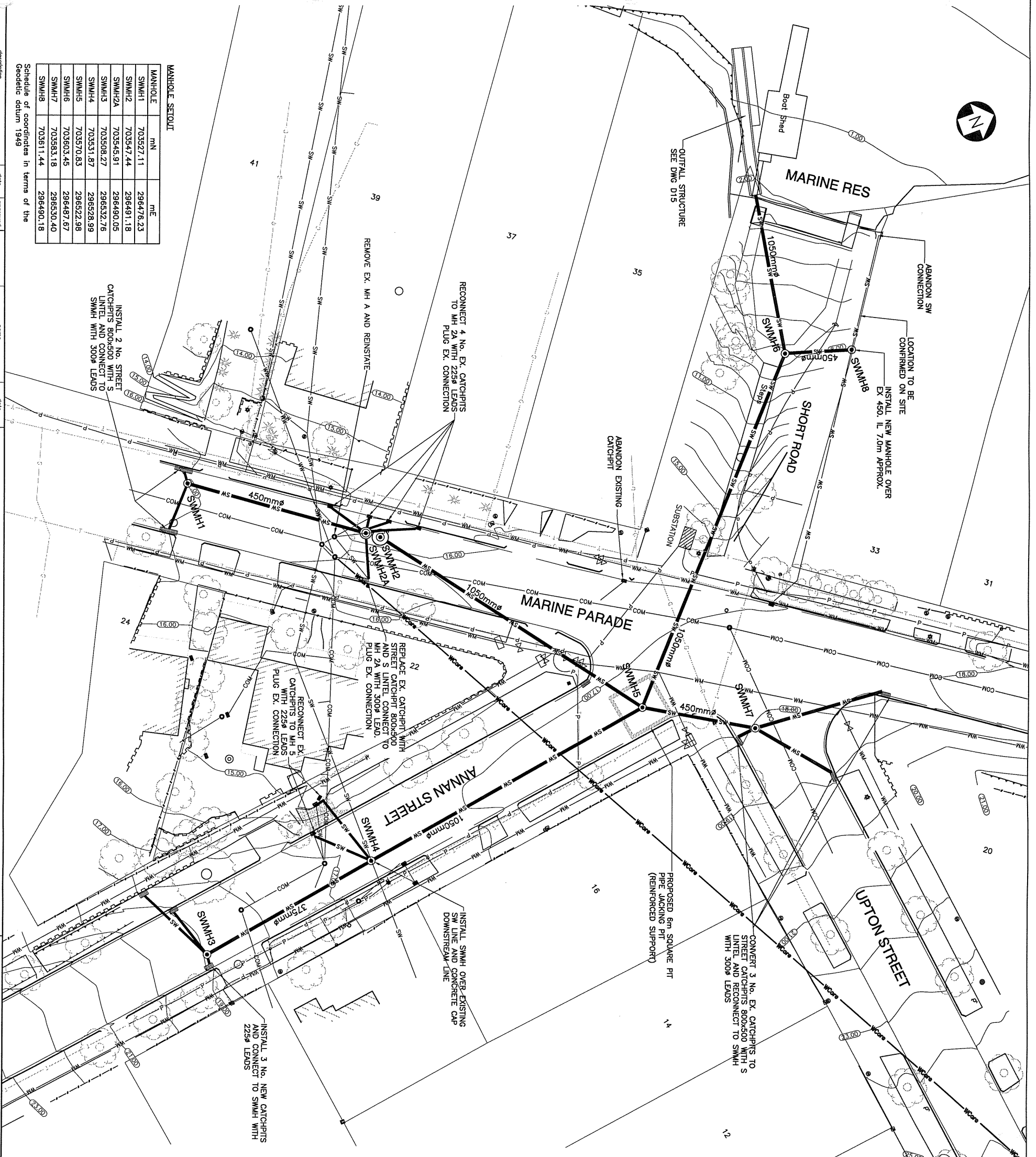


description	date	approved	name	scale
FOR TENDER	11/03			
AMENDED	02/04		S.H. SMITH	10/03
STREET CATCHPIT 800x500 ADDED	03/04		D.M.E.	10/03
project manager:	C.A. THORPE			11/03
scale @ A1: 1:250				scale @ A3: 1:500

MANHOLE	MN	ME
SMWH1	703527.11	296476.23
SMWH2	703547.44	296491.18
SMWH2A	703545.91	296490.05
SMWH3	703508.27	296532.76
SMWH4	703531.87	296528.99
SMWH5	703570.83	296522.98
SMWH6	703603.45	296487.67
SMWH7	703583.18	296530.40
SMWH8	703611.44	296490.18

