

3. SHADOW RIDGE SUBDIVISION

**COMMITTEE RECOMMENDATIONS AS AMENDED**

That Council approve the following:

1. **That the Shadow Ridge Estates Communal Services Demonstration Project be allowed portable back-up power during the minimum two year warranty period or until 45 units are built and occupied subject to notification of purchasers of the potential for service interruption in the case of power failure.**
2. **That staff be directed to draft any further conditions that may be required to protect the Region's interest and limit the Region's liability.**

DOCUMENTATION:

1. Councillor Robert van den Ham's report dated 8 Jan 99 is immediately attached.
2. Councillor Robert van den Ham's memorandum dated 11 Jan 99 immediately follows the report.
3. An Extract of Draft Minute, 12 Jan 99, follows and includes a record of the vote.

REGION OF OTTAWA CARLETON  
MUNICIPALITÉ RÉGIONALE D'OTTAWA CARLETON

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REPORT  
RAPPORT

Our File/N/Réf.            03 07-99-0119  
Your File/V/Réf.

DATE                        8 January 1999

TO/DEST.                 Coordinator, Planning and Environment Committee

FROM/EXP.                Robert van den Ham, Regional Councillor, Ward 6

SUBJECT/OBJET         **SHADOW RIDGE SUBDIVISION**

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### **DEPARTMENTAL RECOMMENDATION**

**That Planning and Environment Committee recommend that Regional Council approve the following:**

- 1. An alternative power supply be required for the Shadow Ridge Subdivision; and**
- 2. That 100% security be required for Regional Works.**

### **BACKGROUND**

Attached please find a memorandum from Tim Marc, Manager, Planning and Environment Law dated 8 January 1999. This memorandum responds to an inquiry I made concerning the above-noted subdivision.

*Approved by*  
*R. van den Ham*

**ADDITIONAL ITEM 3  
PLANNING AND ENVIRONMENT COMMITTEE AGENDA  
12 JANUARY 1999**

Our File/N/Réf.  
Your File/V/Réf.

DATE 8 January 1999

TO/DEST. Councillor van den Ham

FROM/EXP. Manager, Planning and Environment Law

SUBJECT/OBJET **PLANNING**  
**SHADOW RIDGE SUBDIVISION**

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This memo is in response to your request of 23 December 1998 as to options to address the concerns of Mr. Don Cardill with respect to the requirement by the Region for a permanent back-up power supply for the communal water and wastewater systems for the Shadow Ridge Development.

The Shadow Ridge Estates subdivision was granted draft approval by Council on 25 June 1997 (Planning and Environment Committee Report 60, Item 2). The subdivision includes 567 dwellings, 127 singles, 182 semis and 258 row units. The first phase of the subdivision will consist of a mix of 151 units.

The subdivision is to be provided with communal water and sanitary sewer systems. The water supply will be obtained from the high yield shallow groundwater aquifer. One 250 mm and one 200 mm diameter well will be constructed and equipped with submersible pumps. Water will be distributed through a network of watermains located in the roadways.

The sanitary sewage system will be comprised of a proprietary peat filtration bed and a constructed wetland process. The first of three components, the Primary Treatment, consists of a conventional septic tank and pump, or gravity connection, from which the tank effluent will be discharged into a forcemain, or small diameter sewer.

Solids that settle into the tank would be pumped out and hauled away on a regular basis as a requirement of the Region and the Ministry of the Environment.

The collection network will discharge to a treatment facility in which effluent will be discharged to the peat filter beds. Secondary treatment occurs as the effluent percolates through the peat installed below the distribution laterals. The treated effluent then goes into a constructed wetland to provide final treatment. The final effluent is discharged through the ground.

In order to provide for both the security and integrity of the water supply, Regional staff has advised the owner that prior to the occupancy of any dwelling unit, a back up electrical power supply should be installed. It is clear that without an alternative power supply, the water and sewer systems would not operate in the event of a power failure. However, an alternative power supply is equally, if not more important, for the safety of the water supply. In the event of a power failure, changing pressures in the water line could cause a health risk by ground water entering into the water distribution system and contaminating the network. Regional Staff are therefore of the firm position that a back up power supply must be provided at the outset and cannot support the request of Mr. Cardill to move back the installation of the alternative power supply to the second phase. Phase 1 consists of 151 units and depending on growth may take several years to build out.

An option that is available is to reduce the amount of security required for the first phase of development. At present, \$600,000 in security is required by way of Letter of Credit for the Regional works, while the estimated cost of the alternative power supply is \$40,000. Through the 1980's the Region required 50% of the cost of the works as security. Given the risk that such partial security posed for the Region, the Region has moved to requiring 100% security, which approach is supported by staff in this case. Given the history of the Region's security requirements however, and the initial desire under R.O.P.A. 47 to the 1988 Official Plan to promote demonstration communal water or wastewater projects in the rural areas, some reduction in the security requirements may be acceptable. The possibility of going to 75% security has been explored with Mr. Cardill as a balance to requiring the alternative power supply. However, he has stated that such is not acceptable to him.

