

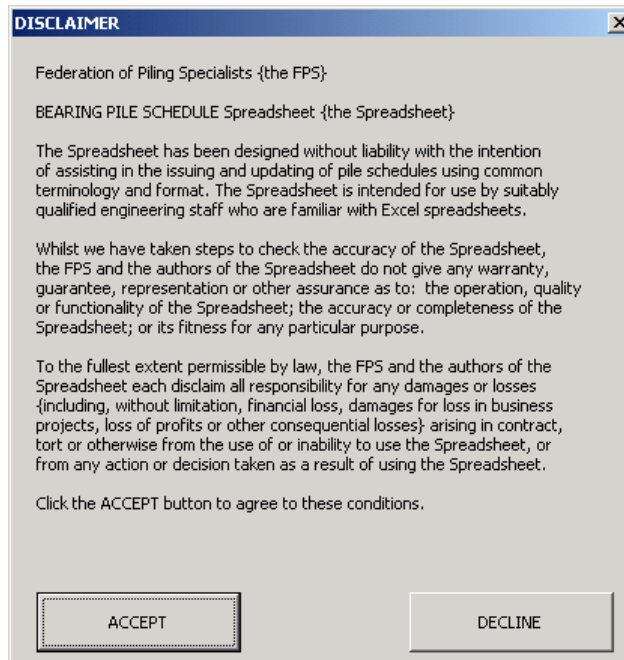
Federation of Piling Specialists Pile Schedule Template Guidance Note

Some of the biggest potential sources of delay and non-conformance with pile construction are untimely and ambiguous pile design information. The FPS has therefore prepared a simple Excel based spreadsheet to assist both engineers and piling contractors with the provision of pile design schedules.

The purpose of this guidance note is to provide an introduction for use of the spreadsheet.

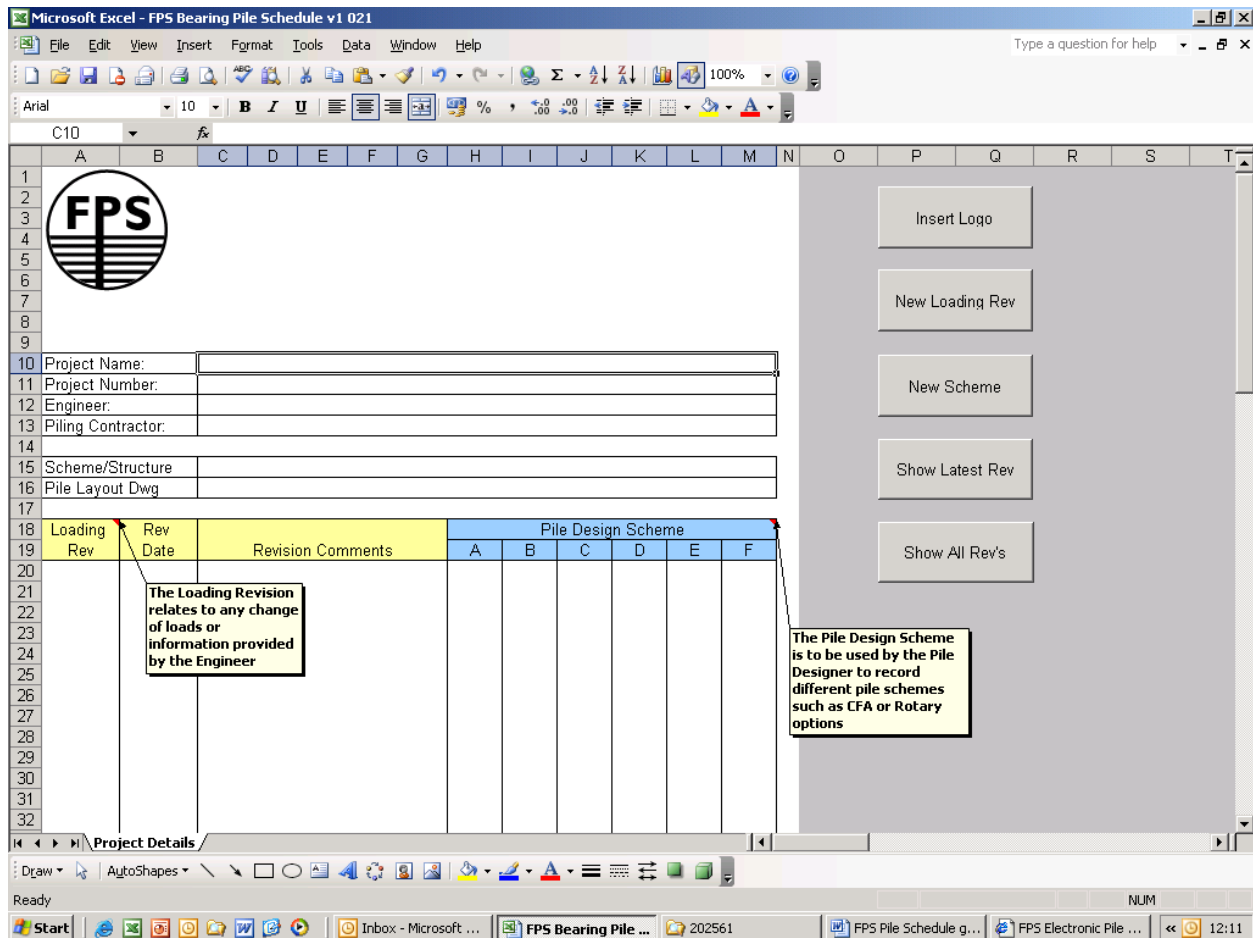
The spreadsheet is provided in Microsoft Excel template format. This means that upon first opening the template (by double clicking) a 1 is added to the end of the filename. This assists in reducing the chance of inadvertently overwriting the template file.

