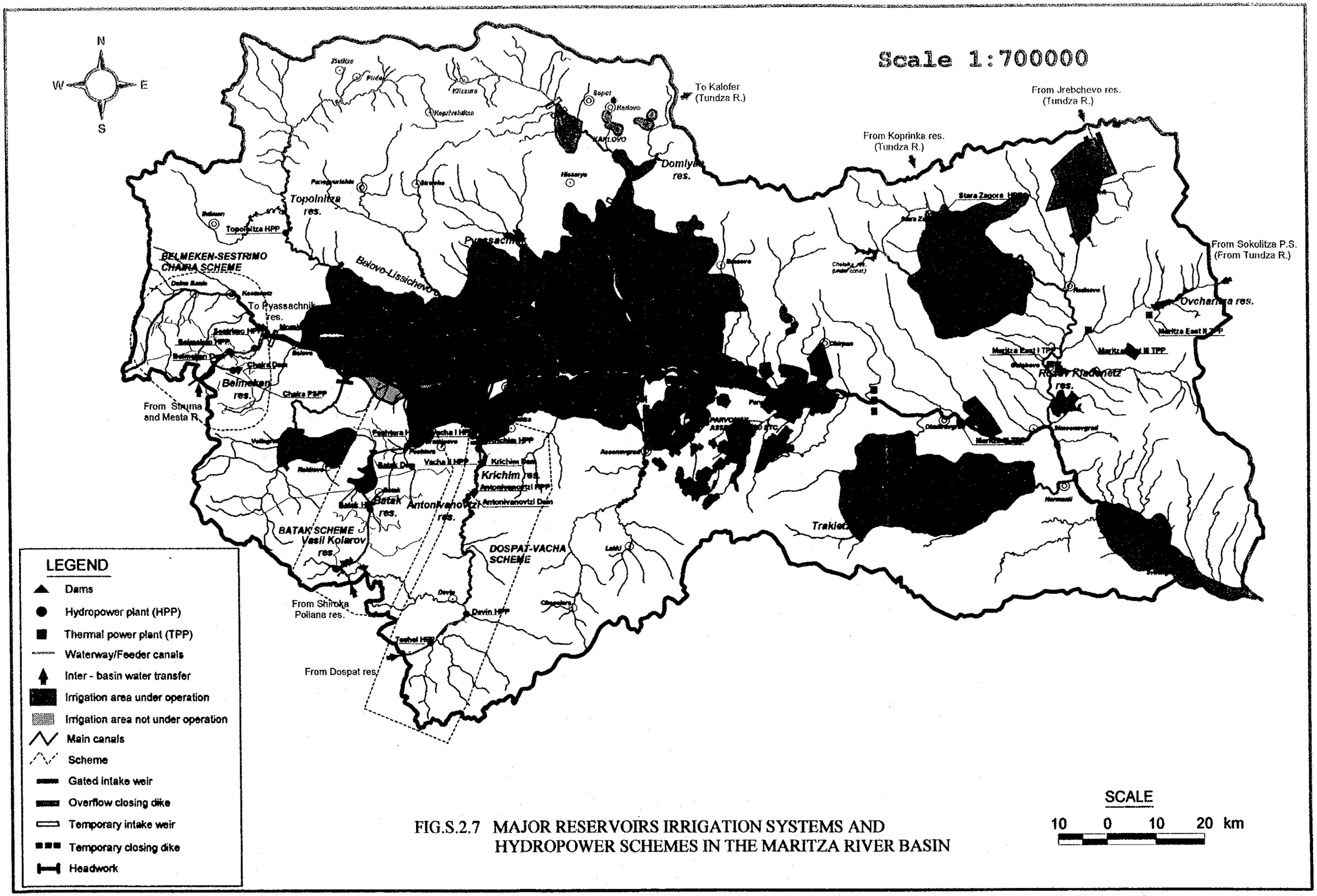
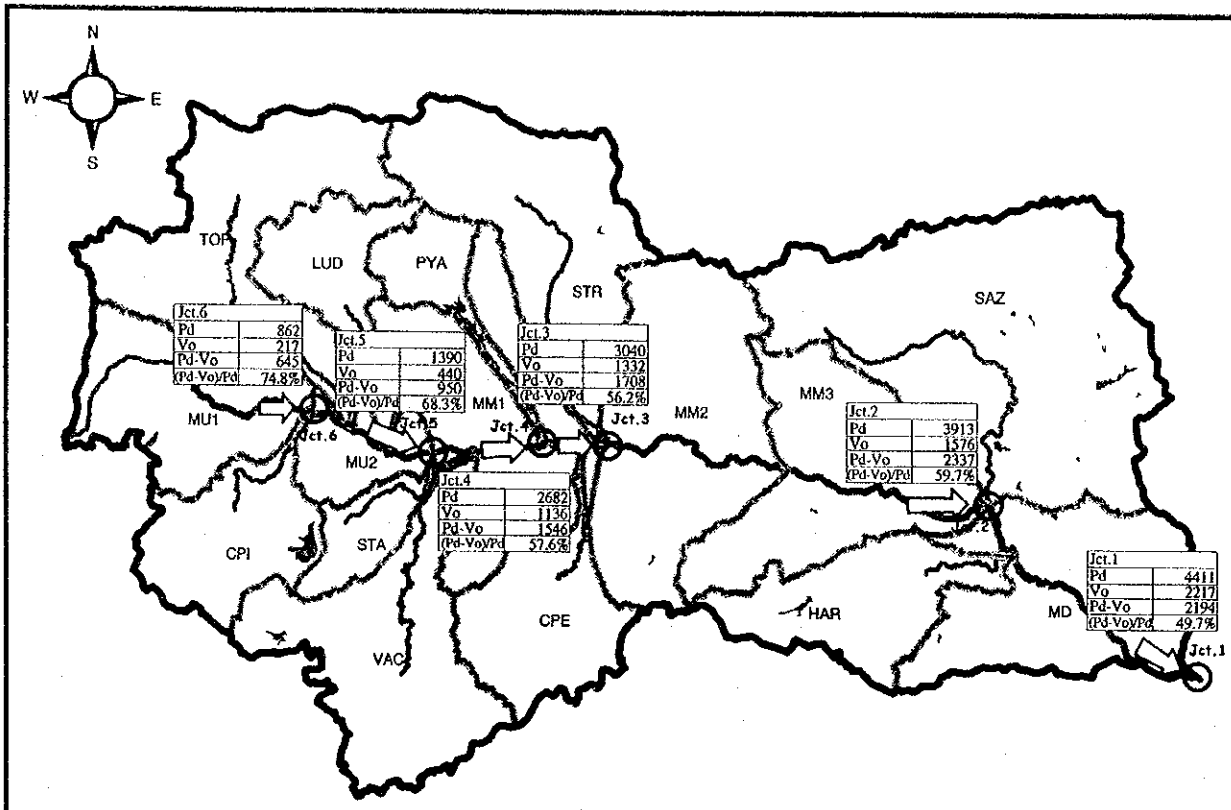
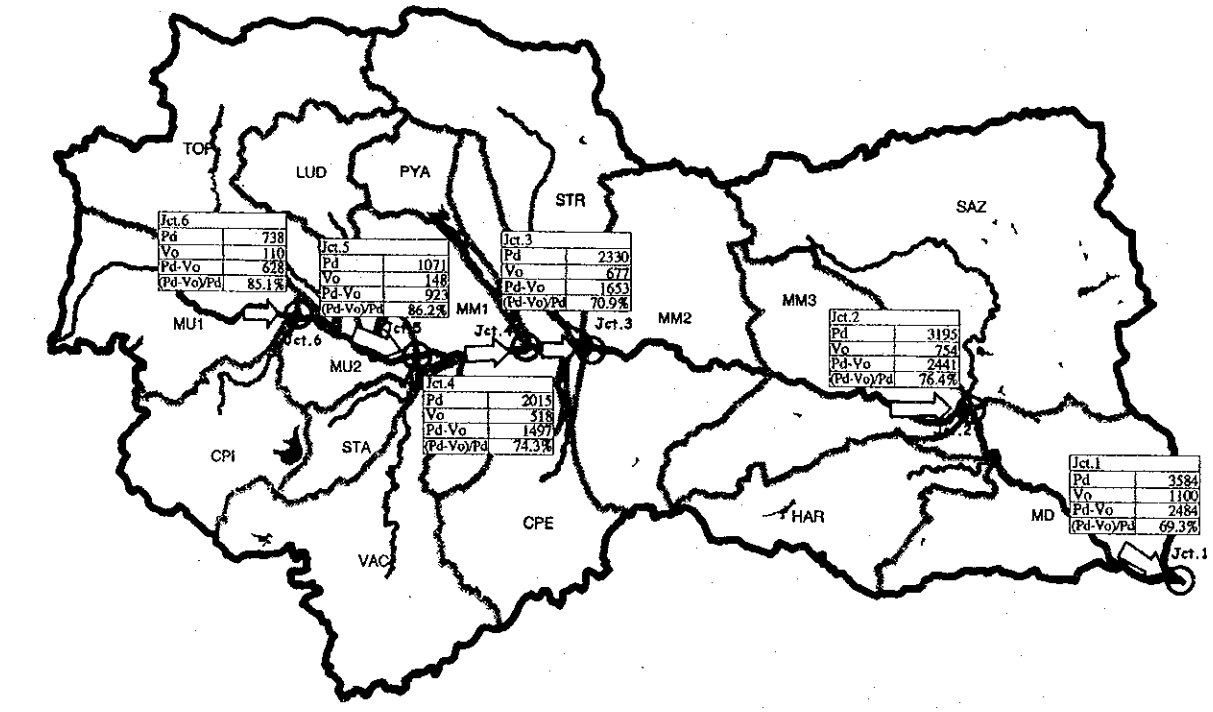


FIG.S.2.7 MAJOR RESERVOIRS IRRIGATION SYSTEMS AND HYDROPOWER SCHEMES IN THE MARITZA RIVER BASIN


Ivaylovgrad
Arda
Dospat
Dospat
Topolnitza
Lesichevo
Lesichevo
Varvara
Varvara
Pashe Arc
Pashe Arc
Eni Arc
Eni Arc
Stryama
Stryama
Pazardjik
Pazardjik
Pazardjik
Irrigation Area
Pazardjik
Irrigation Area
Pazardjik
Irrigation Area



