Other Requirements and Guidelines

THIS CHECKLIST IS A USEFUL GUIDELINE FOR PLAN REVIEW PREPARATION AS THE ITEMS LISTED WILL BE REVIEWED BY GRU:

WATER:

1. Will tap and valve by GRU be required?
2. Backflow preventers and types(installed by contractor)
3. If wastewater is industrial, and concentrations of certain chemicals exist, then applicant must secure an industrial user permit (contact)
4. Proposed and existing water mains with material, size, and locations
5. Meter size and r/w location
6. Fire hydrants with maximum spacing and adequate line size
7. Provide fire sprinkler demand if project includes fire sprinklers
8. Mains stubbed out past pavement to required distance
9. Blow-off assemblies and sample points
10. Approved valve arrangements
11. Fire flow calculations: average and peak water demand calculations based on 350 GPD per single-family detached residence, 70 GPD per bedroom for multi-family residential, and F.A.C. 64e-6.008 for commercial development. (note: in most cases, GRU uses a peaking factor of 2.5 but will accept other peaking factors, with documentation)
12. If meter greater than 5/8", supply: Instantaneous demand CALCS
13. Instantaneous demand CALCS
14. Average daily flow CALCS
15. Horizontal and vertical conflicts with buildings or other utilities
16. Approved restraint method
17. Fitting schedule or indicate fittings clearly on drawing
18. Minimum cover
19. Wetland delineation/setback lines, creeks, and ponds indicated
20. Road crossing details for jack and bores and open cuts with all existing utilities field surveyed, elevation and location shown. Entrance and receiving pit location and dimensions included
21. Drainage structure locations, elevations, sizes and slopes

SANITARY SEWER

1. Plan and profile drawings including material, size, slope and length
2. Storm sewer locations, size, slopes, etc.
3. Sewer stub-outs past pavement and to serve adjacent properties
4. Finished floor elevation
5. Force main shown on profiles with isolation valves and air release valves
6. Grease, sand and lint interceptors as needed
7. Horizontal and vertical conflicts with buildings or other utilities
8. Manhole locations
9. Lateral size, length, slope, and invert at cleanout
10. 36 inches cover minimum
11. Proposed and existing gravity sewer mains material, slope, size, and location
12. GRU water/waste water standard notes shown on plans

ELECTRIC – Refer to ENERGY DELIVERY SERVICE GUIDE (EDSG):

Due BEFORE/AT submittal:

1. Electric department must receive AutoCAD 2010 DXF formatted file showing: overall project boundary w/survey bearings & distances. Reference to section corner or land corner, parcel(s), pavement, sidewalk, building layout, retention ponds, curbing, center line of roadway, etc., for updating of GRU land base. Forward to Matt Johnston – utility GIS coordinator, johnstonjm@gru.com.
2. Consultation with GRU to develop electric design (including rental lighting) prior to plan submittal. For GRU utility maps submit request on line using GRU web link: GRU utility data request
3. Include survey of project/parcel showing all ***existing utilities***. Survey must be current.
4. Proposed electric transformer, equipment & primary conduits shown to scale per EDSG
5. Proposed meter/service delivery point shown per **EDSG**
6. GRU rental lighting system shown on a sealed photometric plan including secondary enclosures & conduits per EDSG
7. All electric equipment, cable/conduits must be contained within a PUE – coordinate with GRU land rights dept.
8. Show proper clearances around all electric structures and equipment as per EDSG due by plan review 3 and before final approval:
9. Provide electrical riser/one-line diagram & panel board schedule including NEC load calculations & voltage
10. *Electric comments must be addressed to proceeding to next plan review*. Denote/cloud any changes to electric layout on plans.