Schedule of coordinates in terms of the Geodetic datum 1949

INSTALL 2 NO. STREET CATCHPITS 800x500 WITH S UNTEL AND CONNECT TO SMWH WITH 300ø LEADS



- NOTES:**
- IMPORTANT - REFER TO WATERCARE WORKS APPROVAL No. DXXX/03 FOR CONSENT CONDITIONS.
 - THE POSITIONS OF KNOWN SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. INVERT LEVELS SHOWN ARE TO THE BEST INFORMATION AVAILABLE.
 - THE CONTRACTOR SHALL CHECK AND CONFIRM LOCATION AND DEPTH OF ALL SERVICES AND THE ALIGNMENT OF NEW PIPES PRIOR TO COMMENCING EXCAVATION.
 - ALL WORKMANSHIP SHALL LAISE WITH ALL UTILITY OPERATORS.
 - ALL ENGINEERING STANDARD DETAILS ATTACHED TO THE SPECIFICATION, CALCULATIONS AND PIPE GRADES ARE BASED ON THE DISTANCE BETWEEN MANHOLES LESS THE DIAMETER OF THE MANHOLE.
 - ALL LEVELS ARE IN TERMS OF L & S 1946 (AUCKLAND MSL).
 - THE CONTRACTOR SHALL GIVE ALL AFFECTED PROPERTY OWNERS AND TENANTS 24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK IN THEIR PROPERTY.
 - THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO PROPERTIES AT ALL TIMES.
 - THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES AROUND THE VICINITY OF THE WORKS.
 - THE CONTRACTORS HEALTH AND SAFETY MANUAL IS TO BE ADHERED TO AND THE HEALTH AND SAFETY ACT IS TO BE FULLY COMPLIED WITH.
 - WHERE WORK IS TAKING PLACE IN EXISTING MANHOLES AND LINES THE CONTRACTOR SHALL ENSURE THAT FLOW IS MAINTAINED AT ALL TIMES.
 - ALL EXCAVATED GROUND SHALL BE RETURNED TO ORIGINAL LEVELS AND FULLY RESTORED ON COMPLETION OF THE WORKS.
 - THE CONTRACTOR SHALL ENSURE THAT ALL CATCHPITS ARE CLEARED OF DEBRIS AND IN WORKING ORDER DURING CONSTRUCTION OPERATIONS AND ON COMPLETION.
 - ANY DAMAGE TO THE CARPARKWAY OR SEAL CAUSED BY MACHINERY OUTSIDE THE EXCAVATION AREA IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE RESTORED IMMEDIATELY.
 - ALL PIPEWORK THAT IS ABANDONED SHALL BE SEALED WITH 17.5MPa CONCRETE TO THE SATISFACTION OF THE ENGINEER.
 - AS BUILT PLANS OF THE WORKS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE WORKS.
 - THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE SITE BEFORE COMMENCING WORK.
 - LOCATION OF EXISTING PRIVATE LATERALS IS APPROXIMATE ONLY. REDUNDANT S/W PIPE CONNECTIONS TO BE CONNECTED TO NEW STORMWATER SYSTEM.
 - OVERHEAD POWER OPERATES IN THIS AREA.
 - WHERE CLEARANCE BETWEEN PIPE CROSSING IS LESS THAN 100mm THE GAP IS TO BE INVERT OF THE HIGHER PIPE 1.0m CLEAR EITHER SIDE OF THE CROSSING.
 - ALL STRUCTURES, FENCES, GARDENS, ETC. EFFECTED BY THE WORKS ARE TO BE FULLY REINSTATED TO ORIGINAL CONDITION AT THE CONTRACTORS OWN EXPENSE.

Existing Services	
	catchpit
	manhole
	power pole
	power pole/street light
	sign post
	street light
	shrub
	tree
	existing wastewater line
	existing stormwater line
	existing combined line
	existing watercare line
	bluestone retaining wall
	fence line
	bank (top/bottom)
	bottom of wall
	kerbline
	seal edge
Proposed Services	
	proposed stormwater line
	proposed stormwater manhole

AUCKLAND CITY

CITY DESIGN
INFRASTRUCTURE MANAGEMENT

Level 9, Stables House, 24 Watney St, Auckland.
P.O. Box 6243, Watney St, Auckland 1, NZ.
Ph: (09) 307 7933
Fax: (09) 307 7900

Project: **MARINE PARADE, HERNE BAY**
STORMWATER UPGRADE

Site Plan

Tender: **V02512**

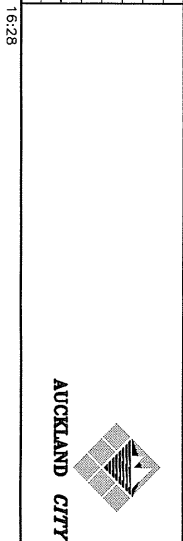
Project number: **V02512**

Drawing number: **D10**

Issue: **C**

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FOR TENDER	11/03			
GEOTECH INFORMATION ADDED	02/04			
designed:	Sam Hooper Smith		10/03	
checked:	D XIE		10/03	
checked:	MB		05/04	
project manager:	C B THORPE		11/03	
scale @ A1: 1:250	scale @ A2: 1:500	scale @ A3: 1:250		

