

Annexure -9

Justification for locating the project on forest area to be submitted by User agency and counter sign DCF.

- 1.0 Sardar Sarovar Narmada Project is multipurpose project which will cater irrigation facility to about 18 Lac Ha. of culturable command area. For economical use of water it is planned to provide water up to each field by gravity. In this regard distribution network of branch, distry, minors & sub minors up to 8 sub chak is planned in such a way that minimum lose of water head & much area could be served for irrigation. The branch canal will some about 60,000 to 80,000 Ha. through distry canal for 4000 to 8000 Ha. than minor canal will same for 400 to 500 Ha. & sub minors off taking from minor would same up to 5 to 8 Ha. subchak i.e. up to field.
- 2.0 Consequently the Dhrangadhra Branch Canal off takes from Ch. 88870 m. of Saurashtra Branch Canal off taking from Narmada main canal at Ch.263.365 km. The Dhrangadhra Branch Canal is planned to serve 81502 Ha. of CCA for irrigation facility. Accordingly, Distributaries & minors canal are planned for the area through which irrigation would be carried out.
- 3.0 **(i) Ramdevpur Branch Minor (D9) ch. 632 m to 870 m.**

Ramdevpur branch minor off takes from D-9 distry of Dhrangadhra Branch Canal which will cater irrigation facility to 374Ha. of CCA. The total length of branch minor is 870m. Out of which, the length of 0.200 km. is completed which is in reach Ch. 0.00 to 200.00m. The alignment of Ramdevpur branch minor passes through forest land between Ch. 573m to 699m to serve the 374 Ha of cultivable land in D/S of 699m. The alternate alignment -2 was studied to avoid acquisition of forest land. As per alternate alignment-2, alignment will pass on high level stone pack. The ground level on alternate alignment +4.00 m hence the canal cutting will be about av.4.0m which will increase more land width to be acquired. The area affects chak No.1 -35.81, Chak No.2 -44.92 Total-80.73 Ha. will not get water if alignment is avoided to pass from forest land. The apex of alternate alignment will be with acute angle. So alternate alignment is not feasible.

(Drg for alternate alignment pl. see fig. 01)

(ii) Ishdra Mr. (D-11) Ch. 107 -250,250-423 m.(b) Vavdi Dy. (D11)

Ch.1002-1066,1152-1650 m.

- (a) The alternate alignment Vavdi distry if made as per connecting canal from sur. No 1362 to sur. No.1369/1 the length is increase upto 157 mt. in pvt. Land. The al. alignment is in hard rock and high level ground which increase cost as deep cutting and more land width to acquire. More over pvt. Land irrigation may decrease upto 20 hector. Two minors are oftaking from this distri from onward length through it more than 350 ha. area is to be in irrigation planning.

D-11 Vavdi Distry

	Ch.(m)	GL
Pt.3	1152	48.294
Pt.4	1614	45.335
Pt.5	1626	45.100
Pt.6	1650	45.010

- (b) Alignment of Ishadra minor is planned to irrigate about 250 Ha. of cultivable land of village Ishadra. The alignment betn. Ch.107 to 250 m, 250 m. to 423 m. of Ishadra minor passes through forest land. The ground level at various locations of Ishadra minor is as under:

	Ch.(m)		GL
Pt.1	0 to 107	107	44.36
Pt.2	107 to 250	250	44.116
Pt.3	250 to 423	423	44.964

After studying the alternate alignment to avoid forest land, the alignment would pass through diagonally in fields survey numbers, which will result uncultivable land due to small piece of fields & it can not be irrigated. Hence the alignment passing through forest land proposed is much economically and technically feasible to irrigate cultivable land of 250 Ha of cultivable land of village Ishadra.

(Drg for alternate alignment pl. see fig. 02)

(iii) Ishdra Mr. (D-11) Ch. 423-468,537-714,818-901,1010-1121,1779-1858,1928-2158,2580-2890 m.

The alignment of Ishadra minor is planned on boundary of forest by maximum land of forest could be saved for acquisition. Hence no other alternate to shift the alignment outside the forest land. As per site condition, if the alignment of Ishadra minor is aligned as per alternali.2, then the area of Sr.No.65, 64.66 approx. 30 Ha of cultivable land could not get benefit of irrigation. If the alignment of Ishadra minor tails at the end of RS.No.63, then the 150 Ha of land will not avail irrigation facility which will affect the economy of farmers of nation.

