



DPS

**Montgomery County
Department of Permitting Services**

Phone: 311 in Montgomery County or (240)777-0311



STATEMENT OF SPECIAL INSPECTIONS

Project Name: _____

Project Address: _____

Permit Number: (A/P): _____

Permit Applicant: _____ Phone: () _____

Email: _____

Applicant's Address: _____

Owner: _____ Phone: () _____

Email: _____

Owner's Address: _____

Architectural Inspector (AI): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Structural Engineer of Record (SER): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Mechanical Engineer of Record (MER): _____

Address: _____

License: _____ Phone: () _____

Email: _____

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

Mechanical Inspector (MI): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Geotechnical Inspector (GI): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Special Inspector (SI): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Testing Agency Engineer (if different from SI): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Precast Concrete Engineer of Record (PER): _____

Address: _____

License: _____ Phone: () _____

Email: _____

Structural Observer (SO): _____

Address: _____

License: _____ Phone: () _____

Email: _____

General Contractor (GC): _____

Address: _____

License: _____ Phone: () _____

Email: _____

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

SCHEDULE OF SPECIAL INSPECTIONS

**Complete all sections of this Schedule. Indicate N/A if not applicable.
Refer to Mo.Co. Special Inspections Manual for additional clarifications.**

| SPECIAL CASES Reference: IBC Section 1705.1.1 and Section 1.2 of the Special Inspections Program Manual. Testing procedures used and evaluation of test results, by an engineer registered in MD, shall be submitted to the County for review and approval prior to the commencement of the work. | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|--|--|--------------|
| INSPECTION OF FABRICATED ITEMS Reference: IBC Section 1705.10. Special Inspections of fabricated items shall be performed in accordance with IBC Section 1704.2.5. (The requirements of IBC Section 1704.2.5.1 may apply subject to County approval). | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STRUCTURAL STEEL

Reference: IBC Section 1705.2.1. Inspections and non-destructive testing of structural steel elements shall be in accordance with the quality assurance requirements of AISC 360-16, Chapter N and the Montgomery County Special Inspections Program Manual.

Fabricator and Erector Quality Control Program

Reference AISC 360, Chapter N, Section N2.

The fabricator's Quality Control Inspector shall inspect the following as a minimum, as applicable:

1. Shop welding, high-strength bolting, and details in accordance with AISC 360 Section N5.
2. Shop cut and finished surfaces in accordance with AISC 360, Section M2.
3. Shop heating for cambering, curving and straightening in accordance with AISC 360, Section M2.1.
4. Tolerances for shop fabrication in accordance with Code of Standard Practice, Section 6.4.

The erector's Quality Control Inspector shall inspect the following as a minimum, as applicable:

1. Field welding, high-strength bolting, and details in accordance with AISC 360, Section N5.
2. Steel deck in accordance with SDI Standard for Quality Control and Quality Assurance for Installation of Steel Deck.
3. Headed steel stud anchor placement and attachment in accordance with AISC 360, Section N5.4.
4. Field cut surfaces in accordance with AISC 360, Section M2.2.
5. Field heating for straightening in accordance with AISC 360, Section M2.1.
6. Tolerances for field erection in accordance with Code of Standard Practice, Section 7.13.

Fabricator and Erector Documents

Reference AISC 360, Chapter N, Section N3.

Submittals for Steel Construction and Available Documents for Steel Construction shall conform to AISC 360, Section N3.

Inspection and Nondestructive Testing Personnel

Reference AISC 360, Chapter N, Section N4

Quality Control Inspector (fabricator or erector) Qualifications, Quality Assurance Inspector (special inspector) Qualifications and Nondestructive Testing Personnel (inspection agency personnel) Qualifications shall conform to AISC 360, Section N4.

Minimum Requirements for Inspection of Structural Steel Buildings

Reference AISC 360, Chapter N, Section N5.

Quality Control Inspections by the fabricator's or erector's Quality Control Inspector (QCI) and Quality Assurance Inspections by the Special Inspector (SI), shall conform to AISC 360, Section N5 and tables N5.4-1, N5.4-2, N5.4-3, N5.6-1, N5.6-2 and N5.6-3. In these tables inspection tasks are as follows:

O-Observe these items on a random basis. Operations need not be delayed pending these inspections.

P-Perform these tasks for each welded joint or member.

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STRUCTURAL STEEL (Continued)

Nondestructive Testing of Welded joints

Nondestructive testing of welded joints shall conform to AISC 360, Section N5 and shall be performed by the Special Inspector (quality assurance inspector) in accordance with AWS D1.1.