Once the file is opened a disclaimer box is displayed which contain condition of use of the bearing pile schedule. These **must** be accepted by the user to enable use of the spreadsheet (declining acceptance of the conditions of use will close the template).



These conditions of use must be accepted each and every time the pile schedule is opened, even once it has been re-saved / re-named.

Upon acceptance of the conditions of use the following screen is displayed:-

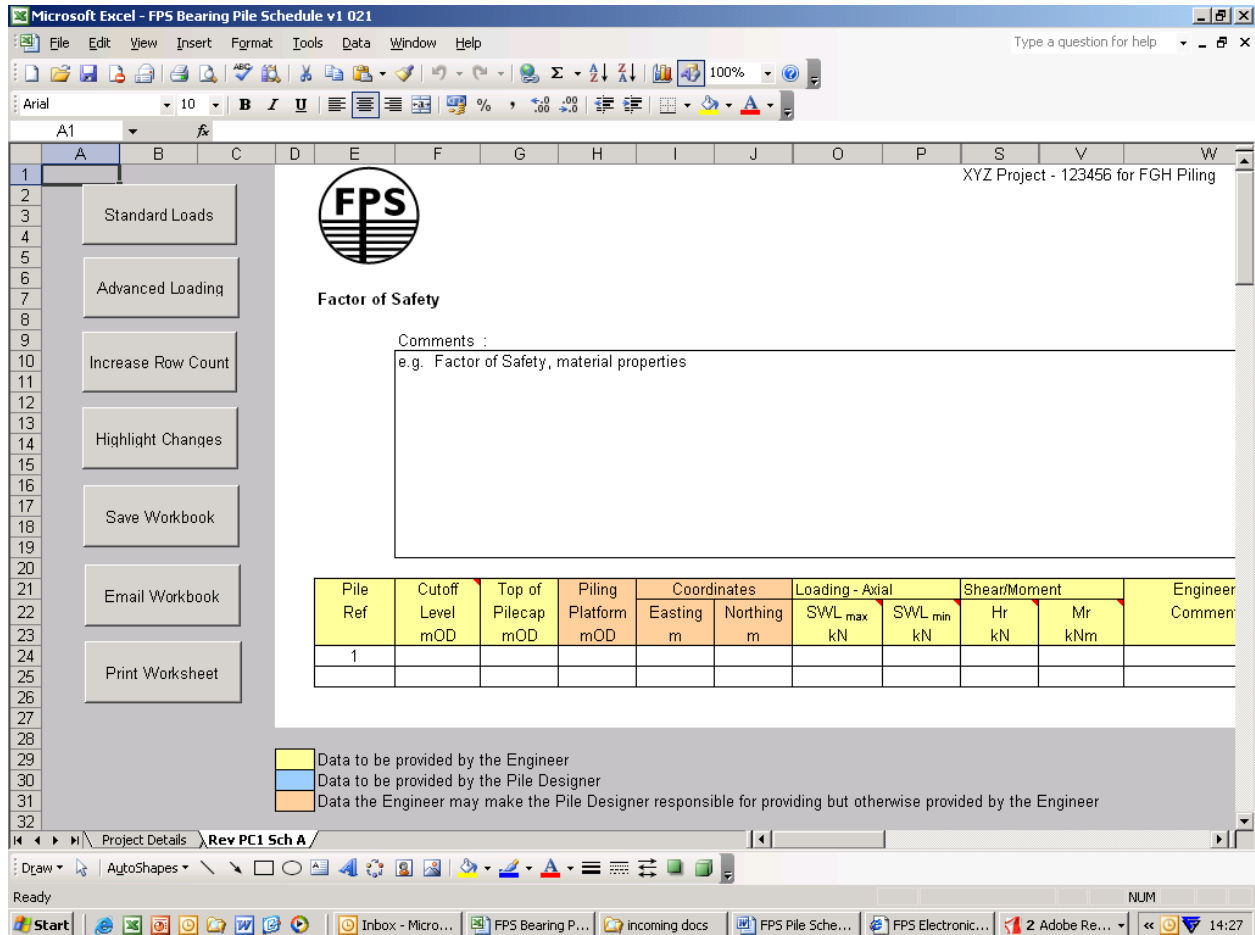


Basic project information is entered on this sheet. A number of macro buttons are located on the right hand side of the sheet. The labelling of the macro buttons is self explanatory. Inserting a corporate logo (JPEG file) will place the logo on all subsequent sheets. The logo's can be moved and re-sized.

You can only enter a new loading revision after an initial loading scheme has been created. Running the "New Loading Rev" macro prior to creating an initial loading revision will result in a Visual Basic run time error. Enter an integer number for the loading rev otherwise problems will occur when creating subsequent loading revisions (a P will automatically be prefixed to the loading revision number entered).

