



Georgia State Financing
& Investment Commission

GSFIC

Professional
Partnership Workshop

Professional Partnership Workshop

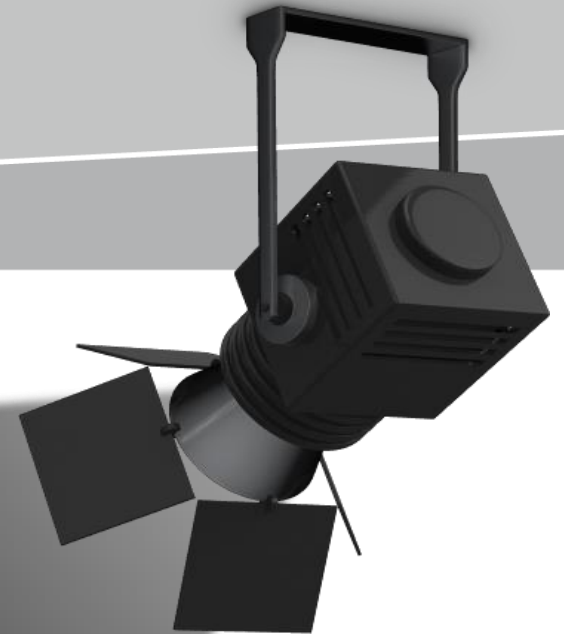
Design Review Group Best
Practices

with

Gifton Passley & Team.....

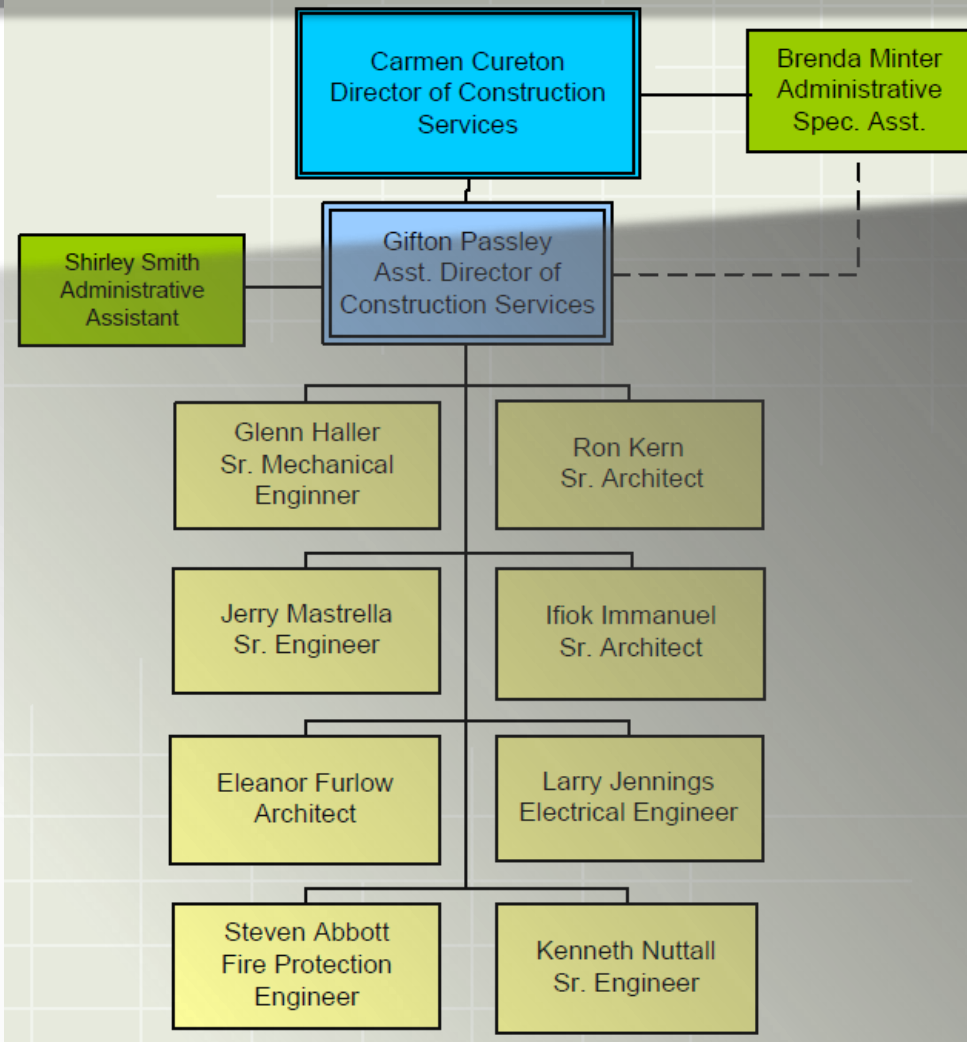
 LANIER TECHNICAL COLLEGE
FORSYTH CONFERENCE CENTER

DRG- Who We Are



Design Review Group

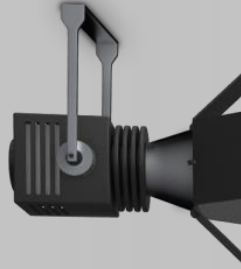
A Department in
GSFIC
Construction
Services Division



DRG – What we do



Constructability - Manage Proper Application of Bond Proceeds



Life Safety and Fire Protection - 5 Deputized State Inspectors



BIM Reviews and Animations



Special Inspections Program and Selection Process



Fire Alarm and Fire Sprinkler Field Inspections

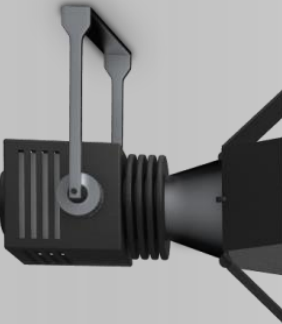
Building Assessments and Cost Estimating

