TO: Development Services Department

SUBJECT: INFORMATION BULLETIN 130
Required Building Inspections for One and Two Family Dwellings

DATE: February 21, 2012/Revised August 1, 2014

CREATED BY: Field Services Division

Purpose:

As a customer service initiative, the Development Services Department (DSD) has created this revised bulletin to update IB 130 on required building inspections for one and two family dwellings. This bulletin has been updated to incorporate the department’s new format for Information Bulletins. This information bulletin will outline the necessary permits and inspections for a typical new one and two family dwelling, the sequence of these inspections and basic elements of what is inspected by the DSD Inspector.

Scope:

Inspection requests are taken by telephone (210) 207-1111 through the DSD Call Center between the hours of 7:45 a.m. and 4:30 p.m. Monday through Friday excluding City holidays. Inspections may also be requested 24/7 over the Internet at the DSD web site Online Services page at www.sanantonio.gov/dsd. Typically any inspection request entered into the system prior to midnight will be on the inspector’s schedule for the following workday. The department strives to conduct (95% or better) the inspections on the date scheduled to be performed. It is important to properly identify your project on site by posting the property’s address in a clearly visible location for the duration of the project. Failure to comply with this requirement may result in your inspection being disapproved.

To communicate the results of the inspection, inspectors will leave written inspection slips on the job site after conducting an inspection that will indicate whether it was approved or disapproved (Green Tag/Red Tag). In addition all inspection results are also available on the DSD web site at the Online Services page for your convenience.

The following is a list of typical inspections, in sequential order by trade permit. Please note that it is the responsibility of the holder of the building permit to coordinate all inspection activity and to ensure that the City approved plans (including plot plan or site plan) are on the job site for inspection purposes. Failure to have City approved plans on the job site or not being ready for the requested inspection may result in disapproval and the assessment of a reinspection fee.
BUILDING PERMIT REQUIREMENTS

Property Platted & Recorded
- Prior to submitting an application for a building permit on a property, it must be platted and recorded at the Bexar County Courthouse.

Property Zoned properly
- Prior to submitting an application for a building permit, it must be zoned for a one or two family dwelling.

Residential Building Permit Application
- The application for a residential building permit for a 1&2 family dwelling needs to be submitted to DSD along with a copy of the plat, two copies of the construction drawings and all other required submittals. See Information Bulletin 101. An A/P (application/permit) number will be assigned for the project. This residential building permit application is the parent permit to the remaining child trade permits that will be needed to construct the residence.

Building Plans Reviewed
- Residential building plans are reviewed for location of the building on the site to ensure proper setbacks and other zoning requirements of Chapter 35 of the City Codes are complied with. The drawings are reviewed for compliance with the building portion of the 2012 International Residential Code. The application submittal is also reviewed for compliance with the 2009 International Energy Conservation Code.

Tree Review
- Prior to beginning any site or building work, the address will be reviewed for compliance with the tree regulations and documented in the Hansen Land Development software. Plumbing and site work may be started after this review in accordance with IB 105.

Building Permit Issued
- After the plans are reviewed and the tree review completed, the application may be released for permit issuance. Once the permit fees are paid the permit is considered issued.

Building Permit Expiration
- Per the 2012 International Residential Code Section R105.5, residential permits expire unless the work authorized begins within 180-days after the permit issuance. Permits also expire if the work authorized is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant one or more extensions of time, for not more than 180-days each if an extension is requested in writing and justifiable cause demonstrated.
**Foundation Inspection**
- The foundation inspection is generally requested after the plumbing house drains have been installed and inspected by a plumbing inspector. If the foundation has water lines installed in it, the “water pipe in slab” inspection will be performed by the plumbing inspector. Any concrete encased electrodes for the electrical grounding system should also be in place prior to the placing of the concrete in accordance with IB 131. The foundation inspection may be performed by a DSD building inspector or may be inspected by a registered engineer who will submit his report to DSD to be documented on the permit record.

**Frame Inspection**
- The frame inspection is performed after all the trade inspections (mechanical, electrical, plumbing) have received an approved concealment inspection to prevent any additional notching or boring of beams and studs that might not comply with the building code. The framing inspection entails the size and spacing of floor, roof and ceiling joists, spacing of wall studs, anchoring of sole plates, wall bracing, window size openings, fire stopping, species of framing material, etc.

**Envelope/Insulation Inspection Report**
- The building envelope test required by the 2009 IECC Section 402.4.2 must be performed and report submitted by a 3rd Party tester/inspector independent from the installer of the building envelope air barrier to DSD for filing with the official inspection record. See Information Bulletin 167 Submittal Requirements for Building Envelope Air Leakage, Insulation Compliance.

