

8.4.1.8 Building and Facility Data List

name [Building and Facility Data List]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B1		A Sequence of Building and Facility Data Records		

8.4.1.8.1 Building and Facility Data Record

Records are created according to the number of building and facility data records in the basic distribution header.

name [Building and Facility Data Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	B:...:B:	Building and Facility Attribute Header	(1)	a
2	2	2		Category Code	(4)	a
3	4	2	B:I	Facility Barycentric X-coordinate	(11)	a
4	6	2	I	Facility Barycentric Y-coordinate	(14)	a
5	8	4	:B:...:B	Approach Direction Limit Information	(5)	c
6	12	2	I	Optional X-coordinate	(16)	c
7	14	2	B:I	Optional Y-coordinate	(18)	c
8	16	2	D	Offset to the Character String Data	(21)	c
9	18	2	D	Offset to the Shape Data	(22)	c
10	20	2	N	Auxiliary Data	(23)	c
11	22	B1		Entrance and Exit Information		c

(1) Building and Facility Attribute Header

No.	bit	Description					
1	15 to 12	Building and Facility Data category	bit15	bit14	bit13	bit12	Meaning
			0	0	0	0	General building data
			0	0	0	1	(0001(2) and after not defined)
2	11	Approach Direction Limit Information Existence Flag	bit11	Meaning			
			0	No approach direction limit information			
			1	Approach direction limit information available			
3	10	Optional Coordinate Existence Flag	bit10	Meaning			
			0	No optional coordinate			
			1	Optional coordinate available			
4	9	String Data Existence Flag	bit9	Meaning			
			0	No character string data offset information			
			1	String data offset information			
5	8	Shape Data Existence Flag	bit8	Meaning			
			0	No shape data offset information			
			1	Shape data offset information available			
6	7	Auxiliary Data Flag	bit7	Meaning			
			0	No auxiliary data information			
			1	Auxiliary data information available			
7	6	Entrance and Exit Information Existence Flag	bit6	Meaning			
			0	No entrance and exit information			
			1	Entrance and exit information			
8	5 to 0	(RESERVED)					

(2) Link Direction 1 for Offset

This field describes the road direction in which vehicles can approach a building or facility. It becomes information corresponding to the relevant link string data record.

(3) Link Direction 2 for Offset

This field describes the road direction in which vehicles can approach a building or facility. It becomes information corresponding to the link string data record that can be specified, following the relevant link string data record, by specifying the identical node information. If a different link string entrance and exit point is configured for a single building or facility, the entrance and exit that can be set must have up to two link string data records.

(4) Category Code

This field describes the category code corresponding to the relevant building or facility data. A code value is common to the background and name data.

(5) Approach Direction Limit Information

This field indicates the road (link string data record) and link direction that applies to the approach direction to the intersection at which a building or facility can be confirmed. This field exists if the approach direction limit information existence flag indicates "1(2): approach direction limit information available." If the building or facility can be confirmed from a specific approach direction, this field exists. If the building or facility can be confirmed from all approach directions or if it is not investigated or is unclear, this field does not exist.

Word 0

No.	bit	Description			
1	15 to 14	(RESERVED)			
2	13 to 12	Information in the relevant link String Data Record	bit13	bit12	Meaning
			0	0	Cannot be confirmed (invalid).
			0	1	Forward direction (same as for the node record accommodation order)
			1	0	Backward direction (backward of the node record accommodation order)
			1	1	Both directions (no direction attribute)
3	11 to 10	Information in the link string data record that appears following the relevant link string data record (this appearance is specified with the identical node information.)	bit11	bit10	Meaning
			0	0	Cannot be confirmed (invalid).
			0	1	Forward direction (same as for the node record accommodation order)
			1	0	Backward direction (backward of the node record accommodation order)
			1	1	Both directions (no direction attribute)
4	9 to 8	Information in the link string data record that appears as the second record after the relevant link string data record (this appearance is specified with the identical node information.)	bit9	bit8	Meaning
			0	0	Cannot be confirmed (invalid).
			0	1	Forward direction (same as for the node record accommodation order)
			1	0	Backward direction (backward of the node record accommodation order)
			1	1	Both directions (no direction attribute)
5	7 to 6	Information in the link string data record that appears as the third record after the relevant link string data record			
6	5 to 4	Information in the link string data record that appears as the fourth record after the relevant link string data record			
7	3 to 2	Information in the link string data record that appears as the fifth record after the relevant link string data record			
8	1 to 0	Information in the link string data record that appears as the sixth record after the relevant link string data record			

