



TRANSPORT NETWORK
EXTENSION PLAN 2007-2011



Comunidad de Madrid

CONSEJERÍA DE TRANSPORTES
E INFRAESTRUCTURAS

- **DESCRIPTION**
- **MetroBUS GENERAL PLAN**
- **GENERAL OBJECTIVES**
- **SYSTEM DESCRIPTION**
- **MB1 SAN SEBASTIÁN DE LOS REYES – ALGETE**
 - a.- INFORMATION
 - b.- WORK PLAN
- **MB2 TORREJÓN DE ARDOZ – BARAJAS**
 - a.- INFORMATION
 - b.- WORK PLAN
- **MB3 ALCORCÓN – VILLAVICIOSA DE ODÓN**
 - a.- INFORMATION
 - b.- WORK PLAN
- **MB4 ARROYOMOLINOS – XANADÚ**
 - a.- INFORMATION
 - b.- WORK PLAN

DESCRIPTION

Metro Network Extension Plan 2003-2007 included the construction of the first Tram (Light Rail) three lines in the Autonomous Community Madrid. The Tram is a versatile means of transport, adaptable in the urban geography.

The new reality in our Region and the necessity to look for optimum solutions for the mobility of Madrid people, it is advisable to committed as well for the Metrobus as a new means of transport that complement the wide Madrid transport network.

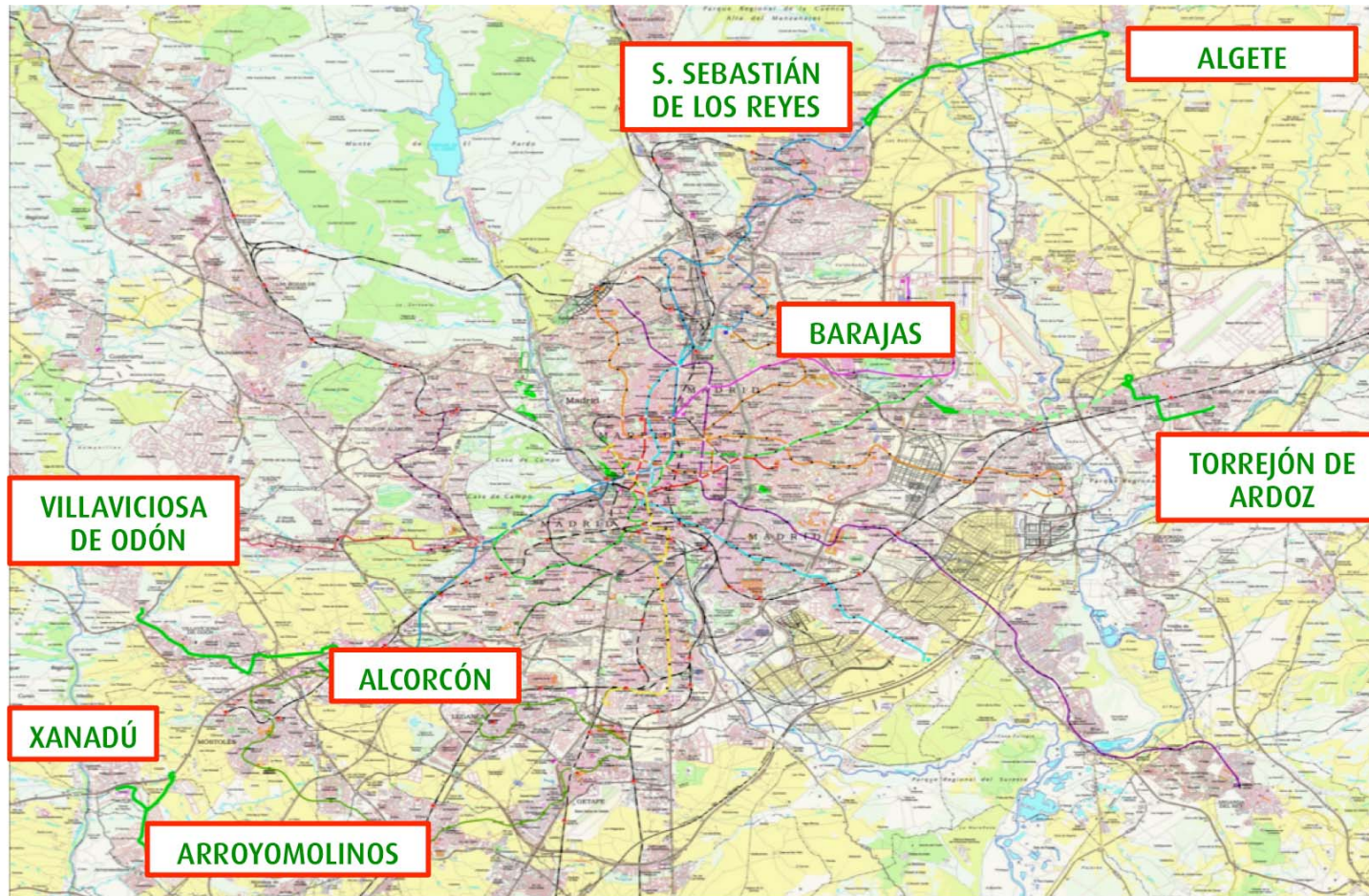
Even though their systems are different, they do have some matching points with the Tram, the reserved platform, priority on the signals, communications, SAE, designed bus stops, closed-circuit television, control office.

