**CURRICULUM VITAE**

1. **Name** : Ashvin B. Patel
2. **Date of Birth**: 1st June , 1953.
3. **Educational**: B. E. (Civil), L. D. College of Engineering, Gujarat University, 1977.
4. **Membership of Professional Association**:

Life member of “Gujarat Institute of Civil Engineers and Architect”

1. **Training:**
2. “Management Development Programme” for senior officers of W.R.D. at ‘WALMI’.
3. Workshop on Canal Distribution Net Work Design at ‘WALMI’, Anand.
4. Training on “Computer Awareness” at Staff Training Collage, Gandhinagar.
5. Training Programme for Executive Engineer Module-I, ‘Administration’ at S.T.C. Gandhinagar.
6. Training on “Vibration Analysis of Structures” organized by National Council for Cement and Building Material at I.I.T. Chennai.
7. Training course of Deputy Executive Engineer Irrigation Department at S.T.C. Gandhinagar.
8. Refresher course for Class-I & Class-II officers at SPIPA, Ahmedabad.
9. **Languages:**

Speaking Reading Writing

**English** Good Good Good

**Hindi** Good Good Good

**Gujarati** Mother tongue.

1. **Employment Record:**
2. **From:** February - 2004 to June – 2011

**Employer:** Water Resources Department, Government of Gujarat.

**Position Held**: Executive Engineer ,Unit-G,(Canal & Canal Structures), Central Design Organisation, Gandhinagar.

1. **From:**  March – 2001 to July – 2004

**Employer:** Water Resources Department, Government of Gujarat.

**Position Held:** Executive Engineer, Water Resources Investigation Division, Himmatnagar.

1. **From:** October – 1985 to March – 2001

**Employer:** Water Resources Department, Government of Gujarat.

**Position Held:** Deputy Executive Engineer, Unit-‘G’(Canal & Canal Structures), Central Design Organisation, Gandhinagar.

1. **From:** November – 1981 to October – 1985

**Employer:** Water Resources Department, Government of Gujarat.

**Position Held:** Deputy Executive Engineer, (Aqueducts),

Irrigation Project Division No. 7, Bharuch under

Karjan Canal Circle.

1. **From:** December – 1977 to November – 1981

**Employer:** Water Resources Department, Government of Gujarat.

**Position Held:** Assistant Engineer, Division’s Professional Branch,

Watrak Project Canal Division, Modasa. (North Gujarat)

1. **Work Under taken that Best Illustrates Capability to Handle the task assigned:**
2. **Name of Project :** Sluice Regulator across various Khadies on left and right banks of river Tapi near Surat city.

**Year:**  2009 – 2011

**Location:**  Surat, Gujarat.

**Main Project Features:**

Surat is a rapidly developing city of Gujarat. There are many people who live on banks of various Khadies meeting Tapi river. During flood in river Tapi, these Khadies are also getting flooded. To prevent the flood water entering the Khadies, sluice regulators are proposed on such Khadies. The height of the sluice regulator is ranging from 15 to 23 m and has to resist water pressure from both the sides. The S.B.C. of soil at these locations is very poor (from 10 t/m2 to 20 t/m2). To suit the lower S.B.C., R.C.C. counterfort type sluice regulators were designed for about such 15 sites. Under reamed piles combined with raft were designed at some locations. All these designs were done under my guidance as Unit Leader.

Position Held: Unit Leader, (Canal & Canal Structures)

**Activities Performed:** Responsible for deciding type of structures, loading conditions, hydraulic and structural design of structures.

1. **Name of Project** : Sujlam Suflam Spreading Canal from Kadana dam to Banaskantha district(about 335 km. long)

**Year:** 2004 – 2008

**Location:** Gujarat.

**Main Project Features**:

To carry surplus water of Mahi river to draught-prone area of North Gujarat i.e. Sabarkantha, Mehsana and Banaskantha district, a canal having capacity of 3000cusec was planned from Kadana dam to Banaskantha district having length of about 335 km. This canal crosses 21 major rivers and more than 200 small and big drains. Aqueduct for crossing river Bhadar, Mazam, Watrak, Khari and canal syphons for rest of major river crossing, more than 200 drainage syphon / culvert, more than 15 C.R. cum escape structures, numbers of inlet structures, numbers of bridges / foot bridges are designed under my leadership. During the construction, many geological problems arised and necessary modifications were given to suit local site conditions were given speedily.

End bearing piles were designed for all piers of Mazam Aqueduct and for some piers of Watrak aqueduct. Khari syphon aqueduct is designed for very low S.B.C of 15 t/m2, with enlarged raft foundation. Sabarmati river crossing was designed as canal syphon with about 30 m water head instead of earlier proposed aqueduct due to poor foundation condition.

**Activities Performed:** Responsible for deciding type of structures, hydraulic and structural design.

1. **Name of Project :** Temporary and Permanent restoration work in place of Collapsed Kos aqueduct on Ukai L.B.M.C.

**Year:**  2010

**Location:** South Gujarat

**Main Project Features:**

Kos aqueduct on Ukai L.B.M.C. with capacity of 500 cusec was collapsed during irrigation. Design and drawings of temporary restoration work i.e. inlet, outlet and pipe syphon(2100 mm dia.) were prepared in just 2 (two) days. Design and drawings (7 Nos.) for new aqueduct structure were prepared in just 7 working days.

**Activities Performed:** Design and drawings got prepared simultaneously from 2 D.E.Es. and 2 A.Es. by giving guidance and coordinating

them.

1. **Name of Project :** Ukai High Level Left Bank Canal.

