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Houston, TX 77056
(713) 980-6610
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July 8, 2013

Lisa Schock
Project Manager
UNLV Planning and Construction, Campus Services Building Room 131B
University of Nevada, Las Vegas
4505 S. Maryland Pkwy.
Las Vegas, NV 89154
Phone: 702-895-0952
By E-mail to: lisa.schock@unlv.edu

Proposal: H-1129-4 FDH-1
Re: NV UNLV Building Protection Project

Dear Ms. Schock,

Thank you for your request for pricing on the FloodBreak Automatic Floodgate mitigation system. Please note the pricing is budgetary and dependent upon receipt of completed construction documents.

Please note that this quote does not include installation of the system. Installation is straightforward and can be accomplished by a locally qualified construction contractor. More information on installation requirements can be found at the following link:
<http://floodbreak.com/technical/>

Also, this quote does not include engineering for the foundation underneath the FloodBreak barrier, which must be provided by an engineering firm with knowledge of the local geotechnical conditions. We can cooperate with the firm of your choice to assist in the design process.

We look forward to working with you on this important project. Please do not hesitate to contact us for more information as necessary.

Best regards,

Stephen M. Harris
Area Manager
+1-713-591-6410
sharris@floodbreak.com



H-1129-4 FDH-1 NV UNLV Building Protection Project

**PROPOSAL FOR
UNIVERSITY OF NEVADA, LAS VEGAS
BUILDING PROTECTION PROJECT FDH OPTION 1**

July 8th 2013

This proposal is submitted for flood protection equipment as described above. These prices are good for 30 days. All mounting specifications and final dimensions are the responsibility of the customer. Barriers are warranted to be free from defects in materials and workmanship for one year from date of purchase. No other warranty is given, either express or implied.

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INTRODUCTION

Background

As per the findings in a study conducted by Columbia University's Center for Climate System Research (CCSR), massive rainfalls worldwide have been double the anticipated rate in just the last decade, causing untold damages and massive financial losses. The study concluded that intense climate events leading to flooding and sea level rise are projected to increase globally in the coming years due to increasing anthropogenic greenhouse gas emissions as well as an intensified hydrological cycle associated with global warming.

The combined effects of increasing sea levels, the rise in extreme precipitation events, and restriction of ground surface permeability due to construction will ultimately enhance flooding threats throughout the world.

As floods increase in severity and frequency, already overtaxed drainage systems, storm sewers, and pumping systems are regularly overwhelmed. The sheer scope and cost of changing these systems mean that upgrades often take years or are found not to be feasible. Across the world, private and public entities are searching for alternative mitigation solutions.

The FloodBreak System

The FloodBreak flood control system is founded on a very simple premise: during flood events, it cannot be taken for granted that power will be available or that people will be able to act to protect buildings and property. Outside of the FloodBreak system, every vendor's solution requires manual or powered intervention to close and secure an entrance. The US Federal Emergency Management Agency has data that demonstrates that as many as 60% of installed active flood protection systems fail during their service lives due to lack of intervention at critical times.

FloodBreak is a revolutionary flood prevention system that minimizes the risk of flooding of ground level or underground structures by automatically blocking paths of entry in the case of rising water by using the power of the flood water itself to close the barrier. With no power requirement and absolutely no need for human intervention, FloodBreak is safe, reliable, and elegant in its simplicity of purpose.

FloodBreak's proven, clean, foolproof operating principle is unique in the market. Quite simply, the system is automatically activated by the force of the water itself without the aid of any power source, pumps or people. The gate, a buoyant composite beam placed at the entrance to a driveway, doorway or other potential flood path, is engineered to withstand extreme hydrostatic and hydrodynamic loading. When water rises and approaches the entrance, the barrier automatically floats and rotates upwards, sealing with a self-activated flange. Once a flood has begun, the barrier is held shut by the

water and will not open until the water recedes, at which time it can automatically recede to its lowered position, allowing passage once again.

Installation is very quick and maintenance is kept to an absolute minimum. With only its hinge as a moving part, the system can remain unused for years and still function immediately when needed in a flood.

Architectural Considerations

The barrier hinges into a recess in the pavement immediately in front of the entrance. In its normal down position, it is virtually unnoticeable and does not affect traffic or change the aesthetics of the surrounding area. The barrier's surface can be matched to existing decorative elements as required, including tenant finishes such as carpet, tile, granite, or special decorative flooring and wall surfaces. FloodBreak is alone in its class when it comes to preserving the aesthetics of historic and showcase structures.

Engineering Considerations

It is difficult to comprehend the power of water in a flood condition or breach. Hydrostatic and hydrodynamic forces can destroy concrete walls and steel panels if not properly engineered with an understanding of these forces. FloodBreak has many years of experience in designing flood control structures and has dozens of systems in the field performing under extreme conditions. In addition to its own product expertise, FloodBreak provides a third-party engineering certification of each system, executed by a specialist firm with deep knowledge in offshore structures and hydraulic engineering.

