 units horizontal (5-percent slope) and there is a total rise greater than 6 inches (152 mm), handrails.
6. Walkways shall be accessible in accordance with chapter 11 of the currently adopted building code, ADA and PROWAG

Exception: Where it is not possible to provide the clear path to the extent required by item number 1 above, the sidewalk, or pathway shall be kept open to the extent required by the Standard Specifications and Details as well as comply with applicable provisions of the ADA Accessibility Guidelines for Buildings and Facilities and/or the ADA Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way, as applicable.

3.6.3 COVERED WALKWAYS AND FENCES.

Covered walkways shall be provided as required by this policy and section 3.6.3. Fences shall be provided as required by this policy and section 3.6.7.

3.6.4 WARNING SIGNS, PERSONNEL, AND BARRIERS.

Warning signs, personnel, or barriers shall be provided to protect the public from hazards generated by construction or demolition activity in or adjacent to a public way as set forth by 3.6.4.1 through 3.6.4.9, Standard Specifications and Details and the MUTCD.

3.6.4.1 Obstructions and Openings.

Obstructions or openings located in a public way shall be marked and guarded by barriers, flags, or signs in accordance with the requirements of this policy, the Standard Specifications and Details and applicable MUTCD requirements.

3.6.4.2 Dangerous Areas.

In areas where special danger to the public exists, including but not limited to vehicle entrances and exits, hoisting areas, points of storage of explosives or highly flammable material, blasting areas, or discharge ends of chutes, descriptive warning signs shall be provided in accordance with the requirements of the Standard Specifications and Details and MUTCD requirements.

3.6.4.3 Vehicular Traffic.

Whenever any work is being performed over, on, or in close proximity to a highway, street, or similar public way, control and protection of traffic shall be provided by barriers, signals, signs, flag person, or other devices, equipment, and personnel in accordance with the requirements of this policy, the Standard Specifications and Details and MUTCD requirements.

3.6.4.4 Directional barricades.

Pedestrian traffic shall be protected by a directional barricade (Jersey barrier type) where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.

3.6.4.5 Construction railings.

Construction railings shall be not less than 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas.

3.6.4.6 Areas Open to Persons Other Than Workers.

A flag person shall be provided whenever intermittent operations are conducted on, or adjacent to, areas open to use by persons other than workers, or when dangerous operations, such as blasting, may affect such areas. Where required by the Standard Specifications and Details, designated personnel shall also be provided in addition to flag persons.

3.6.4.7 Additional signs.

In addition to the requirements of this section, information panels and signs shall also be provided as required by sections 3.1.10.

3.6.4.8 Prohibited signs.

No illuminated business or advertising sign shall be permitted on any protective structure required by this section. Other than as specified in Sections 3.1.10 there shall be no sign, information, pictorial representation, or any business or advertising messages posted on a sidewalk shed, bridge, fence, or other protective structure listed in this section that is erected at the construction or demolition site.

3.6.4.9 Work or Storage Zones.

Where work or storage related to the construction or demolition of a building or structure is occurring adjacent to a covered walkways or equivalent overhead protection, and such area is not closed with a fence in accordance with Section 3.6.7 or a permanent façade, a solid barrier extending at least 4 feet (1219 mm) in height from the level of the ground shall be

provided. The space between the top of the barrier and the deck of the overhead protection shall be enclosed with a wire screen comprised of not less than number 18 gage wire mesh, or equivalent synthetic netting, with openings in the wire or synthetic mesh no larger than 1/2 inch (13 mm).

Exception: In the area where a material hoist, personnel hoist, hoist way, or chute is located, the solid barrier shall extend from level of the ground to the deck of the overhead protection.

3.6.5 WATCHPERSON AND FLAG PERSON.

Flag persons shall be provided as required by Section 3.6.4

3.6.6 COVERED WALKWAYS.

Covered walkways shall be provided as required by this section to protect pedestrians from construction or demolition operations.

3.6.6.1 Permit.

No covered walkways shall be installed without a permit in accordance with the adopted policies and procedures of the City of Auburn.

3.6.6.2 Covered Walkways protection required.

Pedestrians shall be protected during construction, remodeling and demolition activities as required by this policy and Table 3.6.6.2 .

Signs shall be provided to direct pedestrian traffic.

The covered walkway or barrier shall not be removed until the structure is enclosed, all exterior work has been completed and the sash is glazed above the second story, the façade has been cleaned down, and all exterior chutes, scaffolds, mast climbers, and hoisting equipment have been dismantled and removed from the site;

TABLE 3.6.6.2

Protection of Pedestrians

HEIGHT OF CONSTRUCTION	DISTANCE FROM CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than one-fourth the height of construction	Barrier and covered walkway
	5 feet or more, but between one-fourth and one-half the height of construction	Barrier
	5 feet or more, but exceeding one-half the height of construction	None

A covered sidewalk shall be installed and maintained to protect all sidewalks, walkways, and pathways within the property line of a site, and all public sidewalks that abut the property, as follows:

1. When such sidewalk, walkway, or pathway is to be located immediately below a scaffold, mast climber, or chute. The covered walkways shall be installed prior to the installation of such equipment and shall not be removed until such equipment has been dismantled and/or removed from the area being protected;
2. Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) in height. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected where required by the building official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 16.

Exceptions: Except where specifically required by the building official to protect the public from unique hazards at the site, covered walkways are not required for:

1. Sidewalks, walkways, and pathways that are closed, for their full width, to the public;
2. Temporary walkways in accordance with Section 3.6.2.3 that are provided with lighting and overhead protection equivalent to that afforded by a covered walkways;
3. Inspections, including a facade inspection, provided no work occurs during the inspection;
4. Sign hanging occurring by or under the direct and continuing supervision of a licensed sign hanger;
5. Window washing;
6. Work confined to the roof of an existing building, provided the edge of the roof is enclosed to a height of 42 inches (1067 mm) with a solid parapet; or
7. Subject to the approval of the building official, work of limited scope and duration provided that:

- a. During the course of the work the area immediately under the work zone is temporarily closed to the public by means of barriers, cones, or caution tape, and flag persons are provided to direct pedestrian traffic;
 - b. At the end of the day the facade of the building is left in a safe condition and fully enclosed; and
8. There is compliance with Section 3.6.2.1.

3.6.6.3 Area to be Protected.

The decking of the covered walkways shall extend the full length of the area that falls within the zone specified in Section 3.6.6.2, plus an additional 5 feet (1524 mm) beyond such length, or to within 18 inches (457 mm) of curb line, whichever is less. The decking of the covered walkways shall also extend the full width of the sidewalk, walkway, or pathway that remains open to the public, except for a clearance to avoid existing obstructions, not to exceed 18 inches (457 mm) along the curb and not to exceed 1 inch (25 mm) along the face of the building or structure.

Exceptions: Openings in the deck to avoid tree trunks and branches, provided such opening is brought as close to the tree as practical without damaging the tree.

3.6.6.4 Design and Construction of Covered Walkways.

Covered walkways shall be designed and constructed in accordance with the requirements of Section 3.6.6.4.1 through Section 3.6.6.4.10.

3.6.6.4.1 Designer.

All covered walkways shall be designed by a registered design professional.

Exception: Covered walkways that conform to a design approved by the building official provided it be installed at the site in accordance with the standard design.

3.6.6.4.2 Design Loads.

All covered walkways shall be designed as a heavy duty covered walkways to carry a live load of at least 300 pounds per square foot (1464.6 kg/ m). However, where the shed is installed to protect from work performed at a height of less than 100 feet (30 480 mm) above the ground, the covered walkways may be designed as a light duty covered walkways to carry a live load of at least 150 pounds per square foot (732.3 kg/m²), provided that no item is stored or placed upon the shed.

3.6.6.4.2.1 Wind and Other Loads.

The effect of wind and other loads on the covered walkways, and any item placed or attached on or to the shed, shall be considered in the design in accordance with Chapter 16 of the currently adopted building code.

3.6.6.4.2.2 Storage.

1. Storage on covered walkways shall be as follows:
2. No item shall be stored or placed upon a covered walkways designed as a light duty covered walkway under Section 3.6.6.4.2.
3. No material shall be stored or placed upon a covered walkways designed as a heavy duty covered walkways under Section 3.6.6.4.2 unless the shed is designed for such storage, with such areas of storage or placement clearly

designated on the drawings. Where an item is to be stored or placed upon a heavy duty covered walkways, and such storage or placement is not in excess of 150 pounds per square foot (732.3 kg/m²) on any square foot area of the covered walkways, the design live load of 300 pounds per square foot (1464.6 kg/m²) need not be increased. Where an item is to be stored or placed upon a heavy duty covered walkways, and such storage or placement is in excess of 150 pounds per square foot (732.3 kg/m²) on any square foot area of the covered walkways, such shed shall be designed to carry:

4. The live load of 300 pounds per square foot (1464.6 kg/m²) required of a heavy duty covered walkways; and
5. The load of the item to be placed or stored upon the shed, minus 150 pounds per square foot (732.3 kg/m²).

3.6.6.4.3 Materials.

Covered walkways shall be constructed out of wood, steel, or other material possessing equivalent strength and suitability. These materials must be designed for exposure to the weather.

3.6.6.4.4 Vertical Members and Beams.

Vertical members and beams of the covered walkways shall conform to the following:

1. Vertical members and beams shall be adequately braced and connected to prevent displacement or distortion of the framework.
2. The vertical members of the covered walkways shall be plumb.
3. Vertical members shall not be placed into the street unless approved and protected as required by the Standard Specifications and Details and MUTCD guidelines. (Jersey Barriers)
4. Vertical members placed on the sidewalk shall not be placed closer than 18 inches (455 mm) from the face of the curb line.
5. Vertical members shall be placed at least 7 feet (2134 mm) from the edge of a curb cut or vehicular access point, or where placed closer, the vertical members nearest the curb cut or vehicular access point shall be protected against displacement by vehicles, and shall be identified with high visibility marking. (Jersey Barrier)

3.6.6.4.5 Deck.

The deck of the covered walkways shall consist of 2-inch (51 mm) thick wood plank or equivalent material and shall be capable of sustaining the loads required by Section 3.6.6.4.2 The deck shall be solid, or shall consist of planking laid close and made tight. Where the edge of the covered walkways abuts a building or structure, the decking shall be brought tight to the face of the building or structure.

Exception: Where it is not possible to bring the deck tightly against the face of the building or structure, the deck shall be brought to within 1 inch (25 mm) of the face of the building or structure, with the resulting gap sealed or covered by material of sufficient manner and strength capable of trapping falling debris.

3.6.6.4.6 Parapet.

A vertical parapet at least 3 feet 6 inches (1067 mm) high, as measured from the deck of the covered walkways, shall be constructed along all edges of the covered walkways. Such parapet shall consist of solid plywood, corrugated metal, or other equivalent material, and shall be securely attached to the shed with braced uprights. Temporary removal of a portion of the parapet is permitted for the handling of material, provided the parapet is immediately restored at the end of the handling operation upon with approval of the building official.

Exceptions:

1. A parapet is not required along the edge of the covered walkways that abuts a building or structure.
2. A parapet is not required along the edge of a covered walkways that abuts an area that is closed to the public.
3. In lieu of a vertical parapet, angled protection of identical construction to a parapet that inclines outward at an angle of 45 degrees (0.79 rad) may be utilized provided such protection is securely attached to the deck, and provided the angled protection extends to a point that intersects a line drawn 3 feet 6 inches (1067 mm) above the level of the deck.

3.6.6.4.7 Height.

The passageway under the covered walkway shall have a minimum clear ceiling height of 8 feet (2438 mm).

Exception: Lights that extend no more than 8 inches (203 mm) below the level of the deck shall be excluded from the clear ceiling height measurement.

3.6.6.4.8 Lighting.

Covered walkways lighting shall be in conformance with the following:

1. The underside of covered walkways shall be illuminated at all times either by daylight or electric light. The level of illumination shall be uniformly distributed along the entire length of the shed with a minimum of 1 foot-candle (11 lux) measured at the level of the walking surface with a minimum luminous efficacy of 45 lumens per watt or greater and be rated to operate at temperatures of 5°F (-15°C) and higher.
2. All lamps shall be enclosed in water-resistant and vandal-resistant fixtures, and all lamps, wiring, and accessory components shall conform to the requirements of the currently adopted National Electrical Code.
3. Photo sensors may be used to control electric lighting according to the amount of daylight available. All photo sensors shall be equipped for fail-safe operation ensuring that if the sensor or control fails, the lamps will provide the lighting levels required by this section.

3.6.6.4.9 Founding.

The surface upon which the shed rests shall be capable of supporting the design loads of the covered walkways, including any item placed or stored upon the shed.

3.6.6.4.10 Color.

Covered walkways erected on or after August 1, 2019 shall have the wood barrier adjacent to the construction site and the wood parapet be painted the color of hunter green (PANTONE 19-5511 TPX) or other specifically approved color.

3.6.6.5 Installation, Adjustment, Maintenance, Repair, Use, Inspection, and Removal of Covered walkways.

Covered walkways shall be installed, adjusted, maintained, repaired, used, inspected, and removed in accordance with the following requirements.

3.6.6.5.1 Safe Condition.

Covered walkways shall be maintained in a safe condition and used in a manner that eliminates hazards to the public. Any hazardous conditions or defects discovered with the covered walkways shall immediately be brought to the attention of the permit holder for the shed.

3.6.6.5.2 Supervision of Installation, Adjustment, Repair, and Removal.

The installation, adjustment, repair, or removal of a covered walkways shall be performed under the supervision of a competent person designated by the permit holder for the covered walkways.

3.6.6.5.3 Responsibility for Maintenance and Use.

Covered walkways shall be maintained and used by the general contractor, or where there is no general contractor, the contractor causing the work to be performed, or where there is no active work, the building owner.

3.6.6.5.4 Storage or Placement of Items.

No item shall be stored or placed upon a covered walkways unless such shed has been designed for such storage or placement in accordance with Section 3.6.6.4.2. Where such shed has been so designed, items shall be stored or placed only in the area designated on the drawings for storage. Any item placed or stored upon a covered walkways shall be secured in a manner to prevent dislodgement, displacement by wind, and shall be distributed so as not to exceed the design limits of the covered walkways.

3.6.6.5.5 Cleaning.

The decks of covered walkways shall be broom swept and cleaned of material weekly while active work is occurring at the site

3.6.6.5.6 Sharp Edges.

Where located in an area that could pose a danger to the public, bolts and screws without a cap, and sharp edges, shall be protected to prevent injury to the public.

3.6.6.5.7 Installation Inspection.

Upon completion of the installation of a covered walkways, the covered walkway shall be inspected by a qualified person designated by the designer, the permit holder for the shed, or a third party acceptable to both the designer and the permit holder to verify that the covered walkways is in a safe condition and has been installed in accordance with drawings and the requirements of this policy. Following the inspection, the qualified person who inspected the covered walkways shall prepare, sign, and date an installation inspection report. A new installation inspection report shall be prepared each time the covered walkways is reinstalled at the site.

