

Community Development 11360 Lakefield Drive, Johns Creek, GA 30097 <u>www.JohnsCreekGA.gov</u> 678-512-3200

# LAND DISTURBANCE PERMIT CHECKLIST

# LAND DISTURBANCE PERMIT MINIMUM SUBMITTAL CHECKLIST

A Pre-Submittal meeting is required prior to submitting the Land Disturbance Permit Application. When submitting plans for review for a Land Disturbance Permit, **all** items listed below must be submitted through the <u>Customer</u> <u>Self Service (CSS)</u> portal. If not applicable, please explain justification to plan intake personnel upon submittal. Incomplete applications <u>will not</u> be accepted into the review process.

- 1. Proof of Pre-Submittal meeting is required at the time of Land Disturbance Permit Application. Pre-Submittal meetings are requested through the Customer Self Service (CSS) portal.
- 2. Completed Land Disturbance Permit Application and Submittal Fee
- 3. Upload a digital copy through CSS bearing the design professional's seal and signature. **Submittals through email will not be accepted.** Maximum sheet size shall be 30" x 42". Minimum required sheets include:
  - iii. Cover sheet
  - iv. Zoning conditions and all applicable private agreements
  - v. Survey, Existing Conditions, & Demolition plan, if required
  - vi. Site plan
  - vii. Drainage & Grading (with storm pipe profiles and chart)
  - viii. Utility plan (with sanitary sewer profiles)
  - ix. Phased Erosion Control (initial, intermediate & final)
  - x. Standard details
  - xi. Landscape and Tree Protection Plan
  - xii. Provide 2 copies of Engineer's Stormwater Management Report/Hydrology Report and/or hydrology statement on plans
- 4. If Project disturbs the Floodplain, provide 2 copies of Flood Study
- 5. If Project is located within the Metropolitan River Protection Act Plan Area's 2000-foot Chattahoochee River Corridor (O.C.G.A. § 12-5-440 et seq.), provide River Corridor Certificate and MRPA as-built survey of any existing land disturbance and impervious surface.
- 6. If this is a permit revision, provide a revision note on the cover sheet and a letter with a detailed, specific revision description, and update the revision block on all sheets and provide cloud around all revised items.

## **OVERVIEW**

This packet contains the information required to prepare and submit plans for a City of Johns Creek Land Disturbance Permit. The LDP application should be submitted after zoning approval, if applicable. Prior to LDP approval, provide an approved set of plans from Fulton County Water and Sewer, if applicable.

# **CONTACT US**

### 678-512-3200

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Planning & Zoning	Puchi Agarwal
Public Works	Muhammad Dauf
GIS/Addressing	Catherine Cronlund
Fire	Chric Clanton
Arborist	Ruchi Agarwal

## **OTHER HELPFUL TELEPHONE NUMBERS**

Fulton County Environmental Health Services Septic Tank Permits (Residential & Commercial), Water Well Permits, Community Swimming Pools	<u>(</u> 404) 332-1801
Call Before You Dig	(800) 282-7411 or 811
Georgia Department of Transportation	(404) 986-1094
Fulton County Water/Sewer	(404) 730-7399

The City of Johns Creek reserves the right to change this checklist as necessary at any time.

# LDP SURETIES AND FEE REQUIREMENTS

	Use	Cost Per Unit (1)
ONCEPT PLANS	Residential	\$350, plus \$5 per lot
	Commercial	\$350, plus \$5 per acre
LAND	Use	Cost Per Unit (1)
DISTURBANCE PERMIT (LDP)	Residential	\$350, plus \$20 per lot
. ,	Commercial	\$350, plus \$20 per acre
1INOR LDP	Residential / Commercial	\$250

Additional review fee of \$200 assessed for the third and subsequent re-submittal of plans

#### Right-of-Way Improvements Performance Surety

**Prior to the final approval of the Land Disturbance Permit** by the City of Johns Creek Community Development Department, a surety is required for the proposed right-of-way infrastructure improvements. The surety will be released upon installation and City approval of all improvements. Surety calculation forms and templates are available on the Web page:

http://www.johnscreekga.gov/JCGA/Media/PDF-CD/LandDev/surety-row-performance-calculation.pdf http://www.johnscreekga.gov/JCGA/Media/PDF-CD/LandDev/surety-performance-bond-template.pdf (Development Regulations Section 113-71)

#### Erosion Control Surety

Every permit applicant shall be required to post a cash surety, irrevocable letter of credit, or insurance bond of \$3,000 per disturbed acre or fraction thereof prior to the issuance of a land disturbance permit. The surety is a mechanism for the City to cover any potential costs associated with stabilization and compliance of all disturbed

areas and stormwater infrastructure including, but not limited to, permanent grassing, desilting detention ponds, water bodies, stormwater facilities, roadways, reestablishing damaged buffers and similar or related items. This surety will be released upon approval of final stabilization from the Community Development Department. Surety calculation forms and templates are available on the Web page:

http://www.johnscreekga.gov/JCGA/Media/PDF-CD/LandDev/surety-erosion-calculation.pdf http://www.johnscreekga.gov/JCGA/Media/PDF-CD/LandDev/surety-erosion-control-bond-template.pdf (City Code, Soil Erosion & Sedimentation Control Ordinance Section 109-152)

#### Local Issuing Authority Land Disturbance Fee

Every permit applicant proposing to disturb over one (1) acre shall be required to pay a \$40 per disturbed acre fee prior to the issuance of a land disturbance permit. This fee, in addition to other city permitting fees, is to be paid by the primary permittee as defined in the National Pollutant Discharge Elimination System State General Permit. A copy of the NOI, and proof of electronic filing to EPD are required to be submitted to the City prior to issuing permit *(City Code, Soil Erosion & Sedimentation Control Ordinance Section 109-152).* 

## **GIS – ASSIGNMENT OF NAMES AND ADDRESSES**

#### General

All addressing must conform to Section 113-73 of the City of Johns Creek Development Regulations.

#### Project

- A. Proposed project name
- B. Project name prominently displayed on the cover sheet and in the title block area on all sheets.
- C. Project address displayed on the cover sheet and in the title block area on all sheets.
- D. Project LDP Number displayed on the cover sheet.
- E. PIN(s) identified on cover sheet.
- F. On all Sheets, provide North arrow, State Plane Georgia West, Indicate scale (no less than 1"=10' or greater than 1"=100'), graphic scale.
- G. On Cover Sheet, provide total & disturbed acreage, and location map.
- H. Provide a minimum of two points along the boundary, one being the P.O.B. and the other being a point opposite the P.O.B., in either the State Plane Georgia West northing and easting or decimal degrees.
- I. Once LDP is approved, provide a CD of the final drawings in DXF, DGN or DWG file format.