Scheduled Monthly Project Kick-off Meetings

Twice Weekly Project Intake Meetings

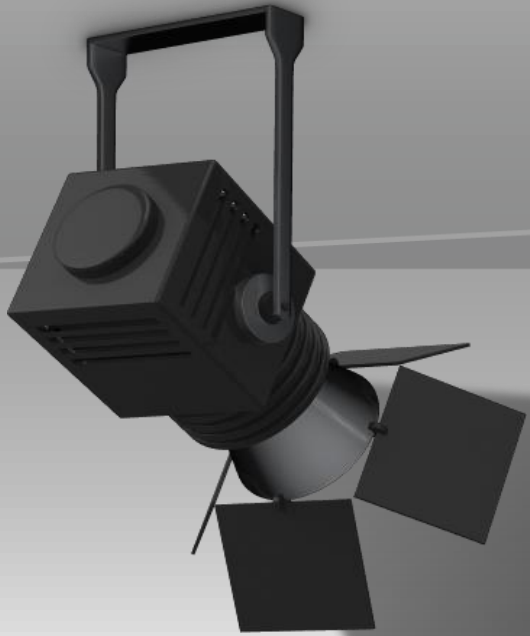


Subject Matter Expert to GSFIC Project Managers during design and construction



Subject Matter Expert to Using Agencies, contractors, other entities in general

Additional Services

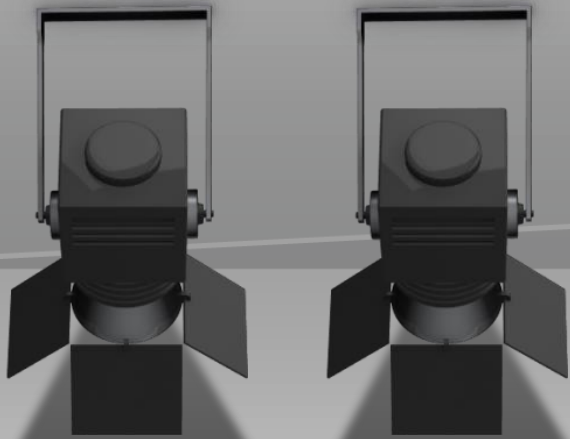


Assistance for the SWCC for their Dam program, Site visits including LDP assistance

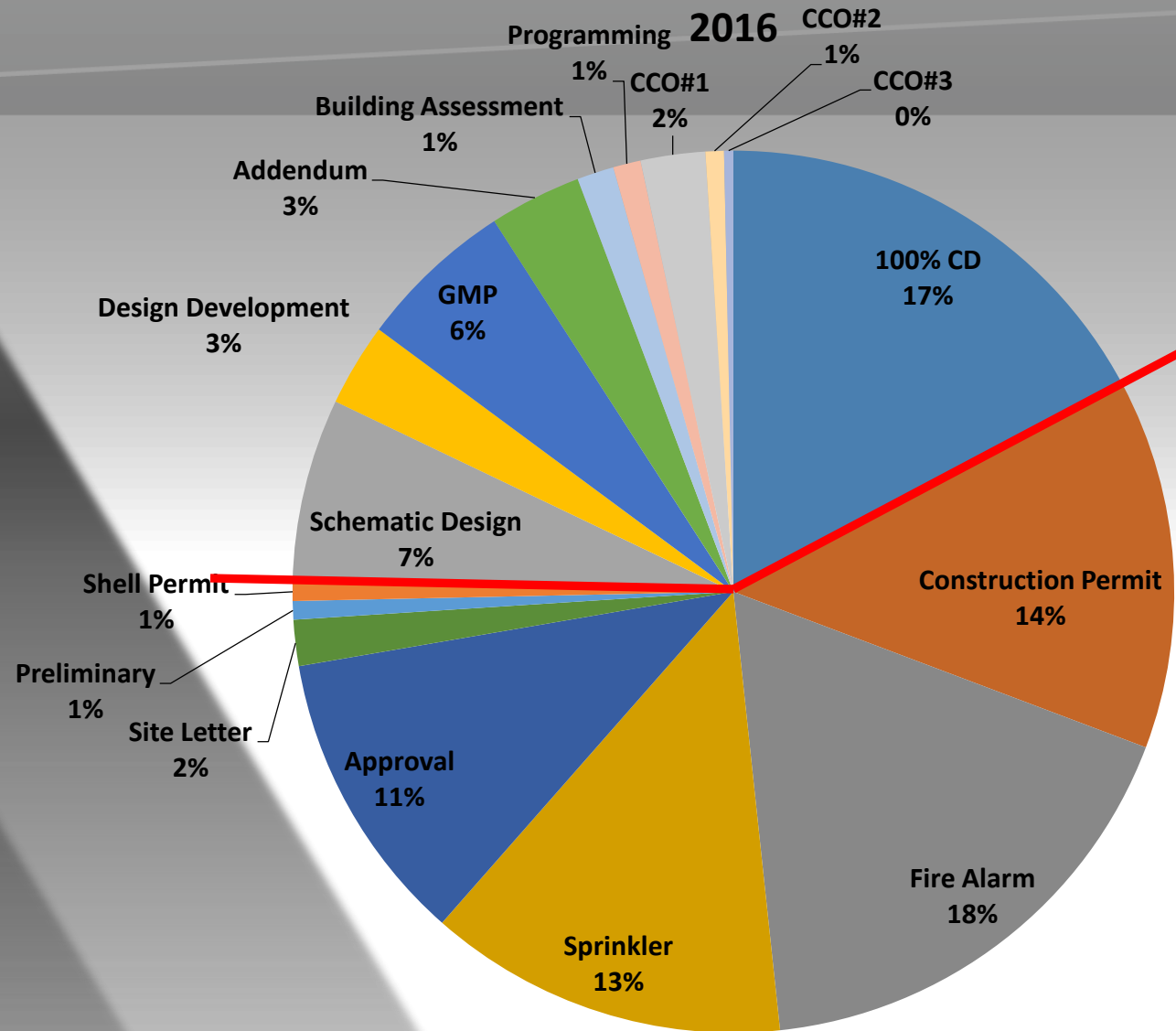
DP and Commissioning Agent selection assistance