3.6.6.5.8 Periodic Inspection.

Six months following the initial installation inspection, and every six months thereafter, the covered walkways shall be inspected by a qualified person designated by the designer, the permit holder for the shed, or a third party acceptable to both the designer and the permit holder to verify that the covered walkways is in a safe condition and is in compliance with drawings and the requirements of this policy. Following the inspection, the qualified person who inspected the covered walkways shall prepare, sign, and date an inspection report.

3.6.6.5.9 Inspection Following an Adjustment or Repair.

Following a repair or adjustment at a site, the covered walkways shall be inspected by a qualified person designated by the designer, the permit holder for the shed, or a third party acceptable to both the designer and the permit holder to verify the adequacy of the repair or adjustment. The results of the inspection shall be recorded, signed, and dated by the person who performed the inspection.

3.6.6.5.10 Daily Inspection.

Covered walkways shall be visually inspected daily by a person designated by the general contractor, or where there is no general contractor, the contractor causing the work to be performed, or where there is no active work, by the building owner to verify:

1. The lights are functioning;
2. No brace or rail is hanging unattached at one or more ends;
3. No portions of the support structure are disconnected;
4. No section of parapet is missing; and
5. All legs remain on their support and are supported to the ground.

Exception: The inspections for a scaffold suspended or supported above a covered walkways shall be in accordance with Section

3.6.6.5.10.1 Daily Inspection Report.

A written record of such inspections shall be maintained by the contractor or owner, with such record signed and dated by the person who performed the inspection. Defects discovered as a result of the inspection shall immediately be brought to the attention of the permit holder for the shed.

3.6.6.5.11 Notification of Removal.

The permit holder for the shed shall notify Inspection Services no more than two business days following the complete removal of a covered walkways.

3.6.7 FENCES / BARRIER PROTECTION REQUIRED.

Pedestrians shall be protected during construction, remodeling and demolition activities as required by this chapter and Table 3.6.6.2. Signs shall be provided to direct pedestrian traffic.

The fence/barrier shall not be removed until the structure is enclosed, all exterior work has been completed and the sash is glazed above the second story, the façade has been cleaned down, and all exterior chutes, scaffolds, mast climbers, and hoisting equipment have been dismantled and removed from the site;

All sites where a new building is being constructed, or a building is being demolished to grade, shall be enclosed with a fence or barrier . Fences or barriers shall also be installed to fully or

partially enclosed sites, as necessary, where there exists an open excavation, an unenclosed portion of a building accessible at grade, or other hazard to the public. Such fences or barriers shall be at least 8 feet (2438 mm) high, built solid for their entire length, out of wood or other suitable material, and shall be returned at the ends to the extent necessary to effectively close off the site.

Exceptions: The building official may approve the use of a chain link fence to:

1. Secure a site where work has been interrupted or abandoned and discontinued, and a registered design professional has certified that all construction or demolition equipment and material that pose a hazard to the safety of the public and property have been removed from the site or safely secured. Prior to the resumption of work, the chain link fence shall be replaced by a solid fence meeting the requirements of this section.
2. Secure portions of a site where a one-, two-, or three-family building, or a commercial building 40 feet (12 192 mm) or less in height, is being constructed or demolished and such building is setback at least 15 feet (4572 mm) from sidewalks or spaces accessible to the public and 5 feet (1524 mm) from adjoining buildings or structures.
3. In instances approved by the building official in conjunction with the City Engineer where a solid fence will interfere with site lines for vehicular traffic. The fence or gate shall be covered with an opaque sturdy cloth "windscreen" fabric at all locations for a distance of 48" above the ground. The fabric shall be securely attached to the fence or gate in accordance with manufacturer specifications. The fabric and fence shall be maintained in a neat, rigid and taut appearance.

3.6.7.1 Location of Fence / Barrier.

Where the fence or barrier is installed to fully enclose a site, the fence shall be constructed along the inside edge of the sidewalk or walkway, along the edges of the property line or as designated by the development agreement. Where a fence is installed to partially enclose a site, the fence or barrier shall be installed as necessary to prevent public access to any excavation or unenclosed portion of the building accessible at grade. Fences and barriers shall be installed and located so to not unreasonably obstruct, either visually or physically traffic, curb cuts, vehicular access points, street lighting poles, traffic lights or signs, fire hydrants, fire department connections, water sampling stations, bus shelters, street furniture, trees, or means of ingress/egress.

Exceptions:

1. Fences may encroach onto the sidewalk in accordance with Standard Specifications and Details requirements.
2. A fence is not required to be installed along the party wall of an adjoining property, provided no material is stored along such wall during the course of work.

3.6.7.2 Gates.

Gates shall be sliding and not interfere into areas not accessible to the public, and shall be provided only where required for access to the site or to facilitate the work. Gates shall consist of the same material and construction as the rest of the fence or barrier. Gates shall be kept closed at all times except during actual loading and unloading operations, when individuals or vehicles are actively entering or leaving the site, or as needed to facilitate active work around the gate.

Exception:

1. Where approved by the building official, chain link gates may be utilized in a solid fence.
2. Swing gates may be utilized when the location and construction is approved by the building official.

3.6.7.3 Viewing Panels.

When viewing panels are provided in solid fences and barriers erected on or after July 1, 2019 at a rate one for every 25 linear feet (7.6 m) per frontage, with a minimum of one per frontage. Viewing panels shall be 12 inches by 12 inches (305 by 305 mm) in size and shall be blocked with plexi-glass or an equivalent non frangible material. The top of the viewing panel shall be located no more than 6 feet (1829 mm) above the level of the ground, and the bottom of the viewing panel shall be located between 3 feet (914.4) and 4 feet (1219.2) above the level of the ground.

3.6.7.4 Chain Link Fences or Gates.

Where a chain link fence or gate is utilized, the following requirements shall apply:

1. The fence or gate shall be made of new materials or, where salvaged, the fence shall be in good condition;
2. The fence posts shall be of galvanized steel pipe or other approved material of a diameter that provides rigidity. Posts shall be suitable for setting in concrete footings, for driving into the ground, or for inserting in precast concrete blocks. Such posts shall be spaced in a manner that maintains the required rigidity to form a safe exterior fence;
3. The fence shall have a top and bottom rail of galvanized steel pipe or other approved material of a diameter that provides rigidity.
4. The fence or gate shall be constructed of woven, galvanized steel wire mesh and shall be of sufficient strength and rigidity to prevent access to the site; and
5. The fence or gate shall be covered with an opaque sturdy cloth "windscreen" fabric at all locations. Fabric shall be securely attached to the fence or gate in accordance with manufacturer specifications. The fabric and fence shall be maintained in a neat, rigid and taut appearance.

3.6.7.5 Design of Barriers.

Barrier installations shall be designed by a registered design professional. The effect of wind on the fence shall be considered in the design in accordance with Chapter 16 and the following:

1. Barriers shall be designed to resist loads required in Chapter 16
2. Barriers shall be provided with 2-inch by 4-inch (51 mm by 102 mm) top and bottom plates.
3. The barrier material shall be boards not less than 3/4-inch (19.1 mm) thick or wood structural panels not less than 1/4-inch (6.4 mm) thick.
4. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.

-
5. Wood structural use panels 1/4 inch (6.4 mm) or 5/16 inch (23.8 mm) in thickness shall have studs spaced not more than 2 feet (610 mm) on center.
 6. Wood structural use panels 3/8 inch (9.5 mm) or 1/2 inch (12.7 mm) in thickness shall have studs spaced not more than 4 feet (1219 mm) on center provided a 2-inch by 4-inch (51 mm by 102 mm) stiffener is placed horizontally at mid-height where the stud spacing is greater than 2 feet (610 mm) on center. Wood structural use panels 5/8 inch (15.9 mm) or thicker shall not span over 8 feet (2438 mm).

Exceptions:

1. Barriers installed in connection with the construction or demolition of a one-, two-, or three-family building.
2. Barriers that conform to a standard design approved by the building official provided the fence is installed at the site in accordance with the standard design.
3. Installation and Removal of Fences / Barriers.

Fences and barriers required by this section shall be installed prior to the commencement of work. Such required fences shall not be removed until:

1. The site has been filled and graded and all hazards to the public removed; or
2. The façade has been enclosed, with all doors and windows installed, and all exterior work, except for incidental work including but not limited to landscaping, painting, weatherproofing, or installation of signs or fixtures, has been completed.

3.6.7.6 Condition of Fences / Barriers.

All fences and barriers shall be installed, adjusted, repaired, and maintained in a sound condition, free of protruding or loose nails, wood, or metal, and with posts in an upright position restrained to prevent the fence from leaning or overturning.

3.6.7.7 Color.

Fences and Barriers erected on or after August 1, 2019 shall be Hunter Green (PANTONE 19-5511 TPX).

3.6.8 MAINTAINING STANDARD SPECIFICATIONS AND DETAILS PEDESTRIAN PROTECTION IN PLACE

Notwithstanding other provisions of law, pedestrian protection required by the Standard Specifications and Details shall be maintained in place and kept in good order for the entire length of time pedestrians may be endangered.

3.6.8.1 Removing Protection at Conclusion of Work.

Public property shall be left in as good a condition or as required by development agreements or construction documents following the completion of the construction or demolition work as it was before such work was commenced. Except where otherwise required by this policy, the owner or the owner's agent shall, upon the completion of the construction or demolition work, immediately remove all covered walkways, fences, guard rails, temporary walkways, material, and other obstructions in or adjacent to the public way.

3.6.9 FACILITATING CITY WORK.

In the event a duly authorized city agency must repair, maintain, or install city property, including but not limited to intersection control signs, electrical equipment, traffic signals, lane

markings, bus shelters, street lighting, other street furniture, or fire hydrants, at a location where pedestrian protection required by this policy is located; such pedestrian protection shall be removed as directed by Inspection Services long as the removal is deemed to be safe and, if necessary, suitable appropriate pedestrian protection that does not interfere with the work of such city agency is installed.

3.7 PROTECTION OF UNENCLOSED PERIMETERS

3.7.1 SCOPE.

Safety netting systems and guardrail systems shall be provided as required by this section to protect unenclosed perimeters. Except where this section authorizes the temporary removal of unenclosed perimeter protection, no work shall occur, nor shall materials be stored on any level where required unenclosed perimeter protection is not installed.

3.7.2 PERMIT.

A permit is not required for the installation of safety netting systems and guardrail systems that are in accordance with this section. A permit is required for alternative methods granted under section 3.7.8, including but not limited to cocoon systems, climbing formwork, and enclosure panels.

3.7.3 SAFETY NETTING DESIGN AND DOCUMENTATION.

Safety netting shall be designed and provided with documentation in accordance with sections 3.7.3.1 through 3.7.3.5.

3.7.3.1 Design.

Safety netting systems shall be designed by a registered design professional to meet temporary loads, including but not limited to wind, as prescribed in Chapter 16 of the currently adopted building code. The registered design professional shall take the supporting structure into account when designing the installation and shall include details of connections, anchorages, and supports. The minimum loads for vertical net cables required by Section 3.7.5.3 need not be added to wind loads in determining the maximum lateral force, but in no event shall the maximum design load for the cables be less than that required by Section 3.7.5.3. A reduction in the surface area due to the openings in vertical or horizontal net fabric or partially enclosed perimeter panel is permitted provided that the force at design wind speed is derived from manufacturers' test data or other testing or methods acceptable to the Building Official.

3.7.3.2 Site safety plans.

Details of the safety netting system shall also be shown on the site safety plan.

3.7.3.3 Make and model.

The make and model of vertical and horizontal netting, along with the connections and supports, shall be acceptable to the registered design professional responsible for the design of the safety netting systems in accordance with Section 3.7.3.1. The make and model, along with acceptance of the make and model by such registered design professional, shall be indicated as a note on the drawings, or in the form of a signed, sealed, and dated letter from such registered design professional that is kept with the drawings.

3.7.3.4 Flame retardant.

Vertical and horizontal safety netting shall be flame retardant in accordance with NFPA 701. Documentation of such shall be provided by the manufacturer and shall be noted on the drawings by the registered design professional responsible for the design of the safety netting systems in accordance with Section 3.7.3.1, or shall be recorded by such registered design professional in the form of a signed, sealed, and dated letter from such registered design professional, with such letter kept with the drawings.

3.7.3.5 Tensile strength.

The tensile strength for the structural net utilized in connection with the horizontal safety netting system shall be;

1. Noted on the drawings by the registered design professional responsible for the design of the safety netting systems in accordance with Section 3.7.3.1, or;
2. Shall be recorded by such registered design professional in the form of a signed, sealed, and dated letter from such registered design professional, with such letter kept with the drawings.
3. Where required by section 3.7.6.3, the strength shall be confirmed by testing; the results of the test shall be documented in the form of a signed, sealed, and dated letter from the registered design professional responsible for the design of the safety netting systems in accordance with Section 3.7.3.1. Such letter shall be kept with the drawings.

3.7.4 RESPONSIBILITY AND SUPERVISION.

The permit holder for the project, or where a permit is required by Section 3.7.2, the permit holder of such, shall be responsible for complying with the requirements of Section 3.7.1. A competent person designated by such responsible permit holder shall supervise the installation, inspection, adjustment, maintenance, repair, and removal of all safety netting systems and guardrail systems, along with any support, connection, or component, or alternative methods granted under Section 3.7.8.

Exception: Where this section requires another entity to perform an inspection.

3.7.5 VERTICAL SAFETY NETTING SYSTEMS.

Vertical safety netting shall be installed and maintained to cover all unenclosed perimeters.

Exceptions:

1. Vertical safety netting is not required at the:
2. Story at grade; or
3. The working deck; or
4. Any story in concrete construction where the formwork has not been stripped, provided such floor is no more than four stories or 40 feet (12 192 mm) below the working deck; or
5. Vertical safety netting is not required at a level where a supported scaffold covers the full width of the unenclosed perimeter, provided the scaffold is decked and flush against the building at such level where the unenclosed perimeter exists, with no gap between the scaffold and the building greater than 3 inches (76 mm), and also provided that the scaffold is provided with netting and guardrails in accordance with other state and federal regulations.

-
6. Vertical safety netting is not required to protect an unenclosed window opening, provided such window opening is enclosed with a sill not less than 2 feet 6 inches (762 mm) in height and protected with vertical mullions or piers with a maximum opening of 5 feet (1524 mm) and a noncorrosive wire cable capable of withstanding a load of at least 200 pounds (890 n) applied in any direction except upward.
 7. Vertical safety netting is not required for a minor alteration or ordinary repair.

3.7.5.1 Openings.

The largest opening area for debris netting when used vertically shall not be larger than 1 square inch (25.4 mm²).

3.7.5.2 Height.

Where required, vertical safety netting shall extend to cover all openings in the unenclosed perimeter to a height of at least 60 inches (1524 mm) above the floor or, where installed at the roof level.