## Project Street Name(s)

This section is only applicable when new streets are proposed for construction within the project. After the street names are approved and the LDP is issued, the street names will be reserved for **18 months**.

- A. List of all proposed street names for research and confirmation
- B. Label proposed streets on sheets for location verification.

## Project Street Number(s)

Project street numbering will be assigned by the Geographic Information System (GIS) Department.

- A. Clearly label the street number and lot number for every lot including detention pond(s), common areas, etc.
- B. Corner lots: verify only one street number is assigned and labeled based on front yards as determined by required setbacks.
- C. Provide the following Address Chart for any project that has two or more assigned/approved lot addresses. Utilize the "PHASE NO." column if the project has more than one building phase.

# ADDRESS CHART

[	PHASE NO.	LOT	STREET NO.	STREET NAME	ACRES	SQ. FT.

# **PLANNING & ZONING CHECKLIST**

- A. Provide zoning conditions and other applicable conditions (Special Use Permit, Variance, etc.) and show compliance.
- B. Provide zoning date sheet that includes the following:
  - 1. Total acreage
  - 2. Zoning district, Rezoning case number
  - 3. Landscape strip, zoning buffer, perimeter setback
  - 4. Development standards for individual lot (minimum lot size, minimum lot width, minimum lot frontage, building setback)
  - 5. Other applicable development standards
- C. Include undisturbed buffers, improvement setback, landscape strips, parking islands, perimeter setback on all sheets.
- D. Provide Photometric Lighting Plan to show compliance with Section 4.9. of Zoning Ordinance.
- E. Provide applicable materials to show compliance with Section 12E.3. of Zoning Ordinance, such as refuse areas and loading areas.
- F. Provide the number of parking spaces, location and design to show compliance with Section 18 of Zoning Ordinance.
- G. If this property is located within the Metropolitan River Protection Act Plan Area's 2000-foot Chattahoochee River Corridor (O.C.G.A. § 12-5-440 et seq.), provide River Corridor Certificate with MRPA as-built survey of any existing land disturbance and impervious surface.

## LANDSCAPE AND TREE PROTECTION CHECKLIST

#### **Zoning Ordinances/Zoning Conditions Requirements**

A. Show compliance with zoning conditions and Zoning Ordinance that apply to tree protection or landscaping.

# Per Chapter 113, Article 10, Section 113-115 of the City of Johns Creek City Code, provide a separate sheet dedicated to a Tree Protection and Landscape Plan

A. Provide Tree Protection Plan as part of the landscape plan or as a separate drawing. Refer to the City of Johns Creek Tree Preservation Ordinance (Chapter 109, Article 7 of the City Code) and the Tree Administrative Guidelines for guidance.

#### **Tree Protection Plan Requirements**

- A. Include all tree protection zones and label all tree save areas (even in R.O.W., adjacent to sidewalk) and show areas of re-vegetation. Methods of tree protection shall be indicated for all tree protection zones, including tree fencing, erosion control, retaining walls, tunneling for utilities, aeration systems, transplanting, staking, signage, etc. Provide tree protection details. Indicate the proposed locations of all underground utilities. Tree save areas cannot be considered in utility easements.
- B. Include limits of disturbance such as grading, trenching, etc., where these disturbances may affect tree protection zones. Indicate staging areas for parking, materials storage and concrete washout because these areas might affect tree protection.
- C. Indicate exact location of all specimen trees onsite as verified by a field run survey. On the site plan, include the size of each specimen tree and indicate whether the specimen tree is to be saved or removed. If more than 20% of the critical root zone will be impacted by land disturbance, then the specimen tree is considered not savable.
- D. Indicate exact location of existing trees counted towards site density. If more than 20% of the critical root zone will be impacted by land disturbance, then the tree is considered not savable.

#### Landscape Plan Requirements

- A. Include all required undisturbed buffers, landscape strips, and parking islands with the required dimensions on all sheets. Include planting list with proposed plant material names (common and botanical), quantity, size, any special planting notes, tree density unit value and planting details.
- B. Site Density Requirement: The required site tree density factor must be satisfied. Existing trees or stands of trees used in the density calculation must be indicated on the survey. Refer to Appendix E in the Tree Administrative Guidelines for acceptable species for replacement trees. Replacement trees must be ecologically compatible with the intended growing site.
- C. Specimen Tree Recompense Requirements: Healthy specimen trees impacted by land disturbance must be recompensed with a tree unit value that is equal to the value of the tree being removed. Specimen hardwood trees and specimen native flowering trees shall be recompensed with hardwood trees and specimen evergreen trees shall be recompensed with evergreen trees. If more than 40 recompense trees are required, at least four species are required. Refer to Appendix E in the Tree Administrative Guidelines for acceptable species. Provide recompense calculation on plan.
- D. Landscape Strip Requirements: Landscape strips shall meet the linear footage requirement and coverage requirement (at least 60% coverage in trees and shrubs, with no more than 40% grass, sod, or other ground cover).
- E. Zoning Buffer Requirements: Zoning buffer and 10-foot improvement setback shall remain undisturbed. If the zoning buffer is sparsely vegetated or where it is disturbed for approved access and utility crossing, it must be replanted to buffer standards.
- F. Detention Pond Requirements: A 20-foot pond buffer shall be provided exterior to the 10-foot access easement. The pond buffer shall be planted to the detention pond landscape buffer standards in the Tree Administrative Guidelines.

# LANDSCAPE AND TREE PROTECTION CHECKLIST – CONT'D

- G. Parking Island Requirements: A 10-foot landscape island shall be provided at the end of each parking bay or every 6th parking space. Parking islands must be planted with minimum 2" caliper hardwood shade trees from Appendix K in the Tree Administrative Guidelines.Permanent structures cannot be permitted in landscape strips, parking islands, improvement setbacks or buffers, including but not limited to retaining walls, curbing, dumpsters, detention facilities, etc. Monument signs, drainage structures, and sidewalks may be allowed with pre-approval. Decorative walls or retaining walls may be allowed in the landscape strip, provided that they are faced with brick or stacked stone to match the architectural building theme.
- H. Curb stops must be used to prevent vehicle overhang into required landscape strips and parking islands. One curb stop per parking stall is required.
- I. Live plant material shall be incorporated on or directly in front of all buildings.

#### **Clearly state the following notes on the Tree Protection/Landscape Plans**

- A. Provisions for tree protection on the site shall be, as a minimum, in conformance with the requirements of the latest edition of the City of Johns Creek Tree Preservation Ordinance, Zoning Ordinance and administrative guidelines pertaining to tree protection.
- B. If the landscape design and plant material are changed from the permitted plan, three (3) sets of revised plans shall be submitted to the City of Johns Creek Arborist's Office for approval, prior to any landscape installation.
- C. All landscaping for the project shall be completed prior to the issuance of certificate of occupancy. Contact the City of Johns Creek at 678.512.3200 for site inspection upon completion of landscape installation.

