



If I could build only one field station that minimizes the total cost of the cable used, I would use Station 28 since it is the shortest path cost at 3902.

Shortest Path Edges: (Only Station 40)	Shortest Path Edges: (Only Station 28)	Shortest Path Edges: (Only Station 25)	Shortest Path Edges: (Only 14)	Shortest Path Edges: (Only 7)
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Total Cost for Shortest Path: 4567	Total Cost for Shortest Path: 3902	Total Cost for Shortest Path: 4378	Total Cost for Shortest Path: 4034	Total Cost for Shortest Path: 4273
Customer: 0 Distance: 185.0 Path: 2 -> 0	Customer: 0 Distance: 122.0 Path: 6 -> 0	Customer: 0 Distance: 120.0 Path: 2 -> 0	Customer: 0 Distance: 60.0 Path: 2 -> 0	Customer: 0 Distance: 52.0 Path: 6 -> 0
Customer: 1 Distance: 190.0 Path: 6 -> 1	Customer: 1 Distance: 123.0 Path: 6 -> 1	Customer: 1 Distance: 133.0 Path: 6 -> 1	Customer: 1 Distance: 73.0 Path: 6 -> 1	Customer: 1 Distance: 28.0 Path: 5 -> 1
Customer: 2 Distance: 155.0 Path: 3 -> 2	Customer: 2 Distance: 103.0 Path: 3 -> 2	Customer: 2 Distance: 90.0 Path: 3 -> 2	Customer: 2 Distance: 30.0 Path: 3 -> 2	Customer: 2 Distance: 65.0 Path: 3 -> 2
Customer: 3 Distance: 140.0 Path: 21 -> 3	Customer: 3 Distance: 88.0 Path: 21 -> 3	Customer: 3 Distance: 75.0 Path: 21 -> 3	Customer: 3 Distance: 15.0 Path: 14 -> 3	Customer: 3 Distance: 50.0 Path: 8 -> 3
Customer: 4 Distance: 167.0 Path: 16 -> 4	Customer: 4 Distance: 105.0 Path: 16 -> 4	Customer: 4 Distance: 140.0 Path: 5 -> 4	Customer: 4 Distance: 80.0 Path: 5 -> 4	Customer: 4 Distance: 31.0 Path: 7 -> 4
Customer: 5 Distance: 177.0 Path: 8 -> 5	Customer: 5 Distance: 110.0 Path: 8 -> 5	Customer: 5 Distance: 120.0 Path: 8 -> 5	Customer: 5 Distance: 60.0 Path: 8 -> 5	Customer: 5 Distance: 15.0 Path: 7 -> 5
Customer: 6 Distance: 172.0 Path: 8 -> 6	Customer: 6 Distance: 105.0 Path: 8 -> 6	Customer: 6 Distance: 115.0 Path: 8 -> 6	Customer: 6 Distance: 55.0 Path: 8 -> 6	Customer: 6 Distance: 35.0 Path: 5 -> 6
Customer: 7 Distance: 0.0 Path: 50 -> 7	Customer: 7 Distance: 0.0 Path: 50 -> 7	Customer: 7 Distance: 0.0 Path: 50 -> 7	Customer: 7 Distance: 0.0 Path: 50 -> 7	Customer: 7 Distance: 0.0 Path: 50 -> 7
Customer: 8 Distance: 147.0 Path: 32 -> 8	Customer: 8 Distance: 80.0 Path: 32 -> 8	Customer: 8 Distance: 90.0 Path: 21 -> 8	Customer: 8 Distance: 30.0 Path: 3 -> 8	Customer: 8 Distance: 35.0 Path: 7 -> 8
Customer: 9 Distance: 163.0 Path: 8 -> 9	Customer: 9 Distance: 96.0 Path: 8 -> 9	Customer: 9 Distance: 106.0 Path: 3 -> 9	Customer: 9 Distance: 46.0 Path: 3 -> 9	Customer: 9 Distance: 51.0 Path: 8 -> 9
Customer: 10 Distance: 185.0 Path: 12 -> 10	Customer: 10 Distance: 133.0 Path: 12 -> 10	Customer: 10 Distance: 120.0 Path: 12 -> 10	Customer: 10 Distance: 44.0 Path: 12 -> 10	Customer: 10 Distance: 95.0 Path: 12 -> 10