3.7.5.3 Cables.

Vertical safety netting shall be secured to noncorrosive wire cable capable of withstanding a load of at least 200 pounds (90.7kg) applied in any direction except upward. The cables shall be located at a height of 60 inches (1524 mm), 42 inches (1067 mm), 21 inches (533 mm), and 0 inches (0 mm) above the level of the floor or, where installed at the roof level, the roof. Where the vertical safety netting extends above 60 inches (1524 mm) in height, a cable shall also be placed at the top of the netting, with intermediate cables between the 60 inch (1524 mm) cable and the top cable as needed to satisfy the design requirements of Section 3.7.3.

Exceptions: In lieu of a cable:

1. At 60 inches (1524 mm) or above, a top rail made of wood, pipe, or structural angle meeting the requirements of Section 3.7.7.3.
2. At 42 inches (1067 mm) and 21 inches (533 mm), mid rails made of wood, pipe, or structural angle meeting the requirements of Section 3.7.7.3.
3. At 0 inches (0 mm), a toe board meeting the requirements of Sections 3.7.7.2 and 3.7.7.3, provided the net is secured to the toeboard.

3.7.5.4 Taut systems.

Where the vertical safety netting relies upon a taut system, the net and cables shall be maintained taut. A positive tensioning system such as a turnbuckle shall be provided to keep the cable taut.

3.7.5.5 Friction connections.

Wood installations that utilize a friction connection are not permitted.

3.7.5.6 Temporary removal.

Vertical safety netting may be temporarily removed in the immediate area where active loading or unloading operations are occurring, or where perimeter work is occurring, provided that:

1. A controlled access zone is established to prevent unauthorized personnel from entering the area where the nets are removed; and

-
2. Immediately prior to the removal of the nets the floor is broom swept and cleared of all material, equipment, and debris to a distance of at least 10 feet, in all directions, from the area where the vertical nets will be removed.
 3. **Exceptions:** The following material does not have to be removed to a distance of at least 10 feet, in all directions:
 4. Material and equipment related to the loading or unloading operation or perimeter work.
 5. Stored materials in accordance with Section 3.3.5.3.

3.7.5.6.1 Restoring nets.

The vertical safety nets shall be reinstalled immediately following the end of active loading or unloading operations, or active work, or at the end of the workday, whichever occurs sooner.

3.7.5.7 Permanent removal.

Vertical safety netting systems may be removed from floors where the façade has been installed and all such openings in the façade, including for windows, have been permanently enclosed to a height of at least 60 inches (1524 mm) above the floor. Vertical safety netting systems may be removed from the roof where the final parapet or guardrail has been installed.

3.7.6 HORIZONTAL SAFETY NETTING SYSTEMS.

Horizontal safety netting shall meet the requirements of Sections 3.7.6.1 through 3.7.6.4

3.7.6.1 Where required.

Horizontal safety netting shall be installed and maintained as follows.

3.7.6.1.1 During construction.

When, during the course of new building construction, or during the vertical or horizontal enlargement of an existing building, the uppermost walkable floor reaches a height of six stories or 75 feet above the level of the ground or an adjoining roof, horizontal safety netting shall be provided at a level not more than two stories or 30 feet below:

1. In concrete structures: the stripping floor; or
2. In steel structures: at the uppermost story where the concrete floor slab has been poured.

Exception: When tarpaulins encase one or more floors immediately below the finished concrete floor in order to maintain temporary heat, the horizontal netting may be located no more than three floors below the finished concrete floor.

3.7.6.1.2 During demolition.

When the demolition of the exterior walls or the roof of a building occurs at a height greater than 6 stories or 75 feet, horizontal safety netting shall be provided at a level not more than two stories or 30 feet below the story from which the exterior walls and roof are being removed.

Exception: Demolition of exterior walls only for the purposes of the alteration, maintenance, or repair of a façade shall be in accordance with section 3.7.6.1.3.

3.7.6.1.3 During façade construction, alteration, maintenance, or repair.

Where unique hazards associated with the construction, alteration, maintenance, or repair of a façade exist to the public and property, horizontal safety netting shall be provided as required by the building official.

3.7.6.1.4 Supported scaffold alternative.

In lieu of horizontal safety netting in accordance with Sections 3.7.6.1.1 through 3.7.6.1.3, a supported scaffold may be utilized provided such supported scaffold covers the full width of the unenclosed perimeter, the scaffold is decked and flush against the building at the level where work is occurring, with no gap between the scaffold and the building greater than 3 inches (76 mm), and also provided that the scaffold is provided with netting and guardrails in accordance with this policy and other applicable state and federal requirements.

3.7.6.1.5 Hoisting area.

Where approved by the building official, horizontal safety netting may be omitted in designated crane, derrick, or hoisting areas.

3.7.6.1.6 Temporary removal.

Horizontal safety netting may be temporarily removed in the immediate area where active loading or unloading operations are occurring, or where perimeter work is occurring, or to relocate the nets to a higher level, provided that no concrete work, including formwork placement or stripping, no structural steel placement or assembly, and no work within 10 feet from an unenclosed perimeter of the building occurs on levels above the horizontal safety netting. Horizontal safety nets shall be reinstalled immediately following the end of active loading or unloading operations, or active work, or at the end of the workday, whichever occurs sooner.

3.7.6.1.7 Permanent removal.

Horizontal safety netting systems may be permanently removed as follows:

1. Horizontal safety netting systems installed for the construction of a building in accordance with Section 3.7.6.1.1 may be removed after all concrete has been poured at the highest level and all concrete stripping work at the highest level has been completed.
2. Horizontal safety netting systems installed for the demolition of a building in accordance with Section 3.7.6.1.2 may be removed after the demolition has progressed to within six stories or 75 feet above the ground or adjoining roof level.
3. Horizontal safety netting systems installed for façade work in accordance with Section 3.7.6.1.3 may be removed after all façade work above the level of the nets has been completed.

3.7.6.2 Horizontal safety netting systems requirements.

Horizontal safety netting systems shall meet the applicable requirements of Sections of ANSI/ASSE A10.11.

3.7.6.3 Tensile strength test.

The tensile strength of netting mesh and/or twine of a structural net utilized in conjunction with a horizontal safety netting system shall be confirmed by testing in accordance with ASTM D 5034 or ASTM D 5035. The testing criteria shall be developed by the registered

design professional who designed the safety netting system in accordance with section 3.7.3. Such testing shall occur prior to the installation of the net at the site for any net that has previously been used, and for any net that has been installed at the site for two years and every two years thereafter. Nets that do not meet the specified tensile strength as required by Section 3.7.3.5 shall not be utilized or shall be replaced.

3.7.6.4 Identification of nets.

Structural netting shall be identified in accordance with Section 7 of ANSI/ASSE A10.11. Debris netting shall be identified by a letter or other documentation from the manufacturer stating the description and model. The identification for structural netting and debris netting shall be kept at the site until the netting is removed.

3.7.7 GUARDRAIL SYSTEM.

A guardrail system shall be installed and maintained to protect all unenclosed perimeters.

Exceptions: A guardrail system is not required at:

1. The story at grade.
2. Levels where vertical safety netting is installed in accordance with Section 3.7.5.3. Levels where a supported scaffold covers the full width of the unenclosed perimeter, provided the scaffold is decked and flush against the building at such level where the unenclosed perimeter exists, with no gap between the scaffold and the building greater than 3 inches (76 mm), and also provided that the scaffold is provided with netting and guardrails in accordance with other applicable state and federal requirements.

3.7.7.1 Components.

Guardrail systems shall include a toprail, midrail, toeboard, and posts.

3.7.7.2 Height of railings and toeboard.

Toprails, midrails, and toeboards shall be located as follows:

1. The top of the toprail shall be located at a height of 39 to 45 inches (above the floor).
2. The midrail shall be located at a height approximately midway between the top rail and the floor, or where more than one mid rail is utilized; each shall be located equidistant from each other, the floor, and the top rail.
3. The toeboard shall be at least 3 ½ inches high and shall be installed so that there is not more than a ¼ inch gap between the floor and the bottom of the toe board.

Exception: When conditions warrant, the height of the top rail may exceed the 45-inch height provided additional mid rails are installed so that there is no vertical gap larger than 24 inches between any toeboard, midrail, or toprail.

3.7.7.3 Dimensions and materials.

Toprails, midrails, toeboards, and posts shall have the following dimensions and be constructed out of the following materials:

1. Toprails shall, at a minimum, consist of:
 - a. 2 inch by 4 inch (51mm by 102mm) 1,500 foot pounds per square inch fiber (stress grade) construction grade lumber;
 - b. 1½ inch nominal diameter (Schedule 40) pipe;

-
- c. 2 inch by 2 inch by 3/8inch structural angle; or
 - d. ¼ inch diameter noncorrosive wire cable made of mild plow steel.
 2. Midrails shall, at a minimum, consist of:
 - a. 1 inch by 6 inch 1,500 lb-ft/in² fiber (stress grade) construction grade lumber;
 - b. 1 ½ inch nominal diameter (schedule 40) pipe;
 - c. 2 inch by 2 inch by 3/8inch structural angle; or
 - d. ¼ inch diameter noncorrosive wire cable made of mild plow steel.
 3. Toeboards shall, at a minimum, consist of:
 - a. 1 inch by 6 inch lumber; or
 - b. Metal plank at least 3½ inches high.
 4. Toprails, midrails, and toeboards shall be securely fastened to upright posts spaced not more than 8 feet apart. Such posts shall, at a minimum, consist of:
 - a. 2 inch by 4 inch 1,500 foot pounds per square inch fiber(stress grade) construction grade lumber;
 - b. 1½ inch nominal diameter (schedule 40) pipe;
 - c. 2 inch by 2 inch by 3/8inch structural angle; or 4.4.A building column.

Exceptions:

1. Guardrail systems designed by a registered design professional capable of withstanding, without failure:
 - a. A force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point along the top edge. Where the force is applied in a downward direction, the top edge shall not deflect more than 6 inches and in no case to a height less than 39 inches above the floor; and
 - b. A load of at least 50 pounds applied in any downward or horizontal direction at any point along the toeboard.
2. Posts supporting wire cable toprails and midrails, as well as the toeboards utilized in connection with such wire cable toprails and midrails, may be spaced more than 8 feet apart provided that the posts are spaced such that where a force of 200 pounds is applied in a downward direction along the top edge, the top edge shall not deflect more than 6 inches and in no case to a height less than 39 inches above the floor.

3.7.7.4 Horizontal gap.

The guardrail system shall be installed so that there exists no horizontal gap larger than 1 inch as measured along the perimeter of the building from the edge of the guardrail system to any building column or façade.

3.7.7.5 Tensioning system.

When made of wire cable, top rails and mid rails shall be provided with a positive tensioning system, such as a turnbuckle, to keep the cable taut.

3.7.7.6 Dislodgement.

Guardrail systems shall be secured to prevent dislodgement by impact or wind.

3.7.7.7 Temporary removal.

Guardrail systems may be temporarily removed in the immediate area where active loading or unloading operations are occurring, or where perimeter work is occurring, provided that:

1. A controlled access zone is established to prevent unauthorized personnel from entering the area where the guardrail system is removed; and
2. Immediately prior to the removal of the guardrail system the floor is broom swept and cleared of all materials and equipment to a distance of at least 10 feet, in all directions, from the area where the guardrail system will be removed, except for material and equipment related to the loading or unloading operation or perimeter work or stored in accordance with policy.

3.7.7.7.1 Restoring guardrails.

The guardrail system shall be reinstalled immediately following the end of active loading or unloading operations, or active work, or at the end of the workday, whichever occurs sooner.

Exception: Where material overhangs overnight in accordance with ??.

3.7.7.8 Permanent removal.

Guardrail systems installed to protect unenclosed perimeters may be removed where vertical safety netting systems meeting the requirements of Section 3.7.5 have been installed.

3.7.8 MODIFICATIONS AND ALTERNATIVE SYSTEMS.

The building official may, based upon a written request from a registered design professional, modify the requirements for safety netting systems and guardrail systems required by this policy, including but not limited to the installation of alternative systems, provided such modification or alternative system meets or exceeds the level of safety afforded to the public and property by safety netting systems and guardrail systems installed in accordance with this section

3.7.8.1 Request content.

A request submitted under Section 3.7.8 shall include:

1. Details of the modification or alternative system to be utilized;
2. Any stipulations;
3. Demonstration that the request meets or exceeds the level of safety afforded to the public and property by safety netting systems and guardrail systems installed in accordance with this section;
4. Where applicable, a description of the practical difficulty of complying with code requirements;

-
5. Where applicable, a reference to the site safety monitoring program; and
 6. Where an alternative system is proposed, a minimum level of inspection in accordance with the recommendations of the manufacturer of the alternative system.

3.7.9 UNENCLOSED PERIMETER PROTECTION INSPECTION, USE, ADJUSTMENT, MAINTENANCE, AND REPAIR.

Safety net systems, guardrail systems, and alternative systems authorized under Section 3.7.8 shall be inspected, used, adjusted, maintained, repaired, and replaced in accordance with the design drawings, manufacturer recommendations, and the requirements of this code.

3.7.9.1 Safe condition.

Safety net systems, guardrail systems, and alternative systems authorized under Section 3.7.8 shall be maintained in a safe condition and used in a manner that eliminates hazards to the public and property. Any hazardous conditions or defects discovered with such shall immediately be brought to the attention of the responsible permit holder under Section 3.7.4.

3.7.9.2 Precautions.

Precautions shall be taken to prevent safety net systems, guardrail systems, and alternative systems authorized under section 3.7.8 from being damaged by sunlight, abrasion, sand, rust, welding, cutting operations, chemicals, and airborne contaminants, where such systems are susceptible to damage by such.

3.7.9.3 Inspections.

Safety net systems, guardrail systems, and alternative systems authorized under Section 3.7.8 shall be inspected for compliance with this code and required drawings daily, as well as after each impact loading event, installation, reinstallation, adjustment, maintenance, or repair of such, or any part or component of such. Where the job requires a site safety manager or coordinator in accordance with Section 3.1.7.1, the inspection shall be performed by the site safety manager or coordinator, and a written record of such inspection maintained as part of the site safety log. Where the job does not require a site safety manager or coordinator, the inspection shall be performed by a competent person designated by the permit holder in accordance with Section 3.7.4, with a record of such inspection prepared, initialed, and dated by such competent person.

3.7.9.4 Removing from service.

Safety net systems, guardrail systems, and alternative systems authorized under section 3.7.8 showing signs of mildew, corrosion, wear, tears, breaks, frays, damage, or deterioration that may substantially affect the strength of such shall be immediately removed from service.

