



Latitude:33.57589, Longitude:-93.21237

Route:278 Section:07 Log:17.28

Arnold Road ID:50x278x7xA, Arnold Log mile:16.392

District 03, 99 - Nevada County

Owner: 1 - State Highway Agency

### Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

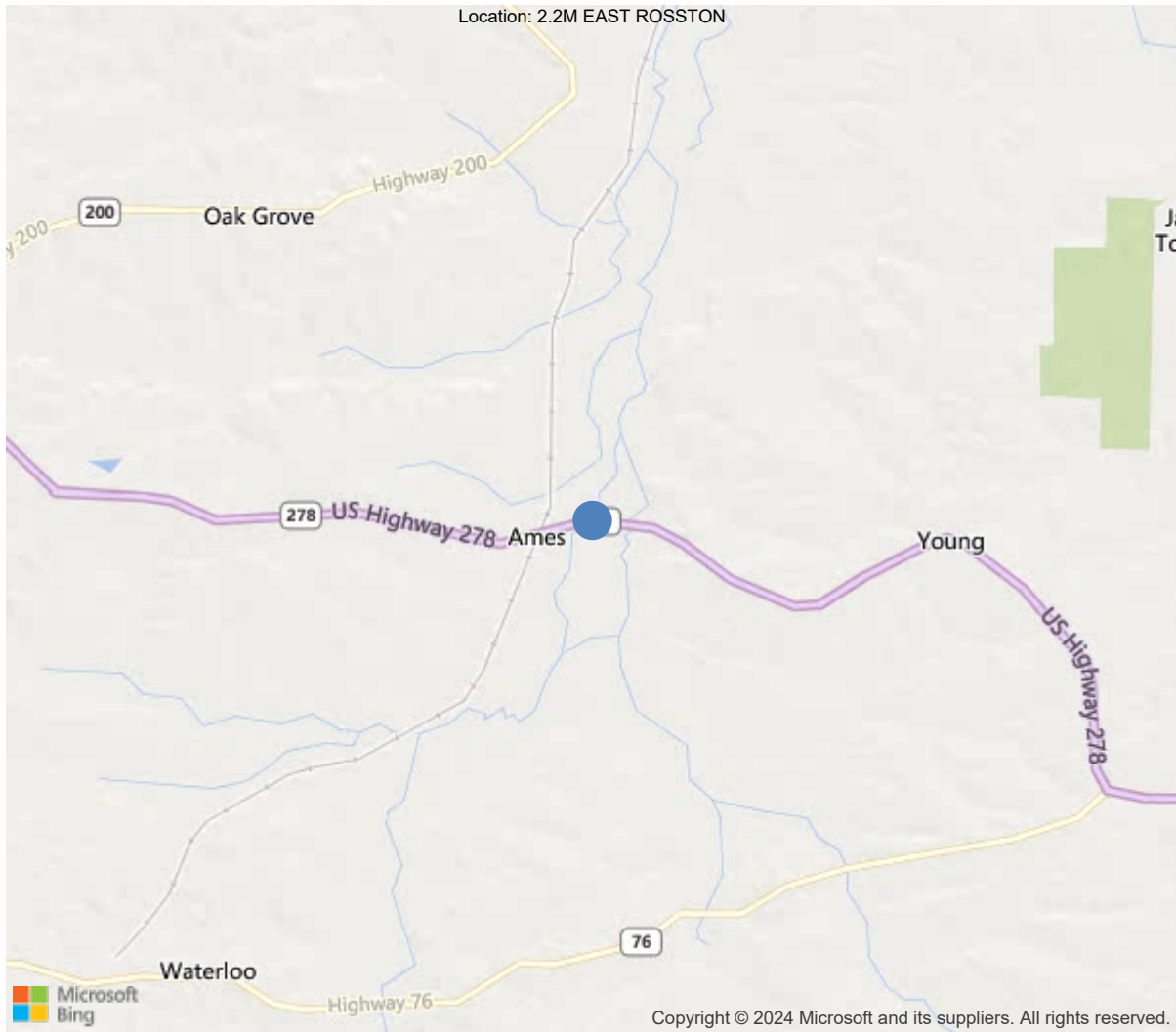
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	60		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



33.57589, -93.21237





**Asset #06671 (Routine, Underwater type 2)**  
**U.S. 278 -07-17.28 over LITTLE CANEY SLOUGH**  
**Location: 2.2M EAST ROSSTON**