Customer: 11 Distance: 41.0 Path: 45 -> 11	Customer: 11 Distance: 99.0 Path: 45 -> 11	Customer: 11 Distance: 151.0 Path: 45 -> 11	Customer: 11 Distance: 182.0 Path: 45 -> 11	Customer: 11 Distance: 169.0 Path: 45 -> 11
Customer: 12 Distance: 163.0 Path: 3 -> 12	Customer: 12 Distance: 111.0 Path: 3 -> 12	Customer: 12 Distance: 98.0 Path: 3 -> 12	Customer: 12 Distance: 22.0 Path: 14 -> 12	Customer: 12 Distance: 73.0 Path: 3 -> 12
Customer: 13 Distance: 180.0 Path: 20 -> 13	Customer: 13 Distance: 161.0 Path: 10 -> 13	Customer: 13 Distance: 95.0 Path: 20 -> 13	Customer: 13 Distance: 64.0 Path: 15 -> 13	Customer: 13 Distance: 123.0 Path: 10 -> 13
Customer: 14 Distance: 0.0 Path: 50 -> 14	Customer: 14 Distance: 0.0 Path: 50 -> 14	Customer: 14 Distance: 0.0 Path: 50 -> 14	Customer: 14 Distance: 0.0 Path: 50 -> 14	Customer: 14 Distance: 0.0 Path: 50 -> 14
Customer: 15 Distance: 165.0 Path: 20 -> 15	Customer: 15 Distance: 141.0 Path: 12 -> 15	Customer: 15 Distance: 80.0 Path: 20 -> 15	Customer: 15 Distance: 36.0 Path: 14 -> 15	Customer: 15 Distance: 103.0 Path: 12 -> 15
Customer: 16 Distance: 127.0 Path: 27 -> 16	Customer: 16 Distance: 65.0 Path: 22 -> 16	Customer: 16 Distance: 126.0 Path: 17 -> 16	Customer: 16 Distance: 87.0 Path: 17 -> 16	Customer: 16 Distance: 25.0 Path: 7 -> 16
Customer: 17 Distance: 117.0 Path: 23 -> 17	Customer: 17 Distance: 38.0 Path: 28 -> 17	Customer: 17 Distance: 96.0 Path: 32 -> 17	Customer: 17 Distance: 57.0 Path: 32 -> 17	Customer: 17 Distance: 20.0 Path: 7 -> 17
Customer: 18 Distance: 100.0 Path: 29 -> 18	Customer: 18 Distance: 48.0 Path: 23 -> 18	Customer: 18 Distance: 75.0 Path: 21 -> 18	Customer: 18 Distance: 36.0 Path: 21 -> 18	Customer: 18 Distance: 45.0 Path: 32 -> 18
Customer: 19 Distance: 110.0 Path: 24 -> 19	Customer: 19 Distance: 92.0 Path: 24 -> 19	Customer: 19 Distance: 25.0 Path: 25 -> 19	Customer: 19 Distance: 23.0 Path: 14 -> 19	Customer: 19 Distance: 95.0 Path: 21 -> 19
Customer: 20 Distance: 140.0 Path: 19 -> 20	Customer: 20 Distance: 122.0 Path: 19 -> 20	Customer: 20 Distance: 55.0 Path: 19 -> 20	Customer: 20 Distance: 35.0 Path: 14 -> 20	Customer: 20 Distance: 125.0 Path: 19 -> 20
Customer: 21 Distance: 120.0 Path: 24 -> 21	Customer: 21 Distance: 68.0 Path: 18 -> 21	Customer: 21 Distance: 55.0 Path: 19 -> 21	Customer: 21 Distance: 16.0 Path: 14 -> 21	Customer: 21 Distance: 65.0 Path: 18 -> 21

Customer: 22 Distance: 112.0 Path: 27 -> 22	Customer: 22 Distance: 30.0 Path: 28 -> 22	Customer: 22 Distance: 124.0 Path: 17 -> 22	Customer: 22 Distance: 85.0 Path: 17 -> 22	Customer: 22 Distance: 48.0 Path: 17 -> 22
Customer: 23 Distance: 92.0 Path: 29 -> 23	Customer: 23 Distance: 18.0 Path: 28 -> 23	Customer: 23 Distance: 97.0 Path: 29 -> 23	Customer: 23 Distance: 66.0 Path: 18 -> 23	Customer: 23 Distance: 45.0 Path: 17 -> 23