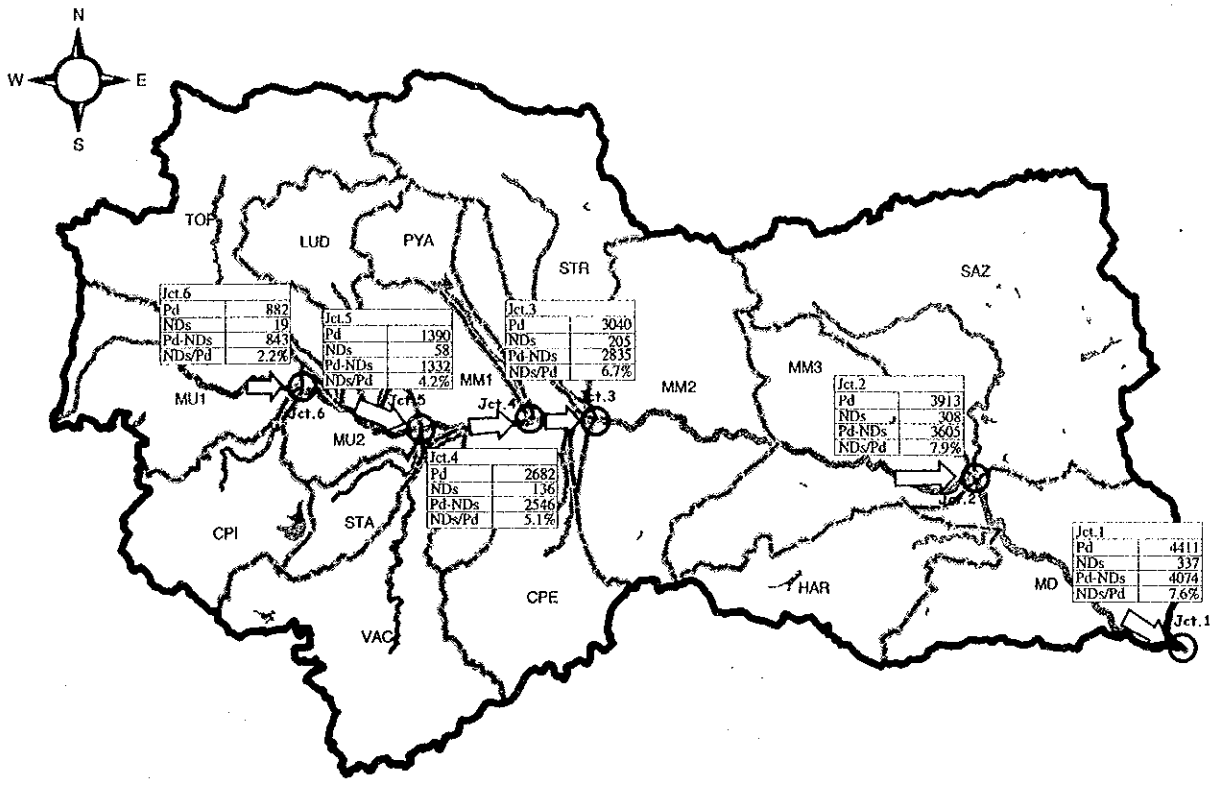
ANNUAL BALANCE IN 1995 (AVERAGE YEAR)



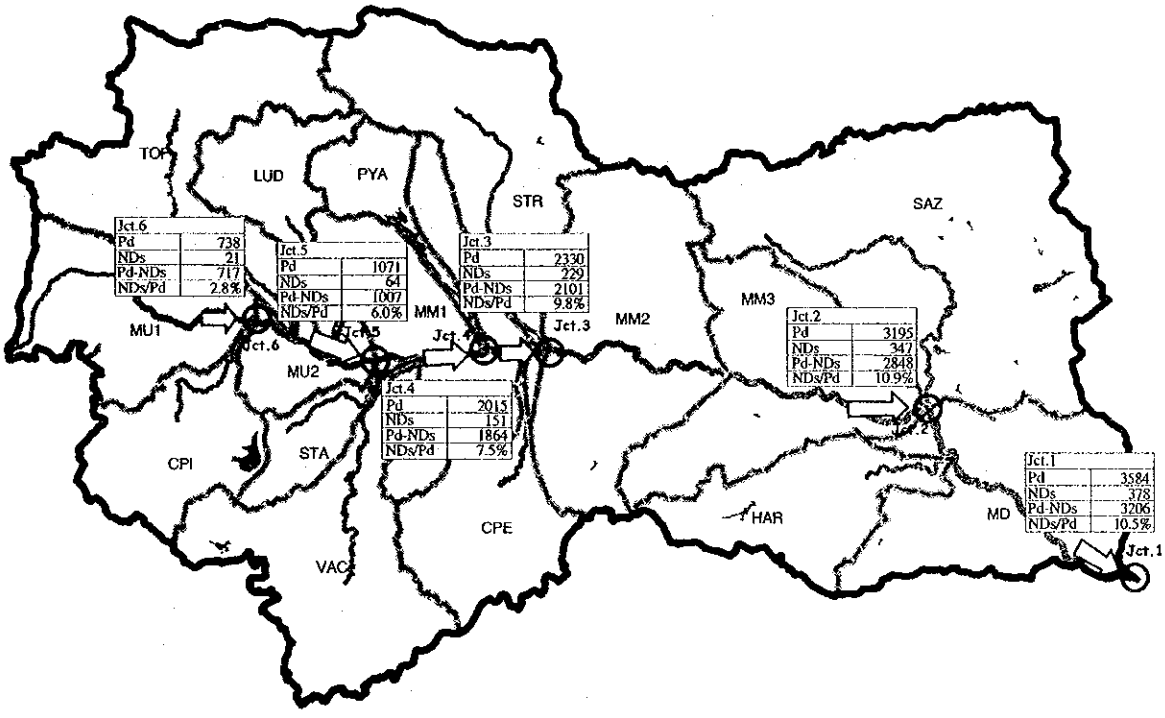
ANNUAL BALANCE IN 1994 (4-YEAR DROUGHT)

Pd : Surface water potential with major dams (mil.m³/year)
Vo : Observed discharge volume (mil.m³/year)
Pd-Vo/Pd : utilization rate of surface water (%)

FIG.S.2.8 PRESENT SURFACE WATER BALANCE BASED ON THE OBSERVED DISCHARGE



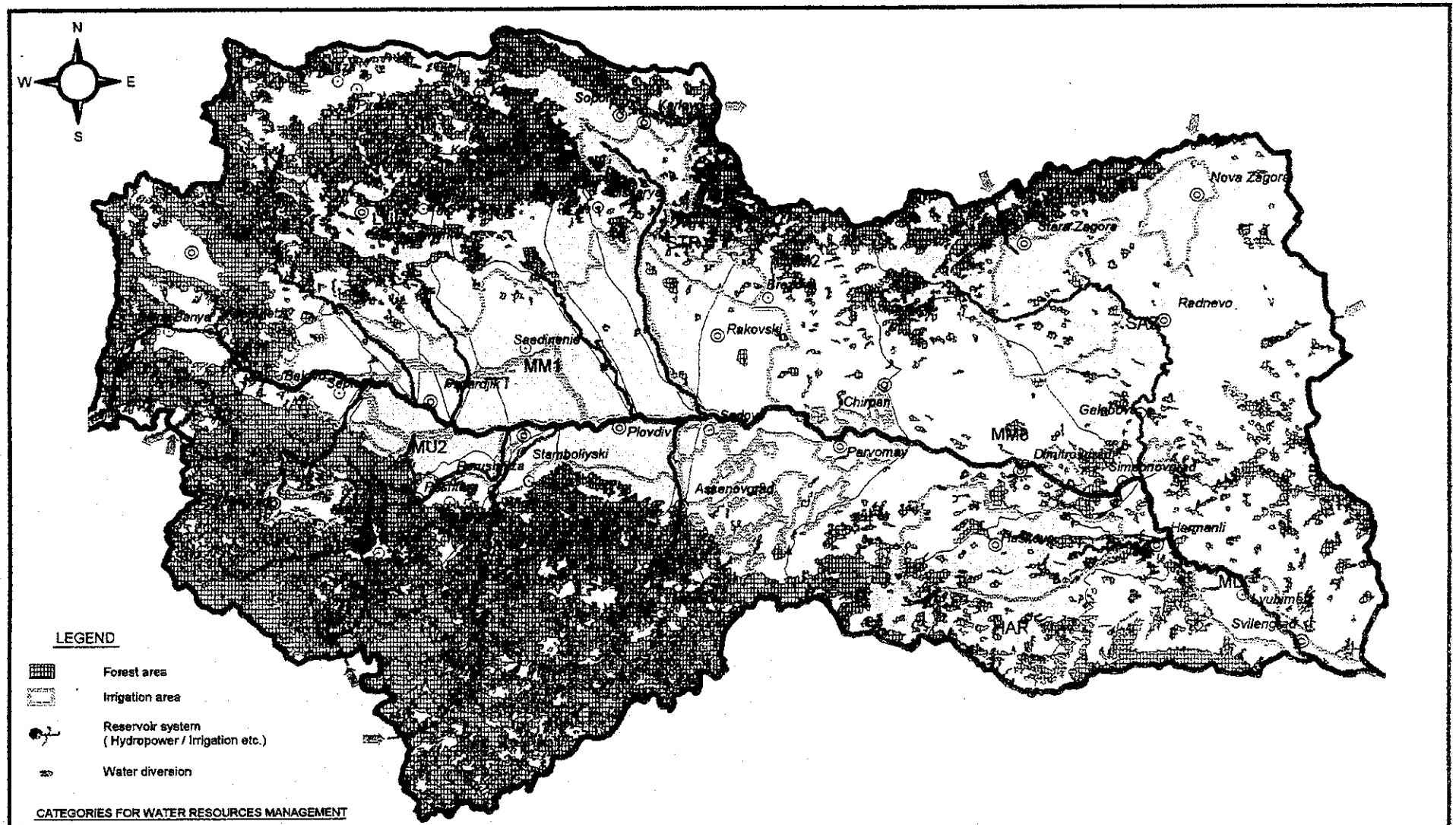
ANNUAL BALANCE IN 1995 (AVERAGE YEAR)



ANNUAL BALANCE IN 1994 (4-YEAR DROUGHT)

Pd : Surface water potential with major dams (mil.m³/year)
NDs : Net water demand cmposed of irrigation ,domestic WS,industrial WS and animal breeding (mil.m³/year)
NDs/Pd : water utilization rate (%)

