

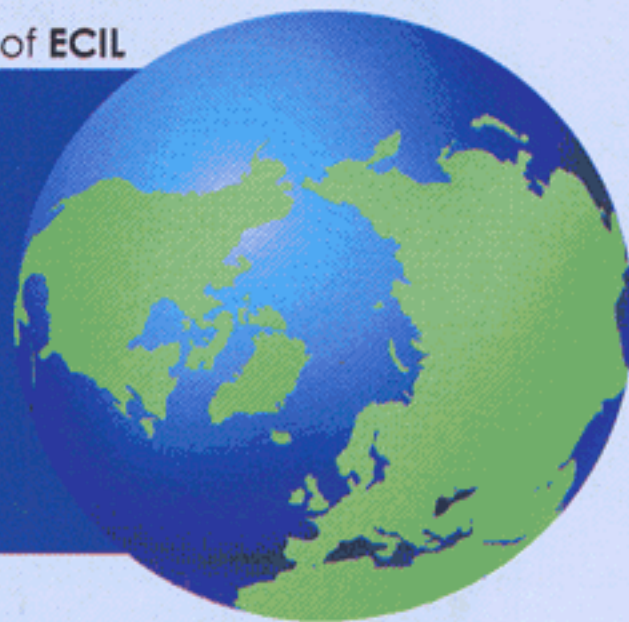
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A Quarterly Newsletter of ECIL

Sigarette



ECIL

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First Words

Time flies, ripping apart the sheet of the present like a rapier, turning it into past, it appears, in the blinking of an eye. It is marvelous to feel the excitement of ECIL entering into its Golden Jubilee year, 2009. Just a few months from now! We, therefore, present the issue of the Vignette with a touch of pride and satisfaction. This occasion is further enriched by earning a unique distinction of international recognition of being one of the 50 recipients out of 100,000 nominations to receive the "Special Achievement Award" in the field of Geographic Information Systems (GIS). Details of this honor are covered in the article that follows. The pride of performance and achievement is cherished immensely by all of us in ECIL. This is purely owing to persistent efforts of our GIS Professional Team to progress further and keep abreast with the state-of-the-art technology.

As usual, through this issue, our readers are going to find plentiful of information about company's activities in Pakistan and abroad. Some interesting articles are going to add, of course, an extra reading flavor to Vignette. Quite naturally, there have been notable growth and diversification; not only in professional staff but in other fields as well. This has been the hallmark of ECIL's growth strategy. As the saying goes, "the real risk is not to venture into a new field but not to take risk itself" so with this reanimated issue of Vignette we keenly look forward to suggestions from our readers regarding our efforts to bring about qualitative improvement in this publication. Our readers and well wishers are welcome to join in by contributing useful, informative and interesting articles not only technical but those touching upon daily human life, catching snippets, anecdotes, thought provoking quotations, brain leasers and of course humor too.

Another important piece of information that we would like to highlight here is that ECIL Head Office has undergone a change of location. While the new Head Office location is more convenient, it provides a better, cleaner and state-of-the-art working environment with more open spaces and latest model workstations conforming to contemporary open-spaces architectural planning and design concepts. The refreshing ambiance of the office interior generates comfortable working environs, allowing concentrated effort on the part of all those working therein. The overall effect of this labor of love would or should reflect in developing a working environment, reigning in the best of professional potential and capability of ECIL in the field of consulting activity, currently booming around the world

-Editorial

Globalization and Challenges to Engineering Services

Engr Akhlaq Ahmad, Chief Executive

With the rapid pace of advancement in technology development around the World, the exchange of information and technology between nations is becoming more important and of gainful significance by the day. An international effort to promote cooperation among professional consulting organizations is now gaining recognition among nations. The idea is to operate in parallel with world wide organizations; like FIDIC, ASPAC and TCDPAP and others. This would create a mutually recognized culture leading to defining the role of engineering in pursuit of mutual cooperation and sound engineering practices.

The scheme would also help in identifying opportunities to enhance the leverage of engineering capabilities of member nations.

Engineering industries in different countries have developed under different conditions and environs

during the industrialization era of the past century. Country's approach to engineering problems varies widely with respect to level of technology, imbalances in human resources and access to the capital needed. Due to rapid developments coming up in science and industrial technology, the expansion of market liberalization and increased international cooperation, we are dealing with changes and challenges in the global markets.

Here is the opportunity and challenge for the developing countries to join in and contribute in the effort of optimal utilization of the state-of-the-art technologies and endeavor to close the "technical divide" between the developed countries and those still developing and improve the distribution and utilization of human resources and the capital for achieving optimum maximum benefit of globalization of consultancy profession, leading to improved services.



REMEMBER

NEVER LET YOUR HEAD HANG DOWN.
NEVER GIVE UP AND SIT DOWN AND GRIEVE.
FIND ANOTHER WAY. AND DON'T
PRAY WHEN IT RAINS.
IF YOU DON'T PRAY WHEN THE SUN SHINES.

PAKISTAN MOTORWAY

Challenges in Construction Projects

ISLAMABAD-PESHAWAR

SECTION (M-1)

Engr Haris Aqil, Deputy Chief Resident Engineer
Engr. M Munawwar Jamal Qureshi, Senior Resident Engineer

A grand event took place on 30th October, 2007 when 152 kilometers long, 6-lane, dual carriageway Islamabad ~ Peshawar Motorway; designated as (M-1), was inaugurated by the President of Pakistan and opened for commuter's use on 31st October, 2007.

The occasion marked the culmination of the vision of the then Prime Minister Mian Muhammad Nawaz Sharif in early nineties of developing a network of motorways to provide speedy mode of land transportation system for swift movement of people and goods across Pakistan.

