

# Design-Build Utility Coordination Workshop

February 24, 2014



# Agenda

- Opening Remarks and Introductions
- Design-Build Delivery at GDOT
- Design-Build Utility Coordination
- Roles and Responsibilities
- Q&A

# Opening

- Mike Bolden, State Utilities Engineer
  - Welcome
  - Utility coordination in Design-Build contracting
- Introductions



# Design-Build at GDOT

- Darryl VanMeter, State Innovative Delivery Engineer
- Design-Build is governed by:
  - 23 Code of Federal Regulations (CFR) Part 636 (Design-Build Contracting)
  - Georgia Code Section 32-2-81 (*Enacted 2004*)
  - Board Rules, Chapter 672-18 (*Adopted 2006*)

# Design-Build Program Overview

## ○ Design-Build Manual

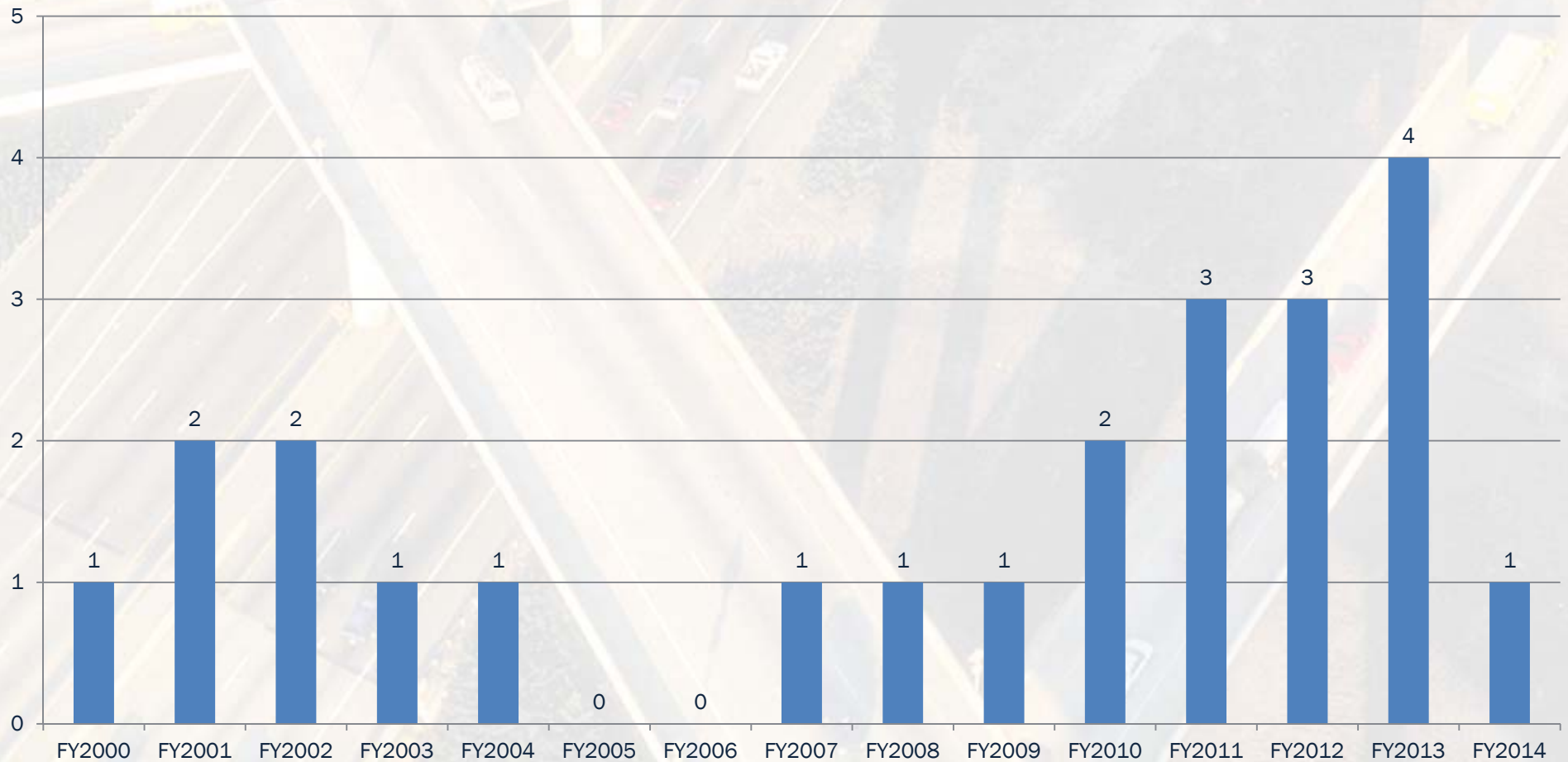
- Revised based on GA Code 32-2-81 [2013]
- Intended for industry and Department staff
- Outline process for selection, procuring and administration

## ○ Design-Build Selection Methods

- Best Value
- Two Phase Low Bid (Shortlist)
- Two Phase Low Bid (all qualified)
- One Phase Low Bid

# Design-Build Program Overview

Georgia Department of Transportation  
Table 2 - Number of Awarded Design-Build Contracts per FY  
March 2014  
TOTAL = 23



# Reasons to Use Design-Build

- Accelerated delivery for public benefit
- Directly supporting economic development
- Up-front contractor-engineer interaction to stimulate value engineering analysis in order to reduce project cost
- Complex constructability issues; or that require specialty/innovative designs, construction methods or techniques
- Maximize the use of available funding



# Suitability Assessment

- Suitability assessment performed on all candidates
- Establishes delivery goal(s)
- Risks are evaluated and included in a matrix
- Potential utility impacts are included in assessment

SR 21 @ I-95 DDI  
P.I. No. 0012722; Chatham  
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	Low Risk
	Moderate Risk
	High Risk

## 6. Initial Risk Identification and Allocation

Risks are present in any project. This project has been identified as a Good Candidate for Design-Build delivery. A Risk Allocation Matrix is provided below as a preliminary assignment of generic risks to the project. A more detailed risk analysis should be completed prior to Requests for Proposals to properly allocate all known risks at that time. The below template is intended to give a high level risk allocation assessment and is prepared as a guide to identify risks and opportunities to mitigate. It is based on the general assumption of Georgia's current lowest qualified bid requirement for Design-Build projects.

