Who would ever think that major road construction could be done in the East Kootenays during winter? Thanks to some innovations, hard work and the help of Mother Nature, construction to realign two sections of Highway 3 above Moyie Lake, 15 kilometres west of Cranbrook has progressed well through the winter.

Sharp Construction Ltd. of Prince George has the big job of moving 94,000 cubic metres of rock and 170,000 cubic metres of dirt to realign two sharp curves and add a two-kilometre eastbound passing lane.

Challenges include having beautiful Moyie Lake just below the project and CPR tracks nearby. A CPR employee works as a spotter when construction crews are working to ensure no falling rocks affect the tracks.

Although an exceptional winter with the least amount of snowfall in local memory aided progress of the project, an unexpected extra volume of soil over rock on a steep side slope was encountered. Access to the slope was very narrow.

To protect the safety of motorists and reduce significant delays for commuters, transport trucks and school buses, single lane traffic was put into effect. For three weeks crews worked non-stop, excavating materials during the day and trucking materials out during the night. A berm was placed along the centreline for protection from rocks and soil.

What did project manager Bill Smith and project supervisor Mike Newton do with 40,000 cubic metres of frozen soil? It was taken to a depleted gravel pit within the project boundaries and used to help in its reclamation.

With winter and the extra work behind them, Bill and Mike are now anticipating finishing the project in July.

Unusual dry winter weather allowed crews to continue working on the realignment of Highway 3 west of Cranbrook. Nearby CPR tracks and the Moyie Lake shoreline made access challenging.
Kokanee campaign  
(cont’d from page 1)

The cabin was built more than 100 years ago and was first used by miners. Today it is frequented by thousands of hikers and skiers who visit the park.

Much of the $900,000 needed to restore and expand the cabin is being raised from private corporate donations. A public fund-raising campaign was launched in Nelson on February 2, with a target of raising the remaining money needed to begin construction this summer. The entire project is being coordinated through the Ministry of Environment, Lands and Parks district office in Wasa, B.C.

The Ministry of Transportation and Highways is a community partner with the snow avalanche programs. District avalanche technician John Tweedy represents the ministry, assisting the Kokanee Glacier Alpine Campaign in its goal, which is to promote backcountry avalanche awareness. John also sits on the national corporate committee.

For more information on the campaign check out their Web site at: www.kokanee-glacier.org

Keeler corrals crabs in Hixon

by Danny Keeler, area manager, bridges and inland ferries

Bridges serve as crossings for many things: from vehicles to pedestrians to wildlife – even crabs!

An unfortunate and unusual accident took place in the wee hours of the morning on the Hixon Creek Bridge last summer that left many of the townsfolk, some passersby and one highways bridge area manager in pursuit of wayward crabs!

The drama began after the driver of a semi-trailer unit travelling southbound from Prince Rupert lost control of his rig at the approach to the bridge, which is about 60 kilometres north of Quesnel. Fortunately, the bridge safety flares prevented the truck from going over into the creek and there were no injuries.

However, the crash liberated about 20,000 dungeness crabs, which immediately began scurrying for cover. Some headed for the creek while others crossed the bridge and tried eluding their captors in the weeds at the side of the road. There were reports that some had been spotted nearly four kilometres from the scene of the accident!

Several officials, including our intrepid bridge area manager, were quickly on hand in an attempt to corral the disoriented critters. Environment officials, who were worried about potential contamination of Naver Creek, scoured the waterway for the crafty crustaceans.

Their efforts were aided by eager residents of Hixon and a few travellers who joined the impromptu crab drive. Judging by the abundance of smiling faces leaving the scene, it appeared the unfortunate trucker’s loss was the gain of some.

Unfortunately, damage to the bridge railing, sidewalk and flares tallied up to about $50,000. The bridge was closed, rendering Highway 97 completely impassable for about six hours. Once reopened, the highway was limited to single lane only for another 14 hours to allow temporary repairs to be carried out on the railing.
Guide signs point the way  
by Glen Plummer and Dave Smith

Like the song says, “Signs, signs, everywhere a sign.”

Welcome to Dave Smith’s world. Dave is in charge of the ministry’s guide sign rehabilitation program.