**TABLE N5.4-1
Inspection Tasks Prior to Welding
Reference AISC 360, Chapter N**

| Inspection Tasks Prior to Welding | QC | AGENT | SI | AGENT |
|---|-----------|--------------|-----------|--------------|
| Welder qualification records and continuity records | P | | O | |
| WPS available | P | | P | |
| Manufacturer certifications for welding consumables available | P | | P | |
| Material identification (type/grade) | O | | O | |
| Welder identification system* | O | | O | |
| Fit-up of groove welds (including joint geometry) <ul style="list-style-type: none"> ▪ Joint preparations ▪ Dimensions (alignment, root opening, root face, bevel) ▪ Cleanliness (condition of steel surfaces) ▪ Tacking (tack weld quality and location) ▪ Backing type and fit (if applicable) | O | | O | |
| Fit-up of CJP groove welds of HSS T-, Y- and K-joints without backing (including joint geometry) <ul style="list-style-type: none"> ▪ Joint preparations ▪ Dimensions (alignment, root opening, root face, bevel) ▪ Cleanliness (condition of steel surfaces) ▪ Tacking (tack weld quality and location) | P | | O | |
| Fit-up of fillet welds <ul style="list-style-type: none"> ▪ Dimensions (alignment, gaps at root) ▪ Cleanliness (condition of steel surfaces) ▪ Tacking (tack weld quality and location) | O | | O | |
| Check welding equipment | O | | - | - |

* The fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type.

Where:

O-Observe these items on a random basis. Operations need not be delayed pending these inspections.

P-Perform these tasks for each welded joint or member.

QC-Quality Control Inspector ((fabricator or erector).

SI-Special Inspector (quality assurance inspector).

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STRUCTURAL STEEL (Continued)

**TABLE N5.4-2
Inspection Tasks During Welding
Reference AISC 360, Chapter N**

| Inspection Tasks During Welding | QC | AGENT | SI | AGENT |
|---|-----------|--------------|-----------|--------------|
| Control and handling of welding consumables <ul style="list-style-type: none"> ▪ Packaging ▪ Exposure control | O | | O | |

TABLE N5.4-2 (Continued)

| Inspection Tasks During Welding | QC | AGENT | SI | AGENT |
|--|-----------|--------------|-----------|--------------|
| No welding over cracked tack welds | O | | O | |
| Environmental conditions <ul style="list-style-type: none"> ▪ Wind speed within limits ▪ Precipitation and temperature | O | | O | |
| WPS followed <ul style="list-style-type: none"> ▪ Settings on welding equipment ▪ Travel speed ▪ Selected welding materials ▪ Shielding gas type/flow rate ▪ Preheat applied ▪ Interpass temperature maintained (min./max.) ▪ Proper position (F, V, H, OH) | O | | O | |
| Welding techniques <ul style="list-style-type: none"> ▪ Interpass and final cleaning ▪ Each pass within profile limitations ▪ Each pass meets quality requirements | O | | O | |
| Placement and installation of steel headed stud anchors | P | | P | |

Where:

O-Observe these items on a random basis. Operations need not be delayed pending these inspections.

P-Perform these tasks for each welded joint or member.

QC-Quality Control Inspector (fabricator or erector).

SI-Special Inspector (quality assurance inspector).

**TABLE N5.4-3
Inspection Tasks After Welding
Reference AISC 360, Chapter N**

| Inspection Tasks After Welding | QC | AGENT | SI | AGENT |
|---|-----------|--------------|-----------|--------------|
| Welds cleaned | O | | O | |
| Size, length and location of welds | P | | P | |
| Welds meet visual acceptance criteria <ul style="list-style-type: none"> ▪ Crack prohibition ▪ Weld/base-metal fusion ▪ Crater cross section ▪ Weld profiles ▪ Weld size ▪ Undercut | P | | P | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STRUCTURAL STEEL (Continued)

TABLE N5.4-3 (Continued)

| | | | | |
|--|-----------|--------------|-----------|--------------|
| ▪ Porosity | | | | |
| Arc strikes | P | | P | |
| k-area* | P | | P | |
| Weld access holes in rolled heavy shapes and built-up heavy shaped** | P | | P | |
| Backing removed and weld tabs removed (if required) | P | | P | |
| Inspection Tasks After Welding | QC | AGENT | SI | AGENT |
| Repair activities | P | | P | |
| Document acceptance or rejection of welded joint of member | P | | P | |
| No prohibited welds have been added without the approval of the Structural engineer of Record | O | | O | |
| *When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 in. of the weld. | | | | |
| **After rolled heavy shapes (see AISC Specification Section A3.1c) and built-up heavy shapes (see AISC Specification Section A3.1d) are welded, visually inspect the weld access hole for cracks. | | | | |
| Where: O -Observe these items on a random basis. Operations need not be delayed pending these inspections. P -Perform these tasks for each welded joint or member. QC -Quality Control Inspector (fabricator or erector). SI -Special Inspector (quality assurance inspector). | | | | |