Project-Specific Considerations

The FloodBreak system can be incorporated into a wide range of installations, including building entrances, driveways, utility shafts, tunnels, window vents, and even roadways. Our family of products has been incorporated into historic buildings where heritage and aesthetics are paramount, vent shafts for major subways and utilities, and roadway crossings through levees in major flood control districts. Although elegant in its simplicity, the FloodBreak system can provide comprehensive protection across large-scale projects as well as specific, unique circumstances.

Summary

The FloodBreak system is unique in its operating principle and is the only solution in the flood control market that can actively close an entrance without people or power. The system is designed and built with a clear understanding of the raging forces inherent in flood conditions, and its elegant simplicity virtually guarantees that it will operate when needed, whether days, months, years, or decades after initial installation. The design allows for cladding with any architectural material, rendering the system invisible to the casual observer. Combining elegance, aesthetics, and foolproof simplicity of operation, the FloodBreak system is a revolutionary step in flood control.



H-1129-4 FDH-1 NV UNLV Building Protection Project

BUDGETARY PRICING

Proposal for Ms. Lisa Schock, Project Manager, UNLV Planning and Construction, University of Nevada, Las Vegas, July 8, 2013.

This offer is valid until end of November, 2013.

Description of Barriers:

The following FloodBreak Barriers are being proposed using the dimensions provided and clarified by Lisa Schock by email on July 2, and July 5, 2013.

Budget:

FDH Option 1					List Price	Total List
Gate No	Length (ft)	Height (ft)	Quantity	Type	\$ USD	Price \$ USD
FDH-1-1	19.1	2	1	Vehicle	\$40,075.00	\$40,075.00
FDH-2-1	18.5	2	1	Vehicle	\$38,850.00	\$38,850.00
				Total		\$78,925.00
				<i>Less University Discount 10%</i>		<i>(\$7,892.50)</i>
				Discounted Total		\$71,032.50
				Onsite Advisory (1)		\$5,000.00
				Loading Fee		\$500.00
				Shipping + Insurance (2)		\$1,500.00
				Total		\$78,032.50

Note:

- (1) If FDH 1 or 2 and HFA1 are purchased together, only one Onsite Advisory Fee is required.
- (2) Shipping & Insurance estimates are included.

Optional Items (that can be requested):

- 1. Gate Opening Activation Sensor** – Installed at time of manufacturing and can be used to create alert/warnings system with external equipment (not provided). No cost. Must be specified at time of order.
- 2. Push Button Mechanical Gate Opener** - \$5000 per gate and installed at time of manufacturing. Some organizations want to raise their gates frequently because of their emergency operating and maintenance procedures. This option allows the heavier gates to be easily opened by internal mechanical means. If the gate is more than 6 feet high, then the cost of the mechanical opener will be \$10,000. If more than 10 feet high then the cost is on request. The mechanical opener can add additional depth to the pan and will be outlined during the shop drawing stage.
- 3. Winch Operated Mechanical Gate Opener** - \$1000 per gate and installed during the floodgate installation. Some organizations want to raise their gates frequently because of their emergency operating and internal maintenance procedures. This manual method is for medium-size gates that are too heavy for manual lifting but no more than 80 square feet. The winch system is composed of a winch pole, a stainless steel pipe with a 2,500 pound capacity worm-gear type winch that can be operated by hand crank or portable drill motor, and a winch insert that finishes even with finished grade. The system is stored when not in use.
- 4. Annual maintenance and Extended Warranty** – Priced at 8% of purchase price per year per gate. Four or more gates priced at 6% per year per gate. On an annual basis, FloodBreak will have a certified Support Engineer inspect and perform any required maintenance.
- 5. Alternative Coatings** - The gate standard coating is a non-slip, high-wear coating designed for long service life in outdoor, high-traffic installations. Color can be matched to customer specifications. The gate can also be “skinned” in architectural finishes, including carpet, tile, paving stones, granite, and other materials. Sidewalls can be architectural materials that match the building façade. One of the major benefits of FloodBreak is that the gate can be almost entirely hidden in the entryway to a structure. No cost. Must be specified as drawings are being finalized prior to order.

Finish:

Standard, non-skid upper surface, safety yellow underneath. Remaining barrier and installation pan surfaces coated as necessary for weather protection.

Inclusions:

Fabricated barrier and installation pan, tested prior to delivery, with fully functional gate mechanism, seals, and installation features, including aluminum wiper walls.

A comprehensive installation and maintenance guide, as well as shop drawings and engineering reports for each gate, are provided as part of the standard package.

The Pricing Offer is FCA, UNLV, Las Vegas, Nevada, USA (per INCOTERMS).

The estimated cost is provided. The difference between actual and estimated will be invoiced/credited based on final invoice.

Exclusions:

Taxes, active or passive warning equipment, permits, installation, and other fees or third-party charges are NOT included in the price.

Installation Oversight, Warranty and Service Contract

FloodBreak will provide onsite oversight support for up to five days for \$5000 during installation phase for passive automatic barriers. Additional visits will be charged at \$8,500 per visit for up to five days and \$1,250 per additional days.