For the first scheme (scheme A) to be created do not enter anything in the pile design scheme cells, otherwise the next scheme will be used, e.g. if "CFA" is entered below scheme A, scheme B will be the first scheme created. See pages 7 for more information on creating additional schemes.

Once the scheme is created a new tab will appear at the bottom of the Excel screen which will have a name in the form “Rev P α Sch β ” where α will be the Loading Rev previously specified and β will be the designated letter of the piling scheme (A, B, C etc.).



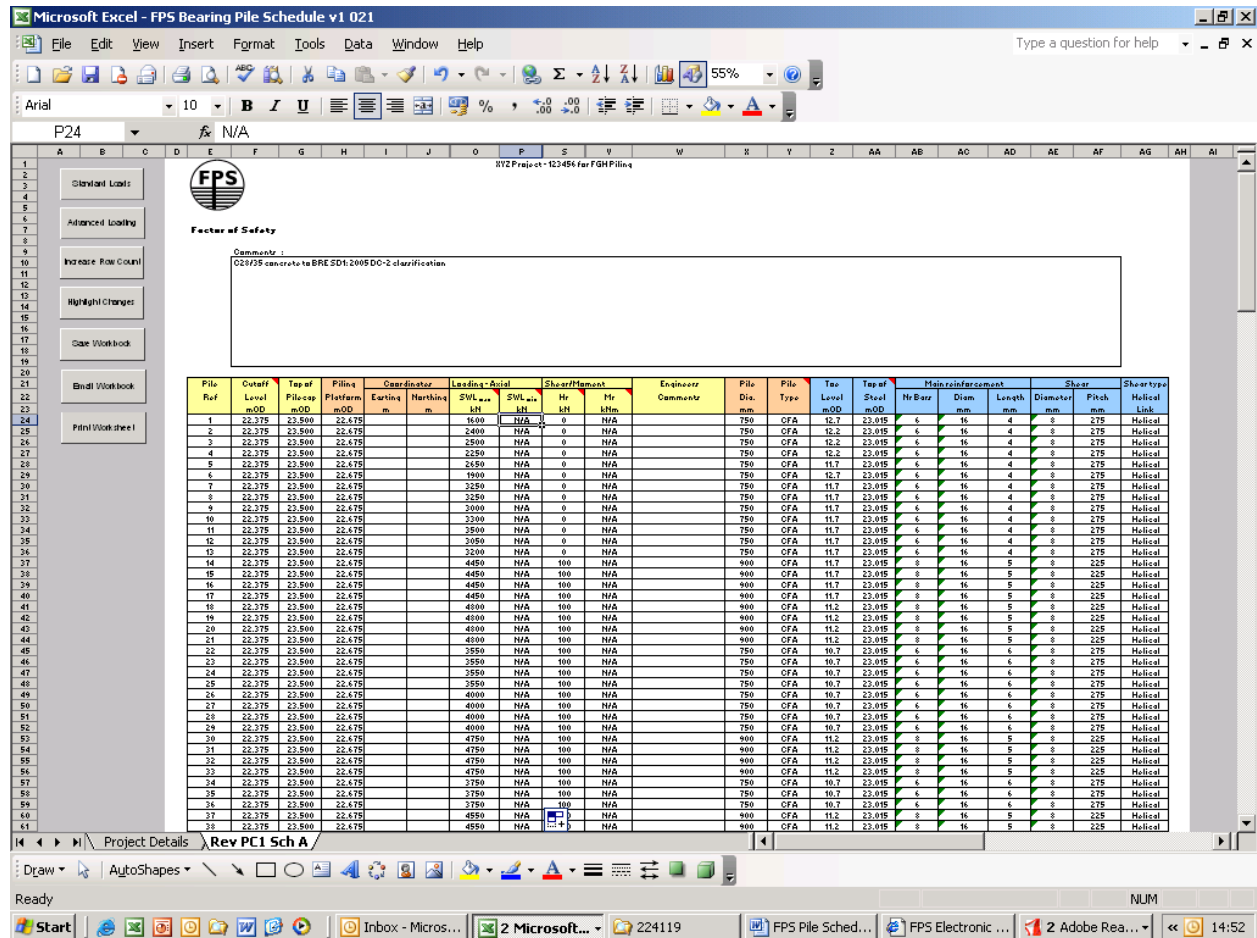
The screenshot shows the Microsoft Excel interface for the FPS Bearing Pile Schedule v1 021. The window title is "Microsoft Excel - FPS Bearing Pile Schedule v1 021". The menu bar includes File, Edit, View, Insert, Format, Tools, Data, Window, and Help. The toolbar contains various icons for file operations and formatting. The worksheet is titled "Rev PC1 Sch A" and contains the following elements:

- Buttons:** Standard Loads, Advanced Loading, Increase Row Count, Highlight Changes, Save Workbook, Email Workbook, Print Worksheet.
- FPS Logo:** Located in the top left of the main content area.
- Factor of Safety:** A section with a "Comments" field containing the text "e.g. Factor of Safety, material properties".
- Data Table:** A table with columns for Pile Ref, Cutoff Level, Top of Pilecap, Piling Platform, Coordinates (Easting, Northing), Loading - Axial (SWL_{max}, SWL_{min}), Shear/Moment (Hr, Mr), and Engineer Comment. The first row contains the value "1" in the Pile Ref column.
- Legend:**
 - Yellow: Data to be provided by the Engineer
 - Blue: Data to be provided by the Pile Designer
 - Orange: Data the Engineer may make the Pile Designer responsible for providing but otherwise provided by the Engineer

Once the piling scheme has been created, the worksheet will default to “standard loads”. If more detailed loads are available (i.e. dead, live, wind and hydrostatic loads) click the “Advanced Loading” button to run the macro to display these loading columns.

Increase row count prior to entering any data on the schedule. Pile ref's will automatically be entered from 1 to n (where n is the user specified number of rows).

Relevant data is entered in the usual manner. All normal Excel functionality can be used, e.g. inserting columns, autofilters etc.