**TABLE N5.6-1
Inspection Tasks Prior to Bolting
Reference AISC 360, Chapter N**

| Inspection Tasks Prior to Bolting | QC | AGENT | SI | AGENT |
|--|-----------|--------------|-----------|--------------|
| Manufacturer's certifications available for fastener materials | O | | P | |
| Fasteners marked in accordance with ASTM requirements | O | | O | |
| Correct fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane) | O | | O | |
| Correct bolting procedure selected for joint detail | O | | O | |
| Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements | O | | O | |
| Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and method used | P | | O | |
| Protected storage provided for bolts, nuts, washers and other fastener components | O | | O | |

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STRUCTURAL STEEL (Continued)

TABLE N5.6-1 (Continued)

Where:
O-Observe these items on a random basis. Operations need not be delayed pending these inspections.
P-Perform these tasks for each welded joint or member.
QC-Quality Control Inspector (fabricator or erector).
SI-Special Inspector (quality assurance inspector).

**TABLE N5.6-2
 Inspection Tasks During Bolting
 Reference AISC 360, Chapter N**

| Inspection Tasks During Bolting | QC | AGENT | SI | AGENT |
|--|-----------|--------------|-----------|--------------|
| Fastener assemblies placed in all holes and washers and nuts are positioned as required | O | | O | |
| Joint brought to the snug-tight condition prior to the pretensioning operation | O | | O | |
| Fastener component not turned by the wrench prevented from rotating | O | | O | |
| Fasteners are pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward the free edges | O | | O | |

Where:
O-Observe these items on a random basis. Operations need not be delayed pending these inspections.
P-Perform these tasks for each welded joint or member.
QC-Quality Control Inspector (fabricator or erector).
SI-Special Inspector (quality assurance inspector).

**TABLE N5.6-3
 Inspection Tasks After Bolting
 Reference AISC 360, Chapter N**

| Inspection Tasks After Bolting | QC | AGENT | SI | AGENT |
|--|-----------|--------------|-----------|--------------|
| Document acceptance or rejection of bolted connections | P | | P | |

Where:
O-Observe these items on a random basis. Operations need not be delayed pending these inspections.
P-Perform these tasks for each welded joint or member.
QC-Quality Control Inspector (fabricator or erector).
SI-Special Inspector (quality assurance inspector).

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

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| STRUCTURAL STEEL (Continued) |
| Inspection of Fabricators and Fabrication Procedures Reference IBC Section 1704.2.5 |
| Inspection of fabricators and fabrication procedures shall be performed by the Quality Assurance Inspector (special inspector) and shall conform to IBC Sections 1704.2.5. (The requirements of IBC Section 1704.2.5.1 may apply subject to County approval). |
| Nonconforming Materials and Workmanship Reference AISC 360, Chapter N, Section N7 |
| Identification and rejection of materials or workmanship that is not in conformance with the construction documents shall be permitted at any time during the progress of the work. Nonconforming material and workmanship shall be brought to the immediate attention of the General Contractor and the fabricator or erector, as applicable. Nonconforming material or workmanship shall be brought into conformance, or made suitable for its intended purpose as determined by the Structural Engineer of Record. Structural repairs shall be reviewed and approved by the County. |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

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| COLD-FORMED STEEL DECK Reference: IBC Section 1705.2.2. Inspections and qualification of welding special inspectors for cold-formed steel floor and roof deck shall be in accordance with the quality assurance inspection requirements of SDI QA/QC-2017 Standard for Quality Control and Quality Assurance for Installation of Steel Deck. |
| Required Submittals Reference: SDI QA/QC-2017, Section 2. |
| Documents to be submitted to the SER and the Owner/General Contractor for approval prior to the installation of the steel deck shall conform to SDI QA/QC-2017, Section 2. |
| Inspection and Testing Personnel Reference SDI QA/QC-2017, Section 3 |
| The Quality Control Inspector (installer) Qualifications and the Quality Assurance Inspector (special inspector) Qualifications shall conform to SDI QA/QC-2017, Section 3 as modified in Montgomery County Executive Regulation. |
| Requirements for Inspection of Steel Deck Installation Reference SDI QA/QC-2017, Section 4. |
| The requirements for inspection for steel deck installation shall conform to SDI QA/QC-2017, Section 4 as modified in Montgomery County Executive Regulation. |
| Installer’s Quality Control Program Reference SDI QA/QC-2017, Section 5. |
| The installer’s quality control program shall conform to SDI QA/QC-2017, Section 5. All material control and installation procedures shall be monitored by the installer’s Quality Control Inspector (QCI). |
| Quality Assurance Tasks Reference SDI QA/QC-2017, Section 6. |
| The quality assurance tasks shall conform to SDI QA/QC-2017, Section 6 and shall be performed by the Quality Assurance Inspector (QAI). |
| Nonconforming material and workmanship Reference SDI QA/QC-2017, Section 7. |
| Identification and rejection of materials and workmanship not in conformance with the construction documents shall be as per SDI QA/QC-2017, Section 7. Nonconforming material or workmanship shall be brought into conformance, or made suitable for its intended purpose as determined by the structural engineer of record (SER). |