When you drive any of the many highways in this province there are all kinds of signs along the way. But, which ones are guide signs? And, what is a guide sign anyway?

“Guide signs are the big green signs that give motorists guidance such as directions or distances,” says Dave. “These signs are 2.9 square metres, basically the size of a 4x8 sheet of plywood.”

The new program has the challenging task of establishing a complete inventory of all of the guide signs in the province and determining what condition they are in.

“The anticipated end result is to establish dedicated rehab funding to assist in the replacement of worn-out signs,” says Dave.

The guide sign program is headed up by Al Planiden in Victoria.

Somebody warn the fish!

Ministry bids Dennis Pretty a fond farewell  
by Bill Smith, regional project manager, Kootenays region

“I tell people you enjoy going to work, you obviously haven’t fished.”

These were the opening words spoken by Dennis Pretty at his retirement party.

On Friday, January 26, 2001, 76 co-workers, friends and family met at the Apollo Restaurant in Cranbrook to wish Dennis and his wife Cathy a very happy retirement.

Dennis’ skill with a fly rod is legendary throughout the region. Fish in every local lake are trembling at the thought of Dennis being there to catch them seven days a week, with those deadly flies he ties. In the “off season,” Dennis will have to resort to ice fishing, or hunting for the odd deer, elk or duck.

Prior to becoming a full time sportsman, Dennis worked for the ministry for 35 years. He spent most of his career working in the Kootenays. He started with Harry Lang’s construction branch in Castlegar in 1965. Bob Chadwick inherited the crew, with projects at Taghum, Kitchener and Elko. In 1972, Dennis transferred to Bill Austin’s crew, working jobs in Grand Forks, Kimberley and McLeod Lake. After years of moving Cathy and their three sons, David, Kevin and Ken around the province, Dennis bid on a job with the engineering crew in the Cranbrook district (now East Kootenay district) in 1978. He stayed with the district until his last day on December 14, 2000.

After dinner, many colourful stories were told highlighting Dennis’ exploits at work, in the bar, fishing and hunting. Presentations were then made by the ministry and co-workers. The evening ended with Dennis wishing all a fond farewell.

Goodbye Dennis, the East Kootenay office will not be the same without the stories of your daily adventures, your indoctrination of young staff and your sarcastic wit. We will all miss you.

PECSF campaign award

Acting deputy minister Dan Doyle presents a recognition award to Vicki Nygaard, Marine Branch. Vicki co-chaired the ministry’s 2000 Provincial Employees Community Services Fund campaign for Victoria.
EIT mentoring program prepares new engineers

by Glen Plummer

Engineer-in-training Chad Tenney believes there is more to be learned from hands-on training than from books in a classroom. Tenney is one of 10 engineers-in-training (EIT) currently participating in the MoTH mentoring program.

“The EIT program is highly regarded by the ministry and the private sector for preparing high quality professional engineers,” said Tenney.

The ministry mentoring program has existed for more than 30 years and many of the EIT’s who go through the MoTH program continue with careers in the ministry. A/Deputy Minister Dan Doyle is a perfect example.

“I started as an EIT in 1969,” said Doyle. “The program at that time was six months long, and during that time I worked in the several disciplines of engineering the ministry had. It was a wonderful introduction to the ministry. The experience I gained and the contacts I made during that six months have been very useful during my time here.”

The program pairs an EIT with a ministry engineer who acts as a mentor, assisting in the development of new engineers. In some instances, mentors exceed expectations and go beyond what is required or usually expected.

This has been the case for Tenney. His mentor, Frank Maximchuk is the senior geotechnical engineer in the northern region.

“As a mentor, Frank is an excellent teacher and is extremely knowledgeable in a range of subjects outside of geotechnical engineering,” said Tenney. “What has impressed me the most is the effort that Frank puts into his teaching methods. He understands what he teaches me will follow me through my career.”

Frank Maximchuk has been involved with the EIT program for many years and has trained numerous geotechnical engineers during these years.

“I’ve been part of the mentoring program for about 12 years and I’ve worked with eight or nine EIT’s,” said Maximchuk.