Word 1

No.	bit	Description
1	15 to 14	Information in the link string data record that appears as the seventh record after the relevant link string data record
2	13 to 12	Information in the link string data record that appears as the eighth record after the relevant link string data record
3	11 to 10	Information in the link string data record that appears as the ninth record after the relevant link string data record
4	9 to 8	Information in the link string data record that appears as the tenth record after the relevant link string data record
5	7 to 6	Information in the link string data record that appears as the eleventh record after the relevant link string data record
6	5 to 4	Information in the link string data record that appears as the twelfth record after the relevant link string data record
7	3 to 2	Information in the link string data record that appears as the thirteenth record after the relevant link string data record
8	1 to 0	Information in the link string data record that appears as the fourteenth record after the relevant link string data record

(11) Facility Barycentric X-coordinate

No.	bit	Description		
1	15	Coordinate Validation Flag (12)	bit15	Meaning
			0	The facility barycentric coordinate is invalid.
			1	The facility barycentric coordinate is valid.
2	14 to 13	(RESERVED)		
3	12 to 0	X-coordinate Offset (13)		

(12) Coordinate Validation Flag

The handling by the flag setting status is as follows:

Coordinate validation flag (bit 15)	Meaning
0(2)	The Facility Barycentric (X, Y) value is invalid.
1(2)	The Facility Barycentric (X, Y) value is valid.

(13) X-coordinate Offset

This field is an offset for representing the integer part obtained by multiplying the normalized coordinate in the parcel by 4096.

This value indicates the offset from the normalized coordinate position of the node record (node in the link string data record in the road data) for accommodating the relevant guidance data. The value can be between -4096 and +4095.

(14) Facility Barycentric Y-coordinate

No.	bit	Description
1	15 to 13	(RESERVED)
2	12 to 0	Y-coordinate Offset (15)

(15) Y-coordinate Offset

This field indicates an offset for representing the integer part obtained by multiplying the normalized coordinate in the parcel by 4096.

This value indicates the offset from the normalized coordinate position of the node record (node in the link string data record in the road data) for accommodating the relevant guidance data to the facility barycentric. The value can be between -4096 and +4095.

(16) Optional X-coordinate

This field exists when the optional coordinate existence flag indicates "1(2): optional coordinate available."

No.	bit	Description
1	15 to 13	(RESERVED)
2	12 to 0	X-coordinate Offset (17)

(17) X-coordinate Offset

This field describes the coordinate defined by the coordinate type.

This field indicates an offset that represents the integer part obtained by multiplying the normalized coordinate in the parcel by 4096.

The value indicates the offset from the normalized coordinate position of the node record (node in the link string data record in the road data) for accommodating the relevant guidance data to the relevant position. The value can be between -4096 and +4095.

(18) Optional Y-coordinate

This field exists when the optional coordinate existence flag indicates "1(2): optional coordinate available."

No.	bit	Description				
1	15 to 13	Coordinate Type (19)	bit15	bit14	bit13	Meaning
			0	0	0	Center coordinate of the building or facility
			0	0	1	Symbol display coordinate
			0	1	0	(010(2) and after not defined)
2	12 to 0	Y-coordinate Offset (20)				

(19) Coordinate Type

This field describes the meaning of the optional coordinate value. The handling is as follows:

Setting value (bit15,14,13)	Meaning
(0,0,0)	Sets the geometric center coordinate (and representative point) of the building.
(0,0,1)	Sets the geometric center coordinate (and representative point) of the building.