GSWCC Level 1A & 1B Certified Inspector Training

DRG Reviews January – June 2016



Review Type	2016
100% CD	51
CCO#3	1
CCO#2	2
CCO#1	7
Programming	3
Building Assessment	4
Addendum	10
GMP	17
Design Development	9
Schematic Design	20
Construction Permit	40
Fire Alarm	52
Sprinkler	39
Approval	32
Site Letter	5
Preliminary	2
Shell Permit	2
Total	296



Predecessor	% Done	No:	Project #	Project Name	Rev. Cat	Proj Mgr. / Client	Review Type	Back Check #	Architect / Engineer	Discipline	In Date	Target Date	Review Duration	Completion Date	Actual Duration	Approval Status	Comments	
			1	TCSG-244	Automated Manufacturing Technology Building, GA Northwestern Tech, Catoosa Campus		Brownsmi	Approval	Ronald Kern		01/05/15	01/27/15	17d	01/16/15	10.66667	Approved		
			2	J-208	Health Center, Georgia Southern University			Fire Alarm	Justin Poblete		01/07/15	01/29/15	17d	01/27/15	19.66667	Approved		
			3	DDS-005	Drivers Services Facility, Paulding County	3	Starks	100% CD	Eleanor Furlow		01/06/15	01/12/15	5d	01/27/15	20.66667			
				FM-086-14	Library, Clayton State			Fire Alarm	Justin Poblete		01/08/15	01/16/15	7d	01/16/15	7.66667	Not Approved		
			4	GWCC-035	NSP Phase I Parking Deck	2	Gist	CCO#1	BC#2	Ifio Immanuel	01/07/15	01/20/15	10d	01/20/15	12.66667			
				FM-061-14	Gullebeau Hall, Gordon College			Sprinkler	Justin Poblete		01/08/15	01/28/15	15d	01/12/15	3.66667	Approved		
				FM-085-14	Arts & Sciences, Clayton State			Fire Alarm	Justin Poblete		01/08/15	01/28/15	15d	01/14/15	5.66667	Approved		
				FM-049-14	Lanier Center for Native Plants, University of Georgia			Construction Permit	Ronald Kern		01/08/15	01/28/15	15d	01/22/15	13.66667	Approved		
				FM-001-15A-D	Retail Block, Jekyll Island			Approval	Ronald Kern		01/09/15	01/29/15	15d	01/27/15	17.66667	Approved		
				J-216	Classroom & Lab Building, Bainbridge College			Fire Alarm	Larry Jennings		01/12/15	01/30/15	15d	01/29/15	16.66667	Not Approved		
				DOT-081	Facility Condition Assessments State Rest Areas		Durr	Schematic Design	Ronald Kern		01/12/15	01/16/15	5d	01/22/15	9.66667			
				J-220	Health Sciences Tech Ed, Dalton State			Fire Alarm	Justin Poblete		01/15/15	02/04/15	15d	02/02/15	17.66667	Not Approved		
				BR-66-1104	Shooting Sports Education Center, Georgia Southern			Fire Alarm	Larry Jennings		01/15/15	02/04/15	15d	02/02/15	17.66667	Approved		
				FM-002-15	Tift Building, Coastal Plains Experiment Station UGA			Approval	Ifio Immanuel		01/15/15	02/04/15	15d	02/02/15	17.66667			
				J-250	Davis Hall, South Georgia College			Approval	Ronald Kern		01/15/15	02/04/15	15d	02/02/15	17.66667			
				TCSG-269	Natural Resources Building, Ogeechee Technical College, Statesboro			Sprinkler	Steven Abbott		01/20/15	02/09/15	15d	01/27/15	6.66667	Not Approved		
				J_226	Fine Arts Center, Georgia Southwestern University			Approval	Ronald Kern		01/20/15	02/09/15	15d	02/04/15	14.66667			
				FM-113-14	Howard Hall, Columbus State University			Fire Alarm	Justin Poblete		01/21/15	02/10/15	15d	01/28/15	6.66667	Approved		
				FM-111-14	Georgia Health Policy Center-8th floor, Georgia State University			Approval	Ronald Kern		01/21/15	02/10/15	15d	01/29/15	7.66667	Approved	Resubmittal	
				DHS-001	Roof Repairs, MLK Human Services Center	3	Starks	100% CD	Ronald Kern		01/15/15	01/21/15	5d	01/28/15	12.66667			
				J-234	Science Learning Center, University of Georgia	1	Brownsmi	CCO#2	BC#4	Ronald Kern		01/23/15	01/29/15	5d	02/03/15	10.66667		
				TCSG-308	Transportation and Energy Building Renovation, South Georgia Tech	2	Berry	Schematic Design		Larry Jennings		01/14/15	01/27/15	10d	01/28/15	13.66667		
				SBE-027B	Renovation of Cottage Bathrooms for ADA Accessibility, Georgia Academy for the Blind, Macon	3	White	Addendum	BC#1	Eleanor Furlow		01/21/15	01/27/15	5d	01/23/15	1.66667		
				SWCC-008C	Soque #29 Dam Rehabilitation	3	Rivera	100% CD	BC#2	Gerard Mastrella		01/20/15	01/26/15	5d	01/26/15	5.66667		
				SWCC-008D	Soque #34 Dam Rehabilitation	3	Rivera	100% CD	BC#2	Gerard Mastrella		01/20/15	01/26/15	5d	01/26/15	5.66667		
				SWCC-008E	Soque #36 Dam Rehabilitation	3	Rivera	100% CD	BC#2	Gerard Mastrella		01/20/15	01/26/15	5d	01/26/15	5.66667		
				FM-003-15	"THINC" College & Career Academy, West GA Technical College LaGrange			Construction Permit	Ronald Kern		01/22/15	02/11/15	15d	02/17/15	25.66667	Approved		
				J-221	Building D Renovation, Southern Polytechnic State University			Approval	Ifio Immanuel		01/23/15	02/12/15	15d			Approved		
				TCSG-268	North Fulton Campus, Gwinnett Technical College			Sprinkler	Steven Abbott		01/23/15	02/12/15	15d	01/29/15	5.66667	Approved		
				J-208	Health Center, Georgia Southern University			Sprinkler	Justin Poblete		01/23/15	02/12/15	15d	01/29/15	5.66667	Not Approved		
				FM-064-14	East Wave Fusion, Georgia State			Sprinkler	Steven Abbott		01/26/15	02/13/15	15d	02/03/15	7.66667	Approved		



