Page #	Split #	Item #	Quantity	Additional Desc.	(Unit) Description
0		614E1100D			(LS) MAINTAINING TRAFFIC
0		619E16010			(MNTH) FIELD OFFICE, TYPE B
0		623E10000			(LS) CONSTRUCTION LAYOUT STAKES AND SURVEYING
0		624E10000			(LS) MOBILIZATION
0		832E3000D			(EACH) EROSION CONTROL

ROADWAY - R
ROADWAY ALTERNATES - RA
PAVEMENT OPTION A: FLEXIBLE - ROA
PAVEMENT OPTION B: RIGID - ROB
EROSION CONTROL - EC
EROSION CONTROL ALTERNATES - ECA
ENVIRONMENTAL / REMEDIATION - ER
ENVIRONMENTAL / REMEDIATION ALTERNATES - ERA
DRAINAGE - D
DRAINAGE ALTERNATES - DA
PAVEMENT - P
PAVEMENT ALTERNATES - PA
WATER WORK - WW
WATER WORK ALTERNATES - WWA
SANITARY SEWER - SS
SANITARY SEWER ALTERNATES - SSA
LIGHTING - L
LIGHTING ALTERNATES - LA
ELECTRICAL - E
ELECTRICAL ALTERNATES - EA
OTHER UTILITIES - OU
OTHER UTILITIES ALTERNATES - OUA
TRAFFIC SURVEILLANCE - TSV
TRAFFIC SURVEILLANCE ALTERNATES - TSVA
TRAFFIC CONTROL - TC
TRAFFIC CONTROL ALTERNATES - TCA
TRAFFIC SIGNALS - TS
TRAFFIC SIGNALS ALTERNATES - TSA
LANDSCAPING - LDS
LANDSCAPING ALTERNATES - LDSA
RETAINING WALLS (XXX) - RW
RETAINING WALLS (XXX) ALTERNATES - RWA
BUILDING DEMOLITION - BD
BUILDING DEMOLITION ALTERNATES - BDA
NOISE BARRIERS - NB
NOISE BARRIERS ALTERNATES - NBA
STRUCTURE REPAIR (CTY-RTE-SECT or SFN) - SR
STRUCTURE REPAIR (CTY-RTE-SECT or SFN) ALTERNATES - SRA
STRUCTURE 20 FOOT SPAN AND UNDER (CTY-RTE-SECT or SFN) - S10
STRUCTURE 20 FOOT SPAN AND UNDER (CTY-RTE-SECT or SFN) ALTERNATES - S10A
STRUCTURE OVER 20 FOOT SPAN (CTY-RTE-SECT or SFN) - S20
STRUCTURE OVER 20 FOOT SPAN (CTY-RTE-SECT or SFN) ALTERNATES - S20A
MISCELLANEOUS STRUCTURE - MS
MISCELLANEOUS STRUCTURE ALTERNATES - MSA
MAINTENANCE OF TRAFFIC - MOT
MAINTENANCE OF TRAFFIC ALTERNATES - MOTA
ITEMS OF WORK - IOW
ITEMS OF WORK ALTERNATES - IOWA
ENGINEERING AND SURVEYING SERVICES - ES
ENGINEERING AND SURVEYING SERVICES ALTERNATES - ESA
INCIDENTALS - I

v2023.05.23

CONTRACT ID:	PIC117460
REQUIRED (EX. FRA99999)	

Spec Years	SPEC YEAR	2023
CHANGE DESC. WIDTH		
SHEET COLUMNS	5	
PART COLUMNS	1	

Buttons: REFRESH DATA TAB | REFRESH ITEM MASTER | INSERT PAY ITEMS | INSERT ROW(s) ABOVE SELECTION (NO UNDO) | DELETE ROW(s) IN SELECTION (NO UNDO) | IMPORT ESTIMATOR XML FILE | CREATE ESTIMATOR XML | CENTER HEADINGS | INSERT SPA | CREATE ESTIMATOR SHEET | CREATE ESTIMATION XML | DELETE SPA