ECIL remained associated with the project through all phases of project development (1989 to 2008) including route alignment, preliminary design, feasibility study, detailed engineering design, pre-construction services, construction supervision, and post-construction services. The construction cost is approximately Rs 17 Billion.

ECIL played a proactive role in planning and design of the motorway, which was initially carried out by ECIL in association with M/s Mott MacDonald International Limited (UK) in 1992. For project implementation phase including Project Management and Construction Supervision, ECIL lead the Consortium namely "Pakistan Motorway Consultants", which comprised 4 other consulting companies including M/s Engineering Associates (Pakistan), M/s AA Associates (Pakistan), M/s Snowy Mountain Engineering Corporation (Australia) and M/s Louis Berger Group (USA). The Consortium successfully provided the required services for which credit is due to all

members of the Consortium.

For construction works, initially, a Turkish Construction Company, Bayindir Construction Incorporated (BCI) was awarded the contract, which was later terminated and the contract for balance works was award to a group of 13 Pakistani construction companies under a Joint Venture namely Pakistan Motorway Contractors (PMC-JV) under the leadership of M/s Saadullah Khan & Brothers (SKB). Incidentally and interestingly, both the Consulting and the Contractors Groups choose to name their consortiums with an acronym of PMC!

The project presented several challenges for ECIL and its consortium partners especially with reference to management and monitoring of multiple contracts and subcontracts.

It may be mentioned here that as a result of the termination of construction contract between NHA and BCI, the execution, monitoring and supervision of the balance works became more critical and complicated since BCI decided to initiate legal proceedings against the Employer. The legal proceedings are still on-going.

In addition, technical challenges were encountered, examined and resolved during the construction, including execution of operations associated with deep rock cutting between km 32 and km 43, piling works for Indus and Kabul River bridges.

All these required skillful and laborious efforts on part of the consultants and the contractor.

Construction of pavement with rut-free Asphalt Concrete Wearing Course has been a remarkable achievement on this Project.

The Asphalt Specialist from ECIL Syed Abu Bakar working in collaboration with Dr. Gwen Donald from SMEC developed the asphalt concrete mixes using lime and polymer additives for the first time in Pakistan.

The mix design proved highly successful and when applied it resulted in giving a smooth riding quality to the motorway carriageways.

confirming that the Project is indeed generating economic and social advantages as conceived at the time of planning. The economic benefits of Islamabad-Peshawar motorway will get a great boost on completion of its complementary project, the Peshawar-Torkham Expressway, facilitating the transportation of goods from Pakistan to Afghanistan and far beyond to the region of Central Asian Republics.

It would be befitting to acknowledge the services and efforts of all the professionals and technicians and other workers who contributed towards the successful completion of this gigantic Project. These include



Toll Plaza at Swabi Interchange on M-1

The project has proved to be beneficial to private and commercial commuters travelling across major commercial and population centers between Karachi and Peshawar. Since its inaugural on 31st October, 2007, the traffic volumes have been consistently increasing as more and more commuters are choosing to switch over to M-1 motorway from Grand Trunk (GT) Road (N-5) and other regional roads/highways,

several hundred individuals representing NHA, ECIL, EA, AAA, SMEC, LBG and last but not the least the Contractors including BCI, PMC-JV and several other sub-contractors and petty contractors who participated in one way or the other in several hundred activities related to the construction of the project. It is a living tribute to all

Continued on page 3

Corporate bodies and Individuals who worked very hard under harsh and torrid conditions as they remained focused on their ultimate goal; the successful completion and commissioning of the Project.

M-1; being one of the most high profile projects in Pakistan, NHA officials across organizational hierarchy maintained their attention constantly focused on the Project. Throughout the construction period cognizable administrative and

Chaudhry Arshad, Waseem Afzal, and Saher Chaudhry, without whose support and guidance it would have been impossible to achieve the goal.

From the Consultants side, the Chairman ECIL, Engineer Zaheer Mirza, remained the driving force behind this Project for most of the time. Under his able leadership and guidance, the Consortium Members remained proactive in attending to any technical or administrative matter impeding the progress of work.

The Office of the CRE, mostly comprising ECIL and SMEC/LBG Professionals, provided the requisite support to NHA and other parties towards timely decision-making and execution of the Project.

In this respect, services of Messrs. Patrick Allsop, Ray Bridger, Glen R. Page, Muhammad Sulaiman, Haris Aqil and Roger Finn are highly appreciated and commendable. Nothing can be achieved without a sound and competent professional team.

and highlight the following for their invaluable contribution toward completion of the Project.

The Team on Section 1 from Engineering Associates, included Riaz N. Ahmed Cheema, Mir Yaqoob Khan Barakzai, Khalid Mehmood, Hammad Zafar, Muhammad Umar, Hafeez-ur-Rehman, Khaliq Hussain Anwar, Lt. Col. (R) Muhammad Fiaz, Muhammad Ishaq Afridi, S. Shahid Raza Zaidi, Muhammad Aamir Chattha, Khushal Khan, Muhammad Umar, Mehboob Ali, Sajjad Khan, Mian Abdul Rahim, Rashid Masih, Muhammad Javed, Rana Tahir Mehmood, Muhammad Shaheen Tariq, Shakeel Ahmed, Muhammad Sharif and Rashid Ahmed.

The Team on Section 2 from ECIL included Munawwar Jamal Qureshi, Mir Yaqoob Khan, Syed Javaid Noor, Sajjad Hussain, Ijaz Ahsan, Abdul Rauf, Shad Muhammad Khan, Azam Khan, Kifayat Ullah Khan, Iqtedar Masood Bajwa, Muhammad Ziauddin, Abdul Haq, Hafiz Sajid Rafique, Ghulam A. Nizami, Altaf Ahmed, Raja Qasim Majeed and Rajmir Khan.