**Year:**  2008 - 2010

**Location:** South Gujarat

**Main Project Features:**

Ukai High Level left bank canal has been planned with a view to provide irrigation facility to farmers of local tribal area surrounding the Ukai Project. This canal is about 100 km. long and with head reach capacity of \_\_\_\_\_\_\_\_ cusec. There are more than 100 structures including aqueducts, canal syphons, drainage syphons / culverts, C.R., escapes, inlets, bridges, H.Rs. etc. The canal is in deep rock cutting at many locations of road crossings. Economical design has been achieved by provide R.C.C. conduit for canal and U.C.R. masonary filling on it for road crossing.

**Activities Performed:** Responsible for deciding type of structures,hydraulic and structural design.

1. **Name of Project :** Panam Link Canal, Panam left bank & Right bank High Level Canal

**Year:**  2007 - 2010

**Location:** Panchmahal District, Gujarat.

**Main Project Features**:

To provide irrigation facility to local people around Panam Reservoir Project, Panam left bank & right bank High Level Canal has been planned. For this, a H.R. has been constructed on periphery of reservoir and a local drain up to 1.70km. length has been used as a link canal. There after left bank and right bank high level canal off takes. There are more than 80 structures including aqueducts, canal syphons, drainage syphons / culverts, bridges, C.R., escapes, inlets, bridges, H.Rs. etc. The canal is in deep rock cutting at many locations of bridges. Economical design has been achieved by provide R.C.C. conduit for canal and U.C.R. masonary filling on it for road.

**Activities Performed:** Responsible for deciding type of structures, hydraulic and structural design.

1. **Name of Project :** Mordenisation of Dharoi Left Bank Canal.

**Year:** 2008 - 2009

**Location:** Sabarkantha District of North Gujarat.

**Main Project Features:**

To utilize surplus water of Dharoi Reservoir Project (due to suspending of water supply to Ahmedabad city), the command area of both left and right bank canals is extended. Due to extension of command, the capacity of left bank canal is almost doubled ( from \_\_\_\_\_\_\_\_ cusec to \_\_\_\_\_\_\_ cusec ). Hence all the structures i.e. aqueducts, canal syphons, bridges etc. are required to be redesigned and reconstructed. More than 50 such structures have been designed.

Activities Performed: Responsible for hydraulic and structural design.

1. **Name of Project :** Constructing a new bridges in place of existing collapsed / damaged bridges on various man-made drains of Ahmedabad district.

**Year:** 2008 - 2010

**Location:** Ahmedabad District of Gujarat.

**Main Project Features:**

There are many long man made drains in Viramgam,Sanand etc. Talukas of Ahmedabad district constructed long back to drain out low lying area. Many bridges on these drains have been collapsed / damaged due to age and heavy flood during past few years. More than 15 bridges were identified for reconstruction. Looking to inadequate capacity of drains and local topographical conditions, the drains and structures on it gets inundated in high floods. Also the soil in this area is of poor S.B.C. Looking to these conditions, R.C.C. box type bridges were designed and constructed for almost all locations.

**Activities Performed:** Visited all the sites of damaged bridges, identified repairable and non-repairable bridges, gave remedial measures to repairable bridges and got prepared design and drawings for bridges to be reconstructed.

1. **Name of Project:** 2100 mm dia. pipe line project from Narmada Main Canal to Hathmati and Guhai reservoir Project.

**Year:**  2003 - 2004

**Location:** North Gujarat.

**Main Project Features:**

To utilize surplus water of Narmada, 2100 mm dia. pipe line project has been planned from N.M.C.Ch. 218 km. to Hathmati and Guhai reservoir Project with 3 (three) pumping stations. The alignment route was planned and decided by our division. The design and drawings were got prepared from consultant and verified by us. Estimate and tendering were done departmentally by us.

**Activities Performed:** Responsible for deciding location of H.R. on Narmada Main Canal, location of first, second and third pumping station, reservoirs. All locations were personally visited, surveyed and decided by me as an Executive Engineer, Water Resources Investigation Division.

1. **Name of Project:** Various Canal structures on different Canals of W.R. Projects of Gujarat.

**Year:**  1985 - 2001

**Location:** Gujarat.

**Work done:**

As a Deputy Executive Engineer of Unit-‘G’, C.D.O. (Canal and Canal Structures), in a span of about 16 years, I have designed numbers of aqueducts, canal syphons,drainage siphons/culverts, escapes, falls, bridges, C.Rs. H.Rs. sluice regulators etc. of various canals of different W.R. Projects of Gujarat state. Designed temporary and permanent restoration works of various canal structures collapsed / damaged during this period.

1. **Name of Project:** Aqueduct on Karjan Left Bank Main Canal.

**Year:**  1982 - 1985

**Location:** South Gujarat.

**Work done and activities performed:**

As a Deputy Executive Engineer in design sub unit of Irrigation Project Division No. 7, Bharuch, I was assigned to designed all aqueduct structures on Karjan left bank main canal (1000 cusec). During this period, I have designed all aqueducts on Karjan L.B.M.C. including 400 m long aqueduct on Madhumati river where well foundation has been designed for pier having height about 30 m from cap to foundation level. All the designs were got scrutinized and approved from C.D.O.

1. **Name of Project:** Canals and Canal structures of Watrak Reservoir Project.

**Year:** 1978 - 1981

**Location:** North Gujarat.

**Work done and activities performed:**

As Assistant Engineer of professional branch of Watrak Project Canal Division, I was responsible for scrutiny of proposals of alignments of branches, distributaries, minors and sub-minors of Watrak Project. I was also responsible for scrutiny of design, estimates, tenders for canals and structures prepared by Sub-Divisions and getting them approved from Circle and Government level.