### Recommendation

Regional Staff recommend that:

1. An Alternative power supply be required for the Shadow Ridge Subdivision;
2. That 100% security be required for Regional Works.

*Approved by Timothy C. Marc,  
Manager, Planning & Environment Law*

TCM/tg

cc: Director, Water Environment Protection Division  
Director, Engineering Division  
Director, Water Division  
Director, Development Approvals Division

Our File/N/Réf.

**URGENT**

DATE 11 January 1999

TO/DEST. Co-ordinator, Planning and Environment Committee

FROM/EXP. Robert van den Ham

SUBJECT/OBJET **SHADOW RIDGE SUBDIVISION, ADDITIONAL ITEM #3**

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This item is before committee because of an impasse between Planning and Environment staff and the developer on condition #23 of the subdivision agreement.

Condition #23. "The owner covenants and agrees to provide back-up power and a telemetering system-tied-in with the Regional SCADA system at the Owner's expense and to the satisfaction of the Regional Environment and Transportation Commissioner."

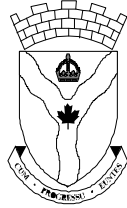
Regional Planning and Environment staff are insisting on a **permanent** back-up power system and that this be installed as part of the communal water/sewer system before any building permits are issued. The cost of permanent back-up power (design, construction, etc) is around \$50,000.

The owner (developer) agrees to supply back-up power, but in a different manner for an interim period. The owner currently owns a portable generator which can provide back-up power if needed.

The Shadow Ridge development as approved by Council also includes conditions requiring a minimum two year warranty period and a minimum of 45 occupied units before regional assumption. The developer is totally responsible during this warranty period.

I will be moving a motion that presents a compromise position that ensures permanent back-up power and provides some flexibility to the developer.

*Approved by*  
*Robert van den Ham*



**REGIONAL MUNICIPALITY OF OTTAWA-CARLETON  
M O T I O N**

**DATE:** January 11, 1999

**MOVED BY:** Councillor Robert van den Ham

**SECONDED BY:**

**WHEREAS;** the RMOC will have 100% financial security including the back-up power supply.

**AND WHEREAS** the assumption of the communal system by the RMOC is conditional upon a minimum two year warranty period and to the satisfaction of the Regional Environment and Transportation Commissioner.

**THEREFORE BE IT RESOLVED THAT** the Shadow Ridge Estates Communal Services Demonstration Project be allowed portable back-up power during the minimum two year warranty period or until 45 units are built and occupied.

Extract of Draft Minute  
Planning and Environment Committee  
12 January 1999

### SHADOW RIDGE SUBDIVISION

- Councillor van den Ham's report dated 8 Jan 99

Councillor van den Ham referred to his memo and explained this item was before the Committee because of an impasse between the developer and Regional staff on condition number 23 of the subdivision agreement which states "The owner covenants and agrees to provide backup power for this water sewage system". Staff are insisting on a permanent power backup system to be installed right away; while the developer agrees to provide a backup power system but in a portable manner. The Councillor indicated he would be moving a motion which would provide the developer with 2 years or until 45 units are built to supply backup power in a portable manner.

André Proulx Director, Water Division, Environment and Transportation Department indicated all of the Region's communal well systems are all supplied with an immediate power system, which allows the generator to kick in immediately in the event of a power failure. The reason for this is directly related to health. Mr. Proulx explained the communal water systems do not have elevated storage and when there is a power failure, there is no power to the pump and therefore no pressure. Because of the depth of pipes in the ground, leaks occur in the system. Without constant pressure in the pipes, if there is a leak, any ground water going into the pipes poses a health hazard. For this reason, an immediate backup power system is required.

Councillor Beamish stated it was his understanding the Region would not be responsible for the system until two years after it was working. Joe Vincelli, Manager, Engineering Services Branch, indicated once a system is commissioned, although it remains the property of the developer, the operation and maintenance is done by the Region or its designated agent. As the operator, the Region would be liable if there was a health problem.

The Committee then heard from Steve Simmering, Simmering & Associates Limited and Don Cardill the owner of Shadow Ridge Subdivision. Mr. Simmering advised this subdivision has been underway for over four years, during which time this issue has been the subject of numerous meetings with Regional staff. He went on to explain the development includes in the design, a facility where portable backup power can be brought in to the water works to provide the power necessary to run the pumps in case of power failure. The system is based on hydromatic storage, such that water is lifted off the ground supply and put in tanks, this provides a significant amount of time between the loss of power and the loss of pressure in the water system. He said for this particular phase, two thousand gallons of pressure storage is proposed which the developer feels is more than adequate to maintain some pressure in the system, given that water usage drops off, when there is a power outage. As well, the system does not have a fire supply which is satisfactory to the township.