The other EIT’s in the program are Joy Sengupta, Allison Fedrigo, Graeme Cross, Amy Choh, Ben Wu, Justin Barrett, Sarah Dennis, Eddie Ballarin and Erin Moxon. EIT mentors include Ed Miska, Brent Dozzi, Norm Parkes, Jacques Dupas, Kevin Richter, Bill Eisbrenner, Jin Oh and Frank Maximchuk.

This current group of EIT’s is all over the map, literally. You can find them in Victoria, Burnaby, Kamloops, Prince George and Terrace. The nature of the EIT program means that EIT’s can find themselves moving more than once during their training. So if an EIT ends up in your office, make them feel welcome.

Travel and training all part of EIT experience

Last September, Amy Choh arrived in Kamloops with a trunk loaded with her worldly possessions. “It was difficult to leave my friends and family in the Lower Mainland,” she recalls. “I had never lived away from home, hadn’t traveled to the Interior before and didn’t know what to expect.”

In her short career with the ministry, Amy has been from Osoyoos to Williams Lake and from Lillooet to Sicamous, studying traffic patterns and investigating safety issues. “This job has given me the opportunity to see parts of the province I never would have seen and to meet some very friendly, interesting people in the region.”

It hasn’t been all work in Kamloops. Amy participated in her first curling tournament at the Region 2 annual two-ender bonspiel. “I had a lot of aches and stiff muscles afterwards, but it was a lot of fun. We may have come in 17th out of 18 teams, but we were the only team to manage to get a point against the eventual winning team!”

Amy will continue her training in Victoria beginning this fall.
**Nicola district enthusiastic about Brodie salt shed**

*By John Philp, Nicola district office manager*

Staff in Nicola district are justifiably pleased with their new Brodie salt shed. Although this structure is not unique – it is one of a number that have already been erected throughout the province – this has not dampened the enthusiasm of district staff for this innovative, environmentally-friendly technology.

Improvements to the design of these structures began in earnest after an old-style salt shed leached salt into the water table at Heffley Creek back in 1994, contaminating the town’s water supply costing the ministry $3 million in damages and remediation. Since the Heffley incident, several different approaches and construction styles have been investigated and considered before arriving at the current design.

Some existing salt sheds could be remediated by the installation of an evapotranspiration (say that ten times quickly!) liner which is a 20x20x1.2m excavation immediately in front of the shed, lined with 30mm PVC. This pit trap is backfilled with rock and gravel. The theory is that the salt spilled in front of the shed will be washed into the trap by rainwater, which will then evaporate and leave the salt behind. Alternatively, if evaporation is not fast enough, the water will be pumped out to be used in various ways.

The Brodie shed been refined several times to the current design which consists of a paved floor, lock-block walls lined with coated plywood and a roof of galvanized steel trusses covered with duraweave fabric. This not only makes the structure cost efficient and relatively portable and allows for set up and disassembly in a matter of days. Our hats are off to the team of Rob Buchanan (HQ), Ray Lofgren, Paul Imada, Al Mitchell and Dick Weichel (all region 2) who have built 21 new sheds and liners and remediated nine existing sheds in fiscal 2000. The team anticipates doing another 50 new sheds and 35 liner installations this year.

**South Surrey Interchange team wins award**

*By Laura Lemp, a/assistant regional communications coordinator*

Terry Walton, project director for the South Surrey interchange, was part of the team honoured on March 3 with the Award of Merit (infrastructure category) for Engineering Excellence as part of the Consulting Engineers of British Columbia (CEBC) Engineering Week.

The South Surrey Interchange on Highway 99 at 152 Street, marks the first use of the "design - build - develop" model in B.C. Under this process, the government used the sale of surplus lands to offset the cost of the project.

This process was beneficial because it created a public-private partnership, a broader knowledge base and range of experience resulting in greater innovation, quicker problem solving and a better product for the motorists. The South Surrey interchange also featured a creative combination of road and transit design with development of land.

Walton explains the interchange’s advantage over the traditional "cloverleaf" layout: "It is a tight diamond-shaped, single-point interchange, which made the design more environmentally friendly and less land hungry," he said. "It also features a fish passageway under the freeway via Barbara Creek and an over-wintering pond where the fish can find food and refuge for the winter months before heading to the ocean."

