	STATEMENT OF ESTIMATED QUANTITIES									
L.,							S.P. 1814-06		L	
LINE NO.	SHEET NO.	CHART LETTER	ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITIES	80% FEDERAL 20% STATE FUNDS	100% CITY OF BRAINERD FUNDS (B)	LINE NO.	
1			2011.601	AS BUILT	LUMP SUM	1	1		1	
2			2016.601	QUALITY MANAGEMENT	LUMP SUM	1	1		2	
3			2021.501	MOBILIZATION	LUMP SUM	1	0.74	0.26	3	
4									4	
5			2031.501	FIELD OFFICE TYPE D	EACH	1	0.74	0.26	5	
6			2031.503	FIELD LABORATORY TYPE D	EACH	1	0.74	0.26	6	
7			2051.501	MAINT AND RESTORATION OF HAUL ROADS	LUMP SUM	1	1		7	
8				· ·					8	
9	18	A	2101.501	CLEARING	ACRE	0.6	0.6		9	
10	18	Α	2101.502	CLEARING	TREE	29	-28	1	10	
11	18	A	2101.506	CRUBBING	ACRE	0.6	0.6		11	
12	18	A	2101.507	GRUBBING	TREE	. 29	28	1	12	
13	129	00	2102.501	PAVEMENT MARKING REMOVAL	SQ FT	786	786		13	
14	119, 129	NN, 00	2102,502	PAVEMENT MARKING REMOVAL	LIN FT	1593	1593		14	

PLAN PRESENTATION BASICS STATEMENT OF ESTIMATED QUANTITIES (SEQ)

Project Design Services Unit

June 2019



STATEMENT OF ESTIMATED QUANTITIES

In this section the Statement of Estimated Quantities (SEQ) section of the plan is probably the most important section. This contains the pay items and quantities for the project.

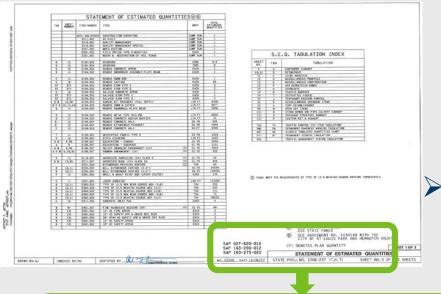
It is typically located after the general layout (if applicable). If there is no general layout then it follows the title sheet.

Additional information can be found in...

- The Design Scene & Guidance website in "SEQ Guidance" (PDF)" under the "General" heading.
- ➤ Metro Sample Plan "Estimated Quantities" chapter under the "Sample Plan Sheets" heading.

SEQ PROJECT NUMBER(S)

The project number(s) should be shown in the bottom right corner of the plan sheet. It should include the (TH #) but not the legislative number.



- When there are multiple project numbers as a minimum the PRIME SP number should be shown. It is optional to show all of the SP numbers. The main thing it to be consistent.
- ALL State Aid project numbers must also be shown on every sheet in the bottom right corner.

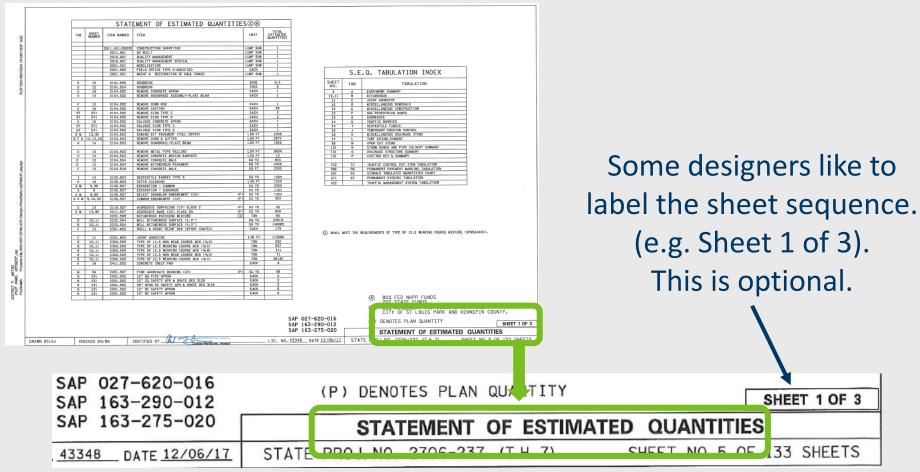
```
SAP 027-620-016
SAP 163-290-012
SAP 163-275-020

STATEMENT OF ESTINATED QUANTITIES

3. 43348 DATE 12/06/17 STATE PROJ. NO. 2706-237 (T.H. 7) SHEET NO. 5 OF 133 SHEETS
```