Site investigations
Special Inspection Coordination
SD and DD Phase Checklists

Process Guide,
Commissioning Guide,
BIM Guide
on **GSFIC website**



DRG Process Guide

along with the



State Construction Manual

and ongoing communication with



GSFIC PM & Authorized Using Agency Rep.

results in



On Time, on Budget, High Quality

This is the goal of the Construction Division - GSFIC

How different is State of Georgia work from the private sector work?

Certification of Ownership: required for any project using GO bonds or exceeding \$1M in design & construction costs

Special Inspections, materials testing and NPDES inspections

The DRG Road

Fire
Marshal

Constructability



DRG Journey Check Points

Upload conformed documents to e-Builder

4

Provide responses and revisions to review comments

3

Initiate Project document upload to e-Builder

2

Attend Project Kick-off Meeting @ GSFIC office

1

Fire Marshal Review Journey

**100% Civil + Life Safety –
signed & sealed**

Site Letter

**All documents signed &
sealed . New Construction/
Renovation**

**Construction Permit/
Approval**

GSFIC & Non-GSFIC Projects

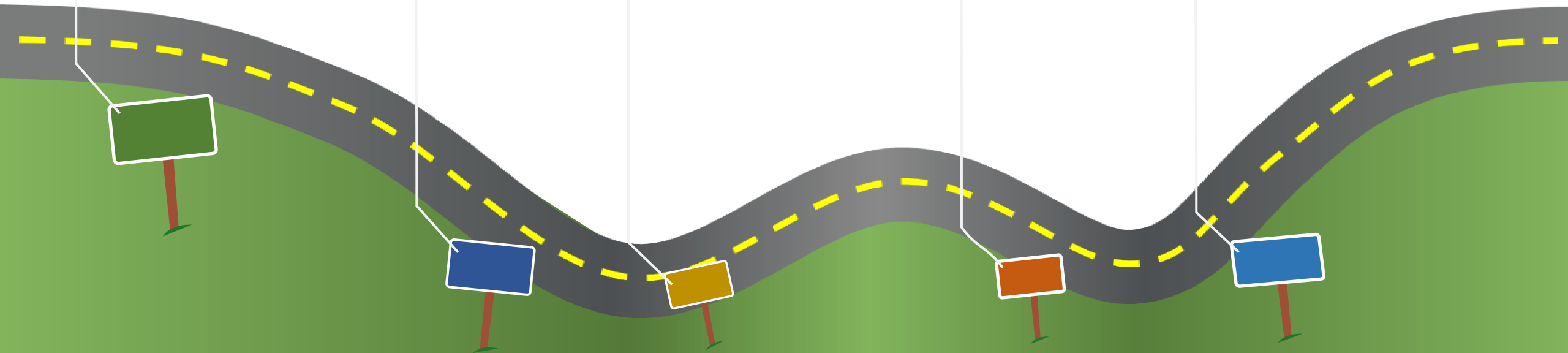
**Hardcopies to SFM
@ 2 MLK Drive**

**100% Civil & Structural, Life
Safety – signed & sealed**

Shell Permit

**Submitted by sub-
contractors**

**Fire Alarm &
Fire Protection**



Submit
Programming,
SD, DD, CCO,
GMP, 100% CD

Initiate next E-builder Process

Revise Documents & Respond to comments

Incorporate Comments into next design Phase

Lots of Sunshine



Submit Back
Check Docs for
CCO, GMP,
100% CD

7 days to respond for
back check

Revise
Documents &
Respond to
comments

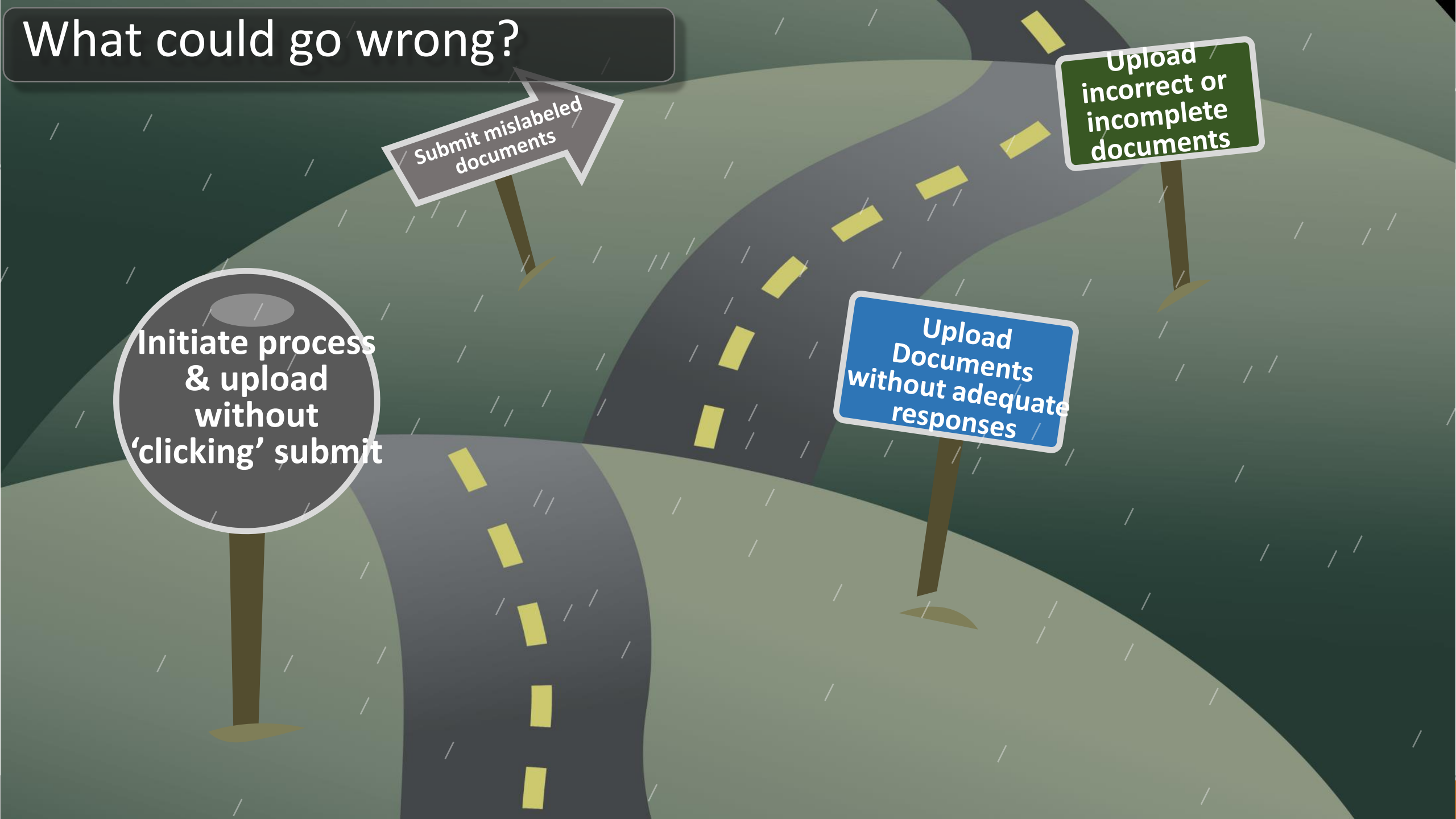
What could go wrong?

Submit mislabeled documents

Upload incorrect or incomplete documents