DESCRIPTION

Metrobus, is a surface mean of transport, using new buses with greater capacity than the conventional buses, and its routes will be reserve to exclusive platforms, providing the following benefits:

- Requires less investment in infrastructure and rolling stock.
- Lower maintenance and running cost.
- Are more flexible, as allows to partially diversify the network to serve the border zone without the need of a reserved platform.
- Can be use, for other kinds of vehicles (ambulance, fireman, taxis, etc).
- The temporary interruption of a stretch for any cause (works, breakdown, demonstration, etc.),does not imply closing the line.

During this Plan, this mean of transport will be extended to the outskirts of Madrid: Algete, San Sebastián de los Reyes, Villaviciosa de Odón, Torrejón de Ardoz y Arroyomolinos.



OBJETIVOS GENERALES

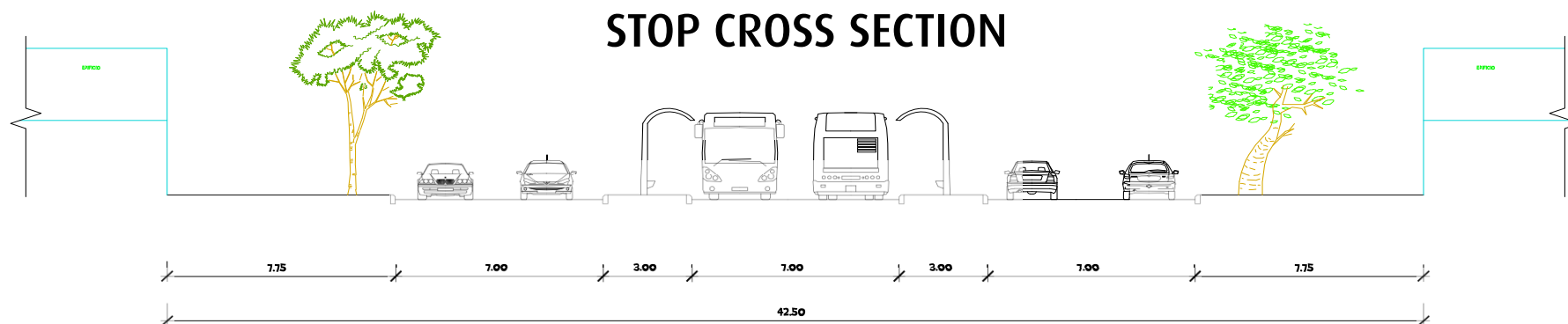
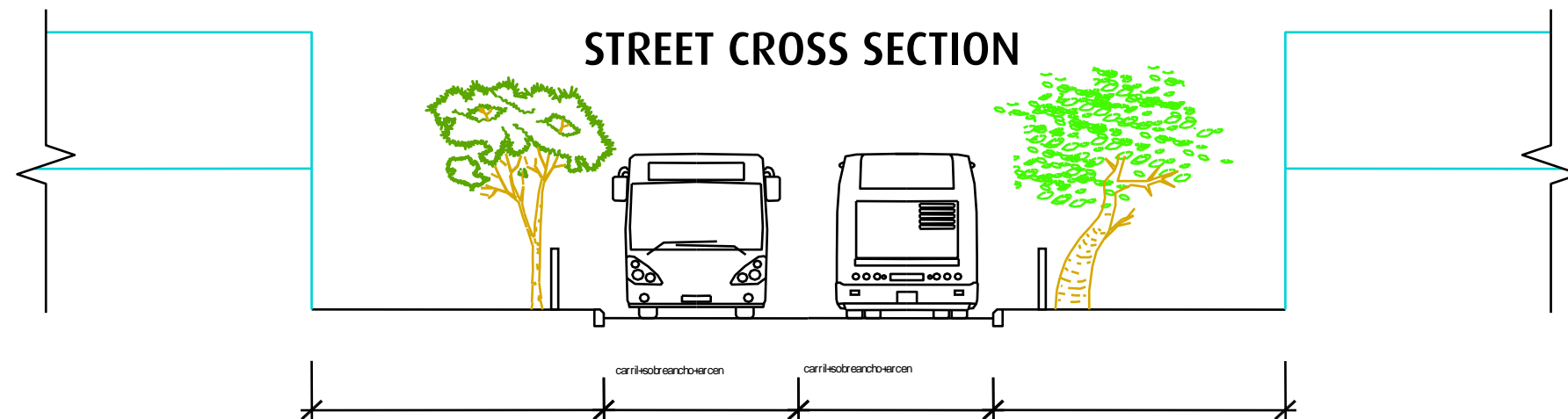
- **LINKING THE COMMUNITY MUNICIPALITIES WITH THE GREATER TRANSPORT SYSTEMS OF MADRID METROPOLITAN AREA:**
 - SUBURBAN TRAINS
 - METRO
 - MINISTRY OF FOMENTO RESERVED PLATFORMS IN THE NATIONAL HIGHWAYS

