新建赣深铁路塘厦至深圳北段光明城站位于深圳市光明区,站场规模为2 台4线,位于既有广深港站场的东侧,站台宽8m,长450m,站场采用高架 轨道桥架空。新建光明城站部分位于赣深站场正下方,既有站房东侧;部分 位于广深港站场正下方,既有站房北侧。光明城站预估总最高聚集人数为2000 人,按中型铁路旅客站房设计。新建光明城站建筑面积为14670m²,既有光 明城站改造面积3957.6m²。

Guangmingcheng Station of Dongguan Tangxia to North Shenzhen Section of the newly-built Ganzhou-Shenzhen High-Speed Railway, situates in Guangming District, Shenzhen City. It is set with 2 platforms and 4 tracks, where the platform (8 m wide and 450 m long) is located at the east side of the existing station of Guangzhou-Shenzhen-Hong Kong High-Speed Railway, and constructed with elevated track bridges. A part of the newly-built Guangmingcheng Station is located directly under the station yard of Ganzhou-Shenzhen High-Speed Railway, and at the east side of the existing station building; and the other part is located directly under the station yard of Ganzhou-Shenzhen High-Speed Railway and at the north side of the existing station building. The maximum number of passengers gathered at Guangmingcheng Station is estimated to be 2,000, so it was designed as a medium-sized railway station. The construction area of the newly-built Guangmingcheng Station reaches 14,670 m², with the reconstruction area of the existing station of 3,957.6 m².



光明城站站房鸟瞰效果图 Aerial View of Guangmingcheng Station

一、车站总平面布置 General Layout of the Station

1)新建光明城站站房中心里程 DK422+149.43,站台中心里程 DK422+259.57.相距 110.14m。

The mileage at the center of the station building of the newly-built Guangmingcheng Station is DK422+149.43, and the mileage at the center of the platform is DK422+259.57, with a distance of 110.14 m.

2)与既有广深港光明城站站场一致,从 DK422+375.880 至 DK422+484.57,约 108 米范围内,站台从桥式站场过渡至路基站场。

The platform transitions from the bridge station to subgrade station within a range of about 108 m from DK422+375.880 to DK422+484.57, as being consistent with the existing Guangmingcheng Station of Guangzhou-Shenzhen-Hong Kong High-speed Railway.

3)光明城站站房共设置2组进站口,1组出站口。

There are 2 sets of entrances and 1 set of exits in Guangmingcheng Station.

赣深铁路塘厦至深圳北段光明城站概况

Overview of Guangmingcheng Station of Dongguan Tangxia to North Shenzhen Section

4)新建站房室内、外地面竖向标高系统与既有站保持一致,车站站厅±0标高 41.05,入口前广场规划标高 40.60。

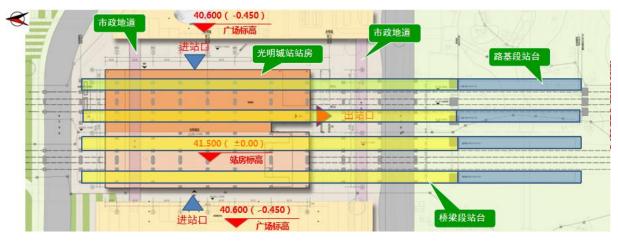
The indoor and outdoor vertical elevation system of the newly-built station building is consistent with that of the existing station; the \pm 0 elevation of the station hall is 41.05 m, and the planned elevation of the square in front of the entrance is 40.60 m.

5)两条涉铁市政地道从站房南北两侧桥梁下方穿越。

Two tunnels involving the railway pass under the bridges at the north and south sides of the station building.

6)全线初步设计中本站批复有 5000 m²铁路自营停车场,根据深圳市与广铁 集团达成的初步协议,停车场纳入到站房东西两侧商业综合体规划中一并考 虑。

In the preliminary design of the railway, a self-operated parking lot of 5,000 m² was approved; according to the preliminary agreement made between Shenzhen Government and Guangzhou Railway Group, the parking lot will be included in the planning of the commercial complex at the east and west sides of the station building.