If HFA Option 1 and FDA Option 1 or 2 are purchased at the same time, only one Onsite Oversight fee is required of \$5000. If HFA Option 2 or FDA Option 3 are ordered, remote support will be provided.

The FloodBreak systems warranty offer for this proposal is one year. Remote or Onsite oversight during installation per the above terms is required in order to activate the warranty.

Installation

The gates are installed in four phases. Please visit www.floodbreak.com and go to the “maintenance and install” section for information. <http://floodbreak.com/installation-guide/>

Phase One- consists of excavation, digging or cutting the hole for the footing (depth to be designated by job engineer).

*Phase Two-*consists of pouring the foundation (footing).

*Phase Three-*consists of placing, leveling and anchoring the system.

Phase Four- consists of the final pour, bringing the areas around the gates up to finish grade.

Delivery and Terms:

Delivery: FCA UNLV, Las Vegas, Nevada, USA.

Terms: 30% with P.O.; 30% due on fabrication completion; 40% due on delivery or as otherwise agreed.

Accepted by: _____

Title: _____

Date: _____



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July 8, 2013

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University of Nevada, Las Vegas
4505 S. Maryland Pkwy.
Las Vegas, NV 89154
Phone: 702-895-0952
By E-mail to: lisa.schock@unlv.edu

Proposal: H-1129-4 FDH-2
Re: NV UNLV Building Protection Project

Dear Ms. Schock,

Thank you for your request for pricing on the FloodBreak Automatic Floodgate mitigation system. Please note the pricing is budgetary and dependent upon receipt of completed construction documents.

Please note that this quote does not include installation of the system. Installation is straightforward and can be accomplished by a locally qualified construction contractor. More information on installation requirements can be found at the following link:
<http://floodbreak.com/technical/>

Also, this quote does not include engineering for the foundation underneath the FloodBreak barrier, which must be provided by an engineering firm with knowledge of the local geotechnical conditions. We can cooperate with the firm of your choice to assist in the design process.

We look forward to working with you on this important project. Please do not hesitate to contact us for more information as necessary.

Best regards,

Stephen M. Harris
Area Manager
+1-713-591-6410
sharris@floodbreak.com



H-1129-4 FDH-2 NV UNLV Building Protection Project

**PROPOSAL FOR
UNIVERSITY OF NEVADA, LAS VEGAS
BUILDING PROTECTION PROJECT FDH OPTION 2**

July 8th 2013

This proposal is submitted for flood protection equipment as described above. These prices are good for 30 days. All mounting specifications and final dimensions are the responsibility of the customer. Barriers are warranted to be free from defects in materials and workmanship for one year from date of purchase. No other warranty is given, either express or implied.

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INTRODUCTION

Background

As per the findings in a study conducted by Columbia University's Center for Climate System Research (CCSR), massive rainfalls worldwide have been double the anticipated rate in just the last decade, causing untold damages and massive financial losses. The study concluded that intense climate events leading to flooding and sea level rise are projected to increase globally in the coming years due to increasing anthropogenic greenhouse gas emissions as well as an intensified hydrological cycle associated with global warming.

The combined effects of increasing sea levels, the rise in extreme precipitation events, and restriction of ground surface permeability due to construction will ultimately enhance flooding threats throughout the world.

As floods increase in severity and frequency, already overtaxed drainage systems, storm sewers, and pumping systems are regularly overwhelmed. The sheer scope and cost of changing these systems mean that upgrades often take years or are found not to be feasible. Across the world, private and public entities are searching for alternative mitigation solutions.

The FloodBreak System

The FloodBreak flood control system is founded on a very simple premise: during flood events, it cannot be taken for granted that power will be available or that people will be able to act to protect buildings and property. Outside of the FloodBreak system, every vendor's solution requires manual or powered intervention to close and secure an entrance. The US Federal Emergency Management Agency has data that demonstrates that as many as 60% of installed active flood protection systems fail during their service lives due to lack of intervention at critical times.

FloodBreak is a revolutionary flood prevention system that minimizes the risk of flooding of ground level or underground structures by automatically blocking paths of entry in the case of rising water by using the power of the flood water itself to close the barrier. With no power requirement and absolutely no need for human intervention, FloodBreak is safe, reliable, and elegant in its simplicity of purpose.

FloodBreak's proven, clean, foolproof operating principle is unique in the market. Quite simply, the system is automatically activated by the force of the water itself without the aid of any power source, pumps or people. The gate, a buoyant composite beam placed at the entrance to a driveway, doorway or other potential flood path, is engineered to withstand extreme hydrostatic and hydrodynamic loading. When water rises and approaches the entrance, the barrier automatically floats and rotates upwards, sealing with a self-activated flange. Once a flood has begun, the barrier is held shut by the

water and will not open until the water recedes, at which time it can automatically recede to its lowered position, allowing passage once again.

Installation is very quick and maintenance is kept to an absolute minimum. With only its hinge as a moving part, the system can remain unused for years and still function immediately when needed in a flood.