FIG.S.2.9 POSSIBLE SURFACE WATER BALANCE IN THE PRESENT BASED ON THE ESTIMATED WATER DEMAND



CATEGORIES FOR WATER RESOURCES MANAGEMENT

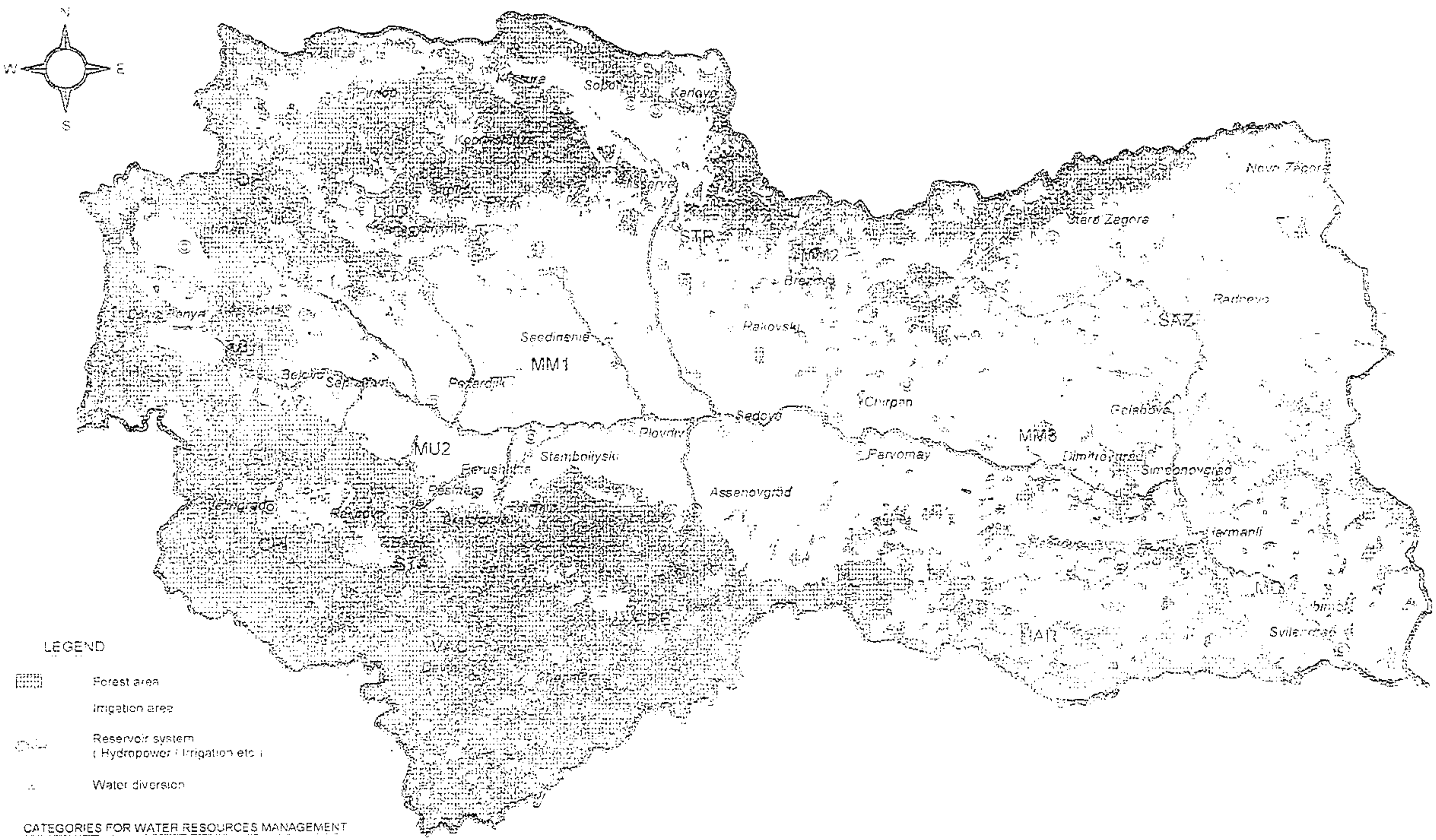
Category	Basins	Points for Manegement
Category I	Special basins for controlling water resources potential	1). Conservation of areas with water resources potential (forest) 2).Supplemental reforestation (MU1,CPI,VAC,CPE,TOP) 3).Positive reforestation (MD) 4). Optimum operation of reservoir systems 5). Optimum diversion of water
Category II	Basins for controlling water resources potential and demand	1). Conservation of areas with water resources potential 2). Optimum operation of reservoir systems and water supply systems
Category III	Basins for controlling water demand	1). Optimisation of demand 2). Optimum water supply for demand

FIG.S.2.10

ZONING WATER RESOURCES MANAGEMENT

SCALE 1:1000000

10 0 10 20 (km)



CATEGORIES FOR WATER RESOURCES MANAGEMENT

Category	Basins	Points for Management
Category I	Special basins for controlling water resources potential	1) Conservation of areas with water resources potential (forest) 2) Supplemental reforestation (MU1 CPI,VAC,CPE,TOP) 3) Positive reforestation (MD) 4) Optimum operation of reservoir systems 5) Optimum diversion of water
Category II	Basins for controlling water resources potential and demand	1) Conservation of areas with water resources potential 2) Optimum operation of reservoir systems and water supply systems
Category III	Basins for controlling water demand	1) Optimisation of demand 2) Optimum water supply for demand

FIG.S.2.10

ZONING WATER RESOURCES MANAGEMENT

SCALE 1:1000000

10 0 10 20 (km)

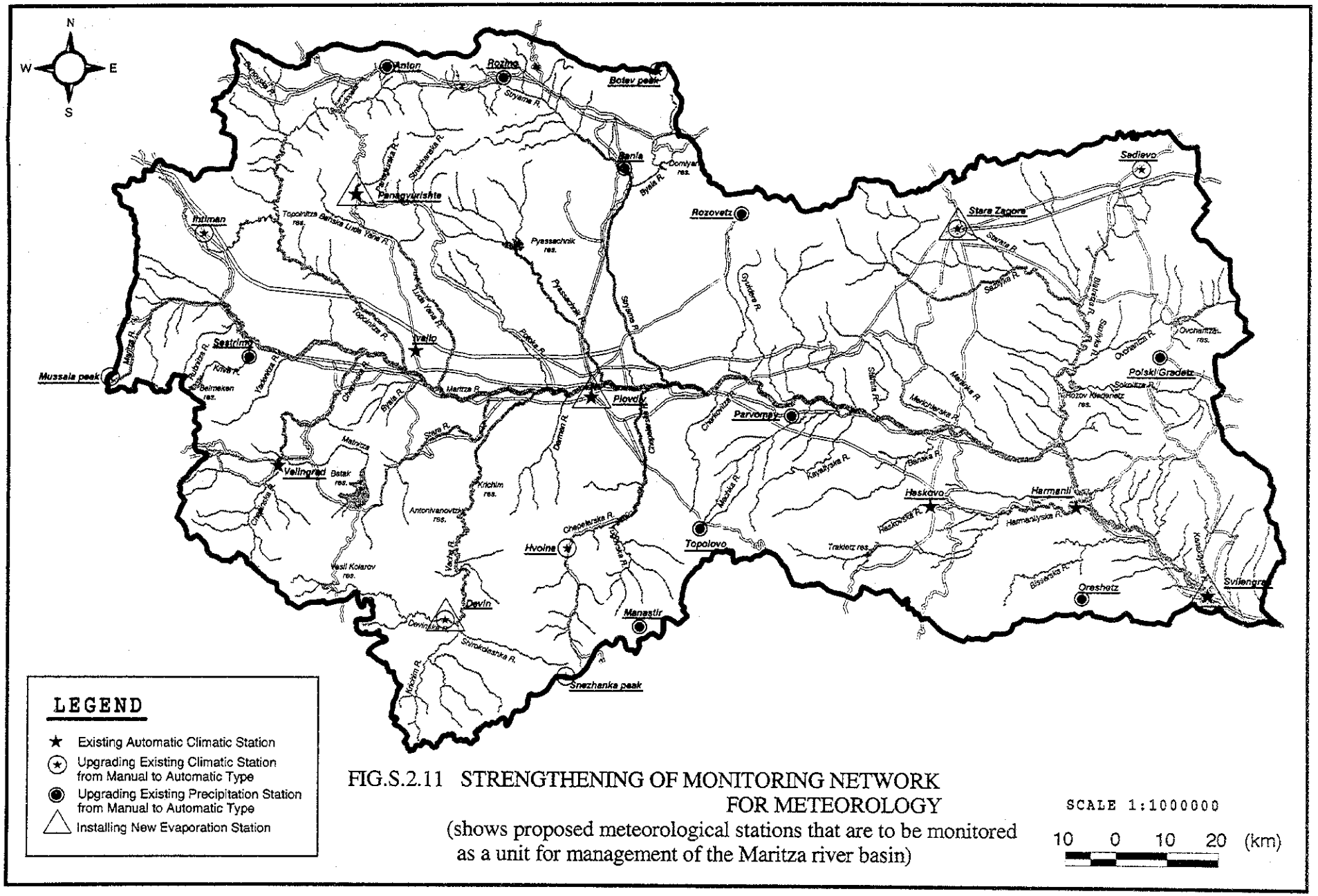
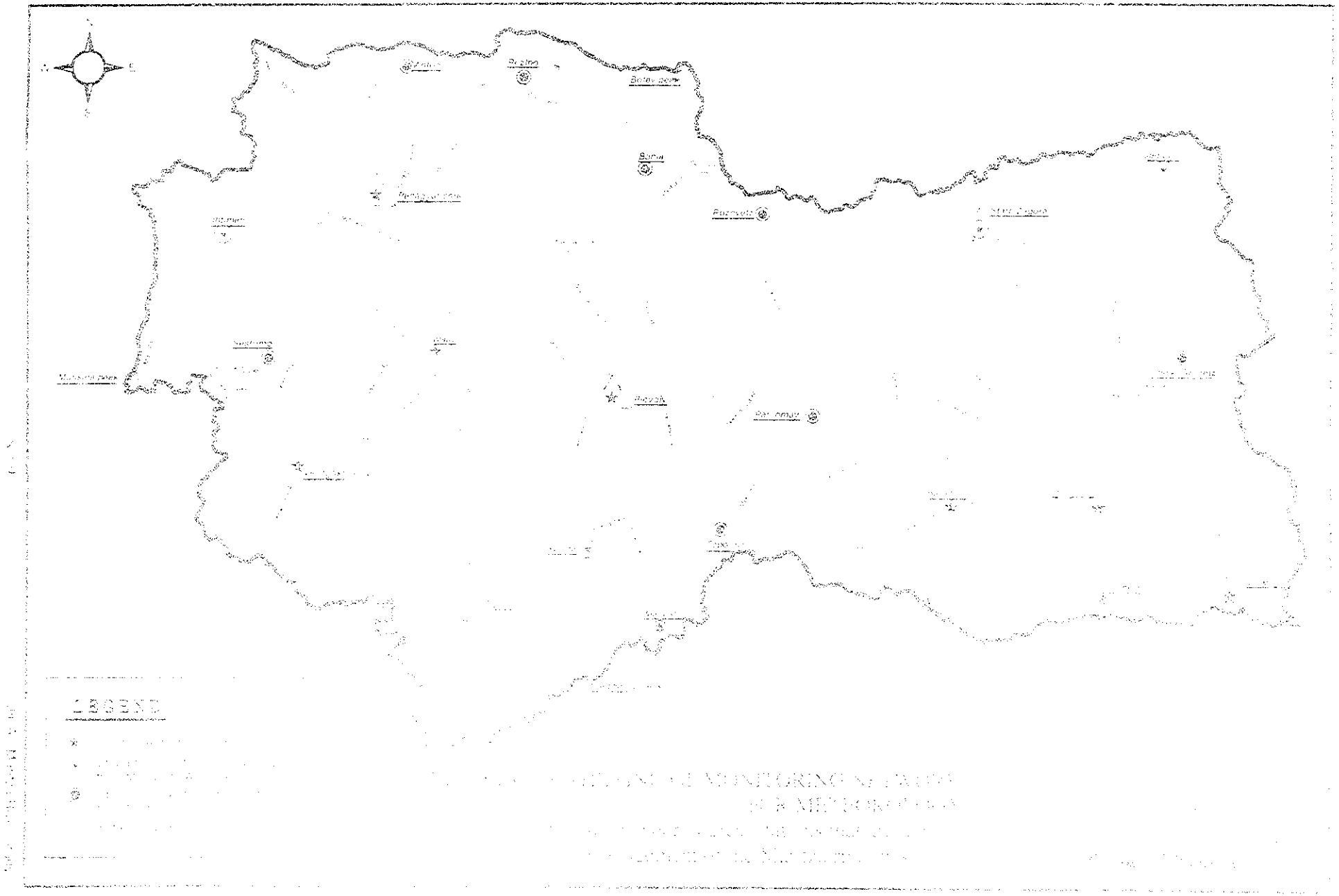
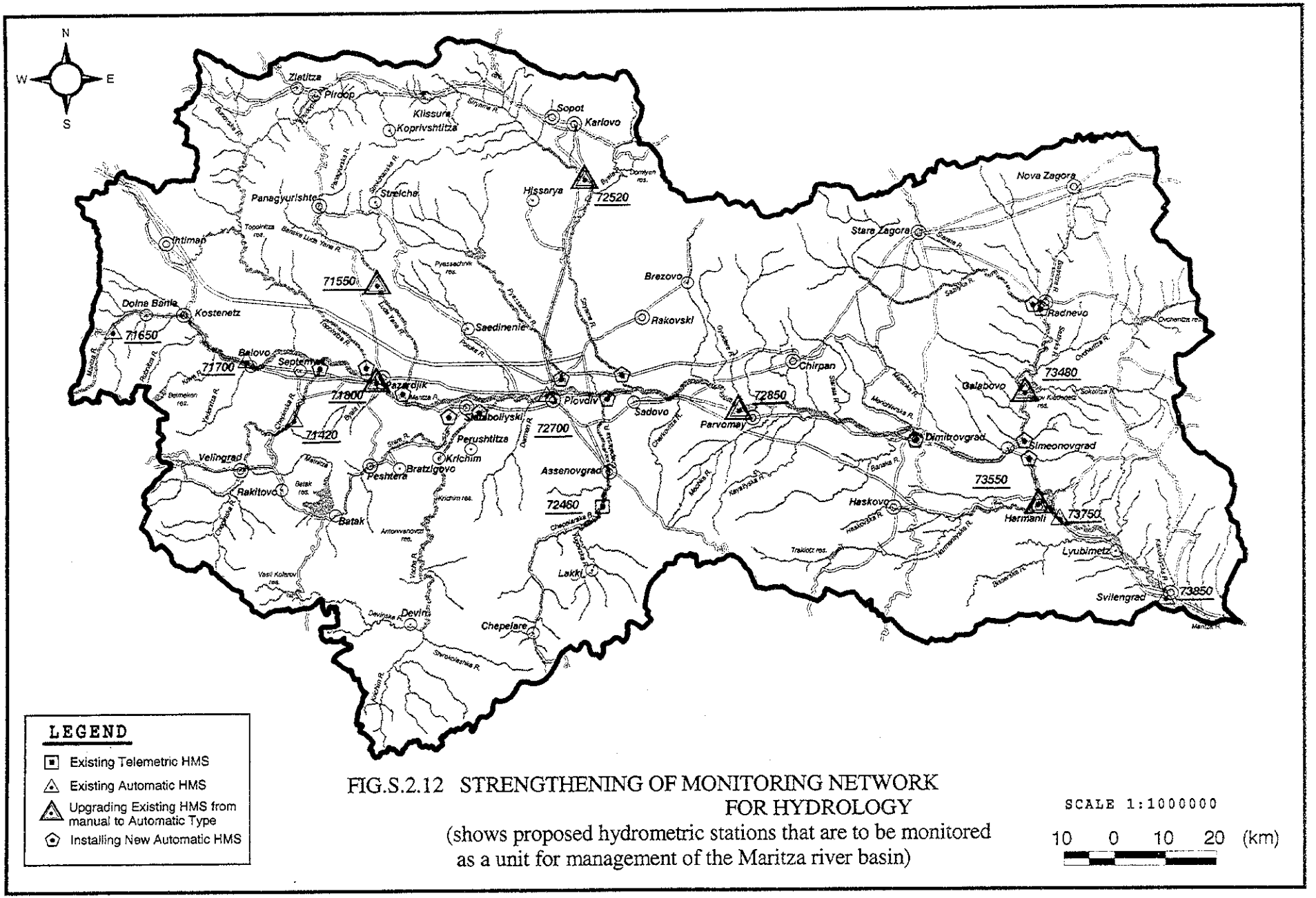