**Team Lead: Jared Kegley, Inspection Date: 06/13/2022**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06671
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	99 - Nevada County
(4) Place Code	0
(6) Features Intersected	LITTLE CANEY SLOUGH
(7) Facility Carried	U.S. 278 -07-17.28
(9) Location	2.2M EAST ROSSTON
(11) Mile Point	17.28 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.57589
(17) Longitude	-93.21237
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1 - Concrete
Type	4 - Tee beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	4
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1998
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1000
(30) Year of ADT	2018
(109) Truck ADT	2 %
(19) Bypass, Detour Length	8 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	118 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	35.4 ft
(52) Deck Width Out to Out	38.4 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	35.8 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	99.9 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	6 - Rural Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	8
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A - HL93
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	0
(114) Future ADT	1100
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date	06/13/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			



Asset #06671 (Routine, Underwater type 2)

District: 03, County: 99 - Nevada County

Team Lead: Jared Kegley, Inspection Date: 06/13/2022

### General Observation

SOUNDINGS WERE TAKEN ON 5/24/2018 BUT NOT ENTERED IN UNTIL 6/4/2018...06/02/2020 alignment and elevation photos taken...6/13/2022. Alignment and Elevation photos taken, soundings taken per this inspection...

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#### 58 - Deck (7 - GOOD CONDITION - some minor problems.)

...DIAGONAL DECKS CRACKS W/EFFLORESCENCE, CRACKS EXTENDS FROM BENTS INTO MID SPAN ON MOST SPANS (CRACKS HAVE BEEN SEALED)

BRIDGE BUILT ON JOB # R30087 LAYOUT DRAWING # 37649...6/13/2022...Cracking in various locations of deck. Efflorescence on bottom side of deck and overhangs...

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#### 59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

SMALL HAIR LINE CRACKS IN CONCRETE TEE BEAMS THIS IS AT MID SPAN...6/2022.. little to no change per this inspection, minor cracks in tee beams...

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#### 60 - Substructure (7 - GOOD CONDITION - some minor problems.)

6/2022...Minor cracking on caps in various locations...

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#### 61 - Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

6/13/2022... Soundings taken this inspection

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**Asset #06671** (Routine, Underwater type 2)

**U.S. 278 -07-17.28 over LITTLE CANEY SLOUGH**

**Location: 2.2M EAST ROSSTON**

**Team Lead:** Jared Kegley, **Inspection Date:** 06/13/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	4531	4151	380	0	0
1120	Efflorescence/Rust Staining	SF	80	0	80	0	0
1130	Cracking (RC and Other)	SF	300	0	300	0	0
(16) DIAGONAL DECKS CRACKS W/EFFLORESCENCE, CRACKS EXTENDS FROM BENTS INTO MID SPAN ON MOST SPANS (CRACKS HAVE BEEN SEALED)							
(1120-16) Efflorescence on underside of deck various locations							
110	Reinforced Concrete Open Girder/Beam	LF	590	510	80	0	0
1130	Cracking (RC and Other)	LF	80	0	80	0	0
(110) HAIRLINE CRACKS ON ALL TEE BEAMS							
215	Reinforced Concrete Abutment	LF	109	109	0	0	0
227	Reinforced Concrete Pile	EA	15	15	0	0	0
234	Reinforced Concrete Pier Cap	LF	116	113	3	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
301	Pourable Joint Seal	LF	106	0	106	0	0
2320	Seal Adhesion	LF	106	0	106	0	0
(301) Loss of adhesion all joints							
331	Reinforced Concrete Bridge Railing	LF	236	236	0	0	0



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## Deck

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Comment: ...DIAGONAL DECKS CRACKS W/EFFLORESCENCE, CRACKS EXTENDS FROM BENTS INTO MID SPAN ON MOST SPANS (CRACKS HAVE BEEN SEALED)

BRIDGE BUILT ON JOB # R30087 LAYOUT DRAWING # 37649...6/13/2022...Cracking in various locations of deck.

Efflorescence on bottom side of deck and overhangs...



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### Superstructure

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(110) HAIRLINE CRACKS ON ALL TEE BEAMS							

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Comment: 6/13/2022... Soundings taken this inspection



6/2022... Elevation



6/2022... Alignment



Typical bottom of deck



Typical substructure





Span 4 photo of efflorescence



Cracking some sealed some not sealed



Photo of joint at Bent 3 typical all joints..