Architectural Considerations

The barrier hinges into a recess in the pavement immediately in front of the entrance. In its normal down position, it is virtually unnoticeable and does not affect traffic or change the aesthetics of the surrounding area. The barrier's surface can be matched to existing decorative elements as required, including tenant finishes such as carpet, tile, granite, or special decorative flooring and wall surfaces. FloodBreak is alone in its class when it comes to preserving the aesthetics of historic and showcase structures.

Engineering Considerations

It is difficult to comprehend the power of water in a flood condition or breach. Hydrostatic and hydrodynamic forces can destroy concrete walls and steel panels if not properly engineered with an understanding of these forces. FloodBreak has many years of experience in designing flood control structures and has dozens of systems in the field performing under extreme conditions. In addition to its own product expertise, FloodBreak provides a third-party engineering certification of each system, executed by a specialist firm with deep knowledge in offshore structures and hydraulic engineering.

Project-Specific Considerations

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Summary

The FloodBreak system is unique in its operating principle and is the only solution in the flood control market that can actively close an entrance without people or power. The system is designed and built with a clear understanding of the raging forces inherent in flood conditions, and its elegant simplicity virtually guarantees that it will operate when needed, whether days, months, years, or decades after initial installation. The design allows for cladding with any architectural material, rendering the system invisible to the casual observer. Combining elegance, aesthetics, and foolproof simplicity of operation, the FloodBreak system is a revolutionary step in flood control.



H-1129-4 FDH-2 NV UNLV Building Protection Project

BUDGETARY PRICING

Proposal for Ms. Lisa Schock, Project Manager, UNLV Planning and Construction, University of Nevada, Las Vegas, July 8, 2013.

This offer is valid until end of November, 2013.

Description of Barriers:

The following FloodBreak Barriers are being proposed using the dimensions provided and clarified by Lisa Schock by email on July 2, and July 5, 2013.

Budget:

FDH Option 2					List Price	Total List
Gate No	Length (ft)	Height (ft)	Quantity	Type	\$ USD	Price \$ USD
FDH1-2	5.8	2	1	Pedestrian	\$9,800.00	\$9,800.00
FDH2-2	11.1	2	1	Pedestrian	\$18,620.00	\$18,620.00
				Total		\$28,420.00
				<i>Less University Discount 10%</i>		<i>(\$2,842.00)</i>
				Discounted Total		\$25,578.00
				Onsite Advisory (1)		\$5,000.00
				Loading Fee		\$500.00
				Shipping + Insurance (2)		\$900.00
				Total		\$31,978.00

Note:

- (1) If FDH 1 or 2 and HFA1 are purchased together, only one Onsite Advisory Fee is required.
- (2) Shipping & Insurance estimates are included.

Optional Items (that can be requested):

- 1. Gate Opening Activation Sensor** – Installed at time of manufacturing and can be used to create alert/warnings system with external equipment (not provided). No cost. Must be specified at time of order.
- 2. Push Button Mechanical Gate Opener** - \$5000 per gate and installed at time of manufacturing. Some organizations want to raise their gates frequently because of their emergency operating and maintenance procedures. This option allows the heavier gates to be easily opened by internal mechanical means. If the gate is more than 6 feet high, then the cost of the mechanical opener will be \$10,000. If more than 10 feet high then the cost is on request. The mechanical opener can add additional depth to the pan and will be outlined during the shop drawing stage.
- 3. Winch Operated Mechanical Gate Opener** - \$1000 per gate and installed during the floodgate installation. Some organizations want to raise their gates frequently because of their emergency operating and internal maintenance procedures. This manual method is for medium-size gates that are too heavy for manual lifting but no more than 80 square feet. The winch system is composed of a winch pole, a stainless steel pipe with a 2,500 pound capacity worm-gear type winch that can be operated by hand crank or portable drill motor, and a winch insert that finishes even with finished grade. The system is stored when not in use.
- 4. Annual maintenance and Extended Warranty** – Priced at 8% of purchase price per year per gate. Four or more gates priced at 6% per year per gate. On an annual basis, FloodBreak will have a certified Support Engineer inspect and perform any required maintenance.
- 5. Alternative Coatings** - The gate standard coating is a non-slip, high-wear coating designed for long service life in outdoor, high-traffic installations. Color can be matched to customer specifications. The gate can also be “skinned” in architectural finishes, including carpet, tile, paving stones, granite, and other materials. Sidewalls can be architectural materials that match the building façade. One of the major benefits of FloodBreak is that the gate can be almost entirely hidden in the entryway to a structure. No cost. Must be specified as drawings are being finalized prior to order.

Finish:

Standard, non-skid upper surface, safety yellow underneath. Remaining barrier and installation pan surfaces coated as necessary for weather protection.

Inclusions:

Fabricated barrier and installation pan, tested prior to delivery, with fully functional gate mechanism, seals, and installation features, including aluminum wiper walls.

A comprehensive installation and maintenance guide, as well as shop drawings and engineering reports for each gate, are provided as part of the standard package.

The Pricing Offer is FCA, UNLV, Las Vegas, Nevada, USA (per INCOTERMS).

