

### **Item Checks:**

These checks will be listed on the main error report.

(1) Valid State Code.

(2) Valid Element Number. *Below is a list of element numbers:*

12	60	112	142	155	207	219	235	302	315
13	65	113	143	156	208	220	236	303	316
15	102	115	144	157	210	225	240	304	330
16	104	116	145	161	211	226	241	305	331
28	105	117	146	162	212	227	242	306	332
29	106	118	147	202	213	228	243	310	333
30	107	120	148	203	215	229	244	311	334
31	109	135	149	204	216	231	245	312	510
38	110	136	152	205	217	233	300	313	515
54	111	141	154	206	218	234	301	314	521

### **Cross Checks:**

These checks will be listed on the main error report.

(1) Total Quantity must be present and greater than 0.

(2) CS one through 4 must be present and contain a value of 0 or greater.

(3) Sum of CS one through four must add up to total quantity.

(4) Values for element quantities must be whole numbers.

(5) Data tag must contain a value.

### **Other Checks:**

These checks will **not** be listed on the main error report. FHWA will use this output to develop guidelines on data integrity for element data

(1) If EN 510, 515, or 521 is submitted there must to be an EPN

(2) If an EPN is submitted then the EPN must appear as an EN (example below)

State Code	Structure Number	EN	EPN	Total QTY	CS-1 QTY	CS-2 QTY	CS-3 QTY	CS-4 QTY
1	14277	12		16217	0	16000	217	0
1	14277	510	12	15783	15083	500	0	200

(3) If EN is 510 then EPN must be equal to one of the following 12, 13, 15, 16, 28, 29, 30, 31, 38, 54, 60, 65, 240, 241, 242, 243, 244, or 245.

(4) If EN is 515 then EPN must be equal to one of the following 28 or, 29, 30, 102, 107, 113, 120, 141, 142, 147, 148, 152, 161, 162, 202, 207, 219, 225, 231, 240, 330, 300, 302, 303, 305, 310, 311, 312, 313, 314, 315, or 316.

(5) If EN is 521 then EPN must be equal to one of the following 12 or, 13, 15, 16, 38, 104, 105, 109, 110, 115, 116, 143, 144, 154, 155, 204, 205, 210, 215, 220, 226, 227, 233, 234, 241, 245, or 331.

(6) An element can only be submitted one time per bridge with the exception of elements 510, 515, and 521. Elements 510, 515, and 521 should have different EPN's.

(7) If an element is submitted in the 100 series then an element in the 200 series should also be submitted for that bridge.

*Required, for each record: State Code, Structure Number, Element Number, Element Parent Number (if applicable), Element Total Quantity, Element Quantity CS One, Element Quantity CS Two, Element Quantity CS Three, Element Quantity CS Four.*

Mod 1:

(1) Accept values for state code for states 01 through 09 to submit state code with OR without the leading zero.

(2) For the following checks add the additional acceptable values as indicated:

If EN is 510 then EPN must be equal to one of the following 12, 13, 15, 16, 28, 29, 30, 31, 38, 54, 60, or 65. **Error Message: Incorrect EPN for EN submitted. Place on “check” error report. Add 240, 241, 242, 243, 244 or 245 to the list.**

If EN is 515 then EPN must be equal to one of the following 28 or, 29, 30, 102, 107, 113, 120, 141, 142, 148, 152, 161, 162, 202, 207, 219, 225, 231, 240, 330, 300, 302, 303, 305, 310, 311, 312, 313, 314, 315, or 316. **Error Message: Incorrect EPN for EN submitted. Place on “check” error report. Add 147 to the list.**

If EN is 521 then EPN must be equal to one of the following 12 or, 13, 15, 16, 104, 105, 109, 110, 115, 116, 143, 144, 154, 155, 204, 205, 210, 215, 220, 226, 227, 233, 234, 241, 245, or 331. **Error Message: Incorrect EPN for EN submitted. Place on “check” error report. Add 38 to the list.**

(3) An element can only be submitted one time per bridge with the exception of elements 510, 515, and 521. Elements 510, 515, and 521 should have different EPN’s. **Error Message: Duplicate Record. Place on “main” error report.**

(4) For each structure, if an element is submitted in the 100 series then an element in the 200 series should also be submitted for that bridge. **Error Message: Missing substructure element. Place on “check” error report.**