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The speaker disputed staff's argument concerning the possibility of leaks; noting fusion welded polyethylene pipes for the complete system all the way into the house are used. There is in essence no joint found in the normal urban system where leaks can occur when there is negative pressure. The portable generator can be made available in quite a short period of time (within three hours) and can provide the safety that is required. In addition to this, each home is equipped with a backflow preventer to prevent the flow of water back into the water system, as is required by the plumbing code.

Mr. Simmering pointed out there is a unit of mobile homes in the vicinity of the subdivision which has a communal water system approved in 1997 and there is no backup power system at all, portable or otherwise. As well there is no backup power system in Munster Hamlet, which is a larger and more sophisticated sub-urban development. He felt these examples supported his belief that staff were being overly cautious in this instance.

In conclusion, Mr. Simmering stated the additional cost associated with the permanent backup power, could be the "straw that broke the camel's back" for this subdivision. He felt in the urban area, all of these things are subsidized, while in this instance, the developer is providing all the capital works with no subsidy whatsoever and the homeowners who will live there will provide all the costs of the maintenance and operation for this system. He opined these things are creating an uneven field between urban and rural development.

Councillor Munter asked if there was a legally enforceable way of assigning all liability to the developer in perpetuity. Mr. Vincelli advised this was not possible. Mr. Proulx added legislation requires the Region to be responsible for the operation of the system.

In response to questions from Councillor Munter concerning the Munster Hamlet system, Mr. Vincelli advised it is a different system than the one proposed here. In the case of Munster, there is a low lift and high lift pump. The low lift pump takes water from the aquifer and puts it in the tank and this part does not have backup power. However the high lift pump which brings the water into the houses has backup power.

Councillor Legendre requested staff respond to comments made by Mr. Simmering concerning leaks in the system. Mr. Proulx advised the proposed system is very similar to what was used in Carlsbad Springs (i.e. polyethylene fused pipes). He said because there are valve connections at the property line at every home, there is always a possibility one of these components having a leak in the system. Mr. Proulx stated the proposed system is dependent on too many variables (i.e.: duration of the power outage, how quickly they can get the generator up) and because of these variables, he indicated he was not comfortable with what was proposed.

Councillor Legendre then asked staff to comment on the trailer park example provided by Mr. Simmering. Mr. Vincelli indicated a mobile park is a private communal system owned and



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operated by a private individual. The Region, as the guarantor, would hold a letter of credit and in the event the private owner and operator walks away from his responsibilities, the Region would be able to step in and run the system until a new owner was found. With respect to this project, the Region will be the owner and operator of the system.

Committee Chair Hunter stated it would appear staff are imposing a different set of rules in this instance; not so much because of the health risks but rather because of liability.

Mr. Simmering noted that in designing the system, the developer had regard to Regional guidelines and policies. He pointed out Regional design guidelines for Private Systems says in part “a stand by power source satisfactory to the RMOC shall be provided to operate high lift pumps in case of power failure”. The mobile park with 100 units actually exceeds the definition of a private system and they therefore felt there was guidance by past practice.

Referring to the RMOC Communal Servicing Objectives, Mr. Simmering noted a provision sets out that if a developer does not provide for the elements listed as backup power, then the developer is to ensure the limitations of the reliability of the system are included in the purchase and sale agreement, are registered on title and are accepted by the private owners. Any statements regarding exceptions which are to be registered on title and included in the sales agreement will be written by the RMOC. The speaker said he had written to the Region requesting to use this clause but staff would not allow this.

At Committee Chair Hunter’s request, Mr. Simmering confirmed that at least until permanent and immediate backup power was available, the prospective owners would be signing an acknowledgment that in the case of power failure, there could be a water supply interruption and there could also be some remedial measures (e.g. bleeding the lines or running water for a while to make sure a potable supply is available).

Mr. Proulx commented although this could be a viable alternative, after each power failure, the Region would have to assume the system was “unhealthy” and the entire system would have to be flushed.

Councillor Munter had questions concerning the 100% security required for regional work. Mr. Vincelli indicated this would be \$600,000.00 for water and waste water distribution and treatment in total. Councillor van den Ham’s motion suggests the letter of credit be augmented by the value of the standby power. For example, if the backup power is \$60,000.00, the total letter of credit would be \$660,000.00.

In response to a question from Councillor van den Ham, Mr. Proulx indicated although he could not guarantee 100% that a permanent generator would kick in, he advised there had not been any instances in the last eight years when there was a power interruption and a generator

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did not start. He said regular maintenance is performed on the generators weekly to ensure they are in good operating order.