The estimated cost is provided. The difference between actual and estimated will be invoiced/credited based on final invoice.

Exclusions:

Taxes, active or passive warning equipment, permits, installation, and other fees or third-party charges are NOT included in the price.

Installation Oversight, Warranty and Service Contract

FloodBreak will provide onsite oversight support for up to five days for \$5000 during installation phase for passive automatic barriers. Additional visits will be charged at \$8,500 per visit for up to five days and \$1,250 per additional days.

If HFA Option 1 and FDA Option 1 or 2 are purchased at the same time, only one Onsite Oversight fee is required of \$5000. If HFA Option 2 or FDA Option 3 are ordered, remote support will be provided.

The FloodBreak systems warranty offer for this proposal is one year. Remote or Onsite oversight during installation per the above terms is required in order to activate the warranty.

Installation

The gates are installed in four phases. Please visit www.floodbreak.com and go to the “maintenance and install” section for information. <http://floodbreak.com/installation-guide/>

Phase One- consists of excavation, digging or cutting the hole for the footing (depth to be designated by job engineer).

Phase Two-consists of pouring the foundation (footing).

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Phase Four- consists of the final pour, bringing the areas around the gates up to finish grade.

Delivery and Terms:

Delivery: FCA UNLV, Las Vegas, Nevada, USA.

Terms: 30% with P.O.; 30% due on fabrication completion; 40% due on delivery or as otherwise agreed.

Accepted by: _____

Title: _____

Date: _____



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July 8, 2013

Lisa Schock
Project Manager
UNLV Planning and Construction, Campus Services Building Room 131B
University of Nevada, Las Vegas
4505 S. Maryland Pkwy.
Las Vegas, NV 89154
Phone: 702-895-0952
By E-mail to: lisa.schock@unlv.edu

Proposal: H-1129-4 FDH-3
Re: NV UNLV Building Protection Project

Dear Ms. Schock,

Thank you for your request for pricing on the FloodBreak Automatic Floodgate mitigation system. Please note the pricing is budgetary and dependent upon receipt of completed construction documents.

Please note that this quote does not include installation of the system. Installation is straightforward and can be accomplished by a locally qualified construction contractor. More information on installation requirements can be found at the following link:
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We look forward to working with you on this important project. Please do not hesitate to contact us for more information as necessary.

Best regards,

Stephen M. Harris
Area Manager
+1-713-591-6410
sharris@floodbreak.com



H-1129-4 FDH-3 NV UNLV Building Protection Project

**PROPOSAL FOR
UNIVERSITY OF NEVADA, LAS VEGAS
BUILDING PROTECTION PROJECT FDH OPTION 3**

July 8th 2013

This proposal is submitted for flood protection equipment as described above. These prices are good for 30 days. All mounting specifications and final dimensions are the responsibility of the customer. Barriers are warranted to be free from defects in materials and workmanship for one year from date of purchase. No other warranty is given, either express or implied.

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INTRODUCTION

Background

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water and will not open until the water recedes, at which time it can automatically recede to its lowered position, allowing passage once again.

Installation is very quick and maintenance is kept to an absolute minimum. With only its hinge as a moving part, the system can remain unused for years and still function immediately when needed in a flood.

Architectural Considerations

The barrier hinges into a recess in the pavement immediately in front of the entrance. In its normal down position, it is virtually unnoticeable and does not affect traffic or change the aesthetics of the surrounding area. The barrier's surface can be matched to existing decorative elements as required, including tenant finishes such as carpet, tile, granite, or special decorative flooring and wall surfaces. FloodBreak is alone in its class when it comes to preserving the aesthetics of historic and showcase structures.

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H-1129-4 FDH-3 NV UNLV Building Protection Project

BUDGETARY PRICING

Proposal for Ms. Lisa Schock, Project Manager, UNLV Planning and Construction, University of Nevada, Las Vegas, July 8, 2013.

This offer is valid until end of November, 2013.

Description of Barriers:

The following FloodBreak Barriers are being proposed using the dimensions provided and clarified by Lisa Schock by email on July 2, and July 5, 2013.

Budget:

FDH Option 3					List Price	Total List
Gate No	Length (ft)	Height (ft)	Quantity	Type	\$ USD	Price \$ USD
FDH1-3	3.0	2	1	Swing Gate	\$4,800.00	\$4,800.00
FDH2-3	3.0	2	1	Swing Gate	\$4,800.00	\$4,800.00
				Total		\$9,600.00
				<i>Less University Discount 10%</i>		<i>(\$960.00)</i>
				Discounted Total		\$8,640.00
				Onsite Advisory		\$0.00
				Loading Fee		\$500.00
				Shipping + Insurance (1)		\$750.00
				Total		\$9,890.00

Note:

- (1) Shipping & Insurance estimates are included

Optional Items (that can be requested):

- 1. Gate Opening Activation Sensor** – Installed at time of manufacturing and can be used to create alert/warnings system with external equipment (not provided). No cost. Must be specified at time of order.
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- 4. Annual maintenance and Extended Warranty** – Priced at 8% of purchase price per year per gate. Four or more gates priced at 6% per year per gate. On an annual basis, FloodBreak will have a certified Support Engineer inspect and perform any required maintenance.
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Finish:

Standard, non-skid upper surface, safety yellow underneath. Remaining barrier and installation pan surfaces coated as necessary for weather protection.