ENTER DATA IN THESE COLUMNS

ITEM CODE	HEADING OR ADDITIONAL DESCRIPTION	QTY NOT FROM SHEET	SEE SHEET NO.
	TRAFFIC CONTROL		
644E30000			
644E00621			4
647E20080			
647E20970			
630E97700	(SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN WARNING SIGN ASSEMBLY)		4
	MAINTENANCE OF TRAFFIC		
614E11110			4
	INCIDENTALS		
614E11000			3
617E25000			

ENTER DATA IN THESE COLUMNS / ENTER DATA IN / ENTER "X" / DO NOT ENTER DATA IN THESE COLUMNS

3	4	8	9	10	PART 01/ENH/28	ALT (X)	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
											TRAFFIC CONTROL	
			73	59	132		644	30000	132	FT	REMOVAL OF PAVEMENT MARKING	
			73	50	123		644	00621	123	FT	CROSSWALK LINE, 12", AS PER PLAN	4
			60	43	103		647	20080	103	FT	CROSSWALK LINE, 24", TYPE B90	
			34	20	54		647	20970	54	FT	YIELD LINE, TYPE B90	
			2	2	4		630	97700	4	EACH	SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN WARNING SIGN ASSEMBLY	4
											MAINTENANCE OF TRAFFIC	
	40				40		614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	4
											INCIDENTALS	
LS					LS		614	11000	LS		MAINTAINING TRAFFIC	3
1					1		617	25000	1	MGAL	WATER	

SUPPLEMENTAL INFO

CROSSWALK LINE, TYPE T, 10" WHITE THERMO	
SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON	

CHANGE DESC. WIDTH
0
PART. COLUMNS
3
ALT COL

CENTER HEADINGS

VERIFY DGNClip

No Duplicated Pages #
No Missing Pages #

GENERAL SUMMARY SHEET 1																			
SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION		SEE SHEET NO.
																	TRAFFIC CONTROL		
													644	30000	132	FT	REMOVAL OF PAVEMENT MARKING		
													644	00621	123	FT	CROSSWALK LINE, 12", AS PER PLAN		4
													647	20080	103	FT	**CROSSWALK LINE, 24", TYPE B90**		
													647	20970	54	FT	YIELD LINE, TYPE B90		
													630	97700	4	EACH	SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN WARNING SIGN ASSEMBLY		4
																	MAINTENANCE OF TRAFFIC		
													614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		4
																	INCIDENTALS		
													614	11000		LS	**MAINTAINING TRAFFIC**		3
													617	25000	1	MGAL	WATER		

CONTRACT ID:	PIC117460

REQUIRED (EX. FRA99999)

SPEC YEAR	2023
PART COLUMNS	6

ENTER DATA IN THESE COLUMNS	
ITEM CODE	HEADING OR ADDITIONAL DESCRIPTION

ENTER DATA IN THESE COLUMNS				
PARTICIPATION				

ContractID	Section	LineNumber	ItemCode	Description	Units	Quantity1	Spec	Alt	Quantity2	Quantity3	Quantity4	Quantity5	Part1	Part2	Part3	Part4	Part5
PIC117460	TRAFFIC CONTROL	1	644E30000	REMOVAL OF PAVEMENT MARKING	FT	132	23						01/ENH/28				
PIC117460	TRAFFIC CONTROL	2	644E00621	CROSSWALK LINE, 12", AS PER PLAN	FT	123	23						01/ENH/28				
PIC117460	TRAFFIC CONTROL	3	647E20080	CROSSWALK LINE, 24", TYPE B90	FT	103	23						01/ENH/28				
PIC117460	TRAFFIC CONTROL	4	647E20970	YIELD LINE, TYPE B90	FT	54	23						01/ENH/28				
PIC117460	TRAFFIC CONTROL	5	630E97700	SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN WARNING SIGN ASSEMBLY	EACH	4	23						01/ENH/28				
PIC117460	MAINTENANCE OF TRAFFIC	6	614E11110	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	HOUR	40	23						01/ENH/28				
PIC117460	INCIDENTALS	7	614E11000	MAINTAINING TRAFFIC	LS	1	23						01/ENH/28				
PIC117460	INCIDENTALS	8	617E25000	WATER	MGAL	1	23						01/ENH/28				

The **"General Summary"** tab is used to fill out the General Summary information. This data is then used to populate the **"Data"** tab for estimating purposes.

