

PRIVATE HOSPITAL AT 35 WATER STREET WAHROONGA



TANNER ARCHITECTS

CIVIL SERVICES

DRAWING SCHEDULE

- C00 COVER SHEET & LEGEND
- C01 STORMWATER CONCEPT PLAN
- LOWER BASEMENT A, B & C
- C02 STORMWATER CONCEPT PLAN
- UPPER BASEMENT A & B
- C03 STORMWATER CONCEPT PLAN - NORTH
- C04 STORMWATER CONCEPT PLAN - SOUTH
- C05 OSD TANK AND DETAILS
- C06 SEDIMENT & EROSION CONTROL PLAN - NORTH
- C07 SEDIMENT & EROSION CONTROL PLAN - SOUTH

PROPOSED DEVELOPMENT

TYPE 5 LOCATION A

CATCHMENT

LOVERS JUMP CREEK (LJ1)
PSD - 94L/S/ha
OSD - 417m³/ha
SITE AREA - 2.29ha

EXISTING CONDITIONS

SITE IMPERVIOUS AREA 0.40ha (18%)

POST-DEVELOPED CONDITIONS

SITE IMPERVIOUS AREA - 0.85ha (37%)

ON-SITE DETENTION (OSD) IS PROPOSED FOR DEVELOPED SITE AREA:

PROVIDED:
OSD - 330m³ AND OSR - 115m³ (25% COUNTED FOR OSD)
20 YEAR ARI PSD - 675L/S (HAS BEEN DETERMINED USING ILSAX MODEL)
100 YEAR ARI PSD - 865L/S

ON-SITE RETENTION (OSR)

PROVIDED: 115m³ OSR
WATER RE-USED FOR:
IRRIGATION OF LANDSCAPED AREA (1.40ha) APPROX. 40% OF DEMAND

LEGEND

STORMWATER SERVICES

- STORMWATER DRAINAGE IN GROUND
- - - STORMWATER DRAINAGE SUSPENDED IN BASEMENT
- / - SUB SOIL DRAINAGE AG PIPE
- - - SUB SOIL DRAINAGE ATLANTIS CELL
- - - STORMWATER DRAINAGE SUSPENDED
- RISING MAIN
- EXISTING PIPE
- X X X EXISTING PIPE TO BE REMOVED
- / — CO INSPECTION EYE
- FFL FINISHED FLOOR LEVEL
- IL INVERT LEVEL
- PHL PIPE HIGH LEVEL
- RL REDUCED LEVEL
- RW RETAINING WALL
- PIPE DOWN
- PIPE UP
- PIPE BREAK
- FLOW DIRECTION
- OVERFLOW
- RWO RAINWATER OUTLET
- GRATED TRENCH
- STORMWATER GRATED PIT
- RWP SERVICE IDENTIFICATION
- 100 SERVICE SIZE
- SITE SUB-CATCHMENT BOUNDARY
- SITE AREA REMAINING INTACT IN NATURAL CONDITIONS
- SITE AREA BY-PASSING OSD
- CATCHMENT NODE
- A1 DUMMY
- A3 ON SITE DETENTION
- A5 EXISTING TREE TO BE RETAINED

EROSION & SEDIMENT CONTROL

- CONSTRUCTION VEHICLE EXIT (ALL WEATHER ACCESS ROAD)
- SEDIMENT CONTROL FENCE
- HAY BALES AROUND EXISTING PIT (REFER TO STORMWATER PIT SEDIMENT TRAP DETAIL)
- CATCH DRAIN (PROPOSED SWALE)
- FLOW DIRECTION ARROW (CONSTRUCT DIVERSION DRAIN AS REQUIRED)

EROSION & SEDIMENT CONTROL

- SUBCATCHMENT BOUNDARY
- NO EXTERNAL CATCHMENT INFLOW INTO SITE

GENERAL

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OF THESE DRAWINGS.
- SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.
- WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- IN ADDITION TO THESE NOTES, LOCAL COUNCIL CIVIL WORKS SPECIFICATIONS SHALL APPLY TO ALL WORKS WITHIN PUBLIC AREAS
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN PLACE & MAINTAIN TRAFFIC FACILITIES AT ALL TIMES DURING CONSTRUCTION.
- NOTWITHSTANDING THE INDICATIVE LOCATION OF IN GROUND PIPEWORK ON THE DRAWINGS, ALL IN GROUND PIPEWORK IS TO BE LOCATED CLEAR OF THE CRITICAL ROOT ZONE OF ALL RETAINED TREES AND VEGETATION

DRAINAGE PIPES

EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL BE REMOVED OR SEALED AS INDICATED ON THE PLANS.