Inclusions:

Fabricated barrier and installation pan, tested prior to delivery, with fully functional gate mechanism, seals, and installation features, including aluminum wiper walls.

A comprehensive installation and maintenance guide, as well as shop drawings and engineering reports for each gate, are provided as part of the standard package.

The Pricing Offer is FCA, UNLV, Las Vegas, Nevada, USA (per INCOTERMS).

The estimated cost is provided. The difference between actual and estimated will be invoiced/credited based on final invoice.

Exclusions:

Taxes, active or passive warning equipment, permits, installation, and other fees or third-party charges are NOT included in the price.

Installation Oversight, Warranty and Service Contract

FloodBreak will provide onsite oversight support for up to five days for \$5000 during installation phase for passive automatic barriers. Additional visits will be charged at \$8,500 per visit for up to five days and \$1,250 per additional days.

If HFA Option 1 and FDA Option 1 or 2 are purchased at the same time, only one Onsite Oversight fee is required of \$5000. If HFA Option 2 or FDA Option 3 are ordered, remote support will be provided.

The FloodBreak systems warranty offer for this proposal is one year. Remote or Onsite oversight during installation per the above terms is required in order to activate the warranty.

Installation

The gates are installed in four phases. Please visit www.floodbreak.com and go to the "maintenance and install" section for information. <http://floodbreak.com/installation-guide/>

Phase One- consists of excavation, digging or cutting the hole for the footing (depth to be designated by job engineer).

Phase Two-consists of pouring the foundation (footing).



H-1129-4 FDH-3 NV UNLV Building Protection Project

Phase Three-consists of placing, leveling and anchoring the system.

Phase Four- consists of the final pour, bringing the areas around the gates up to finish grade.

Delivery and Terms:

Delivery: FCA UNLV, Las Vegas, Nevada, USA.

Terms: 30% with P.O.; 30% due on fabrication completion; 40% due on delivery or as otherwise agreed.

Accepted by: _____

Title: _____

Date: _____



2800 Post Oak Blvd.
Suite 5850
Houston, TX 77056
(713) 980-6610
Fax (713) 629-9936
info@floodbreak.com

July 8, 2013

Lisa Schock
Project Manager
UNLV Planning and Construction, Campus Services Building Room 131B
University of Nevada, Las Vegas
4505 S. Maryland Pkwy.
Las Vegas, NV 89154
Phone: 702-895-0952
By E-mail to: lisa.schock@unlv.edu

Proposal: H-1129-4 HFA-1
Re: NV UNLV Building Protection Project

Dear Ms. Schock,

Thank you for your request for pricing on the FloodBreak Automatic Floodgate mitigation system. Please note the pricing is budgetary and dependent upon receipt of completed construction documents.

Please note that this quote does not include installation of the system. Installation is straightforward and can be accomplished by a locally qualified construction contractor. More information on installation requirements can be found at the following link:
<http://floodbreak.com/technical/>

Also, this quote does not include engineering for the foundation underneath the FloodBreak barrier, which must be provided by an engineering firm with knowledge of the local geotechnical conditions. We can cooperate with the firm of your choice to assist in the design process.

We look forward to working with you on this important project. Please do not hesitate to contact us for more information as necessary.

Best regards,

Stephen M. Harris
Area Manager
+1-713-591-6410
sharris@floodbreak.com



H-1129-4 HFA-1 NV UNLV Building Protection Project

**PROPOSAL FOR
UNIVERSITY OF NEVADA, LAS VEGAS
BUILDING PROTECTION PROJECT HFA OPTION 1**

July 8th 2013

This proposal is submitted for flood protection equipment as described above. These prices are good for 30 days. All mounting specifications and final dimensions are the responsibility of the customer. Barriers are warranted to be free from defects in materials and workmanship for one year from date of purchase. No other warranty is given, either express or implied.

CONFIDENTIAL. THIS DESIGN IS PATENTED AND COPYING OF THIS DESIGN OR UNAUTHORIZED PRODUCTION OF THIS PRODUCT OR SIMILAR DEVICES IS STRICTLY FORBIDDEN.

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INTRODUCTION

Background

As per the findings in a study conducted by Columbia University's Center for Climate System Research (CCSR), massive rainfalls worldwide have been double the anticipated rate in just the last decade, causing untold damages and massive financial losses. The study concluded that intense climate events leading to flooding and sea level rise are projected to increase globally in the coming years due to increasing anthropogenic greenhouse gas emissions as well as an intensified hydrological cycle associated with global warming.

The combined effects of increasing sea levels, the rise in extreme precipitation events, and restriction of ground surface permeability due to construction will ultimately enhance flooding threats throughout the world.