V02.14.05.30

CONTRACT ID:	
REQUIRED (EX. FRA99999)	

Must be filled out correctly in order for the Refresh Data Tab button to appear. The Contract ID consists of the projects 3 character county abbreviation and the projects PID. If the project is a district wide project then use the district number in place of the county abbreviation. An example Contract ID for a state wide project in District 4 would be, **D04**12345.
Note: That all letters in the Contract ID **MUST** be capitalized.
Note: That for District wide projects a leading 0 for districts 1-9 **MUST** be included

SPEC YEAR	2013
CHANGE DESC. WIDTH	0
SHEET COLUMNS	10
PART COLUMNS	4

The Spec Year is used to define the Item SPEC YEAR (This cell is is a pull down to select the desired year)
The Change Desc. Width has a drop down option of numbers. This is used in the case where you may need more sheet number columns and participation columns then can fit on a page or where you have longer descriptions that wont fit on one line. Selecting a number will change the width of the description column to allow for either more or less sheet and part columns.
Note: User **MUST** watch to make sure the new description column length does not cut off part of a description!
The Sheet Columns, and Part Columns have numbers displayed that represent the number of Sheet of Part columns being displayed. The User can change these numbers to the desired number for a project by typing in that number. There is no limit to the number of columns to display, by default the sheet columns and part columns have 20 columns each and you can only add 10 more columns each at one time. So for example if you want 40 sheet columns you can type in 30 for the sheet columns then type in 40. The reason for the limit is to prevent excel from crashing if the user types in add too many columns at once. The minimum number of sheet columns on the general summary sheet is 3, the minimum number of part columns on the general summary shee is 1.
Note: The Horizontal Red line labeled DGNclip represents the end and start of a new page.

REFRESH DATA TAB

Button used to REFRESH and populate information to the "Data" tab, The data tab only looks at the item number, additional description, split names, and split quantities. It DOES NOT look at the page quantities.
Note: Only works when a valid Contract ID is Entered.

REFRESH ITEM MASTER

Button used to REFRESH the Item Master from the ODOT website

INSERT PAY ITEMS
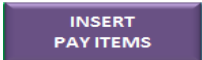
Button Used to Open Item Master Search Form

The Item Master Search can be used to fill out the General Summary sheet. It is populated with all Items from the Item Master stored in this file. This Item Master list is based off the last time the user hit the Refresh item master button.
This form allows for a 4-way search. you can search based off of Item Number, Description, the Three Digit Item code and heading.
Note: The sort based off heading is not 100% complete, there is a check box to turn on/off filtering based on selected heading for this reason.
To place heading, make sure to select a cell in the row you wish to add the heading to, select the heading you want in the pull down, and hit the place heading button.
To place an Item make sure to select a cell in the row you wish to add the item to, select the item (selected item will be highlighted), and hit insert Item.