Contractor must check & verify all dimensions on site before commencing work
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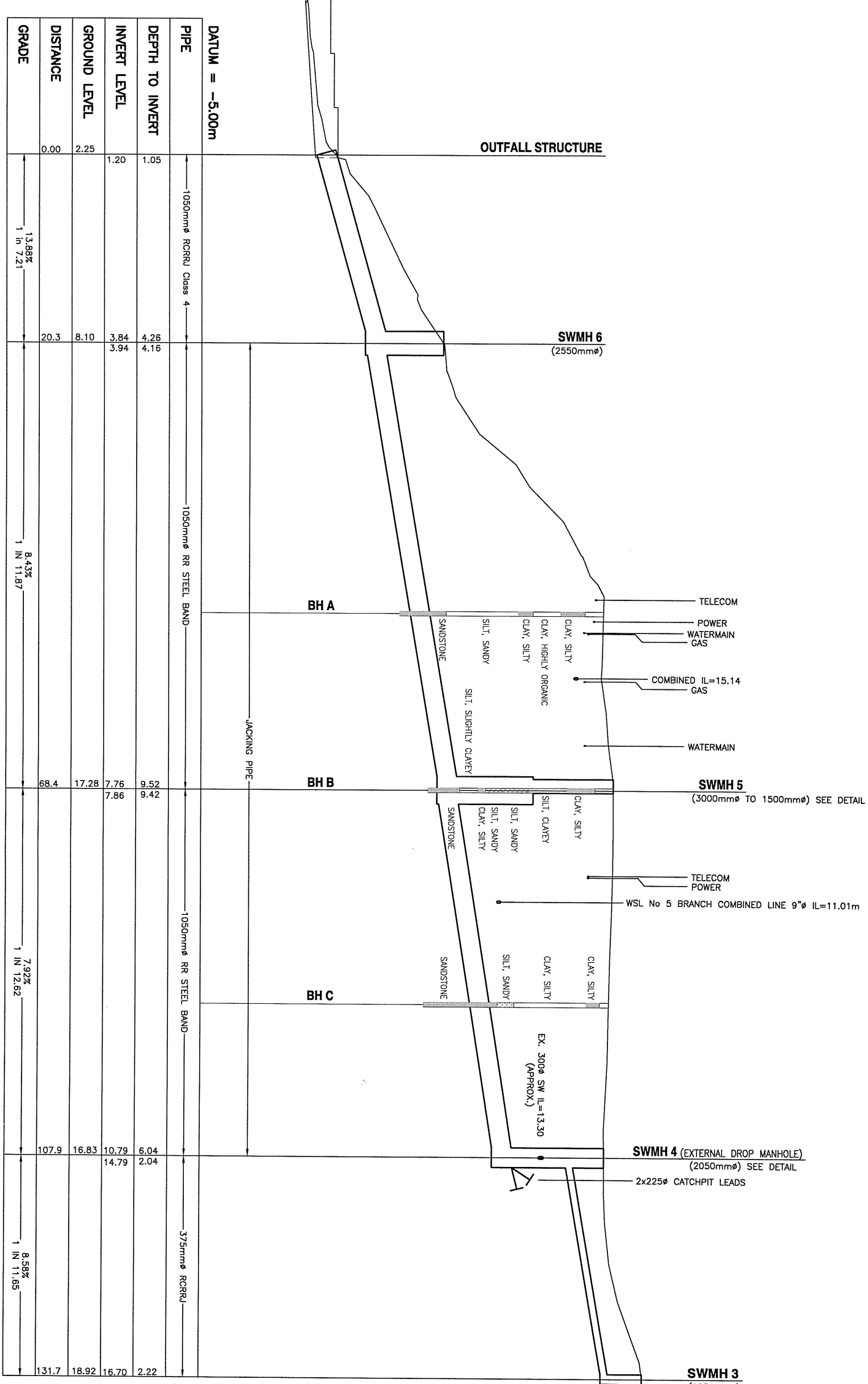
Project:	MARINE PARADE, HERNE BAY
Issued for:	TENDER
Project number:	V02512
Drawing number:	D11
Issue:	B

CITY DESIGN
 INFRASTRUCTURE MANAGEMENT
 Level 9, Bechtel House, 24 Wellesley St, Auckland.
 P.O. Box 5450, Wellesley St, Auckland 1, NZ.
 Ph: (09) 307 7373
 Fax: (09) 307 7300

LONGITUDINAL SECTION (SHEET 1 OF 2)