(20) Y-coordinate Offset

This field describes the coordinate defined by the coordinate type.

This field indicates an offset for representing the integer part obtained by multiplying the normalized coordinate in the parcel by 4096. It indicates the offset from the normalized coordinate position of the node record (node in the link string data record in the road data) for accommodating the relevant guidance data to the relevant position. The value can be between -4096 and +4095.

(21) Offset to the String Data

This field exists when the string data existence flag indicates that string data offset information is available. The offset indicates the storage location of the string data record corresponding to the relevant building or facility. It represents the displacement from the beginning of the string data frame to the beginning of the relevant string data record.

(22) Offset to the Shape Data

This field exists when the shape data existence flag indicates that the shape data offset information is available. The offset indicates the storage location of the shape detail data record corresponding to the relevant building or facility. It represents the displacement from the beginning of the shape data frame to the beginning of the shape detail data record.

(23) Store Code

This field exists when the store code flag indicates that the store code information is available. It is omitted when this flag indicates that the store code information is not available.

8.4.1.8.1.1 Entrance and Exit Information

This information is created according to the number of building and facility data records in the basic distribution header.

name [Entrance and Exit Information]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	N	Number of Entrance and Exit Records		a
2	2	B1		Entrance and Exit Information Record List		a

8.4.1.8.1.1.1 Entrance and Exit Information Record

name [Entrance and Exit Information Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	B:B:B:B:N	Entrance and Exit Detail Information	(1)	a

(1) Entrance and Exit Detail Information

(1) Entrance and Exit Detail Information					
No.	bit	Description			
1	15 to 12	Identical Node Appearance Number (2)			
2	11 to 10	Type of the Accessible Direction	bit11	bit10	Meaning
			0	0	(RESERVED)
			0	1	Accessible only from the forward direction
			1	0	Accessible only from the backward direction
			1	1	Accessible from both directions (no direction attribute)
3	9 to 8	Entrance and Exit Type	bit9	bit8	Meaning
			0	0	(RESERVED)
			0	1	Exit
			1	0	Entrance
			1	1	Entrance and exit
4	7	Forward and Backward Direction Flag	bit7	Meaning	
			0	The distance indicates the forward direction of the link string.	
			1	The distance indicates the backward direction of the link string.	
5	6	Distance Unit Flag	bit6	Meaning	
			0	Unit for each bit (type 1)	
			1	Unit for each bit (type 2)	
6	5 to 0	Distance to the Entrance and Exit (3)			

(2) Identical Node Appearance Number

This field indicates the link string containing the entrance and exit as the identical node information appearance order in which the relevant additional information node is assigned number 0.

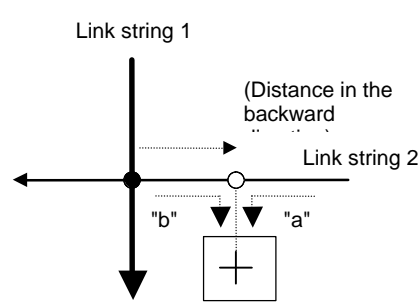
(3) Distance to the Entrance and Exit

This field describes the position from the applicable node to the entrance and exit point. The handling is as follows:

Distance unit flag (bit6)	(0) Type 1	(1) Type 2
Unit	2m	20m
Range of the value to be used	0 to 124m	0 to 1240m

Fractions less than the specified unit are rounded off. The distance is assumed to be unclear for 3F(16).

Example



- ← Forward direction of the link string
 - Node accommodating the relevant guidance data
 - Entrance and exit point
- The approach in the forward direction is possible in the a direction of link string 2.
The approach in the backward direction is possible in the b direction of link string 2.