The Team on Section 4 also from ECIL, worked under the guidance of Munawwar Jamal Qureshi and comprised Israr Ahmed, Muhammad Ali Shah, Iqtedar Masood Bajwa and Sajjad Hussain.

The Team on Section 3 from AAA, included Jehanzeb Khan, Abdul Waheed, Iqtedar Masood Bajwa, Amanullah Khan, Abdul Waheed, Syed Javaid Noor, Nisar Ali Khan, Muhammad Farooq, Syed Anwar Kamal, Uwais-sun-Nabi Baig, Shuaib Nadir, Abid Naeem Khattak, S. Shahid Raza Zaidi, Ashfaq Ahmed, Rawaid Khan, Maj. (R) Tufail Ahmed, Syed Qaiser Abbas Shah, Nisar Ali Khan, Shafi Uddin, Qayam Uddin and Ahmed Hussain.

M-1 has been an outstanding and satisfying achievement for ECIL and its professionals in every aspect and will remain its hallmark for years to come.



Sawabi Interchange on M-1

technical support was provided by various NHA officials who took pains to provide their guidance through

He was ably supported throughout by Members of Steering Committee including Mr. Azhar H Siddiqui (EA), Mr. A Aleem Khan (AAA), Mr. Ahsan A

The success story can not be completed without mentioning contributions made by Messrs. Ahsam S. Arshad, Liaqat Hayat, Syed Abu Bakar, Col. Pervez Hafeez, Saeed Khilji, Dr. Abid Murtaza, Nadeem Abbas, Aziz Ahmed, Manzar Khan, Afzal Ikram Piracha, Iqtedar M. Bajwa, and Sajid Iqbal Khattak,

The Office of the Chief Resident Engineer was supported by four Resident Engineers; two provided by ECIL and one each by EA and AAA.

The professionals and the supporting staff of these Resident Engineers provided the critical control, quality assurance and day-to-day supervision services under the policies and guidance of Office of the CRE and the Steering Committee comprising all PMC Consortium Members. In this respect, we appreciate and acknowledge efforts of all team members on four sections



Overpass at Swabi Interchange on M-1

various stages of the Project. In this respect, we would like to highlight role of Major General (R) Farrukh Javed, Major General Imtiaz Ahmad, Chaudhry Altaf, Col (R) Aziz Mirza, Malik Mohammad Aslam Khan, Chaudhry Mujeeb Qadir,

Siddiqui (EA). Furthermore, contributions from JV Representative, Mr. Khalid Mirza, and Manager Design Coordination, Mr. Mohammad Siddiq Sulemany were appreciated at all levels throughout the course of the Project.

Pakistan's First Green Field Airport and Gateway to a Modern Pakistan

Engr. Khalid Waleed Shaikh, Executive Director (A&A)

The New Islamabad International Airport, recently named as Benazir Bhutto International Airport (BBIA) after one of the most prominent political figure of Pakistan and the Islamic World, Mohtarma Benazir Bhutto, former Prime Minister of Pakistan and Chairperson of Pakistan Peoples Party.

BBIA will be developed as the first green-field airport of Pakistan having all major components of a modern airport facility representing a truly state-of-the-art facility with the potential to become one of the most prominent, safe and attractive airports in the Region encompassing the Gulf and the South Asia.

It will be developed over an area of 3,200 acres, acquired by CAA in the 1980's near a village known as Pind Ranjha, near Fateh Jang; some 20 km from zero-point Islamabad and 23 km from Rawalpindi Cantonment requiring a driving time of only 20-25 minutes through the network of motorways and highways. The proposed site for the new airport has been selected with due consideration of the following factors:

- Accessibility to Regional Road Network.
- Operational suitability.
- Cost of land.
- Easy and time saving approach and exit.
- Improved connectivity with other cities through Motorway

and GT Road.

- Minimum environmental and noise pollution.
- Avoid interference with military aircrafts.
- Expansion potentials

BBIA will have modular facilities for

elements of the BBIA, such as Runway - Taxiway System, Terminal Development, Aeronautical Development, etc., have been determined in a manner that takes into account the long-term needs of each facility. To assist in the planning the airport layout, the airport

and passenger processing spaces, as well as the requisite automobile access roads and parking areas, airline support activities, including GSE servicing and catering, the fuel depot, which will provide both vehicular and hydrant aircraft fuelling, and the airport



both domestic and international passengers and cargo capacity to accommodate the projected demand through 2030. The facilities planned include Passenger and Cargo Terminal Buildings, Runway System, Aprons, Taxiways, Airfield Lighting System, Air Traffic Control Tower, NAVAIDs, utilities and infrastructure including roads, car parking facilities, power supply systems, storm water drainage, sewage treatment plant, etc.