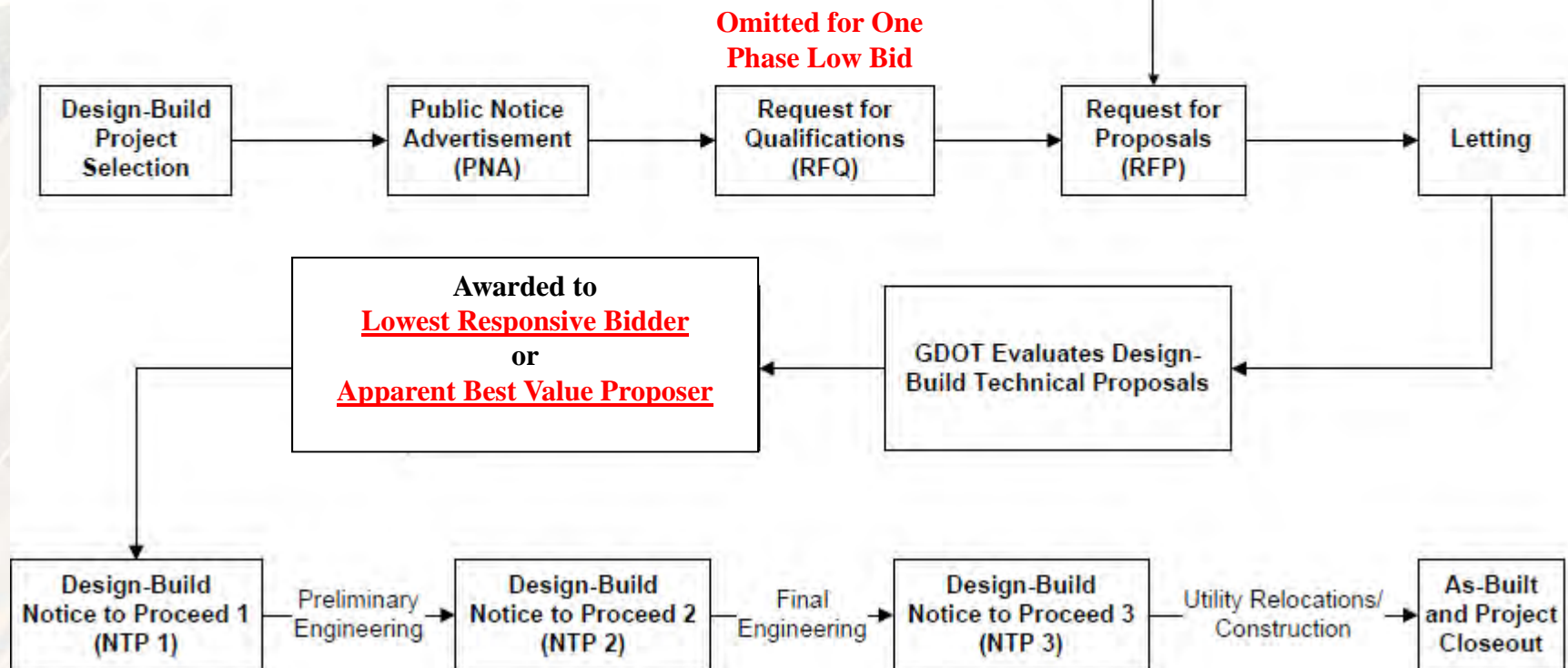
Scope Issues	GDOT	Shared	DB Team	Comments
Define project and scope	X			
Establish performance requirement	X			
Manage/communicate changes in Scope	X			
Incorporate flexibility in project scope	X			Low-bid procurement inhibits flexibility for innovation unless innovation results in project cost savings and is within scope. NEPA prescriptiveness too inhibits flexibility.



# Design-Build Procurement

GDOT's District Utility Engineer's role leading up to RFP includes, but is not limited to:

- obtain SUE QL-B overlaid on Design-Build costing plans,
- conduct "utility workshop" with utility owners, and distribute approved SUE plans
- provide MOUs to utility owners,
- execute MOUs,
- provide Special Provision 999 (utilities section) to GDOT's Design-Build PM,
- prepare Utilities certification for Design-Build project



# Design-Build Utility Coordination

- John Tuttle, HNTB Utility Liaison
  - Pre-let activities
  - Post-let activities

# Design-Build Utility Coordination

Pre Let Activities	Post Let Activities
Concept Report/Costing Plans	DB Team award (low-bid/Best Value) and GDOT issues NTP 1
Environmental Document	DB Team facilitates a utility/SUE kickoff meeting
SUE	DB Team coordinates with utility owners
Utility Workshop	DB Team coordinates and/or performs relocations (per executed MOU requirements)
Targeted Utility Outreach (as needed)	
MOU's	
Utility Analysis Preliminary Routing Report	
Design-Build Contract	



# Design-Build (Pre-Let Activities)

- Public Interest Determination (PID)
  - Senate Bill 19
  - PID procedure – Subject # 6863-12
- SUE QL-B
- Design-Build Contract
- Pre-let utility certification
  - State Utilities Office – upon receipt of all utility MOUs
- RFP advertised by GDOT
  - Amendments issued, as necessary
  - Questions & Answers (Q&A) posted on Design-Build SharePoint
- Letting

# Utility Workshop

- Conducted at time of MOU distribution (typically corresponds with SUE QL-B approval)
- Provide Utility Owners with up-to-date project information such as scope, schedule, and Design-Build delivery mechanics
- MOU's are provided with explanation of utility owner options
- Distribution of the Utility Analysis Preliminary Routing Report
- Discuss GDOT expectations and Utility owner responsibilities
- Discuss utility owner potential conflicts
- Address Utility questions and/or concerns