Microsoft Excel - FPS Bearing Pile Schedule v1 021

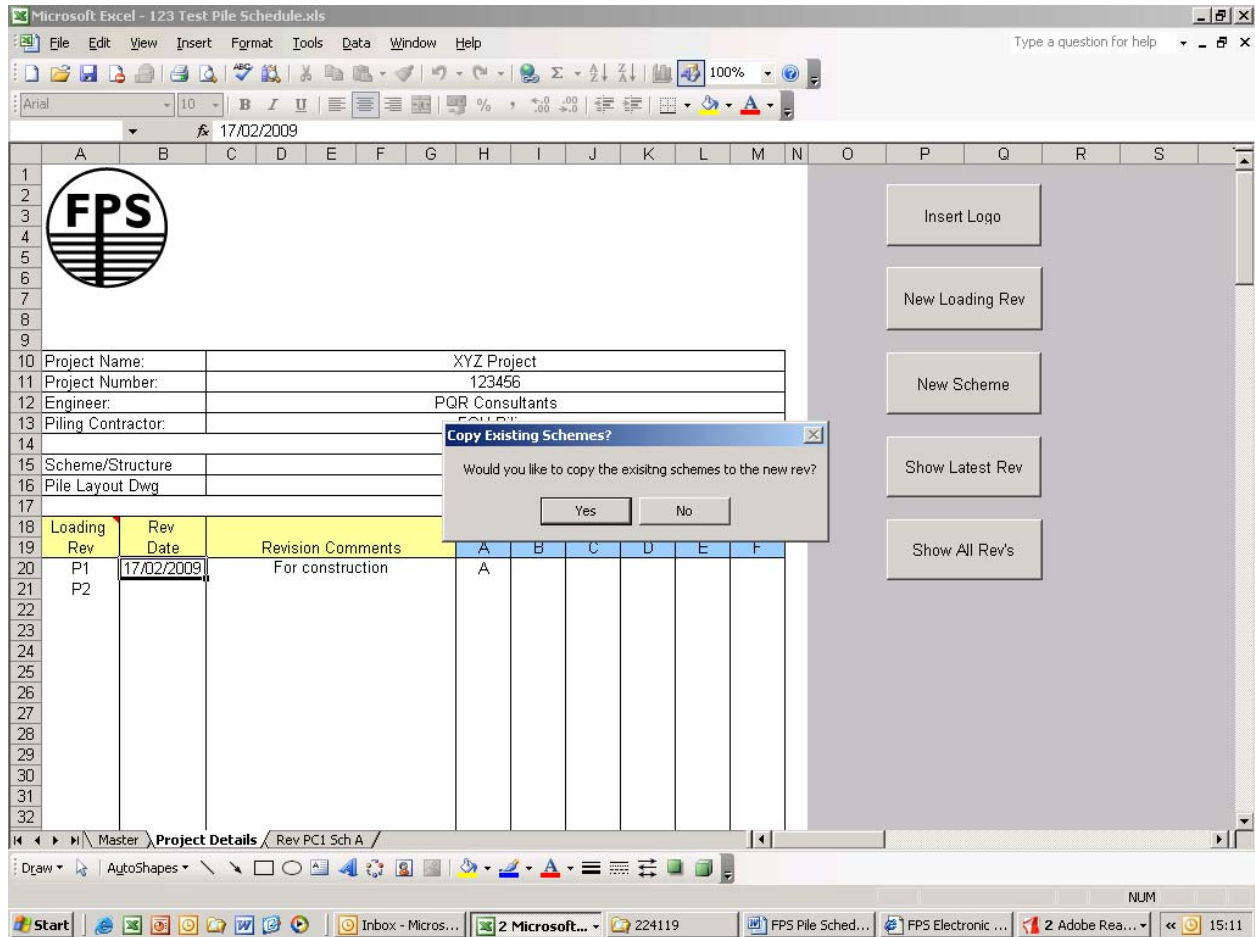
Factor of Safety

Comments:
G20 FPS concrete to BRE SD1:2005 DD-2 classification

Pile Ref	Cut-off Level mOD	Top of Pile cap mOD	Piling Platform mOD	Coordinates		Loading / Axial		Shear / Moment		Engineer's Comments	Pile Dia. mm	Pile Type	Tau Level	Top of Steel Level	Main reinforcement			Shear		Shear type
				Easting m	Northing m	SWL kN	ULI	HL	HL						Hr	Hr	Nr Bars	Dim. mm	Length mm	
1	22.378	23.500	22.678			1600	N/A	0	N/A		750	OFA	12.7	23.018	6	16	4	8	275	Helical
2	22.378	23.500	22.678			2400	N/A	0	N/A		750	OFA	12.2	23.018	6	16	4	8	275	Helical
3	22.378	23.500	22.678			2500	N/A	0	N/A		750	OFA	12.2	23.018	6	16	4	8	275	Helical
4	22.378	23.500	22.678			2550	N/A	0	N/A		750	OFA	12.2	23.018	6	16	4	8	275	Helical
5	22.378	23.500	22.678			2450	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
6	22.378	23.500	22.678			1900	N/A	0	N/A		750	OFA	12.7	23.018	6	16	4	8	275	Helical
7	22.378	23.500	22.678			3250	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
8	22.378	23.500	22.678			3250	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
9	22.378	23.500	22.678			3000	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
10	22.378	23.500	22.678			3200	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
11	22.378	23.500	22.678			3500	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
12	22.378	23.500	22.678			3050	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
13	22.378	23.500	22.678			3200	N/A	0	N/A		750	OFA	11.7	23.018	6	16	4	8	275	Helical