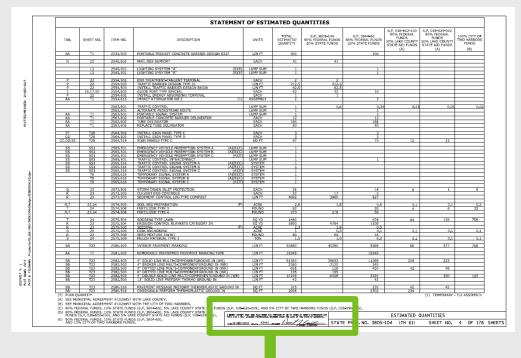
SEQ SHEET LABEL

The sheet label should be shown in the bottom right corner of the plan sheet. Above the SP # and SHEET number.



SEQ SHEET SIGNATURE

Each SEQ sheet must be signed. This is typically located in the bottom center of the sheet just left of the SP #.



This will include the Design Engineers (same person who signed the plan title sheet). It will include....

- Printed name
- > Signature
- License Number
- Date

THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SEQ SHEET SIGNATURE (Continued)

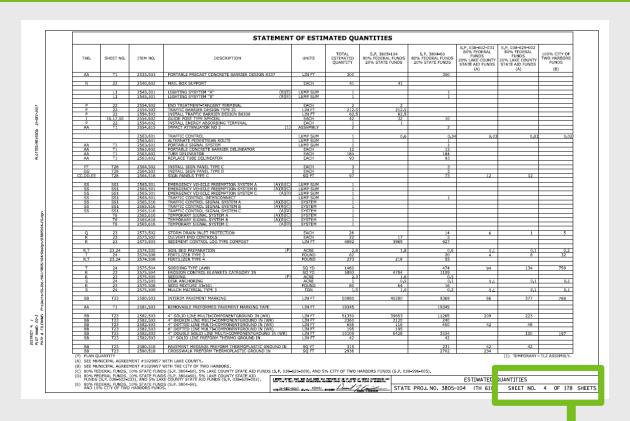
A different signature block will be used if these are signed by an Engineer different than the one who signed the title sheet. This will require the Board of AELSLAGID signature language which includes ...

- the certified by language
- Printed name
- > Signature
- License number
- Date

THEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 21-DEC-2017 LIC. NO. 43441 ENGINEER DANIEL J. ERICKSON

SEQ SHEET NUMBER



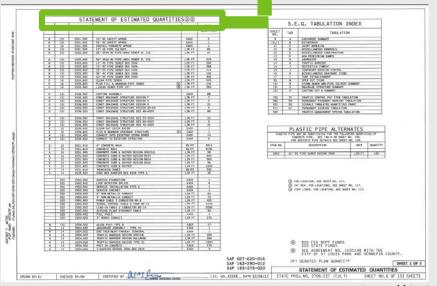
The number should be shown in the bottom right corner of the plan sheet.



SEQ TABULATION HEADING

The SEQ TABULATION should have a heading and it should say "STATEMENT OF ESTIMATED QUANTITIES".

		STAT	TEMENT OF ESTIMATED QUANTITIE	SAB	
ТАВ	TAB SHEET ITEM NUMBER		ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501.502	36" RC SAFETY APRON	EACH	1
K	16	2501.502	INSTALL CONCRETE APRON	EACH	1
N	131	2501.503	12" CS PIPE CULVERT	LIN FT	85
N	131	2503.503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21

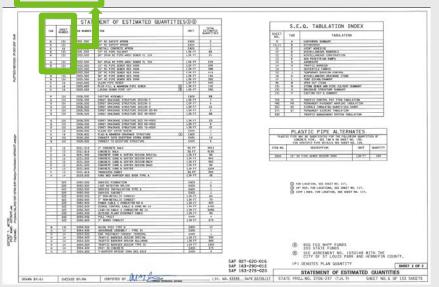


It is located at the top center of the tabulation and there should only be ONE tabulation labelled as this.