The location of the various major

activities are to be distributed to the north and south of the runway (Runway 10-28), with the activities related to commercial passenger flights located to the north and cargo, aircraft maintenance and related infrastructure located to the south. The commercial passenger activities located north of Runway 10-28 include the passenger terminal, with state-of-the art technology and facilitation for passengers, meeters and greeters, including airport an airside mall, ample check-in areas

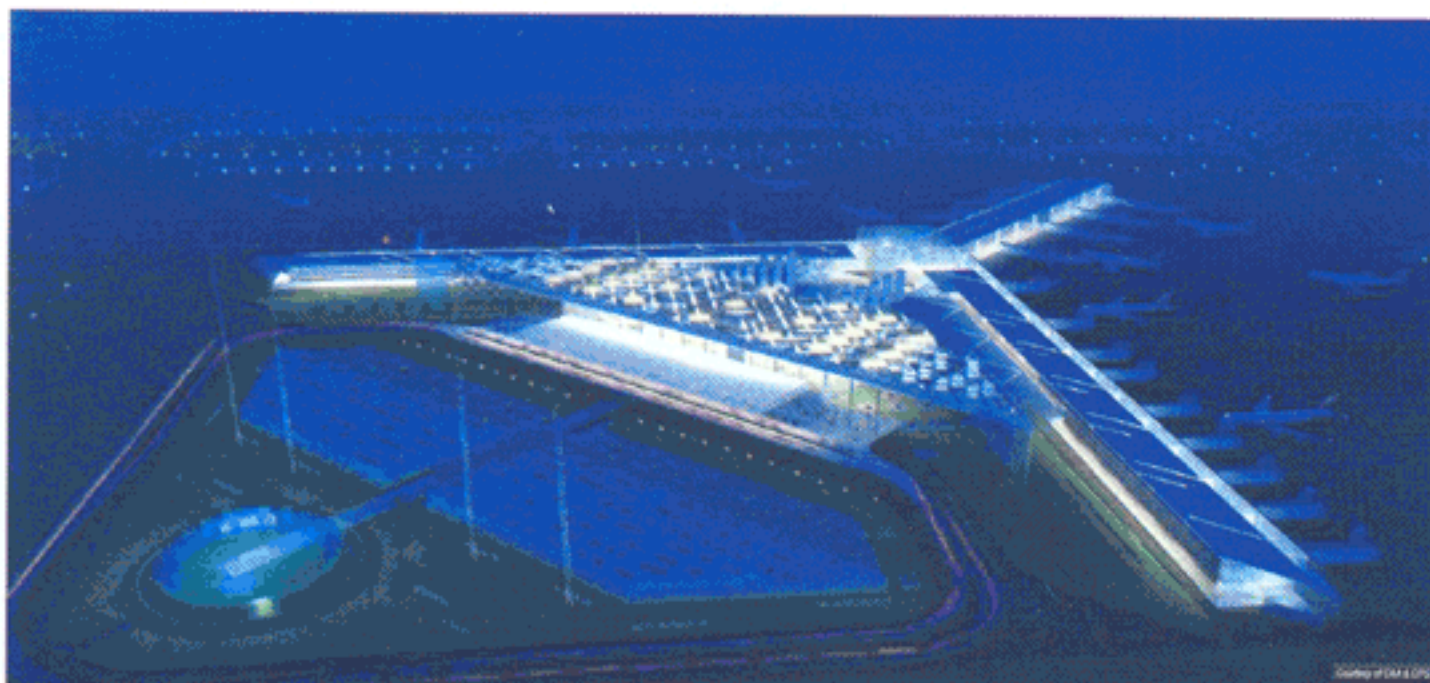
administrative offices, as well other airport support activities, such as the water treatment facility and airport maintenance building, including General Aviation areas.

Access to the terminal, as well as the other areas north of the runway, is anticipated from the east side, thus providing connectivity to the recently constructed motorway, located just east of the BBIA site.

Non-aeronautical activities are also envisioned for the areas north of the runway, and may include commercial and residential development, as well as light industrial units.

The commercial development is anticipated to include convention centres, hotels and shopping areas, whereas the residential development is expected to include a mixture of light, medium and high density housing.

The light industrial activity anticipated for the "Non-Aeronautical" zone is expected to be warehousing, clearing and



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Given the nature of this development, it is anticipated to straddle the main airport access road, with appropriate land use designations taking into account proximity to the arterial access road, the runways, the terminal apron and other light industrial activities existing on adjoining properties.

The areas south of Runway 10-28 are anticipated to be occupied by a combination of air cargo, aircraft maintenance facilities, and other aeronautical related activities, as well as the ATS Campus.

All of these activities require both landside and airside access, yet are preferably located separately from either passenger related activities or residential development.

Additionally, given that they are anticipated to be the result of private investments, there is no clear indication of the short or long-term development potential of either facility, thus ample area has been reserved for their growth.

The ATS Campus is to cater for the Air Traffic Control Tower, the main ARFF station and the Airport Security Offices.

Located south of Runway 10-28, the ATS Campus is cited at the best location for the ATCT, providing it a preferred vantage point to the runways and apron areas without requiring controllers to look southeast or southwest into the rising and setting sun.

The ATS Campus area is also a preferred location for the Main ARFF station, providing emergency vehicles nearly direct access to both ends of the runway as well as the terminal.

Access to this area is anticipated to be provided by a combination of on airport roads and existing, yet improved, off airport roads.

To that end, development of the roads can be undertaken as and when needed.

The runway - taxiways system has also been planned to grow as demand changes over time; however, given the nature of a runway, the capacity of the initial development is sufficient to support nearly all the forecast activities up to and including the year 2035. As a

result, the runway - taxiways system is expected to remain with a single runway over the forecast period, with only changes to the number or type of taxiways expected to be required.

Each development stage is built upon the previous, thus ensuring that subsequent phases do not require the relocation of facilities developed in preceding stages. This is a critical factor that ensures that orderly development of the BBIA can take place either sequentially or out of sequence, as no element requires addition or removal of another in order to be accommodated.

The Project Team comprising CAA Directorate of Plans & Development, Project Management Consultants comprising of Louis Berger Group (USA) in association with ECIL (Pakistan), Design Consultants for Passenger Terminal Building comprising CPG Corporation (Singapore) in association with Arcop (Pakistan), and Design Consultants for Airport Infrastructure comprising Airport de Paris (France) in association with NESPAK (Pakistan).

The project is envisaged to be implemented under nine packages comprising civil works and equipment supply, including navigational aids and instrumentation.