"Local improvements include better access to the freeway for residents and a new neighborhood shopping centre. The

*Continued on page 6*
Deckhand says good bye to Arrow Lakes marine branch

by Vivian Colarch, marine clerk

Ron Dyer has retired after 35 years as a deckhand on the Upper Arrow Lake. Ron started his career with the ministry in Revelstoke in June 1966 and "spared" as a deckhand on the M.V. Lardeo between Arrowhead and Galena Bay. When the D.E.V. Galena ferry was built and put into service in May 1969, Ron transferred and worked as a deckhand until his last sailing February 21.

Ron is as well-known for breeding African cichlid fish as he is for his petit-point embroidery masterpieces, particularly his silk canvas petit points. Ron is also involved in several charitable organizations.

A favourite letter to Ron on his retirement raised the question of who will train upcoming captains. In response, Ron assured us he is only a phone call away for any expert advice.

Ron would like to say 'Ship Ahoy' to his former shipmates, who he will miss, along with the travelling public who were a big part of his life.

South Surrey Interchange
(cont’d from page 5)

new interchange also improves corridor efficiency, allowing for greater movement of commuters, transit buses and commercial traffic. It has also improved safety by relieving afternoon peak congestion, which backed up onto Highway 99 at the Crescent Road intersection."

Terry worked on the project for over two years with Dave Fraser, (McElhanney Consulting), John Kewley, (BA Blacktop), Linda Husband, Fernanda Badke and the rest of the regional project team.

Terry has been with the ministry for over 29 years and started out at the paving branch in Burnaby. Earlier this year, Terry also received the Canadian Institute of Transportation Engineer's W.H. Curtis Award for Technical Achievement on behalf of the ministry. In addition to these two awards, in December 2000, the SSI project team awarded a Silver Public Service award for the innovative approach of the South Surrey interchange project.

Northern region district operations techs meet in Prince George

by Larry Rowe, district operations technician

District operations technicians in the newly-formed Northern region held their first meeting on Feb. 13 and 14 in Prince George. Participants discussed different ways of doing business, the quality assurance program, noxious weed program and the gravel management program. In addition, representatives from the City of Prince George attended the meeting to demonstrate the city’s GIS program and their new road inventory maintenance system, which may replace the currently used road features inventory.
The return of Bush Creek

by Leanne Jones, communications officer, VIHP

Upgrading the Trans-Canada Highway between Goldstream Park and Nanaimo included widening the Bush Creek Bridge from two to four lanes. This creek flows through Chemainus First Nation (CFN) Indian Reserve #12 and, before any work could be carried out, a formal agreement between the CFN and the ministry was put in place.

In the agreement, the Vancouver Island Highway Project (VIHP) committed to providing new fish habitat to replace any that might be impacted during construction. A unique partnership between VIHP staff, Chemainus First Nation members and experts in engineering, biology and ethno-botany enabled this goal and more to be accomplished.

This collaboration created more than 1,000 square metres of fish habitat in the lower Bush Creek watershed. The habitat – a network of rearing ponds and channels – is designed primarily for use by coho salmon and sea-run cutthroat trout, but other types of fish as well as small mammals and amphibians will benefit from the improvements.

The project also involved a comprehensive re-vegetation program. Plant salvaging to re-establish some of the original plants to the banks of the stream and the ponds took place in the summer with the help of CFN band members. In addition, CFN band elders worked with Dr. Nancy Turner, world-renowned ethno-botanist from Simon Fraser University and the University of Victoria, to identify and replant traditional medicinal plants on the VIHP for the first time.

The CFN is working to further develop this area as a ‘living museum’ so that the benefits of this work can be enjoyed, not just over the short term, but by future generations.

To showcase the partnership’s achievement, the VIHP developed a 20 minute documentary called Bush Creek: Everything is One, that recently aired on the Knowledge Network and is available at the ministry library resource centre (call number: "VIDEO BUSH CREEK"). For more information about Bush Creek or other features of the VIHP, please visit the Web site at http://www.th.gov.bc.ca/bchighways/vihp/vihp.htm.

New Monte Creek channel features habitat improvements

by Brent Persello, regional environmental coordinator, Kamloops

Work on the new Monte Creek interchange on the Trans-Canada Highway just east of Kamloops was finished in the fall of 1999. The interchange was built as part of a long-term strategy to upgrade the Trans-Canada from Cache Creek to the Alberta border and address growing traffic and safety concerns along that stretch of highway.