- **INCLUSION OF THIS OBJECTIVE IN ALL THE PROJECT STAGES:**
 - BASIC PROJECT AND/OR ENVIRONMENTAL IMPACT ASSESSMENT
 - WRITE A SPECIAL INFRASTRUCTURES PLAN
 - ENVIRONMENTAL IMPACT STUDY
 - PROJECT OF CONSTRUCTION CIVIL WORKS
 - INSTALLATION PROJECT

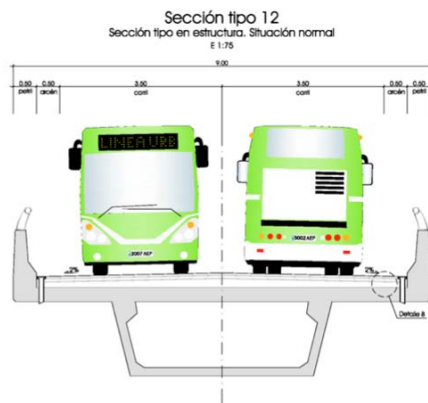
SYSTEM DESCRIPTION

- **SURFACE URBAN TRANSPORT SYSTEM**
- **RESERVED PLATFORM FOR BUSES:**
 - DIVIDED FROM THE REST OF THE TRAFFICS
- **MAIN CHARACTERISTIC:**
 - QUALITY LEVEL NEAR TO TRAM
 - FEWER COST
 - HIGHER VERSATILITY
 - HIGH FREQUENCY OF SERVICES
 - TRAFFIC LIGHTS PRIORITY IN JUNCTIONS: GREEN LIGHT
 - UNIVERSAL ACCESSIBILITY TO THE SYSTEM (STOPS & VEHICLE)