6/2022... underside of deck typical of all spans



6/2022... underside of deck typical of all spans



6/2022... deck photo typical of all spans





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**Location: 2.2M EAST ROSSTON**

**Team Lead:** Jared Kegley, **Inspection Date:** 06/13/2022

#### Maintenance Needs

**Date Reported:** 06/04/2018

**Priority:** D- Routine

**Type of Work:** (Inactive) (Inactive) 9 - None

**Status:** Monitor

**Component:**

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#### Deficiency Description

JOINTS NEED TO BE CLEANED AND RESEALED

#### Remarks



JOINTS NEED TO BE CLEANED AND RESEALED





## **Routine Maintenance**

Check Box Maintenance Items

<b>Type of Maintenance</b>	<b>Is recommended?</b>
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

**A-54 - Sealable Deck Cracks**

**A-55 - Deck Washing Needed**

**A-56 - Joint Cleaning/Flushing Needed**



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**A-57 - Beam End and Bearing Painting Needed**

**A-58 - Cap Cleaning/Flushing Needed**

**A-59 - Joint Repair Needed**

**A-60 - Full Beam Painting Needed**

**A-61 - Polymer Overlay Advised**

**A-62 - Hydro and LMC Advised**

**A-63 Missing/Incorrect Log Mile Signage**

**A-64 - Vegetation Removal Requested**

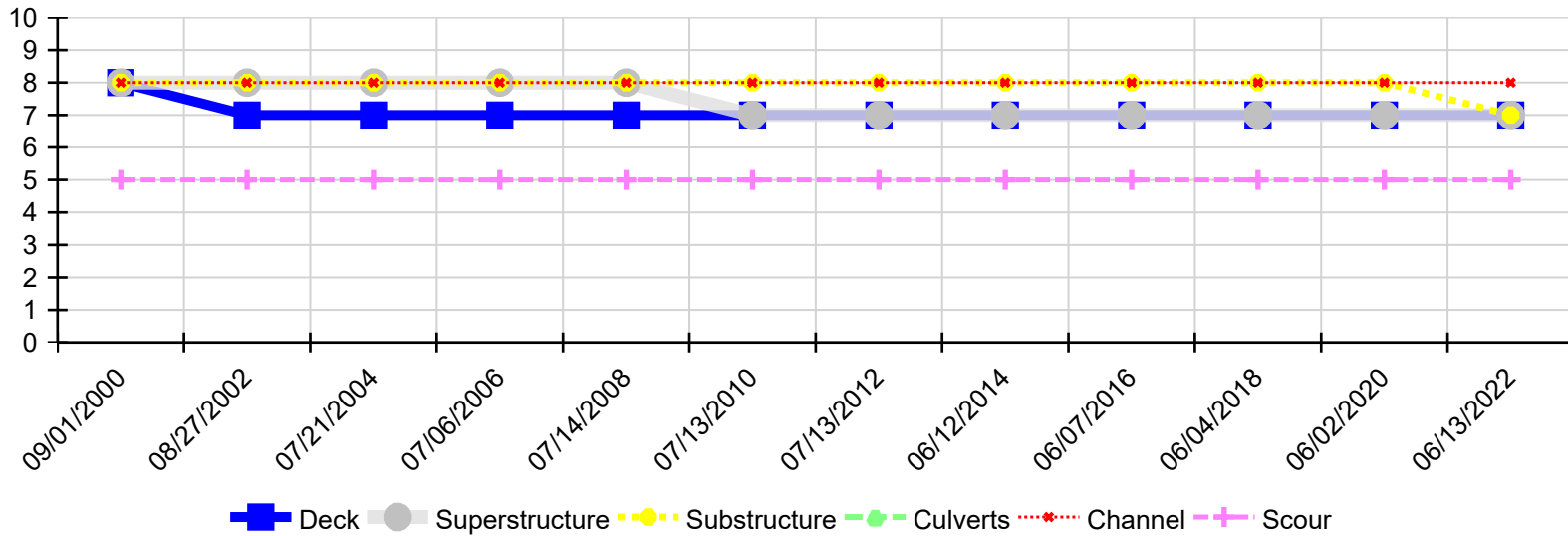


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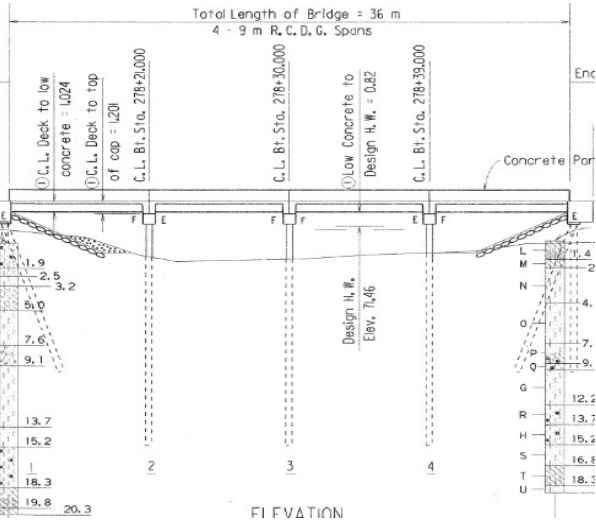
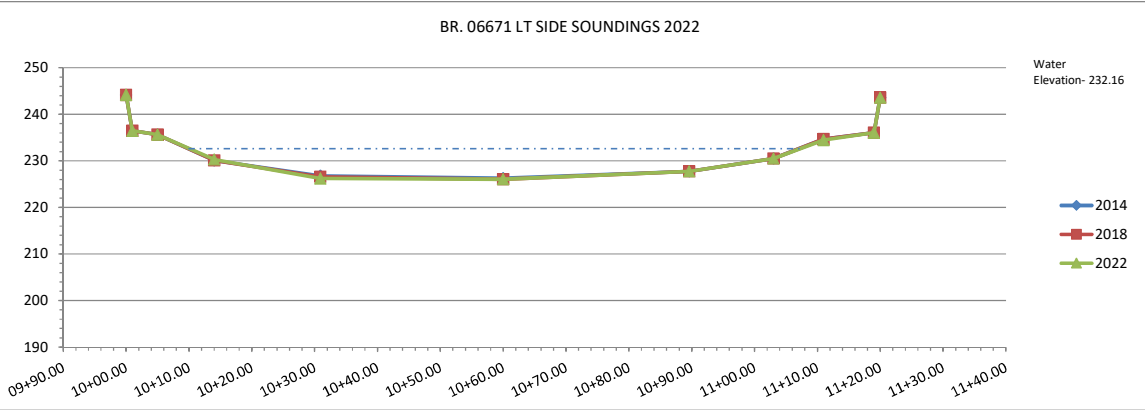
Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/13/2022	7	7	7	N	8	5
06/02/2020	7	7	8	N	8	5
06/04/2018	7	7	8	N	8	5
06/07/2016	7	7	8	N	8	5
06/12/2014	7	7	8	N	8	5
07/13/2012	7	7	8	N	8	5
07/13/2010	7	7	8	N	8	5