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

COLD-FORMED STEEL DECK (Continued)

TABLE 1.1
Inspection or Execution Tasks Prior to Deck Placement
 Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|---|------------|--------------|------------|--------------|
| A | Verify compliance of materials (deck and all deck accessories) with construction documents, including profiles, material properties, and base metal thickness | P | | P | |
| B | Document acceptance or rejection of deck and deck accessories | P | | P | |

Where:
O-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspections
P-Perform these tasks prior to final acceptance for each item or element.
QCI-Quality Control Inspector (Installer).
QAI-Quality Assurance Inspector (Special Inspector).

TABLE 1.2
Inspection or Execution Tasks After Deck Placement
 Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|--|------------|--------------|------------|--------------|
| A | Verify compliance of deck and all deck accessories installation with construction documents | P | | P | |
| B | Verify deck materials are represented by the mill certifications that comply with the construction documents | N/A | | P | |
| C | Document acceptance or rejection of installation of deck and deck accessories. | P | | P | |

Where:
O-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspections
P-Perform these tasks prior to final acceptance for each item or element.
QCI-Quality Control Inspector (Installer).
QAI-Quality Assurance Inspector (Special Inspector).

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

COLD-FORMED STEEL DECK (Continued)

TABLE 1.3
Inspection or Execution Tasks Prior to Welding
 Reference SDI QA/QC-2017, Appendix 1

| | Task | QCI | AGENT | QAI | AGENT |
|---|---|------------|--------------|------------|--------------|
| A | Welding procedure specifications (WPS) available | O | | O | |
| B | Manufacturer certifications for welding consumables available | O | | O | |
| C | Material identification (type/grade) | O | | O | |
| D | Check welding equipment | O | | O | |

Where:

- O**-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection
- P**-Perform these tasks prior to final acceptance for each item or element.
- QCI**-Quality Control Inspector (Installer).
- QAI**-Quality Assurance Inspector (Special Inspector).

TABLE 1.4
Inspection or Execution Tasks During Welding
 Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|--|------------|--------------|------------|--------------|
| A | Use of qualified welders | O | | O | |
| B | Control and handling of welding consumables | O | | O | |
| C | Environmental conditions (wind speed, moisture, temperature) | O | | O | |
| D | WPS followed | O | | O | |

Where:

- O**-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection
- P**-Perform these tasks prior to final acceptance for each item or element.
- QCI**-Quality Control Inspector (Installer).
- QAI**-Quality Assurance Inspector (Special Inspector).

TABLE 1.5
Inspection or Execution Tasks After Welding
 Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|---|------------|--------------|------------|--------------|
| A | Verify size and location of welds, including support, side lap, and perimeter welds | P | | P | |
| B | Welds meet visual acceptance criteria | P | | P | |
| C | Verify repair activities | P | | P | |
| D | Document acceptance or rejection of welds | P | | P | |

Where:

- O**-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection
- P**-Perform these tasks prior to final acceptance for each item or element.

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

COLD-FORMED STEEL DECK (Continued)

TABLE 1.5 (Continued)

QCI-Quality Control Inspector (Installer). **QAI**-Quality Assurance Inspector (Special Inspector).
COLD-FORMED STEEL DECK (Continued)

TABLE 1.6

Inspection or Execution Tasks Prior to Mechanical Fastening

Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|---|------------|--------------|------------|--------------|
| A | Manufacturer installation instructions available for mechanical fasteners | O | | O | |
| B | Proper tools available for fastener installation | O | | O | |
| C | Proper storage for mechanical fasteners | O | | O | |

Where:

O-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection

P-Perform these tasks prior to final acceptance for each item or element.

QCI-Quality Control Inspector (Installer).

QAI-Quality Assurance Inspector (Special Inspector).

TABLE 1.7

Inspection or Execution Tasks During Mechanical Fastening

Reference SDI QA/QC-2017, Appendix 1.

| | Task | QCI | AGENT | QAI | AGENT |
|---|--|------------|--------------|------------|--------------|
| A | Fasteners are positioned as required | O | | O | |
| B | Fasteners are installed in accordance with manufacturer's instructions | O | | O | |

Where:

O-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection

P-Perform these tasks prior to final acceptance for each item or element.

QCI-Quality Control Inspector (Installer).

QAI-Quality Assurance Inspector (Special Inspector).