Customer: 24 Distance: 75.0 Path: 29 -> 24	Customer: 24 Distance: 57.0 Path: 29 -> 24	Customer: 24 Distance: 60.0 Path: 19 -> 24	Customer: 24 Distance: 58.0 Path: 19 -> 24	Customer: 24 Distance: 75.0 Path: 18 -> 24
Customer: 25 Distance: 0.0 Path: 50 -> 25	Customer: 25 Distance: 0.0 Path: 50 -> 25	Customer: 25 Distance: 0.0 Path: 50 -> 25	Customer: 25 Distance: 0.0 Path: 50 -> 25	Customer: 25 Distance: 0.0 Path: 50 -> 25
Customer: 26 Distance: 115.0 Path: 31 -> 26	Customer: 26 Distance: 132.0 Path: 19 -> 26	Customer: 26 Distance: 30.0 Path: 25 -> 26	Customer: 26 Distance: 63.0 Path: 19 -> 26	Customer: 26 Distance: 135.0 Path: 19 -> 26
Customer: 27 Distance: 77.0 Path: 34 -> 27	Customer: 27 Distance: 43.0 Path: 28 -> 27	Customer: 27 Distance: 153.0 Path: 34 -> 27	Customer: 27 Distance: 120.0 Path: 22 -> 27	Customer: 27 Distance: 75.0 Path: 16 -> 27
Customer: 28 Distance: 0.0 Path: 50 -> 28	Customer: 28 Distance: 0.0 Path: 50 -> 28	Customer: 28 Distance: 0.0 Path: 50 -> 28	Customer: 28 Distance: 0.0 Path: 50 -> 28	Customer: 28 Distance: 0.0 Path: 50 -> 28
Customer: 29 Distance: 60.0 Path: 35 -> 29	Customer: 29 Distance: 42.0 Path: 28 -> 29	Customer: 29 Distance: 65.0 Path: 30 -> 29	Customer: 29 Distance: 73.0 Path: 24 -> 29	Customer: 29 Distance: 77.0 Path: 23 -> 29
Customer: 30 Distance: 88.0 Path: 36 -> 30	Customer: 30 Distance: 77.0 Path: 29 -> 30	Customer: 30 Distance: 30.0 Path: 25 -> 30	Customer: 30 Distance: 108.0 Path: 29 -> 30	Customer: 30 Distance: 112.0 Path: 29 -> 30
Customer: 31 Distance: 95.0 Path: 37 -> 31	Customer: 31 Distance: 131.0 Path: 37 -> 31	Customer: 31 Distance: 21.0 Path: 25 -> 31	Customer: 31 Distance: 83.0 Path: 26 -> 31	Customer: 31 Distance: 155.0 Path: 26 -> 31
Customer: 32 Distance: 115.0 Path: 18 -> 32	Customer: 32 Distance: 48.0 Path: 23 -> 32	Customer: 32 Distance: 81.0 Path: 21 -> 32	Customer: 32 Distance: 42.0 Path: 21 -> 32	Customer: 32 Distance: 30.0 Path: 7 -> 32
Customer: 33 Distance: 55.0 Path: 39 -> 33	Customer: 33 Distance: 118.0 Path: 39 -> 33	Customer: 33 Distance: 85.0 Path: 37 -> 33	Customer: 33 Distance: 143.0 Path: 38 -> 33	Customer: 33 Distance: 164.0 Path: 39 -> 33
Customer: 34 Distance: 52.0 Path: 41 -> 34	Customer: 34 Distance: 30.0 Path: 28 -> 34	Customer: 34 Distance: 128.0 Path: 35 -> 34	Customer: 34 Distance: 136.0 Path: 35 -> 34	Customer: 34 Distance: 100.0 Path: 27 -> 34
Customer: 35 Distance: 30.0 Path: 40 -> 35	Customer: 35 Distance: 25.0 Path: 28 -> 35	Customer: 35 Distance: 95.0 Path: 29 -> 35	Customer: 35 Distance: 103.0 Path: 29 -> 35	Customer: 35 Distance: 107.0 Path: 29 -> 35
Customer: 36 Distance: 55.0 Path: 39 -> 36	Customer: 36 Distance: 68.0 Path: 35 -> 36	Customer: 36 Distance: 63.0 Path: 30 -> 36	Customer: 36 Distance: 110.0 Path: 29 -> 36	Customer: 36 Distance: 114.0 Path: 29 -> 36