**Final Inspection**
- The final building inspection is performed when all the building elements covered by the residential building permit are complete. This inspection reviews window glazing, address posted, smoke detectors installed, handrails/guardrails installed, door landing, final grade around structure, etc.

**Residential Certificate of Occupancy**
- When all of the associated child trade permits have been inspected and given a final approval a Certificate of Occupancy (C of O) is issued to the electronic permit file. This C of O also authorizes the builder to transfer utilities from the builder to the homeowner.

**ELECTRIC PERMIT REQUIREMENTS**

**Electrical Temporary Meter Loop (TML) Permit**
- The TML is a temporary electrical panel and meter located on a temporary pole to be used as construction power. The licensed electrical contractor in accordance with local electrical requirements installs this TML. The TML is inspected by a DSD electrical inspector and when approved released to City Public Service Energy (CPS) for connection. The TML permit should be listed as child permit to the building permit application and once inspected and after the building plan review fees are paid the release for connection is authorized.
**TML Inspection**

- The TML inspection ensures the temporary pole is securely braced, the dead front covers are installed, proper GFCI protection is installed, the over current devices are properly sized and the driven grounding electrode has been installed. The inspection also covers compliance with the City adopted electrical code.

**General Electrical Permit**

- The general electrical permit is a child permit to the residential building permit and lists all the various electrical panels, outlets, lighting outlets, appliances, motors, etc. that will be installed. The electrical permit is issued to licensed electrical contractors that are registered with the City of San Antonio to perform electrical installations.

**Electric Rough-in Inspection**

- The electrical rough-in inspection (concealment inspection) is requested when all of the electrical conductors, boxes, conduits, electric panels, etc. have been installed and prior to any concealment (insulation, sheetrock, paneling, metal lathe, plaster, brick, stone, etc.) This inspection checks box fill, size of conductors, stapling of conductors, placement of holes in studs, wall spacing of outlets, etc.) This inspection should be requested and performed prior to the building framing inspection.

**Electric Final Inspection**

- The electrical final inspection is conducted when the electrical installation is complete. This inspection reviews that the light fixtures are installed, outlets are installed, GFCI outlets are installed, arch fault protection is installed, electrical panel is complete and directory is installed, etc.

**Electrical Temporary on a Permanent Set (TOPS) Permit**

- This permit allows for the connection of the permanent electrical service equipment prior to the final inspections on all trades and is optional. The conditions for having this permit inspected and released are outlined in **IB 104A**. The release of this permanent service is to allow testing of equipment, using the air handler and authorizes CPS to connect the permanent electrical service at an earlier period rather than when the Certificate of Occupancy (C of O) is issued. This release does not allow occupancy of the structure without a temporary C of O being approved.

**TOPS Inspection**

- The TOPS inspection is generally requested in conjunction with the Electrical Final Inspection. If the Electrical Final Inspection is not completely ready but the electrical installation meets **IB 104A** and is electrically safe, it may be requested prior to the final inspection. Once the inspection is approved, and if all the other associated permits are linked as children to the parent and at the proper inspection stage, than a release is authorized to CPS to connect the electrical service.

**MECHANICAL PERMIT REQUIREMENTS**
Mechanical Permit

- The mechanical permit is a child permit to the residential building permit and lists all the various duct outlets, appliances, motors, air handlers, compressors, etc. that will be installed. The mechanical permit is issued to licensed mechanical contractors that are registered with the City of San Antonio to perform HVAC installations.

Mechanical Rough-in Inspection

- The mechanical rough-in inspection (concealment inspection) is requested when all of the ducts, duct outlets, air handler, etc. have been installed and prior to any concealment (insulation, sheetrock, paneling, metal lathe, plaster, brick, stone, etc.). This inspection checks duct strapping, duct outlet installation, drain lines, equipment installation, dryer vent installation, range hood exhaust, etc. This inspection should be requested and performed prior to the building framing inspection.

Mechanical Duct Test Inspection Report

- The duct test for leakage of the ducts required by the 2009 IECC Section 403.2.2 must be performed and report submitted by a 3rd Party tester/inspector independent from the installer of the building duct system to DSD for filing with the official inspection record. See Information Bulletin 167 Submittal Requirements for Building Envelope Air Leakage, Insulation Compliance

Mechanical Final Inspection

- The mechanical final inspection is conducted when the mechanical installation is complete. This inspection review that the registers have been installed, the condensing unit is installed and meets energy code compliance, the equipment is accessible, etc. All electric/fuel burning connections are complete.

PLUMBING PERMIT REQUIREMENTS

General Plumbing Permit

- The general plumbing permit is a child permit to the residential building permit and lists the number of fixtures, water heaters, water softeners and any other plumbing related item that will be installed. The plumbing permit is issued to licensed plumbing contractors that are registered with the City of San Antonio to perform plumbing installations.