TABLE 1.8

Inspection or Execution Tasks After Mechanical Fastening

Reference SDI QA/QC-2017, Appendix 1

| | Task | QCI | AGENT | QAI | AGENT |
|---|--|------------|--------------|------------|--------------|
| A | Check spacing, type, and installation of support fasteners | P | | P | |
| B | Check spacing, type, and installation of side lap fasteners | P | | P | |
| C | Check spacing, type, and installation of perimeter fasteners | P | | P | |
| D | Verify repair activities | P | | P | |
| E | Document acceptance or rejection of mechanical fasteners | P | | P | |

Where:

O-Inspect these items on an intermittent basis. Operations need not be delayed pending these inspection

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| | | |
|--|--|--------------|
| COLD-FORMED STEEL DECK (Continued) | | |
| TABLE 1.8 (Continued) | | |
| <p>P-Perform these tasks prior to final acceptance for each item or element. QCI-Quality Control Inspector (Installer). QAI-Quality Assurance Inspector (Special Inspector).</p> | | |
| OPEN-WEB STEEL JOISTS AND JOIST GIRDERS | | |
| Reference: IBC Section 1705.2.3, IBC Table 1705.2.3 and the Special Inspections Program Manual. | | |
| Required Special Inspections of Open Web Steel Joists and Joist Girders Reference: IBC Table 1705.2.3 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Installation of open-web steel joists and joist girders. | | |
| a. End connections – welding or bolted. | | |
| b. Bridging – horizontal or diagonal <ul style="list-style-type: none"> 1. Standard bridging 2. Bridging that differs from the Steel Joist Institute SJI specifications listed in IBC Section 2207.1 | | |
| COLD-FORMED STEEL TRUSSES SPANNING 60 FEET OR GREATER | | |
| Reference: IBC Section 1705.2.4 | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| CONCRETE CONSTRUCTION | | |
|---|--|--------------|
| Reference: IBC Section 1705.3 Special inspections and tests of concrete construction shall be performed in accordance with IBC Section 1705.3, IBC Table 1705.3 and the Montgomery County Special Inspections Program Manual. | | |
| CONCRETE Reference: IBC Table 1705.3 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Inspect reinforcement, including prestressing tendons, and verify placement. | | |
| 2. Reinforcing bar welding: a. Verify weldability of reinforcing bars other than ASTM A706; b. Inspect single-pass fillet welds, maximum 5/16; and c. Inspect all other welds. | | |
| 3. Inspect anchors cast in concrete. | | |
| 4. Inspect anchors post-installed in hardened concrete members. See note below. a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. Installation shall be performed by an ACI or CRSI certified adhesive anchor installer. b. Mechanical anchors and adhesive anchors not defined in 4.a. | | |
| 5. Verify use of required design mix. | | |
| 6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete. | | |
| 7. Inspect concrete and shotcrete placement for proper application techniques. | | |
| 8. Verify maintenance of specified curing temperature and techniques. | | |
| 9. Inspect prestressed concrete for: a. Application of prestressing forces; and b. Grouting of bonded prestressing tendons. | | |
| 10. Inspect erection of precast concrete members. | Continuous. (County amendment). | |
| 11. Verify 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. The strength evaluation shall be demonstrated by field cured cylinders only. | Continuous. (County amendment). | |
| 12. Inspect formwork for shape, location and dimensions of the concrete member being formed. | | |

Note: Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the County prior to the commencement of the work.

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

MASONRY CONSTRUCTION

Reference: IBC Section 1705.4

Special inspections and tests of masonry construction shall be performed in accordance with the Quality Assurance Program requirements of TMS 402 and TMS 602 and the Montgomery County Special Inspections Program Manual.

QUALITY ASSURANCE PROGRAM

The Quality Assurance Program shall comply with the Level defined in Table 3.1 of TMS 402, depending on how the masonry was designed and the Risk Category, as defined in IBC 2018, Table 1604.5. The Quality Assurance Program shall itemize the requirements for verifying conformance of material composition, quality, storage, handling, preparation, and placement with the requirements of TMS 602, and shall comply with the **minimum** requirements of TMS 602, Tables 3 and 4 for the required Level. The Structural Engineer of Record may increase the amount of **Verification** and **Special Inspections** required.

MINIMUM QUALITY ASSURANCE LEVEL

Reference TMS 402, Table 3.1

| Designed in accordance with | Risk Category I, II or III | Risk Category IV |
|---|-----------------------------------|-------------------------|
| Part 3 or Appendix B or Appendix C of TMS 402 | Level 2 | Level 3 |
| Part 4 of TMS 402 | Level 1 | Level 2 |
| Appendix A of TMS 402 | Level 1 | Not permitted |

MINIMUM VERIFICATION REQUIREMENTS

Reference TMS 602, Table 3

| Minimum Verification | Required for Quality Assurance | | | AGENT |
|---|---------------------------------------|----------------|----------------|--------------|
| | Level 1 | Level 2 | Level 3 | |
| Prior to construction, verification of compliance of submittals | R | R | R | |
| Prior to construction, verification of f'm and f'aac, except where specifically exempted by the Code | NR | R | R | |
| During construction, verification of Slump flow and Visual Stability Index (VSI) when self-consolidating grout is delivered to the project site | NR | R | R | |
| During construction, verification of f'm and f'aac for every 5000 sq. ft. | NR | NR | R | |
| During construction, verification of proportions of materials as delivered to the project site for premixed or preblended mortar, prestressing grout, and grout other than self-consolidating grout | NR | NR | R | |

Where: R=Required, NR=Not Required.