3.7.9.5 Repair.

Repairs to safety net systems, guardrail systems, and alternative systems authorized under section 3.7.8 shall be in accordance with the specifications of the manufacturer of such and shall provide the original manufacturer factor of safety, or where none exists, shall be repaired in accordance with specifications developed by the registered design professional responsible for the design of the safety netting systems in accordance with Section 3.7.3.1

Exception: Structural nets and debris nets shall not be repaired

DRAFT

3.8 TEMPORARY USE OF STREETS, ALLEYS AND PUBLIC PROPERTY

3.8.1 STORAGE AND HANDLING OF MATERIALS.

The temporary use of streets or public property for the storage or handling of materials or of equipment required for construction or demolition, and the protection provided to the public shall comply with the provisions of the applicable governing authority and this chapter.

3.8.1.1 Obstructions.

Construction materials and equipment shall not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins or manholes, nor shall such material or equipment be located within 20 feet (6096 mm) of a street inter-section, or placed so as to obstruct normal observations of traffic signals or to hinder the use of public transit loading platforms.

3.8.2 UTILITY FIXTURES.

Building materials, fences, sheds or any obstruction of any kind shall not be placed so as to obstruct free approach to any fire hydrant, fire department connection, water main blow off, water valves, meter boxes, sewer cleanouts, water vaults, utility pole, manhole, fire alarm box or catch basin, or so as to interfere with the passage of water in the gutter. Protection against damage shall be provided to such utility fixtures during the progress of the work, but sight of them shall not be obstructed.



**City of Auburn
Inspection Services Department**

**4 Third-Party Inspection Program
(TPIP)**

2020 Edition

4.1 INTRODUCTION

4.1.1 PURPOSE:

The City of Auburn Third-Party Inspection Program (TPIP) establishes a building inspections procedure that utilizes qualified, third-party professionals in addition to the City of Auburn's Inspectors. The purpose of this document is to establish the policy and guidelines for the construction process in accordance with the TPIP and to:

1. Identify the types of structures that are subject to the TPIP.
2. Define the responsibility of all parties.
3. Qualifications to become a pre-qualified third party inspector;
4. Standardize code application.
5. Provide for an orderly and systematic approach for updating standards that apply to the TPIP.
6. Ensure that the TPIP modifications are uniformly applied.
7. Set forth a guideline for third-party inspectors to follow in the TPIP.

4.1.2 BASIS FOR THIRD-PARTY INSPECTIONS

Third party inspections (TPI) are not allowed by right. TPI's are intended to augment inspections mandated by City and the 2015 International Building Code (IBC). IBC sections 104.4 and 110.4 authorizes the building official to accept reports by pre-approved inspection agencies. The building official recognizes the use of TPI's as a means to augment the demand on daily City inspection services as a means to maintain high quality services delivery.

IBC 104.4 Inspections. *The building official shall make the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.*

IBC 110.4 Inspection agencies. *The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.*

4.2 APPLICABILITY

Structures that are subject to the TPIP include, but are not limited to:

1. All commercial structures for which a permit is obtained to construct a new building or to construct an addition to an existing structure with an estimated construction cost in excess of \$200,000. This excludes buildings or structures of Use Group R3 (Town Houses and Detached Single Family Dwellings), and R4. Minor tenant work done in an existing building(s) is also excluded from the scope of the TPIP.
2. All deep foundations, such as caissons and piles.
3. All post-tensioned buildings.

-
4. Buildings on problematic soil conditions.
 5. All elevated concrete slabs.
 6. Other structures determined by the Building Official, or their representative, to be of unusual design or where code reference standards require special architectural or engineering inspections.
 7. The Building Official may include or exclude a project from the TPIP due to its simplicity or complexity.

All supplemental permits for a project shall fall under the TPIP until such time the final Certificate of Occupancy (CO) is issued and that all permit requirements for the project are finalized. This includes, but is not limited to: soils and foundation construction, earth retention systems, pre-cast concrete construction, cast-in-place concrete, masonry construction, wood construction, wood framing, structural steel construction, insulation, finish systems, fire protection, life safety, electrical systems, mechanical systems, plumbing systems, fuel/gas systems, fire sprinkler systems, fire alarm systems, etc.

DRAFT

4.3 DEFINITIONS AND QUALIFICATIONS

The following words and terms shall, for the purposes of this manual and the City's TPIP have the meaning delineated below. See Attachment #2 for a more extensive list of responsibilities for many of the individuals mentioned.

NOTE: It is possible that multiple professionals share the titles defined below, for example, the term "Structural Inspector of Record" may be shared by one person who performs the foundation inspection and a second who performs inspections on the superstructure.

Agent: A full-time, qualified employee under the direct supervision of an inspecting *Registered Design Professional* retained to conduct continuous actual or assist with onsite inspections and testing.

Architect of Record (AR): The *Registered Design Professional* retained by the Owner to design and specify architectural construction and whose signature and State of Alabama architectural seal appear on the City-approved architectural construction documents.

Building Code: The current International Building Code (IBC) as amended by The City of Auburn

Certification: A statement of professional opinion by a qualified *Registered Design Professional* that indicates that the work under consideration, based upon their actual inspections, in their opinion and to the best of their knowledge meets the requirements of the City-approved construction documents and the City Code. Certifications must be signed and sealed by the qualified professional making the statement.

Construction Documents: Plans and other documents prepared for the purpose of obtaining a building permit.

City-Approved Plans: Construction Documents approved by the City including all approved revisions.

City of Auburn Inspector (COAI): The individual(s) employed by the COAIS, who oversees all third-party inspections and any projects falling within the purview of the TPIP.

City of Auburn Inspection Services Department (COAIS): The City of Auburn Inspection Services Department.

Contractor: A person who contracts on predetermined terms to provide labor and materials and to be responsible for the performance of a construction job in accordance with established specifications or plans.

Design Engineers of Record: The *Registered Design Professionals* whose designs are included in the City-Approved Plans (includes: Electrical Engineer of Record, Fire Protection Engineer of Record, Fire Protection Systems Designer of Record, Geotechnical Engineer of Record, Mechanical Engineer of Record, and Structural Engineer of Record).

Electrical Engineer of Record (EER): The *Registered Design Professional* retained by the Owner to design or specify electrical documents and whose seal and signature appear on any electrical documents.

Electrical Inspector of Record (EIR): The *Qualified Professional* retained by the Owner to provide third-party electrical inspections and testing services as approved by the City. The EIR cannot be an individual affiliated with the *EER*.

Fabrication and Erection or Shop Drawing Documents: Written, graphic, and pictorial documents prepared or assembled after issuance of a permit describing the design, location, and physical characteristics of building components necessary for fabrication, assembly, or erection of project elements or systems. These documents usually require a supplemental City review, permit, and/or approval.

Final Inspections Report: A signed and sealed certification document from each *Third-Party Inspector of Record* that performed inspections, which indicates that the construction, having been inspected in the qualified professional's opinion and to the best of the qualified professional's belief, complies with the *City-Approved Plans* and specifications. This includes a record of all Routine Inspection Non-Compliance Reports having been satisfied.

Fire Protection Engineer of Record (FPER): The *Registered Design Professional* retained by the Owner to design or specify building fire protection and egress documents and whose seal and signature appear on any fire protection documents.

Fire Protection Inspector of Record (FPIR): The *Qualified Professional* retained by the Owner to perform third-party building fire protection and egress inspections and testing services as approved by the City. The FPIR cannot be an individual affiliated with the *FPER* or *FPSD*.

Fire Protection Systems Designer of Record (FPSD): The *Qualified Professional* retained by the Owner to design or specify fire protection system documents and whose seal and signature appear on any fire protection system documents.

Fire Protection Systems Inspector of Record (FPSI): The *Qualified Professional* retained by the Owner to perform third-party fire protection system inspections and testing services as approved by the City. The FPSI cannot be an individual affiliated with the *FPSD* or *FPER*.

General Contractor (GC): The construction company who coordinates building construction and is retained by the Owner.

Geotechnical Engineer of Record (GER): The *Registered Design Professional* retained by the Owner to design or specify earthwork and foundations and whose seal and signature appear on any geotechnical documents.

Geotechnical Inspector of Record (GIR): The *Qualified Professional* retained by the Owner to perform third-party geotechnical inspections and testing services as approved by the City. The GIR cannot be an individual affiliated with the *GER*.

ICC Certification: Voluntary certifications issued by the International Code Council (ICC), a nonprofit organization established in 1994 that is dedicated to developing a single set of comprehensive and coordinated national model construction codes. ICC Certification is based on the results of one or more examinations administered by the ICC to establish proficiency in professional categories.

Inspection: The periodic observation of work and the performance of tests for certain building or structure components to check code compliance of a system or group of assembled components to assure compliance with the City Code.

Inspections Division (ID): The individual(s) employed by the City of Auburn Inspection Services Department (COAIS) in the Inspections Division.

Inspection and Testing Agency: Agency or agencies retained by the Owner and approved by the Building Official or their designee to perform special inspections and materials testing as required by the International Building Code (IBC) and the City.

International Building Code (IBC): A model code developed by the International Code Council and adopted with amendments by the City of Auburn. These adopted codes include, Building, Residential, Plumbing, Mechanical, Fuel Gas, Fire, Accessibility, Energy and Property Maintenance.

Mechanical Engineer of Record (MER): The *Registered Design Professional* retained by the Owner to design or specify mechanical documents and whose seal and signature appear on any mechanical documents.

Mechanical Inspector of Record (MIR): The *Qualified Professional* retained by the Owner to provide third-party mechanical system inspection and testing as approved by the City. The MIR cannot be an individual affiliated with the *MER*.

Non-Structural Elements: Elements of a building that are not primary or secondary structural elements such as exterior curtain walls and cladding, non-load bearing partitions and stair railings. Inspection is required to assure compliance with the applicable City Building Code.

Owner: Owner or owners of the free hold premises or lesser estate therein; a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, or lessee in control of a building/structure to be constructed/altered or the Owner's duly authorized representative.

Pre-Engineered Structural Elements: Structural elements specified by the Structural Engineer of Record, but which may be designed by a specialty-registered design professional.

Examples: may include open web steel joists and joist girders; wood trusses; combination wood, metal and plywood joists; pre-cast concrete elements; prefabricated wood or metal buildings; tilt-up concrete panel reinforcement and lifting hardware.

Primary Structural System: The combination of elements that serve to support the weight of the building's structural shell, the applicable live load based upon use and occupancy, and environmental loads such as snow, wind, thermal loads and seismic loads. Items such as curtain wall members, non-load bearing walls, or exterior facades are not part of the primary structural system.

Project: The totality of construction activity covered by specific construction permit(s) and which requires field inspections or special inspections pursuant to the Construction Codes.

Qualified Professional: An individual practicing within their area of expertise meeting the qualifications established by the City through this document and the requirements of the State Board of Licensed Professionals (see Attachment #2, page 31, for field specific qualifications).

TPIP Certification Form: The final, signed and sealed certification documents (includes all field specific, standard certification forms) from each *Third-Party Inspector of Record* that performed inspections, which indicate the construction elements specified for their inspection that, having been inspected and in the qualified professional's opinion and to the best of their belief, comply with the *City-Approved Plans*, City Code and specifications (see Attachment #3).

Registered Design Professional (RDP): A professional licensed in the State of Alabama and practicing within their field of expertise.

Routine Inspection Report: Written documentation of each inspection done by a Third-Party Inspector of Record or their agent.

Secondary Structural Elements: Building elements that are structurally significant for the function they serve, but are not necessary for the stability of the primary structure.

Examples include support beams above the primary roof structure, which carry a chiller, elevator support rails and beams, retaining walls independent of the primary building, flagpole or light pole foundations, false work required for the erection of the primary structural system, steel stairs or railings, etc.

Statement of Third-Party Inspections (STPI): A form (see Attachment #1) prepared by the Owner and appropriate *Registered Design Professionals* of Record that is submitted by the permit applicant for review and approval by the City. The STPI identifies the names and qualifications of all professionals involved. The STPI is required as a condition of permit issuance.

Structural Engineer of Record (SER): The *Registered Design Professional* retained by the Owner to design or specify structural documents and whose signature and seal appear on such documents.

Structural Inspector of Record (SIR): The *Qualified Professional* retained by the Owner to provide third-party structural inspection and testing, as approved by the Building Official or their designee. The SIR cannot be an individual affiliated with the *SER*.

Subcontractor (SC): One who takes a portion of a contract from the principal contractor or from another subcontractor.

Third Party Inspector subcontractor (TPISC): One who takes a portion of a contract from the Third Party Inspector of Record or from another Third Party Inspector of Record subcontractor.

Third-Party Inspector(s) of Record (TPIR): The qualified, third-party professional(s) retained by the City and named in the STPI to provide discipline specific inspections and material services as approved by the Building Official or their designee (includes: *EIR, FPIR, FPSI, GIR, MIR* and *SIR*).

4.4 PRE-PERMIT PHASE

4.4.1 STATEMENT OF THIRD-PARTY INSPECTIONS

Owners of projects that are subject to the TPIP must submit, as part of the permit application, the names of all design professionals of record.

The Fire Protection System Designer(s) of Record (FPSD) is not required to submit at permitting. It is the responsibility of the Owner and General Contractor to make the COAIS and the TPI aware of their contact information within five (5) business days of their contract approvals.

Third-Party Inspectors of Record (TPIR), and the Inspection and Testing Agency retained to provide inspections and/or testing services must submit the names and qualifications to the Building Official prior to the pre-construction meeting. Refer to Attachment #1 in this document. An individual's signature on the STPI certifies that they have read and understand their role under the TPIP.

NOTE: It must be clearly understood that each of the Third-Party Inspectors of Record (*EIR, FPIR, FPSI, GIR, MIR, and SIR*) must be unaffiliated with the Registered Design Engineers of Record (*EER, FPER, FPSD, GER, MER, and SER*) and the installer/contractor. It is assumed that the design professionals will field verify the installation of their designed or specified documents; HOWEVER, this verification is not part of the TPIP process. In addition, the Third-Party Inspectors of Record (*EIR, FPIR, FPSI, GIR, MIR, and SIR*) must be unaffiliated with City officials or current/previous City employees as outlined in all applicable State and local codes of ethics. It is the Third-Party Inspection Agency's responsibility to ensure its officers, directors, employees and agents are in full compliance with such codes of ethics.

4.4.2 FEES AND COST

Fees and costs associated with the performance of TPIR shall be borne by the Owner. The estimated amount of the third party inspection cost will be included in the fees at time of permitting. The owner will guarantee they are responsible for the cost of the TPI's and provide a bond to cover any expenses that should occur in which the owner does not provide payment for services encumbered by the TPI. The owner will pay for any overages for the cost of the TPI's.

Failure to have the requisite inspections may result in the City issuing a stop work and/or assessing special investigation fees until the inspections are brought up to date. Each out-of-date inspection may result in a separate special investigation fee (\$100).

4.4.3 RELEVANT CODES AND STANDARDS

The provisions of the relevant codes shall determine the applicability of a project to any technical codes or standards referenced in these requirements or standards in effect as of the submission date of the permit application.