SEQ TABULATION FORMAT TAB COLUMN

The columns in the SEQ tabulation should be in a specific order from left to right. The first (far left column) should be the TAB column.

		SAB			
TAB	SHEET NUMBER	ITEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501.502	36" RC SAFETY APRON	EACH	1
K	16	2501.502	INSTALL CONCRETE APRON	EACH	1
N	131	2501.503	12" CS PIPE CULVERT	LIN FT	85
N	131	2503.503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21



This refers to the tabulation letter that the quantity for this item is located in. It may be located in more than one tabulation.

SEQ TABULATION FORMAT SHEET NUMBER COLUMN

The second column from the left should be the Sheet Number (Reference) column.

		STAT	EMENT OF ESTIMATED QUANTITIE	SAB	
TAB	SHEET NUMBER	TEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501.502	36" RC SAFETY APRON	EACH	1
K	16	2501.502	INSTALL CONCRETE APRON	EACH	1
N	131	2501.503	12" CS PIPE CULVERT	LIN FT	85
N	131	2503.503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21
	1			T	

| STATEMENT C | STIMATED QUANTITIES & | STIME | STATE | STATE

This refers to the sheet that the

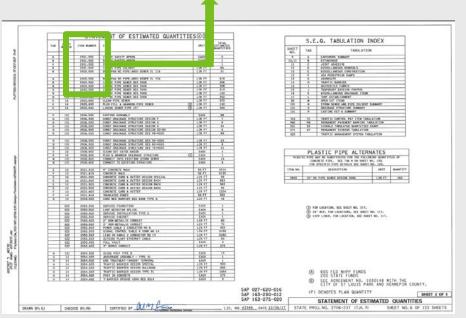
- Tabulation for this item is located in. It may be located in more than one tabulation.
- Special detail for modified and special items is located on.

Sometime these first two column are reversed but the preference is the tab letter first.

SEQ TABULATION FORMAT ITEM NUMBER COLUMN

The third column from the left should be the Item number column.

		STATE	EMENT OF ESTIMATED QUANTITIE	SAB	
TAB	SHEET NUMBER	ITEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501.502	36" RC SAFETY APRON	EACH	1
K	16	2501.502	INSTALL CONCRETE APRON	EACH	1
N	131	2501.503	12" CS PIPE CULVERT	LIN FT	85
N	131	2503.503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21



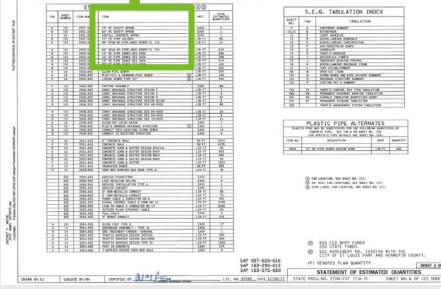
This refers to the item numbers that pertain to the pay item in TRNS*PRT (ASHTOWARE).

Only show the first seven digits, not the extension numbers.

SEQ TABULATION FORMAT ITEM DESCRIPTION COLUMN

The fourth column from the left should be the Pay Item Description column.

		STAT	EMENT OF ESTIMATED QUANTITIE	SAB		
TAB	SHEET NUMBER	ITEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	
N	131	2501.502	18" RC SAFETY APRON	EACH 3		
N	131	2501.502	36" RC SAFETY APRON	EACH 1		
K 6 2501.502		2501.502	INSTALL CONCRETE APRON	EACH	1	
N	N 31 2501.503		12" CS PIPE CULVERT	LIN FT 85		
N 31 2503.503			28" SPAN RC PIPE-ARCH SEWER CL IIA	21		
				_		



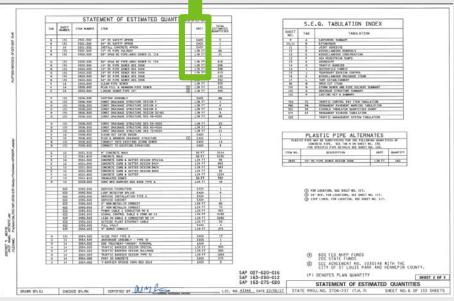
This refers to the pay item description as it is shown in TRNS*PRT.