# Utility MOU

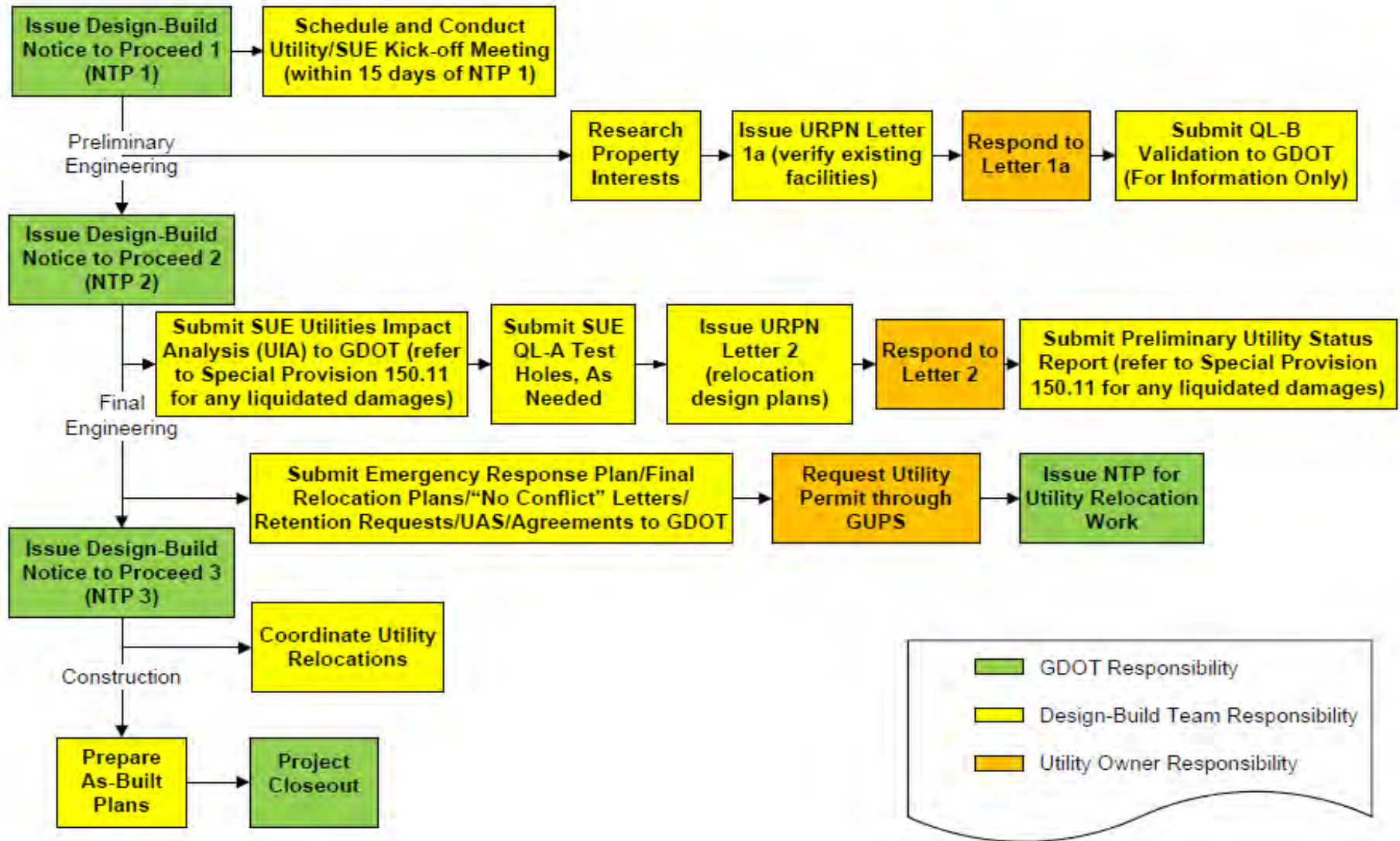
- Describes Utility Owners intent regarding utility relocations
- Will include prequalified vendor list and special requirements such as cutover limitations and additional insurance requirements



# Utility Analysis Preliminary Routing Report

- The purpose is to provide proposing Design-Build teams with additional information regarding possibly affected utilities.
- Gives general information on existing conditions, proposed resolutions and resolution conditions as determined by the utility owner.
- Gives all proposing bidders the same information, so that all Design-Build teams has the same information to put together their bids.
- The disclaimer states this is for information purposes only and is not binding.

# Design-Build Utility Coordination



# Design-Build (Post-Let Activities)

- Utility kick-off meeting (including SUE kick-off meeting)
- Awarded Design-Build Team's Roles and Responsibilities
  - Proactively manage the utility relocation process
  - First and second submission letters
  - SUE QL-B Validation
  - SUE QL-A/Utility Impact Analysis (UIA)
  - Emergency Response Plan
  - Regular coordination meetings (make each meeting productive)
  - Project schedule/Utility Adjustment Schedule (UAS)
  - Preliminary Utility Status Report (PUSR)
  - Utility Agreements
  - Georgia Utility Permitting System (GUPS)



# Utility/SUE Kickoff Meeting

- Critical meeting – sets stage for success
- Typically conducted directly after the “post award meeting”
- Must be conducted within 15 days of NTP1
- PD PM can provide list of suggested attendees
- Facilitated by awarded Design-Build Team
- Agenda may include roles/responsibilities, “what to expect with Design-Build,” high level schedule discussion, documentation protocol, potential issues, meeting frequency, UAS, GUPS
- With all meetings, the Design-Build Team should plan ahead and optimize time with utility owners, e.g. bring first submission set with URPN letter to the kickoff meeting

# Utility Relocation Procedure Notification

- 1st Submission - Utility Relocation Plan Notification (URPN)
  - NTP1 + 5 Calendar Days
  - 30 to 120 Days for Utility Owners to verify and return
- 2<sup>nd</sup> Submission – URPN Letter 2
  - Concurrently with accepted SUE Verification by Utility Owner
  - 30 to 120 Days for Utility Owners to prepare their Utility Work Plan

# Utility Adjustment Schedule (UAS)

- The awarded Design-Build Team schedule should include the following applicable activities for each utility owner:
  - Preliminary Engineering
  - Right-of-Way Acquisition
  - Construction Engineering
  - Material Procurement
  - Clearing & Trimming
  - Construction
  - Splicing or Tie-in Work
  - Service Considerations
  - Temporary Work



# Utility Adjustment Schedule (UAS)

## UTILITY ADJUSTMENT SCHEDULE (UAS)

UTILITY: (1) \_\_\_\_\_ P.I. NO: (2) \_\_\_\_\_ Date: (3) \_\_\_\_\_  
(4) (Lock document and use drop-down menu)

PROJECT: (5) \_\_\_\_\_ COUNTY: (6) \_\_\_\_\_  
ROUTE/ROAD: (7) \_\_\_\_\_ DESCR: (8) \_\_\_\_\_

### A. SUMMARY OF UTILITY FACILITIES AND UTILITY ADJUSTMENT SCHEDULE

LIST ALL EXISTING FACILITIES WITHIN PROJECT (exclude minor items)

Provide Quantity, Type of Facility and Type of Service Provided:

(9)	QUANTITY IN CONFLICT	
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS
_____	<input type="checkbox"/>	UNITS

Existing facility locations were identified using (10)(use drop-down menu) dated: \_\_\_\_\_ (11)

This schedule is based on (12)(use drop-down menu) dated: \_\_\_\_\_ (13)

If any changes are made to the plans after this date, which affect the Utility, then this schedule may require modification.