4.4.4 INDEPENDENCE

Third Party Inspectors (hereafter Inspectors) must be able to demonstrate and maintain independence from any person or firm responsible for construction of work they will inspect. The Inspector shall have no financial or personal relationship with the property owners, designers, permit holders, contractors or sub-contractors being inspected. Inspectors shall not have:

1. Accepted monies or any other item of value other than remuneration for third party inspection services; or
2. Performed services or other work other than third party inspections for the property owners, designers, permit holders, contractors or sub-contractors being inspected for a period of 2 years prior to performing such inspection.

The Inspector must always maintain a high degree professionalism, neutrality and autonomy necessary to secure the health, safety and welfare provisions of the IBC and other related statues, law or regulations. Although paid by the permit holder, the TPI is ultimately responsible to the City of Auburn Building Official. If the Inspector discovers any attempts by the responsible party to cover or conceal discrepancies or rejected work, the Inspector shall immediately contact the building official. The Inspector shall not perform any further TPI's on the project until approval is obtained from building official.

The Inspector is required to complete the attached "Affidavit of Independence" and submit it to the City of Auburn Building Official prior to approval as a TPIR.

4.4.5 THIRD PARTY INSPECTOR INSURANCE REQUIREMENTS

The Inspector or agency must submit proof of general liability insurance, professional errors and omissions insurance and workers' compensation insurance if the inspector or agency is required by law to carry the coverage. Limits of liability for general liability insurance shall be, at a minimum, \$1,000,000 per occurrence, \$1,000,000 personal and advertising injury, \$1,000,000 general aggregate and \$1,000,000 products completed operations aggregate. Limits of liability for professional liability shall be, at a minimum, \$ 5,000,000 per occurrence or claim and \$5,000,000 aggregate. If any of the liability coverages are on a claims-made base, the inspector or agency must carry coverage at the limits specified in this paragraph for two (2) years following completion of the work specified in this agreement. If the inspector or agency is required by law to carry workers' compensation insurance, the coverage will provide statutory benefits and employers' liability limits of \$500,000 each accident, \$500,000 disease - each employee and \$500,000 disease - policy limit. If the inspector or agency is not required by law to carry workers' compensation insurance, the inspector or agency acknowledges that they are responsible for any workers' compensation type benefits. The inspector's or agency's insurance is primary. If the inspector carries higher coverage limits, the higher limits apply. The inspector or agency is responsible for the payment of any deductibles or self-insured retentions. The insurance company must state that they will provide a thirty (30) days' written cancellation notice to the City. The Inspector or agency shall provide proof of insurance prior to approval as a TPI.

4.4.5.1 AUTO INSURANCE

The Third Party Inspector will provide Auto Liability Insurance at a minimum of 1,000,000.00 combined single limit. The City of Auburn should be listed as an additional insured under the auto liability coverage.

4.4.5.2 THIRD PARTY INSPECTOR SUBCONTRACTORS

The TPI shall require certificates of insurance from its TPI subcontractors. TPI subcontractors will carry limits of insurance equal to or greater than those carried by the TPI. These certificates shall evidence waivers of subrogation in favor of the TPI and the City, and shall be made available to the City upon request.

4.4.6 INDEPENDENT CONTRACTOR

The relationship of the TPIR to the City, and its employees and agents, is that of an independent TPIR contractor and not an employee. TPIR acknowledges that the true nature of its relationship is that of an independent TPIR contractor in that TPIR may use any appropriate method of conducting its services based on its knowledge, skill, judgment, means and methods.

4.4.7 INDEMNIFICATION

The TPIR, inspector or agency shall be solely responsible for any and all of its actions, errors and/or omission, and agrees to indemnify and hold harmless the City, its officials, representatives, agents, servants and employees, from and against any and all claims, actions, lawsuits, damages, judgments, liability and expense, including attorneys' fees and litigation expenses arising from the inspector's or agency's performance of TPI actions. This obligation survives the payment of any losses by the inspector's or agencies insurance carrier.

4.4.8 BUSINESS LICENSE

The Inspector or agency performing TPIRs shall provide documentation of an appropriate business and license(s) as required by the City of Auburn.

4.4.9 TRAINING & MEETINGS

Inspectors maintaining an approval status or who are providing continuous inspection services shall have at least one qualified company representative attend designated City TPIR meetings as necessary. All inspectors shall attend any required training to maintain a professional license or certification.

4.4.10 THIRD PARTY INSPECTOR AND LABORATORY QUALIFICATIONS

Third party inspectors must demonstrate the knowledge, skills and abilities to perform inspections in their area of expertise. Not only must they demonstrate a technical knowledge of the code and trade they inspect, they must also demonstrate that they have applicable knowledge of City ordinances and regulations. Inspection and Testing Agency personnel shall perform only those services in which they have demonstrated competency through such a recognized certification or registration program and shall be under the direct supervision of an Alabama Registered Design Professional. Third party inspectors must provide the following for evaluation and approval purposes to the building official. Approval of a third party inspector shall be in writing from the building official.

4.4.10.1 Registration and Certification

The following shall serve as minimum qualifications for all inspectors:

1. Alabama registration as an inspector in the specific area(s) of inspections performed; and

-
2. International Code Council (ICC) certification(s) as an inspector in the specific area(s) of inspections performed; or
 3. An Alabama Registered Design Professional (RDP) practicing within their area of competency as related to the area of inspection; or
 4. Certified by examination through ACI, AWS, ASNT, NICET, WACEL, or other organizations whose programs are recognized by the City and approved in writing by the Building Code Official
 5. Individuals or firms approved to perform special inspections as specified in 2015 IBC §110.3.9 within their area of qualification, competency and operating under the direction of an Alabama RDP.

4.4.10.2 Experience

The Inspector shall demonstrate knowledge of the applicable codes, Alabama modifications, City ordinances and other applicable City regulations by demonstrating the following minimum experience:

1. A minimum of five years of experience conducting inspections within the specific area of expertise as regulated by IBC; or
2. Applicants may also submit for consideration additional qualifications to substantiate equivalent experience. This may include engineers-in-training that include a college degree in subject area augmented with field inspection experience and supervision of an Alabama RDP; or
3. Applicants may substitute two years of field construction supervision experience for each one year of field inspection experience if it is relevant to the area of inspections being sought for approval. Field construction supervision experience may replace up to three of the five years of inspection experience.

However, the building official reserves the right to require more than the above minimum requirements in specific situations, at his/her sole discretion.

4.4.10.3 Annual Renewal of Third Party Inspector Qualification

To maintain approval to conduct third party inspections in The City of Auburn, the Inspector shall submit, one month before their approval anniversary date, all the following:

1. Proof of attendance of any mandatory training to maintain registration or professional qualifications;
2. Proof of the required insurance; and
3. Proof of business license.

Failure to submit the above documentation will result in suspension status and suspension of inspection privileges. The Inspector or agency will be required to be re-approved before being authorized to perform inspections.

4.4.10.4 Laboratory Qualifications

Laboratory facilities must be accredited for the testing conducted by an agency such as AALA, NVLAP, WACEL, or other organizations whose programs are recognized by the City and approved in writing by the Building Code Official. All laboratory facilities must meet the requirements of ASTM E329, ASTM D3740, and ASTM C1077 in addition to the requirements

outlined in this Program. The TPIR shall accredit on-site laboratory facilities as an extension of an accredited laboratory. The TPIR shall submit resume and documentation, for approval by the City, of inspection and testing personnel and laboratories prior to the Pre-Construction Meeting.

DRAFT

4.5 PRE-CONSTRUCTION MEETING:

4.5.1 PRE-CONSTRUCTION MEETING

A Pre-Construction Meeting is required for every project that is subject to the TPIP as a condition of permit issuance. The meeting shall take place after the plans and the STPI have been reviewed and approved by the City and prior to issuance of the permit.

4.5.2 PARTICIPANTS IN THE PRE-CONSTRUCTION MEETING:

The following construction team members shall participate in the meeting, as required:

1. Owner or Owner's duly authorized representative
2. Architect of Record (AR)
3. Design Engineers of Record
4. Electrical Inspector of Record (EIR)
5. Fire Protection Inspector of Record (FPIR)
6. Fire Protection Systems Inspector of Record (FPSI)
7. Geotechnical Inspector of Record (GIR)
8. Mechanical Inspector of Record (MIR)
9. Structural Inspector of Record (SIR)
10. General Contractor (GC)
11. City Staff - City Inspector (COAI)
12. Third Party Inspector of Record representative
13. Other parties deemed appropriate by the Owner or City

4.5.3 PURPOSE:

The purpose of the Pre-Construction Meeting is to review the inspection requirements of the project and establish communication. The Owner or Owner's representative is responsible for ensuring that the Architect, General Contractor, Design Engineers of Record and Special Inspectors attend.

The City of Auburn will conduct the meeting. At a minimum, the following shall be discussed:

1. Construction Project Requirements: Construction requirements of the City of Auburn TPIP, including construction methods, site safety, fire hazard prevention and temporary electrical installations during the construction process.
2. Responsibilities: Clarify the roles and responsibilities of each party. Refer to the Definitions and Attachment #2.
3. Communication: Organize channels of communication between the City, Owner's representatives, and members of the construction and design teams. Identify who is to obtain copies of various inspections reports, certifications, and the time limitation on submitting those reports to COAI. Verify that the contact information on the Statement of Third-Party Inspections (Attachment #1) is correct.
4. Phased Construction: Requirements for phasing or separations of permits and certificates of completion.

-
5. Schedule of Inspections: Estimate a timeline for building construction and identify areas of concern to specific inspections. Site visits for each Third-Party Inspector of Record must be at intervals appropriate to the stage of construction or as otherwise agreed by the Owner, Design Professional, or City representative. Each inspection must be documented for COAIS to become clearly familiar with the progress and quality of the work completed and to determine, in general, if the work is being performed in a manner conducive to completion in accordance with the City-Approved Plans.

4.6 CONSTRUCTION PHASE

4.6.1 REPORTS AND COMMUNICATIONS FLOW

The Third-Party Inspectors of Record (TPIR) and the Inspection and Testing Agencies shall provide Routine Inspection Reports as required by the Statement of Third-Party Inspections and this TPIP document within five business days of inspection.

Site visits for each TPIR must be at intervals appropriate to the stage of construction or as otherwise agreed by the COAIS, Owner, and Design Professional or their representative. Each visit must be documented, in writing, for the COAIS to become clearly familiar with the progress and quality of the work completed and to determine, in general, if the work is being performed in a manner conducive to completion in accordance with the City-Approved Plans. The TPIR shall notify the COAIS if their services have not been requested for a project in a manner consistent with the normal construction schedule of a similar building, or if they suspect that a project is proceeding without inspections.

Reports shall include:

1. The applicable permit numbers
2. Project name
3. Title: Third Party Inspections
4. The Inspector's name, address, phone number and E-mail
5. The name of the approved agent if different from above
6. Project street address
7. Inspection type
8. Discipline (Architect, Structural, Mechanical, Electrical Fire General, Fire System)
9. Date and time of the inspection
10. City approved permit plans were available on site for inspection
11. The inspection results with deficiencies properly identified
12. Verification that previous inspection discrepancies were known, reviewed and approved or need correction where applicable
13. A statement that reads, "This inspection report is subject to review and approval by the City of Auburn Inspection Services Department.

Each report shall be prepared in a manner that is legible, describes what was inspected, and any modifications or deficiencies encountered. Follow-up reports shall be prepared when deficiencies have been corrected and inspected. These reports shall clearly indicate compliance or non-compliance. Reports shall also indicate if work is proceeding without inspection approval.

If the Routine Inspections Report includes deficiencies, the Report shall describe the nature and specific location of the deficiency and include a description of the corrective action recommended by the Registered Design Professional of Record. If a similar deficiency exists throughout the project, it may be so noted once, but corrections must be noted individually.

The TPI shall bring nonconforming items to the attention of the COAIS, contractor, owner by the issuance of a nonconforming report, and note all such items in the daily report. The TPI inspector shall also notify the Engineer or Architect of Record. Reports of non-compliance shall give the TPI the authority to suspend all work in the areas of such non-compliance, until the noncompliance is corrected and a field report indicating compliance has been issued by the TPI.

The TPI is responsible to immediately notify the COAIS of any structural failure, collapse or condition that in the opinion of the TPI inspector may possibly lead to a structural failure. The COAIS will provide for after-hours notification of emergency conditions. Those numbers will be made available to all Inspection Agencies.

All reports shall be sent to the COAIS, Owner or Owner's designee, appropriate design professionals of record, and to any such others that the Owner or City may direct. The parties who are to receive Routine Inspections Reports will be identified and confirmed at the Pre-Construction Meeting.

4.6.2 ROUTINE INSPECTION REPORTS GUIDELINES

1. Each time an agent of the Third-Party Inspector completes an inspection or test, an Inspection Report shall be filed immediately with COAIS and the Contractor.
2. The inspection or testing report shall be signed and sealed by an approved Alabama Professional Engineer as shown on the TPIP agreement.
3. Inspection reports shall be legible. Only typed or printed reports are acceptable unless an alternative is deemed satisfactory. Reports that are not legible will be rejected and the Third-Party Inspection Agency notified that a replacement is required.
4. Type of inspection, as much as practical, should be specific: This may include terms such as but not limited to: subgrade, concrete placement, backfill, forming, framing, insulation, rough in (electrical, mechanical, plumbing, etc.), accessibility, brick tie, and final.
5. The Contractor shall maintain a log of inspection reports and ensure that it is available to the City, Owner, and third party agents, on site at all times. This log shall be given to the City and Owner upon completion of the project unless mutually agreed otherwise.
6. Each report shall be completed in its entirety.
7. The reviewer of the report shall be the signatory of the Third-Party Inspection Agreement.
8. Room numbers, sections, wing, floor, or column line shall reference inspection location when partial inspections are completed.
9. Inspections conducted on the same day, for the same type, by the same inspector may be recorded on one report.

-
10. Outstanding issues are required to be noted when an inspection fails.
 11. The architectural inspector must view the foundation certification prior to issuing an inspection report to allow the erection of the superstructure.
 12. The structural inspector must issue a “passing” inspection report prior to the general contractor permitting trade (electrical, mechanical, etc.) work to proceed in that portion of the structure.
 13. The architectural inspector must view the “passing” inspection reports for the other disciplines and the superstructure certification prior to issuing their inspection report prior to a framing inspection. The architectural inspection report must be on site and submitted to the City prior to requesting an framing inspection.
 14. The architectural inspector must view the “passing” final inspection reports for the other disciplines prior to conducting the final inspection. A final inspection report shall be completed prior to requests to the City to issue stocking, temporary, or final occupancies.
 15. A narrative section may be used for positive comments and to record inspection information, i.e., observed UFER ground, reviewed reports of others, hydrostatic test conducted, etc.

4.6.3 CHANGES IN CRITICAL SERVICES

In the event that the Design Professionals or Inspection and Testing Agencies of Record are changed during the course of the project, the Owner shall notify the Building Official in writing, within one business day of the action taken by the Owner.