#### Clearly state the following notes on BOTH the Tree Protection/Landscape Plan and the Grading Plan

- A. Contact the City of Johns Creek Land Development Inspector at 678.512.3200 to determine if a preconstruction meeting prior to any land disturbance is required. All required tree fences must be installed prior to this meeting.
- B. Undisturbed buffers shall be planted to buffer standards where sparsely vegetated or where disturbed due to approved utility crossings. Replanting is subject to City Arborist approval.
- C. Call Before You Dig (800) 282-7411

#### **Stream Buffer Protection Standards**

A. All State Waters (as defined by O.C.G.A. 12-7) require a minimum undisturbed buffer, measured from the point of wrested vegetation, fifty (50) feet wide and an additional impervious setback of twenty-five (25) feet on both sides of the stream or normal pool level (i.e. lake/pond).

## HYDROLOGY STUDY/ STORMWATER MANAGEMENT REPORT CHECKLIST

#### **Existing Conditions Analysis**

- A. Provide topographic plan of existing conditions. Show the following on the map:
  - 1. Delineate drainage boundaries (including offsite areas draining onto site) and label/name each drainage area the same as each basin is labeled/named in calculations and tabulations appearing elsewhere in the report.
  - 2. Indicate acreage of each delineated drainage area.
  - 3. Indicate CN for each delineated drainage area.
  - 4. Indicate Tc for each delineated drainage area.
  - 5. Indicate runoff travel path and correlate to calculations determining Tc for each drainage area.
  - 6. Indicate land cover condition for each drainage area.
  - 7. Indicate all state waters and other surface water features.
  - 8. Indicate existing stormwater conveyances and structural control facilities.
- B. Provide a summary table of peak rates of runoff and velocities from each delineated drainage area for 1, 2, 5, 10, 25, 50, and 100 year storm events. Include in summary table for each drainage area the following data: label/name of drainage area, acreage, CN, Tc, gross rainfall amount for each storm event, and peak flow rate for each storm event (cfs).
- C. Provide time of concentration determination calculations for each drainage area.
- D. Provide Soil Classifications

#### Post Development Conditions Analysis

- A. Provide topographic map of developed conditions. Show the following on the map:
  - 1. Delineate drainage boundaries (including offsite areas draining onto site) and label/name each drainage area the same as each basin is labeled/named in calculations and tabulations appearing elsewhere in the report.
  - 2. Indicate acreage of each delineated drainage area.
  - 3. Indicate CN for each delineated drainage area.
  - 4. Indicate Tc for each delineated drainage area.
  - 5. Indicate runoff travel path and correlate to calculations determining Tc for each drainage area.
  - 6. Indicate land cover condition for each drainage area.
  - 7. Delineate and label/name each stormwater management facility.
  - 8. Indicate all outflow locations for each stormwater management facility.
  - 9. Indicate the location of any site design credits that are being utilized.
  - 10. Indicate the location of conservation areas.
- B. Provide a summary table of peak rates of runoff and velocities from each delineated drainage area for 1, 2, 5, 10, 25, 50, and 100 year storm events. Include in summary table for each drainage area the following data: label/name of drainage area, acreage, CN, Tc, gross rainfall amount for each storm event, and peak flow rate for each storm event (cfs).
- C. Provide a summary table of developed peak rates of runoff vs. existing peak rates of runoff for each drainage area. Demonstrate no increase in peak rates of runoff for 1, 2, 5, 10, 25, 50, or 100 year events for each drainage area.
- D. Provide tabular hydrograph output for drainage area(s) draining to each stormwater management facility for the 1, 2, 5, 10, 25, 50, and 100 year events.
- E. Provide calculations for the channel protection volume and demonstrate a minimum extended detention time of 24 hours for the 1 year storm event.

# HYDROLOGY STUDY/ STORMWATER MANAGEMENT REPORT CHECKLIST – CONT'D

- F. Retain the runoff reduction volume generated by the first 1.0 inch of rainfall or provide water quality enhancements designed to provide treatment for the runoff from 1.2 inches of rainfall. Runoff reduction and water quality facilities shall be designed to the standards provided in the Georgia Stormwater Management Manual, a copy of which is available at <a href="http://www.georgiastormwater.com">http://www.georgiastormwater.com</a>
- G. Provide details of all runoff reduction and/or water quality facilities and calculations. Provide planting plans when applicable.
- H. Not used.
- I. Provide a map of the site highlighting the areas used for the Stormwater Quality Site Development spreadsheet, the map shall include any bypass area.
- J. Provide the Site Development Tool spreadsheet. Note that undisturbed areas or stream buffers cannot be considered Natural Conservation Areas unless it is a properly recorded conservation easement
- K. Provide tabular hydrograph output for outflow (routing) of each stormwater management facility for the 1, 2, 5, 10, 25, 50, and 100 year events.
- L. For any bypass area hydrograph that is combined with a stormwater management facility outflow hydrograph, provide the tabular hydrograph output for the bypass area for the 1, 2, 5, 10, 25, 50, and 100-year events. Provide the tabular hydrograph output for each combined hydrograph.
- M. Provide time of concentration determination calculations and path for each drainage area.
- N. For each stormwater management facility provide Stage/Storage/Outflow tabulation and outlet configuration data used for routing for each stormwater management facility.
- O. Provide details for outlet control structures/devices for each stormwater management facility on plans and in stormwater management report. Ensure details on plans agree with details in report. Label structures so plans and details in report and on plan can be easily correlated.
- P. When Natural Area Conservation Easements are proposed provide easement documentation and clearly delineate on the plans and exhibits contained in the hydrology study.
- Q. Provide a Stormwater Maintenance Agreement.
- R. Provide a Floodplain Indemnification Document if applicable.

## Post Development Downstream Analysis

- A. Provide analysis of downstream conditions at each point or area along project boundary at which runoff will exit the property. Direct discharge of stormwater to an acceptable watercourse, (e.g. existing creek, swale, ditch, drainage system, etc...). Provide calculations to show the adequacy of receiving waters immediately downstream of the project site.
- B. Extend analysis of downstream conditions to include all portions of the downstream conveyances between the site and the point where the site area is less than 10 percent of the total basin area.
- C. Compare capacity vs. designed flows for each downstream conveyance between site and 10% point. The analysis should include the timing of all flows at each confluence point.