GAS

1. If using GRU gas, signed agreement required

REAL ESTATE

1. Existing easements shown on utility plan
2. Off-site easements identified
    a. Off-site easements required for project must be received by the city/GRU prior to plan approval
3. Proposed easements shown on utility plan in metes & bounds format
    a. Must maintain the following separation on both sides of the middle of proposed utilities: 5' for gas, 10' for electric, communications & water, 15' for sanitary sewer
    b. On-site easements required for project must be received by the city/GRU prior to any permanent utility service connections.
    c. If no new utility connections are needed, on-site easements will be required prior to plan approval
4. Encroachments (IE., bldgs., walls, signs)
5. Proposed plat with easements & dedication language
6. Standard utility note for easement(s) that will be provided
7. Standard utility note for permitting requirements with other regulatory agencies (i.e. county, state, Florida Gas Transmission, Clay Electric)
8. Property utilization application may be required if project is adjacent to GRU-owned property – see property utilization guide located at
9. Lift stations
    a. Note added to plans that state "lift station site to be deeded to GRU"

b. Warranty deeds are required to be granted for lift station sites; legal description and sketch prepared by a registered land surveyor must be supplied.

VEGETATION MANAGEMENT:

1. Landscape plan included
2. Rental lighting shown if applicable
3. Proper setbacks for above ground facilities
4. Proper setbacks for pad mount equipment
5. Proper setbacks for underground electric
6. Proper setbacks for underground gas
7. Proper setbacks for underground water
8. Proper setbacks for underground wastewater

REQUIREMENTS FOR ELECTRIC WORK ORDER PRODUCTION

(AFTER GRU UTILITY CONSTRUCTION PERMIT APPROVAL)

1. Approved final plans including GRU's electrical design shown on utility site plan
2. Contractor to schedule preconstruction meeting with GRU electric before purchasing and installing materials
3. Electrical service required date
4. Number of secondary conductors per phase (max of 8 per phase to GRU transformer)
5. Size of secondary conductors meet GRU specs (refer to energy delivery service guide, EDSG)
6. Electrical load imbalance less than 15% for 3phase service
7. Electric design meets all applicable codes
8. Electrical meter center submittal if applicable
9. Services over 400 amps must be CT metered & AMI communication conduit provided for – contact GRU metering department. Service greater than 400 amps must be underground.
10. Motor soft starts shown where required, refer to EDSG
11. Signed rental lighting agreement, if applicable, along with approved photometric plan on final UCP
12. Temporary power needs identified – allow 4-6 weeks' notice to GRU for temp service
13. Electrician to contact new services to set up temp account for construction (GRU account/billing)

GRU PLAN REVIEW CONTACT LIST

DEPARTMENT	TITLE	NAME	PHONE NUMBER	E-MAIL ADDRESS
ENERGY DELIVERY EAST	Electrical Engineer (East of NW 34 St)	Angel Rivera	352-393-1529	riveralopa1@gru.com
ENERGY DELIVERY WEST	Electrical Engineer (West of NW 34 St)	Milvia Hidalgo	352-334-6047	hidalgoma@gru.com
GAS	Gas Sales	Eric Williams Don Baham	352-393-1467 352-393-1468	williamsej@gru.com bahamdd@gru.com
GAS	Utility Engineer	Philip Lancaster	352-334-6078	LANCASTERPD@GRU.com
GRUCom	Electric Utility Engineer	Mike Chappell	352-393-6923	CHAPPELLMR@GRU.com
NEW SERVICES	Utility Service Supervisor	Kelly McCoy	352-393-1459	mccoyka@gru.com newservices@GRU.com
REAL ESTATE	Land Rights Coordinator (South of Univ. Ave)	Tiffany Davis	352-393-1216	davista@gru.com
REAL ESTATE	Land Rights Coordinator (North of Univ. Ave)	Ann Mullins	352-393-1232	MULLINSAM@GRU.com
REAL ESTATE	Operations Assistant (Right-of-way Permits)	Jennifer Rushing	352-393-1243	rushingjr@gru.com
WATER/WASTEWATER	Engineer Utility Designer 2	Christina DeStephans	352-393-1604	destephancg@gru.com
WATER/WASTEWATER	Supervising Engineer	Russ Ingram	352-393-1641	INGRAMRD@GRU.com