FIG.S.2.11 STRENGTHENING OF MONITORING NETWORK FOR METEOROLOGY

(shows proposed meteorological stations that are to be monitored as a unit for management of the Maritza river basin)


LEGEND



LEGEND

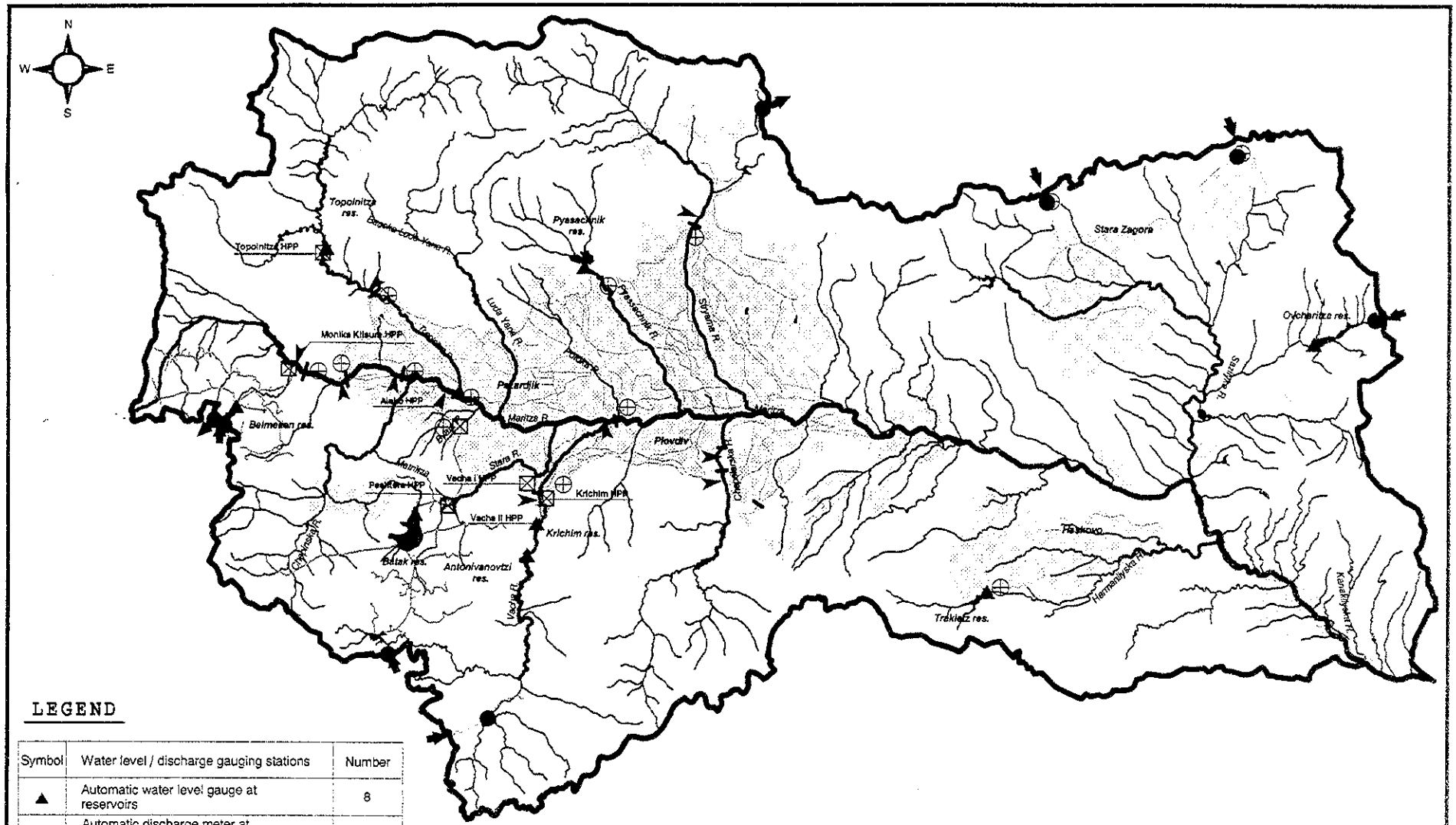
- Existing Telemetric HMS
- Existing Automatic HMS
- Upgrading Existing HMS from manual to Automatic Type
- Installing New Automatic HMS

FIG.S.2.12 STRENGTHENING OF MONITORING NETWORK FOR HYDROLOGY

(shows proposed hydrometric stations that are to be monitored as a unit for management of the Maritza river basin)

SCALE 1:1000000

10 0 10 20 (km)



LEGEND

Symbol	Water level / discharge gauging stations	Number
▲	Automatic water level gauge at reservoirs	8
⊠	Automatic discharge meter at hydropower stations	6
▲	Automatic water level / discharge gauge at intake weirs	10
⊕	Automatic water level / discharge gauge at irrigation canals	11
●	Automatic water level / discharge gauge at inter-basin water transfer points	6

FIG.S.2.13 PROPOSED MONITORING STATIONS FOR RIVER BASIN MANAGEMENT
-Irrigation,Hydropower and Inter-basin Water Transfer

SCALE 1:1000000

10 0 10 20 (km)