As of August 2008, one contract package for Preliminary Enabling Works has been completed by Husnain Cotex Group in association with HCI-IKAN (JV) both from Pakistan.

The second construction package has recently been awarded to Lagan International (Ireland) in association with Husnain Cotex Group (Pakistan). The work on Package 2 is expected to commence in latter half of October 2008.

It is expected that more packages will be offered for tendering before the end of this year.

The anticipated date of completion and commissioning of the Project is December 2010.

The completion cost of the project is estimated to be Rs. 37 Billion.

Being part of the Project Management Consultant Group, ECIL is proactively involved in

Master Planning, Pre Construction Services, Construction Supervision, Contract Monitoring and Post Construction Services. When completed, the Project will be

yet another feather in ECIL's Portfolio of major projects, making remarkable difference in Pakistan's economic growth.

REVAMPING OF IRRIGATION CHANNELS IN SINDH

Engr Ghulam Sarwar Khichi

Pakistan possesses one of the largest irrigation systems in the world. Province of Sindh shares a substantial part of that system. As a matter of fact, the irrigation system in the province of Sindh was established in the early decades of 20th century. Large scale experiments and trials were carried out to ensure its operational effectiveness. On its completion it proved highly beneficial for the development of agriculture, leading to much increased production of cash crops like cotton, rice and wheat. However, after a lapse of over half a century it started decaying in that the earthwork began to crumble, causing deformation of channel cross sections, breaches in canal banks and silting up of the channels.

The situation was exacerbated by uncertain weather conditions as much as the misuse of the irrigation water by the farmers who caused wide scale damage to steal water to irrigate their crops.

In the year 2000, the scenario invited government's attention to the deteriorating situation and a project was approved in 2001, for "Revamping / Rehabilitation of Irrigation and Drainage System", comprising 13,325 miles of canals and 3,811 miles of open surface

drains. The project was estimated to cost Rs.13,000 millions envisages revamping and strengthening of irrigation and drainage channels in the entire province.

A consortium of engineering consulting firms was assigned the task of planning, designing and supervision of the works to be carried out to rehabilitate the entire irrigation and drainage system of the province. ECIL is one of the three firms that form the consortium and the work is making good progress.

The objective of the Project is to provide equitable and assured water supply to the farmers especially at the tail end areas of the canal systems. This will be achieved by strengthening of canal banks, silt clearance and repairing / remodeling of regulators, re-boring of tube wells, making them operational and de-silting of canals and surface drains.

Commencing in 2001, nearly 55 % of work has been completed and an extension of time to finish the entire scope of work by December 2008 has already been approved. On completion of the project, it is expected that agriculture activities in the province of Sindh will get a reasonable lease of life for the benefit of future generations.

Quotable Quotes

Patience, persistence and perspiration make an unbeatable combination for success.

There is real magic in enthusiasm. It spells the difference between mediocrity and accomplishment

Special Achievement in GIS

An International Award of Excellence!

Our readers will be delighted to know that ECIL has received a prestigious "Special Achievement in GIS" (SAG) Award from world renowned and most credible GIS organization in the World, i.e., Environmental Systems Research Institute Inc. (ESRI), USA.

The award-giving ceremony was held on Wednesday 6th August 2008 at the San Diego Convention Center, USA, where representative of ECIL, Dr. Jamil Kazmi, received the award on behalf of ECIL. The SAG Award was conferred by ESRI during the 28th Annual User Conference, the largest attended GIS conference in the World, where on average 12,000-14,000 GIS professionals attend from across the world. This award is given to user sites

around the world in recognition of their outstanding work in the GIS field. ECIL was selected to receive this award from over 100,000 entries constituting GIS sites worldwide. This is the second time that ECIL has been selected to receive this distinguished award.

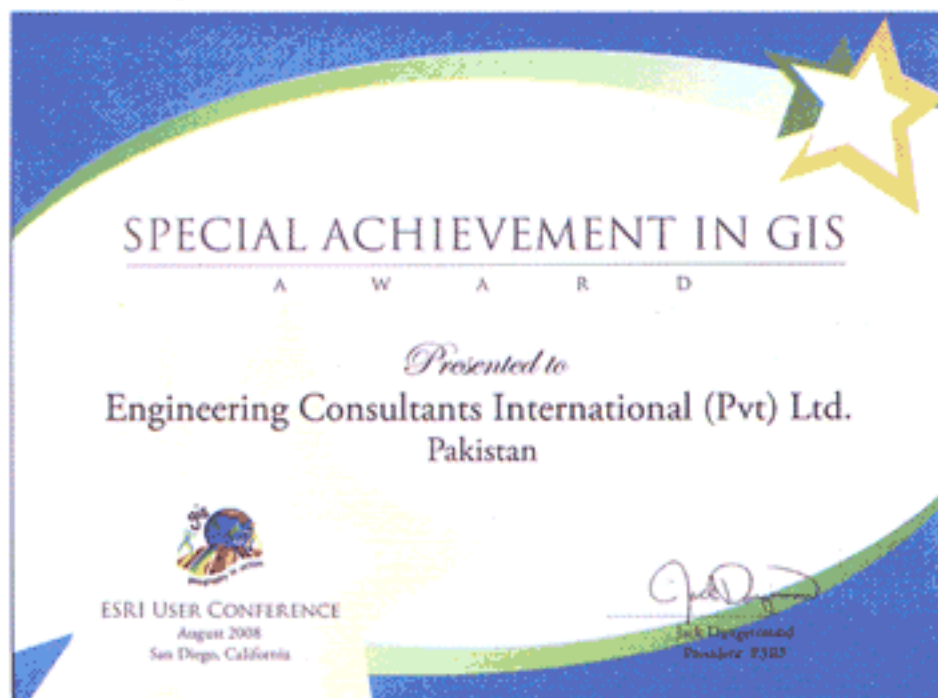
The last one was in 1999. ESRI showcased the applications developed by ECIL and other SAG award winners and their applications on the ESRI Web site at <www.esri.com/sag> after the conference. The aim was to feature ECIL and to share the importance of ECIL's contributions in GIS in the global community. 50 international organizations won the SAG award. Some of the

organizations that have achieved this award in yesteryears, include, the Harvard University (Massachusetts, USA); Department of Agriculture

accomplishment not only we at ECIL feel proud of this achievement and congratulate our team of professionals and management to