14	22.378	23.500	22.678			4450	N/A	100	N/A		900	OFA	11.7	23.018	8	16	5	8	225	Helical
15	22.378	23.500	22.678			4450	N/A	100	N/A		900	OFA	11.7	23.018	8	16	5	8	225	Helical
16	22.378	23.500	22.678			4450	N/A	100	N/A		900	OFA	11.7	23.018	8	16	5	8	225	Helical
17	22.378	23.500	22.678			4450	N/A	100	N/A		900	OFA	11.7	23.018	8	16	5	8	225	Helical
18	22.378	23.500	22.678			4900	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
19	22.378	23.500	22.678			4900	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
20	22.378	23.500	22.678			4900	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
21	22.378	23.500	22.678			4900	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
22	22.378	23.500	22.678			3550	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
23	22.378	23.500	22.678			3550	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
24	22.378	23.500	22.678			3550	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
25	22.378	23.500	22.678			3550	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
26	22.378	23.500	22.678			4000	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
27	22.378	23.500	22.678			4000	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
28	22.378	23.500	22.678			4000	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
29	22.378	23.500	22.678			4000	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
30	22.378	23.500	22.678			4750	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
31	22.378	23.500	22.678			4750	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
32	22.378	23.500	22.678			4750	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
33	22.378	23.500	22.678			4750	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
34	22.378	23.500	22.678			3750	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
35	22.378	23.500	22.678			3750	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
36	22.378	23.500	22.678			3750	N/A	100	N/A		750	OFA	10.7	23.018	6	16	6	8	275	Helical
37	22.378	23.500	22.678			4550	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical
38	22.378	23.500	22.678			4550	N/A	100	N/A		900	OFA	11.2	23.018	8	16	5	8	225	Helical

Once the schedule has been saved additional loading revisions can be added as required.

To enter a new loading revision go back to the Project Details sheet and click the “New Loading Rev” button. You will then be asked if you wish to copy the existing scheme to the new revision (this will save entering the majority of the info. again if there are only relatively minor changes between revisions).



The screenshot shows the Microsoft Excel interface for a file named "123 Test Pile Schedule.xls". The active sheet is "Project Details". The spreadsheet contains the following data:

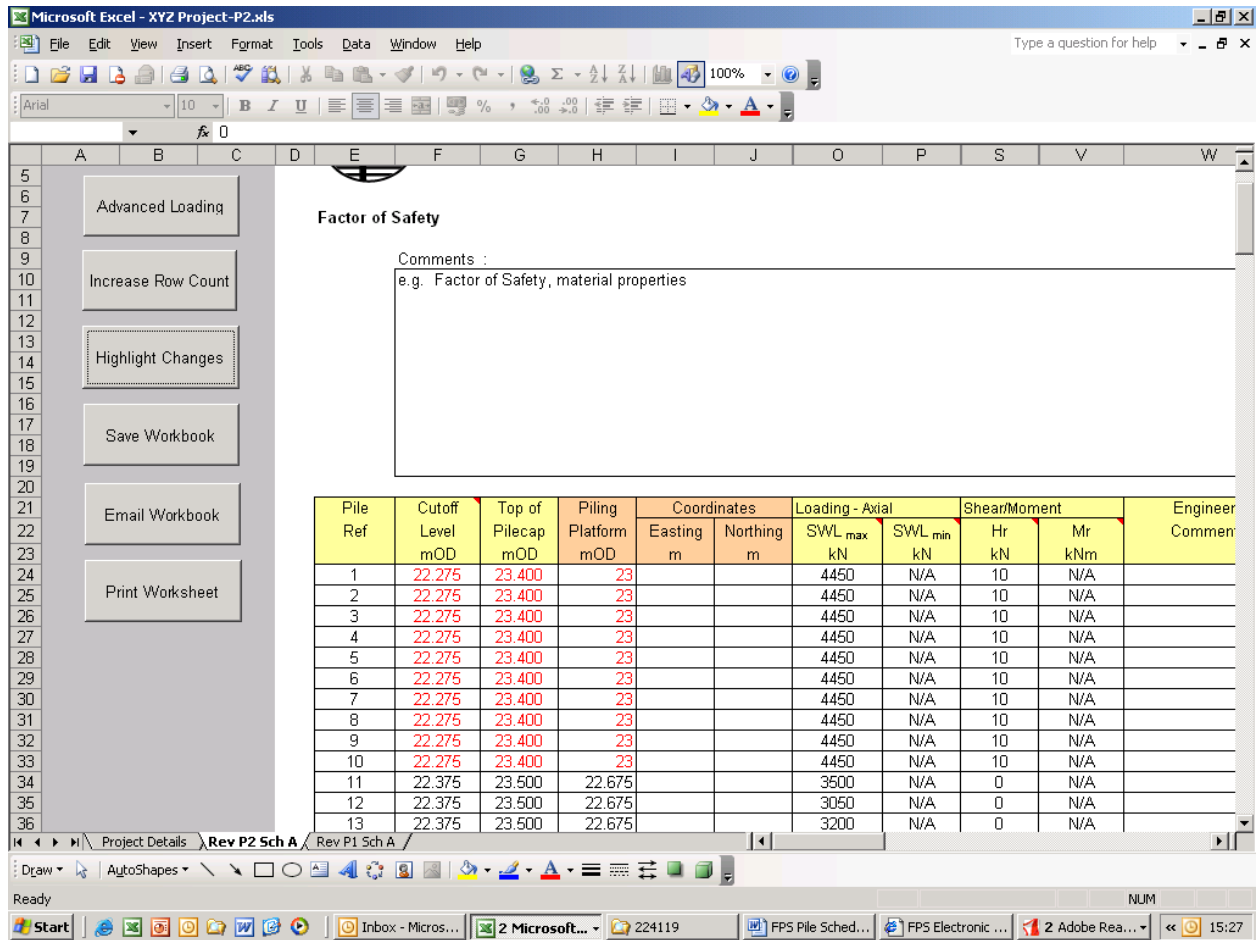
10	Project Name:	XYZ Project							
11	Project Number:	123456							
12	Engineer:	PQR Consultants							
13	Piling Contractor:	STU V							
14									
15	Scheme/Structure								
16	Pile Layout Dwg								
17									
18	Loading	Rev	Revision Comments	A	B	C	D	E	F
19	Rev	Date							
20	P1	17/02/2009	For construction	A					
21	P2								
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