As floods increase in severity and frequency, already overtaxed drainage systems, storm sewers, and pumping systems are regularly overwhelmed. The sheer scope and cost of changing these systems mean that upgrades often take years or are found not to be feasible. Across the world, private and public entities are searching for alternative mitigation solutions.

The FloodBreak System

The FloodBreak flood control system is founded on a very simple premise: during flood events, it cannot be taken for granted that power will be available or that people will be able to act to protect buildings and property. Outside of the FloodBreak system, every vendor's solution requires manual or powered intervention to close and secure an entrance. The US Federal Emergency Management Agency has data that demonstrates that as many as 60% of installed active flood protection systems fail during their service lives due to lack of intervention at critical times.

FloodBreak is a revolutionary flood prevention system that minimizes the risk of flooding of ground level or underground structures by automatically blocking paths of entry in the case of rising water by using the power of the flood water itself to close the barrier. With no power requirement and absolutely no need for human intervention, FloodBreak is safe, reliable, and elegant in its simplicity of purpose.

FloodBreak's proven, clean, foolproof operating principle is unique in the market. Quite simply, the system is automatically activated by the force of the water itself without the aid of any power source, pumps or people. The gate, a buoyant composite beam placed at the entrance to a driveway, doorway or other potential flood path, is engineered to withstand extreme hydrostatic and hydrodynamic loading. When water rises and approaches the entrance, the barrier automatically floats and rotates upwards, sealing with a self-activated flange. Once a flood has begun, the barrier is held shut by the

water and will not open until the water recedes, at which time it can automatically recede to its lowered position, allowing passage once again.

Installation is very quick and maintenance is kept to an absolute minimum. With only its hinge as a moving part, the system can remain unused for years and still function immediately when needed in a flood.

Architectural Considerations

The barrier hinges into a recess in the pavement immediately in front of the entrance. In its normal down position, it is virtually unnoticeable and does not affect traffic or change the aesthetics of the surrounding area. The barrier's surface can be matched to existing decorative elements as required, including tenant finishes such as carpet, tile, granite, or special decorative flooring and wall surfaces. FloodBreak is alone in its class when it comes to preserving the aesthetics of historic and showcase structures.

Engineering Considerations

It is difficult to comprehend the power of water in a flood condition or breach. Hydrostatic and hydrodynamic forces can destroy concrete walls and steel panels if not properly engineered with an understanding of these forces. FloodBreak has many years of experience in designing flood control structures and has dozens of systems in the field performing under extreme conditions. In addition to its own product expertise, FloodBreak provides a third-party engineering certification of each system, executed by a specialist firm with deep knowledge in offshore structures and hydraulic engineering.

Project-Specific Considerations

The FloodBreak system can be incorporated into a wide range of installations, including building entrances, driveways, utility shafts, tunnels, window vents, and even roadways. Our family of products has been incorporated into historic buildings where heritage and aesthetics are paramount, vent shafts for major subways and utilities, and roadway crossings through levees in major flood control districts. Although elegant in its simplicity, the FloodBreak system can provide comprehensive protection across large-scale projects as well as specific, unique circumstances.

Summary

The FloodBreak system is unique in its operating principle and is the only solution in the flood control market that can actively close an entrance without people or power. The system is designed and built with a clear understanding of the raging forces inherent in flood conditions, and its elegant simplicity virtually guarantees that it will operate when needed, whether days, months, years, or decades after initial installation. The design allows for cladding with any architectural material, rendering the system invisible to the casual observer. Combining elegance, aesthetics, and foolproof simplicity of operation, the FloodBreak system is a revolutionary step in flood control.



BUDGETARY PRICING

Proposal for Ms. Lisa Schock, Project Manager, UNLV Planning and Construction, University of Nevada, Las Vegas, July 8, 2013.

This offer is valid until end of November, 2013.

Description of Barriers:

The following FloodBreak Barriers are being proposed using the dimensions provided and clarified by Lisa Schock by email on July 2, and July 5, 2013.

Budget:

HFA Option 1					List Price	Total List
Gate No	Length (ft)	Height (ft)	Quantity	Type	\$ USD	Price \$ USD
HFA1	8	2	1	Pedestrian	\$13,440.00	\$13,440.00
HFA2	14	2	1	Pedestrian	\$23,520.00	\$23,520.00
HFA3	15	2	1	Pedestrian	\$25,200.00	\$25,200.00
				Total		\$62,160.00
				<i>Less University Discount 10%</i>		<i>(\$6,216.00)</i>
				Discounted Total		\$55,944.00
				Onsite Advisory (1)		\$5,000.00
				Loading Fee		\$500.00
				Shipping + Insurance (2)		\$1,500.00
				Total		\$62,944.00

Note:

- (1) If HFA-1 and FDA-1 or 2 is ordered at the same time, only one Onsite Advisory Fee is required
- (2) Shipping & Insurance estimates are included

Optional Items (that can be requested):