07/14/2008	7	8	8	N	8	5
07/06/2006	7	8	8	N	8	5
07/21/2004	7	8	8	N	8	5
08/27/2002	7	8	8	N	8	5
09/01/2000	8	8	8	N	8	5

10+00.00	244.15	244.15	244.15	BT 1
10+01.00	236.44	236.44	236.44	
10+05.00	235.62	235.62	235.62	
10+14.00	230.08	230.08	230.28	
10+30.90	226.8	226.6	226.2	BT 2
10+60.00	226.26	226.06	226.06	BT 3
10+89.60	227.72	227.72	227.72	BT 4
11+03.00	230.51	230.51	230.51	
11+11.00	234.67	234.67	234.47	
11+19.00	236.04	236.04	236.04	
11+20.00	243.59	243.59	243.59	BT 4

2014      2018      2022



CONCRETE PILING: Piling for Bents 1 and 5 shall be 405 mm octagonal or 355 mm square precast concrete and shall be driven to a minimum safe bearing capacity of 390 kN per pile. Piling shapes shall not be mixed. Piling in Bents 2 thru 4 shall be 455 mm square precast concrete and shall be driven to a minimum safe bearing capacity of 490 kN per pile. All piling shall be driven with an approved air, steam, or diesel hammer. Piling in end bents shall be driven after embankment to bottom of cap is in place and shall have a minimum penetration of 6.0 m below natural ground. Piling in Bents 2 thru 4 shall be driven to a minimum tip elevation of 59.5. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Drive one 12.5 m test pile in Bent 1, and one 18.0 m test pile in bent 3.

10+00.00	242.31	242.31	242.31	BT 1
10+01.00	234.62	234.62	234.62	
10+05.00	234.54	234.54	234.74	
10+14.00	230.18	230.18	230.78	
10+30.90	226.05	226.15	226.15	BT 2
10+60.00	224.39	224.29	224.29	BT 3
10+89.60	227.53	227.53	227.53	BT 4
11+03.00	230.14	230.14	230.44	
11+11.00	234.08	234.08	234.08	
11+19.00	235.21	235.21	235.51	
11+20.00	242.86	242.86	242.86	BT 5
	2014	2018	2022	