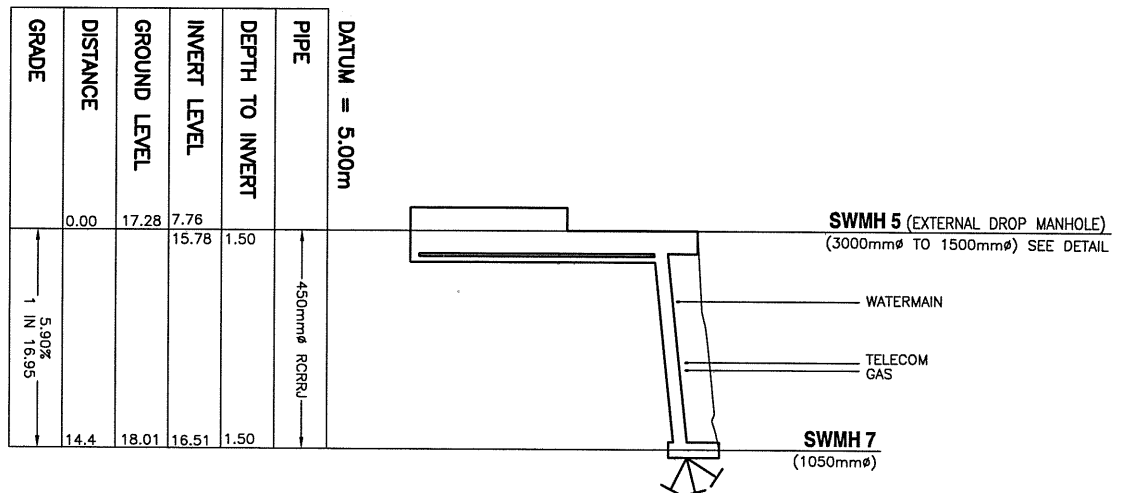
LONGITUDINAL SECTION - ANNAN STREET

SCALE HORIZONTAL 1:250
 VERTICAL 1:125

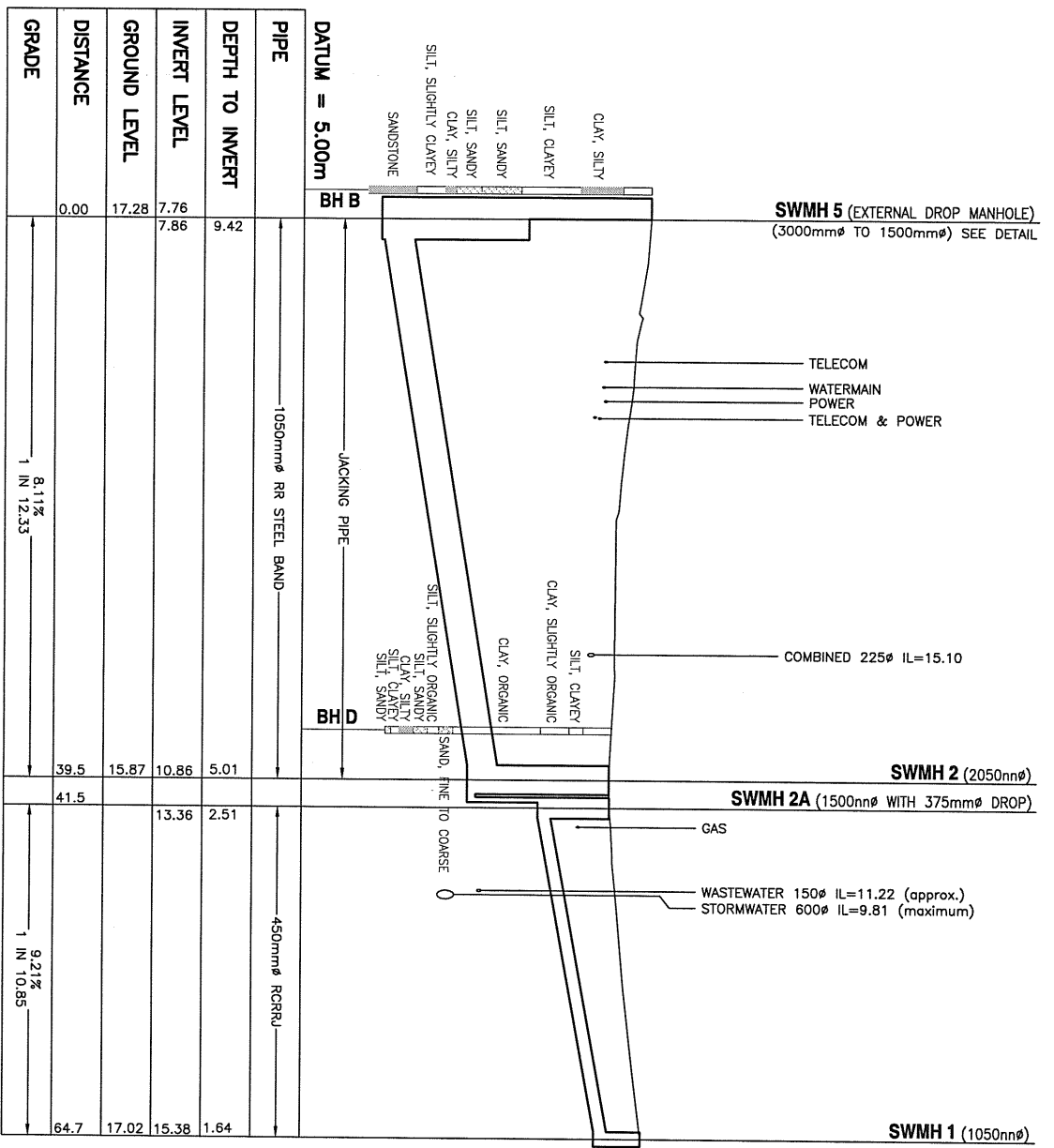


description	date	approved	name	date
FOR TENDER	11/03			
GEOTECH INFORMATION ADDED	02/04		S.H. SMITH	10/03
LONGITUDINAL MATH TO MH8 AMENDED	03/04		D.XIE	10/03
			C.B. THORPE	11/03

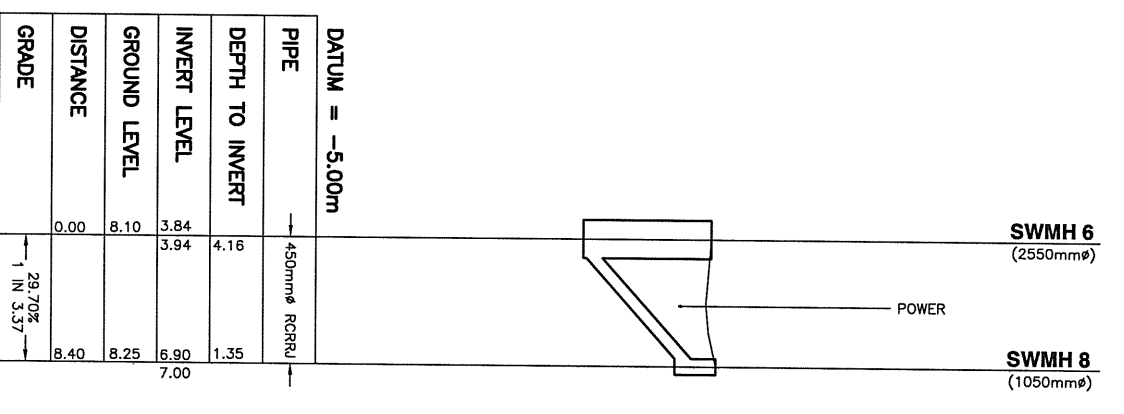
Contractor must check & verify all dimensions on site before commencing work
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 scale @ A1: 1:250 @ A1: 1:500 @ A3: 1:500 @ A3: 1:250
 02/03/2004 16:06



LONGITUDINAL SECTION - UPTON STREET
 SCALE HORIZONTAL 1:250 @A1 (1:500 @A3)
 VERTICAL 1:125 @A1 (1:250 @A3)