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| MASONRY CONSTRUCTION (continued) | | | | |
|--|-------------------|----------------|----------------|--------------|
| MINIMUM SPECIAL INSPECTION REQUIREMENTS | | | | |
| Reference TMS 602, Table 4 | | | | |
| INSPECTION TASK | Frequency* | | | AGENT |
| | Level 1 | Level 2 | Level 3 | |
| 1. As masonry construction begins, verify that the following are in compliance: | | | | |
| a. Proportions of site-prepared mortar | NR | P | P | |
| b. Grade and size of prestressing tendons and anchorages | NR | P | P | |
| c. Grade, type and size of reinforcement, connectors, anchor bolts, and prestressing tendons and anchorages | NR | P | P | |
| d. Prestressing technique | NR | P | P | |
| e. Properties of thin-bed mortar for AAC masonry | NR | C**/P**** | C | |
| f. Sample panel construction | NR | P | C | |
| 2. Prior to grouting, verify that the following are in compliance: | | | | |
| a. Grout space | NR | P | C | |
| b. Placement of prestressing tendons and anchorages | NR | P | P | |
| c. Placement of reinforcement, connectors, and anchor bolts | NR | P | C | |
| d. Proportions of site-prepared grout and prestressing grout for bonded tendons | NR | P | P | |
| 3. Verify compliance of the following during construction: | | | | |
| a. Materials and procedures with the approved submittals | NR | P | P | |
| b. Placement of masonry units and mortar joint construction | NR | P | P | |
| c. Size and location of structural members | NR | P | P | |
| d. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction | NR | P | C | |
| e. Welding of reinforcement | NR | C | C | |
| f. Preparation, construction, and protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F) | NR | P | P | |
| g. Application and measurement of prestressing force | NR | C | C | |

(Continued)

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

MINIMUM SPECIAL INSPECTION REQUIREMENTS

Reference TMS 602, Table 4 (Continued)

| INSPECTION TASK (Continued) | Frequency* | | | AGENT |
|---|------------|----------|---------|-------|
| | Level 1 | Level 2 | Level 3 | |
| h. Placement of grout and prestressing grout for bonded tendons is in compliance | NR | C | C | |
| i. Placement of AAC masonry units and construction of thin-bed mortar joints | NR | C**/P*** | C | |
| 4. Observe preparation of grout specimens, mortar specimens, and/or prisms | NR | P | C | |
| 5. Inspect location and conformance of wall penetrations, embedded items and wall flashing | NR | P | P | |

* **Frequency** refers to frequency of inspections, which may be **Continuous** during the listed task or **Periodic** during the listed task, as defined in Table 4 above.