Customer: 37 Distance: 60.0 Path: 39 -> 37	Customer: 37 Distance: 96.0 Path: 36 -> 37	Customer: 37 Distance: 50.0 Path: 25 -> 37	Customer: 37 Distance: 118.0 Path: 31 -> 37	Customer: 37 Distance: 142.0 Path: 30 -> 37
Customer: 38 Distance: 80.0 Path: 33 -> 38	Customer: 38 Distance: 121.0 Path: 37 -> 38	Customer: 38 Distance: 61.0 Path: 31 -> 38	Customer: 38 Distance: 118.0 Path: 26 -> 38	Customer: 38 Distance: 167.0 Path: 37 -> 38
Customer: 39 Distance: 30.0 Path: 40 -> 39	Customer: 39 Distance: 93.0 Path: 36 -> 39	Customer: 39 Distance: 80.0 Path: 37 -> 39	Customer: 39 Distance: 135.0 Path: 36 -> 39	Customer: 39 Distance: 139.0 Path: 36 -> 39
Customer: 40 Distance: 0.0 Path: 50 -> 40	Customer: 40 Distance: 0.0 Path: 50 -> 40	Customer: 40 Distance: 0.0 Path: 50 -> 40	Customer: 40 Distance: 0.0 Path: 50 -> 40	Customer: 40 Distance: 0.0 Path: 50 -> 40
Customer: 41 Distance: 27.0 Path: 40 -> 41	Customer: 41 Distance: 55.0 Path: 34 -> 41	Customer: 41 Distance: 130.0 Path: 35 -> 41	Customer: 41 Distance: 138.0 Path: 35 -> 41	Customer: 41 Distance: 125.0 Path: 34 -> 41
Customer: 42 Distance: 72.0 Path: 34 -> 42	Customer: 42 Distance: 50.0 Path: 34 -> 42	Customer: 42 Distance: 148.0 Path: 34 -> 42	Customer: 42 Distance: 146.0 Path: 27 -> 42	Customer: 42 Distance: 101.0 Path: 27 -> 42
Customer: 43 Distance: 41.0 Path: 41 -> 43	Customer: 43 Distance: 67.0 Path: 34 -> 43	Customer: 43 Distance: 144.0 Path: 41 -> 43	Customer: 43 Distance: 152.0 Path: 41 -> 43	Customer: 43 Distance: 135.0 Path: 42 -> 43
Customer: 44 Distance: 82.0 Path: 47 -> 44	Customer: 44 Distance: 74.0 Path: 42 -> 44	Customer: 44 Distance: 159.0 Path: 48 -> 44	Customer: 44 Distance: 170.0 Path: 42 -> 44	Customer: 44 Distance: 125.0 Path: 42 -> 44

Customer: 45 Distance: 20.0 Path: 40 -> 45	Customer: 45 Distance: 78.0 Path: 41 -> 45	Customer: 45 Distance: 130.0 Path: 46 -> 45	Customer: 45 Distance: 161.0 Path: 41 -> 45	Customer: 45 Distance: 148.0 Path: 41 -> 45
Customer: 46 Distance: 28.0 Path: 40 -> 46	Customer: 46 Distance: 108.0 Path: 45 -> 46	Customer: 46 Distance: 100.0 Path: 39 -> 46	Customer: 46 Distance: 155.0 Path: 39 -> 46	Customer: 46 Distance: 159.0 Path: 39 -> 46
Customer: 47 Distance: 56.0 Path: 43 -> 47	Customer: 47 Distance: 82.0 Path: 43 -> 47	Customer: 47 Distance: 159.0 Path: 43 -> 47	Customer: 47 Distance: 167.0 Path: 43 -> 47	Customer: 47 Distance: 137.0 Path: 42 -> 47
Customer: 48 Distance: 43.0 Path: 46 -> 48	Customer: 48 Distance: 111.0 Path: 45 -> 48	Customer: 48 Distance: 115.0 Path: 46 -> 48	Customer: 48 Distance: 170.0 Path: 46 -> 48	Customer: 48 Distance: 174.0 Path: 46 -> 48
Customer: 49 Distance: 63.0 Path: 46 -> 49	Customer: 49 Distance: 138.0 Path: 33 -> 49	Customer: 49 Distance: 105.0 Path: 33 -> 49	Customer: 49 Distance: 163.0 Path: 38 -> 49	Customer: 49 Distance: 184.0 Path: 33 -> 49