Initiate process & upload without 'clicking' submit

Upload Documents without adequate responses



Stormy Days Ahead

Failure to
address all
comments

Delay back check
beyond 7 days

Move to next
phase with **open**
back check
comments

A stylized illustration of a stormy night. A dark road with a dashed yellow center line leads towards a large white sign that says "Danger Ahead!". The sky is dark with heavy grey clouds and yellow lightning bolts. Rain is falling, indicated by white diagonal lines. Four signs are placed along the road: a circular grey sign on the left, a green rectangular sign, a brown rectangular sign, and a blue rectangular sign on the right. The signs are on wooden posts. The overall mood is one of danger and warning.

Did not
read the
Process
Guide

Exceeded
SCL

Danger Ahead!

GSFIC Front
End Docs
not included

Did not use
current
adopted codes



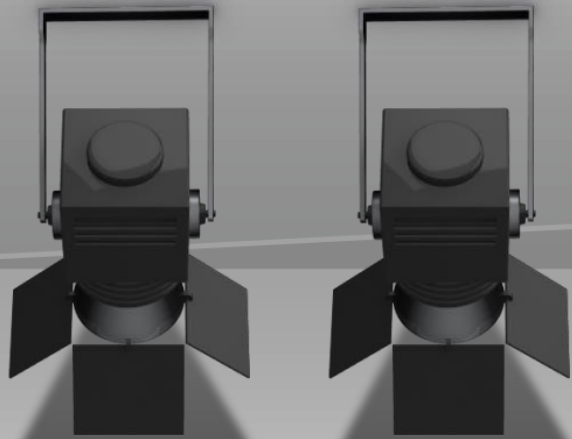
**Know Your
DRG
Process
Guide**

**Respond
thoroughly to
all reviewer
comments**

**The Successful
Finish**

**Include
GSFIC Front
End Docs**

**Start your
Design with
Construction
codes in mind**



To familiarize DRG with project specific information

Familiarize Design Professional with DRG processes & expectations

Share lessons learned from similar projects

DRG Project Kick-off Meeting

GSFIC DRG Project Kick-Off

CONSTRUCTABILITY

- ~~SCHEMATIC DESIGN~~
- ~~DESIGN DEVELOPMENT~~
- ~~COMPONENT CHANGE ORDER~~
- ~~GMP~~
- ~~100% CD~~

FIRE MARSHAL

- ~~SITE LETTER~~
- ~~SHELL PERMIT~~
- ~~CONSTRUCTION PERMIT~~
- ~~FP & FA APPROVALS~~

AGENDA

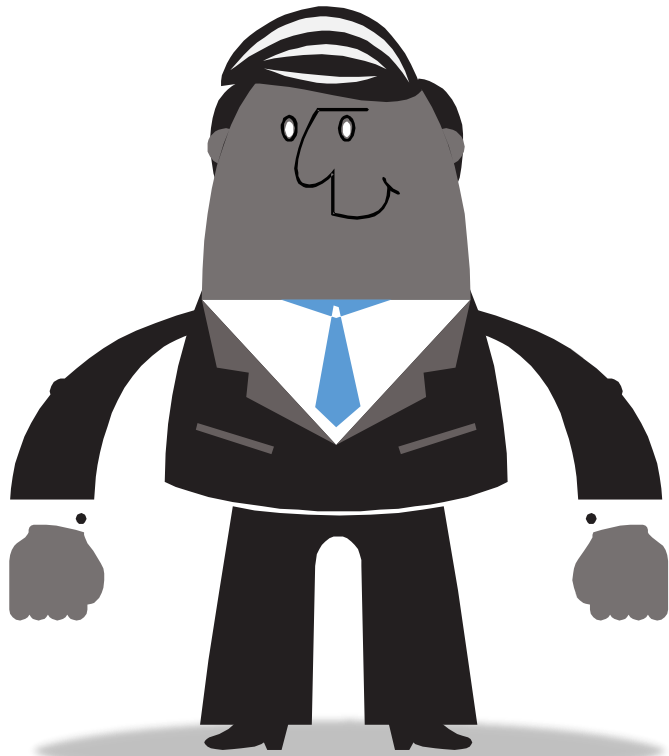
- Pre-design
- Programming/Scope Discussion
- Site Investigation
- Plan Review Process
- Constructability Reviews
- State Fire Marshal Approvals
- Other Approvals

DRG TEAM MEMBERS

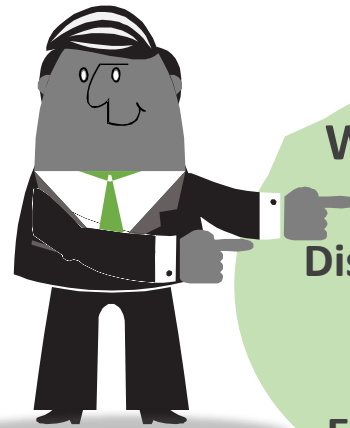
- Ron Kern [A/FM] 4. 463.5684
- Ifiok Immanuel [A/FM] 3.5686
- Eleanor Furlow [A/FM] 3.5796
- Jerry Mastrella [C] 3.5679
- Ken Nuttall [S] 3.5688
- Glenn Haller [M/P] 3.5789
- Steve Abbott [FP/FM] 4.656.2661
- Justin Poblete [FP/FM] 4.656.2662
- Larry Jennings [E] 4.232.1399

DESIGN REVIEW GROUP

INTENT
Introduce DRG
& DP Team
+
DRG Lead



WHO TO BRING
Project
Architect,
Project A/E's
CM



**We answer
your
questions**



WHAT WE DO
Discuss Review
Process
+ Set
Expectations

Happy Meeting

You've read the DRG Process Guide
You share your Project Information:
Scope, Budget & Schedule

We discuss:

Site / Predesign,
QA/QC Hurdles,
DRG Publications,
Fire Marshal Submittals,
Review Levels, e-Builder,
Checklists



Unhappy Meeting

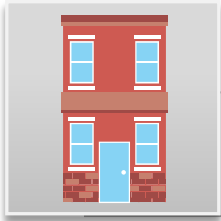
You have not read the Process
Guide



Design Review Categories



Category 1: 7 day turnaround



Category 2: 14 day turnaround



Category 3: 21 day turnaround

Review Category 1



SINGLE STORY BUILDINGS

Duration = 7 Days

- Single Story Business Occupancies
- Single Story Renovations and Additions
- MEP Upgrades
- Demolitions
- Facades and Building Envelope

Review Category 2



2 STORY BUILDINGS

Duration = 14 days

- 2 Story Business Occupancies
- Storage Occupancies
- Non-Complex Labs
- Renovations
- Residential, 2 Stories or Less

Review Category 3



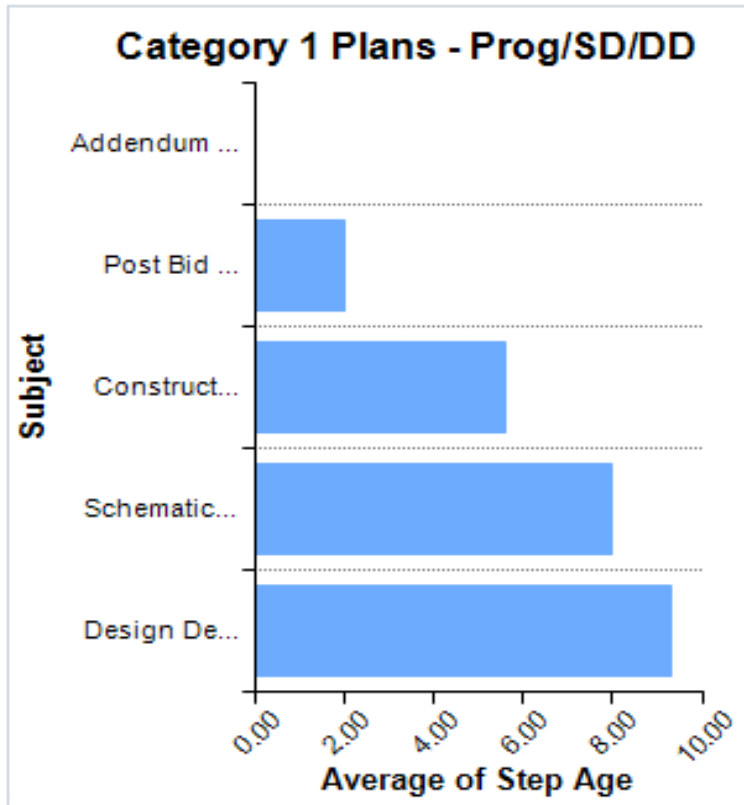
VERY COMPLEX BUILDINGS

Duration = 21 days

- Assemblies: Libraries, Student Centers
- Classroom Buildings 3 Stories & Above
- Complex Labs
- Health Care
- Residential: Dormitories & Apartments 3 Stories & Above

DRG REVIEW DURATION JULY 1, 2015 – JUNE 30, 2016

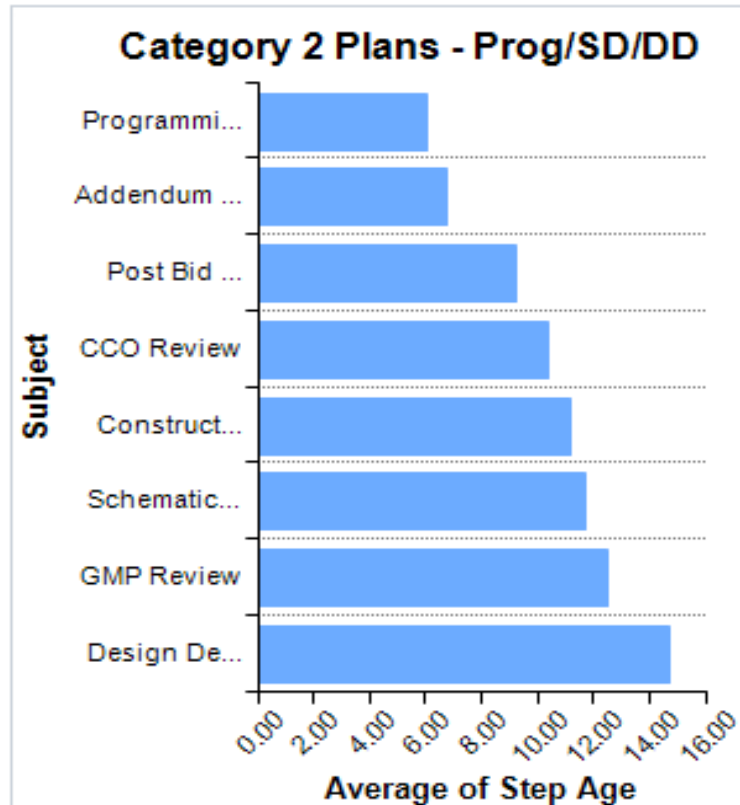
Design Review Step Avg Processing Ages (in days)



Goal - 7 Days

Category 1 Total Processes 11.00

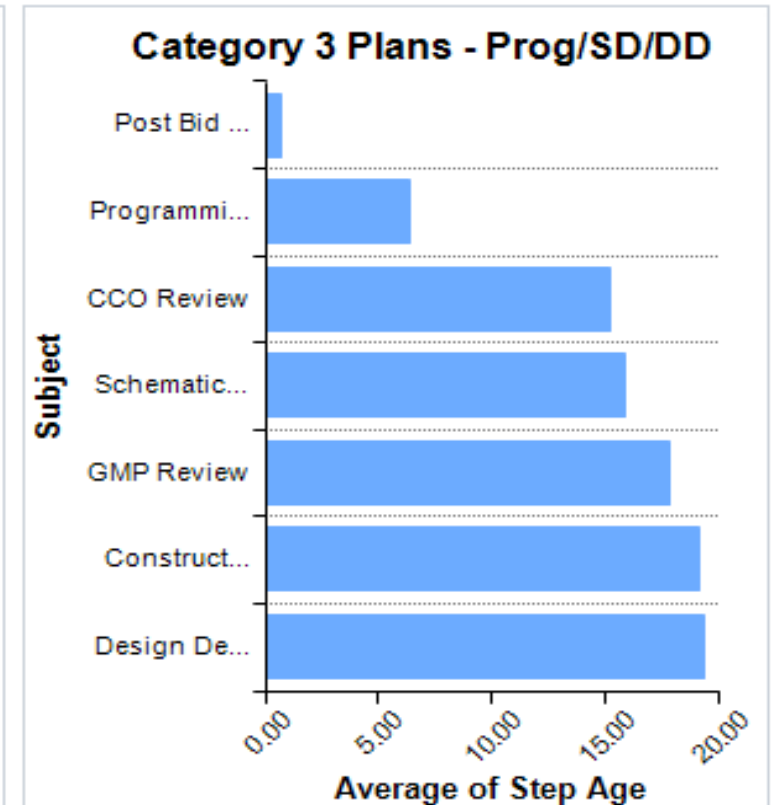
Design Review Step Avg Processing Ages (in days)



Goal - 14 Days

Category 2 Total Processes 57.00

Design Review Step Avg Processing Ages (in days)



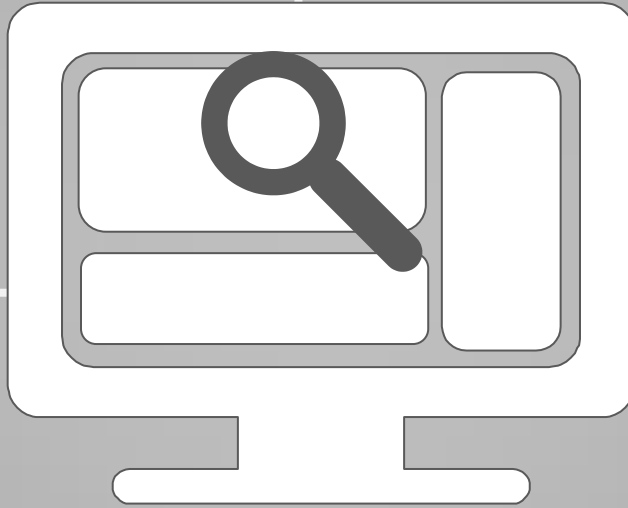
Goal - 21 Days

Category 3 Total Processes 38.00

**DP initiates Review Process
in e-Builder**



**DP uploads
documents and
'clicks' submit
button**



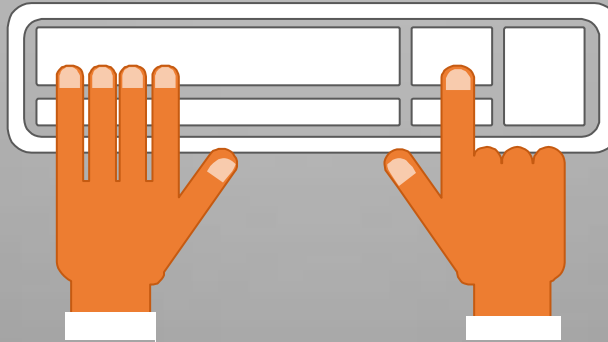
**DRG Lead
authorizes DP
upload**



**DRG performs review, posts
comments in e-Builder.
Process back in DP court**

**DRG intakes documents
in e-Builder**

Intake meetings twice weekly
to screen documents, before
accepting



DRG Review Comments

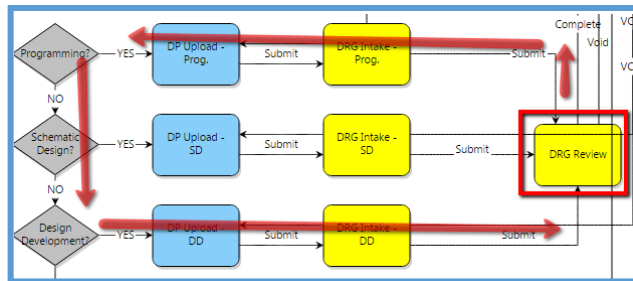
DRG REVIEWS UPLOADED DOCUMENTS AND GENERATES COMMENTS WHICH SHOULD BE ADDRESSED BY DP WITH REVISIONS TO DOCUMENTS SUBMITTED AT NEXT PHASE.

No back checks are required for SD and DD submittals.

100% CDs, CCOs & GMPs will be back checked till all comments closed

Comments closed
100% CDs, CCOs & GMPs will be back checked till all

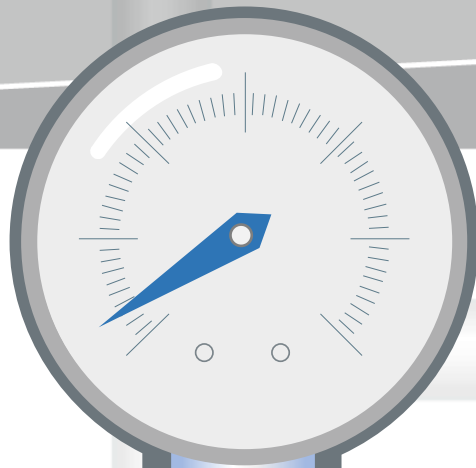
All comments should be closed by 3rd back-check!



Comm. No.	Drawing/ Specification Reference Number	Room/ Detail Number	Reviewer's Comments	Architect's/ Engineer's Response	Status Open/Closed
Architectural Constructability Review Comments					
CD Review Comments					
Project: Atlanta, Georgia				Date: 10/23/12	
Reviewer: Ifiok Immanuel				Date: 11/19/12	
Phone No 404-463-5686				Date: 11/30/12	
				DD Date: 12/4/12	
				CCO#3: 2/13/13	
				GMP: 4/19/13	
				Date: 6/5/13	
				CD Date: 8/5/13	
BIM Model (See attached images)					
57	Mechanical		Pipes intersecting with pipes	to be coordinated	Open
58			Pipes and ducts intersecting	to be coordinated	Open
59			Floating roof components	to be coordinated	Open
60			Roof intersecting ducts	Roof design was not completed nor coordinated at completion of DD. Final roof height of mechanical penthouse was not coordinated at the date of DD. Future issuances should have this coordinated.	Open
61			Plumbing pipes embedded in the ceiling	To be coordinated.	Open
62	Arch/Mech	Roof	Duplicate/intersecting mechanical equipment at roof. These components should be deleted at CD completion. In the interim they should be hidden.	Arch mechanical equipment reflects SD sizes and is shown for coordination as well as renderings that were based on the Revit model. Do you want us to delete these components at the completion of CDs?	Open
63	Arch/Mech	Roof	Ductwork extends beyond the penthouse roof	Extensive coordination on penthouse has taken place since DD. We hope to have these issues resolved soon.	Open
64	Mechanical/ Structural	Level 0 - Level 5	Several locations with pipes and ductwork intersecting beams and columns.	to be coordinated	Open
65	Mechanical/ Electrical		Light fixtures embedded in ductwork.	to be coordinated	Closed

DRG Review Comments

Reviewer's Comments	Architect's/ Engineer's Response
POST-BID ADDENDUM #1	
(Documents, dated 3/18/16)	
No comments.	Thank you



DRG Stays Connected

Design Through Construction

- DRG Fire Protection Shop Drawings & Performs Site Inspections
- Review and Inspection of Fire Alarm Systems
- Assessment of Existing Buildings
- Assistance for the SWCC for their Dam Program, Site visits including LDP assistance

Design Submittals

(ASTM E 1804)

Completeness - to match industry standards

(PDF)

Uploads - PDF & CAD/ BIM native formats

(File Name)

Grouped by A/E Discipline - Not zipped. Use GSFIC Project Number

(Call)

Reviewer if you have questions

(QA/QC)

Perform - before upload

(Back Check)

Reference Sheet # - where changes have been made in responses

(Specs)

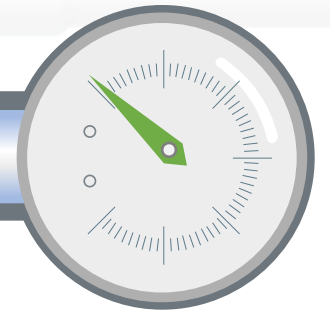
Single PDF File

('03' Folder)

File Destination - remains the same for every upload

(Submit)

Hit This Button - This is common oversight



Approved Fire Marshal Plans
Must be on site always

Approved Shop Drawings – Fire Projection and Fire Alarm onsite prior to installation

Prefunction testing - conducted prior to requesting DRG inspection



Fire Alarm Inspections



Fire Protection Inspections




Fire Protection Inspections



Fire Protection Inspections




Bookmark This!!!





Design Review Group

- Constructability Reviews
- Life Safety and Fire Protection
- BIM Reviews and Animations
- Special Inspection Program and Selection Process
- Building Assessments and Cost Estimating

Know your DRG Process Guidel

Always Start your design with construction codes in mind 

Always Include GSFIC Front End documents in project manual 

Always Provide thorough responses to reviewer comments 

**Process Guide!
Construction Codes!
Review Comments!**





Georgia State Financing
& Investment Commission

GSFIC

Professional
Partnership Workshop

Questions??

 LANIER TECHNICAL COLLEGE
FORSYTH CONFERENCE CENTER