- ➤ It must match TRNS*PRT (ASHTOWARE) exactly, even the abbreviations.
- ➤ Both long and/or short descriptions my be used in the tabulation. However, each item must be one or the other, they cannot be mixed.

SEQ TABULATION FORMAT UNIT COLUMN

The fifth column from the left should be the units column.

		STATI	EMENT OF ESTIMATED QUANTITIE	SAB	
TAB	SHEET ITEM NUMBER		ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501 502	ROW DO SAFETY ADDOM	EACH	1
K	16	2)1.502	INSTALL CONCRETE APRON	EACH	1
N	131	2)1.503	12" CS PIPE CULVERT	LIN FT	85
N	131	2 3.503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21



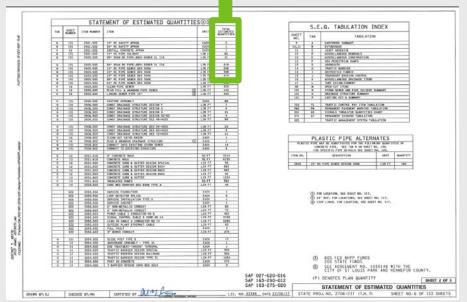
This refers to the pay item units used

- It must match the units used in the tabulation(s).
- ➤ It must use the standard abbreviations as shown in TRNS*PRT list plan units column.

SEQ TABULATION FORMAT QUANTITIES COLUMN

The sixth column from the left should be the total quantity column.

		STATI	EMENT OF ESTIMATED QUANTITIE	SAB	
TAB	TAB SHEET ITEM NUMBER		ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
N	131	2501.502	18" RC SAFETY APRON	EACH	3
N	131	2501 502	ZCII DO CAEETY ADDON	EVU	1
К	16	2501 002	INSTALL CONCRETE APRON	EACH	1
N	131	2501 03	12" CS PIPE CULVERT	LIN FT	85
N	131	2503 503	28" SPAN RC PIPE-ARCH SEWER CL IIA	LIN FT	21



This refers to the total quantity from all the tabulations referenced.

If there is only one SP number there will only be one column after the units column. Do NOT repeat the SP column.

SEQ TABULATION QUANTITIES COLUMN

- The quantities put on the estimate sheet should normally be rounded to the nearest whole number. We should avoid using decimals, if possible. Only in cases of extremely small quantities should decimals be used and then only to the tenths place.
- ➤ Commas should not be used either. For large numbers either leave a space where the comma would typically go or just continue the number (e.g. 12 345 or 12345 instead of 12,345).
- ➤ When using small numbers as in the case of prorata items, a zero should be placed before the decimal number. (e.g. 0.5 instead of .5).
- ➤ Do NOT use zeros or dashes in the estimated quantities table or any tabs. These locations should be left blank.

SEQ TABULATION FORMAT GENERAL INFORMATION

➤ When SEQ is under development it is good practice to leave an open line space every 5 or 6 lines. This practice is desirable when corrections or additions have to be made on the sheets. Some designers are not leaving enough space below the tabulations for the addition of notes if some have to be added after the plan is turned in for processing. A two inch minimum space from the

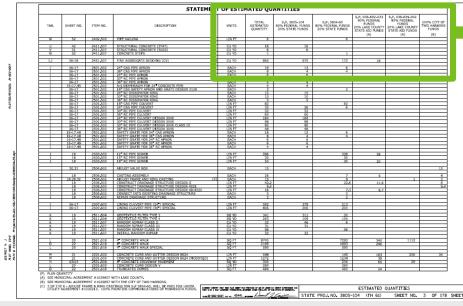
bottom
border line
of the plan
sheet to the
lower line on
the tabulation
is desirable.