A dialog box titled "Copy Existing Schemes?" is open, asking "Would you like to copy the existing schemes to the new rev?" with "Yes" and "No" buttons.

On the right side of the spreadsheet, there is a vertical panel with the following buttons: "Insert Logo", "New Loading Rev", "New Scheme", "Show Latest Rev", and "Show All Rev's".

The Windows taskbar at the bottom shows the Start button, several application icons, and the system tray with the time 15:11.

Changes from one revision to another can be displayed by running the “highlight changes” macro. Currently only changes to “Cutoff Level” , “Top of pilecap” and “Piling Platform” are highlighted.

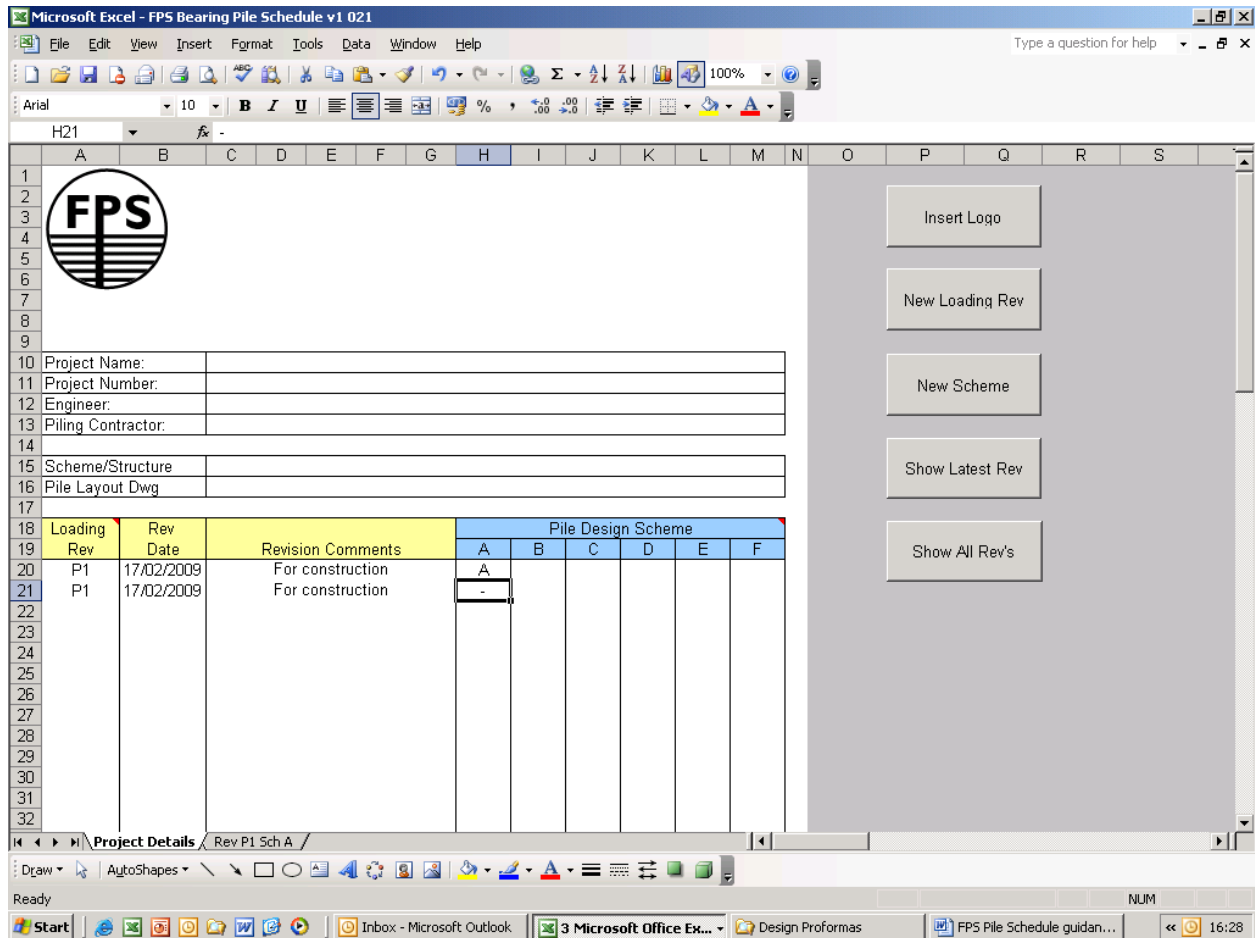


Factor of Safety

Comments :
e.g. Factor of Safety, material properties

Pile Ref	Cutoff Level mOD	Top of Pilecap mOD	Piling Platform mOD	Coordinates		Loading - Axial		Shear/Moment		Engineer Comments
				Easting m	Northing m	SWL _{max} kN	SWL _{min} kN	Hr kN	Mr kNm	
1	22.275	23.400	23			4450	N/A	10	N/A	
2	22.275	23.400	23			4450	N/A	10	N/A	
3	22.275	23.400	23			4450	N/A	10	N/A	
4	22.275	23.400	23			4450	N/A	10	N/A	
5	22.275	23.400	23			4450	N/A	10	N/A	
6	22.275	23.400	23			4450	N/A	10	N/A	
7	22.275	23.400	23			4450	N/A	10	N/A	
8	22.275	23.400	23			4450	N/A	10	N/A	
9	22.275	23.400	23			4450	N/A	10	N/A	
10	22.275	23.400	23			4450	N/A	10	N/A	
11	22.375	23.500	22.675			3500	N/A	0	N/A	
12	22.375	23.500	22.675			3050	N/A	0	N/A	
13	22.375	23.500	22.675			3200	N/A	0	N/A	

To create a new pile design scheme (e.g. scheme B), enter Loading rev (remember to use an integer number only, with no text), Rev Date, Revision comment and a dash (-) in column A.



The screenshot shows the Microsoft Excel interface for 'FPS Bearing Pile Schedule v1 021'. The spreadsheet is divided into several sections:

- Project Details (Rows 10-16):** Fields for Project Name, Project Number, Engineer, Piling Contractor, Scheme/Structure, and Pile Layout Dwg.
- Revision Table (Rows 18-32):** A table with columns for Loading Rev, Rev Date, Revision Comments, and Pile Design Scheme (A-F).

Loading Rev	Rev Date	Revision Comments	Pile Design Scheme					
			A	B	C	D	E	F
P1	17/02/2009	For construction	A					
P1	17/02/2009	For construction	-					
- Control Panel (Rows 2-9):** A vertical sidebar containing buttons: 'Insert Logo', 'New Loading Rev', 'New Scheme', 'Show Latest Rev', and 'Show All Rev's'.

Then click on "New Scheme" to create scheme B.