FIG.S.3.1 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND PAZARDJIK

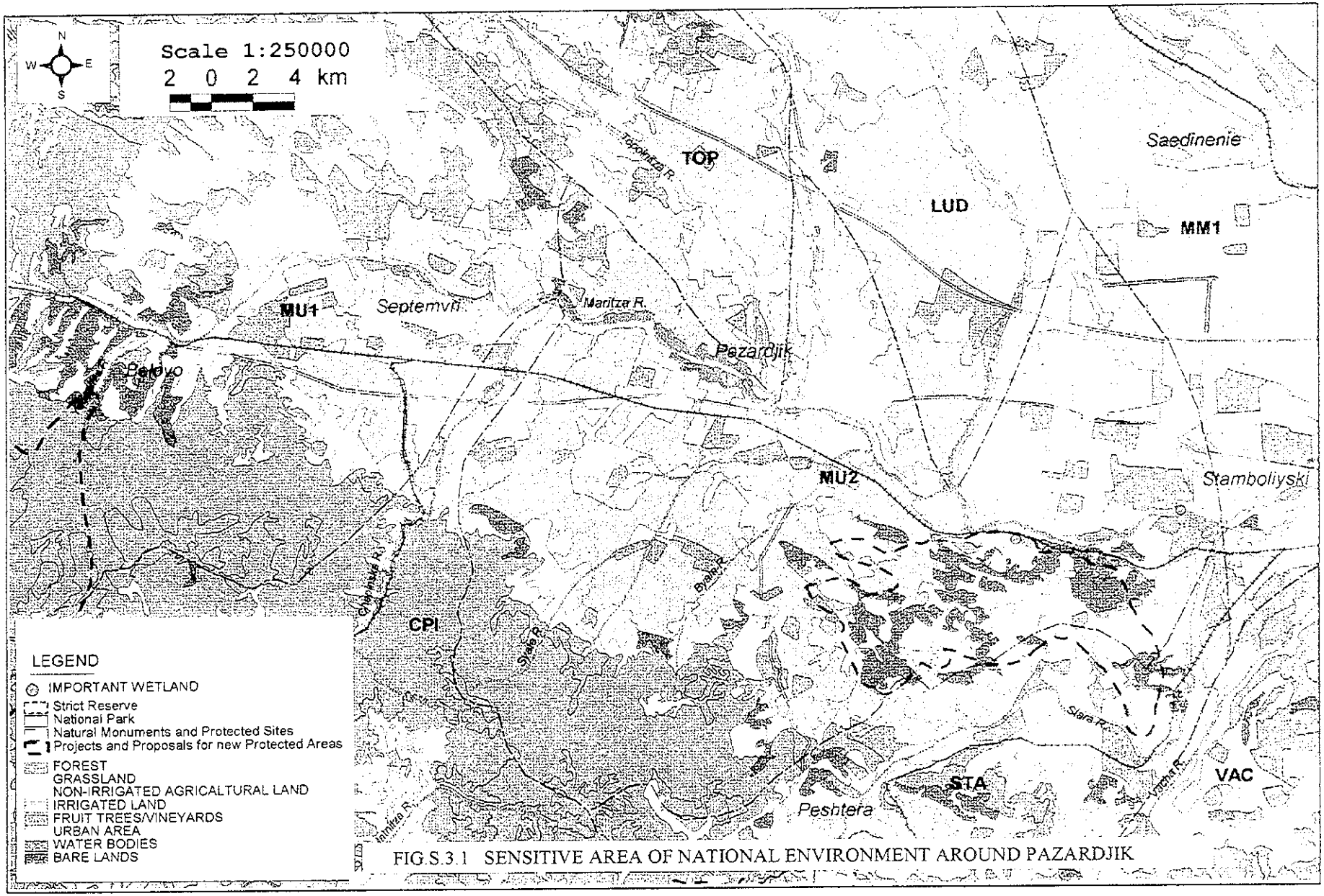


FIG.S.3.1 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND PAZARDJIK

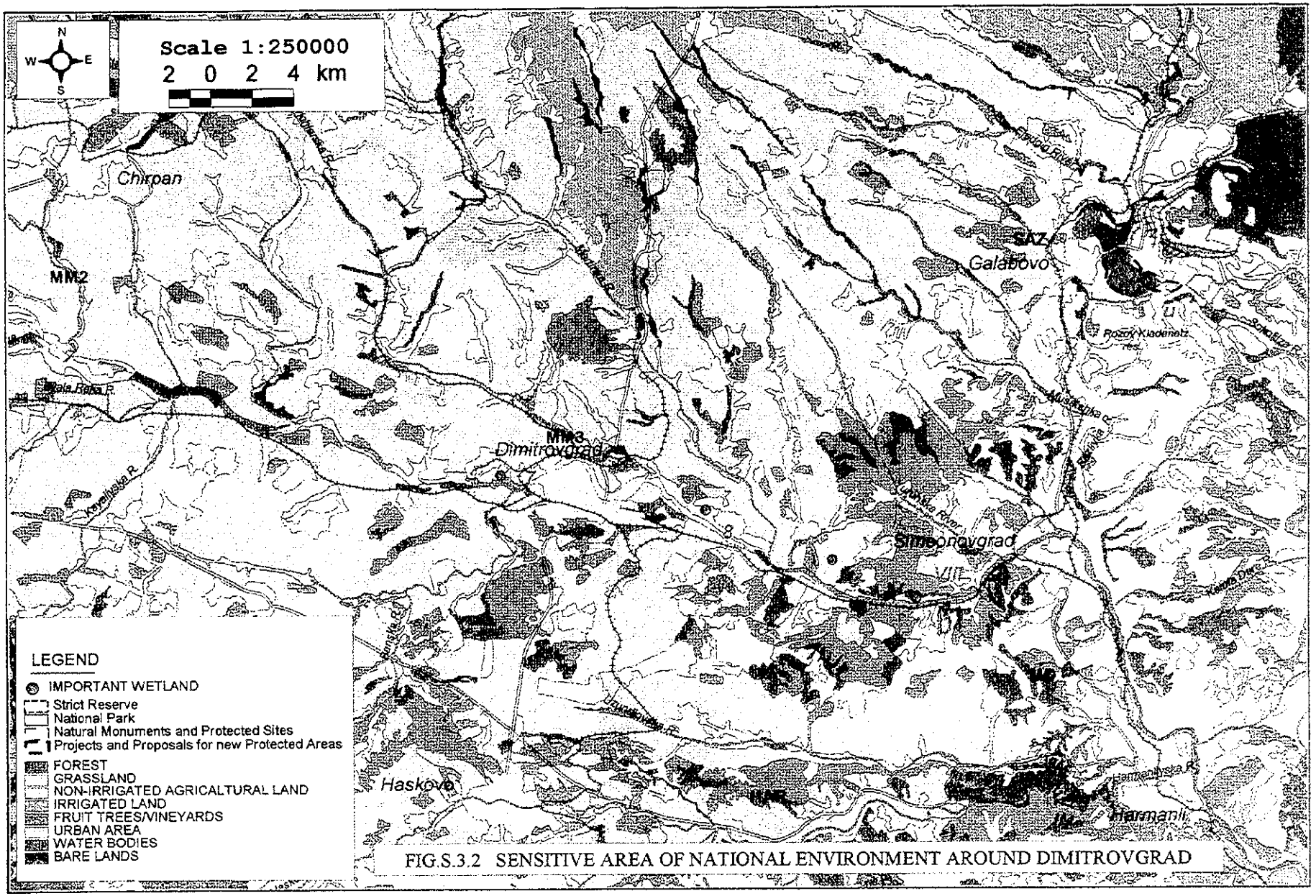


FIG.S.3.2 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND DIMITROVGRAD