LONGITUDINAL SECTION - MARINE PARADE
 SCALE HORIZONTAL 1:250 @A1 (1:500 @A3)
 VERTICAL 1:125 @A1 (1:250 @A3)



LONGITUDINAL SECTION - MH6 TO MH8
 SCALE HORIZONTAL 1:250 @A1 (1:500 @A3)
 VERTICAL 1:125 @A1 (1:250 @A3)



AUCKLAND CITY

CITY DESIGN
 INFRASTRUCTURE MANAGEMENT
 Level 9, Bridge House, 24 Wellesley St, Auckland.
 P.O. Box 6543, Wellesley St, Auckland 1, NZ.
 Ph: (09) 307 7373
 Fax: (09) 307 7300

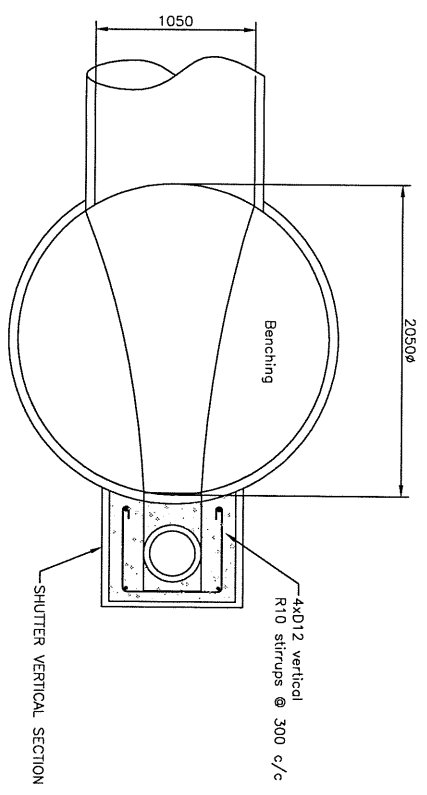
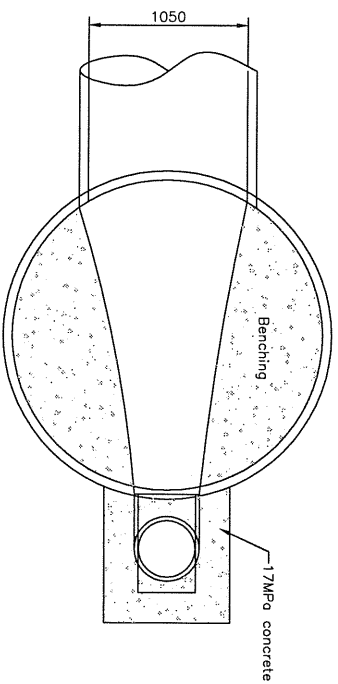
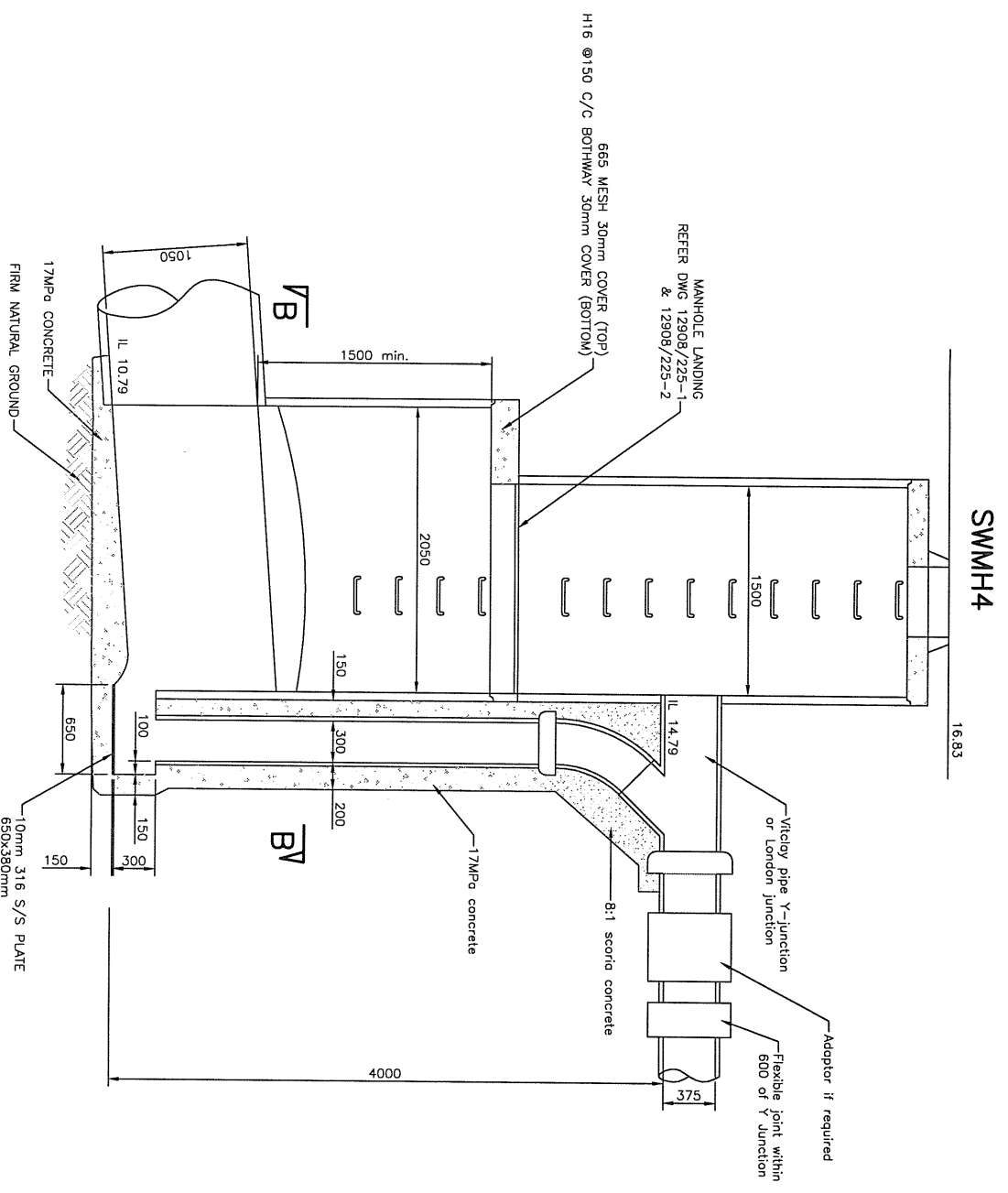
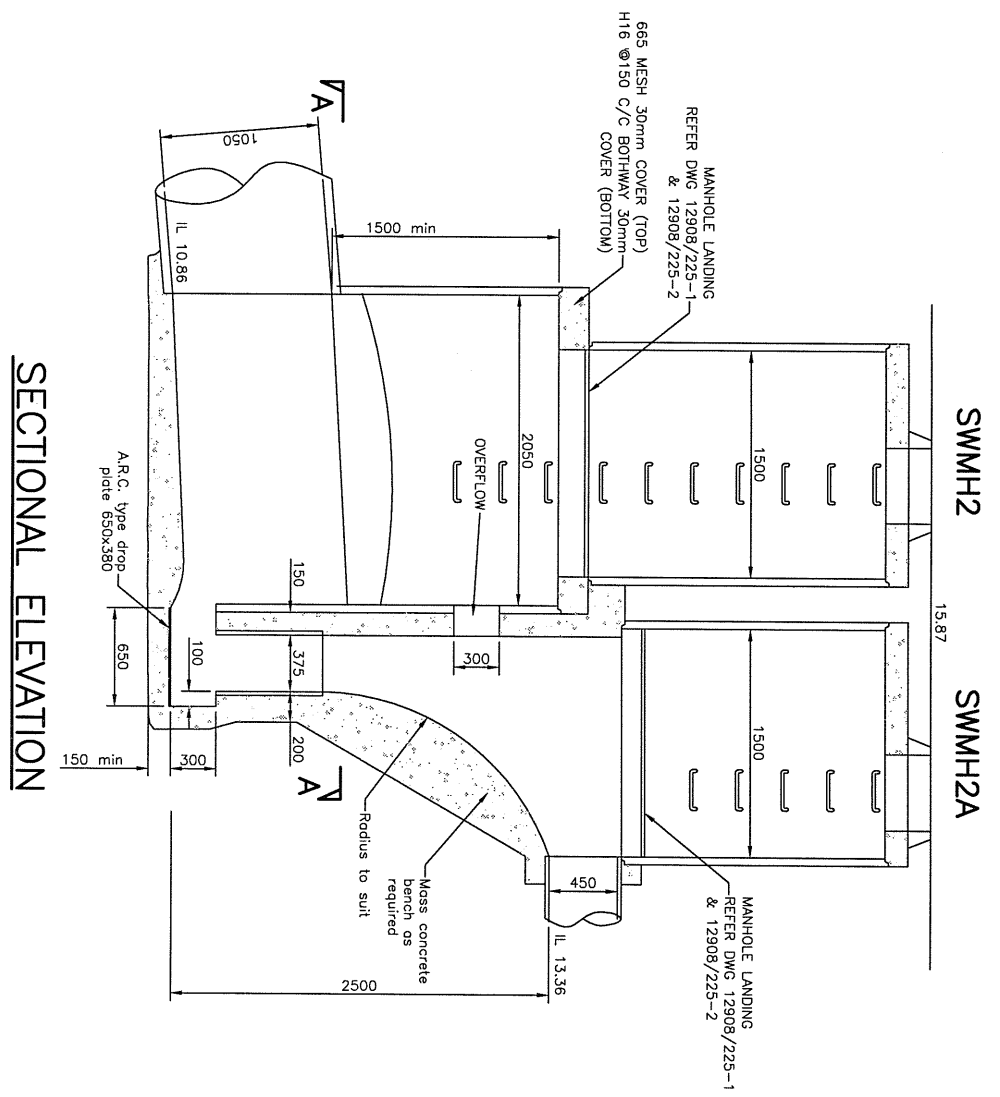
Project: **MARINE PARADE, HERNE BAY**
STORMWATER UPGRADE
LONGITUDINAL SECTION (SHEET 2 OF 2)
 Issued for: **TENDER**
 Project number: **V02512**
 Drawing number: **D12**
 Issue: **C**

description	date	approved	name	date
FOR TENDER	11/03			
B AMENDED	02/04		R GANDA	10/03
			D JIE	10/03
			C A THORPE	11/03

Contractor must check & verify all dimensions on site before commencing work.

Scale @ A1: 1:25
Scale @ A3: 1:50

Project name: C.A. THORPE
CAD file: G:\WERN\W02512\W02512\CAD\W02512\314.dwg
G:\Wern\W02512\Projects\W02512 - Marine Parade, Herne Bay\CAD\Issued\W02512-01314_B.dwg



SECTIONAL B-B

SECTIONAL A-A

SECTIONAL ELEVATION

SECTIONAL ELEVATION

- NOTES:**
1. Provide flexible joint in all pipes within 1m of DMH
 2. Steel grille landings shall be used for depth of manhole as follows. Where inlet connection direct to 3. invert is not practical, external drops are the preferred solution.