CROSS SECTION



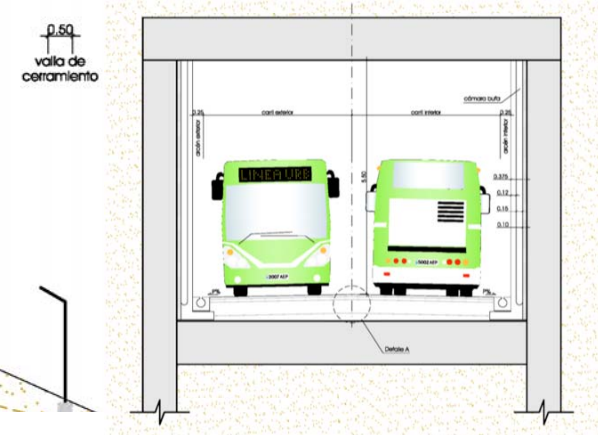
BRIDGE CROSS SECTION



SUBGRADE CROSS SECTION



TUNNEL CROSS SECTION



MB 1: SAN SEBASTIÁN DE LOS REYES - ALGETE

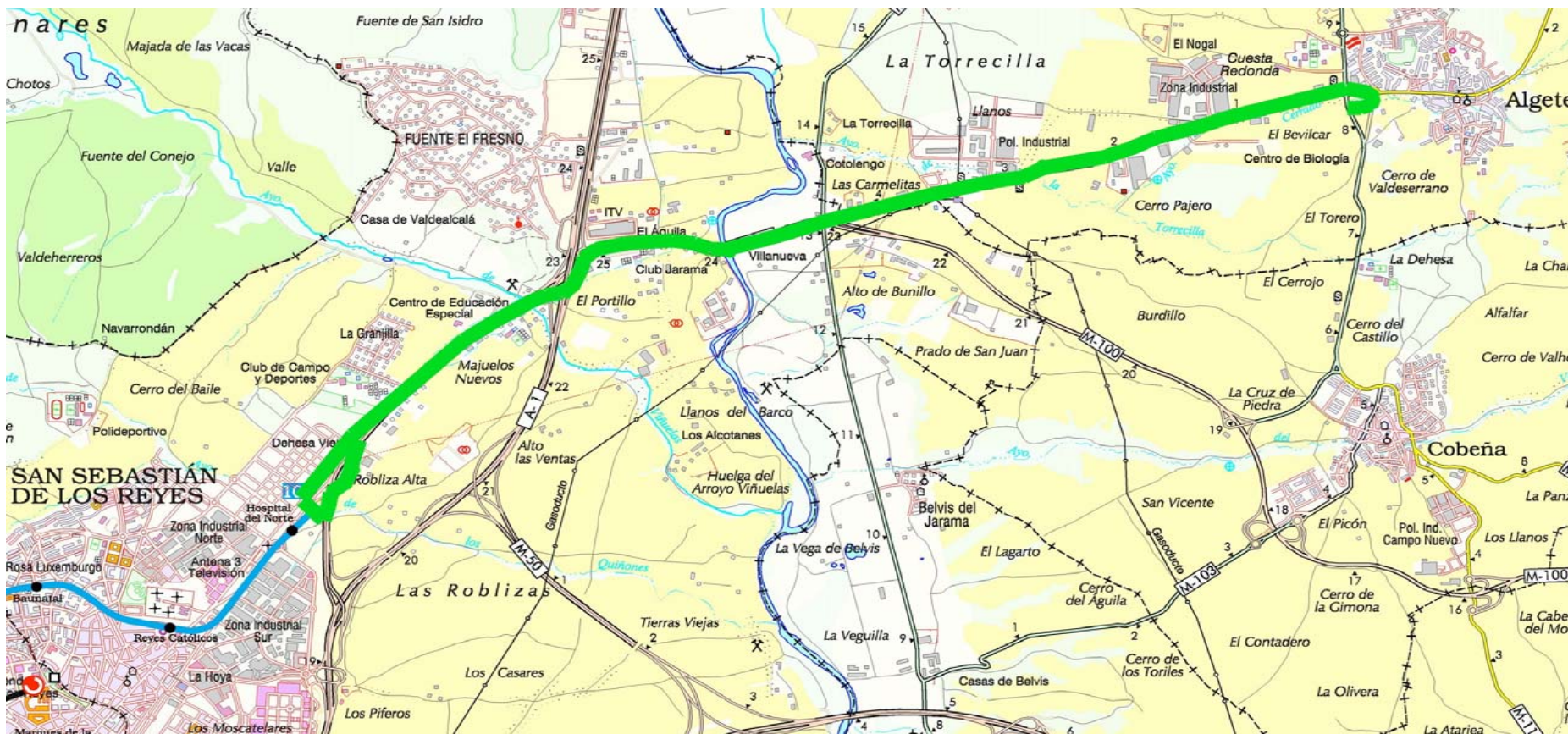
a.- TECHNICAL ESPECIFICATION

- **PROGRAM:** METROBUS.
- **WORKS:** New line MB1 between Algete & San Sebastián de los Reyes.
- **DESCRIPTION:** The new platform will start in Algete by the M106, and then take the M100 and following the A1 will enter in San Sebastian de los Reyes connecting with Metronorte.
- **OBJECTIVES:** Provide Algete with a powerful public transport, linking up with great transport systems, (Metro & suburban trains) as with the new platform, carry out for the Ministry of Fomento in the A1.
- **PERIOD:** 2007-2011.
- **SERVED MUNICIPALITIES:** Algete & San Sebastián de los Reyes.
- **SERVED POPULATION:** 90.000 inhabitants.
- **LENGHT:** 10,68 km.
- **COST:** 170,88 M€.
- **OBSERVATIONS:** Possible future connection with the new platform carry out by the Ministry of Fomento in the A1.