The Owner shall provide to the Building Official a written explanation for such change prepared and signed by the departing party. It must identify the replacement organization or individual with whom they have contracted; must furnish the documentation necessary to show that such organization or individual is qualified for the work as required herein; and must provide a revised inspection agreement signed by the new party.

The departing party must provide a job status report indicating completed inspections and known deficiencies. This report must be signed and sealed by an approved professional, licensed in the State of Alabama, and practicing within their field of expertise.

COAIS may Stop Work if, in the Department’s opinion, work otherwise would proceed without adequate inspection. COAIS will authorize a recommencement of work only when it is satisfied that the integrity of the inspection can be assured.

The ultimate responsibility and final certification is with the replaced inspection agency.

COAIS may Stop Work and withhold any Certificate of Occupancy until adequate and satisfactory certifications are presented to the City.

4.7 PERFORMANCE REVIEWS

City of Auburn may periodically review the performance of any professionals utilized in the TPIP. If a professional is determined to not be performing satisfactorily, COAIS will notify the TPI to provide a replacement that is acceptable.

The building official may suspend or revoke inspection privileges of an approved inspector or agency for just cause. Failure to strictly comply with all of the below terms may result in inspection reports being rejected and suspension or termination of approval to conduct TPI.

-
1. Failure to maintain required certifications or licenses
 2. Failure to maintain the minimum required insurance
 3. Failure to adhere to the requirements for inspection scheduling or reporting
 4. Failure to perform proper inspections in accordance with the code and City ordinances, policies and the TPI program
 5. Failure to attend training or meetings that are required by TPI program
 6. Failure to follow the written City directives when unacceptable inspection practices or results are identified
 7. Evidence of misrepresentation of fact that led to approval by the City
 8. Failure to maintain independence from the individuals or firms responsible for the project construction being inspected
 9. Failure to have City approved inspectors performing inspections
 10. Falsification of any reports
 11. Any act or omission that is deemed by the City to violate the letter or intent of the TPI program or any laws or ordinances of the Federal Government, State of Alabama or City of Auburn.

4.7.1 THIRD PARTY INSPECTOR REVOCATION

4.7.1.1 FRAUDULENT/INCOMPETENT CERTIFICATIONS

COAIS will utilize established Departmental guidelines for dealing with fraudulent certifications and incompetent individuals and/or agencies. These guidelines include the suspension of the acceptance of ANY certifications from the party involved and/or filing of complaints with the appropriate licensing/registration board.

4.7.1.2 THREATS TO PUBLIC HEALTH AND SAFETY

If COAIS's determines that the subject agreement constitutes a threat to public health, safety, or welfare, or is in conflict with the City, State, or other government goals or purposes, the TPI will be notified by COAIS to withdraw the third-party inspection services and COAIS will assign City inspectors to monitor and inspect the permitted work until such time as the situation is resolved.

4.8 POST CONSTRUCTION PHASE

4.8.1 FINAL REPORT OF THIRD PARTY INSPECTIONS

Upon completion of the inspections and testing, the Third-Party Inspectors of Record (TPIR) and any Inspections and Testing Agency utilized, shall submit a Final Report of Inspection to the COAIS referencing all Routine Inspection Reports issued. The Final Report of Inspection is submitted after the inspection specified has been completed for the project. Reports shall include:

1. The applicable permit numbers
2. Project name
3. The Inspector's name, address, phone number and E-mail
4. The name of the approved agent if different from above

-
5. Project street address
 6. Inspection type
 7. Discipline (Architect, Structural, Mechanical, Electrical Fire General, Fire System)
 8. Date and time of the inspection
 9. Inspection reports numbered _____ to _____, and testing reports numbered _____ to _____, submitted prior to this final report form a basis for, and are to be considered an integral part of this final report.
 10. The inspection results with deficiencies properly identified
 11. Verification that previous inspection discrepancies were known, reviewed and approved or need correction where applicable
 12. A statement that reads, "This inspection report is subject to review and approval by the City of Auburn Inspection Services Department."
 13. A statement that reads, "To the best of my information, knowledge and belief, the inspections specified for this project, have been completed. In my professional opinion, the inspections have been found to comply with City-approved documents and project specifications and the City of Auburn adopted codes.
 14. Sign and Affix P.E. Seal to document

4.8.1.1 TPIP CERTIFICATION FORM

Upon acceptance of the Final Report of Inspection, each Third-Party Inspector of Record (TPIR) and any Inspections and Testing Agency utilized, shall submit a TPIP Certification Form to the Building Official, Owner, and others as designated. Refer to Attachment #3. The report must provide a professional opinion stating that, to the best of their knowledge, information, and belief, the work observed was constructed in accordance with the City-Approved Plans, construction documents, adopted City of Auburn codes, State and Federal regulations. Submit any certification forms (NFPA, UL, FM, ASCE, etc.) with the TPIP Certification Form.

ATTACHMENT 1

STATEMENT OF THIRD-PARTY INSPECTIONS

Permit applicants are required to submit a Statement of Third-Party Inspections (STPI) as a condition for permit issuance. This statement shall certify that all third-party inspections shall occur in accordance with the Third-Party Inspection Program. The STPI shall include a list of the individuals (agents), approved agencies, and firms intended to be retained for conducting such inspections and the function in which each Third-Party Inspector is serving must be clearly designated. AN INDIVIDUAL'S SIGNATURE ON THIS STPI CERTIFIES THAT THEY UNDERSTAND THE ROLE THEY ARE UNDERTAKING IN THE TPIP. The City reserves the right to require notarization of any signature included in this document.

This Attachment may be used "as is" or may be modified to accommodate unique requirements of a specific project. These pages must identify the project name, location, Owner, Design Engineers of Record, Third-Party Inspectors of Record (TPIR), any Inspections and Testing Agency of Record (if different from the TPIR), and the General Contractor.

The qualifications of the TPIR and/or any Inspections and Testing Agency of Record are reviewed and approved by the Building Official or their designee as part of the permitting process. The definitions and qualifications for individuals referenced in this STPI can be found in the City of Auburn TPIP Manual (Section 4.3 and Attachment #2).

Documentation supporting any individual's qualifications may be requested at any time and is to remain on file with COAIS.

To help assure a complete understanding of responsibilities and reporting requirements, the TPIR identified on this STPI, select COAIS representatives, and other appropriate parties must attend a pre-construction meeting. Design Engineers of Record are required to attend this meeting unless directed otherwise by the Owner or City representative. This STPI and the qualifications of the TPIR and/or any Inspection and Testing Agency are reviewed again by City Code Officials and approved at the Pre-Construction Meeting prior to the issuance of a permit.

The Fire Protection System Designer(s) of Record (FPSD) is not required to be listed in the STPI. It is the responsibility of the Owner and General Contractor to make the COAIS and the TPI aware of their contact information within five (5) business days of their contract approvals.

NOTE: It must be clearly understood that each of the Third-Party Inspectors of Record (EIR, FPIR, FPSI, GIR, MIR and SIR) selected must be unaffiliated with the Design Engineers of Record (EER, FPER, FPSD, GER, MER, and SER) and the installer. It is assumed that the design professionals will field verify the installation of their designed or specified documents; HOWEVER, this verification is not part of the TPIP process.

**CITY OF AUBURN
INSPECTION SERVICES DEPARTMENT
STATEMENT OF THIRD-PARTY INSPECTIONS**

Project Name: _____

Building Address: _____

Owner:

Company's Legal Name: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Officer:

Name: _____ Title: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Resident Agent/Program Contact (Owner's Authority):

Name: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

The authority for implementing this Third-Party Inspection Procedure is found in the 2015 IBC, Section 110, titled, "INSPECTIONS." The undersigned hereby agrees that inspections of the structure being constructed will be carried out in compliance with the rules and procedures outlined in the City of Auburn TPIP Manual.

The Owner further agrees that compliance with this agreement and procedures during construction is a requirement for the issuance of a valid Certificate of Occupancy at the completion of construction.

**CITY OF AUBURN
INSPECTION SERVICES DEPARTMENT
PRIMARY CONTACTS**

OWNER

Full Legal Name (Printed): _____

Signature: _____ Date: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

ARCHITECT (AR):

Company Name (Printed): _____

Officer's Name and Position (Contact): _____

Signature: _____

Title: _____ Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

GENERAL CONTRACTOR (GC):

Company Name (Printed): _____

On Site Representative's Full Legal Name (Printed): _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

**CITY OF AUBURN
INSPECTION SERVICES DEPARTMENT
DESIGN ENGINEER OF RECORD**

ELECTRICAL ENGINEER OF RECORD (EER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE PROTECTION ENGINEER OF RECORD (FPER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

GEOTECHNICAL ENGINEER OF RECORD (GER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

MECHANICAL ENGINEER OF RECORD (MER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

STRUCTURAL ENGINEER OF RECORD (SER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE SPRINKLER ENGINEER OF RECORD (FSER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE ALARM ENGINEER OF RECORD (FAER):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

**CITY OF AUBURN
INSPECTION SERVICES DEPARTMENT
THIRD PARTY INSPECTORS OF RECORD**

ELECTRICAL INSPECTOR OF RECORD (EIR):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE PROTECTION INSPECTOR OF RECORD (FPIR):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE PROTECTION SYSTEM INSPECTOR (FPSI):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

GEOTECHNICAL INSPECTOR OF RECORD (GIR):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

MECHANICAL INSPECTOR OF RECORD (MIR):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

STRUCTURAL INSPECTOR OF RECORD (SIR):

Full Legal Name: _____ Date: _____

Company Name (Printed): _____

Signature: _____

Alabama Registration Number: _____

Officer's Name (if different from Above): _____

Officers Signature: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip Code: _____

This Statement of Third-Party Inspections is submitted as a condition for permit issuance in accordance with the City of Auburn TPIP requirement. Third-Party Inspectors of Record shall keep records of inspections and testing. They shall furnish inspection and test reports to the City and to the Registered Design Professionals of Record, as appropriate. All discrepancies shall be brought to the attention of the contractor for correction. Documents for corrective work must be prepared, signed and sealed by the appropriate Registered Design Professional and must carry the City stamp of approval. Discrepancies must be corrected and re-inspected prior to advancing to the next stage of construction. If the discrepancies are not corrected within a reasonable period, the discrepancies shall be brought to the attention of the City Building Official and to the Registered Design Professionals of Record, as appropriate. Routine Inspection Reports shall be submitted periodically at a frequency agreed upon by the Owner and the City prior to the start of work (typically at the Pre-Construction Meeting). Test reports shall be submitted within ten (5) days of the completion of the test to the City. Any critical deficiencies must be reported immediately. A Final Report of Third-Party Inspections documenting completion of all required inspections and correction of documented discrepancies shall be submitted prior to the issuance of the Certificate of Occupancy

Third Party Inspector Representative:

Type or Print Name Date

Signature: _____

Reviewed by Design Professional of Record:

Type or Print Name Date

Signature: _____

Building Official's (or Representative's) Acceptance:

Type or Print Name Date

Signature: _____

ATTACHMENT 2

GENERAL RESPONSIBILITIES

PRINCIPAL PARTIES

The following are general responsibilities of the principal parties to the constructed project that are affected by Third-Party Inspections. This list is not intended to be all-inclusive. The Owner, the Building Official, or his designee may assign to the parties identified below and to others additional responsibilities. Those responsibilities will be explained and confirmed at the Pre-Construction Meeting.

4.8.2 OWNER (OWNER'S REPRESENTATIVES):

1. Submits permit applications that include a complete statement of inspections.
2. Retains registered Professional Engineers and Architect of Record, who are duly registered in the State of Alabama.
3. Prepares estimated time schedules.
4. Notifies the City of the starting date of the project prior to the initiation of construction (72 hours advanced notification is required on all projects).
5. Oversees the design, construction, and permitting for the project.
6. Verifies full-time construction inspections and testing of all stages of construction as required.
7. Reviews site visits of all stages of construction by the inspection team and the Architect of Record to become familiar with the progress and quality of work completed and to determine, in writing, if the work is being performed in accordance with the approved plans and contract documents.

4.8.3 ARCHITECT OF RECORD (AR):

1. Reviews and approves, as appropriate, concrete mix designs.
2. Reviews and approves construction bracing designs, mortar and grout mix designs and other building element designs that affect the approved architectural construction documents for conformance with those documents.
3. Reviews construction observation and testing reports provided by the Geotechnical Engineer of Record and/or the Inspection and Testing Agency of Record that affects the City-approved architectural construction documents.
4. Notifies the COAIS, TPI's and Owner of any architectural modifications and changes made to help assure that the structure meets the requirements of the City-approved construction plans, documents, all applicable City, State, and National Codes. The changes must be reviewed and approved by COAI prior to construction and or modifications.

5. Visits the site at intervals appropriate to the stage of construction or as otherwise agreed by the Owner and the Architect, in writing, to become clearly familiar with the progress and quality of the work completed. Also, determines, in general, if the work is being performed in a manner indicating that the work, when completed, will be in accordance with the contract documents.
6. Assures that all other agents are making necessary inspections, reviews inspection results, and monitors construction progress along with any corrections to code deficiencies.

4.8.4 DESIGN ENGINEERS OF RECORD:

(Includes: EER, FPER, FPSD, GER, MER, and SER.)

1. Prepares and submits design modifications/recommendations, specifications, and construction criteria including related design calculations to the City for review and approval.
2. Reviews all construction plans and specifications as approved by the City.
3. Reviews and approves shop drawings.
4. Submits required shop drawings to the City for approval.
5. Provides guidance and professional opinions in response to inspection reports that indicate that the construction does not meet the requirements of the City-approved construction documents.
6. Takes appropriate action if conditions differ from those anticipated in the design and notifies the COAIS, TPI's and Owner.
7. Notifies the COAIS, TPI and Owner of modifications and changes made to help assure the structure meets the City-approved construction plans, documents and all applicable City, State, and National Codes.

4.8.5 GENERAL CONTRACTOR (GC):

1. Obtains all required approval and permits for temporary facilities such as construction and storage trailer, cranes, power, signs, etc.
2. Keeps a copy of the City-approved construction documents and permits posted on the site at all times.
3. Provides the means, methods, and materials of construction.
4. Takes necessary action to assure a safe jobsite and fulfills OSHA and other job site safety responsibilities.
5. Submits construction documents to the City as identified at the Pre-Construction Meeting.
6. Maintains an inspection log on site, to be completed by the inspector when the inspection is done.
7. Maintains a complete set of inspection records and files on the job site.
8. Notifies and coordinates with subcontractors all provisions of this agreement.
9. Notifies the COAIS, TPI and appropriate Design Professionals of Record of construction schedules as identified at the Pre-Construction Meeting.

4.8.6 THIRD-PARTY INSPECTORS OF RECORD (TPIR):

(Includes: EIR, FPIR, FPSI, GIR, MIR, and SIR.)