Prepared by (Utility Representative) Title \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
(14) \_\_\_\_\_

Approved by GDOT Title \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
(15) \_\_\_\_\_

Comments: (16) \_\_\_\_\_

**B. SPECIAL REQUIREMENTS** (staging required, dependent activities, joint-use coordination, etc.) NONE

## UTILITY ADJUSTMENT SCHEDULE (UAS)

UTILITY: (18) \_\_\_\_\_ P.I. NO: (19) \_\_\_\_\_ Date: (20) \_\_\_\_\_

### C. WORK PLAN - provide disposition of all existing and proposed facilities on project:

Location: Please identify by station(s), location number(s) or sheet number(s)	Description of Utility Work	Dependent Activities	Plan Stage No.	Days
(21)	(22)	(23)	(24)	(25)

# Utility Adjustment Schedule (UAS)

## UTILITY ADJUSTMENT SCHEDULE (UAS)

UTILITY: (26)  | P.I. NO: (27)  | Date:  (28)

### D. SCHEDULE SUMMARY FOR WORK PLAN: (29)

Exclude weekends, weather delays and non-productive time

Work Phase	(30) Total Estimated Days	(31) Prior to Project Award	(32) After Project Award	
Preliminary Engineering	<input type="text"/>	<input type="text"/>	<input type="text"/>	(33)
Right-of-Way Acquisition	<input type="text"/>	<input type="text"/>	<input type="text"/>	(34)
Construction Engineering	<input type="text"/>	<input type="text"/>	<input type="text"/>	(35)
Material Procurement	<input type="text"/>	<input type="text"/>	<input type="text"/>	(36)
Clearing & Trimming	<input type="text"/>	<input type="text"/>	<input type="text"/>	(37)
Construction	<input type="text"/>	<input type="text"/>	<input type="text"/>	(38)
Splicing or Tie-in Work	<input type="text"/>	<input type="text"/>	<input type="text"/>	(39)
Service Considerations	<input type="text"/>	<input type="text"/>	<input type="text"/>	(40)
Temporary Work	<input type="text"/>	<input type="text"/>	<input type="text"/>	(41)

Project Duration for Non-Concurrent Activities in Days: (42)

# Utility Impact Analysis (UIA)

- The UIA is a report, typically a spreadsheet, outlining avoidance alternatives, required adjustments/relocations, and cost estimates to perform those relocations.
  - Includes a conflict matrix which is used to determine to what extent the proposed roadway improvements will impact the existing utilities
  - The UIA is typically recommended after QL“B” but prior to QL“ A” and is used to determine which QL“ A” (Test Holes) may need to be performed



# Utility Impact Analysis (UIA)

C#	Station & Offset	Utility	Identified Conflict		TH (Y/N)	TH#	Utility Impact with Cost ("As- designed")	Recommended Resolution	Benefit of Resolution	UTILITY KEY
			Existing Utility	Proposed Feature						
01V	108 + 85, 10' R to 109 + 10, 83' L	E	GDOT Poles 76, 105 and 106 associated with highway lighting	Elevated ramp and embankment fill	N		Existing Poles 76, 105, 106 and existing E cables are in conflict with the proposed elevated ramp and associated embankment fill. Relocate Poles and 535 LF of E cables. (\$ 15,125)	Relocate light poles and replace associated E cables	Avoid construction delays in fill placement for the proposed elevated ramp, and keep maintenance of access to the E cables.	Underground
02V	106 + 80 to 109 + 70	SS	COA SSMH 109V and associated 8" DIP and PVC lines north and south of SSMH 109V	Elevated ramp, embankment fill and abutment wall	N		Existing 8" SS crosses beneath the proposed exit ramp. Relocate 650 LF of SS line to maintain access to the sewer and avoid excessive fill over the line. (\$ 65,000)	Relocate 8" sewer to the west of the proposed exit ramp between the ramp toe of slope and the existing SR 400 South ramp to Sidney Marcus Boulevard	Maintenance of access to the sewer line, eliminating risk of sewer line collapse due to excessive fill and the possible undermining of the proposed exit ramp embankment and abutment wall.	E - Electric
03V	110 + 84	TC	GDOT Traffic control cables and associated HH	Elevated ramp, embankment fill and abutment wall	N		Existing TC cables and associated HH are in conflict with a proposed abutment footing. Relocate 100 LF of TC cables. (\$ 2,500)	Relocate TC cables and associated HH to the south.	Maintenance of access to the TC cables and avoid construction delays in placing the abutment footing.	G - Gas
04V	112 + 11, 3' L	OGW	GDOT Pole 96 containing traffic signal lights and guy wire	Overhead bridge	N		Guy pole (and traffic signal lights) are in the path of a proposed overhead bridge. Relocate pole and attachments. (\$ 25,000)	Relocate pole and attached traffic signal lights and guy wire.	Eliminate conflict with proposed bridge design and avoid construction delays.	SS - Sanitary Sewer
05V	113 + 13	OE, OT, OTV	690, ATT, COM overhead lines	Overhead bridge	N		Pole 97 is in close proximity to and attached overhead lines are in the path of a proposed overhead bridge. Move pole and relocate attached lines. (\$ 50,000)	Place conflicting overhead lines underground.	Eliminate conflict with proposed bridge design and avoid construction delays.	T - Telecommunications
06V	112 + 25	G	4" AGL plastic main and 2" AGL plastic service	Overhead bridge support column	Y	TH1	TH 1 was previously conducted in the area of the intersection of the gas main and gas service line. These were found to be in conflict with a proposed support column foundation. Relocate gas main and service lateral. (\$ 20,000)	Relocate the gas line termination point to the west and reconnect service to this point.	Eliminate conflict with the bridge support column foundation.	TC - Traffic Control
07V	112 + 16	T	(9) 4" ATT PVC conduit T duct bank (concrete encased)	Overhead bridge support column	Y	TH1A	TH 1A was previously conducted on the T duct bank. A support column foundation is in close proximity to duct bank. Adjust/relocate T duct bank. (\$ 250,000)	Possibly expose duct bank prior to excavation for the proposed support column foundation.	Avoid damaging the duct bank during excavation activities for the bridge support column foundation.	TV - Cable TV
08V	112 + 85	SS	COA SSMH 5 and associated 8" PVC lines	Overhead bridge ROW take	N		Project will acquire the currently owned COA SS easement. SS is not in conflict, but will be in the GDOT ROW. (\$ 0)	Leave COA owned SS easement beneath proposed bridge.	Avoid delays acquiring ROW from COA	W - Water
09V	113 + 47	E	Private lighting Pole 104 for The Dump commercial business	Overhead bridge	N		Pole 104 is in the path of a proposed overhead bridge. Remove or relocate pole. (\$ 5,000)	Relocate light pole. Associated E cables should not be in conflict with a nearby proposed support column.	Eliminate conflict with proposed bridge design and avoid construction delays.	Overhead
010V	113 + 47	E	Private E service for the Dump commercial business from Pole 92	Overhead bridge support column	N		Existing E service cables are in conflict with a proposed support column foundation. Relocate 800 LF of E cables (\$ 4,000)	Relocate and sink E cables in the wall.	Eliminate conflict with the proposed bridge support column foundation and avoid construction delays.	OE - Overhead Electric
011V	113 + 23	W	Private UNK Size/type water line for the Dump commercial business	Overhead bridge ROW take	N		Project will acquire private property that contains the existing private water line. The water line is not in conflict, but will be in the GDOT ROW. (\$ 0)	Leave privately owned water line beneath proposed bridge.	Avoid delays of acquiring property containing the existing water line.	OGW - Overhead Guy Wire
012V	116 + 27, 6' R	E	GDOT Pole 165	Overhead bridge	N		Pole 165 is in the path of a proposed bridge. Remove or relocate pole. (\$ 5,000)	Relocate light pole. Associated E should not be in conflict with a proposed nearby support column.	Eliminate conflict with proposed bridge design and avoid construction delays.	OT - Overhead Telecommunications
013V	124 + 34, 7' L	E	GDOT E cables associated with median highway lighting	Overhead bridge support column attached to the existing grade separation wall between north and southbound I-85	N		Existing E cables to Pole 157 are in conflict with a proposed bridge support column foundation. Relocate E cables and pole. (\$ 3,000)	Relocate E cables and associated light pole.	Eliminate conflict with proposed bridge design and avoid construction delays.	OTV - Overhead Cable TV

