BEFORE THE SAFETY AND HEALTH REVIEW BOARD OF NORTH CAROLINA RALEIGH, NORTH CAROLINA

COMMISSIONER OF LABOR FOR THE STATE OF NORTH CAROLINA,

COMPLAINANT,

DOCKET NO. OSHANC 99-3781 OSHA INSPECTION NO. 302465984 CSHO ID NO. T7732

v.

REA CONSTRUCTION COMPANY

RESPONDENT.

<u>ORDER</u>

THIS MATTER was heard by the undersigned on March 21, 2000 in Concord, North Carolina. Complainant was represented by Jane A. Gilchrist, Assistant Attorney General. Respondent, a corporation, was represented by Greg Ahlum, of the law firm Johnston, Alson & Hord of Charlotte, North Carolina. Present for the hearing for complainant were Health Compliance Officer Thomas Elder, Health Compliance Supervisor Nelson D. Edwards, Jr., and Emily Dawson. Present for respondent were foreman Charles Larry Gilliam, Steve Hubbard and Michele Jacobs.

Prior to the commencement of the hearing, the parties stipulated that they had reached a settlement regarding all citations except Citation 1, Item 2. A Stipulation and Notice of Settlement regarding all citations except Citation 1, Item 2 was subsequently signed by the parties on March 22, 2000. On April 10, 2000, the undersigned Administrative Law Judge signed and submitted for filing a Consent Order approving the settlement of Citation 1, Items 1a, 1b, 1c and 1d and Item 3. The terms of the Stipulation and Notice of Settlement and the Consent Order addressing all but Citation 1, Item 2 are hereby incorporated as if fully set forth herein.

With regard to Citation 1, Item 2, after reviewing the record file, and after hearing the evidence and the arguments of counsel, the undersigned makes the following:

FINDINGS OF FACT

1. The complainant is charged by law with responsibility for Compliance with and enforcement of the provisions of N.C. Gen. Stat. §§95-126 et. seq., the Occupational Safety and Health Act of North Carolina (the Act).

- 2. The respondent is a corporation which is in the business of repairing and building bridges. It employed 15 employees at the work site which is the subject of the Citation. It employs over 1,400 employees company wide. It is subject to the provisions of the Act.
- 3. Health Compliance Officer (HCO), Thomas Elder, inspected respondent's bridge repair project over Highway 52 at the Liberty Street exit in Forsyth County, North Carolina on December 7, 1998. The inspection was a result of Mr. Elder's observation of respondent's employees jack hammering concrete on the bridge overpass. Knowing that one of the constituent elements of concrete is silica, the HCO made a self-referral and opened an inspection.
- 4. The HCO presented his credentials to Roy Lowe, the lead man on the site. Thereafter, the HCO held an opening conference with respondent's foreman, Larry Gilliam. Mr. Gilliam gave the HCO permission for the inspection. While on the construction site, the HCO personally observed what he believed to be a violation of the Act by several of respondent's employees.
- 5. The HCO took photographs of the construction site.
- 6. The HCO also obtained the names of some of the employees on the site.
- 7. On February 2, 1999, the HCO held a closing conference with respondent's foreman, Mr. Gilliam; respondent's safety and loss control manager, Mr. Steven Hubbard; respondent's superintendent, Larry Bowers; respondent's safety man, Mr. Kent Thomas; and respondent's construction manager, Mr. Greg Jones.
- 8. In order to enforce the Act, complainant issued citations on February 19, 1999 for violations of the Act. The citation at issue in this case is as follows:

Citation 1, Item 2

A serious violation of 29 C.F.R. §1926.501(b)(4)(ii): Each employee on a walking or working surface was not protected from tripping in or stepping into or through holes by covers:

- (a) for the employees jack hammering the old concrete from the Liberty Street bridge on the southbound side of Highway 52, Winston-Salem.
- 9. Regulation 29 C.F.R. §1926.501(b)(4)(ii) provides as follows:

Each employee on a walking/working surface shall be protected from tripping in or stepping into or through holes (including skylights) by covers.

- 10. Regulation 29 C.F.R. §1926.500 (b), defines a "walking/working surface" as follows:
- ...any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, <u>bridges</u>, runways, <u>formwork and concrete reinforcing steel</u> but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties. (Emphasis added)
- 11. Regulation 29 C.F.R. §1926.500 (b), defines a "hole" as follows:
- ...a gap or void 2 inches (5.1 cm) or more in its least dimension, in a floor, roof, or other walking/working surface.
- 12. The case was initiated by a Notice of Contest filed by respondent which followed the issuance of the citations.