Dr. Jamil Kazmi, Representing ECIL and receiving the SAG award, from the Founder & President of ESRI Mr. Jack Dangermond



Certificate given to ECIL by ESRI

(USA), Department of Forest Services (USA), Geospatial Service and Technology Center (Utah, USA), US Marine Corps (USA); Swiss Reinsurance (Switzerland), JP Morgan Chase (USA), Nakheel (UAE), IBM Technology Center (China), Telefonica de España (Spain) Singapore Land Authority (Singapore), Saudi Aramco (Saudi Arabia), Department of Civil Aviation (Dubai, UAE), Communauté Urbaine du Grand Lyon (France); NOAA - National Weather Services (USA), and the CH2M Hill Inc. (USA). Because of this outstanding

have risen above all, we also feel that it is as well a matter of pride for the people of Pakistan to have achieved this level of international community.



SAG Award

NEWS BRIEFS

UPGRADING OF ECIL'S AIRPORTS DEPARTMENT

The Airports Department has been upgraded and is now called "Airports & Aviation Division". The Division will be headed by Engr Khalid Waleed Sheikh, Executive Director. The Division is conceived to create new and positive prospects in moving towards the new market segment as it holds great potential for successful knowledge base business venture.

PLANS FOR AN AIRSTRIP AT ISLAMKOT IN THAR AREA

Preparation of a Feasibility Report for building of a new airstrip with

allied facilities at Islamkot in the province of Sindh is going on. The Sindh Coal Authority has sponsored this project to provide infra-structural support to their Thar Coal Project. Topographic survey of the site area is being undertaken by ECIL under the supervision of ECIL's Chief Surveyor, Mr. Hidayat Ullah.

DEVELOPMENT OF MULTAN AIRPORT TO INTERNATIONAL STANDARD

Plans and detailed designs of up-graded airside facilities for operation of large wide body aircraft at Multan International Airport have been completed and project tendered out by CAA. ECIL will also supervise the execution of this project, which will be completed by 2010.

PQA DELEGATION VISITS ECIL HEAD OFFICE:

A high level delegation of Port Qasim Authority visited ECIL Head Office on May 30, 2008, which was lead by the then Chairman Port Qasim Authority, Rear Admiral (R) M. Afzal, SI(M). The delegation included Rear Admiral M.S.Kureshi S.I.M, DG Technical, Mir Afsar Din Talpur present Chairman PQA and Mr. K.M.Yousuf Director P&D. They were welcomed by Mr. Akhlaq Ahmad, CEO ECIL, along with other company officials. A detailed briefing was provided through a powerpoint presentation encompassing salient features of ECIL and the status of current works that ECIL is doing for PQA. The Chairman appreciated efforts of ECIL and stated the following in the Visitor's Book "I visited this organization and personally feel that government organizations should work on this pattern"



Architect Naved Zaheer Making a Presentation to the Chairman Port Qasim Authority

TCDPAP CONFERENCE IN SEOUL, SOUTH KOREA

Mr. Akhlaq Ahmad, CEO, attended the conference of TCDPAP, FIDIC and ASPAC held between 22-25 April 2008, at South Korean capital Seoul, along with other consultants of South Pacific Region.

There were four delegates from Pakistan who also participated in the proceedings. ECIL has actively contributed in the conference proceedings. The good news for Pakistan emanating from the conference was that that the President of ACEP has been elected to serve as the President of TCDPAP for a four year tenure, commencing from April 2008.

This is also an honour for ECIL as its Chairman, Engineer Zaheer Mirza, is one of the founding fathers of the Association of Consulting Engineers Pakistan (ACEP) and contributed significantly towards making it an active association and earning membership of Federation of International Consulting Association (FIDIC). It is gratifying that the foundation laid by our Chairman, like many other visions that he had materialized, ACEP is also growing and contributing towards the betterment for the profession of consultancy in Pakistan.



Mr Mahbubul Huq and Mr. Akhlaq Ahmad CEO ECIL visited Korea accompanied by their families and participate in the TCDPAP conference



OPPORTUNITY

They do me wrong who say I come no more
When once I knock and fail find you in
For everyday I stand outside your door
And bid you wake and rise to fight and win
Wait not over the golden chances past
Wait not over the golden ages on the wane
For each night I burn the records of the day
At sunrise every soul is born again

Fulfillment of Social Responsibilities ENDEAVOR TO IMPROVE QUALITY OF DRINKING WATER IN A VILLAGE OF THAR DESERT IN SINDH

Engr. Khurram W. Khan, Engr Khalid Mirza, Engr. Abu Zahid Mahmood

The desert area of THAR has been supporting human life for times immemorial. The elixir of life called water has always been scant but has still been enough for people living in small villages and hutments for centuries past. In the entire region, the only source of water has been subsoil aquifers gifted with sweet water by nature.

However, in our times development works, increase in population, unhygienic disposal of water, living conditions have all adversely affected natural water aquifer.