To accommodate the widening and realignment of the new highway section, it was necessary to permanently relocate 150 metres of the Monte Creek channel. The existing, undersized highway culvert, which functioned as a barrier to upstream fish migration, was replaced with a larger culvert. In addition, a new clear span bridge was built over Monte Creek to improve traffic flow along the nearby frontage road.

Monte Creek supports fish such as rainbow trout, coho, chinook, and other non-sport species such as redsided shiners. The new Monte Creek channel features several types of in-stream habitat improvements for fish. Large boulders were strategically placed in the channel to slow water flow and provide refuge areas for fish, particularly during higher flow periods. Several rip-rap weirs were built to create holding/rearing pools for both juvenile and adult fish. In addition, natural streambed material was placed within the new culvert to provide opportunities for increased productivity of algae and aquatic species.

After construction, disturbed areas beside the new channel were re-planted with various shrub and tree species including snowberry, elderberry, black cottonwood, and trembling aspen. The new plants will eventually provide shade and nutrients to the stream and help replace important riparian vegetation removed during interchange construction.

Over the next three years, the success of

Continued on page 8
Spious Creek acid rock remediation  
by John Philp, Nicola district office manager

An innovative environmental remediation project at the Pennask Summit on the Okanagan Connector has been completed thanks to input from Nicola district staff, Brent Persello, environmental coordinator for Thompson-Okanagan region, and Mike Kent, chief environmental officer in headquarters.

The problem occurred when Connector construction finished in 1989. A rock cut at Pennask Summit exposed a stratum of acid leaching rock. The resulting groundwater contamination drained into a tributary of Pennask Creek, the richest rainbow trout spawning creek in the world. Field observations revealed a cloudy film of water entering the creek from a tributary starting along a rock on the highway. Scientific investigations conducted by biologists hired by the ministry revealed the pH level of the tributary was adversely affecting the habitat of the creek, damaging some of the primary food sources for the immature rainbow trout although not harming the trout themselves.

To cure this problem the ministry placed about 70 cubic metres of limestone in the ditches on both sides of the freeway and in the tributary flowing in the right-of-way. The limestone immediately reacted with the acid rock-affected groundwater and returned the pH of the ground water to a normal state. Ongoing monitoring will be carried out over the next few years to assure the continued effectiveness of the project.

Monte Creek  
(cont’d from page 5)

the re-vegetation program and in-stream structures will be closely monitored to ensure these habitat features are functioning as intended. Initial fish sampling results are yielding encouraging results. Rainbow trout, coho, and chinook are using the in-stream structures on a regular basis, which suggests the new structure is allowing unrestricted fish passage for the first time in many years.

From a card...to a case  
by Fred C. Hughes, regional manager, finance and administration

Last Christmas, while at my daughter’s home in Prince George, I was introduced to what has become my new hobby: collecting hockey cards. McDonald’s Restaurants in Canada has had hockey card promotions for the past five or six winters.

All it took to get me hooked was trying to complete that first set.

Every package was a surprise. There were ordinary cards to complete the basic set, but there was also the potential to find insert cards with player autographs and pieces of their game-used jerseys.

I quickly moved from buying packs of cards to buying boxes of cards - and recently cases of cards - and I’ve had great success in finding those elusive insert cards.

I wrote about my card collecting adventures for the Canadian Sports Collector magazine. My story called “From a Card...To a Case” appeared as a three-page story in their November issue. The editor asked me to submit other stories on card collecting in the future. I suppose this must be my 15 minutes of fame.

Thompson River binwall temporary repairs  
by John Philp, Nicola district office manager

Temporary repairs have been made to the binwall that supports the Trans-Canada Highway along the Thompson River between Spences Bridge and Lytton. Installed in 1960, seasonal forces such as high spring-runoff river levels as well as pressure and seepage have damaged both the inside and outside of the wall.

Although complete repair of the 1.4 kilometres of binwall would be costly, temporary repairs have been made to strengthen and secure the binwall.

