



RESIDENTIAL CONSTRUCTION INFORMATION PACKET

Building Inspections

TABLE OF CONTENTS

Plan Submittal Requirements	2
General Inspection Information	3
Inclement Weather	5
Residential Inspections Required	5
Inspection Requirements	5
Storm Water Protection	7
Pre-Drainage Inspection	7
T-Pole	7
Plumbing Rough	7
Foundation	8
Exterior Wall	8
Top-Out/Frame	9
Plumbing Top-Out	9
Electrical Rough	9
Mechanical Rough	9
Framing	10
Insulation	10
Sheetrock	11
Drainage Culvert	11
Flatwork	11
Utility Final	11
Final Drainage Inspection.	12
Tree Final	12
Building Final	12

A. PLAN SUBMITTAL REQUIREMENTS

Please check your deed restrictions and Home Owner’s Association requirements before building, as the Town does not regulate them.

1. Design Criteria

TABLE R301.2 (1)

ROOF SNOW LOAD	WIND	SEISMIC DESIGN CATEGORY (f,g)	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP (f)	FLOOD HAZARDS (h)
	Speed (e) (mph)		Weathering (a)	Frost line Depth (b)	Termite (c)		
5 lb/ft²	115(3-sec-gust)/76 fastest mile	A	Moderate	6"	Very heavy	22° F	Local code

TABLE R301.2 (1)

ICE SHIELD UNDER-LAYMENT REQUIRED	AIR FREEZING INDEX	MEAN ANNUAL TEMPERATURE	
NO	150	64.9° F	

2. No construction may begin until a building permit has been issued. Permit application must be submitted via eTRAKiT. Plans may be uploaded electronically during the application process. The follow information must be included with your submittal:

- a. A site plan indicating all proposed and existing structures and where those structures are to be placed in relation to property lines. This includes, but is not limited to, the house, accessory structures, patios, sidewalks, driveways, etc. Site plan must also indicate existing infrastructure (manholes, fire hydrants, inlets, cleanouts, utility boxes, etc.) in relation to all proposed structures.
- b. A grading and drainage plan that is separate from the required site plan. This plan must be submitted at the time of permit application and must provide the following information:
 - i. The finished pad elevation (FPE)
 - ii. The elevation of the lot corners
 - iii. Arrows showing the drainage inlet, including spot elevations for any high points
 - iv. All existing utilities and improvements, including inlets, ADA facilities and manholes
 - v. All retaining walls with top and bottom of wall elevations
 - vi. Location of water meter
 - vii. Any existing trees that will remain
 - viii. All proposed flatwork, including driveways, with the proposed width
 - ix. Culvert(s) with all data, including the pipe size, flow line (in and out) and slope.
 - x. Show all existing easements.
 - xi. The location of any proposed or existing sub-surface drain systems located on the property and surface drainage arrows that conform to the Town approved drainage plans. If no drainage plans exist, the proposed drainage plan must not increase the flow of water to adjacent lots. **NOTE: All deck and Gutter drain terminations must be clearly identified on the drainage plan and must be approved at the pre-drainage inspection. Drain terminations must be at least six feet away from the ROW or adjacent property lines. Termination at the street must be pre-approved and will only be allowed for lots with special circumstances. If pre-approval is granted, the drains must be constructed through the curb and must be cored.**

Depending on the subdivision, the grading and drainage plan will be in one of two forms:

- For lots in a subdivision where there are Town of Flower Mound approved as-built construction plans, the plan may be in the form of a plot plan with the additional information listed above added. The information listed above must match the approved subdivision plans exactly; no deviations are permitted. In the situation where the builder wants to deviate from the approved as-built plans, an engineered grading and drainage plan must be provided
 - For lots where there are no existing as-built plans or where a subdivision was intentionally developed without specific lot grading information, the plan shall be in the form of an engineered grading and drainage plan and must be signed and sealed by a civil engineer licensed to practice in the State of Texas (a Texas P.E.). The engineered grading and drainage plan shall show the proposed grading for the lot at 1' intervals and include all the items listed above. In addition, the plan shall show the proposed location of any on-site sewage facility (OSSF) and include all information necessary to install utility taps (if required). The plan shall reference the Town's Engineering standards and shall include all relevant Town standard construction details.
- c. Architectural plans must include window sizes, door sizes, and elevation drawings showing exterior wall construction and masonry percentage calculations. Plans must show the height of the structure from grade to peak. **All options to be built must be clearly marked. Any options on the plans that will not be constructed should be crossed-out.**
 - d. Foundation drawings shall be stamped by a professional engineer licensed by the State of Texas. Correct elevations must be marked.
 - e. A letter (with the correct legal address) from the same engineer that designed and sealed the foundation plans stating that the foundation was designed for the soil conditions on that particular lot. The letter must also state that the foundation design criteria comply with the minimum standards required by the current International Residential Code adopted by the Town.
 - f. All brick arches that span more than six (6) feet and brick columns that are more than ten feet (10') in height must be designed by a structural engineer. A design letter must accompany the plans.
 - g. A non-refundable \$250.00 plan review fee must be paid upon permit submittal.
 - h. Proof of energy compliance must be submitted. Options include a certificate of compliance using the energy calculation tool found at <https://ic3.tamu.edu/>, certificate of compliance from another approved trade-off program, or documentation showing that EnergyStar will be used.
 - i. A Manual J and a Manual S must be submitted. The software used to create these manuals must be ACCA compliant and it must state this on each manual.
 - j. A letter from the mechanical contractor or designer, indicating how compliance with section M1505 of the IRC will be achieved.
 - k. If septic, a TCEQ licensed septic contractor registered with the Town of Flower Mound must submit an application and all supporting documents for a septic permit.
 - l. If engineered trusses or I-beams are used, a layout must be submitted.
 - m. If the lot is one acre or larger, a tree survey is required. All protected trees over six inches (6") in diameter (at 4.5 feet high) must be on the survey. This tree survey must be done by a certified arborist (International Society of Arboriculture) or by a registered landscape architect. The tree survey must be in compliance with all standards and regulations, pursuant to chapter 94, Trees, and Section 94-24 of the Town of Flower Mound Code of Ordinances.

If a lot is less than one acre, a plot plan showing the approximate diameter of the trees, their canopy extent, and their location in relation to the building pad should be submitted. Preparation by a certified arborist or landscape architect is not required for lots under one acre.

- n. If the bonus room is unfinished, please note on the plans that it was not included in the square footage.
- o. If the house is a model home, you must indicate this on your application. If the garage is to be used as a sales office, this must also be noted on the plans.
- p. If the house has gas, you must include a complete gas line diagram showing the gas line from the meter to the farthest appliance. This diagram must include the following:
 - a. The psi of the meter (low, medium, or high pressure)
 - b. The length of the line
 - c. The size of the line
 - d. The type of line (material)
 - e. The BTU load of each appliance on the line
 - f. The total BTU load
 - g. The length of the longest run

****All required plumbing drawings must be to ¼ or 1/8 scale *****

Exception: Outdoor propane lines must be inspected by the Texas Railroad Commission

- q. PLANS AND SPECIFICATIONS SHALL BE DRAWN TO SCALE AND SHALL BE OF SUFFICIENT CLARITY TO INDICATE THE LOCATION, NATURE, AND EXTENT OF THE WORK PROPOSED AND SHOW IN DETAIL THAT IT WILL CONFORM TO THE PROVISIONS OF THE CURRENTLY ADOPTED CODES AND ALL RELEVANT LAWS, ORDINANCES, RULES, AND REGULATIONS.
- r. Permit fee is non-refundable.
- s. **Time Limitations of Applications** – An application for a permit for any proposed work shall be deemed to be abandoned 45 days after the date of filing, if permit has not been pursued in good faith.

The telephone numbers for the Residential Plans Examiners are 972.874.6368 and 972-874-6357.

B. GENERAL INSPECTION INFORMATION

1. **Working Hours** - Standard working hours are between 7:00 a.m. and 7:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on weekends.
2. No tracked vehicles will be allowed on streets and alleys after a subdivision has been accepted.
3. Instruct subcontractors and their employees to park in such a way that emergency vehicular traffic will not be obstructed, e.g., fire trucks and ambulances.
4. **Lot Grading** - No lot grading is to take place until the building permit has been issued. **Note:** For SFD permits that have an individual grading plan, a "Stormwater Protection" inspection must be scheduled and approved prior to beginning any grading.
5. **Tree Removal** – Before removing any tree over six inches in diameter from a lot, check with the Environmental Services Division to determine if the tree can be removed. A tree removal permit is necessary to remove any specimen or historic tree, and any tree over six inches in diameter on the protected list that is not in the buildable area (Sec. 94-34).
6. **Tree Protection** - Prior to preparing the pad site, protective fencing should be placed around the drip line(s) of all protected trees or group of protected trees located on the property and six-

foot-high chain-link fencing around the drip line of specimen and historic trees to reduce damage from construction activities – clearing brush within these fenced areas should only be done by hand or mowers (Sec.94-51).

7. **Tree Damage Penalties** - Unauthorized tree removal or unauthorized construction activities under the drip line of any protected tree on a site will be subject to penalty per the Town's tree ordinance (Sec. 94-41). For replacement trees: If replacement onsite is not an option, is not possible, or is not approved; payment into the Town's tree preservation fund in the amount of \$125 per-caliper-inch will be required. Penalties for the unauthorized removal of protected trees includes replacement with 5 times the caliper inches removed, and/or a monetary penalty of \$250 per-caliper-inch removed. Penalties for the unauthorized removal of specimen trees includes replacement with 10 times the caliper inches removed, and/or a monetary penalty of \$500 per-caliper-inch removed. Penalties for the unauthorized removal of historic trees includes replacement with 15 times the caliper inches removed, and/or monetary penalty of \$750 per-caliper-inch removed. The **Environmental Services Division** can be reached at 972.874.6352 or 972.874.6340.
8. **Portable Toilets** – Construction-worker toilet facilities of non-sewer type shall conform to ANSI Z4.3.
9. **Posting of Address** - Building addresses must be posted in a location (see #10 below) that is conspicuous from the street on each lot at all times.
10. **Maintenance of the Construction Site** – Construction or work for which a permit is required shall be subject to inspection, and such work shall remain accessible and exposed for such purposes until approved. Before any inspection is approved, an address shall be posted that can be read from the street and all rights-of-way, streets, and alleys shall be clean and clear of mud, sand, concrete, and building materials. All trash, construction debris, and construction material on site shall be contained.
11. **Inspection Requests** - All inspections must be requested by using the online inspection scheduling program. To schedule an inspection, go to <http://etrakit.flower-mound.com> and use your contractor login to access your permits. Inspections can be requested as late as 7:30 a.m. for a same-day inspection. Inspections can be scheduled up to 14 days in advance (excluding holidays and weekends). You can also cancel inspections and check inspection results using the same website.
12. **After-Hours Inspection Request** – An after-hours inspection must be approved by the Assistant Building Official (**prior approval is needed to assure that an inspector will be available and that the request is warranted**). A fee of \$120 is required upon approval.
13. **Office hours** for inspectors are from 7:30 a.m. to 8:30 a.m. and 3:30 p.m. to 4:30 p.m. each day. **Technical questions and questions regarding inspection item corrections must be directed to the inspectors during the above listed office hours. DO NOT CALL THE MAIN OFFICE NUMBER AND REQUEST TECHNICAL INFORMATION.** If you are unable to resolve an issue with your inspector, you may contact that inspector's supervisor.
14. **For general questions only and for permit information, you may call the office at 972.874.6355.**
15. **Temporary Power** - Because of serious safety considerations, citations will be issued to the job superintendent, electrician, and/or an officer of the general contractor or electrical contractor if temporary power is tied directly into the permanent breaker box. Electricians are

permitted to test house circuits provided that a licensed electrician is on site at all times while power is connected to the house. Any temporary wiring that does not meet these conditions may be cause for confiscation of wire and disconnect of power. If power is disconnected, a permit must be obtained and an inspection must be approved to release power.

- 16. Re-inspection Fees** - A re-inspection fee may be assessed and inspection may not be performed if any of the following conditions apply (this list is not intended to be all-inclusive):
- a. Inspection scheduled is not ready.
 - b. No building address posted as specified in #9 above.
 - c. Trash on the lot.
 - d. House is locked, or work to be inspected is not otherwise accessible.
 - e. An inspection is disapproved twice for the same item.
 - f. A safety fence is not installed around sewer tap excavations that are four feet deep or more.
 - g. Water meter box must be in place and not damaged at all times, or the inspection will not be performed
 - h. Construction materials are located within the right-of-way. (See item #10 above.)
 - i. Panel cover is not removed for utility final inspection or is off at the building final.
 - j. No tree certificate, engineer's reports, or energy testing documents have been uploaded to the permit at final inspection.
 - k. Any deviation from the original approved plans that requires a permit and does not have approval (see specification in #17 below).

This list is not an all-inclusive list. Re-inspection fees may be assessed at the discretion of the inspector.

All re-inspection fees must be paid prior to scheduling a Utility Final inspection.

- 17. Re-stamp** - Any changes in the approved plans are required to be re-stamped before an inspection is scheduled. This includes any variance of the site plan over one foot (1'). Re-stamps are \$90 per hour with a \$90 minimum and may take up to two days to process. Do not schedule an inspection if the re-stamp is not approved. Failure to comply will result in a re-inspection fee, and no inspection will be conducted.
- 18. Engineering Letters and Other Required Documents** - Whenever an engineering letter or other document is required, the letter/document must be uploaded to eTRAKiT prior to scheduling the inspection. When uploading a letter or other required documents to eTRAKiT, please label the document "INSPECTION DOCUMENT". This will allow the inspector to refer to the letter/document in order to verify compliance with the requirements of the engineer.
- 19. Safety Compliance** - For the purpose of providing safety on the construction site, the Occupational Safety and Health Administration (OSHA) guidelines shall be followed (see their web site at www.osha.gov).
- 20. Expiration** - Every permit issued shall become invalid unless the work on the site is commenced within 45 days after its issuance. In addition, every permit issued shall become invalid if work authorized on site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. **Suspended or abandoned** will be defined as an elapsed time of 180 days between any two approved inspections.

C. INCLEMENT WEATHER

No concrete, plumbing rough, or underground inspections will be made if it has been determined by the Assistant Building Official that it is too wet.

No concrete or plumbing rough inspections will be made unless the temperature is at least 38 degrees and rising. You may check eTRAKiT between 8:15 and 8:30 a.m. the morning of the inspection to verify if an inspection has been canceled due to weather.

During inclement weather, it is the responsibility of the contractor to reschedule all inspections on eTRAKiT.

E. INSPECTION REQUIREMENTS

These are code requirements and/or commonly missed items. For a complete list of requirements, refer to the current Codes as adopted by the Town.

1. STORM WATER PROTECTION (if applicable)

This inspection is only necessary for those SFD permits that require a grading plan to be submitted with the SFD permit application because there are no existing as-built plans or where the subdivision was intentionally developed without specific lot grading information.

- a. All protection measures required in the approved Stormwater Prevention Protection Plan (SWPPP) must be installed prior to scheduling this inspection.
- b. No grading of the lot may begin until this inspection is approved.

2. PRE-DRAINAGE

- a. Lot must be benched and foundation forms boards installed.
- b. Plumbing work **shall not** be started.
- c. No grade beams or piers shall be started.
- d. All required erosion-control devices must be in place.
- e. This inspection must be approved before any other inspection can be scheduled.
- e. Slopes shall not exceed 3:1 ratio.
- f. A form board survey **must** be uploaded to the permit via eTRAKiT prior to scheduling this inspection. The attachment should be labeled "FORM BOARD/PAD SURVEY." The survey must verify that all property line setbacks are met and must show the finished pad elevation. Pad elevation must be represented using the Town's benchmarks.

3. TEMPORARY POWER POLE

- a. Pole is to be braced, secure, and stable and the address must be posted on the pole.
- b. The licensed electrician can test house circuits using the power source from the temporary power pole to prepare for utility final and/or all final inspections **only** and provided all circuits are disconnected prior to the licensed electrician's leaving the site.

4. PLUMBING ROUGH (You must have an approved pre-drainage inspection prior to scheduling this inspection.)

The form board survey provided at pre-drainage will be used to verify setbacks at this inspection.

Upon approval of the plumbing rough inspection, the open ditches shall be immediately covered prior to any further inspections.

a. **Water Lines**

1. One hose bibb with a non-removable vacuum breaker must be installed in the water line to check the pressure on the water service line.
2. All hot water lines must be insulated with .50 insulation.
3. The water meter must be installed when the inspection is scheduled, or there will be a re-inspection fee, unless prior approval from the Assistant Building Official has been obtained. (Licensed plumber is responsible for verifying that the water pressure meets the requirements of the currently adopted code.)
4. The water meter must be installed correctly with the arrow pointing toward the house.
5. Cover must be removed from the water meter box when a plumbing rough inspection is requested.

b. **Sanitary Sewer**

1. Five-foot (5') head of water measured at the last stack in the house. The measurement will be taken from ground level. Stacks that are too high are subject to receiving a disapproval tag. The water test must include the sewer yard line. A screw-type test ball must be installed at the sewer tap.
2. The sewer tap must be exposed two feet (2') from either side of sewer connection. (This means that two feet (2') of the Town's green lateral line adjacent to the tie-in must be exposed at the time of inspection.)
3. At the time of connection, if no clean-out is provided it is the responsibility of the contractor to install a clean-out at the connection of the building sewer and the service lateral. This clean-out should be located 14.5' from back of curb unless prior approval from the Assistant Building Official has been obtained.
4. Air admittance valves are not allowed.
5. Sewer must be connected to the Town's sanitary sewer system.

5. **FOUNDATION** (You must have an approved plumbing rough inspection prior to scheduling this inspection.)

- a. All work must conform with the engineered plans with no additions or subtractions to the approved plans. (If changes are made, they must be re-engineered and re-submitted for Town approval – a \$40 re-stamp fee will apply.)
- b. Cable ends must be a minimum of six inches (6") below the top of the forms.
- c. Cable ends must be a minimum of six inches (6") from the corners.
- d. Cable insulation must cover the cable to within three inches (3") of the cable ends.
- e. Cables that must be re-routed to miss plumbing fixtures must be done with long sweeping curves of the cable.
- f. Electrical conduit located in the foundation must be installed.
- g. When gas lines are approved to be installed in areas of the foundation, they must be properly sleeved.
- h. When required, original finished floor elevation surveys and engineering letters verifying required piers were installed according to the design must be uploaded to the permit via eTRAKiT prior to scheduling this inspection.
- i. No changes can be made to the foundation after inspection approval without a plan re-stamp and requesting another foundation inspection.
- j. Poly must cover all pad areas only. Poly is to be cut or not installed in beams.
- k. A water test with Town pressure or other approved test must be maintained on the water supply lines.
- l. All tub boxes must be installed.
- m. Sewer and water lines must run at 90-degree angles to grade beams.

- n. All water and sewer yard trenches must be covered.

6. **EXTERIOR WALL**

- c. Exterior wall inspection is only to be used if exterior wall sheathing is to be covered by a vapor or air barrier.
- d. Sheathing must be attached per currently adopted code or manufactures installation instructions.
- e. Wind bracing must be installed per currently adopted code and approved permit documents.

7. **TOP-OUT/FRAME** (You must have an approved foundation inspection prior to scheduling this inspection.)

a. **Plumbing Top-Out**

1. **Water**

- a. All water lines must be supported, anchored, or braced to minimize movement.
- b. All water lines in unheated areas must be protected from freezing.
- c. Hot water lines (100-180 degrees F) must have .50 insulation unless in attic, which requires .75 insulation.
- d. Frost-proof hose bibbs with integral vacuum breakers must be installed.
- e. The Town's water pressure or other approved means must be applied.

2. **Gas Lines**

- a. **Black Pipe Gas Lines:** There must be an approved test installed, and the test must be located outside of the house at the utility meter connection. Except for immediate termination at the utility meter connection, gas lines located between exterior veneer and outside sheathing must be factory mill wrapped.
- b. **CSST Gas Lines:** Approved tests must be installed. When medium pressure is provided by the utility provider, the test from the utility gas meter connection to the regulator must be installed on the outside of the house at the utility gas meter connection (to test the medium pressure side), and from the regulator, another test must be located at the fireplace (to test the low pressure side). If the CSST gas piping system is installed with all low pressure provided by the utility provider, the test must be installed on the outside of the house at the utility gas meter connection. **You must verify with the utility provider for information pertaining to the pressures supplied.**

3. **Drain, Waste, and Vents**

- a. Air admittance valves are not allowed.
- b. All drain, waste, and vents (DWV) shall be tested at this inspection.
- c. All tubs, shower liners, and receptors shall be tested at this inspection.

b. **Electrical Rough**

- 1. Service entrance conductors cannot exceed 3' from the meter connection to the first means of disconnect.
- 2. Bonding at gas piping, metallic water piping, and metallic boxes.

3. Concrete encased electrode (ground) verification.

c. **Mechanical Rough**

1. If applicable, metal ducts shall be insulated.
2. Air conditioning (AC) duct insulation must meet the requirements of the Town's currently adopted energy code.
3. AC joints and seams must be sealed by approved mastic or tape with a (UL181A) listing. Duct tape is not approved.
4. The insulation for all AC lines (fluid temp. range 40-55 degrees F) must meet the requirements of the Town's currently adopted energy code.
5. AC ducts inside the building but outside conditioned area require a vapor retardant of 0.05 perm or aluminum foil of 2 mils.
6. All exhaust fan ducts must extend to the outside.
7. Where a water closet is separated from the shower area by a door, an exhaust fan is required in both the water closet area and the main bath area.
8. Dryer vent length must meet the requirements of the Town's currently adopted code.

d. **Framing**

1. Exterior bottom plates must be secured to the foundation by L-bolts (washers and nuts must be tight) or other code approved methods.
2. Joists over four feet (4') in length must be pressure blocked on one side only with nails driven from the joist into the pressure block – or a joist hanger must be used.
3. All lumber must be grade-stamped. Unstamped lumber is unacceptable as a structural framing member.
4. Where air handling units and water heaters are supported by ceiling joists, those joists will be calculated as floor joists. Where air handling units and water heaters are supported by rafters, those rafters will be calculated as rafters supporting a drywall ceiling.
5. Stairway tread depths must be a minimum of eleven inches (11").
Exception: Tread depths may be a minimum of ten inches (10") in locations where code compliant nosing is installed.
6. Tread depths at the inside of each winder are to be at least six inches (6"). (See currently adopted code for more details.)
7. A structural engineer's design is required when wood members are used to permanently support masonry. Gables that cantilever in excess of six feet (6') over a roofline also require a structural engineer's design.
8. All penetrations in top plates and chase openings must be sealed.
9. Seal all floor/ceiling penetrations (e.g., tub trap openings at second floor).
10. Covered porches and patios must be inspected to verify proper structural framing prior to installing any finished ceiling material.
11. All brick wall ties must be installed.
12. Check all fenestrations for labeling of SHGC/NFRC, and labeling must remain intact for the inspection. All fenestrations must be NFRC (National Fenestration Council)-certified.
13. All recessed lighting must be rated airtight or be enclosed within a sealed box constructed from .50-inch gypsum board or other airtight assembly.
14. A system must be in place to ensure a one-inch air space between all ceiling/roof assemblies (baffles for ventilation in attics).
15. Use the header span chart in the current IRC as adopted by the Town for ceiling joists used to support the roof load.

16. Remove all combustibles (wood, building materials, trash, etc.) from fireplace firebox.

8. **INSULATION** (You must have an approved top-out/frame inspection prior to scheduling this inspection.)
 - a. Insulation R-values must be equal to or better than the R-values indicated on the approved plans and must fit properly with no voids or missing pieces.
 - b. Vapor barriers are exempted in this area.
 - c. Insulation at roof/ceiling assemblies requires one-inch cross ventilation.
 - d. Insulation must be installed under all equipment walkways and floored areas in the attic space.

9. **SHEETROCK** (You must have an approved insulation inspection prior to scheduling this inspection.)
 - a. All green rock or other approved material must be installed in wet or damp areas.
 - b. All lighting outlets, switches, and plugs must be sealed airtight at the building envelope.
 - c. All plumbing and mechanical penetrations must be sealed airtight at the building envelope.
 - d. Fastener (nail/screw) patterns must match code requirements.

10. **DRAINAGE CULVERT** (if applicable)
 - a. A Drainage Culvert inspection must be scheduled and approved before you can schedule a flatwork inspection.

11. **FLATWORK** (Town sidewalks, drive approaches, and driveways)
 - a. The only flatwork inspected by the Town is Town sidewalks, driveway approaches, and driveways.
 - b. All flatwork must be reinforced with steel. Town walks are required to have a minimum of three-eighths inch (3/8") rebar at eighteen inches (18") on center transversely and eighteen inches (18") on center longitudinally with expansion joints at twenty feet (20') on center.
 - c. Approaches off of alleys must have a depth of six inches (6") and be reinforced with #3 bars eighteen inches (18") on center to the property line. Alley approaches must have a turn radius of six feet (6'). The alley must be doweled eighteen inches (18") on center with #3 bars that extend at least six inches (6") into the alley. **Do not** install an expansion joint at the alley. An expansion joint will be required at the property line.
 - d. Approaches off of a street must have a depth of six inches (6") and be reinforced with #3 bars eighteen inches (18") on center to the property line. Curb cuts shall follow engineer stamped ST-4. The street must be doweled eighteen inches (18") on center with #4 engineer-stamped ST-6 bars that extend at least six inches (6") into the street. An expansion joint will be required at the sidewalk. **Do not** install an expansion joint at the street. All driveways **must** use horizontal (sloped) saw cut.
 - e. Expansion joints must be installed at all existing concrete (except streets and alleys).
 - f. All lead walks to back of curb need expansion joints. Decorative concrete may be installed only on private property. Any concrete work done within a street or alley easement must be completed with a brush finish.
 - g. The minimum width for a driveway is twelve feet (12').
 - h. The minimum length of a driveway is twenty feet (20') from the property line to the garage.

- i. The minimum distance from the driveway to a street intersection is thirty-five feet (35’).
- j. Driveways must be a minimum of two feet (2’) from the side property line.

12. UTILITY FINAL (You must have an approved sheetrock inspection prior to scheduling a utility inspection.)

- a. All wires must be capped and covered, or fixtures must be installed.
- b. The cover must be off of the electrical panel.
- c. The meter base must be bonded to the main panel box.
- d. **Black Pipe Gas Lines:** There must be an approved test installed, and the test must be located outside of the house at the utility meter connection.
- e. **CSST Gas Lines:** Approved tests must be installed. When medium pressure is provided by the utility provider, the test from the utility gas meter connection to the regulator must be installed on the outside of the house at the utility gas meter connection (to test the medium pressure side), and from the regulator, another test must be located at the fireplace (to test the low pressure side). If the CSST gas piping system is installed with all low pressure provided by the utility provider, the test must be installed on the outside of the house at the utility gas meter connection. **You must verify with the utility provider for information pertaining to the pressures supplied.**
- f. Gas stops at each appliance must be properly secured.
- g. Gas system must be completely installed. Gas stops and caps must be installed at all terminations.
- h. All light fixtures located within thirty-six inches (36”) horizontally and within eight feet (8’) vertically of the lip of a bathtub or shower must be waterproof.
- i. All masonry must be complete before requesting a Utility Final.
- j. Water heaters must have heat traps (hot and cold side).

13. SEWER SERVICE VERIFICATION

- a. The house sanitary sewer cleanout must be accessible.
- b. The sanitary sewer service must be intact, clean and free of debris or blockage all the way to the sewer main.
- c. A Town crew will camera the sewer service from the house to the sanitary sewer main.
- d. The Town reserves the right to check the main downstream from the sewer service if they suspect that debris has been pushed into the Town’s main.

14. FINAL DRAINAGE

- a. At the time of this inspection dirt work must be completed and the lot grading and drainage must be in accordance with the approved grading and drainage plan.
- b. All disturbed areas of the lot shall either have permanent vegetation established or erosion control measures installed to ensure that there will be no silting of the neighboring lots or the ROW. In location where the ROW, drainage easements or common drainage swales have been disturbed, all areas must have established grass or sod in place.
- c. The Sidewalks, water meter box, streets, curbs, fire hydrants, water valves, drive approaches, lead walks, and sewer clean-outs on or adjacent to the lot shall be complete, clean and in property working order.

15. TREE FINAL

- a. The trees species noted on the Tree Species Certification Form must be installed with an above or below ground staking system.
- b. Irrigation must be provided to each tree that is separate from the irrigation installed for the lawn, with a minimum of one (1) bubbler.
- c. A mulch ring can be placed around the newly planted tree/s, but it should not be located on top of the root ball. No sod should be placed on the root ball.
- d. The root flare should be visible when the tree is planted and it should be planted 1-2" above grade to allow for settling of the root ball.
- e. See Exhibit "A" of Tree Species Certification Form for additional planting details.

16. BUILDING FINAL (All Finals) (You must have approved final drainage and tree final inspections prior to scheduling an all finals inspection.)

a. General

- 1. Electrical and gas meters must be installed. If the building final is requested prior to the installation of the electric or gas service meter, a re-inspection fee will be assessed.
- 2. The Jacuzzi access panel must be removed for inspection.
- 3. A Tree Species Certification form must be uploaded to eTRAKiT prior to scheduling this inspection. When uploading this document to eTRAKiT, please label it "TREE SPECIES CERTIFICATION FORM." This form is available on the Town's web site. It must show a minimum of three (3) trees with a caliper width (at six inches above ground level) of two and one half (2 ½) to three (3) inches and at least six feet (6') in height provided on each residential lot 10,000 square foot and greater. A minimum of two (2) trees, with a minimum caliper width of two and one-half (2 ½) to three (3) inches, and at least six feet (6') in height, shall be provided on each single-family and duplex lot between 5,000 and 10,000 square feet. A minimum of one (1) tree, with a minimum caliper width of two and one-half (2 ½) to three (3) inches, shall be provided for each 3,000 square feet of gross lot area on each multi-family lot. At least one tree must be in the front yard, unless the subdivision requirements indicate otherwise. All special tree requirements for that subdivision must be met. There shall be no more than 50 percent of any tree species, and no more than 75 percent of any tree genus permitted to satisfy the planting requirements. To receive credit for existing protected trees greater than or equal to six inch diameter, per Section 94-40, contact **Environmental Services** at **972.874.6352**.
- 4. Final approval of the **septic system** (if present) must be obtained from the **Environmental Services Division (972.874.6340)** prior to requesting the building final inspection.
- 5. All work is to be complete. No contractors should be on the site working at the time of the inspection.
- 6. If the EnergyStar home option was chosen during plan review, an address-specific certificate must be uploaded to eTRAKiT prior to scheduling this inspection. When uploading this document to eTRAKiT, please label it "ENERGYSTAR CERTIFICATE."
- 7. All energy code required documentation (blower door and duct testing) is to be uploaded to eTRAKiT prior to scheduling this inspection.

b. Plumbing

1. Any drain or water line that is installed for future use must have permanent caps.
2. Heat traps must be installed or built into all water heating appliances.
3. Sewer clean-outs must be cut to grade and installed with an approved cap.
4. Air admittance valves are not allowed.
5. All UV exposed PVC shall be protected (painted).
6. Protect all exposed gas piping from corrosion (painted).

c. **Electrical**

1. All electrical outlets 120 volt, 15 and 20 amp that are located in “wet locations” are required to be GFCI-protected.
2. Arc-fault circuit interrupters must be installed per the Town’s currently adopted code.

d. **Mechanical**

1. Thermostatic controls shall be capable of being set locally or remotely. The minimum temperature range shall be 55-85 degrees F.
2. All air conditioning and heating equipment must reflect the correct size and rating per the approved plans.
3. Refrigerant lines exposed to UV shall be protected at condensers.
4. Locking caps are required at condensers where not otherwise protected.

e. **Building**

1. A solid core door must be installed between the garage and living area.
2. Weather-stripping must be installed at all openings of the building envelope.
3. Attic access pull-down stair must be insulated and rated for code approved weight.
4. Attic insulation must have correct R-value (blown insulation requires a certification label by the installer and depth markers every 300 square feet). These labels must face the attic access.
5. Yard must be clear of debris and final grade completed.
6. A permanent address must be installed and visible from the street and alley. The address numbers must be a minimum of three (3) inches in height.
7. All construction debris must be removed and disposed of or relocated to an approved site.
8. Street, alley, and all flatwork must be clean and clear of mud and debris.

Contacts and Additional Information:

These requirements are only a general list of building, electrical, plumbing, and mechanical Code regulations and/or commonly missed items. To view current Ordinances and Amendments adopted by the Town, refer to the Town’s web site at www.flower-mound.com.

To navigate the web site, click Departments, and choose Building Inspections from the drop-down list. From the menu on the left-hand side of the Building Inspections page, choose “Building Information and Permits” to access forms and information packets.

Town of Flower Mound
 Building Inspections Division
 2121 Cross Timbers Road
 Flower Mound, TX 75028

Phone: 972.874.6355
Permit Information and Inspection Scheduling: <http://etrakit.flower-mound.com>