FIG.S.3.2 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND DIMITROVGRAD

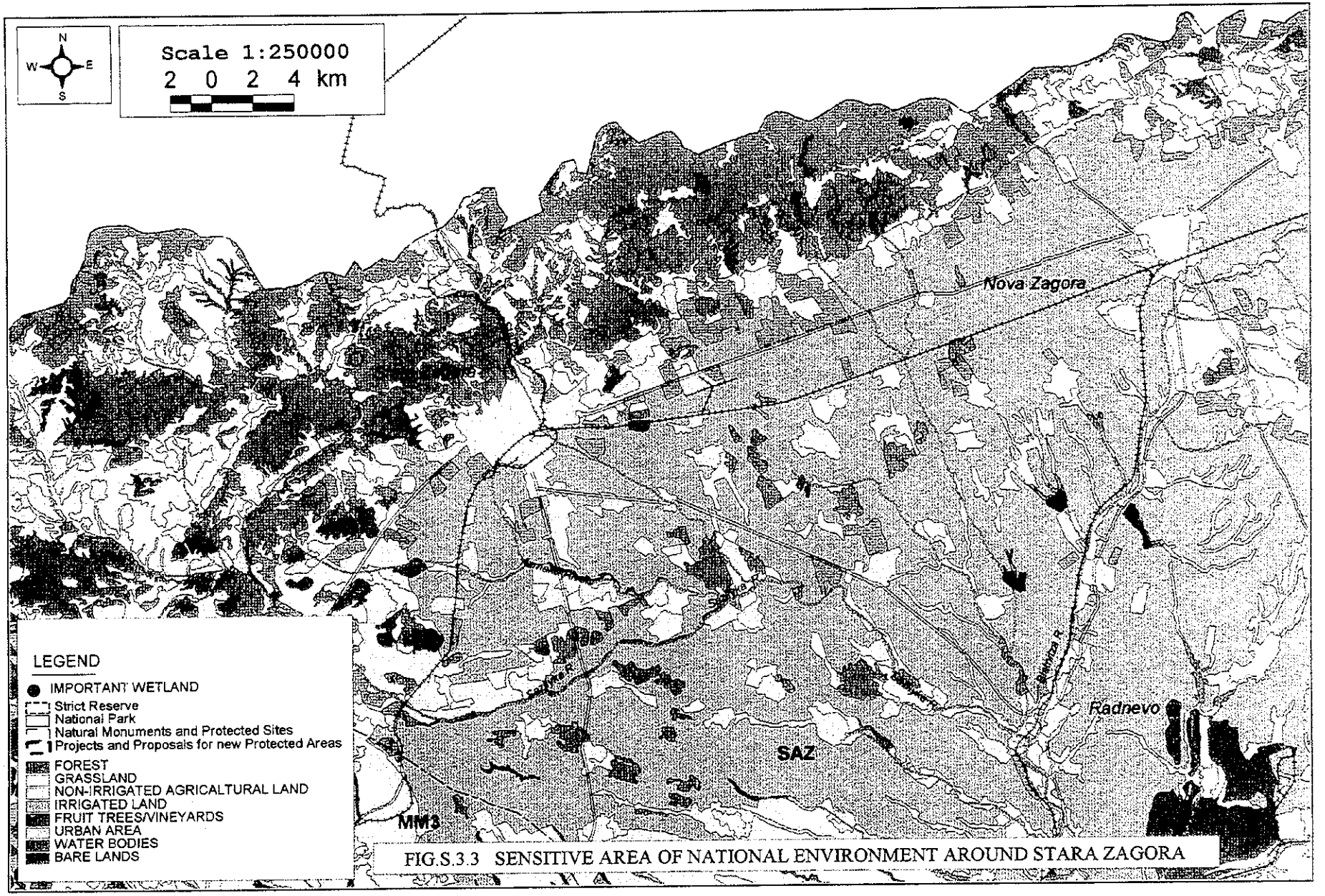


FIG.S.3.3 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND STARA ZAGORA

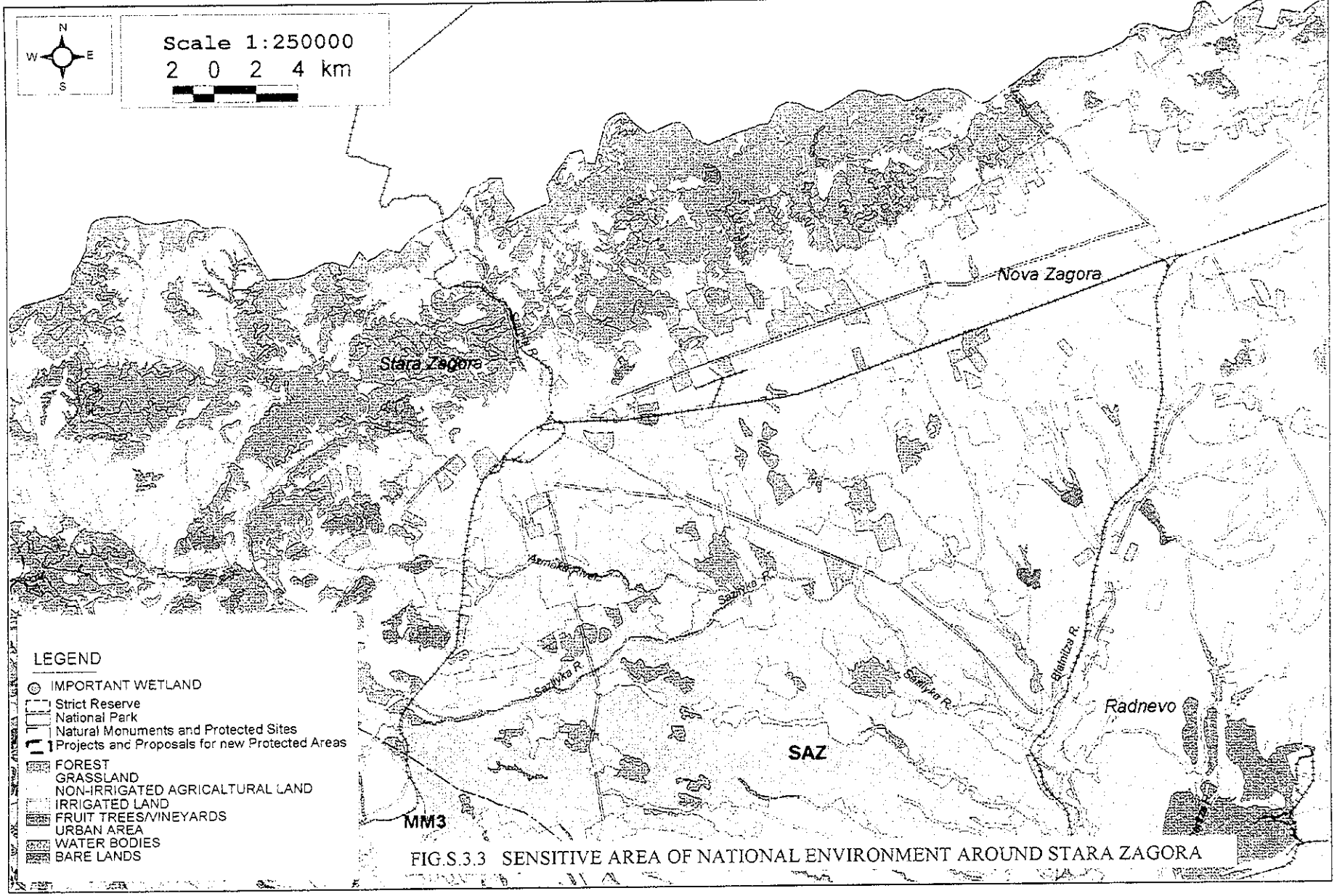


FIG.S.3.3 SENSITIVE AREA OF NATIONAL ENVIRONMENT AROUND STARA ZAGORA

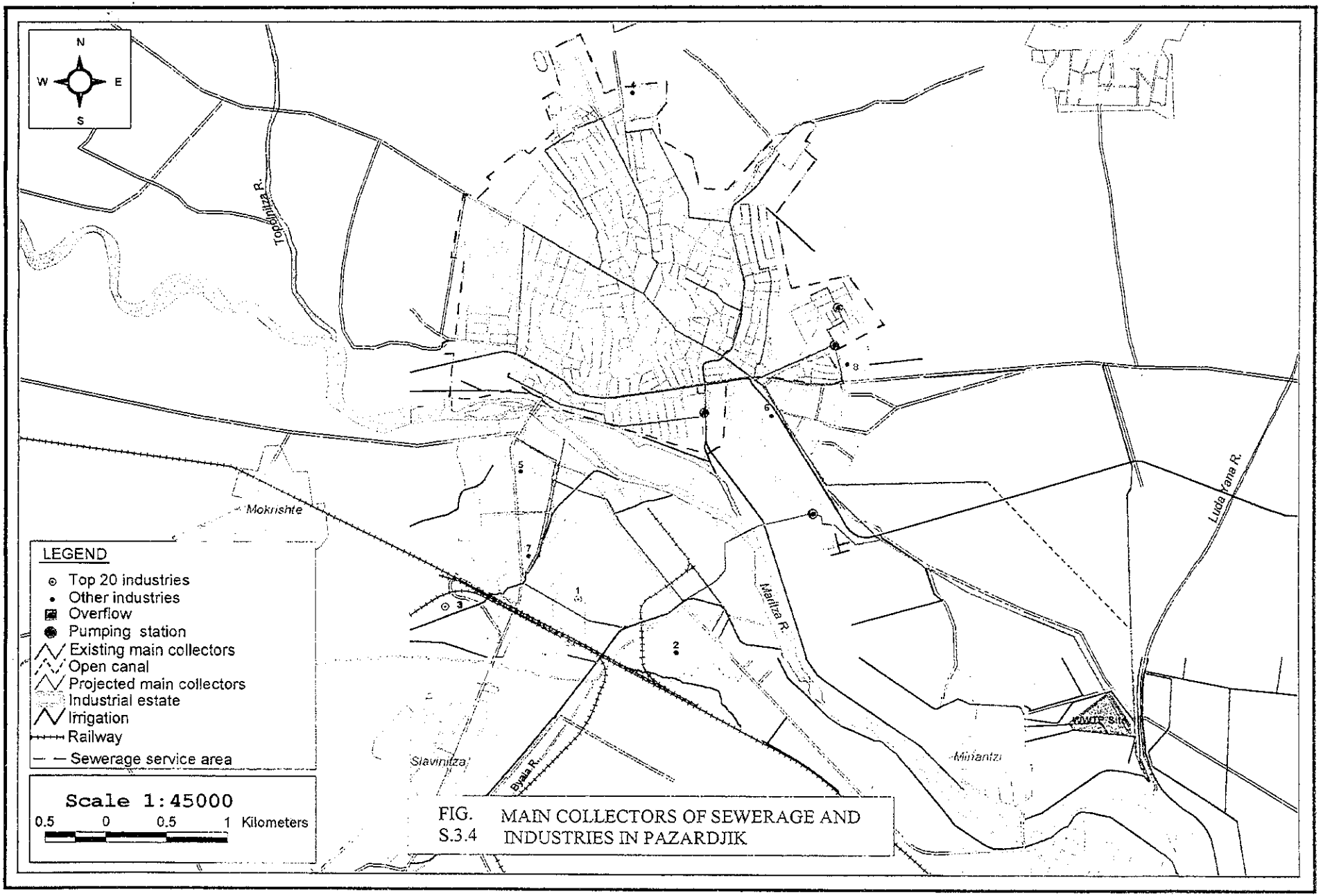