Repairs are identifiable by light-coloured panels visible on the wall in the photograph, taken about 10 kilometres southwest of Spences Bridge.
New Lytton bridge will carry heavier loads

by John Philp, Nicola district office manager

The third road bridge across the Thompson River is currently under construction at Lytton. The confluence of the Thompson and Fraser rivers has seen a series of bridges, starting with a timber trestle bridge built during the 1800s, the pilings for which are still visible to the really keen eye.

This original structure was replaced in 1913 by the current single lane steel truss bridge. Some minor remediation of the piers took place several years ago to ensure the structure would continue to serve the residents along Highway 12 north of Lytton until the current replacement is finished.

The new bridge will eliminate the current load limit which reduces the amount of wood logging trucks can carry to mills further down the canyon and beyond.

Looking east, there are actually four bridges or their remains to be seen. In the foreground the remains of the piers of the original timber trestle bridge, then the current steel truss bridge, then the new steel girder bridge in process of construction, and beyond that the railway bridge.

RIMS to offer enhanced features, road information

by John Philp, Nicola district office manager

Although the Road Features Inventory (RFI) system used by this ministry for a number of years worked well for collecting data on district roads and features, it fell short of its originally intended ability to provide this information on a regional or provincial basis.

To remedy this, the Road Inventory and Maintenance System (RIMS) was introduced. The aim of RIMS is, ultimately, to incorporate the RFI, the enhanced ministry Location Referencing System (LRS) as well as information related to Global Positioning System (GPS), bridge, pavement, development approvals, rockfall hazard and property acquisition information.

To assist in this gargantuan task, our own Gerry Sanford has been appointed to the project working group and has been buried under maps for the past several weeks.

The Kootenays melting pot

by Christine McCandlish, administrative services supervisor, Nelson

In honour of multiculturalism week (Feb. 11-17), a group of Kootenays regional and Central Kootenay district staff got together on Valentine’s Day for a multi-national potluck lunch.

While enjoying spaghetti, fried rice, Indonesian rice salad, Greek salad, focaccia bread, pineapple delight and Scottish shortbread, staff shared stories about how they or their families had come to live in Canada. Everyone benefited from realizing what a great place Canada is to live in and also how often Canada is the preferred country to settle in for people of many nationalities. We look forward to doing it again next year.

Enjoying lunch are, clockwise, Jacques Dupas, Willa Horsfall, Heather Syfchuck, Tracy Welbourn; Cindy Tarr; Heather Hnatiuk and Heather Wiese
Service awards—Nicola district

by John Philp, Nicola district office manager

With 30 years of service to the ministry, Brian Horel takes the cake for stick-to-it-iveness amongst Nicola district staff! Brian began his service with highways construction as an engineering aide 1 in September 1968, for the grand sum of $331 per month. He took time out in ’71-’72 to travel and rejoined highways construction at Beaver Cove on northern Vancouver Island in September 1972. Brian remained working on Vancouver Island where he was loaned out to several districts during the off-season until early 1980 when he moved with construction to Revelstoke. A few months later, Brian won a competition as engineering assistant in what was then the Prince Rupert district and in 1985 won a similar position in Penticton. In 1989, Brian won a competition as area manager, roads, Nicola district, Merritt, a position he holds to this day.

Now with 20 years of public service, John Philp started his career as an office assistant with the Ministry of Consumer and Corporate Affairs in Victoria in 1981. In 1985, he entered the office manager training program for the Ministry of Transportation and Highways in Nelson and in 1986 won a competition as office manager in what was then the Lakes district at Burns Lake. In 1989, he won a promotion to Nicola district, Merritt, where he has remained to the present.

Tammy Smyth began work as an OA2 in the Nicola district, Merritt, on Jan. 15, 1986. For the last 15 years Tammy has continued serving well as a district clerk.

Nadene (Dean) Morris, also with 15 years of service, began work as an OA2 in 1986 and, like Tammy, has continued to serve the district well since then. Unfortunately Dean, who is probably best known for her expertise with hired equipment, is currently off work because of illness and could not attend the presentation ceremony.

District highways manager Doug Kirk, presented the rest of the pins at a district meeting on March 8, when he expressed his appreciation of the dedication involved in this total 80 years of service of these four employees.

Around region six

by Debra Crozier-Smith, communications officer

The past few months have offered a variety of experiences for the Vancouver Island region team, some good and some painful.