总平面图 General Layout

二、功能分区与布局 Zoning & Layout

1) 平面布局 Layout Plan

本次设计将两座车站融合成一个整体设计考虑。需对既有站房进行适应性改造。两座站房候车区域打通,对既有站非付费区进行改造,形成一个完整的候车厅。完整的候车厅面积 7100 m²。候车厅内两组进、出楼扶梯同方向布置,朝向站房南侧(与既有站楼扶梯布置方向不同)。两座站房中部连接区域形成 8.95m 宽光通廊。

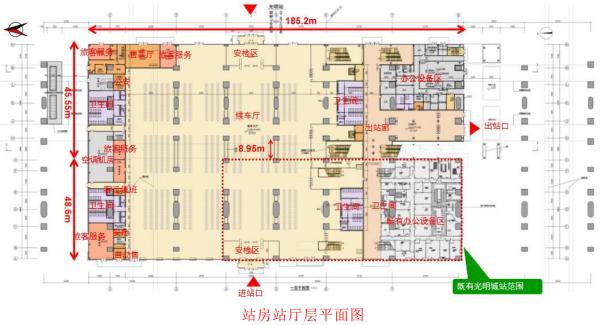
This design shall be conducted by taking the two stations as a whole. Adaptive reconstruction of the existing station shall be performed; merge the waiting areas of the two stations, and transform the non-paying area of the existing station, to form a complete waiting hall (7,100 m²). The two sets of escalators in the waiting hall shall be arranged in the same direction, facing the south side of the station building (different from the direction of existing escalators). The connecting area between two station buildings shall form a lighting corridor of 8.95 m in width.

对既有站付费区进行改造与新建站形成完整出站廊,既有卫生间作为出站卫生间使用。

Reconstruct the paying area of existing station to form a complete exit gallery with the newly-built station, and its existing toilets will be used for the exit area.

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Overview of Guangmingcheng Station of Dongguan Tangxia to North Shenzhen Section



印历如门云 1 画图 Floor Plan of the Station Hall

2) 剖面设计 Section Design

站房一层室内地坪标高±0.000 m(绝对标高 41.050 m),夹层标高 5.400m, 一层候车厅室内吊顶标高 7.800m,采光通廊最高点标高 16.20m。售票厅吊顶 高为 5.400m。

The interior floor elevation at the first floor of the station building is ± 0.000 m (absolute elevation: 41.050 m), the elevation of the interlayer is 5.400 m, the ceiling elevation of the waiting hall at the first floor is 7.800 m, and the elevation of the highest point of the lighting corridor is 16.20 m. The height of ceiling of the booking hall is 5.400 m.

1) 站房平台室外标高-0.450m(40.600m)

Outdoor elevation of the station platform is -0.450 m (40.600 m)

2) 站房一层室内地坪标高±0.000m(41.050m)

The ground elevation on the first floor of the station building is ± 0.000 m (41.050 m)

3) 站房一层夹层标高 5.400m(46.000m)

The elevation of the interlayer on the first floor of the station building is

5.400 m (46.000 m)

4) 轨道桥下屋面最高点标高 10.300m (51.550m)

The elevation at the highest point of the ceiling under the railway bridge is

10.300 m (51.550 m)

5) 轨顶标高 19.100m(60.150m)

The elevation of the rail top is 19.100 m (60.150 m)

6) 站台标高 20.350m (61.400m)

The elevation of the platform is 20.350 m (61.400 m)

7) 站房建筑檐口高度 24.250m (65.300m)

The height of eaves of the station building is 24.250 m (65.300 m)

8)车站最高点高度 34.000m (75.050m)

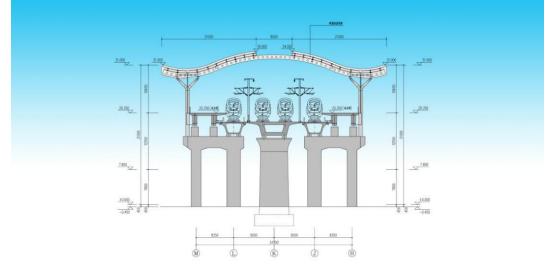
The highest point of the station is 34.000 m (75.050 m)



Section 1

赣深铁路塘厦至深圳北段光明城站概况

Overview of Guangmingcheng Station of Dongguan Tangxia to North Shenzhen Section



剖面图 2

Section 2