Councillor Legendre, noting the houses will sell for between \$100,000 and \$125,000, commented the average cost per house would be \$2,200 (based on the permanent generator costing \$100,000, divided by 45 houses). He suggested this would appear to be a small amount. Mr. Cardill commented that having to put a permanent generator in immediately, would result in the delay of the project for another year.

Responding to further questions from Councillor Legendre, Mr. Cardill indicated he currently has a 20 kW diesel generator on site that would run the water system. He said in the event of a power failure, there is an alarm system built in the pump house. The instant the water goes down an alarm would sound and the generator would immediately be moved from wherever it was on the site, to the pump house. In addition, Mr. Cardill advised he also has an agreement with BNR Equipment Rentals, who could supply them with a generator within in 3 hours. The speaker said eventually, he would like to put in a natural gas generator, to be located in the pump house building. However, as gas is new to Greely it will not be supplied to this location until Phase 2 of the subdivision.

Speaking to his motion, Councillor van den Ham stated it would provide some flexibility to the developer. He felt perhaps staff were being overly cautious in trying to guarantee total assurance for the Region in terms of risk and although he could appreciate their attempts to protect the Region, he felt his motion represented a reasonable compromise. He felt the issue boiled down to the Region being a little bit flexible on its number one communal service demonstration project.

Councillor van den Ham explained his motion asks for two years or until 45 units are built and occupied (whichever comes first) to allow the developer to get under way. He felt the Region would be sufficiently protected by the conditions in the subdivision agreement and if there is a problem (i.e. too many power interruptions) the Region would have the option and the security, to deem that the portable power supply was not working. He urged the Committee to support his motion.

Chair Hunter suggested a friendly amendment to Councillor van den Ham's motion and the Councillor agreed to add the following to his motion: "subject to notification of purchasers of the potential for service interruption in the case of power failure".

Councillor Legendre asked staff to comment on Councillor van den Ham's motion and whether, in the event the portable system does not work, the Region could step in and insist that a permanent backup system be put in place right away. Mr. Vincelli felt this would have to be added to Councillor van den Ham's motion. Otherwise, staff would have to come back to

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Committee. He said there were currently no draft conditions in the subdivision agreement that speak to this.

Referring to the second paragraph of page 2 of Tim Marc's report, Councillor Legendre asked staff to expand on the proposal to reduce the amount of security to 75%. Mr. Vincelli said, because of the developer's cash flow problem, staff advised Mr. Cardill the Region would be willing to accept a letter of credit for 75%. Mr. Cardill, however, did not accept this offer as he felt reducing the letter of credit from 100% to 75% would not equal the value of a generator (approximately \$50,000).

Councillor van den Ham clarified his intent was that staff would come back to the Committee and advise if the system was not working. He did not think specific conditions, that would further restrict the developer, should be added to the agreement.

Councillor Munter stated he would be moving a motion directing staff to add any further conditions necessary to protect the Region and limit its liability.

Councillor Legendre then put forward an amendment to Councillor van den Ham's motion to add to the notification clause that a potential danger for water contamination exists, in the event of a power failure.

Councillor van den Ham felt Councillor Legendre's motion was going too far and noted the entire Regional system is subject to contamination yet not everyone in the Region would have this warning registered on title.

Councillor Legendre explained the purpose of his amendment was to focus on staff's main concern, namely, health and not liability. Flagging for the potential homeowners that there is a possibility of power and water interruption, does not flag for them the real concern: contamination.

The Committee then considered the motions before them.

Moved by J. Legendre

**That the words "and to the potential for water contamination as a result." be added to the modified van den Ham motion.**

LOST

NAYS: D. Beamish, B. Hill, R. van den Ham and G. Hunter....4

YEAS: J. Legendre, A. Munter and W. Stewart....3

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Moved by R. van den Ham

**Whereas the RMOC will have 100% security including the back-up power supply;**

**And whereas the assumption of the communal system by the RMOC is conditional upon a minimum two year warranty period and to the satisfaction of the Regional Environment and Transportation Commissioner;**

**Therefore be it resolved that the Shadow Ridge Estates Communal Services Demonstration Project be allowed portable back-up power during the minimum two year warranty period or until 45 units are built and occupied subject to notification of purchasers of the potential for service interruption in the case of power failure.**

CARRIED

YEAS: D. Beamish, B. Hill, G. Hunter, J. Legendre, A. Munter and R. van den Ham ....6

NAYS: W. Stewart.....1

Moved by A Munter

**That staff be directed to draft any further conditions that may be required to protect the Region's interest and limit the Region's liability.**

CARRIED

YEAS: D. Beamish, G. Hunter, J. Legendre, A. Munter and W. Stewart ....5

NAYS: B. Hill and R. van den Ham.....2