## Minimum Hydrology Design Parameters

- A. Existing condition, pervious vegetated areas maximum CN = 55.
- B. Existing condition time of concentration determination shall be in accordance with Section 2.1.5.6 in the Georgia Stormwater Management Manual (GSMM). Sheet/Overland flow lengths less than 100 feet used in GSMM equation 2.1.9 shall be justified in stormwater management report. Use of existing time of concentrations greater than calculated in accordance with GSMM 2.1.5.6 is acceptable.
- C. Minimum freeboard for above ground earthen stormwater management facility dams is 2' if over 10' high and 1.5' for dams less than 10' high.
- D. Minimum freeboard for concrete stormwater management containment facility is 1 foot.
- E. Verify the seasonal high ground water table.
- F. Provide infiltration test results for infiltration based practices.

# **GRADING AND DRAINAGE PLAN REVIEW CHECKLIST**

- A. Provide approved plans from the Fulton County Water and Sewer and Fulton County Health Departments.
- B. New commercial conveyor car washes must install operational recycled water systems. A minimum of 50% of water utilized will be recycled.
- C. If installing a new irrigation system, provide location and detail of rain sensor shut-off switch.

#### Hydrology and Drainage Items

- A. Show a 20 ft., graded (max 16% slope) and stabilized access easement to all stormwater management facilities from a location of public vehicle access. Adequate access should be extended to all portions of the facility, e.g. pipe outlets, forebays, outlet structures, etc. No facility shall be completely walled without providing adequate access to the bottom of the facility.
- B. Provide a 20 ft. landscape strip as required by the City Arborist around the exterior of all detention areas adjacent to and outside the required 10 ft. access easement.
- C. If side slopes for the stormwater facility are steeper than 4:1 show a six foot high security fence with a 10 ft. access gate outside of the ten foot access easement around each detention pond. Show the location of the access gate.
- D. Not used.
- E. State the Water Quality Volume, the Channel Protection Volume, the 25-year volume, and the 100-year volume on the plans. State the Water Quality elevation, the Channel Protection elevation, the 25-year elevation and the 100-year elevation on the plans in accordance with GA Stormwater Management manual.
- F. Eliminate proposed concentrated discharge from site where existing condition is sheet flow.
- G. When serving more than three lots, detention ponds shall be located on a separate parcel where no home can be constructed.
- H. Lowest floor elevation adjacent to a stormwater management facility shall be a minimum of 3 feet above the 100-year flood elevation within the facility.
- I. Provide design engineer's professional seal, signature and date on plans and report. Signature and date shall be handwritten as required by the Georgia Board of Professional Engineers 180-12.02 (3) and (5).
- J. Provide access to outlet control structure with manhole steps.
- K. Identify and wetlands on site or provide a statement that there are none.

# STORMWATER PLAN REVIEW CHECKLIST

#### **Drainage Review Requirements**

- A. Minimum culvert size shall be 18" and maximum velocity shall be 15 ft. /sec.
- B. Locate catch basins with 600 feet maximum spacing, designed for 25-year storm with a maximum gutter spread of 8 feet for collector or arterial streets and 10 feet for local streets.
- C. Show nearest existing catch basin and/or drop inlets that receive water from this development.
- D. Provide design calculations for all storm drainage pipes. Storm drainage pipes shall be designed for 25year storm frequency.
- E. Culverts beneath roads shall be designed to convey the 100-year storm. Show analysis/effects of 100-year storm.
- F. Provide design calculations for all ditches and channels. Ditches and channels shall be designed for 25-year storm frequency.
- G. Provide back water effect due to constriction of pipes in ditches or swales. Limit backwater to within the property.
- H. Storm Drainage/Grading Plan:
  - 1. Show existing and proposed contours, clearly distinguishable.
  - 2. Identify drainage structures as existing or proposed.
  - 3. Show drainage easements drawn with width dimensions specified. Provide easements with widths in accordance with Table 12.6.1 Section 113-146. In general, pipes over 8' in depth require easements greater than 20' in width. Minimum D.E. width is 20.
  - 4. Delineate and label any flood zone within the site.
  - 5. Label roadway highpoints on the center line of the roadway.
  - 6. Show the limits of proposed construction to be permitted.
  - 7. Clearly note this statement on plans:
    - Call Before You Dig 811 or (800) 282-7411
  - 8. Profile all existing/proposed storm pipes above which land disturbance will occur and provide pipe chart. Provide storm structure numbers.
  - 9. Reference all storm drainage structures (e.g. catch basins, drop inlets, headwalls, etc.) to Johns Creek or other standard (GDOT, etc.) or provide complete detail(s) if not a public standard.
  - 10. Storm drainage structures are not allowed within the radius of a curb.
  - 11. Provide outlet velocity at outlet structures (i.e. storm drainage profile).
  - 12. Storm drainage structures shall discharge into natural draws or drainage channels/swales.
  - 13. Address entrance drainage.
  - 14. For all permit revisions, submit a letter stating the proposed changes. These changes should be highlighted on all sheets affected.

## Storm Drainage Pipe Design

- A. 30" maximum cross drain pipe draining through GDOT standard catch basins or drop inlets. When larger diameter is required, provide design and detail of all structures.
- B. Storm drain cross section:
  - 1. Minimum pipe cover:
    - a. Storm drains: 18 inches outside roadway, 36 inches within roadway (Ref. FC Standard 524).
    - b. Berming or trenching is not allowed to achieve minimum or maximum cover.
  - 2. Minimum pipe slopes:
    - a. Concrete or smooth walled HDPE 0.5%
    - b. CMP 1.0%
- C. All storm crossings under public roadways shall be reinforced concrete pipe (RCP)
- D. Storm pipe material types, directional changes, slope changes, or transitions are permitted only at drainage structure with surface access (i.e., junction box with manhole, catch basin, etc.). Concrete collars are not acceptable at transitions.
- E. Show size, material type, class or gauge, percent slope, and length of all pipes.

## STORMWATER PLAN REVIEW CHECKLIST

- F. Provide invert elevations and top elevations of drainage structures.
- G. Maximum allowable slope is 10% for RCP and 14% for CMP. Anchor collars may be required on storm pipes when the slope exceeds these standards.
- H. Refer to GDOT Standard for storm sewer pipes (CMP pipe shall be fully-coated or aluminized Type II with a paved invert.)
- I. When serving more than three lots, detention ponds shall be located on a separate parcel where no home can be constructed.
- J. The starting tail water elevation for Hydraulic Grade Line Calculations (HGL) shall be the greater of the 25 year peak water surface elevation at the discharge point or 1 times the diameter of the outlet pipe.
- K. The maximum hydraulic grade line elevation shall be 1 foot below ground elevation or the top of the pipe, whichever is lower.

#### **Ditches and Swales**

- A. All proposed swales and ditches shall have cross sections, centerline profiles, flow rates, and velocities shown on plans.
- B. If velocity in ditch is greater than 3 ft. /sec., ditch invert shall have a non-erodible material.