An unexpected game of musical chairs offered new opportunities for two key Island staff. Dan Doyle’s sudden ascension into the deputy minister’s seat and the subsequent shuffle in headquarters executive left the ministry temporarily without an incumbent assistant deputy minister of major projects. Region six regional director Neville Hope was called down to Victoria to fill the gap. While regional staff were glad to have a ‘mole’ in executive, the loss of our fearless leader might have had serious implications if his position had not quickly been filled by Central Island district highways manager Peter Wightman. Peter, known for his apparently unflappable equanimity, calmly picked up the reins and did a sterling job keeping things running smoothly during Neville’s absence. Congratulations to both Neville and Peter for a job well-done. Both deserve gold stars for rising to the challenges of these temporary assignments.

Gold stars may not be the only ones in region six this spring. There’s a chance the area could be invaded by stars of a different caliber. We’re talking Hollywood! The producers of the feature film, "24 Hours" are interested in filming an important scene on Vancouver Island’s Inland Island Highway. This would involve landing a plane on the highway, crashing it into a logging truck and simulating a fiery explosion. While this isn’t the first time a feature film company has asked to use a B.C. highway, this is probably among the most ambitious proposals to date. At the time of writing this article, the ministry is still in discussions with the production company and has not reached a decision. However, feature films of this type offer important benefits to the province and local communities. The ministry is bearing this in mind during negotiations.

On a more somber note, region six staff members were greatly saddened when Bob Marwood passed away unexpectedly on March 15. Throughout his 26 years of service in region six’s electrical branch, Bob held a much-deserved reputation as a fair, kind, hard working man, who was full of laughter, always willing to help and well-liked by his fellow workers. Bob started his MoTH career as a journeyman and in the late ’80s became a lead hand in Nanaimo. In the early 1990s, he became a supervisor in the Nanaimo area, then moved to Victoria as trade senior supervisor in 1998. Bob was also active in his community as a cubmaster, track club president and a 25-year volunteer firefighter in the North Cowichan area. He will be deeply missed by his fellow workers and everyone who knew him. Our condolences to his wife, family and friends. Bob was a ‘one in a million’ kind of guy, and he will be remembered that way.
Wetlands bridged to protect local environment

by Eddy Piasentin, communications officer, VIHP

Engineering success is often identified with grand structures, man-made monoliths that are obvious to the eye and command attention. Bridges and skyscrapers come quickly to mind as examples of what people can conceive, design and build. Yet, when we are faced with the need to carefully integrate our infrastructure with our natural environment, successful and creative engineering is often revealed in a much more subtle way.

During the design phase of the Vancouver Island Highway Project, engineers grappled with the challenge of crossing the sensitive wetlands just north of Courtenay. Bevan Creek, a tributary of the Puntledge River, supports important populations of coho salmon, cutthroat and rainbow trout, as well as an assortment of wildlife species, from black bears and deer to waterfowl and reptiles.

Engineers worked closely with environmental specialists to determine how best to "tiptoe" a four-lane highway through such an important and environmentally diverse watershed. Traditionally, in a bygone era of highway construction, such sensitive and valuable environmental resources might have been overlooked in a bid to simply get the highway built. Today, however, protecting and even enhancing our environment is an essential goal when building a new highway.

The team of engineers and environmental specialists determined a bridge would be the least intrusive way to cross the wetlands, giving birth to the design of the Bevan Wetlands bridge. They immediately decided that the wetlands were too delicate to allow heavy machinery to actually move on the ground. The team adopted a technique of building the bridge "causeway style" over an extended distance. In essence, the Bevan Wetlands bridge was built from high above, inching across the landscape as it was pieced together. Originally conceived to be about 50-metres long, the bridge ultimately stretched to 124-metres in order to completely span the wetlands.

To complement the bridge construction and the Vancouver Island Highway Project’s habitat conservation goals, environmental enhancements were made to the existing wildlife and fisheries habitat. These efforts included: building a fish channel and pond complex approximately 1,100 metres long; hiring local environmental stewardship groups (Project Watershed) to excavate part of the new fisheries channel by hand, and plant native trees and shrubs; and building five wildlife ponds, the largest being the size of a hockey rink.