Citation 1, Item 2, Uncovered Holes on Walking or Working Surfaces 29 C.F.R. §1926.501(b)(4)(ii)

- 13. During his inspection, the HCO observed that respondent's employees were jack hammering concrete from in and around criss-crossing steel reinforcing bars ("rebars") on the bridge surface and from in and around the expansion joints where bridge sections come together.
- 14. The HCO took photographs of the site showing respondent's employees jack hammering concrete from in and around rebars (Complainant's Exhibits C-1 and Respondent's Exhibit R-1) and showing respondent's employees jack hammering concrete from in and around an expansion joint and showing the resultant expansion joint hole. (Complainant's Exhibits C-2, C-3, C-4 and C-5)
- 15. The HCO cited respondent for not covering or protecting its employees from stepping into the space created by respondent's employees when they removed the concrete from the expansion joint ("expansion joint hole"). (Complainant's Exhibit C-5).
- 16. Because he did not wish to expose himself to what he considered to be a hazard, the HCO did not perform actual measurements of the expansion joint hole. However, from his own observations of the site and his extrapolation from other objects in the photograph, the HCO estimated the expansion joint hole to be greater than 5".
- 17. Respondent's foreman, Mr. Charles Gilliam, testified that the grid formed by the criss-crossing of the rebars ("rebar hole") creates a hole 5" in diameter. Using a

standard ruler, the rebar hole in C-5 which appears third from the bottom and immediately adjacent and to the right of the expansion joint hole, measures 1/4 of an inch in diameter ("the measured rebar hole"). Thus, the measuring scale for photograph C-5 is "1/4 of an inch equals 5 inches" at the plane where the third rebar hole from the bottom adjoins the expansion joint hole. The expansion joint hole created by respondent's employees immediately adjacent and to the left of the measured rebar hole also measures 1/4 of an inch. Thus, the expansion joint hole on the bridge where respondent's employees were working was approximately 5" wide.

- 18. The extrapolation done by the undersigned in paragraph #17 of the FINDING OF FACT is further supported by observing respondent employee's foot pictured in C-5. Although the employee is standing in a plane which is deeper than the plane measured in paragraph #17 above, his foot almost fits into a rebar hole. Thus, it is clear that the expansion joint hole created by respondent was 2" in diameter or more.
- 19. The expansion joint hole on the bridge where respondent's employees were working created a trip hazard. The substantial probable result of tripping over such a hole would be scrapes, bruises and lacerations requiring simple first aid. The substantial probable result of tripping over such a hole would not be death or serious injury and thus the trip hazard is non-serious.
- 20. However, the expansion joint hole on the bridge where respondent's employees were working created a hazard in which someone's foot and leg could accidentally plunge into the hole.
- 21. Several of respondent's employees were exposed to the hazards, including but not limited to Pedro Arellanes, Ignacio Arellanes and Zorobabel Batron.
- 22. The expansion joint hole created the possibility of an accident on December 7, 1998, to wit: an employee could accidentally step into the expansion joint hole. The substantial probable result of stepping into such a hole would be scrapes, bruises, lacerations and puncture wounds to the inner foot soles, calves, thighs and groin area from the unprotected sharp and dirty rebars protruding into the hole. Such injuries would result in serious harm requiring more than simple first aid, thus the fall hazard is serious.
- 23. Respondent knew or should have known about the expansion joint hole because respondent's employees created the hole and because the hole was in plain view. Foreman Larry Gilliam was on the work site for portions of every day.

- 24. The \$413.00 penalty imposed for the serious violation cited in Citation 1, Item 2 relating to the hazard of stepping into the expansion joint hole was in accordance with the North Carolina Department of Labor Manual as follows:
- a) the severity of the violations was properly determined to be low based upon the HCO's testimony that the substantial probable injuries would be those of a temporary nature, not requiring hospitalization and most likely needing minor supportive medical treatment such as stitches;
- b) the probability assessment was properly deemed to be low based upon the HCO's testimony that the respondent's employees were aware of the hole that they created and based upon Mr. Gilliam's testimony that respondent's employees did not walk across the hole and were trained to monitor the open hole and to warn other employees or the public to stay away from the hole;
- c) the gravity based penalty was properly calculated to be \$750.00;
- d) the adjustment factor of 0% for the size of the employer was properly applied;
- e) the adjustment factor of 10% for respondent's cooperation with the inspection and immediate abatement of the violation was properly applied;
- f) the adjustment factor of 10% for no history of prior violations was properly applied;
- g) the adjustment factor of 25% for safety and health programs in place was properly applied; and
- h) the 45% total reduction to the \$750.00 gravity based penalty to reduce the penalty to \$413.00 was properly applied.
- 25. Respondent presented evidence that it is impossible to cover expansion joint holes because its employees work continuously to create the expansion joint holes and refill the expansion joint holes with concrete as follows:
- a) respondent needs to keep the expansion joint holes clear of covers in order to allow its employees to jack hammer the expansion joints to create the expansion joint holes;
- b) respondent needs to keep the expansion joint holes clear of covers in order for some of its employees to hand jack hammers to other of its employees who are stationed below the bridge for the purpose of clearing additional concrete from under the bridge and from within the expansion joint hole;