PIPES UP TO 300 DIAMETER SHALL BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS (U.J.O.). ALL PIPE JUNCTIONS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.

WHERE DOWNPIPE DRAINAGE PASS UNDER FLOOR SLABS SEWER GRADE UPVC IS TO BE USED.

MINIMUM GRADE TO DRAINAGE PIPES TO BE 1% U.N.O., MIN. SIZE 100 DIAMETER U.N.O.

CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.

DRAINAGE PITS

PITS DEEPER THAN 1200mm TO BE FITTED WITH STEP IRONS AT 300 CENTRES.

ALL EXPOSED EDGES TO BE ROUNDED WITH 20mm RADIUS, OR CHAMFERED 20mm X 20mm.

PIT REINFORCEMENT - RF 81. LAP TO BE 400mm MIN. CLEAR COVER 40 MIN. CAST AGAINST BLINDING OR FORMWORK. CORNER RETURNS MAY BE FABRIC OR EQUIVALENT BARS.

BENCHING TO BE HALF OUTGOING PIPE DEPTH. CONCRETE FOR BENCHING TO BE 20MPa MASS CONCRETE.

APPROVED PRECAST PITS MAY BE USED.

GRATES IN CARPARK AREA - HEAVY DUTY
GRATES IN LANDSCAPING AREA & FOOTPATH - LIGHT DUTY

SUBSOIL DRAINAGE

SUBSOIL DRAINAGE SHALL BE LAID AT A MIN GRADE OF 0.5% U.N.O.

ADDITIONAL SUBSOIL DRAINAGE SHALL BE LAID TO SUIT SITE CONDITIONS AND GROUNDWATER PRESENCE AS DIRECTED.

EROSION & SEDIMENTATION CONTROL

- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

CLAY SOILS

A SYSTEM SHALL BE INSTALLED TO EITHER:

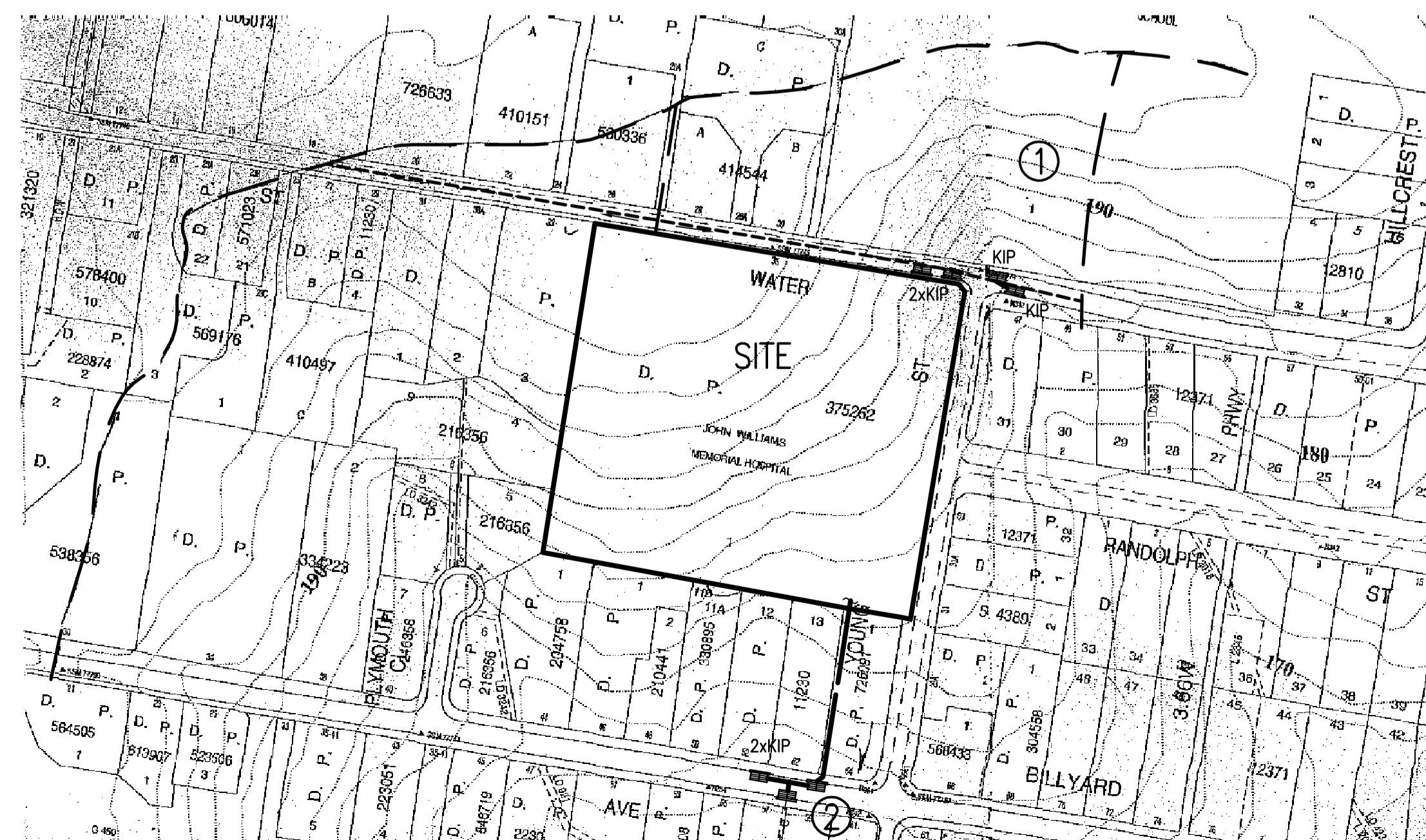
TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS ON SITE (IN TEMPORARY SEDIMENT BASIN) SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.

MAINTENANCE PROGRAM

- SEDIMENT TRAPS AND FENCES TO BE CHECKED AND MAINTAINED ON A WEEKLY BASIS AT LEAST AND AFTER EVERY STORM EVENT TO ENSURE ADEQUATE OPERATION
- CONNECTION TO EXISTING DISCHARGE DRAINAGE SYSTEMS TO BE CARRIED OUT AT THE EARLY STAGES OF THE CONSTRUCTION.
- MAINTAIN SITE ACCESS IN AN EFFECTIVE CONDITION THROUGH REMOVAL OF SEDIMENT AND/OR ADDITION OF EXTRA AGGREGATE ON DAILY BASIS
- WORK TO BE PHASED. TRUCK MOVEMENT MINIMISED ON DISTURBED AREAS AND GROUND SURFACE TO BE KEPT DAMP (NOT WET) TO LIMIT DUST EMISSIONS
- BINS TO BE EMPTIED ON A WEEKLY BASIS AT LEAST. WASTE TO BE DISPOSED OF IN AN APPROVED MANNER
- REPAIR AREAS OF EROSION AS REQUIRED

NOTE

FINAL DRAINAGE DESIGN AND INSTALLATION WILL BE CO-ORDINATED WITH ANY HYDROGEOLOGY RELIEF MEASURES THAT MAY BE REQUIRED TO MAINTAIN NATURAL MOISTURE LEVELS TO SURROUNDING BLUE GUM HIGH FOREST MAPPED AREAS



SITE CATCHMENT PLAN SCALE 1:2000

Design	ZO	Scale	1:2000
Date	OCT 2008	Design Validated	MA
Sheet	1 OF 8	QA Approved	-
Drawn	JK	Computer Dwg.No.	COMPDWG
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