

Product/Version or Task:	GSA 8.2 build 3
Test Plan and Certificate Revision:	0

Software/Documentation Components Used In Tests:	
Component	Version
GSA	8.2.3.1
AdcData	30.32.0.1
AdFile	30.32.0.1
GdSpec	8.2.3.1
GSA_DES_BS5950_1_2000	8.2.3.1
GSA_DES_LRFD3	8.2.3.1
GSA_DES_Rc2D	8.2.3.1
GSA_DES_StressCheck	8.2.3.1
Gsa_Export_Cad	8.2.3.1
Gsa_Import_Cad	8.2.3.1
Gsa_Export_dxf	8.2.3.1
Gsa_Import_dxf	8.2.3.1
GsAdc	8.2.3.1
GsBridge	8.2.3.1
GsCheck	8.2.3.1
GsEnvelope	8.2.3.1
GsExport	8.2.3.1
GsFile	30.32.0.1
GsGraph	8.2.3.1
GsPrivate	8.2.3.1
GsRaft	8.2.3.1
GsRelax	8.2.3.1
GSS	30.32.0.1
GsTable	8.2.3.1
GwDat	30.32.0.1
OaBase	30.32.0.1
OaRaft	30.32.0.1
OaSect	30.32.0.1
OaSteelDesUtil	30.32.0.1
OaUtil	30.32.0.1
OaWin	30.32.0.1
StepFile	8.2.3.1
VDDCal	30.0.1.0
WaveLoad	8.2.3.1

Verification

1 Requirements

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
1.1	✓	The Change Log should identify changes in this version.	CK

1.2			
1.3	✓	Version expiry and copy protection should be built into the code.	CK
1.4			

2 Design

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
2.1			
2.2			
2.3			
2.4	✓	Ensure that included tasks are documented and fixed NCRs cross reference code changes.	CK
2.5	✓	Ensure that security system (ref. 1.3) is functioning correctly.	CK

3 Code

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
3.1	✓	Satisfy that coding standards are met.	CK
3.2	✓	Satisfy that configuration standards are met.	CK
3.3			
3.4			

4 Integration

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
4.1	✓	Carry out installation tests.	CK

5 Documentation

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
5.1	✓	Ensure that online help/manual, change log and web site are updated.	CK
5.2	✓	(as 5.1)	CK

6 Development Outputs

Test Plan			Testing Completed By
Item	Required (Yes/No)	Description	
6.1		Outputs should be reviewed at design review. (not required for rebuild)	
6.2	✓	Associate required functionality with software components. Ensure that NCRs identified in the Release Notes have been addressed.	CK

6.3	✓	Compare results with benchmark.	(see 6.4.2 table)																																																																												
6.4.1																																																																															
6.4.2	✓	<p>Carry out final code integration tests as detailed in the table below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="padding: 5px;">General User Interface Tests</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Graphics</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Context sensitive menus</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Selection sets</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Cut and paste</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Report view options</td> </tr> <tr> <td style="padding: 5px;">Comments :</td> <td style="padding: 5px; text-align: center;">CK</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table Tests</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Simple table (e.g. axes)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Multi-page, multi-view table (e.g. nodes)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Multi-page, multi-module table (e.g. loads)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Multi-page, multi-record table (e.g. alignments)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table with results</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Copy to/paste from spreadsheet</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Cut/copy/paste in table</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table edit options (e.g. find, modify)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table data options (e.g. units, wizards)</td> </tr> <tr> <td style="padding: 5px;">Comments</td> <td style="padding: 5px; text-align: center;">SH</td> </tr> <tr> <td colspan="2" style="padding: 5px;">GsRaft Table Tests</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Simple table (e.g. soil zones)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Multi-page (e.g. soil profiles)</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table with results</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Copy to/paste from spreadsheet</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Cut/copy/paste in table</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Table edit options (e.g. find, modify)</td> </tr> <tr> <td style="padding: 5px;">Comments :</td> <td style="padding: 5px; text-align: center;">TL</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Pre-processing Tests</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Mesh generation</td> </tr> <tr> <td style="padding: 5px;">Comments :</td> <td style="padding: 5px; text-align: center;">CK</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Post-processing Tests</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Axes</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Enveloping</td> </tr> <tr> <td colspan="2" style="padding: 5px;">RC slab design</td> </tr> <tr> <td colspan="2" style="padding: 5px;">RC member design</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Strain energy density</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Steel design code checks</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Bridge load optimisation</td> </tr> <tr> <td style="padding: 5px;">Comments :</td> <td style="padding: 5px; text-align: center;">TL (steel design &</td> </tr> </table>	General User Interface Tests		Graphics		Context sensitive menus		Selection sets		Cut and paste		Report view options		Comments :	CK	Table Tests		Simple table (e.g. axes)		Multi-page, multi-view table (e.g. nodes)		Multi-page, multi-module table (e.g. loads)		Multi-page, multi-record table (e.g. alignments)		Table with results		Copy to/paste from spreadsheet		Cut/copy/paste in table		Table edit options (e.g. find, modify)		Table data options (e.g. units, wizards)		Comments	SH	GsRaft Table Tests		Simple table (e.g. soil zones)		Multi-page (e.g. soil profiles)		Table with results		Copy to/paste from spreadsheet		Cut/copy/paste in table		Table edit options (e.g. find, modify)		Comments :	TL	Pre-processing Tests		Mesh generation		Comments :	CK	Post-processing Tests		Axes		Enveloping		RC slab design		RC member design		Strain energy density		Steel design code checks		Bridge load optimisation		Comments :	TL (steel design &	CK
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		Results have changed because of NCRs 1415, 1746 and 1754.	bridge load TL (RC2D) AS (RCmem) AH (other)
		Design Interface Tests RC slab design RC member design Steel design	
		Comments :	AS (RCmem) CK (other)
		GSS Tests Static Static P-delta Modal dynamic Modal P-delta dynamic Ritz Ritz P-delta Buckling Mass	
		Comments :	SH
		GsRelax Tests Static Static with buckling Static non-linear Static non-linear with buckling Miscellaneous	
		Comments :	TL
		GsSpec Tests Response spectrum analysis Harmonic analysis Footfall analysis	
		Comments :	SH (RespSpec) TL (other)
		GsRaft Tests Soil-structure interaction	
		Comments :	TL
		Bridge Tests Influence analysis	
		Comments :	TL
		Analysis Envelope Tests Analysis envelopes	

			AH	
		3rd Party Software Interaction		
		CAD i/o		
		GsRevit		
		CK (prelim.) Ram'seshan		

Validation

Test Plan:

~~External review by nominated beta testers.~~ (External review not required for this version.)

Testing Completed By

Comments:

4.1 See file <GF62 6 Release Installation Test Report.doc>

Conclusions:

GSA 8.2 build 3 has satisfied all verification tests.

Test Plan

Task Manager	Chris Kaethner	Date	6 July 2007
Product Director	Chris Kaethner	Date	6 July 2007

Test Certificate

Task Manager	Chris Kaethner	Date	25 July 2007
Accepted For Release (Yes/No)	Yes		
Product Director	Chris Kaethner	Date	25 July 2007

Notes

- (1) For descriptions of verification items see the corresponding items in Procedure GP36 (Software Verification and Validation).
- (2) Refer to procedures, data files, instances of GF62.1 Test Report, and testers where appropriate.
- (3) Identify operating systems.