CITY DESIGN
INFRASTRUCTURE MANAGEMENT
Level 9, Brandon House, 24 Wellesley St., Auckland.
P.O. Box 5543, Wellesley St., Auckland 1, NZ.
Ph: (09) 307 7272
Fax: (09) 307 7260

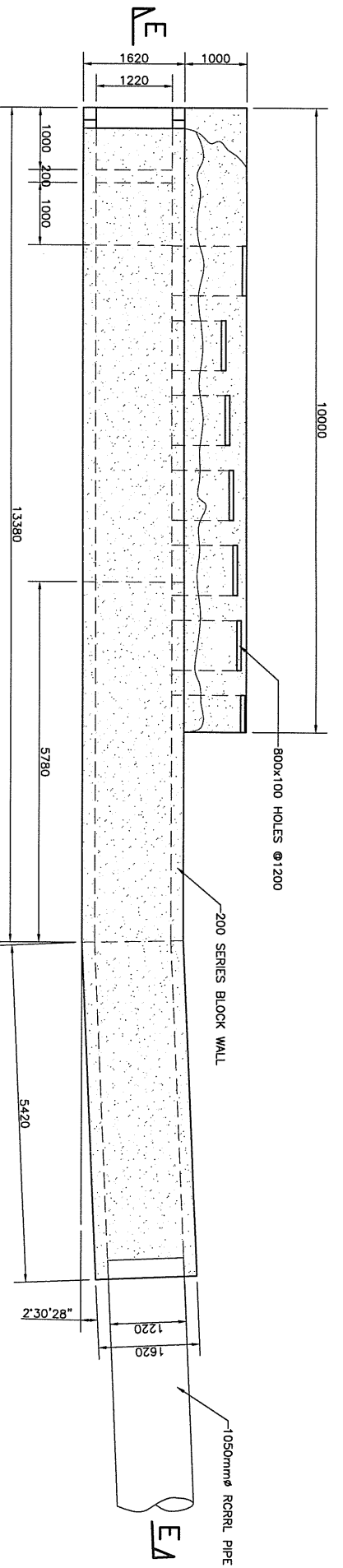
Project: **MARINE PARADE, HERNE BAY**
STORMWATER UPGRADE
MANHOLE DETAILS (SHEET 1 OF 2)

