

ILUKA EBB TIDE RIVER RELEASE

PROJECT ILUKA EBB TIDE RIVER RELEASE

CLIENT NEW SOUTH WALES PUBLIC WORKS

TIME 4 MONTHS



CROSSING LENGTH:
725M HDD
SHORE CROSSING

PIPE:
DN 355
HDPE
PN 20

INSTALLATION:
UNIQUE RIVERBED DIFFUSER
AND COFFER DAM
PROTECTION STRUCTURE

RIG:
DD220
DRILLING SPREAD

Coe Drilling's innovative approach to engineering and design solutions delivered a unique, best for-project solution on the Iluka Ebb Tide River Release project, overcoming serious environmental and safety construction challenges.

The Iluka Sewerage Scheme provided a vital infrastructure upgrade for the Iluka Township. The project included the construction of a sewage treatment plant, pump stations and collection network. Maximising recycled water usage through irrigation and domestic reuse through the provision of a reticulated sewage system, Coe Drilling was engaged to construct an Ebb Tide River Release to release treated water from the treatment plant.

Installing a Horizontal Directional Drilled (HDD) shore crossing 725m in length from the town side to the mouth of the Clarence River in over 20m of water presented a number of unique challenges when it came to ensuring a cost effective and environmentally sensitive installation. Strong currents and extensive tidal changes contributed to the complexities of the project and posed serious safety risks for off-shore works.

Taking an innovative approach to design engineering, Coe Drilling delivered a unique solution to construct a 4m by 20m coffer dam at the mouth of the Clarence River, allowing for the safe and efficient construction of a riverbed diffuser and an exit point for the HDD crossing.

Drilling operations commenced with a 12¼ inch pilot hole, a single reaming pass and conditioning pass, before the pipeline was towed to the exit point. During drilling all drill fluid was contained within the coffer dam, allowing recycling of the fluid through a return pipeline on the riverbed, a unique environmental solution to a common problem.

PROVEN PROJECT DELIVERY
ON TIME DELIVERY THROUGH INNOVATIVE ENGINEERING AND PROBLEM SOLVING

PROVEN PIONEERING APPROACH
CONSTRUCTED A UNIQUE RIVERBED DIFFUSER IN FAST TIDAL CURRENTS

CONSISTENT ENVIRONMENTAL OUTCOMES
100% RECYCLED DRILL FLUID THROUGH USE OF COFFER DAM



WATER & WASTE



A QUANTA SERVICES COMPANY