#### **Storm Drain Structures**

- A. Show drainage area, Q25 and headwater elevation at the inlet of all storm drain structures (include accumulative areas and Q's, and longitudinal system).
- B. Indicate the type and GDOT standard number for inlet and outlet structures of all pipes.
- C. All pre-cast manholes shall be provided with a minimum of 9 inches clearance on each side of connecting pipe between all cut-outs or penetrations.
- D. Use online catch basins except for cul-de-sac applications in which one foot offset is required.
- E. Show concrete spillway at the end of curb and gutter (Ref. GDOT Standard 9013, Type III) where applicable.
- F. Use concrete flared end sections at driveway crossings within the right-of-way and other applications adjacent to vehicular traffic (Ref. GDOT Standard 1120).

# **EROSION CONTROL CHECKLIST**

- A. City of Johns Creek Erosion Control Plan Requirements (provide most current GSWCC Checklist on plans if >1 disturbed acre for the appropriate General Permit.)
- B. Per GESA 12/31/06 requirement, provide GSWCC Level II Design Professional seal and number on the Cover Sheet and on the Phased Erosion Control Sheets. Provide the most current GSWCC Checklist if projects are >1 disturbed acre.
- C. Provide project name/address; owner's name/address/phone; design firm name/address/phone/e-mail; 24 hour contact name/local phone/e-mail on cover sheet and all ESPCP sheets
- D. If less than one acre disturbed; complete the following checklist items.
  - 1. The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
  - 2. Level II certification number issued by the Commission, signature and seal of the certified design professional.
  - 3. Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.
  - 4. The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
  - 5. Provide the name, address and phone number of primary permittee.
  - 6. Note total and disturbed acreage of the project or phase under construction.
  - 7. Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
  - 8. Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
  - 9. Description of the nature of construction activity
  - 10. Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
  - 11. Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
  - 12. Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
  - 13. Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 15 of the permit.
  - 14. Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."
  - 15. Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50foot undisturbed stream buffers as measured from the point of wrested vegetation without first acquiring the necessary variances and permits."
  - 16. Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
  - 17. Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."
  - 18. Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
  - 19. Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."

# **EROSION CONTROL CHECKLIST – CONT'D**

- 20. Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
- 21. Any construction activity, which discharges storm water into an Impaired Stream Segment or within one linear mile upstream of and within the same watershed as, any portion of a Biota Impaired Stream Segment, must comply with Part III.C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site, which discharge to the Impaired Stream, Segment.
- 22. If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 21 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.
- 23. Show the BMPs for concrete wash-down of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.
- 24. Provide BMPs for the remediation of all petroleum spills and leaks.
- 25. Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.
- 26. Description of the practices that will be used to reduce the pollutants in storm water discharges.
- 27. Description and chart or timeline of the intended sequence of major activities, which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
- 28. Provide complete requirements of inspections and record keeping by the primary permittee.
- 29. Provide complete requirements of sampling frequency and reporting of sampling results.
- 30. Provide complete details for retention of records as per Part IV.F. of the permit.
- 31. Description of analytical methods to be used to collect and analyze the samples from each location.
- 32. Appendix B rationale for NTU values at all outfall sampling points where applicable.
- 33. Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
- 34. A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.\*
- 35. Graphic scale and North arrow.
- 36. Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or	Flat 0 - 2%	0.5 or 1
larger scale	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

- 37. Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
- 38. Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
- 39. Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
- 40. Delineation and acreage of contributing drainage basins on the project site.

## **EROSION CONTROL CHECKLIST – CONT'D**

- 41. Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.\*
- 42. An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities is completed.
- 43. Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all stormwater discharge points.
- 44. Soil series for the project site and their delineation.
- 45. The limits of disturbance for each phase of construction.
- 46. Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.
- 47. Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
- 48. Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
- 49. Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding will take place and for the appropriate geographic region of Georgia.
- E. Clearly state the following notes on the plans:
  - 1. Prior to any other construction, a stabilized construction entrance shall be constructed at each entry to or exit from the site.
  - 2. The construction exits shall be maintained in a condition which will prevent tracking or flow of mud on to public right-of-way. This may require periodic top dressing with stone, as conditions demands, and repair and/or clean-out of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicle onto public roadway or into storm drain must be removed.
  - 3. Provide GPS coordinates at construction exit as required on the Notice of Intent under the NPDES Application.
  - 4. Prior to commencing land disturbance activity, the limits of land disturbance shall be clearly and accurately demarcated with stakes, ribbons, or other appropriate means. The location and extent of all authorized land disturbance shall occur within the approved limits indicated on the approved plans.
  - 5. Immediately after the establishment of construction entrances/exits, all perimeter erosion control devices and storm water management devices shall be installed prior to any other construction.
  - 6. Owner agrees to provide and maintain off-street parking on the subject property during the entire construction period.
  - 7. The contractor shall furnish and maintain all necessary barricades while roadway frontage improvements are being made.

## **EROSION CONTROL CHECKLIST – CONT'D**

- 8. The construction of the site will initiate with the installation of erosion control measures sufficient to control sediment deposits and erosion. All sediment control will be maintained until all up stream ground within the construction area has been completely stabilized with permanent vegetation and all roads/driveways have been paved.
- 9. Failure to install, operate or maintain all erosion control measures will result in all construction being stopped on the job site until such measures are corrected consistent with the City of Johns Creek Erosion Control Ordinance.
- 10. A copy of the approved land disturbance plan and permit shall be present on the site whenever land disturbance activity is in progress.
- 11. All sewer easements disturbed must be dressed and grassed to control erosion.
- F. Delineate a 50-foot undisturbed natural vegetative buffer, measured horizontally, on both banks of the stream as measured from the point of wrested vegetation in accordance with the Johns Creek Stream Buffer Protection Ordinance. No septic facilities permitted within the buffer.
- G. Delineate a 25-foot impervious setback, measured horizontally, beyond the 50 foot undisturbed natural vegetative buffer, in which all impervious cover is prohibited. Grading, filling, and earthmoving shall be minimized within the setback. (Ref: City of Johns Creek Stream Buffer Protection Ordinance) No septic facilities permitted within the setback.
- H. Site is within 2000 feet of the banks of the Chattahoochee River. Demonstrate compliance with the Metropolitan River Protection Act and the Chattahoochee Corridor Plan. Refer to separate checklist for ARC/MRPA River Corridor Certificate.
- I. Provide statement on the plans stating whether State Waters are, or are not, onsite or within 200 feet of the site. If State Waters are within 200 feet of the site, depict location of State Waters.
- J. Clearly state the total site area, disturbed area, and building area.
- K. All slopes steeper than 2.5:1 and greater than ten feet in height shall be hydro-seeded and covered with GDOT approved matting and blankets. All slopes must be protected until a permanent vegetative stand is established.
- L. Slopes over 20 feet in height shall be stabilized in stages by matting and vegetation. Stabilization measures shall be placed in vertical increments not to exceed 20 feet immediately at the completion of each 20 foot lift. A minimum of a four-foot bench every 20 feet is required on 2:1 slopes.
- M. Provide an Erosion Control Surety calculation form.