		STATEMENT OF ESTIMATED	QUAN	TITIES	ò		
SHEET NO.	ITEM NO.	DESCRIPTION	NOTES	UNITS	TOTAL ESTIMATED QUANTITIES	S.P. 4710-27 (A)	100% CITY FUNDS (B)
22	2504,602	ADJUST VALVE BOX-WATER		EACH	8		8
22	2504.602	ADJUST CURB STOP	(11)	EACH	18		18
74	2506.501	CONST DRAINAGE STRUCTURE DESIGN SD-48		LIN FT	3.1	3.1	
74	2506.516	CASTING ASSEMBLY		EACH	2	2	
22	2506.522	ADJUST FRAME & RING CASTING		EACH	3	3	
16-17	2507,603	LINING CULVERT PIPE (24") SPECIAL		LIN FT	1075	1075	
16-17	2507.603	LINING CULVERT PIPE (30") SPECIAL		LINFT	155	155	
16-17	2507.603	LINING CULVERT PIPE (36") SPECIAL		LINFT	202	202	
16-17	2507.603	LINING CULVERT PIPE (60") SPECIAL		LINFT	77	77	
16-17	2507,603	LINING CULVERT PIPE (72") SPECIAL		LINFT	58	58	
16-17	2511,501	RANDOM RIPRAP CLASS III		CU YD	69	69	
16-17	2511.501	GRANULAR FILTER		CU YD	3	3	
16-17	2511.511	GEOTEXTILE FILTER TYPE III		SQ YD	164	164	
		-					
21	2521,501	4" CONCRETE WALK	(10)	SQ FT	12992	12005	987
21	2521.501	6" CONCRETE WALK	(10)	SQ FT	1084	1084	

SEQ TABULATION FORMAT MULTIPLE SP/FUNDING TYPES

After the total are the SP/Funding Type Columns if more than one SP and/or Funding Type.

7	OF ESTI	MATED QUA	ANTITIES						
	UNITS	TOTAL ESTIMATED QUANTITY	S.P. 3805-104 30% FEDERAL FUNDS 20% STATE FUNDS	8	S.P. 3804-60 % FEDERAL FUNDS 0% STATE FUNDS	80% FI FUI 20% LAK STATE A	-602-033 EDERAL NDS E COUNTY ID FUNDS A)	S.P. 038-629-002 80% FEDERAL FUNDS 20% LAKE COUNTY STATE AID FUNDS (A)	100% CITY OF TWO HARBORS FUNDS (B)
	LIN FT	6			6				
\perp									
	CU YD	16	16						
	CU YD	6	6		4				
	CU YD	1							
П									
)	CU YD	865	675		172		18		
						1			



- > The first column will be the PRIME SP # column.
- The last column will be the CITY/COUNTY funding column.
- Each SP # will have a separate column.

SEQ TABULATION FORMAT SP and/or FUNDING COLUMNS

Include a column for each type of funding including city, county, and state aid funds.

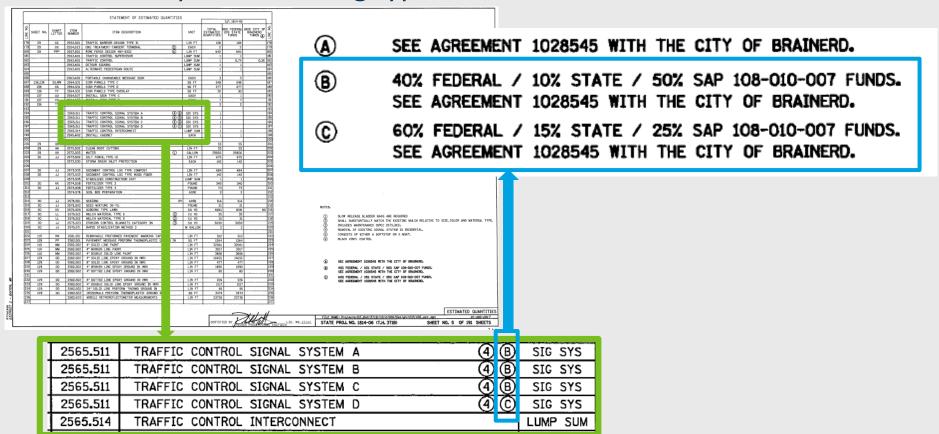
➤ Each funding type should have a separate column, even if it shares an SP #.