Where: NR= Not Required, **P=** Periodic, **C=** Continuous

** Required for the first 5000 square feet of AAC masonry.

*** Required after the first 5000 square feet of AAC masonry.

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| WOOD CONSTRUCTION Reference: IBC Section 1705.5 and the Montgomery County Special Inspections Program Manual | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|---|--|--------------|
| Special Inspections of prefabricated wood structural elements and assemblies shall be in accordance with Section 1704.2.5. (The requirements of IBC Section 1704.2.5.1 may apply subject to County approval). | | |
| Special Inspection of site built assemblies shall be in accordance with IBC Section 1705.5 | | |
| Inspect high-load diaphragms as per IBC 2018, Section 1705.5.1 | | |
| Inspect metal-plate-connected trusses as per IBC Section 1705.5.2 | | |
| Inspect Load Bearing Walls as follows, as applicable: <ol style="list-style-type: none"> 1. Wall stud species and spacing as per project specifications. 2. Placement of cripple stud blocking inside of floor system. 3. Stud drillings and penetrations (not to exceed one third of stud dimension unless otherwise is specified by the structural engineer of record). 4. Sill plate species as per project specifications. | | |
| Inspect Wood Columns as follows, as applicable: <ol style="list-style-type: none"> 1. Types and placement of wood columns as per construction documents. 2. Column connection details to beams and trusses. 3. Cripple stud project requirements within the floor system for load path continuity. 4. Column base assemblies. | | |
| Inspect Shear Wall Systems as follows, as applicable: <ol style="list-style-type: none"> 1. Wall stud, size and spacing. 2. Anchor bolt size, location on sill plates and strappings through floor system. 3. Placement of diagonal bracing and component shear trusses. 4. Placement of hold-down anchors and tension rods as per contract documents. 5. Shear wall sheathing type, fastener types and fastener spacing. 6. Wall blockings | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| WOOD CONSTRUCTION (Continued) Reference IBC Section 1705.5 and the Montgomery County Special Inspections Program Manual | EXTENT OF SERVICE (Continuous or Periodic) | AGENT |
|---|--|--------------|
| Inspect Roof Framing as follows, as applicable: <ol style="list-style-type: none"> 1. Placement of hurricane hangers. 2. Placement of parapet hold-down anchors. 3. Placement of permanent roof bracing. 4. Placement of gable truss bracings. | | |
| Inspect Steel Framing as follows, as applicable: <ol style="list-style-type: none"> 1. Wood to steel connections (number, size and spacing of bolts and hunger types). 2. Bracing of steel beams and columns (placement of sill plates, anchor bolt, and diagonal bracing to top of beams and blocking placement at steel beam webs). | | |
| Inspect Floor trusses as follows, as applicable: <ol style="list-style-type: none"> 1. Placement of 2x6 band members at end of trusses. 2. Truss bearing width in butting and diagonal situations. | | |
| Other Wood Inspections as determined by SER: | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| | | |
|---|-----------------------------------|--------------|
| SOILS | | |
| Reference: IBC Section 1705.6, IBC Table 1705.6 and the Special Inspections Program Manual | | |
| Required Special Inspections and Tests of Soils | EXTENT OF SERVICE | AGENT |
| Reference: IBC Table 1705.6 | (Continuous or periodic) | |
| 1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity. | Continuous. (County amendment) | |
| 2. Verify excavations are extended to proper depth and have reached proper material. | | |
| 3. Perform classification and testing of compacted fill materials. | | |
| 4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. | | |
| 5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly. | | |
| DRIVEN DEEP FOUNDATION ELEMENTS | | |
| Reference: IBC Section 1705.7, IBC Table 1705.7 and the Special Inspections Program Manual | | |
| Required Special Inspections and Tests of Driven Deep Foundation Elements | EXTENT OF SERVICE | AGENT |
| Reference: IBC Table 1705.7 | (Continuous or periodic) | |
| 1. Verify element materials, sizes and lengths comply with the requirements. | | |
| 2. Determine capacities of test elements and conduct additional load tests, as required. | | |
| 3. Inspect driving operations and maintain complete and accurate records for each element. | | |
| 4. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element. | | |
| 5. For steel elements, perform additional special inspections in accordance with IBC Section 1705.2 | | |
| 6. For concrete elements and concrete-filled elements, perform tests and additional inspections in accordance with IBC Section 1705.3 | | |
| 7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge. | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| CAST-IN-PLACE DEEP FOUNDATIONS | | |
|---|--|--------------|
| Reference: IBC Section 1705.8, IBC Table 1705.8 and the Special Inspections Program Manual | | |
| Required Special Inspections and Tests of Cast-in-Place Deep Foundation Elements Reference: IBC Table 1705.8 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Inspect drilling operations and maintain complete and accurate records for each element. | | |
| 2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes. | | |
| 3. For concrete elements, perform tests and additional Special inspections in accordance with IBC Section 1705.3 | | |
| HELICAL PILE FOUNDATIONS | | |
| Reference: IBC Section 1705.9 | | |
| SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE | | |
| Reference: IBC Section 1705.12 and Table below | | |
| A. Structural Steel Reference: IBC Section 1705.12.1 and the Quality Assurance Requirements of AISC 341-16 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Seismic Force-Resisting Systems Reference: IBC Section 1705.12.1.1 | | |
| 2. Structural Steel Elements Reference: IBC Section 1705.12.1.2 | | |
| B. Structural Wood Reference: IBC Section 1705.12.2 | | |
| C. Cold-Formed Steel Light-Frame Construction Reference: IBC Section 1705.12.3 | | |
| D. Designated Seismic Systems Reference: IBC Section 1705.12.4 and Section 13.2.2 of ASCE 7-16 | | |
| E. Plumbing, Mechanical and Electrical Components Reference: IBC Section 1705.12.6 | | |
| F. Seismic Isolation Systems Reference: IBC Section 1705.12.8 | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| TESTING FOR SEISMIC RESISTANCE Reference IBC Section 1705.13 and Table below | | |
|--|--|--------------|
| A. Structural Steel Reference: IBC Section 1705.13.1 and the Quality Assurance Requirements of AISC 341-16 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Seismic Force-Resisting Systems Reference: IBC Section 1705.13.1.1 | | |
| 2. Structural Steel Elements Reference: IBC Section 1705.13.1.2 | | |
| B. Nonstructural Components Reference: IBC Section 1705.13.2 and Section 13.2.1 of ASCE 7-16 | | |
| C. Designated Seismic Systems Reference: IBC Section 1705.13.3 and Section 13.2.2 of ASCE 7-16 | | |
| D. Seismic Isolation Systems Reference: IBC Section 1705.13.4 and Section 17.8 of ASCE 7-16 | | |
| Other Seismic Resistance Inspections/Testing as determined by SER: | | |
| | | |
| SPRAYED FIRE-RESISTANT MATERIALS Reference: IBC Section 1705.14 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Special Inspections and Tests Required: a. Condition of substrates. b. Thickness of application. c. Density in pounds per cubic foot. d. Bond strength adhesion/cohesion. e. Condition of finished application. | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| SPRAYED FIRE-RESISTANT MATERIALS (Continued) | | |
|--|--|--------------|
| | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS Reference: IBC Section 1705.15 | | |
| EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS). Reference: IBC Sections 1705.16 and 1705.16.1 (The method of application shall be reviewed and approved by the County prior to commencement of the work). | | |
| FIRE-RESISTANT PENETRATIONS AND JOINTS Reference: IBC Section 1705.17 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| 1. Penetration Firestops Reference : IBC Section 1705.17.1 | | |
| 2. Fire-Resistant Joint Systems Reference: IBC Section 1705.17.2 | | |
| TESTING FOR SMOKE CONTROL Reference: IBC Section 1705.18 | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| Smoke control systems shall be tested by a specialty inspector registered in the state of Maryland. Qualifications of Approved Agencies for smoke control testing shall meet the requirements of IBC Section 1705.18.2. The tests shall be witnessed and accepted by the Mechanical Inspector for the project. | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| STRUCTURAL OBSERVATIONS See Section 1.7.3a of the Special Inspections Program Manual. | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|---|--|--------------|
| | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| MECHANICAL INSPECTIONS See Section 1.7.5 of the Special Inspections Program Manual. | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|---|--|--------------|
| | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