## General (all projects)

- A. Provide most current FEMA Flood Insurance Rate Map (FIRM) excerpt on the cover sheet for the subject site development plans on which the site is delineated.
- B. For all streams with a drainage area of 100 acres or greater, the future-conditions flood elevations shall be provided by the city. If future-conditions elevation data is not available from the city, then it shall be determined by a registered professional engineer using a method approved by FEMA and the city.
- C. Provide Flood Study (2 copies if applicable)

## If Flood Zone AE, Zone A and/or shaded Zone X within site:

- A. Clearly delineate flood zone extents and both the existing and future 100-year flood elevations on plans.
- B. Provide project benchmark with elevation, tied to Johns Creek or Fulton County G.I.S. monument. Use N.A.V.D. or Mean Sea Level Datum.
- C. If the proposed work encroaches within Zone AE, A or X. The following is required:
  - 1. Professional Engineer's certification that the proposed work will not:
    - a. raise the base flood elevation;
    - b. reduce the flood storage capacity in the flood plain (fill placed within floodplain must be compensated and all cut areas must gravity drain to watercourse);
    - c. impede the movement of flood waters;
    - d. change the flow characteristics of the flood waters; and
    - e. create hazardous or erosion-producing velocities.
  - 2. Flood study, prepared and certified by Professional Engineer, which determines both the existing and proposed extents and elevations of the flood zone. Provide a No Rise Certificate, if applicable.
  - 3. At the request of Johns Creek, provide application to FEMA for a conditional FIRM revision to be submitted to FEMA.
- D. Locate all flood study sections on the plans and state the existing and proposed flood elevations at each section.

#### General

- A. State the "lowest floor elevation" including basement and attached garage for each lot affected by the floodplain. Note: lowest flood elevation shall be a minimum of 3 ft. above the 100-year storm elevation.
- B. Per Floodplain Ordinance, certify and submit calculated areas to demonstrate that no lot area has less than 50% of the minimum lot area above the base flood elevation, and/or no less than 70% of the buildable land area of any lot lies above the base flood elevation.
- C. Clearly state the following notes on the cover sheet and construction plans:
  - 1. Provide statement below:

"This site [is/is not] located within a zone [A, AE, shaded zone X] as defined by FIRM Community Panel Number 14121C0097F for Fulton County, Georgia and incorporated areas dated (Insert Applicable Date)."

- 2. Provide FEMA FIRM excerpt of the subject site with the site location delineated.
- 3. The base flood (IRF) elevations shown hereon are based on the flood elevation study by \_\_\_\_\_, (signature, seal, date of design professional.);
- 4. All construction including grading and filling within the floodplain shown hereon shall be in conformance with the Johns Creek Floodplain Ordinance.
- 5. All cut and fill within the floodplain shall be field verified and certified by a Professional Engineer.
- 6. All floodplain shall be field located and staked prior to encroachment within them. Such location shall be maintained clear and visible throughout construction and final approval.
- 7. When utility (storm drains, sewers, etc.) construction is within a floodplain:
  - a. The contractor shall restore the floodplain to the original condition and grade immediately upon completion.

## **FLOODPLAIN CHECKLIST – CONT'D**

- b. Upon completion of restoration, a Professional Engineer shall certify in writing to the Community Development Department that all work is complete and the floodplain restored.
- 8. When any construction borders a floodplain:
  - a. The contractor shall restore the floodplain to the original condition and grade immediately upon completion.
  - b. Upon completion of restoration, a Professional Engineer shall certify in writing to the Community Development Department that all work is complete and the floodplain restored.
- 9. The lowest floor elevation (includes basement and attached garage), HVAC, electrical, and other service facilities shall be a minimum of 3 ft. above the 100-year storm elevation.
- D. Show the limits of construction and the quantities of cut/fill proposed within the floodplain on the construction plans. Show a grading plan with quantities and proposed contours for the area where the compensating cut is to be made. When fill or cut is proposed within a floodplain, a plan and profile based on field run cross sections shall be submitted as part of the land disturbance permit. The horizontal and vertical scales shall be such that the contractor can clearly determine the extent and amount of work and such as to facilitate the engineer in submitting the required certification. Provide No Rise Certificate.
- E. The lowest finished floor elevation adjacent to a stormwater management facility shall be a minimum of 3 feet above the 100-year flood elevation within the facility.
- F. Structural detail sheets should be removed from LDP submittal and either submitted separately as a Building Permit or submitted with the building renovation Building permit.
- G. The City has completed a Flood Study on 03/20/15 and is using this data as Best Available Data. Show 100-year and flood year floodplain on site. Show existing and future 100-year elevations. Contact Catherine Cronlund at <u>Catherine.Cronlund@johnscreekga.gov</u> for a copy of the floodplain for your site.

## FIRE DEPARTMENT CHECKLIST

#### **City of Johns Creek Fire Department**

The numbers that follow worksheet statements represent an IFC code section unless otherwise stated.

#### Access

- A. The required fire department access roads is a minimum unobstructed 20 ft. in width and 13 ft. 6 in. clear height, IFC 503.2.1. Check with local or state requirements that may have street planning regulations that supersede the IFC requirements.
- B. "No Parking Fire Lane" signs are provided at AHJ prescribed locations, IFC 503.3.
- C. Required fire department access roads are designed to support an apparatus with a gross axle weight of 75,000 lb., engineering specifications are provided, IFC App D102.1.
- D. Required fire department access roads are an all-weather driving surface such as asphalt, concrete, chip seal (oil matting), or similar materials, IFC 503.2.3.
- E. The proposed building does have an emergency vehicle access road within 150 ft. of any exterior portion of the structure, if not, a fire department access road must be provided, IFC 503.1.1.
- F. The grade for required fire department access road does not exceed 10 percent unless approved by the Chief, Appendix D103.2.
- G. A local jurisdiction alternative to the 10 percent grade restriction could be the following: If the grade exceeds 10 percent, the first portion of the grade shall be limited to 15 percent for a length of 200 ft. and then 15 percent to 20 percent for a maximum of 200 ft., repeat the cycle as necessary unless the building is sprinklered.
- H. No access drive grades are greater than 10 percent if Appendix D is applicable at the local level, Appendix D 103.
- I. The access road design for a maximum grade conforms to specifications established by the fire code official, IFC 503.2.7.
- J. The dead-end fire department access roads (s) in excess of 150 ft. is provided with a turn-around, IFC 503.2.5.
- K. The turn-around cul-de-sac has an approved inside and an outside radius, e.g. 30 ft. 50 ft. respectively, a hammerhead design is a minimum 70 ft. L x 20 ft. W, or another approved design may be used, IFC 503.2.4.
- L. The turning radius for emergency apparatus roads is 30 ft. inside and 50 ft. outside radius or as approved by the code official.
- M. Fire department access roads shall be constructed and maintained for all construction sites, IFC 1410.1.
- N. Dead-end streets in excess of 150 ft. resulting from a phased project are provided an approved temporary turnaround, IFC 503.2.5.