FIG. S.3.4 MAIN COLLECTORS OF SEWERAGE AND INDUSTRIES IN PAZARDJIK

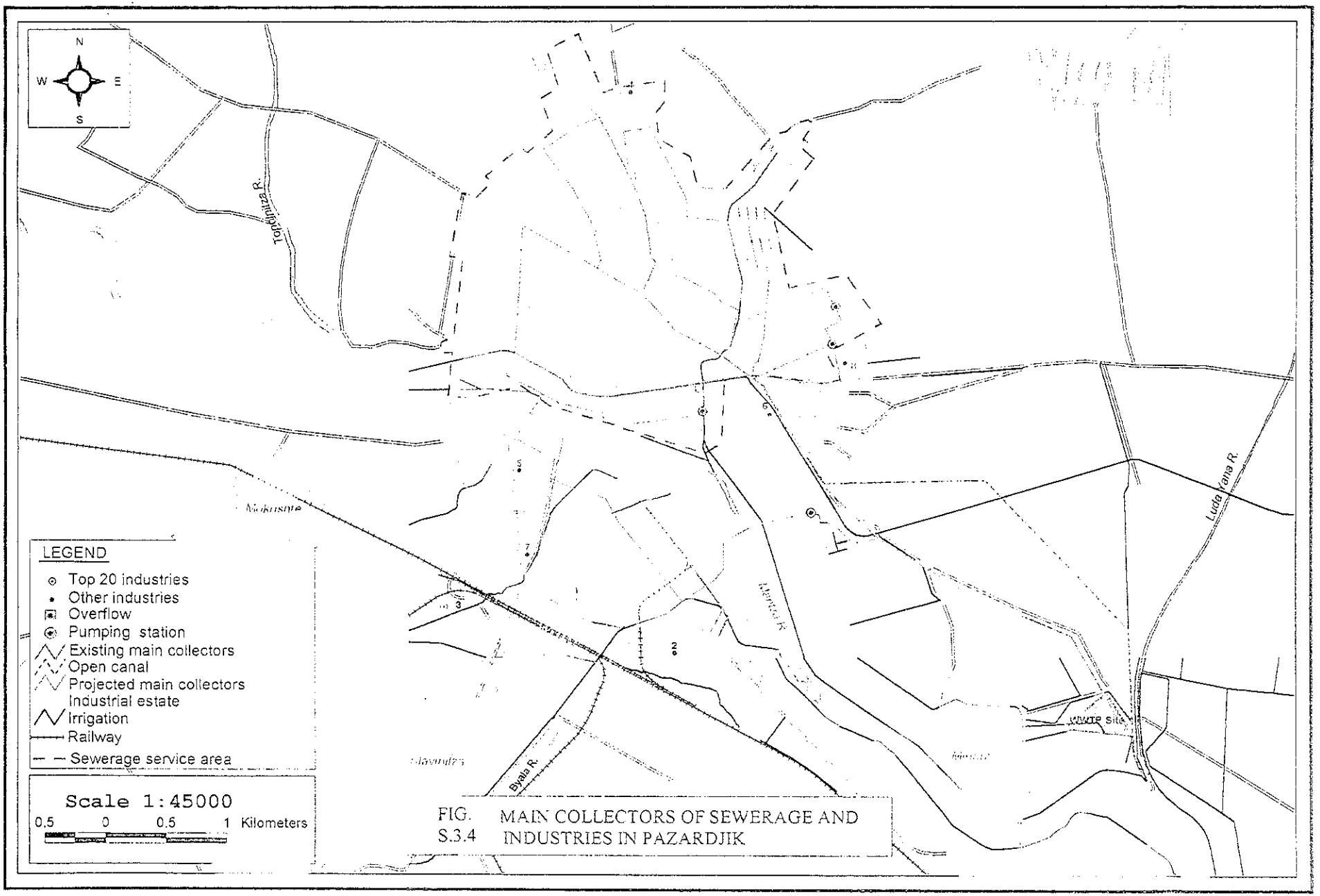


FIG. S.3.4 MAIN COLLECTORS OF SEWERAGE AND INDUSTRIES IN PAZARDJIK

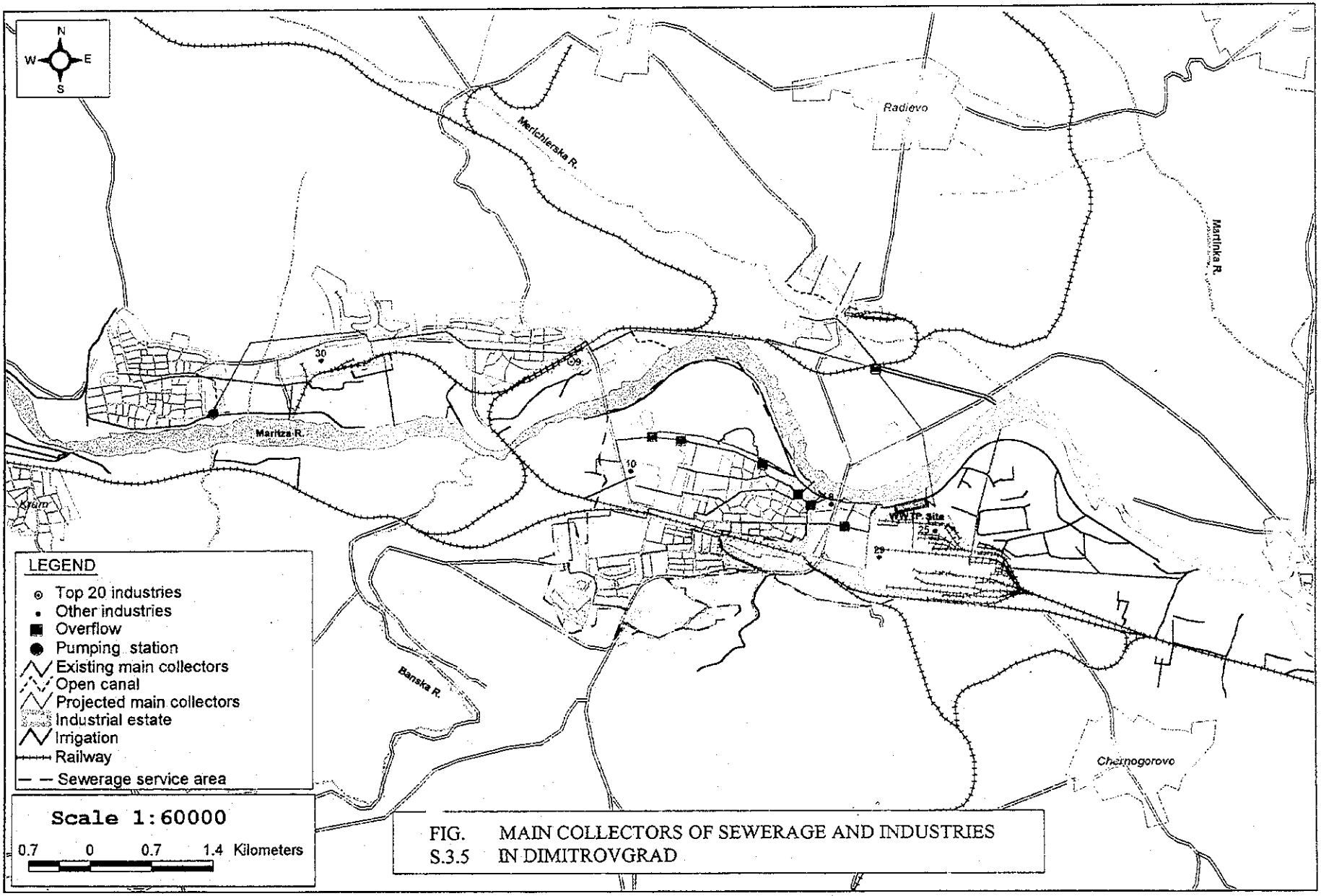


FIG. S.3.5 MAIN COLLECTORS OF SEWERAGE AND INDUSTRIES IN DIMITROVGRAD

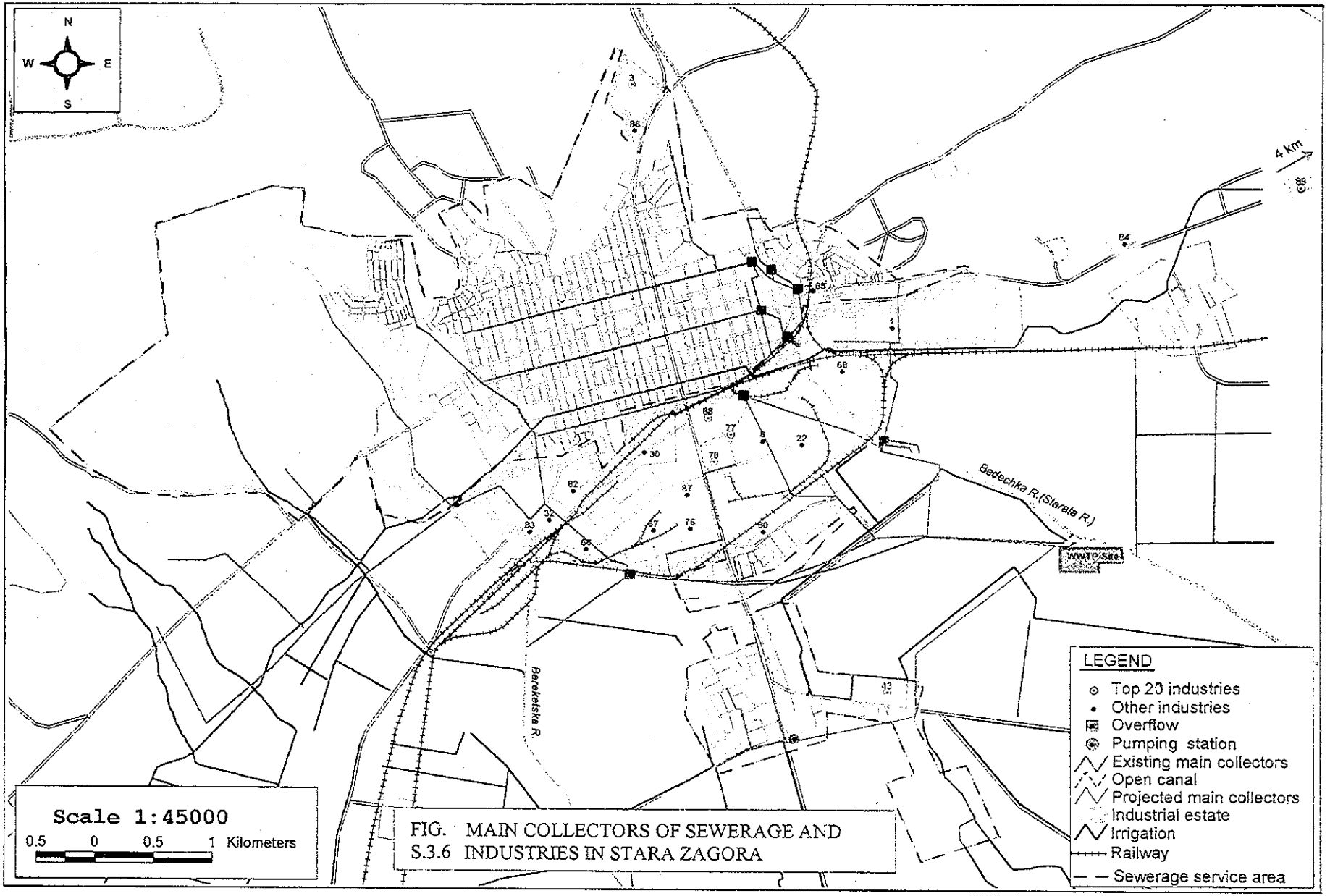
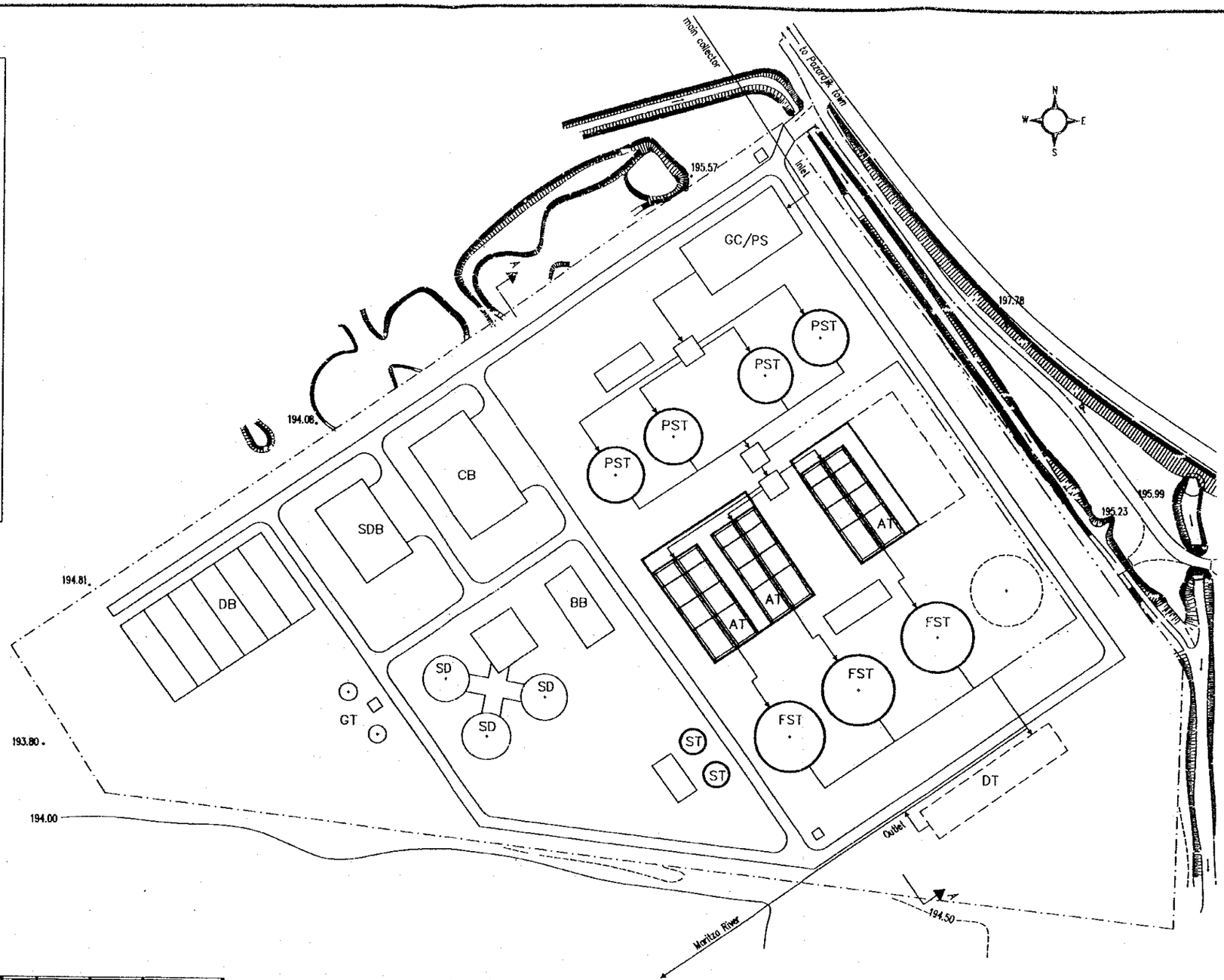