Ground Rough-in Inspection

- This inspection is requested when the house drains have been installed and prior to any concealment. This inspection reviews the plumbing house drain lines to ensure proper materials, securing of pipes, size of drain lines, correct fittings, proper fall, etc.

Water pipe in slab inspection

- This inspection is requested after any waterlines installed in the foundation are completed, prior to the building foundation inspection and prior to placement of the concrete. This inspection is required even if the water lines are run overhead and not in the foundation. At this time the water lines (if installed in the foundation) are checked
for correct sizing, any damage and proper protection from any contact with the reinforcing steel. The drainage system is also checked one more time for any damage and that it is still holding the water test.

**Underground water line**
- This inspection is requested after any waterlines installed to connect the house to the water meter (water service) are completed, prior to any concealment (dirt, sand, fill, concrete, etc.) This inspection checks pipe sizes, proper materials, proper depth, etc. This inspection may be requested any time prior to the building final inspection.

**Top-out Inspection**
- The plumbing top-out inspection (concealment inspection) is requested when all of the plumbing vents, drains, waterlines, etc. have been installed in the walls, between floors and in the attics and prior to any concealment (insulation, sheetrock, paneling, metal lathe, plaster, brick, stone, etc.) This inspection checks pipe sizes, proper materials, drain lines, securing of piping, equipment installation, etc. This inspection should be requested and performed prior to the building framing inspection.

**Final Plumbing Inspection**
- The plumbing final inspection is conducted when the plumbing installation is complete. This inspection review that the fixtures have been installed, the water heater is installed, the equipment is accessible and everything has the proper clearances etc.

**Sewer Plumbing Permit**
- The sewer permit is a child permit to the residential building permit and is for the installation of the sewer line to the sewer stub at the property line. The sewer permit is issued to licensed plumbing contractors that are registered with the City of San Antonio to perform plumbing installations.

**Sewer Final Inspection**
- The sewer final inspection (concealment inspection) is requested when the sewer drain line has been installed connecting the house sewer line to the sewer stub at the property line and prior to any concealment (dirt, sand, fill, concrete, etc.) This inspection checks pipe sizes, proper materials, drain lines, grade/slope etc. This inspection may be requested any time prior to the building final inspection. This inspection will need to be conducted and passed if an electric TOPS permit will need to be released for connection.

**Gas Permit**
- The gas permit is a child permit to the residential building permit and is for the installation of the gas piping for the residence and is needed only if gas lines will be installed. The gas permit is issued to licensed plumbing contractors that are registered with the City of San Antonio to perform plumbing installations.

**Gas Rough-in Inspection**
- The gas rough-in inspection (concealment inspection) is requested when all of the gas lines have been installed and prior to any concealment (insulation, sheetrock, paneling,
metal lathe, plaster, brick, stone, etc.) This inspection checks pipe sizes, proper materials, securing of piping, air test of system to ensure that the piping does not leak, equipment installation, etc. This inspection should be requested and performed prior to the building framing inspection.

Gas Final Inspection
- The gas final inspection is conducted when the gas installation is complete. This inspection review that the gas valves have been installed, the water heater is installed, the equipment is accessible and another air test to ensure that the gas pipes hold pressure without leaking, etc.

MISCELLANEOUS REVIEW PERMIT REQUIREMENTS

Miscellaneous Review Permit
- The miscellaneous review permit is a child permit to the residential building permit and is required for any concrete work in the public right of way for sidewalks and approaches. The miscellaneous review permit is issued to licensed sidewalk and curb contractors that are registered with the City of San Antonio.

Sidewalk Final Inspection
- The sidewalk final inspection is requested prior to the placement of any concrete for the sidewalk and approach. This inspection checks proper base materials, depth of forms, size of reinforcing steel, grade/slope, etc. This inspection may be requested any time prior to the building final inspection. This inspection will need to be conducted and passed for the Certificate of Occupancy to be issued.

Should you have any questions on this process, please contact the Development Services Manager at (210) 207-0148 or the Building Inspections Supervisor at (210) 207-2750.

Questions for each of the disciplines outlined in this information bulletin should be directed to the following inspectors:

- Building Inspections Supervisor (210) 207-2750
- Electrical Inspections Supervisor (210) 207-8286
- Mechanical Inspections Supervisor (210) 207-8242
- Plumbing Inspections Supervisor (210) 207-8279

Summary:

This Information Bulletin is for informational purposes only.

Prepared by: Sylvia Cortez, Building Inspections Supervisor

Reviewed by: Patrick Poloskey, CBO, Development Services Manager

Authorized by: Michael Shannon PE, CBO, Assistant Director