# Design-Build Contract Submittals

TABLE 4-2: REVIEWS

Utility Submittal Description	Format	Quantity	Delivery Date*	Review Period*	Review Type	Comment
Supplemental verification of Overhead/Subsurface Utility Engineering (SUE) Investigations - QL-B <ul style="list-style-type: none"> <li>Electronic SUE files, mapping files and proposed design files</li> <li>Certified half-size PDF</li> <li>PDF of the certified SUE deliverables checklist</li> </ul>	AR, MS PDF	1	NTP (1) + 45 Calendar Days (Or as Determined by State Subsurface Utilities Engineer at the SUE Kick-Off meeting which is concurrent with the first utility coordination meeting)	NA	Submitted to the State Subsurface Utilities Engineer for information	Only certify SUE work actually completed
SUE Utility Impact Analysis "UIA" <ul style="list-style-type: none"> <li>Excel spreadsheet of conflict matrix</li> <li>Certified color PDF (11x17) of conflict matrix</li> <li>PDF showing the conflict locations on the utility plans</li> <li>PDF of the certified SUE deliverables checklist</li> </ul>	AR, PDF	1	NTP 1 + 120 Calendar Days (Or as Determined by State Subsurface Utilities Engineer at the SUE Kick-Off meeting which is concurrent with the first utility coordination meeting)	NA	Submitted to the State Subsurface Utilities Engineer for information	Only certify SUE work actually completed
Overhead/Subsurface Utility Engineering (SUE) Investigations - QL-A <ul style="list-style-type: none"> <li>Electronic SUE files, mapping files (if not already provided) and updated proposed design files</li> <li>PDF of the certified test hole forms</li> <li>PDF of the certified SUE deliverables checklist</li> </ul>	AR,MS,PDF	1	UIA + 45 Calendar Days	NA	Submitted to the State Subsurface Utilities Engineer for information	Only certify SUE work actually completed
Overhead/Subsurface Utilities Engineering (SUE) Information to Utilities for Review (URPN Letter 1a - SUE Submit to Utility Companies Revise)	FS,HS,PDF, MS	Plans: 2 for each Utility Owner +3 for Dept. and MicroStation files	NTP 1 + 5 Calendar Days (Or as Determined by District Utilities Engineer at SUE Kick-Off meeting)	5 days for Dept. + 30 days for each Utility Owner	Reviewed by District Utilities Office (DUO)  SUE Verification by Utility Owner (According to the details contained in the MOUs)	
Relocated Utility Plans (URPN Letter 2 - 2nd Submission Letter (Existing and Proposed) )	FS,HS,PDF, MS	Plans: 2 for each Utility Owner +3 for Dept. and MicroStation files	Concurrently w/ Accepted SUE Verification by Utility Owner	5 days for Dept.  + 90 days for each Utility Owner	Reviewed by District Utilities Office (DUO) and Accepted by Engineer  Proposed Relocation by Utility Owner (According to the details contained in the MOUs)	
Preliminary Utility Status Report (URPN Letter 6 - Notice to Proceed with Permit)	HC, PDF	3, 1	Concurrently w/ Accepted Relocated Utility Plans	10- days  + 5 days	Reviewed by District Utilities Office (DUO) and Accepted by Engineer  Accepted by State Utilities Preconstruction Engineer	

# Design-Build Contract Submittals

Utility Plans/Agreements (Utility NTP Letter)	Plans/ Agreements HS,PDF,MS	Agreements: 3 hard copy, 1 electronic pdf  Plans: 2 for each Utility Owner + 3 for Dept. and MicroStation files	Concurrently w/ Accepted Relocated Utility Plans	Agreements: 30 days for Dept. + 60 days for each Utility Owner  Plans: 30 days	Relocation Plans and Agreements reviewed by Department Utilities Office. Agreements also reviewed by Utility Owner.(According to the details contained in the MOUs)	
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\*All days are "Calendar Days.", as defined in section 101, Standard specifications

**All Submittals** shall be made directly to the Engineer. The Engineer shall provide submittals to the applicable GDOT Office Reviewer and/or other applicable entities as directed by the Engineer, unless otherwise noted or discussed with the Contractor. As accepted by the Engineer the Contractor may provide submittals to applicable offices for a concurrent review. **Hand-deliver submittals, track and regularly update the Engineer on review status.** In the event concurrent submittals are required, the "receipt" date shall be the date the last recipient receives the submittal and shall be the contractual begin date for the review. Unless a different review time is specified elsewhere in the contract, a period of **thirty (30) calendar days** from receipt to release of the submittal by the Department shall be allowed for the Department's review. Engineer's (Department's) acceptance as to completeness is required for all reviews. All Contractors' schedules shall reflect the review times contained within the specifications and contract. Engineer's receipt of submittals will mark the beginning of the review period. All submittals by the Contractor shall be required to contain a statement certifying that no unapproved design-exceptions have been incorporated in the submittal. Errors and omissions are the responsibility of the Contractor to correct and shall be at the Contractor's expense.