- 1. Gate Opening Activation Sensor** – Installed at time of manufacturing and can be used to create alert/warnings system with external equipment (not provided). No cost. Must be specified at time of order.
- 2. Push Button Mechanical Gate Opener** - \$5000 per gate and installed at time of manufacturing. Some organizations want to raise their gates frequently because of their emergency operating and maintenance procedures. This option allows the heavier gates to be easily opened by internal mechanical means. If the gate is more than 6 feet high, then the cost of the mechanical opener will be \$10,000. If more than 10 feet high then the cost is on request. The mechanical opener can add additional depth to the pan and will be outlined during the shop drawing stage.
- 3. Winch Operated Mechanical Gate Opener** - \$1000 per gate and installed during the floodgate installation. Some organizations want to raise their gates frequently because of their emergency operating and internal maintenance procedures. This manual method is for medium-size gates that are too heavy for manual lifting but no more than 80 square feet. The winch system is composed of a winch pole, a stainless steel pipe with a 2,500 pound capacity worm-gear type winch that can be operated by hand crank or portable drill motor, and a winch insert that finishes even with finished grade. The system is stored when not in use.
- 4. Annual maintenance and Extended Warranty** – Priced at 8% of purchase price per year per gate. Four or more gates priced at 6% per year per gate. On an annual basis, FloodBreak will have a certified Support Engineer inspect and perform any required maintenance.
- 5. Alternative Coatings** - The gate standard coating is a non-slip, high-wear coating designed for long service life in outdoor, high-traffic installations. Color can be matched to customer specifications. The gate can also be “skinned” in architectural finishes, including carpet, tile, paving stones, granite, and other materials. Sidewalls can be architectural materials that match the building façade. One of the major benefits of FloodBreak is that the gate can be almost entirely hidden in the entryway to a structure. No cost. Must be specified as drawings are being finalized prior to order.

Finish:

Standard, non-skid upper surface, safety yellow underneath. Remaining barrier and installation pan surfaces coated as necessary for weather protection.

Inclusions:

Fabricated barrier and installation pan, tested prior to delivery, with fully functional gate mechanism, seals, and installation features, including aluminum wiper walls.

A comprehensive installation and maintenance guide, as well as shop drawings and engineering reports for each gate, are provided as part of the standard package.

The Pricing Offer is FCA, UNLV, Las Vegas, Nevada, USA (per INCOTERMS).

The estimated cost is provided. The difference between actual and estimated will be invoiced/credited based on final invoice.

Exclusions:

Taxes, active or passive warning equipment, permits, installation, and other fees or third-party charges are NOT included in the price.

Installation Oversight, Warranty and Service Contract

FloodBreak will provide onsite oversight support for up to five days for \$5000 during installation phase for passive automatic barriers. Additional visits will be charged at \$8,500 per visit for up to five days and \$1,250 per additional days.

If HFA Option 1 and FDA Option 1 or 2 are purchased at the same time, only one Onsite Oversight fee is required of \$5000. If HFA Option 2 or FDA Option 3 are ordered, remote support will be provided.

The FloodBreak systems warranty offer for this proposal is one year. Remote or Onsite oversight during installation per the above terms is required in order to activate the warranty.

Installation

The gates are installed in four phases. Please visit www.floodbreak.com and go to the “maintenance and install” section for information. <http://floodbreak.com/installation-guide/>

Phase One- consists of excavation, digging or cutting the hole for the footing (depth to be designated by job engineer).

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Delivery and Terms:

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Terms: 30% with P.O.; 30% due on fabrication completion; 40% due on delivery or as otherwise agreed.

Accepted by: _____

Title: _____

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FloodBreak

REVOLUTIONARY FLOOD CONTROL

2800 Post Oak Blvd.
Suite 5850
Houston, TX 77056
(713) 980-6610
Fax (713) 629-9936
info@floodbreak.com

July 8, 2013

Lisa Schock
Project Manager
UNLV Planning and Construction, Campus Services Building Room 131B
University of Nevada, Las Vegas
4505 S. Maryland Pkwy.
Las Vegas, NV 89154
Phone: 702-895-0952
By E-mail to: lisa.schock@unlv.edu

Proposal: H-1129-4 HFA-2
Re: NV UNLV Building Protection Project

Dear Ms. Schock,

Thank you for your request for pricing on the FloodBreak Automatic Floodgate mitigation system. Please note the pricing is budgetary and dependent upon receipt of completed construction documents.

Please note that this quote does not include installation of the system. Installation is straightforward and can be accomplished by a locally qualified construction contractor. More information on installation requirements can be found at the following link:
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We look forward to working with you on this important project. Please do not hesitate to contact us for more information as necessary.

Best regards,

Stephen M. Harris
Area Manager
+1-713-591-6410
sharris@floodbreak.com



H-1129-4 HFA-2 NV UNLV Building Protection Project

**PROPOSAL FOR
UNIVERSITY OF NEVADA, LAS VEGAS
BUILDING PROTECTION PROJECT HFA OPTION 2**

July 8th 2013

This proposal is submitted for flood protection equipment as described above. These prices are good for 30 days. All mounting specifications and final dimensions are the responsibility of the customer. Barriers are warranted to be free from defects in materials and workmanship for one year from date of purchase. No other warranty is given, either express or implied.

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