MB 1: SAN SEBASTIÁN DE LOS REYES - ALGETE

b.- PLAN



MB 2: TORREJÓN DE ARDOZ - BARAJAS**a.- TECHNICAL ESPECIFICATION**

- **PROGRAM:** METROBUS.
- **WORKS:** New line between Torrejón de Ardoz & Barajas.
- **DESCRIPTION:** The line will start in Barajas, Madrid municipality, continues to the A-2, entering in Torrejón de Ardoz, where links with Metro-train and it is allocated through the south municipality from west to east.
- **OBJECTIVES:** Provides with a transversal public transport system connecting Torrejón de Ardoz with Barajas.
- **PERIOD:** 2007-2011.
- **SERVED MUNICIPALITIES:** Madrid, Barajas district & Torrejón de Ardoz.
- **SERVE POPULATION:** 80.000 inhabitants.
- **LENGHT:** 11,0 km.
- **COST:** 176,0 M€.



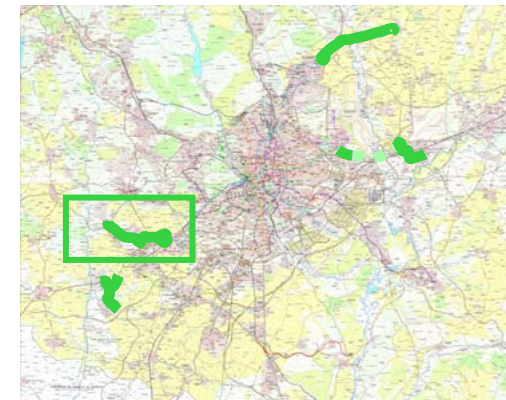
MB 2: TORREJÓN DE ARDOZ – BARAJAS b.- PLAN



MB 3: ALCORCÓN – VILLAVICIOSA DE ODÓN

a.- TECHNICAL ESPECIFICATION

- **PROGRAM:** METROBUS.
- **WORKS:** New line MB3 between Alcorcón & Villaviciosa de Odón.
- **DESCRIPTION:** The route of the new line follows the road M501 to connect both municipalities, starting from the proximity of the suburban train interchange and Metrosur, Alcorcón Central.
- **TYPES OF WORK:** METROBUS.
- **OBJECTIVES:** Provide Villaviciosa with a powerful transversal public transport system, linking up with great transport systems, (Metro & suburban trains) in Alcorcón.
- **PERIOD:** 2007-2011.
- **SERVED MUNICIPALITIES:** Alcorcón & Villaviciosa de Odón.
- **SERVED POPULATION:** 30.000 inhabitants.
- **LENGHT:** 11,4 km.
- **COST:** 144,0 M€.
- **OBSERVATIONS:** Future connection with the new bus platform carry out by the Ministry of Fomento in the A5.



MB 3: ALCORCÓN – VILLAVICIOSA DE ODÓN

b.- PLAN



MB 4: ARROYOMOLINOS - XANADÚ

a.- TECHNICAL ESPECIFICATION

- **PROGRAM:** METROBUS.
- **WORKS:** New line MB4 between Arroyomolinos & Xanadú.
- **DESCRIPTION:** It will link Arroyomolinos municipality with the new suburban train line and the future bus platform carry out by the Ministry in the A5.
- **TYPES OF WORK:** METROBUS.
- **OBJECTIVES:** Provide Arroyomolinos with a powerful transversal public transport system, linking up with great transport systems, suburban trains and the new bus platform carry out by the Ministry of Fomento in the A5.
- **PERIOD:** 2007-2011.
- **SERVED MUNICIPALITY:** Arroyomolinos.
- **SERVED POPULATION:** 20.000 inhabitants.
- **LENGHT:** 7,15 km.
- **COST:** 96,0 M€.