#### Hydrants and FDCs:

An in-depth plan review for private hydrants and private water mains will occur during the project plan review phase.

- A. A fire flow test and report is provided to verify that the fire flow requirement is available.
- B. Water mains and pipe sizes are detailed on the site plan, IFC 508.1.
- C. All water mains and hydrants shall be installed and operate as soon as combustible materials arrive on a construction site, IFC 1412.1.
- D. The nearest hydrant(s) to the project structure and/or property road frontage are shown on the plan.
- E. No fire service mains shall be of a pipe smaller than a nominal 8 inch diameter when used:
  - a. to supply more than one hydrant, or
  - b. to supply one hydrant and automatic extinguishing system, or
  - c. to supply one hydrant on a dead-end main over 500 feet.

## FIRE DEPARTMENT CHECKLIST – CONT'D

- F. In no case shall a dead end main(s) exceed 600 feet in length for main sizes less than 10 inches. GA Safety Fire Commissioner, 120-3-3, NFPA 24.
- G. Fire Department connections shall be on the street side of buildings and so located and arranged that hose lines can be readily and conveniently attached to the inlets without any interference. They shall also be free standing at approved location by the Fire Department. NFPA 24.
- H. A fire hydrant shall be located within 400 feet of the most remote portion of the building and maintain a 3 foot clearance around the hydrant. IFC 2006 Section 508.
- I. If new hydrants are installed they shall be placed a minimum of 40 feet from the building and be installed according to the specifications of Fulton County Water Systems. NFPA 24.
- J. The center of the hose outlet shall be not less than 18 inches above the final grade. NFPA 24.
- K. Hydrants shall not be placed near retaining walls where there is a danger of frost through the walls. NFPA 24.
- L. Hydrants shall be protected from mechanical damage. The means of protection shall be arranged so that it will not interfere with the operation of the hydrant (3 feet clearance). NFPA 24.

#### Miscellaneous

- A. Handicap ramp landings shall have level landings at the top and bottom of each ramp and each ramp run. They shall have the following features:
  - a. The landing shall be at least as wide as the ramp run leading to it,
  - b. The landing length shall be a minimum of 60 inches clear,
  - c. If the ramp changes direction at landings, the minimum landing size shall be 60 inches by 60 inches.
- B. Transformer Pads
  - a. The landing shall be at least as wide as the ramp run leading to it.
  - b. Transformer pad locations shall be a minimum of 10'-0" from any walkway, balcony, building overhang, canopies, exterior walls, and exterior stairs.
  - c. Transformer pad edges shall be no less than 14'-0" from any door way.
  - d. Transformer pad edges shall be no less than 10'-0" from any window or other opening.
  - e. If the building has an overhang, the 10'-0" clearance shall be measured from a point below the edge of the overhang.
  - f. Fire escapes, outside stairs, and covered walkways attached to or between buildings, shall be considered as part of the building.
  - g. Pad locations shall be no less than 3'-0" from any solid wall of non-combustible construction with no overhang.
- Ga. Safety Fire Commissioner, 120-3-3, NFPA 70

# **PUBLIC WORKS/TRANSPORTATION CHECKLIST**

### Georgia Department of Transportation (GDOT)

- A. GDOT Driveway Permit Number This development accesses on a road maintained by GDOT and/or a City road with a currently programmed state improvement project. Provide GDOT driveway permit number and approval. No Land Disturbance Permit will be issued showing roadway improvements until GDOT plans and approval are presented to Johns Creek Department of Community Development.
- B. GDOT right-of-way (R.O.W.) Dedication and Reservation Plans must show GDOT mandated R.O.W. dedications and reservations for all projects adjacent to any road maintained by GDOT and/or any City road with a currently programmed state improvement project.

#### Manual of Uniform Traffic Control Devices (MUTCD) Traffic Control Plan

A separate sheet dedicated to a Traffic Control Plan should be submitted with the Land Disturbance Permit approval drawings if the improvements associated with the development will create the need for supplemental road improvement, signing, or striping of a City road which will either be accessed on or dedicated by the development. The plan should be at a scale of between 1" = 20' and 1" = 60', contain a location map and north arrow. It must include all warning devices, barricades, signage, and operational changes to all affected roads, including any necessary detour routes. All work zone signage and marking must conform to the MUTCD.

#### American Association of State Highway Transportation Officials (AASHTO) Compliance

All road designs shall conform to AASHTO and these checklist items as a minimum. Revise plans to conform to AASHTO requirements noted in the review.

#### **Curb Cuts**

- A. Show all existing and proposed curb cuts which are within 300 feet of proposed driveway(s) along property frontage.
- B. Dimension distance from centerline of project curb cuts to existing and/or proposed curb cuts.
- C. Show angle of incidence of centerline of driveway and entrance, with centerline of road.
- D. Show width of driveway entrance from back of curb to back of curb. Driveway widths must conform to Fulton County Driveway Manual and Standard Details.
- E. Show concrete apron per Johns Creek Standard Details. For private residential street entrances and commercial and industrial entrances; add this detail to your plans.
- F. Show right-in/right-out only curb cut design per Johns Creek Standard Details; add this detail to your plans.
- G. Show any proposed walls and/or fences along the property frontage. No portion of the fence or wall may be closer than 3' to the R.O.W. line. If the fence is located within the R.O.W. reservation, an agreement must be filed, before LDP issuance, that the fence will be removed at no cost to the City at any future time that the City may purchase the reservation. Such agreement must be filed with the City Clerk and the Department of Public Works, and tied to the property deed.
- H. Show separate dimensioned entrance detail for all gated entrances.

# **PUBLIC WORKS/TRANSPORTATION CHECKLIST – CONT'D**

#### **Roadway Construction/Drainage**

- A. Show proposed improvement(s) on City roads dimensioned from legal centerline of road. Include deceleration, left turn lanes, road widening, and other improvements as required by Johns Creek Driveway Manual. All improvements must conform to Johns Creek Standard Details.
- B. Show how the proposed road improvement(s) will be tied into the existing conditions, on the City road at the limits of the properly frontage with the adjacent parcel(s).
- C. Show roadway widening per Johns Creek Standard Details, if required; add the appropriate detail to your plans.
- D. Show concrete with topping construction detail when roadway widening is less than four feet, per Johns Creek Standard Detail.
- E. Show curb and gutter improvements on all frontages, per Johns Creek Standard Details; add the appropriate detail to your plans.
- F. Show sidewalks or trails as required per Johns Creek Subdivision Regulations, and Johns Creek Standard Details; add this detail to your plans.
- G. Show drainage flow lines, minimum slopes, high points and low points with spot grades along your road frontage. Provide gutter spread calculations.
- H. Show internal roadway cross-sections and widths per Johns Creek Standard Details; add the appropriate detail to your plans.