These effects are both qualitative and quantitative, making the life of the village folk an unsavory affair.

Water has not only gone scarce but it is fast changing its chemistry and is turning into brine, adversely affecting health of the consumers.

The situation has also been exacerbated by the vagaries of weather, in that annual rainfalls in the area have depleted due to a world-wide climate change manifesting in the phenomenon known as El-NINO and La-NINA.

This has affected a large segment of people, men women alike and the worst affected are the children who are being physically de-capacitated due to the harmful effects of fluoride Fluorosis, a disease caused by excessive fluoride contents in drinking water.

Several other impurities that have been identified through extensive tests are also spoiling the water quality.

The state of human misery in the Thar Desert demands urgent corrective measure to improve its quality as early as possible.

In this respect, a Philanthropist

approached ECIL to seek technical advice for a project that is aimed to provide some relief to the residents of a pilot village in the area vis-à-vis quality of drinking water.

For this purpose, a team of three engineers visited the project site and carried out reconnaissance in order to formulate

desired objectives.

During the visit, following observations were made:

- Water is drawn from ages old wells, which were mostly unlined.
- Wells are situated at distances far apart and people (mostly women) living in villages, have to walk long distances to fetch water.

It has been found that subsoil water in the entire area is contaminated, and does not meet the criteria for drinking water. The high fluoride contents severely affecting health of the populace, which calls for immediate measure to save and mitigate various health-related problems of the people.

- Extremely poor hygienic conditions also need to be attended to in order to improve living conditions.
- To overcome the scarcity of water, storage tanks and pumping facilities have been provided but these are not contributing towards improving the quality of water stored owing to lack of maintenance and inability of the residents to do the needful on self-help basis.

The project envisages installation, commissioning and maintenance of a Reverse Osmosis Plant for which an appropriate system has been identified.

It is also considered necessary to provide training to select group of local individuals to operate and maintain the system, which will not only provide employment to the local but give them sense of contribution towards their social responsibility.

As and when the project is successfully implemented and commissioned, it is envisaged that it would open up more avenues for other philanthropists, NGOs and public sector organizations to learn lessons from the success story and build up further on the basis of these experiences towards betterment of the Thar Communities. We will keep our readers up-to-date on this project in the coming issues as the project would be commissioned before the end of this year,



recommendations for possible options and subsequent implementation to meet the

- Extensive water quality tests have been carried out to check water quality of the ground water.

An overview of workload

SELECTED ON GOING INTERNATIONAL PROJECTS



Feasibility Study and Detailed Design for the Rehabilitation and Reinstatement of Ruwais Housing Complex: Abu Dhabi National Oil Company (ADNOC) initiated a feasibility study followed by detailed engineering design for the reinstatement of old Ruwais Housing Complex, commissioned in 1979. Project comprised the rehabilitation of all components i.e. Structures, Roads and the connected services.

Development of Metro Cities (Project B) in Dubai UAE: Road and Transport Authority, RTA Government of Dubai, planned developing of Metro Cities, comprising Official, residential and commercial high-rise buildings including five star hotels. The aim is restrict the heavy traffic by providing all the facilities within the projects area. Project comprises 13 sites spread all over Dubai along the Metro-Lines, adjacent to Metro Stations. ECIL provided the Infrastructure Design Consultancy on this project in association with Parsons Brinckerhoff and RTA.

Meydan Development Project: Design of Infrastructure including roads and services with Theo A King Design Consultant TAK, Meddan Development for a 160 Hectare, comprising Horse Training Tracks, Residential and Commercial Buildings.

Ras Trompy Development Project, Marsa Alam Egypt: Preparation of Feasibility Study with Parsons, Brinckerhoff and Bovis Land Lease in order to select most appropriate Master Plan for development over an area of 3500 hectares.

Additional Works for the Maintenance and Rehabilitation of Roads and Bridges in Abu Dhabi Island (2,100 Km-Lanes): This project involves the development of Comprehensive Pavement Management System of the complete road network of Abu Dhabi City (Island). Project activities include the pavement evaluation using Falling Weight Deflectometer, Roughness Surveys using Laser Profilometer, Real Time GPS Surveys and Development of Video Management System for Abu Dhabi Municipality, Government of UAE.

Roughness Testing at the Runway of Dubai International Airport: Execution of the Roughness Survey by using cutting edge Laser Technology, at the Runway of Dubai International Airport, considering landing gear and nose gear configuration of different aircrafts operating at Dubai International Airport, UAE (Department of Civil Aviation, Government of Dubai, UAE, Al Naboodah Contracting).

Roughness Testing and Pavement Evaluation at Shaam Qusaidat Road Section in Ras Al Khaima, UAE: Pavement evaluation and roughness testing at the road section 130-Km, to ensure quality assurance parameters, set by the Ministry of Public Works and Housing Government of UAE. (MPWH)

Roughness Testing at Fujairah-Khorfakkan Highway, UAE: Roughness testing and asset management surveys at Fujairah Khorfakkan Highway 90 Km-Lane (MPWH)

Roughness Testing at the Runway of Jebel Ali International Airport: Execution of the Roughness Survey by using cutting edge Laser Technology, at the Runway of Dubai

International Airport, considering landing gear and nose gear configuration of different aircrafts operating at Dubai International Airport, UAE (Department of Civil Aviation, Government of Dubai, UAE, Al Naboodah Contracting)

Construction of Outer Bypass from Umm Al Quwain Dhaid Road to Saja Khawanej Road UAE: Roughness testing and asset management surveys at Umm Al Quwain-Saja Khawanej Road Section 110 Km-Lane (MPWH)

Construction, Completion, and Maintenance of Roads in Dhadna, Taween, Khalibeh and Idhen: Roughness testing and asset management surveys at different road sections approximately 120 Km-Lane. (MPWH)