1. Performs inspections at intervals appropriate to the stage of construction or as otherwise agreed by the Owner, design professional and City representative.
2. Documents, in writing, to demonstrate clear familiarity with the progress and quality of the work completed and to determine, in general, if the work is being performed in a manner conducive to completion in accordance with the City-Approved Plans.
3. Notifies Architect of Record, Owner, COAIS, TPI, and any other pertinent individuals of deviations from approved construction documents.
4. Submits a Final Report of Inspection to the COAIS referencing all Routine Inspection Reports issued upon completion of inspections and testing by the Third-Party Inspectors of Record (TPIR) and any Inspections and Testing Agency utilized. The Final Report of Inspection is submitted after the inspection specified has been completed for the project.
5. Submits a TPIP Certification Form to the COAIS, Owner, and others as designated by the Owner upon acceptance of the Final Report of Inspection. Refer to Attachment #3. The report must provide a professional opinion stating that, to the best of their knowledge, information, and belief, the work observed was constructed in accordance with the City-Approved Plans and all applicable City, State, and National Codes.
6. Submits any discipline specific, standard certification forms (NFPA, UL, FM, ASCE, etc.) with the TPIP Certification Form.
7. Completes Contractor's inspection log upon completing inspection Testing Laboratory Engineer of Record if different from TPIR:
8. Performs construction materials testing services to meet Third-Party Inspections or all applicable City, State, and National Codes.
9. Completes Contractor's inspection log upon the completion of testing Field Specific Responsibilities

4.9 FIELD SPECIFIC RESPONSIBILITIES

4.9.1 SOILS AND FOUNDATIONS

The purpose of this section is to describe the TPIP responsibilities associated with soil- related conditions and/or foundation systems.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.1.1 Geotechnical Engineer of Record (GER):

1. Prepares and issues a geotechnical report offering professional opinions of the subsurface conditions likely to affect the design and the proposed construction.
2. Prepares and issues, for review and approval by the City, foundations and/or foundation systems work that will be performed.
3. Prepares design criteria for foundations and/or foundations systems.
4. Reviews and approves architectural and/or structural components whose design is based on recommendations prepared by the GER.

5. Revises geotechnical recommendations if site soil or groundwater conditions differ materially from conditions indicated on the approved geotechnical report and coordinates changes with the design professionals of record responsible for the structural design of foundations, deep foundations, or other types of foundation systems.
6. Reviews all geotechnical reports prepared in conjunction with the site work or building construction and provides additional recommendations.
7. Takes appropriate action if subsurface conditions differ materially from those anticipated in the geotechnical report and notifies the COAIS, TPI's and Owner.
8. Determines any special monitoring required for the property or adjacent neighborhood prior to the start of a phase of construction that may affect adjacent properties.
- 9.

4.9.1.2 Geotechnical Inspector of Record (GIR):

1. Performs specified inspections to determine materials' quality and in-place density tests for compliance with the City-approved construction documents.
2. Gives notice to proceed to the COAIS, contractor and Owner that the foundation system is suitable for the erection of the superstructure. This written approval must be received prior to any superstructure construction.
3. Notifies COAIS immediately if the Contractor is proceeding against direction.
4. Performs specified inspections of foundations to determine their in-place load-bearing capacity:

Piling: Inspections shall include inspection of piles before, during, and after driving. Inspection reports shall contain an evaluation of the pile capacity based on driving resistance, and dynamic or static pile testing. Pile driving records shall be submitted to the City prior to placement of pile caps.

Piers: Inspections shall include concrete, steel reinforcement, orientation and shape of caissons, and bearing capacity at the base of the caisson. Inspection reports shall be submitted to the City prior to the placement of grade beams.

5. Verifies and inspects any special monitoring required by Geotechnical Engineer of Record (GER) for the property or adjacent neighborhood before and during construction that may affect adjacent properties.
6. Performs inspections of shallow footings and foundations systems, including shallow foundations, foundation walls, mats, slabs, etc. Inspections of cast-in-place concrete shall include formwork, monitoring the placement of concrete, concrete reinforcement, and the dimensions, shapes and locations of footings, slabs, post tensioned slabs and foundation walls
7. Performs inspections of subgrade prior to the construction of footings and slabs for compatibility of bearing materials and groundwater conditions with the geotechnical report.
8. Performs specified inspections of structural fill material prior to, during, and following its placement for compliance with approved structural fill specifications.

9. Perform inspections to determine those materials' quality and in-place density tests for compliance with the City-approved construction documents.
10. Submits a field compaction report for all classes of fill on the site to assure structural fills are constructed in accordance with the City-Approved Plans or documents.
11. Inspects and certifies that the soil bearing capacity meets or exceeds the capacity specified in the construction documents.
12. Submits foundation and foundation system inspection reports, laboratory reports, test data and foundation records to the Architect of Record for review, among others designated by the City and/or Owner.
13. Notifies the COAIS, and Owner of geotechnical modifications and changes made to help assure the structure meets the requirements of the City-approved construction documents and all applicable City, State, and National Codes

4.9.2 EARTH AND RETENSION SYSTEMS

The purpose of this section is to describe the TPIP responsibilities associated with earth retention systems.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.2.1 Structural Engineer of Record (SER):

1. Reviews and approves concrete and mortar mix designs.
2. Reviews all concrete and mortar strength test reports and delivers only the 7, 14 and 28-day test results to the TPI's , unless construction will proceed on less cured concrete. In which case the report showing adequate strength, covered by the engineers seal and criteria, shall be delivered to Inspection Services immediately.
3. Reviews and approves construction bracing designs, mortar and grout mix designs, and other building element designs that affect the approved structural construction documents for conformance with those documents.
4. Establishes criteria for removal and reshoring of formwork.
5. Reviews construction observation and testing reports provided by geotechnical professionals.
6. Reviews and approves earth retention system designs and recommendations prepared by other design professionals.
7. In addition to structural design, the construction documents shall include the following:
8. Adjoining Properties - recommendations for protecting adjoining properties, including existing public and private streets.
9. Slope Protection - specification of responsibility for protecting all slopes in accordance with general practice, throughout the course of the project.
10. Dewatering - any requirements for dewatering of the excavation that are specified or assumed in the earth retention system design.

11. Installation - system installation criteria, including allowable inward movement, pile installation and tieback criteria, and requirements for inspection and monitoring of the earth retention system construction and adjacent properties.

4.9.2.2 Structural Inspector of Record (SIR):

1. Performs subgrade condition inspections of earth retention systems including, but not limited to:
2. Compaction - determines that materials' quality and in-place density tests comply with the City-approved construction documents and geotechnical report.
3. Backfill, Drainage and Waterproofing - inspects backfill, foundation drainage systems and waterproofing during and following their placement for compliance with City-approved backfill, foundation drainage systems and waterproofing specifications.
4. Obtains approval from the appropriate design professionals of record and City if inspection and testing results do not meet the requirements of the approved construction documents prior to continuing work in the affected area. When the earth retention system is to become a permanent part of the final structure, deviations shall also be subject to approval by the SER.

4.9.3 CONCRETE (PRE-CAST AND CAST-IN-PLACE)

The purpose of this section is to describe the TPIP responsibilities associated with pre-cast and cast-in-place concrete.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

THIRD-PARTY INSPECTIONS OF CONCRETE CONSTRUCTION

Verification and Inspection	Continuous ¹	Periodic ²	Reference Standard	IBC Reference
1. Inspection of reinforcing steel, including prestressing tendons and placement.		X	ACI 318: 3.5, 7.1-7.7	1903.5, 1907.1, 1907.7, 1914.4
2. Inspection of reinforcing steel welding in accordance with approved plans and documents.	X		AWS D1.4 ACI 318: 3.5.2	1903.5.2
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased.	X			1912.5
4. Verify use of required design mix.		X	ACI 318: Ch. 4, 5.2-5.4	1904, 1905.2- 1905.4, 1914.2, 1914.3
5. Sampling fresh concrete and performing slump, air content, and determining the temperature of fresh concrete at the time of making specimens for strength test.	X		ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1905.6, 1914.10
6. Inspection of concrete and shotcrete placement for proper application technique.	X		ACI 318: 5.9, 5.10	1905.9, 1905.10, 1914.6, 1914.7, 1914.8
7. Inspection for maintenance of specified curing temperature and technique.		X	ACI 318: 5.11-5.13	1905.11, 1905.13, 1914.9
8. Inspection of prestressed concrete:	X			
9. Application of prestressing forces.	X			
10. Grouting of bonded prestressing tendons in the seismic-force-resisting system.	X		ACI 318: 18.18 ACI 318: 18.16.4	
11. Erection of pre-cast concrete members.		X	ACI 318 Ch. 16	
12. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.		X	ACI 318: 6.2	1906.2

¹Continuous means inspections accomplished during the placement of the work

²Periodic means an inspection accomplished prior to the placement of concrete.

4.9.4 PRE-CAST CONCRETE

4.9.4.1 Architect of Record (AR)/ Structural Engineer of Record (SER):

1. Reviews and approves pre-cast concrete and mix designs.

4.9.4.2 Structural Inspector of Record (SIR):

1. Verifies that a precast concrete fabricator that is fabricating elements off-site has a quality control program that meets the requirements of the Precast/Pre-stressed Concrete Institute (PCI) Plant Certification Program. Alternatively, the SIR may inspect the precast plant at appropriate intervals to verify that materials, methods, products, and quality control comply with project specifications, approved fabrication and erection documents and PCI MNL-116, "Manual for Quality Control for Plants and Production of Precast and Pre-stressed Concrete Products," and/or PCI MNL-117, "Manual for Quality Control for Plants and Production of Architectural Precast Products."
2. Verifies that concrete meets the requirements of approved concrete mix designs.
3. Verifies that the compressive strength of field-cured cylinders satisfies the requirements of the City -approved construction documents.
4. Provides construction observation and testing services as necessary to establish that pre-cast, attachment, connections, and field construction are in compliance with the City-approved construction documents.
5. Verifies that welders and weld inspections were performed in accordance with AWS D1.1, Chapter 5, Part C.
6. Provides specified inspections of welded connections for conformance with the City -approved construction documents and applicable sections of the AWS D1.1, Welding Code, SJI Specifications, and AISC.

4.9.5 CAST-IN-PLACE CONCRETE

4.9.5.1 General Contractor (GC):

1. Coordinates construction so that the building is capable of carrying structural loads.
2. Posts the updated concrete pour schedule on the door of the field office.

4.9.5.2 Structural Engineer of Record (SER):

1. Reviews and approves concrete mix designs.
2. Establishes criteria for removal and reshoring of formwork.

4.9.5.3 Structural Inspectors of Record (SIR):

1. Provides inspections of concrete formwork (erection and removal), reinforcing steel, post-tensioned tendons, stressed tendons, and placement of concrete as indicated below.
2. Provides materials testing for concrete properties and submits test results to the Structural Engineer of Record and the COAIS.

3. Prepares test cylinders in accordance with ASTM C172. Cylinders for strength tests shall be cast, stored, transported, and laboratory-cured in accordance with ASTM C31. Field-cured cylinders shall be cured as closely as possible to the location of placement of the concrete pour they represent, and be exposed as nearly as possible to the same temperature and moisture environment, in accordance with ACI 318 and ASTM C31. Testing of cylinders shall be in accordance with ASTM C39.
4. Determines when concrete strengths have achieved levels specified in the approved plans and specifications that will permit the removal of formwork and/or reshoring. The SIR shall submit a written statement indicating that the concrete strength and conditions meet or exceed project design specifications and design stripping criteria. The letter should be sent to the SER and City.

4.9.6 MASONRY

The purpose of this section is to describe the TPIP responsibilities associated with masonry building elements.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.6.1 Architect of Record (AR)

1. Coordinates with Structural Engineer of Record the review and approval of construction bracing design, mortar and grout mix design and other masonry building element designs and erection specifications for conformance with approved architectural construction documents.

4.9.6.2 Structural Engineer of Record:

1. Reviews and approves construction bracing design, mortar and grout mix design and other masonry building element designs and erection specifications for conformance with approved, structural construction documents.

4.9.6.3 Structural Inspector of Record (SER)

1. Performs inspections of masonry and in accordance with ACI, ASCE, and TMS criteria.
2. Performs inspections of bracing and its removal.
3. Provides testing of materials.

MASONRY-INSPECTION LEVEL I

Inspection Task (Level 1)	Frequency of Inspection		Reference For Criteria		
	Continuous ¹	Periodically ²	IBC	ACI 530/ ASCE 5/ TMS 402	ACI 530.1/ ASCE 6/ TMS 602
1. As masonry construction begins, the following shall be verified to ensure compliance: a. Proportions of site prepared mortar. b. Construction of mortar joints. c. Location of reinforcement and connectors.		X X X			Art 2.6A Art 3.3B Art 3.4
2. The inspection program shall verify: a. Size and location of structural elements. b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction. c. Specified size, grade, and type of reinforcement. d. Welding of reinforcing bars. e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).	X	X X X X	Sec. 2108.9.2.11, Item 2 Sec. 2104.3, 2104.4	Sec. 1.15.4, 2.1.2 Sec. 1.12 Sec. 8.5.7 and Sec. 8.5.7.2	3.3G Art 2.4, 3.4 Art 1.8
3. Prior to grouting, the following shall be verified to ensure compliance: a. Grout space is clean. b. Placement of reinforcement and connectors. c. Proportions of site-prepared grout. d. Construction of mortar joints.		X X X X		Sec. 1.12	Art 3.2D Art 3.4 Art 2.6B Art 3.3B
4. Grout placement shall be verified to ensure compliance with code and construction document provisions.	X				Art 3.5
5. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.	X		Sec. 2105.3, 2105.4, 2105.5		Art 1.4
6. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.		X			Art 1.5

¹ Continuous means inspections accomplished during the placement of the work

² Periodic means an inspection accomplished prior to the placement of concrete.

MASONRY - INSPECTION LEVEL 2

Engineered masonry in essential facilities - The minimum special inspection program for masonry designed by Section 2106, 2107, 2108 (IBC), or by chapters other than Chapters 5, 6, or 7 of ACI 530/ASCE5/TMS 402, in essential facilities (see Tables 1604.5 and 1617.6 of IBC) shall comply with the following table:

Inspection Task (Level 2)	Frequency of Inspection		Reference For Criteria		
	Continuous ¹	Periodically ²	IBC	ACI 530/ ASCE 5/ TMS 402	ACI 530.1/ ASCE 6/ TMS 602
1. From the beginning of masonry construction, the following shall be verified to ensure compliance: <ul style="list-style-type: none"> a. Proportions of site-mixed mortar and grout. b. Placement of masonry units and construction of mortar joints. c. Placement of reinforcement and connectors. d. Grout space prior to grouting. e. Placement of grout. 	X X	X X X		Ch. 8	Art 2.6A Art 3.3B Art 3.4 Art 3.2D Art 3.5
2. The inspection program shall verify: <ul style="list-style-type: none"> a. Size and location of structural elements. b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction. c. Specified size, grade, and type of reinforcement. d. Welding of reinforcing bars. e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F). 	X X	X X X	 Sec. 2108.9.2.11, Item 2 Sec. 2104.3, 2104.4	Sec. 1.15.4, 2.1.2 Sec. 1.12 Sec. 8.5.7 and Sec. 8.5.7.2	3.3G Art 2.4, 3.4 Art 1.8
3. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.	X		2105.3, 2105.4, 2105.5		Art 1.4
4. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.		X			Art 1.5

¹Continuous means inspections accomplished during the placement of the work.