Chances are this fall, when the new Inland Island Highway opens and traffic starts crossing the Bevan Wetlands bridge, the care and ingenuity that went into building the bridge and enhancing the wetlands won’t be obvious to most travellers. While building a safe, efficient highway is the ultimate objective of a new highway, the unseen value will last for generations.

Earthquake shakes up South Coast region

by Paul Kim, communications officer

An earthquake centred near Olympia, Washington sent tremors throughout South Coast region on the morning of Feb. 28, 2001. As soon as the tremors were felt, employees swung into action, putting into practice their rehearsed earthquake drills.

Charmaine Crowe, Lower Mainland – Howe Sound district clerk, was standing by her desk when she felt the tremors. “At first I thought it was a large truck. I simply couldn’t believe it was an earthquake, but then Susan Keldsen, our floor warden, yelled for everyone to get under their desks. We stayed there for 60 seconds and then went outside.” Once outside, staff waited 20 minutes for the threat of any after shocks to subside and for their building to be checked over for safety.

Senior district clerk Keldsen was standing at her desk sorting through paper work when she felt the earthquake. “We get a lot of vibration in our office all day from heavy trucks and the local SkyTrain line. But when I realized the tremors were continuing and felt myself swaying, it was almost like being seasick. Once I realized what it was, I yelled, ‘Earthquake! Duck and cover,’ and got under my desk.”

Floor warden Keldsen was full of praise

Continued on page 12
for the actions of the staff. "They reacted calmly and responded to directions without hesitation," she says.

"I feel much better about the ability of our staff to handle an earthquake," says Crowe. "When I got home, I talked with my family and realized they didn’t know what to do, so I taught them what I learned from the ministry."

At the South Coast regional office, Bill Earis, bridge rehab engineer, was brought in to conduct a check of the regional office building.

"I actually didn’t feel the earthquake," says Earis. "When it happened, I was talking on the phone. When I got off the phone I heard people talking about it, and then Allan Galambos, regional bridge rehab engineer, and our floor warden, told everybody to get out."

"After the wardens determined it was okay to conduct a preliminary check of the building, I headed up to the third floor with Bill Stzo, bridge seismic rehab liaison engineer. We checked for cracks around windows and doorframes, fallen ceiling tiles, broken piping in the washrooms, and toppled furniture. I also checked over the PHCC and caught the media coverage from Seattle on their TV feeds, which was very helpful."

The earthquake was strongly felt in Fraser Valley district office in Chilliwack. Doug Wilson, area bridge manager, was talking on the phone when he noticed his computer monitor bouncing on its arm extension. "It started bouncing around an inch in each direction, up and down and sideways," Wilson says. Like many others that morning, Wilson didn’t believe that what he was feeling was an actual earthquake.

"I thought it was the guys heading out for a smoke break leaning against my wall. When I looked around the corner, I saw the T-bar ceiling and the walls actually moving, the pictures rattling, and John Marunchuk of paving branch walking towards me like he was on an unsteady ship. When I looked back into my office my chair was rolling around in circles."

Once the earthquake was over, Wilson contacted his colleagues across South Coast region to assess damage to major structures and roads. "Everybody in bridges started calling around to see if there were any problems. I am very happy we came through okay."

Earthquake (cont’d from page 5)

A significant safety hazard on Highway 16 was reduced to a pile of rubble on March 8. Over the years, Carwash Rock, a huge bluff 48 kilometres west of Terrace, has caused many close calls for transport trucks and buses. As the vehicles hug the rock face to avoid oncoming vehicles, they occasionally collide with rock face. The blast removed 300 cubic metres of rock, which increased vertical clearance by 12 metres and lane width by 1.5 metres. Frank Maxinchuk was the geotechnical engineer on the project and Chimera Springs Rockwork Ltd. carried out extensive rockbolting to reduce the threat of rock falls after the blast. Twenty-eight rock bolts, from six to nine metres long, were hand-drilled to secure the rock. The $119,300-project was finished in 12 days – on schedule and with minimal traffic delays – leaving the cliff face now looking like a sculptured stone wall. As contractor Mike Hall said, "It is still Carwash Rock though, and water will still drip onto passing vehicles."

Blast increases safety