Issued for: **TENDER**

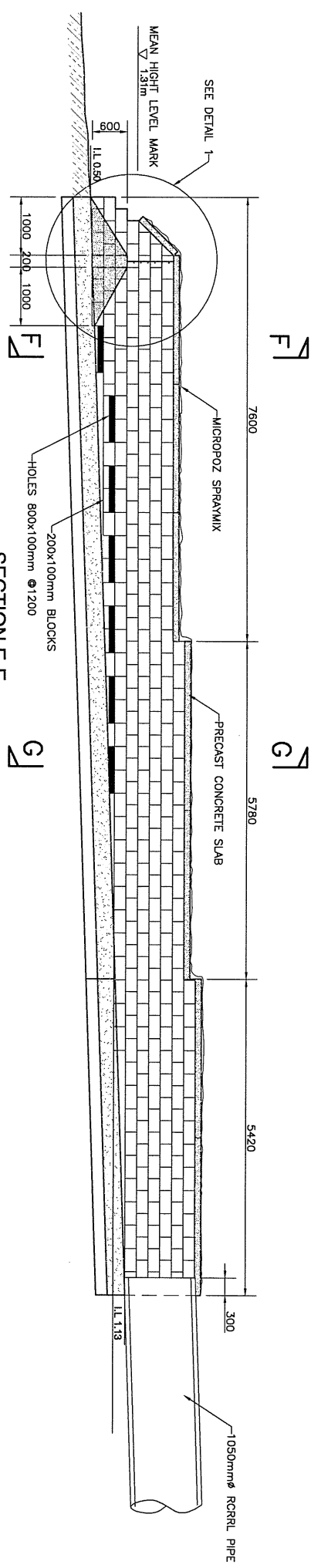
Project number: **V02512**

Drawing number: **D13**

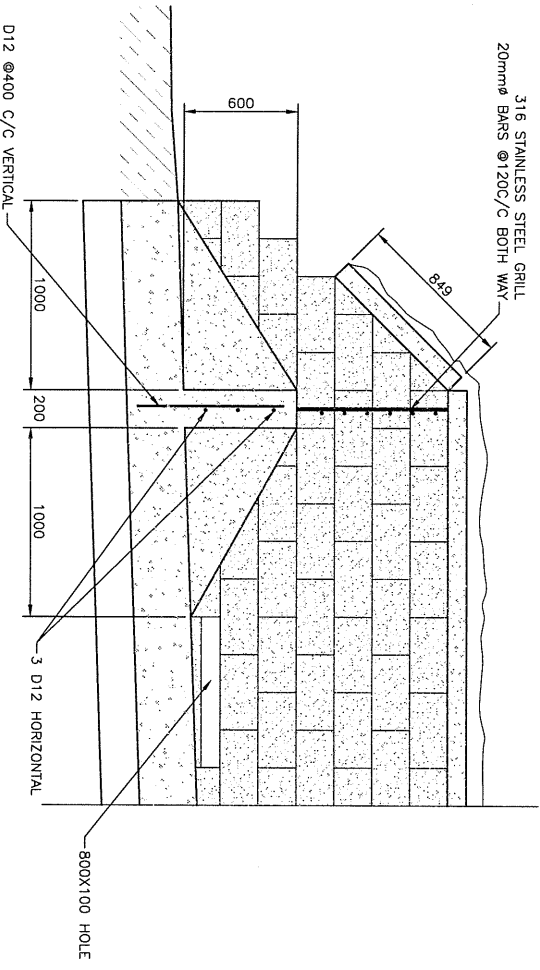
Issue: **B**



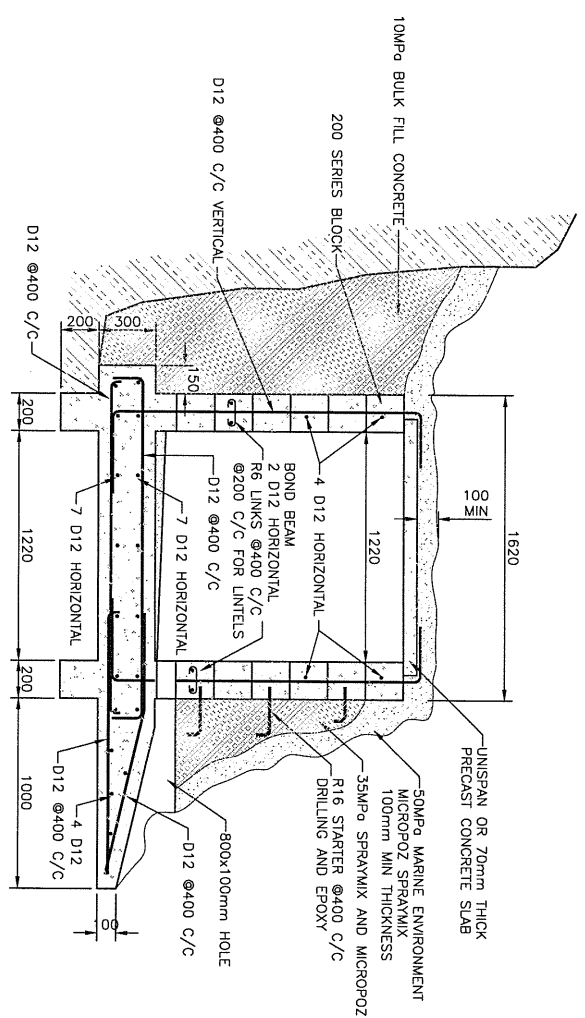
OUTFALL STRUCTURE PLAN
SCALE 1:50 @A1 (1:100 @A3)



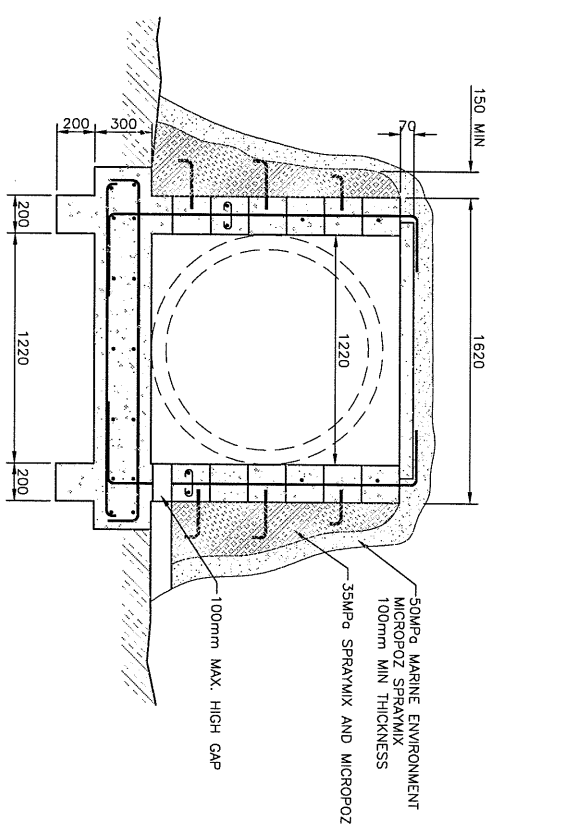
SECTION E-E
SCALE 1:50 @A1 (1:100 @A3)



DETAIL 1
SCALE 1:20 @A1 (1:40 @A3)



SECTION F-F
SCALE 1:20 @A1 (1:40 @A3)



SECTION G-G
SCALE 1:20 @A1 (1:40 @A3)

NOTE:
CONCRETE TO BE 50MPa MARINE GRADE.
COVERS TO BE 75mm.
ALL MASONRY BLOCKS TO BE SOLID FILLED.

description	date	approved	name	date
FOR TENDER	11/03			
SIZE OF HOLE CHANGED	02/04			
checked:	designed:	checked:	project manager:	scale @ A1: AS SHOWN
D XIE	N GANDA	C.A. THORPE		scale @ A3: AS SHOWN
10/03	10/03	11/03		

Contractor must check & verify all dimensions on site before commencing work.
C:\wern\02512\Projects\02512 - Marine Parade, Herne Bay\CAD\Issued\02512-D15_B.dwg 26/02/2004 16:27

AUCKLAND CITY

CITY DESIGN
INFRASTRUCTURE MANAGEMENT

Level 8, Sandstone House, 24 Waterloo St, Auckland.
P.O. Box 6400, Waterloo St, Auckland 1, NZ.
Ph: (09) 307 7333
Fax: (09) 307 7300

project:	MARINE PARADE HERNE BAY
issued for:	TENDER
project number:	V02512
drawing number:	D15
issue:	B