TOTAL ESTIMATED QUANTITY	S.P. 3805-104 80% FEDERAL FUNDS 20% STATE FUNDS	S.P. 3804-60 80% FEDERAL FUNDS 20% STATE FUNDS	S.P. 038-602-033 80% FEDERAL FUNDS 20% LAKE COUNTY STATE AID FUNDS (A)	S.P. 038-629-002 80% FEDERAL FUNDS 20% LAKE COUNTY STATE AID FUNDS (A)	100% CITY OF TWO HARBORS FUNDS (B)
1	1				
1	1				
4	1				

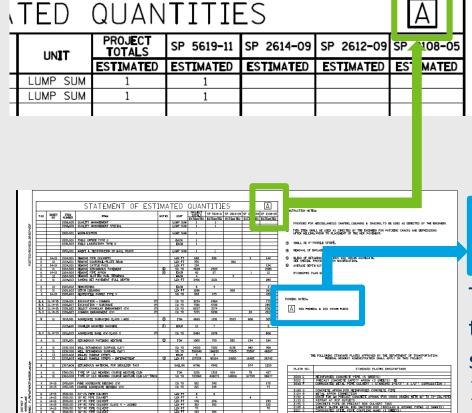
>					_				
			S.P. 1814-06						
	UNIT	TOTAL ESTIMATED QUANTITIES	80% FEDERAL 20% STATE FUNDS	100% CITY OF BRAINERD FUNDS (A)					
	LIN FT	128	128		1				
	EACH	2	2		1				
	I TAL C'T	E40	E40		4				

SEQ TABULATION FORMAT SP and/or FUNDING COLUMNS

There are exceptions to this rule which could have a lettered note instead such as signals and lighting. Or when there are less than five items for a specific funding type.



SEQ FUNDING NOTES



If the project has federal funds they must be noted in the SEQ. It can be placed in the column heading as part of the narrative or as a lettered note. Never use number notes for funding as they need to stand apart from the rest of the notes.

Α

80% FEDERAL & 20% STATE FUNDS

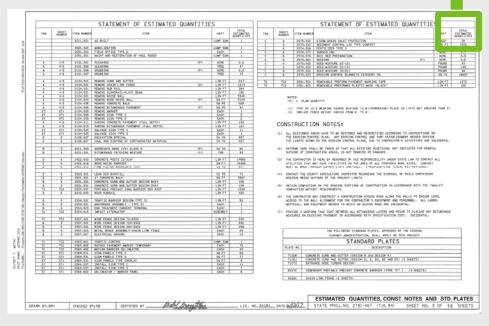
The funding notes should stand apart from the numbered notes. If possible they should be...

- Larger font
- Bold
- Placed away from the numbered notes.

SEQ FUNDING NOTES (Continued)

STATEMENT OF ESTIMATED QUANTITIES					
TAB	SHEET NUMBER	ITEM NUMBER	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
С	6	2573.530	STORM DRAIN INLET PROTECTION	EACH	
С	6	2573.533	SEDIMENT CONTROL LOG TYPE COMPOST	LIN FT	7595
С	6	2574.508	FERTILIZER TYPE 3	POUND	691
С	6	2574.575	SUBSOIL ING	ACRE	3.5

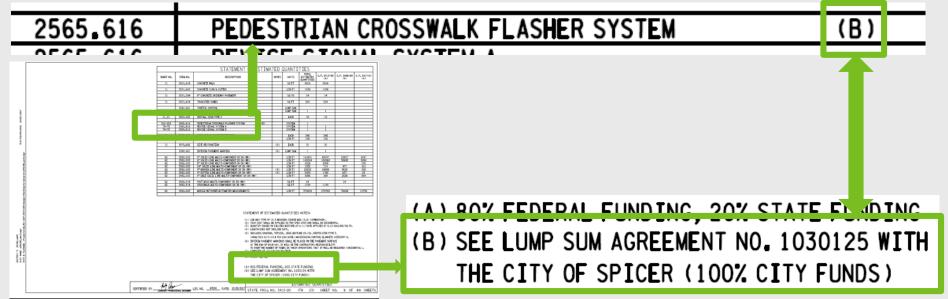
- ➤ If the project is only State funded then no note is needed.
- ➤ If the project is both federally and state funded then the state funds need to be noted.
- ➤ If the project is both state and city/county funded then the state funds need to be noted.