- c) respondent needs to keep the expansion joint holes clear of covers in order to allow its employees to build ply wood forms under the bridge expansion joint holes for the pouring of fresh concrete. Respondent presented uncontradicted evidence that its employees were in the process of completing these forms at the time of the inspection; and
- d) respondent needs to keep the expansion joint holes clear of covers in order to allow its employees on the surface of the bridge to pour fresh concrete into the plywood forms built beneath the expansion joint holes.
- 26. Impossibility of compliance is an affirmative defense which respondent did not plead in its answer.
- 27. The evidence at the hearing and common sense dictate that respondent's employees can use ply boards to cover the areas of the expansion joint holes already carved out with jack hammers while respondent's employees are jack hammering out the remaining portions of the expansion joint; that respondent's employees can temporarily lift the ply board covers to hand jack hammers through the expansion joint hole to the workers under the bridge for further concrete removal under and between the expansion joints; and that respondent's employees can build forms under the joint for the pouring of fresh concrete while ply boards cover the expansion joint holes on the surface of the bridge.
- 28. The evidence at the hearing and common sense also dictate that if ply boards are not a feasible method of protection during actual jack hammering of the concrete out of the holes or during the pouring of fresh cement, respondent's employees can use brightly colored ropes, cones or tape to cordon off the areas where some of respondent's employees are working in order to keep nonessential personnel away from the uncovered holes.
- 29. Respondent presented evidence that it provided alternative means of protection of its employees, (a) by roping off the bridge at both ends with caution tape at the end of each work day to keep people away from the uncovered expansion joint holes which were not filled with fresh concrete; and (b) by conducting safety meetings in the morning to advise its employees to keep people from walking across the expansion joint holes.
- 30. Alternative means of protection is an element of the affirmative defense of impossibility of compliance, which respondent did not plead in its answer.
- 31. The evidence at the hearing and common sense dictate that roping off the entire bridge at the end of a work day is not a feasible method of protecting respondent's

employees from falling into the expansion joint holes while walking and working on the bridge surface during the regular work day.

32. Respondent's evidence that it advises its employees to warn people not to walk across the expansion joint holes is insufficient to prove that it employed alternative means of protection because its employees who are jack hammering have their eyes focused on their work and would probably not see someone walking across the expansion joint hole. Further, those who are walking across the expansion joint hole might not hear someone yelling a warning due to the noise and vibration of the numerous jack hammers being operated by respondent's employees.

CONCLUSIONS OF LAW

- 1. The foregoing findings of fact are incorporated by reference as Conclusions of Law to the extent necessary to give effect to the provisions of this Order.
- 2. Respondent is subject to the provisions and jurisdiction of the Act.
- 3. Complainant proved by a preponderance of the evidence that respondent committed a serious violation of 29 C.F.R.1926.501(b)(4)(ii) in that it failed to cover expansion joint holes, thus creating the possibility of a fall through the hole, the substantial probable result of which would be scrapes, bruises, lacerations and puncture wounds to the inner foot soles, calves, thighs and groin area from the unprotected rebars protruding into the hole, thus requiring more than simple first aid. Citation 1, Item 2 with a penalty of \$413.00 should be affirmed.
- 4. Impossibility of compliance is an affirmative defense which must be pled affirmatively in a respondent's answer. Brooks v. Austin Berryhill Fabricators, Inc., 102, N.C.App. 212, 401 S.E.2d 795 (1981). Respondent did not plead impossibility of compliance in its answer and thus is precluded from arguing this defense.
- 5. Even if, *arguendo*, respondent did plead impossibility of compliance in its answer, respondent failed to prove impossibility of compliance by a preponderance of the evidence. To establish the defense, the employer must establish either that compliance with the standard would preclude performance of the required work or that compliance would be functionally impossible. The employer must also show that alternative means of protection were unavailable. Brooks v. Austin Berryhill Fabricators, Inc., 102, N.C. App. 212, 401 S.E.2d 795 (1981). Respondent failed to take the steps outlined in paragraphs 27 and 28 of the FINDINGS OF FACT. Respondent failed to present any evidence of the economic infeasibility of the precautions outlined in paragraphs 27 and 28 of the FINDINGS OF FACT.

Respondent failed to present convincing evidence that it took any other reasonable steps in order to protect its employees from accidentally stepping into the expansion joint holes.

Based upon the foregoing Findings of Fact and Conclusions of Law, **IT IS ORDERED** as follows:

- 1. Citation 1, Item 2 is hereby affirmed and the penalty is hereby imposed in the amount of \$413.00;
- 2. The penalty shall be paid within ten (10) days of the filing date of this Order; This the 19th day of April, 2000.

Ellen R. Gelbin
Administrative Law Judge