To place an item make sure to select a cell in the row you wish to add the item to, select the item (selected item will be highlighted), and hit insert item.
 Note: If you want to add an additional description for an item you can fill out the additional description box before hitting the insert item button and it will be added to the sheet with the item.
To move to the next line you can hit the skip button.
Note: After hitting the place heading button or insert item buttons the active cell will automatically move down to the next row
Note: There is a reset button at the top left corner to clear out all fields in the search form.
Note: The supplemental spec for an item can be found by dragging the horizontal bar to the right.
Note: Hit the Esc key on your keyboard or the close button on the form to close the item master search form.
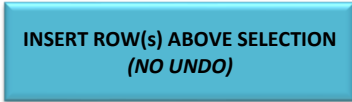
INSERT ROW(s) ABOVE SELECTION *(NO UNDO)*	Button used to INSERT row(s) above the cursor selection Note: Will not work on rows 1 through 14
DELETE ROW(s) IN SELECTION *(NO UNDO)*	Button used to DELETE row(s) in the cursor selection Note: Will not work on rows 1 through 14
IMPORT ESTIMATOR XML FILE	Button used to IMPORT an Estimator XML file (This will import the headings, item codes and additional descriptions. If the estimate file has funding splits filled out then the split names and splits quantities will be filled out as well, if not then just the quantity total for each item will be filled out.)
CREATE ESTIMATOR SHEET	The Create Estimator Sheet Button will create a Tab called Estimator. This Tab will take the "Data" tab and rearrange it to the correct format to upload to Estimator. If you rerun this it will not run if the Estimator sheet is already created. This is to prevent you from losing any data you may want. You can either change the name of the Estimator sheet or delete it and then rerun. (there is a 10000 line limit) NOTE: This is for version 2.8 of Estimator but will still import with newer versions
CENTER HEADINGS	Button used to CENTER Item HEADINGS in the description field and uncenter non-headings
INSERT SPACES	Button used to put blank rows between items and headings, the box below will open to give the users options. Note: This will change any formulas entered to values!

Insert Spaces

Select how to insert spaces between Items:

☐ Add Spaces when 3 digit item code changes

☐ Add Spaces every 5 items

[Okay]   [Cancel]

The User can select to add spaces when a 3 digit item code changes from one line to another as well as a space at the start of a new heading by checking the first checkbox.
The User can select to add spaces every 5 items with in a heading as well as a space at the start of a new heading by checking the second checkbox.
The User can also select both checkboxes to add spaces every 5 items in a heading or when a 3 digit item code changes from one line to another, which ever comes first. As well as it was add a space at the start a new heading.

DELETE SPACES	Button used to DELETE blank spaces between Items. Note: This will change any formulas entered to values!
SPLIT DESC. LINE	Button used to open form to place a description onto up to 5 lines Make sure to select the cell with the description you want to split into multiple lines **BEFORE** hitting this button, the following box will open up and populate the first textbox with the text from the selected cell

Place Description on Multiple Lines

Line 1 Description: [_____]

Line 2 Description: [_____]

Line 3 Description: [_____]

Line 4 Description: [_____]

Line 5 Description: [_____]

[Okay]   [Cancel]

After hitting the Split Desc. Line button the form pictured above will pop up and the line 1 description will be populated with the text from the cell that was selected. Fill out the lines in the way you want the description to be split up then hit okay.

Note: This will place a M in column A. This is needed for the formulas to work.
Note: If you no longer want the item description split onto multiple lines you **MUST** use the delete row(s) in selection button to delete the item and its multiple lines. Then re-enter the item.
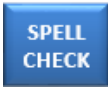
Button used to run spell check only on column C (Heading or additional description column) on either the General Summary sheet or SimpleForm sheet.

Use this buttom to sort the selected range. Sorts by Item number then Additional Description.
NOTE: Selection can not contain a heading!
NOTE: Sort will not work correctly if selection contains a description that spans more then one row!

ENTER DATA IN THESE COLUMNS	
ITEM CODE	HEADING OR ADDITIONAL DESCRIPTION
	ROADWAY
201E11000	ROADWAY
202E11200	EROSION CONTROL
202E20010	DRAINAGE
202E23000	PAVEMENT
202E23010	WATER WORK
202E30700	SANITARY SEWER
202E35100	LIGHTING
	ELECTRICAL

A drop-down menu has been provided for the HEADINGS column or you may key in a value for additional item descriptions.
NOTE: if the heading does not appear in the drop down it is not a valid heading and will not create the data sheet properly.
You can add a CONT., (CONT.) or CONTINUED after the heading name for a heading that spans more then one page.
For alternative bid items, you must have another heading with the word ALTERNATES after the heading name. So for example if you have an alternate bid item in the roadway heading you would have a ROADWAY ALTERNATES heading.
NOTE: If the heading is not bolded then it is not a valid heading.