**Any submittal received by the Engineer after 12 PM (noon) shall be considered as being received the following business day.**

Monthly progress meetings will be held at the Project location if requested by either the Contractor or the Department. Attendees shall include the Contractor, design consultant, the Department's Project Engineer and design liaison, and may also include a representative from various Department Offices.



# Preliminary Utility Status Report

- The Contractor shall prepare and submit to the Department a Preliminary Utility Status Report (PUSR)
- Typically NTP + 180 Days
- The PUSR shall include:
  - Listing of all Utility Owners located within the project limits and a recommendation as to the extent of each Utility Owner's property interests
  - Copies of easements, plans, or other supporting documentation that substantiates any property interests of the Utility Owners
  - Each Utility owner should be listed with contact information, along with a preliminary assessment of the impact to each of the Utility Owner's facilities
  - Most up-to-date UIA

# Escalation Process

## Design-Build Team Responsibilities:

- Track each Utilities progress in relation to the Utility Work Plan
- Once the DB Contractor has determined that the Utilities work progress is at least 20% behind the approved Work Plan; the Contractor will notify the Utility, and the Department of such apparent delay through written correspondence.

## Utility Owner Responsibilities:

- Utility Owner shall submit a proposal on how the Utility plans to rectify such delay and maintain the project's schedule prescribed by the previously approved Work Plan within 10 days.

# Utility As-Builts

- It shall be the responsibility of the Contractor's 3.10 Utility Coordination Consultant to manage and ensure accurate completion and delivery of utility as-builts.
- Utility as-builts must be completed after utility relocations are completed and prior to project closeout.
- Provide Utility as-built plans in the Department's current CADD Software format to include each individual utility owner within the project limits.
- Utility Owner relocations included in the contract, the utility owner will be provided a copy of completed as-builts for review and approval.
- The Department will ensure DB Contractors are gathering required as-built information during the relocation process.



# GDOT Responsibilities

- Rob Lewis, HNTB
- Pre-Let
  - Provide MOU templates to utility owners
  - Execute MOU
  - Utility certification
- Post-Let
  - Process Retention Request (Post-Let)
  - GUPS (issue permit)
  - Provide Utility Agreement template
  - Execute Agreement(s) and authorize utility work
  - Oversight

# DB Team Responsibilities

## ○ Pre-Let

- Contact Utility Owners, gather information, submit price/technical proposal

## ○ Post-Let

- Schedule utility/SUE kickoff meeting
- Facilitate and lead regular utility coordination meetings
- Coordinate and/or perform utility relocations
- Direct and coordinate completion of Retention Request
- Ensure utility owners submit through GUPS
- Coordinate Utility Agreement activities (property interest research, request templates, facilitate signature process, etc.)
- Complete utility As-Built plans
- Keep DUE and PM informed of utility coordination activities

# Utility Owner Responsibilities

- Pre-Let
  - Participate in the pre-let Utility Workshop
  - Complete MOU/Utility Analysis Preliminary Routing Report
  - Provide information, as needed, to proposing Design-Build Teams
- Post-Let
  - 1<sup>st</sup> and 2<sup>nd</sup> Plan Submittal
  - Retention Request – Coordinate and Participate
  - GUPS
  - Prior Rights – Compensable Property Interest
  - Agreements



# Hammond Dr at SR 400

- Large number of utility relocations to coordinate
- Regular utility coordination meetings ensued during design and construction phases
- Private utility hook-ups (cost-to-cure)



# I-575 at Ridgewalk Pkwy

- Rural project
- Avoided a \$100,000 switch cubicle
- Georgia Power crews were remobilized to deal with out of state weather related issues
- Franchise agreements





# I-20 Eastbound CD





# Skidaway Narrows





# SR 400 @ I-85 Connector Ramps





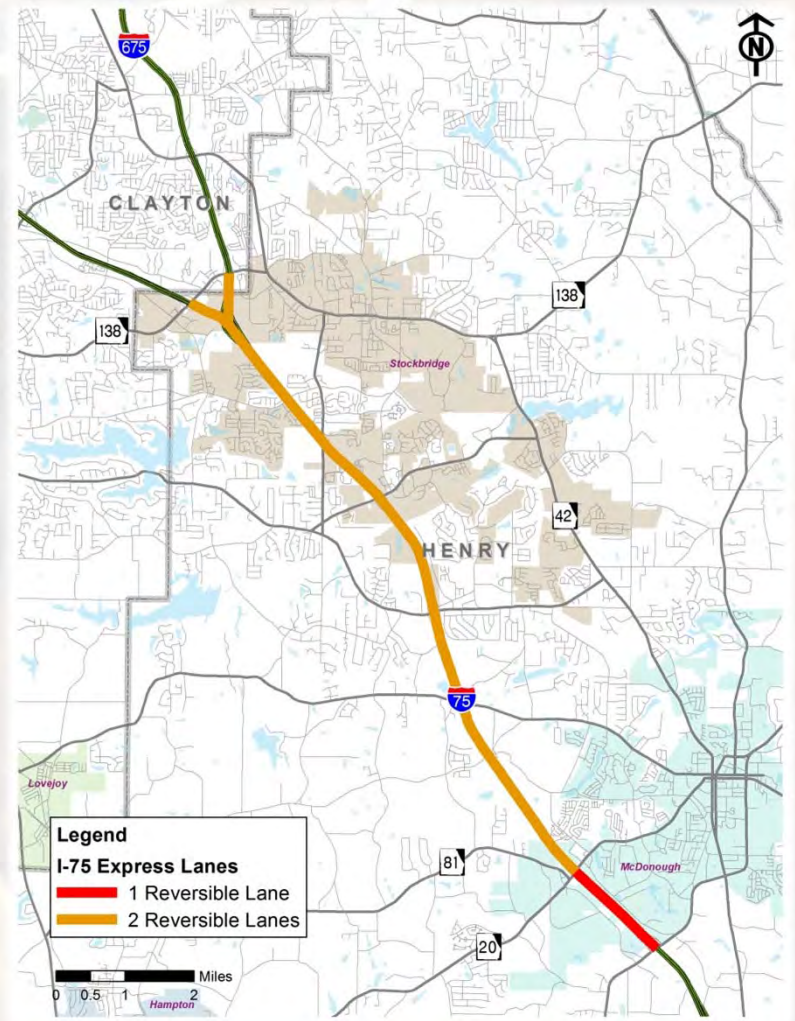
# Jimmy Deloach Connector





# I-75 Express Lanes

- Total Project length of approximately 17 miles
- Begins at SR 155/McDonough Road and terminates at SR 138/Stockbridge Highway
- One (1) reversible barrier-separated managed lane in the median of I-75 from SR 155 to north of SR 20
- Two (2) reversible barrier – separated managed lanes in the median of I-75 from north of SR 20 to SR 138
- Northbound operations in the morning and reverses southbound operation in the evening
- Design-Build Contract (\$176,247,661.51)
- Open to Tolling by December 31, 2016
- Contract completion by June 30, 2017



# Variable Speed Limit Signs

- I-285 Variable Speed Limit Signs
  - Design-Build contract (\$4,921,604.00)
  - Contract completion date of September 30, 2014
  - VSLS on north end and static signs on south end
  - LED signs to regulate speed limit and traffic flow
  - Raise speed limit from 55 mph to 65 mph
  - VSLS to be implemented on I-85, I-75 and I-20





# Lessons Learned

- Early identification of utility risks (pre-let)
- Scope/MOU clarity (pre-let)
- Regular and proactive coordination
- Anticipate, anticipate, anticipate
- Never assume and ask questions
- Design-Build Team must lead the utility coordination process



# Questions?



**SIGN-IN SHEET**  
Please Print



Date/Time: 24 Feb 2014 10:00 AM

Location: One Georgia Center 4th Floor

Purpose: Design-Build Utility Workshop

Name	Company and/or Address	Phone	E-Mail
MARK TILDEN	BPC	404.506.4203	MATILDEN@SOUTHERNCO.COM
TERRY ALGOOD	WALTON BAK	770.601.2795	tallygood@waltonbak.com
Jimmy Amos	AET	770.382.9081	JAM719@aet.com
JUN BURKAMMER	GDOT - UTILITIES	404.347.0606	jburkammer@gdot.ga.gov
Raymond Chandler	GDOT-UTILITIES	404-631-1360	rchandler@gdot.ga.gov
PATRICK ALLEN	GDOT - D7 UTILS	779.86.1117	paallen@gdot.ga.gov
Charity Belford	GDOT-SUO	404.631.1363	cbelford@gdot.ga.gov

**SIGN-IN SHEET**  
Please Print



Date/Time: 24 Feb 2014 10:00 AM

Location: One Georgia Center 4th Floor

Purpose: Design-Build Utility Workshop

Name	Company and/or Address	Phone	E-Mail
BOB THOMPSON	C.W. MATTHEWS	(770) 596-9444	bobt@cwmatthews.com
Jim Brunsight	Flatiron Const	770-927-8660	jbrunsight@flatiron-construction.com
Michelle Hirose	RS&H	678-528-7211	michelle.hirose@rsandh.com
Marlo Powers	GDOT-IPD	4) 631-1713	mpowers@dot.ga.gov
CARE WILTMORE	GDOT - UTILITIES	4) 631-1371	cwiltmore@dot.ga.gov
Carlton Sellars	Wolbert + Assoc.	6-772-0496	carl.sellars@wolbert-ssa.com
Roy R ROGERS	BIGWAT CONSTRUCTION	678 697 9325	ROY.ROGERS@BIGWATCONSTRUCTION.COM
Allen Scott	C.W. Matthews	770-422-7520	allens@cwmatthews.com
Darryl VanMeter	GDOT	404-631-1703	dvanmeter@dot.ga.gov
Deborah Collins	CONCAST	7-559 2035	deborah_collins@cable.comcast.net



**SIGN-IN SHEET**  
Please Print



Date/Time: 24 Feb 2014 10:00 AM

Location: One Georgia Center 4th Floor

Purpose: Design-Build Utility Workshop

Name	Company and/or Address	Phone	E-Mail
Bob Manning	ER Snell	678-344-4104	bmanning@ersnell.com
KERRY GORE	GDOT	706-646-7603	kgore@dot.ga.gov
CARL PEARSON	AGL	404-584-4352	cpearson@agresources.com
KARL LEDFORD	GTC	770-270-7990	KARL.LEDFORD@SATIANS.COM
Tonia Hunter	GDOT	404-347-0605	
JEFF BAKER	GDOT	404-631-1970	jbaker@dot.ga.gov
LEE UPKINS	GDOT	404-631-1354	lupk@dot.ga.gov
Joe Ussery	Columbia Engineering	770-925-0357	jussery@columbia-engineering.com

Georgia DOT Project:  
GDOT P.I.

**DESIGN-BUILD  
MEMORANDUM OF UNDERSTANDING**

between the  
Georgia Department of Transportation (hereafter the DEPARTMENT)  
and  
\_\_\_\_\_ (hereafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereafter referred to as PROJECT to \*\*\*\*\*in \*\*\*\*\* County, Georgia by contract through competitive bidding procedures; and,

Whereas the DEPARTMENT will accomplish the PROJECT through a Design Consultant, Design Consultant Team and/or Contractor hereafter referred to as CONTRACTOR; and,

Whereas, where OWNER has property rights (“Prior Rights”) at the location of the PROJECT, OWNER will provide written evidence as to said prior rights within the area and will provide written documentation of prior rights relating to any individual crossing or Utility Facility, at the location of the PROJECT; and

Whereas, OWNER acknowledges that, generally, absent a showing of prior rights, the costs of relocation, protection, removal, or adjustment performed by OWNER shall be borne by OWNER; and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of relocation, protection, or adjustment of OWNER’S facilities where DEPARTMENT has made the determination that (i) such payments are in the best interest of the public and necessary in order to expedite the staging of the design-build project; and (ii) the costs of the removal, relocation, protection, or adjustment of such facilities are included as part of the Contract between the Department and the Department's roadway contractor for the design-build project; and

**1. Type of Utility**

OWNER has the following utility facilities which may need to be adjusted or relocated as a result of the proposed PROJECT:

Type of facility or facilities of OWNER:

- \_\_\_\_\_ Domestic water mains and distribution lines and associated appurtenances
- \_\_\_\_\_ Sanitary Sewer facilities and/or Storm Drainage System
- \_\_\_\_\_ Electrical Distribution (overhead and underground) wires, poles, etc.
- \_\_\_\_\_ Electrical Transmission (overhead and underground) wires, poles, etc.
- \_\_\_\_\_ Natural Gas Distribution Facilities (underground)
- \_\_\_\_\_ Natural Gas Transmission Facilities (underground)
- \_\_\_\_\_ Petroleum Pipeline (underground)
- \_\_\_\_\_ Telecommunications facilities and equipment
- \_\_\_\_\_ Cable TV facilities
- \_\_\_\_\_ Street Lighting
- \_\_\_\_\_ Internet Data Service
- \_\_\_\_\_ Other Facilities (Description) \_\_\_\_\_

## 2. New Utility Facilities Proposed (Betterment)

OWNER desires the following to be installed as new additional facilities within the PROJECT.  
Insert here or attach a detailed description of proposed new additional utility installations:

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## 3. Assignment of Responsibilities for Design and Construction

This MEMORANDUM OF UNDERSTANDING and the following shall serve as a *basis* for assignment of responsibilities and costs for the DEPARTMENT to enter into a Standard Utility Agreement (SUA) or Contract Item Agreement (CIA), if necessary, with OWNER once the PROJECT is awarded to the CONTRACTOR. For a PROJECT implementation, GDOT will not have in its possession exact costing plans to be utilized to determine exact locations of the removal, relocation, protection, or adjustment. However, Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities. Please use these plans for developing the final determination of services as indicated below. The CONTRACTOR developed plans will be provided to the OWNER after the design build project is awarded by GDOT which shall be used by the CONTRACTOR as the final basis for the SUA or CIA.

OWNER hereby intends to:

- A. OWNER, at the DEPARTMENT'S cost, will provide the following services for the properties for which it has established prior rights (check to signify):

Design \_\_\_\_\_  
Construction \_\_\_\_\_

- B. OWNER, at the DEPARTMENT'S cost, for any removal, relocation, protection, adjustment and/or design (Regardless of Prior Rights) will allow their facilities to be placed into the DEPARTMENT'S contract for the following services pursuant to O.C.G.A. § 32-6-170(b). The DEPARTMENT will add the removal, relocation, protection, adjustment and/or design cost to the overall PROJECT's cost. (Check to signify):

Check Design and/or Construction if you want to have the Design and/or Construction to be added to the DEPARTMENT'S contract.

**If Design and/or Construction are checked in Section B and the OWNER wants the work to be performed by their pre-approved Contractors and/or Design Consultants, the OWNER must provide at a minimum, three pre-approved contractors and/or three Design Consultants on page 6.**

**(Water and Sewer will automatically be accomplished by the DEPARTMENT'S CONTRACTOR and the design will have to be approved by the OWNER)**

Design \_\_\_\_\_  
Construction \_\_\_\_\_



- C. OWNER, at the DEPARTMENT'S cost wishes to allow the DEPARTMENT'S CONTRACTOR to perform the removal, relocation, protection, adjustment and/or design work, please signify below:

**DEPARTMENT'S CONTRACTOR CAN PERFORM:**

Design \_\_\_\_\_

Construction \_\_\_\_\_

**If both are checked, please leave page 6 blank.**

As per this section, all work necessary for the removal, relocation, protection, or adjustment of the described utilities in accordance with the plans when approved shall be included in the project contract and accomplished by the CONTRACTOR except as follows (check none or list any work items to be performed by the OWNER)

None \_\_\_\_\_

Excluded Items \_\_\_\_\_

Comments: \_\_\_\_\_

- D. OWNER, at OWNER'S cost, will provide the following services (check to signify):

Design \_\_\_\_\_

Construction \_\_\_\_\_

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the PROJECT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and DEPARTMENT when required. However; the OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the PROJECT (list any work not included in the PROJECT in space provided above). If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR.
3. After award of the project, the CONTRACTOR will research the property interest of each OWNER and present the findings to the DEPARTMENT and OWNER for approval. The CONTRACTOR will coordinate resolution of any disputed items. The plans and estimate for the utility work shall be subject to approval of both the DEPARTMENT and the OWNER prior to construction. If the OWNER chooses to include the subject utility work in the PROJECT and the research indicates that no property interest exists, the OWNER

did not indicate Section 3B above, and the OWNER cannot refute this finding with evidence that would substantiate the property interest in legal proceedings, the OWNER shall provide confirmation in writing that OWNER will reimburse the DEPARTMENT for any adjustment or relocations necessary; and an agreement will be prepared and executed in accordance with the DEPARTMENT'S "Utility Accommodation Policy and Standards Manual". If the OWNER chooses to perform its own relocations and the OWNER holds no property interest as stated above; the OWNER shall confirm in writing that the OWNER will relocate its own facilities at no cost to the DEPARTMENT and the CONTRACTOR.

4. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all utility work included in the PROJECT is accomplished in accordance with the PROJECT'S plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER'S facility.
5. For Utility work included in the PROJECT, the CONTRACTOR shall ensure that the construction and installation of the OWNER'S facilities is performed by a contractor prequalified/registered with both the DEPARTMENT and the OWNER. The CONTRACTOR shall contact the OWNER to obtain the current list of the OWNER'S prequalified Contractors:
6. For Utility work included in the PROJECT'S contract, the OWNER or the OWNER'S Consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all utility work is completed and ready for final inspection by the OWNER.
7. Upon Maintenance Acceptance or Final Acceptance of the utility work included in the contract and upon certification by the DEPARTMENT'S Engineer and the OWNER, that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodation Policy and Standards Manual, current edition" and any agreements in effect without further cost to the DEPARTMENT or its CONTRACTOR.
8. For the purpose of utility coordination, relocation and reimbursement matters, the OWNER shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S "Utility Accommodation Policy and Standards Manual, current edition" and any agreements in effect between the DEPARTMENT and OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.
9. In accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) all manufacturing processes for steel and iron products or predominantly of steel or iron (at least 90% steel or iron content) furnished for permanent incorporation into the work on this project shall occur in the United States. The only exception to this requirement is the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.
  - a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires, and cable wire/strand. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

- b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled “**Buy America Certificate of Compliance**” is attached to this agreement as “**Exhibit B.**” Records to be maintained by the RAILROAD/UTILITIES and the Department for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.
- c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron or a minimal use of foreign steel and iron materials if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or \$2,500.00, whichever is greater.

The Memorandum of Understanding will be incorporated into the project contract by reference or Exhibit.

APPROVED FOR THE OWNER BY:

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Title)

APPROVED FOR THE DEPARTMENT BY:

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

STATE UTILITIES ENGINEER



Pre-Approved Construction Contractor				
Company Name	Address	Phone	Contact Person	E-Mail
Pre-Approved Design Consultant				
Company Name	Address	Phone	Contact Person	E-Mail

**All Pre-Approved Contractors/Consultants listed above must be Registered/Prequalified with the Department – Contractors must fill out one original DOT Form 478 and provide three reference letters. Send all documents to the: Georgia Department of Transportation, Office of Transportation Services – Contractor Prequalification, 600 West Peachtree Street, NW, 19<sup>th</sup> Floor, Atlanta, GA 30308**

**Please refer to the Department’s website @ (<http://www.dot.ga.gov/doingbusiness/prequalification>) and follow instructions for contractor Registration/Prequalification**