SEQ AGREEMENT NOTES

If the project has an agreement it should

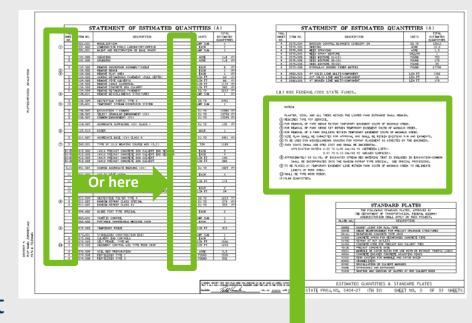
- > Reference either
 - ❖ SEE LUMP SUM AGREEMENT, or
 - ❖ SEE AGREEMENT...if schedule "I"
- > Agreement number
- Who the agreement is with (e.g. City/County name)
- Note the percentage of federal funds, if applicable



SEQ NOTES

All SEQ notes should be accounted for.

- If a note is written in the SEQ it should not be repeated in the Tabulation. The note should only appear in one location (either the SEQ or the tabulation, not both).
- They note should be clear, understandable
- The note should be necessary, don't have more notes than you need.



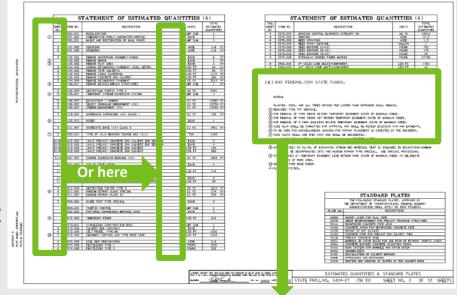
- (2) FOR REMOVAL OF PARK BENCH WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.
- (3) FOR REMOVAL OF PARK SWING SET WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.
- (4) FOR REMOVAL OF 9 PARK BOULDERS WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.
- (5) SITE PLAN SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE WITHIN EXISTING R/W AND EASMENTS.
- 6 TO BE USED FOR MISCELLANEOUS GRADING FOR RIPRAP PLACEMENT AS DIRECTED BY THE ENGINEER.
- (7) TACK COATS SHALL USE SPEC 2357 AND SHALL BE INCIDENTAL.

APPLICATION RATES: 0.03 TO 0.05 GAL/SQ YD (BETWEEEN LIFTS)

0.07 TO 0.10 GAL/SQ YD (MILLED SURFACES)

SEQ NOTES (Continued)

- Location of the note number in the SEQ should be consistent either on the left side of the tabulation or on the far right side of the Item Description column.
- Numbered notes should be set apart from the lettered (funding) notes.



(A) 80% FEDERAL/20% STATE FUNDS.

NOTES:

PLANTER. SIGN. AND ALL TREES WITHIN THE LOOPED PARK ENTRANCE SHALL REMAIN.

- (1) REQUIRES TYPE "D" SERVICE.
- (2) FOR REMOVAL OF PARK BENCH WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.
- (3) FOR REMOVAL OF PARK SWING SET WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.
- 4 FOR REMOVAL OF 9 PARK BOULDERS WITHIN TEMPORARY EASEMENT SOUTH OF MASHAUG CREEK.



QUESTIONS????

Any questions contact us ANYTIME:

Tim Swanson, P.E. @ 651-366-4689 tim.swanson@state.mn.us

Chee Yeun Lay, P.E. @ 651-366-4662 chee.yeun.lay@state.mn.us

Jane Krebsbach@ 651-366-3183 jane.krebsbach@state.mn.us