THE UPDATE

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The goal of our monthly update is to provide information on timely matters that may impact your practice and professional interests.

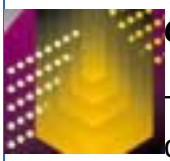
ACCIDENT SCENE HEAD TRAUMA METHODS ADVANCE

A new hand-held device 'pupilometer' that automatically records the contraction of the accident victims pupils in response to bright light may help insure that they get the correct treatment when paramedics are called to an accident scene. Although paramedics can currently use other non-portable commercial pupilometers requiring patient contact, most shine a light in the eyes of the survivors to see how their pupils react to help establish serious head trauma or internal bleeding issues. Yet accurately spotting changes in the pupils responsiveness is difficult, relies on manual assessment, is time consuming and can be extremely subjective, such as on a wet dark road. To improve the quality of accident victim pupil response, Medical Device Management (MDM) in Braintree, Essex, UK has developed a portable commercial pupilometer to automatically take a short video of the eye before, during, and after a 200-millisecond flash of white light to record any changes , all in less than a second and without touching the victim 's body. MDM claims that paramedics using its device will be able to take more accurate measurements (because the pupil remains unaffected by the wavelength of light it has selected) in far less time which can then be sent ahead to the hospital.

REVERSE AUCTION BIDDING: OWNER BENEFIT OR NOT?

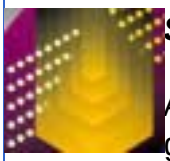
Reverse Auction Bidding (RAB) is a procurement method that is increasingly being used in the purchase of construction services. While a normal auction pits bidders against each other to obtain the highest price for the seller, RAB attempts to reverse this process by pitting anonymous bidders against each other to reach the lowest price for the owner. The RAB process is typically web-based and open to all interested bidders submitting their prices. Bids are posted without identifying the bidder. Additionally bidders are allowed a set period of time to offer alternative, lower bids. However once his time period expires , the bidding process is closed and the award is made to the lowest bidder. Owners claim that one of the main advantages of RAB is

receiving a better price than with traditional sealed bidding. Contactors understandably view RAB as an unethical, transparent form of bid shopping , promoting imprudent bidding and making construction a commodity. As a practical matter , RAB may not not lead to the lowest price since it can hardly be a complete indicator of quality and performance ,unless all bidders are pre-qualified .Furthermore without some benchmark used by the owner to compare anticipated cost against the final bid e.g. a similar project, savings can be marginal, if any, because construction variables including seasonal or local material and labor costs can skew those numbers .Using the opening bid could actually inflate the likely owner savings since no contractor is likely to submit their best price on the initial bid. Furthermore the complexity of the project may not lend itself to RAB from both owner and contractor perspectives particularly in view of unanticipated change order costs and potential architect-engineer E & O liability.



GROWING USE OF ONLINE PROJECT COLLABORATION

The number of architect-engineer (A/E) and construction firms using online project collaboration systems appears greater than ever. Web-based collaboration has become a valued business tool saving time and cost by providing increased transparency and control to project team members. In a recent survey the 2004 Construction Financial Management Association questioned 800 contractors about their software choices and found that project collaboration software is most often used by the largest GC firms. Purdue University School of Engineering e-Construction Group researchers also collected data from 82 construction projects and concluded that such systems "promise to change the way the construction business is conducted" making information transfer occur faster and more effectively thereby providing a "unique opportunity for teamwork and workflow automation". For additional details contact author: nititham@purdue.edu



SMART GLASS BLOCKS SUMMER HEAT ; NOT LIGHT

A new glass that blocks out heat but not light when a room starts getting overly warm has been developed by UK scientists. At most room temperatures and particularly in colder winter climates, the glass lets both light and infrared (heat) wavelengths pass through minimizing space heating costs. However, above 29 degrees C the vanadium dioxide substance coating the glass undergoes a chemical change causing it to block infrared light preventing room temperatures to rise excessively in bright sunshine or if

outdoor temperatures soar, thereby reducing air conditioning costs automatically. Current use of commercially available tinted glass cannot respond to changing outdoor conditions while also reducing the amount of available light entering a room-presenting a dilemma for architects and builders. This new glass technology could materially change the way both architects and engineers design large buildings.