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|---|--|---------------------|
| <p>SHEETING AND SHORING See Section 1.7.2 A of the Special Inspections Program Manual.</p> | <p>EXTENT OF SERVICE (Continuous or periodic)</p> | <p>AGENT</p> |
| <p>UNDERPINNING See Section 1.7.2 B of the Special Inspections Program Manual.</p> | <p>EXTENT OF SERVICE (Continuous or periodic)</p> | <p>AGENT</p> |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| ARCHITECTURAL INSPECTIONS See Section 1.7.6 of the Special Inspections Program Manual. | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|--|--|--------------|
| | | |
| WALL PANELS AND VENEERS | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
| | | |
| COLD-FORMED STEEL LIGHT-FRAME | EXTENT OF SERVICE | AGENT |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| | | |
|---|--|---------------------|
| | (Continuous or periodic) | |
| <p>PRECAST See additional requirements in Chapter 3 of the Special Inspections Program Manual.</p> | <p>EXTENT OF SERVICE (Continuous or periodic)</p> | <p>AGENT</p> |
| | | |

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

| OTHER INSPECTIONS (Explain) | EXTENT OF SERVICE (Continuous or periodic) | AGENT |
|---------------------------------------|--|--------------|

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

STATEMENT OF SPECIAL INSPECTIONS AGREEMENT

This statement of special inspection is submitted as a condition for permit. It includes a Schedule of Special Inspections applicable to this project. The SI shall keep records of specified inspections and testing. The SI shall furnish specified inspection and test reports to the County building official, and to the registered design professionals of record, as appropriate. All discrepancies shall be brought to the attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the code official and to the registered design professionals of record, as appropriate. Interim reports shall be submitted as required by the special inspection program manual. A Final Report of Special Inspections documenting completion of all required special inspections and correction of documented discrepancies shall be submitted prior to the issuance of an occupancy permit. By signing the SSI, you also affirm that you understand and will comply with the County requirements for Special inspections as outlined in the "SSI", "Special Inspection Program Manual", and the "Building Code".

Owner:

Type or print name Date

Signature

Inspecting Architect (IA):

Type or print name Date

Signature

Structural Engineer of Record (SER):

Type or print name Date

Signature

Structural Observer (SO):

Type or print name Date

Signature

Mechanical Engineer of Record (MER):

Type or print name Date

Signature

MONTGOMERY COUNTY STATEMENT OF SPECIAL INSPECTIONS

Mechanical Inspector (MI):

Type or print name

Date

Signature

Geotechnical Inspector (GI):

Type or print name

Date

Signature

Precast Concrete Engineer of Record (PER):

Type or print name

Date

Signature

Special Inspector (SI):

Type or print name

Date

Signature

Testing Agency Engineer of Record (if different from SI):

Type or print name

Date

Signature

General Contractor (GC):

Type or print name

Date

Signature

County Code Official's Acceptance:

Type or print name

Date

Signature