The Sheet number columns are filled out by typing in the sheet number in the desired column. Every page that has an item quantity will have its own column. DO NOT combine more then one page to one column. This is why you have an unlimited amount of columns if you need them. The DGNClip sheet is where you will be able to combine more then one page to a column if needed. The cell will turn red if you enter a page number that does not exist.

"SimpleForm" Tab

The **"SimpleForm"** tab is used to fill out ONLY the information required to populate the **"Data"** tab for estimating purposes.

"DGNClip" Tab

The **"DGNClip"** tab is used to format the General Summary information and link it to MicroStation. The data shown on this sheet is referenced from the **"General Summary"** tab.
The pages go across so that the user can customize the layout of each page.
Each page will always and only have the correct number of columns displayed so that it will fit properly into a an ODOT Sheet cell in Microstation.
Under the sheet number section of the General Summary there are pull down that list all the page numbers from the General Summary tab. Fill out the page numbers in these columns. the same for the part. columns.
If you can't fit all the page number columns that you need, you may combine multiple pages to one column. This should be used as little as possible. on DGNClip sheet you can type in the first page number then a "-" and then the last page number of the span of pages you wish to combine to one column. the formulas will automatically update the totals. DO NOT add any spaces between the "-" and both the page numbers must be listed on the General Summary Tab. Lump sum items will display a LS when combining multiple pages to one page column.
This will work for page numbers with letters at the end. For example if you want to have pages 14, 14A, 15, 15A, 15B all combined to one sheet column you simply enter in "14-15B" and the page totals for an item will be the sum of each of those page totals for that item. Note' excel might think that what you entered in is a data and will format the cell as a date. to prevent this put an apostrophe in the front of your text in the cell. EX. '15-15B

Each page has these three options, use the pull downs to customize each page. The number of sheet columns being displayed is dependent on if you have the ALT column displayed, how many part columns you have displayed and what you set your description column width as.

This Button will go through and check all the pages in the DGNClip tab to see if that page is missing any page numbers or it there are any page numbers duplicated. Above the Description column for each page it will list what, if any pages are missing or duplicated. like the picture below shows.

The **"Data"** tab is used to export the General Summary data into a format that can be imported by the ODOT, Office of Estimating. Please review the **"Data"** tab column headers for specific column information used in the estimating process. (Note: DO NOT EDIT THE "DATA" TAB IN ANY WAY, as any edits will be overwritten!)

"Info" Tab

The **"Info"** tab has been added to help clarify some key features about the GENSUM_VBA_AASHTOWareV2 spreadsheet.

Things To KNOW about the GENSUM_VBA_AASHTOWare Spreadsheet

If you are using your own General Summary spreadsheet you may simply copy and paste the data into each of the columns provided either on the **"General Summary"** tab or the **"SimpleForm"** tab. When pasting data in Excel, make sure to not use any special formatting in the cells. (e.g. Zip Code, Currency, Date, etc.)

All information must be provided on the **"General Summary"** tab or the **"SimpleForm"** tab for it to be included as part of the project estimate. (i.e., Pavement, Retaining Walls, Structures)

When entering data in the PARTICIPATION columns make sure to start with the LEFT column for PARTICIPATION 1, 2nd column for PARTICIPATION 2, 3rd column for PARTICIPATION 3, etc. Do not enter PARTICIPATION data in any other format. It will not populate the **"Data"** tab with correct quantity splits.

If you are not using CADIG or linking the spreadsheet data to your MicroStation drawing and are only using the spreadsheet for estimating value, you may use the **"SimpleForm"** tab as it ONLY requires the information needed to populate the **"Data"** tab for estimating purposes.