SELECTED INTERNATIONAL PROJECTS COMPLETED 2007 - 2008

Rehabilitation Engineering Design of Fujairah - Khorfakkan Highway (24 Km): This project involved complete rehabilitation and engineering design of a Four Lane Dual Carriage Highway, from Fujairah to Khorfakkan. ECIL conducting topographic surveys, traffic studies, pavement evaluation and geometric design of road, improvement of intersections. (Ministry of Public Works and Housing, Govt. of UAE)

Detailed Infrastructure Design of Mixed Used Development Fujairah Paradise (500 acres): Design of mixed used facility having all modern day facilities including 1000 Villas, Five Star Hotel, Golf Course etc. (Gambert Engineering Consultant and Golden Riyadh Developers)

Paschid Serena Hotel: Detailed engineering design, including civil works, electrical and mechanical works, for new Serena Hotel in Tajikistan being constructed by Aga Khan Development Network.

SOME OF THE MAJOR ON GOING LOCAL PROJECTS



Emergency Earthquake Assistance Program (EEAP): Under ADB's assistance for earthquake affected areas in Azad Jammu & Kashmir, ECIL is providing professional services for design, construction supervision and contract management of around 200 km of roads linking various parts of the AJK.

Banazir Bhutto International Airport: BBIA will be developed as the first green-field airport of Pakistan having all major components of a modern airport facility representing a truly state-of-the-art facility with the potential to become one of the most prominent airports in the Region encompassing the Gulf and the South Asia.

Grade Separation Facility at Zero Point, Islamabad: The Consultancy work comprises planning, designing and construction supervision of multi level Grade Separation Facility to be constructed at the confluence of two major arterial roads, the Kashmir Highway and Islamabad Highway. It is a Clover Leaf interchange with an inbuilt Trumpet Interchange. Capital Development Authority (CDA) is the sponsoring and executing Agency.

Buildings for Gawdar Port Authority: Construction of Gwadar Port Authority Head Office Facilities, which comprise of 5-storied building with covered area of 60,747 square feet. The civil works have been completed while HVAC works are in progress. The facility included construction of access road (2.2 km), security fence (652 m), Control Tower Building consisting of 5-storey building with 36,590 sqft covered area, maintenance workshop (15,492 sqft), Vehicle Wash Bay (1813 sqft), Vehicle Service Garage (3,873 sqft), Sea Water Tank, Oil Depot, Oil Waste Water Treatment Plant, Water Tank & Pump House, Security building (11,148 sqft), Operational Building (36,300 sqft), Fire House (10,731 sqft), Mosque (9479 sqft), Guard House (966 sqft), Covered Pathway, Fuelling Station (1,346 sqft), Electric Sub Station and Sewerage Treatment Facility, including the installation of Sewerage Treatment Plants Equipment.

University of Engineering, Science and Technology (UESTP) for Higher Education Commission (HEC), campuses at Karachi (Pakistan - French Univesrity), Lahore (Pakistan- Austrian University) and Sialkot (Pakistan - Sweden University).

Lowari Tunnel: Construction supervision services of 8 km long Lowari Road Tunnel with about 20 km access roads on either ends of the portals. When constructed, this will be one of the longest tunnels in the World.

Multan Airport: Planning and Design of the New Terminal Building and Upgrading of airside facilities at Multan International Airport, including new Cargo Terminal Facilities to boost exports from the region.

Development of Infrastructure Facilities for Eastern Industrial Zone, Port Qasim, Karachi: The works include planning and designing for development of Infrastructure facilities in Eastern Industrial Zone (Area: 8000 Acres). It involves way leaves planning considering Master Plan of EIZ, water supply network, sewerage network, access roads, internal roads and storm water drainage system. The Client is Port Qasim Authority.

LOCAL PROJECTS COMPLETED IN 2007-2008

Jaglot Skardu Road Project: Detailed engineering design has been completed for 80km section of strategically important highway in the north-eastern mountainous region of Pakistan.

Hydrological/Drainage Study: The Study was carried out and completed for CDGK for area around Institute of Business Management, Korangi Creek Karachi in order to study the impact of development around major storm water stream. The study recommended various measures to ensure swift water flow, especially during monsoon season, without affecting any developments in the command area.

Realignment Study for Section of M-2 through Salt Range Area: Pre-feasibility Study of M2 encompassing Pavement Overlay Design and Alternate Alignments through Salt Range Area was carried out and completed for NHA.

Traffic Management Study for AKU:

Detailed studies were carried out to prepare Master Plan for Transportation Facilities at the Aga Khan University Hospital Complex encompassing the expansion plan up to Year 2025 and beyond. The study focused on providing parking facilities for the users and enhanced infrastructure facilities associated with transportation within the facilities.

Makran Coastal Highway: The construction supervision services have been completed for Makran Coastal Highway (Pasni Gwadar Section), which has enhanced local transportation network in the region opening gateway to development and economic opportunities for the local population. It is to highlight that this section of the Highway successfully withstood two major floods in 2003 and 2005, which speaks of practical and functional design/planning of the facility. After successful completion of the Project, NHA had awarded Gwadar Gabd Section to ECIL with same Team of Supervision Professionals.



An eye level view of the concept of a university building



Images of Corporate Setup

ECIL World Wide Experience

America
United States

Africa
Chad
Libya
Senegal
Tanzania

Asia/Middle East

Pakistan
Afghanistan
Bahrain
Bangladesh
Kyrgyz Republic
Kazakhstan
Malaysia
Qatar
Russia
Saudi Arabia
United Arab Emirates
Uzbekistan
Yemen
Brunei



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