#### Signing/Striping

- A. Show legal centerline of all existing and proposed City roads. Show speed limits for all roads (existing and proposed); locate any adjacent speed limit signs; label proposed as future public or private.
- B. Show deceleration lane(s) striping and signage, if required. Show signing and striping on the plans per Johns Creek Standard Details and the MUTCD.
- C. Show left turn lane(s) striping and signage, if required. Show signing and striping on the plans per Johns Creek Standard Details and the MUTCD.
- D. Show striping plan for frontage resurfacing. Show signing and striping on the plans per Johns Creek Standard Details and the MUTCD.

## Intersection Sight Distance Profile

Show intersection sight distance (not to be confused with stopping sight distance) of each proposed intersection entrance, street or driveway. Intersection sight distance is determined with an assumed height of driver's eye of 3.5 feet and an assumed height of object of 3.5 feet when measuring in the vertical plane. When measuring in the horizontal plane, the intersection sight distance is determined with an assumed driver's eye location from a point 4' offset from the centerline and 15' from the edge of closest travel lane to a point along the centerline of the closest oncoming travel lane. When measuring in either plane, the line of sight must remain in the proposed standard dedicated R.O.W. and may not be obstructed by monuments, walls, fences, trees, hedges or other visual impediments / obstructions.

## Right-of-Way / Utilities

- A. Show proposed R.O.W. dedication and reservation, dimension from centerline.
- B. Show a 10.5 foot R.O.W. shoulder dimensioned from the back of curb of all road improvements, if the road improvement plus 10.5 feet will be greater than the proposed R.O.W. dedication.
- C. Show R.O.W. miter at external street intersections of at least 20 feet radius. Ensure intersection site distance, free of obstructions, is provided.
- D. All utility locations must conform to Johns Creek Standard Details; add this detail to your plans.
- E. Show R.O.W. widths for all proposed streets and cul-de-sacs per Johns Creek Standard Details, Subdivision Regulations, and Driveway Manual.

# **PUBLIC WORKS/TRANSPORTATION CHECKLIST – CONT'D**

#### Vertical Alignment (for internal streets)

- A. Minor street (50' R.O.W.) = 14% maximum grade. All grades exceeding 12% shall not exceed a length of 250 feet.
- B. Show minimum centerline profile and longitudinal gutter slopes with grade of at least 0.5 percent when used as a tangent.
- C. Show minimum Vertical curve lengths, per Johns Creek Subdivision Regulations.
- D. Show compliance with Johns Creek Subdivision Regulations for leveling course design at approaches to an intersection.

#### Horizontal Alignment (for internal streets)

- A. Show minimum horizontal centerline curve radius, per Johns Creek Subdivision Regulations.
- B. Show minimum tangent lengths between reverse horizontal curves of 50 or 100 feet, per Subdivision Regulations.
- C. Show desired ninety degree angle of incidence between intersections, per Subdivision Regulations.

#### Notes

Clearly state the following notes on the plans prior to approval:

- A. New pavement / surfacing is required across all property frontages to existing centerline, to be installed per Johns Creek Standard Details or as additionally directed by Johns Creek Traffic Engineer:
- B. All traffic control and warning devices must be shown and placed per MUTCD.
- C. Temporary traffic control and warning devices shall be placed prior to the commencement of any road improvement work on City roads and shall remain in place until the conclusion of all signing and striping work.
- D. All signs shall conform to the MUTCD Standards and Johns Creek for color, size, reflectivity, height, and placement.
- E. Striping (white and yellow) and arrow marking shall be applied using GDOT standards for thermoplastic striping.
- F. When necessary, existing striping shall be removed by grinding, unless specified by Johns Creek Traffic Engineer.
- G. All final signage must be installed concurrently with the performance of the striping work.
- H. Contact the Johns Creek Traffic Engineer (678-512-3200) one week prior to commencement of any striping work.
- I. Clearly note this statement on plans:
  - Call Before You Dig 811 or (800) 282-7411

#### Signal Permit

Include separate signal plans if a signal is required for this development. Signal plans must be submitted to, but not necessarily approved by, Johns Creek Public Works prior to the Transportation sign-off for LDP. The signal plan checklist is available on our website at <u>www.JohnsCreekGA.gov</u>

## **PRE-CONSTRUCTION MEETING INFORMATION**

All Land Disturbance Permittees are required to schedule a pre-construction meeting with the Land Development Inspectors prior to any site activity. Pre-construction meetings provide an opportunity to meet the Johns Creek site inspectors, to discuss city regulations, enforcement protocol, and project expectations, and identify critical areas that may require special attention during development.

The pre-construction meeting will be held at City Hall prior to any land disturbance activity. The developer/owner, design engineer, and site contractors should be present. The Land Disturbance Permit (LDP) shall be presented after the meeting.

The Engineer, the Developer, the Owner, the General Contractor, any major Sub-Contractors, the 24-Hour Contact, and any other Primary, Secondary, and/or Tertiary Permittees are required to register all pertinent contact and licensing information with the City's Management Information System (MIS) prior to the Pre-construction meeting. All inspection results are forwarded to this contact list. This is the formal manner in which Permittees, Designers, and other Related Parties will be made aware of inspection results. Posted signs giving notice of Non-Compliance, Violations, and Stop Work Orders will be placed on site, but the details of these non-compliance issues are contained in the e-mailed inspection results.

Items that will be discussed during the meeting include:

- Receipt of 7-day Letter from Design Professional of Record; city will not complete the initial inspection without this.
- Initial erosion & sediment controls (E&SC), tree save, installation sequencing (Sd3, Re, etc.)
- State waters, buffers, and wetlands delineation
- Construction exit (Co) and LDP/site plan location
- Stormwater Sampling and records location
- Permit box location
- Job trailer (if there will be one and the requirements)
- Temporary vegetation (14 day rule) and dust control (Du)
- Any Conditions of Zoning
- Site inspections and enforcement procedures
- Department of Public Works items, site distance, and rights-of-way disturbance
- Final plat or plan requirements and procedures
- Level 1A Certified Staff responsible for the day-to-day activities and a copy of the Blue Card.

Please contact a Land Development Inspector to schedule a pre-construction meeting.

## OTHER HELPFUL CITY OF JOHNS CREEK CONTACTS

Environmental Compliance Manager	Terrence Byrd (678-512-3291)
Public Works Director	
Right-of-Way Specialist	