²Periodic means an inspection accomplished prior to the placement of concrete.

4.9.7 WOOD

The purpose of this section is to describe the TPIP responsibilities when construction includes wood building elements.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.7.1 Structural Inspector of Record (SIR):

1. Performs inspections of wood elements for conformance with the requirements of the City approved construction documents.
2. Inspects prefabricated structural elements during erection.
3. Verifies the quality of all mechanical connections for conformance with the construction document and manufacturer's specifications.
4. Upon completion of wood construction, including connections the SIR submits a completion report to the SER and the City Building Official.

4.9.8 STRUCTURAL STEEL

The purpose of this section is to describe the TPIP responsibilities associated with the fabrication and erection of structural steel elements.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.8.1 Structural Engineer of Record (SER):

1. Verifies and approves structural members and connections designed by the steel fabricator.

4.9.8.2 Structural Inspector of Record (SIR):

1. Provides inspections of structural members and assemblies performed at the fabricator's shop. Special inspections are not needed if the fabricator does not perform any welding, thermal cutting or heating operation as part of the fabrication.
2. Verifies that the fabricator complies with AISC Quality Certification Program or equivalent.
3. Provides inspections of structural elements, connections, welding materials, and high-strength bolts as indicated on the following table. High strength bolts and nuts shall be clearly marked with an identifiable manufacturer's mark on both the bolt head and nut. Shipments of high-strength bolts, nuts and washers, whether from manufacturer, distributor, or reseller, shall include manufacturer's current test reports for chemical composition (ASTM A751) and mechanical properties, including proof load testing (ASTM F606).
4. Verifies that fabricated components meet the SER's approved designs.
5. Notifies the SER and City if inspection and testing indicate that construction does not meet the requirements of the City-approved construction documents.

4.9.9 INSPECTIONS FOR STEEL MATERIALS

Verification and Inspection	Continuous ¹	Periodic ²	Reference Standard	IBC Reference
1. Material verification of high-strength bolts, nuts, and washers: <ul style="list-style-type: none"> a. Identification markings to conform to ASTM standards specified in the approved construction documents. b. Manufacturer's certificate of compliance required. 		X	Applicable ASTM material specifications; AISC ASD, Section A3.4, AISC LRFD, Section A 3.3	
2. Inspection of high-strength bolting: <ul style="list-style-type: none"> a. Bearing-type connections. b. Slip-critical connections. 	X	X	AISC LRFD Section M2.5	1704.3.3
3. Material verification of structural steel: <ul style="list-style-type: none"> a. Identification markings to conform to ASTM standards specified in the approved construction documents. b. Manufacturers' certified mill test reports required. 	X		ASTM A6 or ASTM A568 ASTM A6 or ASTM A568	1708.4
4. Material verification of weld filler materials: <ul style="list-style-type: none"> a. Identification markings to conform to AWS specification in the approved construction documents. b. Manufacturer's certificate of compliance required. 	X	X	AISC, ASD, Section A3.6; AISC LRFD Section A3.5	
5. Inspection of welding: <ul style="list-style-type: none"> a. Structural steel: <ul style="list-style-type: none"> i. Complete and partial penetration groove welds ii. Multi-pass fillet welds iii. Single-pass fillet welds > 5/16" (7.9mm) iv. Single-pass fillet welds < 5/16" (7.9mm) v. Floor and deck welds b. Reinforcing steel: <ul style="list-style-type: none"> i. Verification of weldability of reinforcing steel other than ASTM A706. ii. Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls, and shear reinforcement. iii. Shear reinforcement. iv. Other reinforcing steel. 	X	X	AWS D1.1 AWS D1.3 AWS D1.4 ACI 318.3.5.2	1704.3.1 1903.5.2
6. Inspection of steel frame joint details for compliance with approved construction documents: <ul style="list-style-type: none"> a. Details such as bracing and stiffening. b. Member locations. c. Application of joint details at each connection. 		X		1404.3.2

¹Continuous means inspections accomplished during the placement of the work.

²Periodic means an inspection accomplished prior to the placement of concrete.

4.9.10 FIRE PROTECTION

The purpose of this section is to describe the TPIP responsibilities associated with fire protection.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.10.1 Fire Protection Inspector of Record (FPIR):

1. Performs inspections and meets qualifications as specified on next page.
2. Provides inspection of spray-on fireproofing.
3. Assures compliance with the City-approved construction documents, all applicable City, State, and National Codes.
4. Submits reports of Fire Protection inspections to the Architect of Record, Owner, and Fire Code Official of COAIS.
5. Submits a certification to the COAIS, Architect of Record and Owner, stating that the structure is ready for close-in based on the inspections performed and construction observed.
6. Routinely monitors construction project for fire safety hazards during construction.
7. Assures compliance with type of construction, fire ratings of components (doors, walls, floors, roofs, etc.), height and area, egress, special occupancy provisions of plans.

4.9.10.2 Fire Protection Systems Inspector of Record (FPSI):

1. Meets the qualification requirements as specified on the next page.
2. Performs inspections and testing of fire protection systems such as fire pumps, fire hydrants, fire standpipes, smoke control systems, emergency power systems, alarm systems, sprinkler systems, and smoke evacuation systems. Submits test results and inspection reports to the COAIS for approval.

**MINIMUM QUALIFICATIONS
FOR FIRE INSPECTIONS & CERTIFICATION**

<u>Inspection Tasks</u>	<u>Registered Professional Engineer</u>	<u>NICET Level III</u>	<u>Other Specialized Qualifications under Professional Supervision (SEE NOTE #1)</u>
<u>General Fire Inspections</u>			
Construction type	X		X,3
Egress	X		X, 3
Interior finish	X		X, 3
Emergency lighting	X		X, 3
Fireproofing	X		X, 3
Firestopping	X		X, 3
Firewalls	X		X, 3
Patrons	X		X, 3
Rated floors/ceilings	X		X, 3
Miscellaneous, other	X		X, 3
<u>Fire Protection Systems & Performance Testing</u>			
Fire Pumps	X	X	X,5
Automatic Supp. Systems	X	X	X,3
Standpipe Systems	X	X	X,2
Fire Alarm Systems	X	X	
Smoke Control	X		X,2
Systems Underground Piping	X	X	X,5
Detection Systems	X	X	
Emergency Responder Radio System			

X = Inspections and Certifications (I &C) are permitted by individuals having these qualifications.

X, N = I&C Permitted if individual has N years related verifiable experience in inspection and installation. Registered Professional Engineer = Alabama Registered Professional Engineer, having Fire Protection knowledge and experience.

Note 1: Final approval and acceptance of all qualifications shall be subject to the Fire Code Official approval.

Note 2: Individual resumes of experience and education may be submitted to the Fire Code Official for possible consideration in lieu of the above minimum qualifications. Verifiable experience and specialized training in fire protection inspection, design, and installation practices is required.

Note 3: The State of Alabama requires that all Fire Sprinkler Contractors be licensed by the State Fire Marshal.

4.9.11 ELECTRICAL SYSTEMS

The purpose of this section is to describe the TPIP responsibilities associated with electrical systems.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.11.1 Participating Providers

Third-Party Electrical Inspector of Record (EIR) Approved Third-Party Inspection Agency (ATPIA)

4.9.11.2 Participating Provider Requirements:

1. Obtains an active or inactive State of Alabama Master Electricians license.
2. The EIR or ATPIA is required to present an established inspection procedure or program reviewed and approved by the COAIS.
3. EIR or ATPIA is required to maintain an adequate amount of liability insurance approved by the City.
4. EIR or ATPIA shall have inspection stickers and correction orders in a standard format approved by the COAIS.
5. EER and ATPIA of Record cannot act in the function of design engineer or professional engineer and perform as an inspection agency. It is assumed that the EER will field verify the installation of their designed or specified documents. However, this verification is not part of the TPIP process.

4.9.11.3 Electrical Inspector/Inspection Agency of Record (EIR/ATPIA) Responsibilities:

1. Specify and perform inspections necessary during the installation of electrical systems to ensure that the systems are installed in accordance with the City-approved electrical construction documents and electrical permits issued by City of Auburn
2. Submit electrical inspection reports to COAIS and the Owner within five (5) working days. Each report shall include the building permit number, building address and the electrical permit number. Correction orders and deficiencies shall be included with each report. All reports shall bear the signature of the EIR or ATPIA providing the report.
3. Verify that individuals installing and erecting or repairing electrical work, including low voltage and communication systems, are in compliance with the license requirements of the City of Auburn and the Code of Alabama.
4. Refer all code-related issues and interpretations to the Electrical Inspector.
5. Verify that the service is installed in accordance with the approved plans and is Code compliant for the electric utility to make a connection. The EIR shall submit a report to the COAIS, which will initiate a request for an inspection by the COAIS commercial electrical inspector. Once the City has approved the installation, the City Inspector will generate a notification to the electrical utility recorded on the City electrical permit.
6. Verify that all portable and temporary sources of electrical energy are permitted and are being operated in a safe and Code compliant manner.
7. Verifies that an electrical permit has been obtained for all electrical work on the premise.

8. Provides an electrical system certification to the COAIS, AR, and the Owner, to close in that the electrical systems have been inspected and are ready for the structure or part of the structure to be closed-in.
9. Provides an electrical system certification to the COAIS, AR, and the Owner that specified electrical inspections have been performed and the structure is ready for the Power Company to make the service hot.

4.9.12 MECHANICAL SYSTEMS

The purpose of this section is to describe the TPIP responsibilities associated with mechanical systems.

NOTE TO ALL PROFESSIONALS: SEE GENERAL RESPONSIBILITIES SECTION IN THIS ATTACHMENT.

4.9.12.1 Mechanical Inspector of Record (MIR):

1. Performs inspections necessary during the installation of mechanical systems to assure that the systems are installed in accordance with the City-approved mechanical construction documents, the City Mechanical, Plumbing and Fuel Gas Code, other applicable City, State, and National Codes
2. Submits inspection reports, as well as certification indicating that the mechanical systems are ready for the closing-in of the structure, to the COAIS.
3. Performs a final inspection of the system to assure that all components operate individually and as a system to meet the intent of the Code.

ATTACHMENT 3

CITY OF AUBURN THIRD-PARTY INSPECTION PROGRAM CERTIFICATION FORM

Date: _____

To: Building Official
Fire Code Official

From:

Address:

Building Case Number:

This transmittal is to advise and certify that the following actions are in accordance with the provisions contained within the City of Auburn Inspections Services Department, Third-Party Inspection Program (TPIP) and associated Third-Party Inspection Agreement for the above referenced project, as follows:

By the Structural Inspector of Record and/or Architect of Record

- Structural/Architectural Certification that the construction project is built according to approved plans and documents as required by the all applicable City, State, and National Codes.
- All structural shop drawings were reviewed and found compliant with the design intent and approved by the City
- Building and Site Accessibility Certification that the construction project is in compliance with the Accessibility Code and accessibility requirements of the all applicable City, State, and National Codes.

By the Geotechnical Inspector of Record

The following were found to be adequate, in compliance with the City-approved plans, and accepted engineering practice:

- Compaction of soils
- Soil bearing capacity
- Foundation construction
- Field modifications as approved by the City

By the Mechanical System(s) Inspector of Record

- Installation of the mechanical system(s) in accordance with the approved plan(s) and documents and all applicable City, State, and National Codes.
- Certification as to the mechanical system(s) readiness for closing of the structure before closing begins
- Completion of the mechanical system(s) and all testing done in accordance with the approved plan(s) and document(s) and requirements of the all applicable City, State, and National Codes.

By the Superstructure Inspection and Testing Service

- Construction of the superstructure has been completed in accordance with the approved plans, documents, and requirements of all applicable City, State, and National Codes.
- Completion of the superstructure allows for trade work

By the Fire Protection Inspector of Record, or other party responsible for Fire Protection System(s) Inspection, Testing, and General Fire Protection Inspection(s)

- Construction project is completed according to the fire safety aspects of the construction plan(s) and document(s), the fire safety aspects of all applicable City, State, and National Codes. (including, but not limited to, the inspectional tasks shown on Attachment #2, Fire Protection)
- Structural members receiving fire protection have been completed in accordance with their listing and that successful testing of those members has been completed in accordance with the listing of all applicable City, State, and National Codes.
- Construction project is ready to be closed-in
- Certification as to the fire protection system(s) readiness for the closing of the structure before the closing begins, specifically including the following items as indicated:

- | | |
|---|--------|
| <input type="checkbox"/> automatic fire suppression system(s) | Case # |
| <input type="checkbox"/> fire pump(s) | _____ |
| <input type="checkbox"/> fire alarm system(s) | _____ |
| <input type="checkbox"/> smoke control system(s) | _____ |
| <input type="checkbox"/> detection system(s) | _____ |
| <input type="checkbox"/> underground piping | _____ |
| <input type="checkbox"/> standpipe system(s) | _____ |
| <input type="checkbox"/> emergency responder radio | _____ |
| <input type="checkbox"/> other | _____ |

Test reporting required for valid certification

- Completion and successful performance testing of the fire protection system(s) in accordance with approved plan(s) and document(s) and requirements of all applicable City, State, and National Codes, specifically including the following items indicated below:
 - automatic fire suppression system(s) Case # _____
 - fire pump(s) _____
 - fire alarm system(s) _____
 - smoke control system(s) _____
 - detection system(s) _____
 - underground piping _____
 - standpipe system(s) _____
 - other _____

By the Electrical System(s) Inspector of Record

- Construction project is built according to the construction document(s) and electrical permit(s) issued by City of Auburn and all applicable City, State, and National Codes.
- Certification as to the electrical systems readiness for the closing of the structure before the closing begins
- Completion of the electrical system(s) in accordance with the approved plan(s) and document(s) and requirements of the City of Auburn Building Code, that the electrical system(s) is ready for the power company to make the service "hot," and all work has been performed under an electrical permit
- Electrical system(s)/installation(s) has valid permit(s)

The above-indicated certification(s) is/are made to the best of my knowledge and opinion that all construction has been completed in accordance with the requirements of applicable approved plan(s) and requirements of all applicable City, State, and National Codes.

Certified By: _____ *affix signature & seal*

Printed Name: _____

AL Reg. No.: _____

Company Name: _____

Name of agents/technicians acting on behalf of above:
