

#### **Residential Contractor Guidelines**

Rev. 8/2023

152 N. Main Drive Van Alstyne, Texas 75495 Phone 903.482.5426

#### Construction projects shall comply with the following codes:

- 2015 International Energy Conservation Code and local amendments
- 2015 International Residential Code and local amendments
- 2014 National Electrical Code and local amendments
- City of Van Alstyne Subdivision Ordinance
- City of Van Alstyne Zoning Ordinance

#### **Purpose**

This guideline has been prepared to assist the builders and field supervisors. Builders are encouraged to share the content of this guideline with their administrative staff, architects, engineers, subcontractors, trades, and material suppliers. This guideline is not a full disclosure of all codes and ordinances. It shall only be used as a supplement to help residential contractors and the City of Van Alstyne residents.

Periodically, the City of Van Alstyne may update this guideline to reflect building code changes, newly adopted ordinances, and any other information pertinent to residential construction. All contractors currently building residential structures within the City of Van Alstyne shall be responsible for obtaining the most current publication available.

- 1. Site Parking: Builders shall instruct their subcontractors and their employees to park in such a way that emergency vehicular traffic will not be obstructed (i.e. police cars, fire trucks, and ambulances).
- 2. Construction Site Maintenance: Before any work for which a permit is required may be approved by the inspector, the following construction site maintenance and Inspection items shall be completed:
  - a. Jobsite Address Posting: Temporary Addresses shall be posted on the trash bin and/or on the front of the house and shall be plainly visible and legible from the street fronting the property at all times during construction. T-Poles alone on a jobsite shall have the temporary address legibly posted on the lateral side support bracing board that faces the street frontage.

Permanent addresses shall be secured in-place prior to the Gas and Electrical Release inspections, or no inspection shall be made. The permanently installed address block with numbering, background, and location conforming to the City of Van Alstyne Fire Department regulations shall be plainly visible and legible from the street fronting the property. The number(s) shall contrast with their background and shall be a minimum of four (4) inches high, with a stroke width of one-half ( $\frac{1}{2}$ ) of an inch. Addresses posted on mailboxes shall be secondary to addresses posted on the house.

- b. **Required Permit Locations**: All permits shall be plainly visible for inspectors.
- c. High Grass and Weed Control: Grass and weeds shall be trimmed and maintained per the City of

Van Alstyne vegetation regulations. The height of vegetation is limited to a maximum of twelve (10) inches.

- d. **Sanitary Facilities**: Portable chemical toilets shall be provided to construction workers when permanent sanitary facilities are not available. Portable chemical toilets shall be placed within 400 feet of the jobsite per local policy and shall conform to ANSI Z4.3. Portable chemical toilets shall be serviced on a regular basis or as deemed necessary by the *Building Official*.
- e. **Trash Control**: Trash shall be controlled at all times on each jobsite so as not to accumulate and/or cause any objectionable, unsightly, unsanitary, or noxious condition, or obstruct storm water inlets and/or drains, or litter the neighborhood(s):
  - Trash Bins Per City policy, a trash bin is required on each jobsite to sufficiently contain all *rubbish*, trash, and debris on the lot. It is the responsibility of the builder to make sure trash gets hauled away frequently enough that it does not create any of the Trash Control issues described above. Trash bins shall be continuously maintained throughout the construction process and shall be on-site beginning at the Plumbing Rough inspection and may be removed only at the time of final grading.
  - Trash Fencing Per City policy, safety-net trash fencing shall be provided along the sides and rear perimeter lot lines to help keep the trash from being blown into the neighborhoods and/or causing obstructions to the public storm water inlet boxes and storm drains.
- f. Erosion Controls: Erosion controls shall be installed and continuously maintained throughout the construction process. Inspectors may require additional erosion control as deemed necessary. All storm drains and inlet boxes shall be maintained clean and clear of mud, sand, concrete, building materials, and debris. All storm drains and inlet boxes shall be maintained per the approved Storm Water Pollution Prevention Plan (SWPPP) for the development and guidance from the 3<sup>rd</sup> party engineering department.
- g. Clean Rights-of-Way: Per City policy, all rights-of-way, including streets, alleys, and sidewalks, shall be clean and clear of trash, mud, sand, gravel, concrete, nails, and other construction materials. There shall be no material storage or portable chemical toilets located within the *rights-of-way* and no closer than five (5) feet from the back of the curb.
- 3. Inspection Scheduling Required: Inspections shall be scheduled and cancelled by email. Email inspections@cityofvanalstyne.us
  - a. *Inspection Documents*: All inspection paperwork and engineering letters must be emailed to <u>inspections@cityofvanalstyne.us</u> with the same format as requesting an inspection.
  - b. *Inspection Requests* –Inspection requests must be emailed before 4:00 pm the previous business day or the inspection will not be completed the next day. Email <u>inspections@cityofvanalstyne.us</u>
  - c. Inspection Cancellations All inspection cancellations shall be made through inspections email. inspections@cityofvanalstyne.us. prior to 8:30 AM the day of the inspection. If issues arise, send an email directly to the inspector that is scheduled to conduct the inspection. All inspectors can view emails out in the field. The inspector may also be stopped before he steps onto the jobsite. Inspections shall not be cancelled if the inspector has already been on the jobsite.
- 4. **Inspector Office Hours:** Every effort shall be made to have an inspector available from 8:00 AM 8:30 AM and 3:00 PM 4:00 PM each business day. Please contact the inspector that has been scheduled if you need to discuss a time to meet at the jobsite. Summer hours may have an earlier start time each businessday.

- 5. **Reinspection Fee:** A reinspection fee may be assessed, and no inspection made when any of the following conditions apply:
  - Job Substantially Not Ready for Scheduled Inspection
  - Job Site Address Not Posted Per Construction Site Maintenance requirements.
  - Trash Violation Loose trash on lot or blowing around the neighborhood, trash bin not being maintained, missing trash fences, or excessive trash on the lot.
  - House Locked or Work to be Inspected Not Accessible Inspector is unable to conduct the scheduled inspection.
  - Required Document(s) Missing Required Document(s) not provided at the initial inspection and again not included at the next same-type inspection.
  - Approved Safety Fencing Not Installed safety fencing is required around a sewer tap excavation that is four (4) feet or more in depth.
  - Jobsite Not Maintained mud in streets, missing erosion control, etc. Job sites shall be maintained at all times.
  - Electrical Panel(s) Not Ready Panel dead-front(s) not removed for the Electrical Release Inspection.
  - No Gas Test There is no Gas Test Gauge located at the gas meter, as required.
  - Major Plan Deviation Any deviation from the Approved Plans that requires a re-stamp, separate permit, or any other prior approval.
  - No Waste Test No water in the Waste Test for the initial or subsequent required Waste System Test at the Plumbing Rough or 2nds-Framing inspections.
  - Trades Working On Premises Ongoing work, at time of scheduled inspections, that make conditions too noisy, hazardous, unsafe, unhealthy or otherwise detrimental for the inspector to focus and to conduct their inspection properly.
  - Previously noted correction items, either from an inspection of the same-type or a previous "approval with conditions", are not corrected prior to the next inspection.

**Please Note:** Reinspection fees assessed shall be paid <u>prior to</u> any additional inspection requests on the same permit. Per the City of Van Alstyne's fee schedule, the first reinspection fee assessed shall be \$50, the second and subsequent fee for the same inspection type shall increase in \$25 increments. Until the permitting system indicates the reinspection fee has been paid, no inspection(s) shall be made for said permit unless otherwise verified by receipt.

6. **Re-Stamp/Plan Review**– Any significant changes to the approved set of plans are required to be submitted for Re-stamp and approved prior to an inspection request being scheduled. Re-stamp/Plan Review shall take up to ten (10) business days to process. Inspections cannot be scheduled unless the restamp has been approved and the re-stamped plans are in the permitting system available to the inspector.

Please verify with the inspector on the jobsite whether a re-stamp submittal is required for the proposed changes. Oftentimes, the inspectors can handle minor changes out in the field.

- 7. **Permit Expiration**: Every permit issued shall become invalid unless the work on the site commences within 180 days after its issuance, unless otherwise specified. Every permit shall become invalid if work authorized by such permit is *suspended or abandoned* for a period of 180 days after the time the work commences. The term *suspended or abandoned* is defined as an elapsed time of 180 days between any two (2) approved inspections. In addition, any approved permit application that has not been picked up and paid for within 180 days of approval shall become invalid and shall be disposed of.
- 8. **Inclement Weather:** No concrete inspections, plumbing rough inspections, or underground inspections shall be conducted if it has been determined that it is too wet by the Building Official or Chief Building Inspector. Concrete and/or plumbing rough inspections shall not be conducted unless the temperature is at

least 38 degrees and rising by 8:30 AM the morning of the inspection. Note: During inclement weather it is the responsibility of the contractors to reschedule all cancelled inspections, after checking their jobsites.

### **Required Inspections:**

#### T-pole

*Note:* Please schedule your T-pole and Plumbing Rough inspections together, when possible. No trash bin is required if scheduling the T-pole only, if no Plumbing Rough work has been done.

- 120V and 220V receptacles shall have ground fault protection ("GFCI") on all 20 and 30 amp circuits.
- Plugs and breakers shall be in a weatherproof enclosure and plugs shall be weather- resistant.
- T-Pole shall be properly grounded and braced front-to-back and side-to-side.
- Approved ground rods, grounding electrode conductors, and connectors shall be installed.

# Plumbing Rough

## Required paperwork: Form Board Survey.

- All Plumbing Roughs that tie into the City of Van Alstyne public sewer system shall be required to utilize a screw in type test ball. Once the Plumbing Rough has passed the required inspection, the screw in type test ball shall be removed and the test tee plug shall be installed.
- Water meter, yard service piping, and in-slab water piping on test. (Fire-suppression piping, when applicable). Hot water piping to be insulated with joints taped (under slab).
- PEX water service piping shall be 1-<sup>1</sup>/<sub>4</sub>" minimum within two (2) feet of the water meter. Pipe sizing calculation may be required, at the inspector's discretion.
- The minimum depth of water service lines shall be twelve (12) inches below finished grade.
- A Pressure Reducing Valve (PRV) shall be located above the slab downstream of a shut-off valve connected to the water service inside the garage.
- Sewer tap, yard sewer, in-slab waste system, and 5-feet head test. Sanitary waste systems shall be properly bedded. If soil is rocky, six (6) inches of clean cover sand is required above.
- Sewer Tap Holes exceeding four (4) feet in depth shall be provided with orange safety fencing and secured in place, completely surrounding the sewer tap holes exceeding four (4) feet in depth. Caution tape is not acceptable.
- Provide two combination fittings within five (5) feet of the slab, arranged as a two- way cleanout to comply with Public Works specifications.

# Foundation

Required paperwork: pre-pour inspection approval from third-party (inspection report only).

- This must be a "clean tag". The only allowed approval conditions are "cleaning out beams and caveins".
- Separate electrical underground inspection no longer required. Underground mechanical and electrical, if any, will be inspected at time of foundation inspection.
- Cables and rebar to be properly placed.
- Cable ends to be taped and secured.
- Beams to be properly sized and free of debris and water.
- Plastic piping to be properly sleeved.
- Missing or damaged poly to be repaired on interior pads.
- Conduits for underground electrical, if any, shall be installed.
- Anchorage shall be in place before pouring.
- Concrete encased electrode (Ufer Ground) shall be installed near the electrical panel.
- Yard sewer holes shall be filled in or no inspection shall be performed and shall be subject to

reinspection fee.

• Piers to be installed per plans/passed pier inspection.

## Flatwork (Sidewalks)

*Public Handicap Ramps are inspected by 3<sup>rd</sup> party engineering.* 

- Approved expansion joints spaced twenty (20) feet maximum apart (and at all street intersection corners, when applicable).
- The sidewalk is located within one (1) foot of the property line.
- Sidewalk to be minimum five (5) feet in width, with one-quarter (1/4) inch per foot cross- slope toward street.
- From the top of curb to top of sidewalk form board (street-side) to be 2% maximum slope. This will ensure that all fire hydrant breakaway joints are within the effective parameter.
- Reinforcement shall be #3 bars at eighteen (18) inches on center each way.
- Water meters shall not be located inside walk.
- City water control valves located within sidewalks shall be positioned flush to surface so as not to create a trip hazard to pedestrians.
- Flatwork area to be dry and free of standing water.
- Fire hydrant joints to be located and water main line valve stacks shall be clearly located and level with final grade.
- Four (4) inch expansion joint shall be required at the City sidewalk to street.

# <mark>Approach</mark>

- The maximum approach width along the private driveway is twenty-four (24) feet.
- The minimum approach width is five (5) foot turning radius for the driveway approach to be consistent within the subdivision.
- Driveway approaches shall be six (6) inches thick concrete, reinforced with a grid consisting of #3 bars at eighteen (18) inches o.c. each way, and chaired over compacted soil and 1" sand.
- The rebar grid shall be wire-tied to twenty-four (24) inch smooth bars doweled into the concrete street twelve (12) inches and spaced eighteen (18) inches on center, with plastic caps on exposed ends.
- Six (6) inch width expansion joint material required along the street with drilled holes for dowels.

# Sheathing

All structural items detailed on the lateral bracing plans shall be completed prior to scheduling a Sheathing Inspection, which includes both exterior and interior elements. No house wrap is to be installed over the exterior sheathing until after approval of the Sheathing Inspection. Zip Board and T-ply joints may be taped at the builder's risk as inspectors may require removal if improper nails or nailing patterns are noted elsewhere or suspected.

# **2nds Framing** includes framing, mechanical, electrical, and plumbing components. **Required paperwork:**

1) Third-party inspection report for frame and lateral bracing (this may be one inspection report or two depending on the engineering firm). These must be "clean" inspection reports without any further corrections required.

**2)** Formal (signed and sealed) Engineer's structural letter(s) for the foundation inspection, frame inspection, and wind bracing inspection. This is often 2-3 separate letters depending on the engineering firm but might be just one. The Formal Engineer's Structural Letter(s) shall include address, lot number, block number, subdivision, and phase.

# Items commonly needing correction:

# <u>Frame</u>

- 1. Lintels are required to be installed on rakes above rooflines above five (5) square feet in area and shall be properly sized.
- 2. Weather resistance: Install roofing, and all windows and construction doors. All holes and penetrations in exterior sheathing shall be properly flashed and sealed.
- 3. Wood columns (posts) shall be supported by concrete piers or metal pedestals projecting up one (1) inch above concrete ... to prevent decay from moisture.
- 4. Install brick ties spaced not more than 32" o.c. horizontally and 16" vertically and must extend all the up to the roof line.
- 5. Triple 2x6 rafters required for brick lintel support under roof sheathing.
- 6. Foundation anchorage shall be installed per engineered plans or anchor bolts at six (6) feet on center per IRC.
- 7. Install fireblocking so it separates: concealed wall or partition spaces from floor-ceiling assemblies; vertical concealed spaces from horizontal concealed, the concealed spaces in walls or partitions from the attics above; fireplace chases where they pass through a floor or a ceiling.
- 8. Over-bored or over-notched stud(s), top-plate(s), joist(s), or rafter(s) shall be properly repaired.
- 9. Provide the same number of trimmers under compound 2x or engineered beams.
- 10. Provide lateral support bracing at floating beam.
- 11. Provide tempered glass at hazardous locations.

# Electrical Rough

- 1. Two (2) 20 amp circuits shall be required in the kitchen.
- 2. Proper stapling at boxes.
- 3. Sleeve NM cable run through brick pocket.
- 4. Smoke detectors and carbon monoxide detectors shall be installed per manufacturer installation instructions and the approved plans.
- 5. Protect all wiring in attic equipment pathway.
- 6. Bond all metal boxes.

# <u>Plumbing Top-out</u>

- 1. DWV piping shall be properly supported.
- 2. DWV piping shall be tested with a 5' head test and shall be free of leaks.
- 3. Cleanout on island and foot vent as required.
- 4. Approved shower pans shall be sloped and shall be water tested.
- 5. Tubs shall be tested to overflow.
- 6. B-vent horizontal not greater than seventy-five (75) percent of vertical rise.
- 7. Need adequate combustion air for fuel fired appliances.
- 8. Support horizontal runs of all PVC at four (4) foot intervals.
- 9. Spring gauges are not allowed for testing of gas system.
- 10. Low pressure systems shall be air tested at three (3) psi on a six (6) lb. gauge. Medium pressure systems shall be air tested at ten (10) psi on a twenty (20) lb. test gauge.
- 11. Gas distribution piping shall be completed to the approximate location of all appliances and capped.
- 12. Gas piping shall be bonded. Bond at gas main unless this would require a bonding jumper over seventy-five (75) feet in length.

# <u>Mechanical Rough</u>

- 1. Exhaust vent terminations shall be located a minimum of ten (10) feet from mechanical air intakes and three (3) feet from operable windows.
- 2. All exhaust fans shall be vented outside of the building.
- 3. Dryer vent maximum length is thirty-five (35) feet developed length or per the dryer manufacturer's instructions.

- 4. A minimum twenty-four (24) inches wide by thirty (30) inch high unobstructed, solid catwalk is required from the point of attic entry to the attic furnace service panels and filters.
- 5. The "Line of Travel" distance between the attic entry point and the attic furnace access panels shall not exceed twenty (20) feet. This distance shall increase to fifty (50) feet if the passageway is unobstructed and no less than six (6) feet in height.
- 6. A 30" x 30" level work platform and thirty (30) inch clear work area is required in front of attic furnace access and filters.
- 7. Gas flue pipes (B-Vent) shall not terminate within eight (8) feet of any vertical wall or similar structure on the roof.
- 8. Gas flue pipes (B-vent) shall have a minimum clearance of one (1) inch from combustibles.

### Insulation

- 1. Energy Rough and Energy Final Inspections are performed by an approved third party provider.
- 2. Energy inspection reports must be submitted by email to City Inspectors at time of CO-Building Final.

## Gas Release and Electric Release

- 1. No inspection shall be performed unless a permanent address has been installed on the front of the house.
- 2. Tubs not inspected at 2<sup>nds</sup> Framing Inspection shall be installed and filled to overflow, with tub skirt open for inspection. In addition, a thermostatic mixing valve must be installed.
- 3. Gas releases and electrical releases shall be scheduled at the same time and will not be separately approved. Both inspections must pass in order for either to pass.

#### Gas Release

- 1. Low pressure systems shall be air tested at three (3) psi on a six (6) lb. gauge. Medium pressure systems shall be air tested at ten (10) psi on a twenty (20) lb. test gauge.
- 2. Gas distribution piping must be 100% complete including sediment traps, shut offs, and connection to appliances. All gas appliances shall be installed except for stove and cooktop unless approved by the field inspector. All unused openings must be capped.
- 3. Per local amendments to the 2015 IRC, spring gauges are no longer allowed for pressure testing of gas systems. Properly calibrated diaphragm gauges in good working order are required.

# Electrical Release

- 1. Receptacles shall be in the wall and have cover plates installed.
- 2. Panel cover shall be removed for inspection.
- 3. Identify UFER location in electrical panel.
- 4. Isolate ground and neutral in sub-panel.
- 5. Sufficient workspace and clearances shall be provided.
- 6. Outlet covers shall not be missing.
- 7. Smoke alarms shall be installed.

# **Irrigation**

# Required paperwork: City of Van Alstyne Backflow Report shall be emailed to

<u>inspections@cityofvanalstyne.us</u> with the same format as requesting an inspection.

- An irrigation inspection shall be approved before requesting a Building Final.
- The irrigation inspection shall take place once all work on the irrigation system is completed.
- The irrigation inspection shall be scheduled at the same time as the fence inspection.

# <mark>Fence</mark>

- A Fence Inspection shall be approved before requesting a Building Final.
- The fence inspection shall take place once all work on the fence is completed.

- The fence inspection shall be scheduled at the same time as the irrigation inspection.
- Materials and layout must match those shown on the approved site plan for the permit.

#### Public Works

A Public Works Inspection shall be approved before requesting a Building Final Inspection. A Building Final Inspection shall not be performed until the Public Works Inspection approval is obtained.

#### Public Works Inspectors look for the following items during their inspection

- 1. Cracks or Chips in curbs, sidewalks, drive approaches.
- 2. Sidewalks and streets clean of all excess debris.
- 3. Trip Hazards in expansion joins, valve stacks, and/or manhole lids.
- 4. Sod in place.
- 5. Meter box level, at grade, with no damage or missing parts.
- 6. The area is clean around water meter and angle stop.
- 7. Address is correct and posted on house (address on mailbox is secondary tohouse posting).
- 8. Storm drains in working order.
- 9. The water meter is working.
- 10. Valve lids are clean of all excess concrete and not damaged.
- 11. Valve stack is clear of all debris, dirt and is not crooked or offset.
- 12. Valve stack directly above valve.
- 13. Water and sewer valve correctly marked on curb.
- 14. The fire hydrant is not damaged or missing parts.
- 15. The fire hydrant splash pad is not damaged or missing and is to grade.
- 16. Sanitary sewer cleanout has concrete pad (12" x 12") and is not damaged and isto grade.
- 17. Storm sewer drain boxes are clear of all debris and dirt.
- 18. Light poles are not damaged or missing parts.

#### **Building Final**

- A Building Final Inspection shall include: Plumbing Final, Electrical Final, Mechanical Final, and Building Final.
- > No furniture may be place in a residential occupancy until final inspection has been approved.

#### Required paperwork:

- 1) Termite Affidavit (Affidavit shall be notarized including lot, block, subdivision, phase, and address).
- 2) Energy Final Inspection (Rough/Pre-drywall and Final inspection approval paperwork or letter stating that the house has passed both inspections and meets the minimum requirements of the City of Van Alstyne. Paperwork shall include the third party inspector's ICC# and/or appropriate credentials on each inspection report or letter).
- *3) Final Grade Survey* (shall include lot, block, subdivision, phase, and address including elevations with arrows showing the direction of flow).
- *4) Fire Sprinkler Inspection Approval (if required).*
- *5)* All Final Documents must be emailed to <u>inspections@cityofvanalstyne.us</u> with the same format as requesting an inspection.

#### Items commonly needing correction:

Plumbing

1. Water meter and valve boxes shall be set to grade and cleaned out, so connections and valves are visible. All boxes and stack lids shall be in place and undamaged.

- 2. Gas shall be hard piped gas thrucabinet/partition.
- 3. Fixtures shall not be leaking or missing.
- 4. Outside plumbing shall be protected from freezing.
- 5. Provide adequate combustion air for fuel fired appliances.
- 6. Mil-wrap/paint exposed gas piping.

#### Electrical

- 1. GFCI's shall be operable at all installations.
- 2. All receptacles, switches, and fixtures shall be in place. Plate covers shallbe on.
- 3. All arc-fault breakers/circuits installed where required.
- 4. AC service disconnects shall be within sight of units.
- 5. Smoke detectors and carbon monoxide detectors shall be installed.
- 6. A three-way switch shall be installed at stairway lighting.
- 7. All breakers shall be labeled at the electrical panel. Circuits containing smoke detectors shall be labeled.

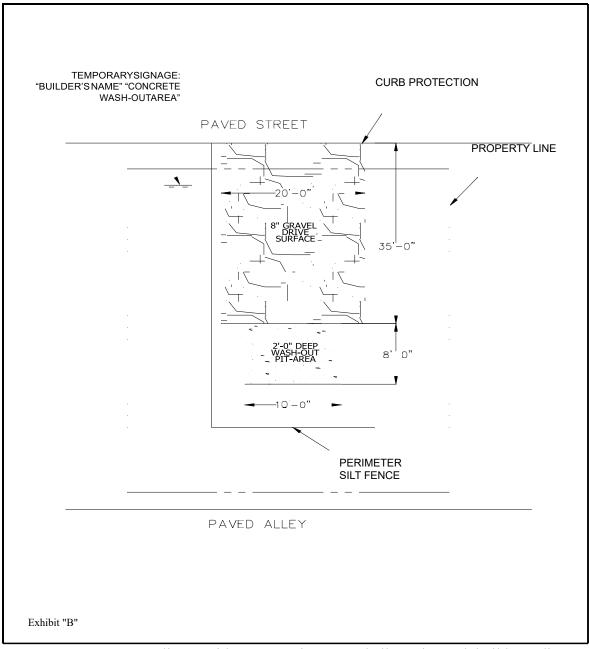
#### Mechanical

- 1. A gas meter shall be installed and all appliances shall be operable.
- 2. AC service disconnects shall be within site of the respective unit and shall have proper workspace clearances.
- 3. AC condensers are to be level and firmly supported three (3) inches above adjoining grade.
- 4. Gas flue pipes (B-vent) shall have a minimum clearance of one (1) inch from combustibles.
- 5. Auxiliary and secondary drain systems shall be in place on cooling or evaporator coils(A/C).

#### Building:

- 1. Final grade, positive drainage, swale location, and sod shall be in place. Positive drainage shall be away from the foundation. Lot drainage shall be designed not to cause lot to lot drainage.
- 2. Trees shall be installed per Planned Development requirements (neighborhood specific). See approved plans for tree requirements.
- 3. Tread depth on stairs shall be ten (10) inch minimum nosing to nosing with a maximum 3/8" variance.
- 4. Safety glass shall be installed in hazardous locations.
- 5. Stairway handrail/guardrail shall be to code.
- 6. Final grade shall be four (4) inches below brick.

#### **BUILDERS DESIGNATED SUBDIVISION WASH-OUT PIT**



- 1. Necessary compliance with EPA requirements shall require each builder to direct transit ready-mix concrete trucks to a designated wash out area.
- 2. This area shall be on a centrally located lot that is owned, maintained, and returned to building pad state at the near completion of a subdivision buildout.
- 3. Waste concrete from the site of the washout pit shall require legal disposal.
- 4. It is the building contractor's responsibility to direct the concrete truck drivers to the designated wash out area for their subdivision.
- 5. Street, alleyway, or vacant lot washout is strictlyprohibited.