Click the **"Refresh Data Tab"** button so you may populate the **"Data"** tab on demand. The **"Data"** tab must be populated with the latest information so remember to refresh upon completion of the spreadsheet.

There are key CELLS that need to have information entered correctly. On the **"General Summary"** tab, cell D4 should have the CONTRACT ID. (i.e., FRA99999)

There are key CELLS that need to have information entered correctly. On the **"SimpleForm"** tab, cell C3 should have the CONTRACT ID. (i.e., FRA99999)

There are key CELLS that need to have information entered correctly. On the **"General Summary"** and **"SimpleForm"** tab cell J4/J3 should have the SPEC YEAR. (i.e., 2013). This CELL has been enter and locked.

When entering the quantity for LUMP SUM items you may use the word **"LUMP"** or **"LS"** in the SHEET and PARTICIPATION columns. If the LUMP SUM item is split across PARTICIPATION's, enter the **"LUMP"** or **"LS"** value for each PARTICIPATION split. "**LS**" is the preferred designation.

You may add **"CONT." or "CONTINUE"** to headings that span multiple sheets. (i.e., ROADWAY CONT., ROADWAY CONTINUE). Any other format will not work

The ITEM DESCRIPTION field has a maximum length of 120 characters. Anything above 120 characters will be truncated and not used as part of the description.

When separating out the HEADING for structures you may use **COUNTY-ROUTE-SECTION or SFN - STRUCTURE FILE NUMBER** for the structure description. Please see the following formats as an example: **STRUCTURE 20 FOOT SPAN AND OVER (FRA-270-0123)** or **STRUCTURE UNDER 20 FOOT SPAN (FRA-270-0123)**. A template format has been included in the HEADING drop-down menu.

When separating out the HEADING for structure repair you may use **COUNTY-ROUTE-SECTION or SFN - STRUCTURE FILE NUMBER** for the structure description. Please see the following format as an example: **STRUCTURE REPAIR (FRA-270-0123).** A template format has been included in the HEADING drop-down menu.

When separating out the HEADING for retaining walls you may use a reference number, please see the following format as an example: **RETAINING WALLS (001), RETAINING WALLS (002), RETAINING WALLS (XXX),** etc. A template format has been included in the HEADING drop-down menu.

INCIDENTALS is now a heading.

The quantities under the **INCIDENTALS** heading will be spread across all splits evenly (rounding to 3 digits) on the data sheet. PS&E will allocate the funds correctly. So if you look at the data sheet you may notice the quantities under the incidental heaging dont match, this is okay and intended. Do not change the values.

Group	Item	Unit	Item Description	Supplemental Description	Quantity	Unit Price	Total
1100 TRAFFIC CONTROL (01/ENH/28)	644E30000	FT	REMOVAL OF PAVEMENT MARKING		132	$ 20.00	$ 2,640.00
1100 TRAFFIC CONTROL (01/ENH/28)	644E00621	FT	CROSSWALK LINE, 12", AS PER PLAN		123	$ 10.00	$ 1,230.00
1100 TRAFFIC CONTROL (01/ENH/28)	647E20080	FT	CROSSWALK LINE, 24", TYPE B90		103	$ 15.00	$ 1,545.00
1100 TRAFFIC CONTROL (01/ENH/28)	647E20970	FT	YIELD LINE, TYPE B90		54	$ 8.00	$ 432.00
1100 TRAFFIC CONTROL (01/ENH/28)	630E97700	EACH	SIGNING, MISC.:	SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) PEDESTRIAN WARNING SIGN ASSEMBLY	4	$ 18,000.00	$ 72,000.00
2100 MAINTENANCE OF TRAFFIC (01/ENH/28)	614E11110	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		40	$ 150.00	$ 6,000.00
2300 INCIDENTALS(01/ENH/28)	614E11000	LS	MAINTAINING TRAFFIC		1	$ 7,500.00	$ 7,500.00
2300 INCIDENTALS(01/ENH/28)	617E25000	MGAL	WATER		1	$ 250.00	$ 250.00
							$ 91,597.00