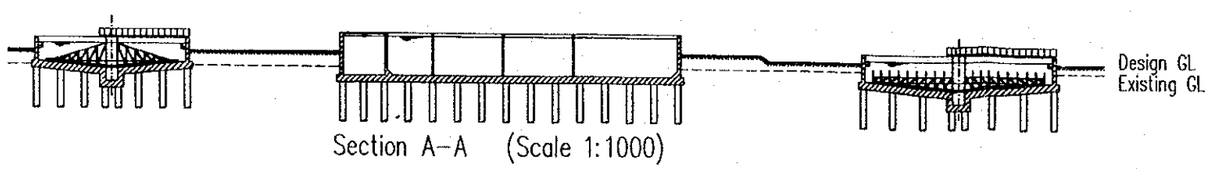
FIG. S.3.6 MAIN COLLECTORS OF SEWERAGE AND INDUSTRIES IN STARA ZAGORA

LEGEND

GC: Grit Chamber (Screens oilremoval)
PS: Pumping Station
PST: Primary SedimentationTank
AT: Aeration Tank
FST: Final Sedimentation Tank
DT: Desinfection Tank
ST: Sludge Thickener
SD: Sludge Digester
DB: Sludge Drying Bed
GT: Gas Tank
CB: Control Building
SDB: Sludge Dewatering Building
BB: Blower Building

Boundary Line
Future Expansion
Water Flow
Bypass



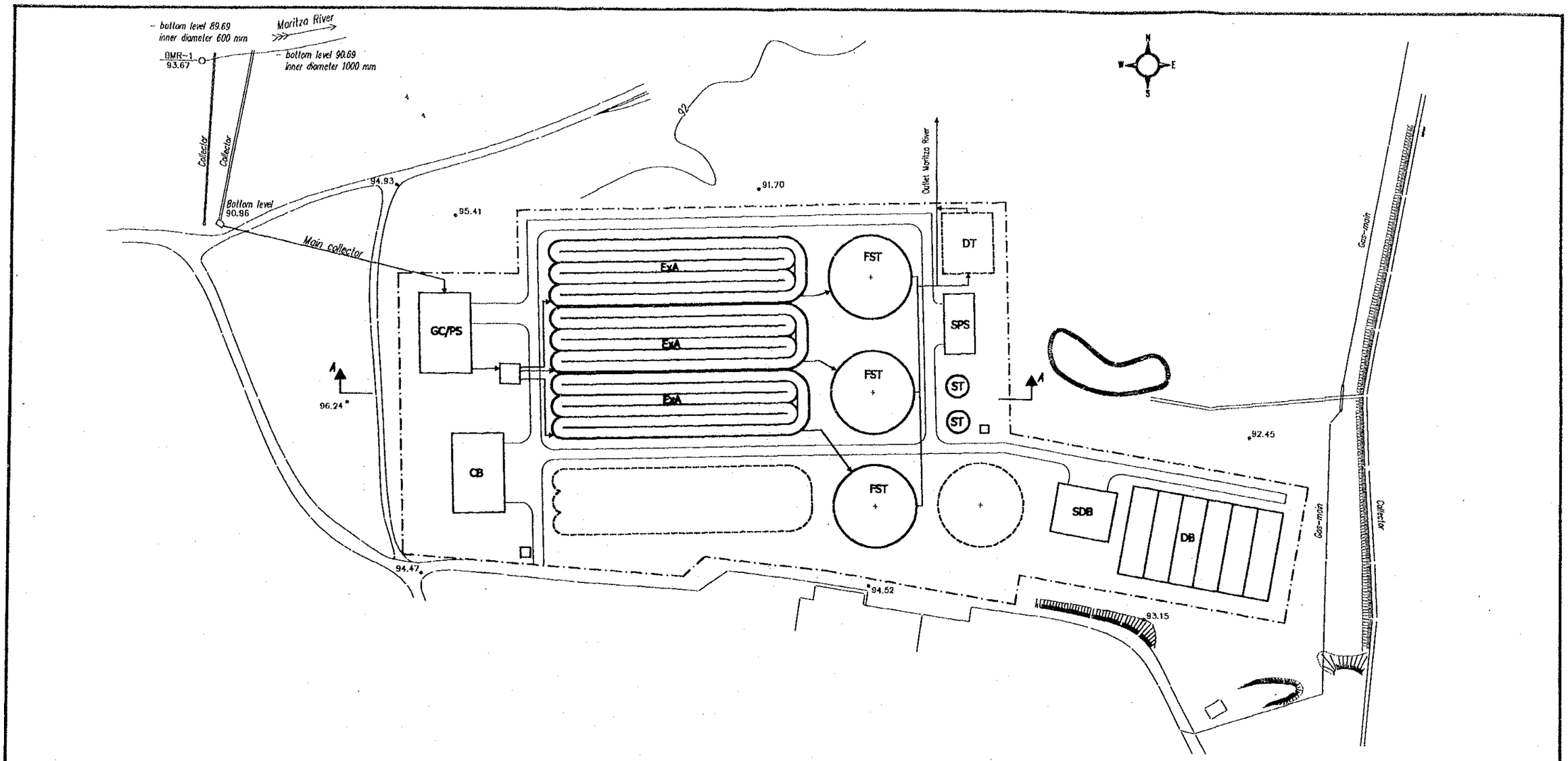


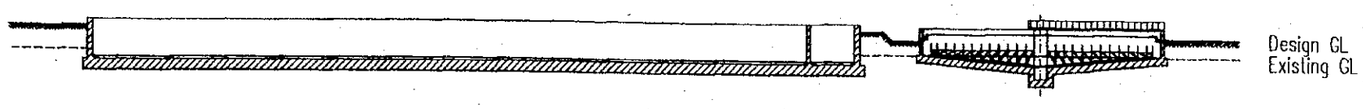
Section A–A (Scale 1:1000)

SCALE 1:2000

0 10 20 30 40 50 100m

FIG.S.3.7 GENERAL LAYOUT OF PAZARDJIK WWTP





Section A–A (Scale 1:1000)

LEGEND

GC: Grit Chamber (Screens oilremoval)	CB: Control Building
PS: Pumping Station	SDB: Sludge Dewatering Building
ExA: Extended Aeration	
FST: Final Sedimentation Tank	
DT: Desinfection Tank	Boundary Line
ST: Sludge Thickener	Future Expansion
SPS: Sludge Pumping Station	Water Flow
DB: Sludge Drying Bed	

FIG.S.3.8 GENERAL LAYOUT OF DIMITROVGRAD WWTP

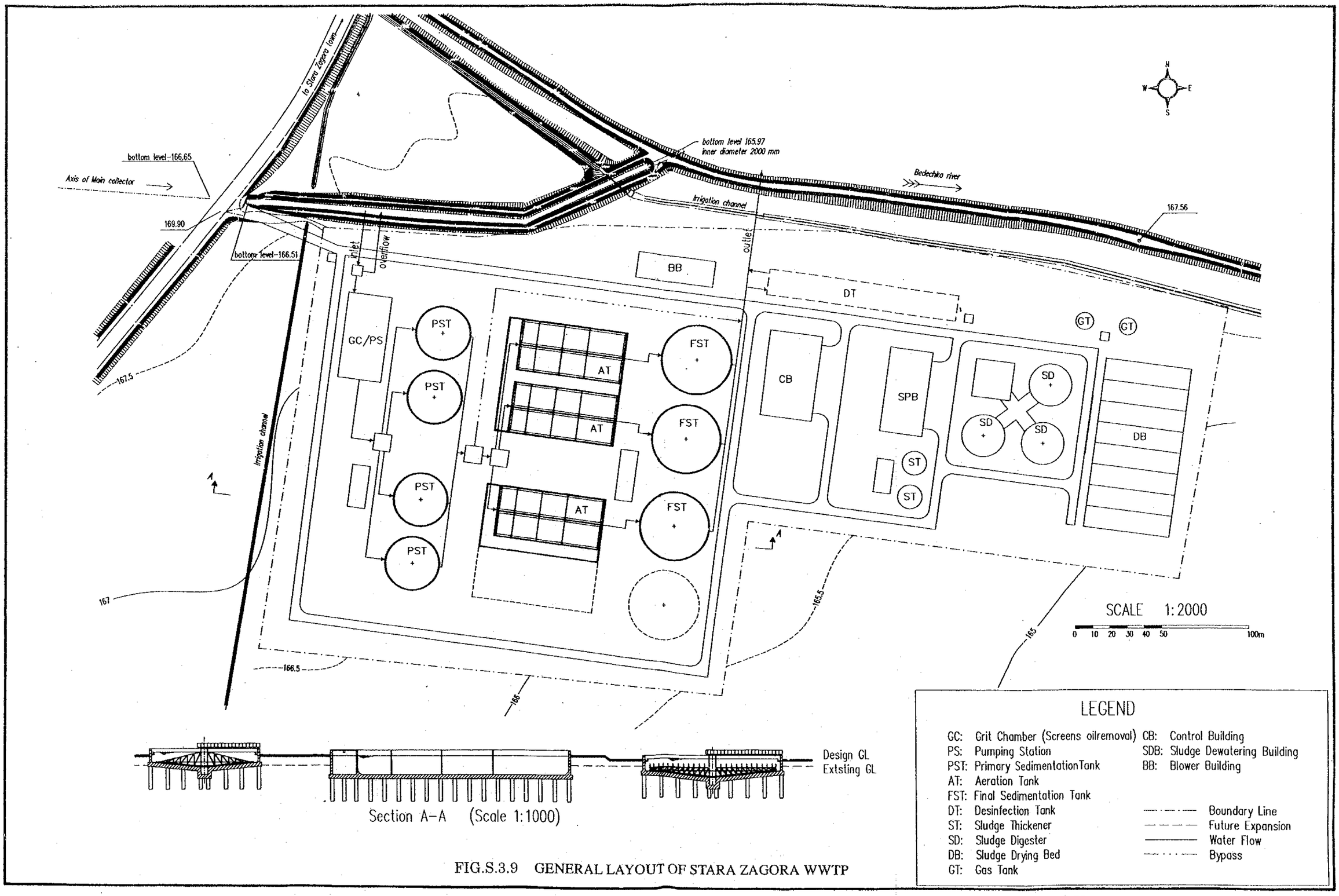


FIG.S.3.9 GENERAL LAYOUT OF STARA ZAGORA WWTP