(Drg for alternate alignment pl. see fig. 03)

(iv) Virendragadh Mr.1(D-11) Ch. 4381-4622,4650-4775,4969-5218 m

Alternate alignment for minimizing forest land was studied, which cause the nos. of apex with acute angle and increase in length more than two times i.e. 841m. Moreover, if the minor end at Ch.4650m i.e. at the beginning point of forest land, about 90 Ha. of culturable area could not be served for irrigation.

(Drg for alternate alignment pl. see fig. 04)

(v) Jasmatpur Dy.(D-13) Ch. 28-58,111-161 m.

The off take of Jasmatpur distry is finalized with reference available full supply water level in branch canal and more area can be served for irrigation purpose. Looking the alignment, there is not other alternate as the canal passes in small length belong to forest length on boundary.

(Drg for alternate alignment pl. see fig. 05)

(vi) (a) Jasmatpur Minor Ch.233-445 (b) Jasmatpur Br. Minor (D-13)
ch. 0 to 1053m.

- (a) Jasmatpur minor between Ch. 233 to 277m passes on boundary of forest land. Alignment is planned to minimum land required from forest.
- (b) The alignment of Jasmatpur branch minor passes nearer to boundary of forest and R.S.No.230, 232/2. Onwards it passes through forest land at end of R.S.No.297/2 and 232/1. For avoiding acquisition of forest land, alternate alignment as shown in map, was studied and it is found that length of canal increases by 385m length which will reduce FSL as well as there is high level stone rock on alternate alignment. So the alternate alignment is not technically and economically feasible. If the alignment of this canal will not aligned as per planning, than about 175 Ha. of cultivable land could not get water for irrigation which will affect the prosperity of farmers and nation.
(Drg for alternate alignment pl. see fig. 06)

(vii) Kankavati Br. Mr.(D-14) Ch. 1493-1634,1703-1830 m.

The alternate alignment marked on map to avoid for acquisition of forest land is not feasible as per planning concept, increase in length by four times and passes through rock area. If the canal is not completed in forest area about 300 Ha. of cultivable land will not get irrigation water.
(Drg for alternate alignment pl. see fig. 07)

(viii) (a)Ghanad Mr.1 (D-15) Ch. 958-1268 m. (b)Mangalpur Mr.(D-16) ch. 3438-3684 m.

(a) D-16, Ghanad Minor village Gopalgad:

It the alternate alignment as shown in map is prepared, the length increases by 446 m & higher ground levels met which cause excessive canal cutting & nos. of apexes which cause loss of water head & reduction in command area. So the shortest and economical alignment is prepared.

b) D-15, Mangalpur Minor :

The alignment passes through boundary of forest & village boundary of Mangalpur & Gopalgad. The other alternate is not possible as the area under forest is very small.

(Drg for alternate alignment pl. see fig. 08)

(ix) Kankavati Mr.1(D-15) Ch. 312-1714,1739-1903,2065-2234,2301-3077m.

D-15, Kankavati minor-1

The alignment passes on boundary of forest & Dhrangadhra Branch Canal. The alternate alignment will divide the forest in small patch becomes inaccessible form one to another patch. There is not another alternate to avoid forest area. The alignment of minor is technically aligned on boundary of forest land and to supply irrigation facility in downstream of forest land.

(Drg for alternate alignment pl. see fig. 09)

(x) Mangalpur Mr.(D-16) ch. 4020-4397 m.

The alternate alignment of minor canal can not be provided through Sr.Nos. diagonically. If the alignment pass on boundary of R.S.No. 44/1 & 44/2 on south side will delete area for irrigation forever. Hence, the shortest alignment is prepared at boundary of forest area.

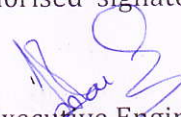
(Drg for alternate alignment pl. see fig. 10)

For all proposal for diversion of forest land, alternate alignment for minimizing or avoiding forest land utilization were studied but it is not found viable technically as well as economically because of increase in length, higher depth of cutting and dropping of FSL, ultimately resulting in loss of command. Therefore present proposed alignment of canals is feasible for construction with respect to technical & economical aspects.

Place- Dhrangadhra

Date- 14-08-2017

Authorised signatory,



Executive Engineer

S.B.C. Dn No. 5/1

Dhrangadhra

FIG. (1)

VIL. RAJGADH TAL. DHRANGADHRA DIST. SURENDRANGAR DIGITAL MAP FOR RAMDEVPUR BRANCH MINOR of D-9

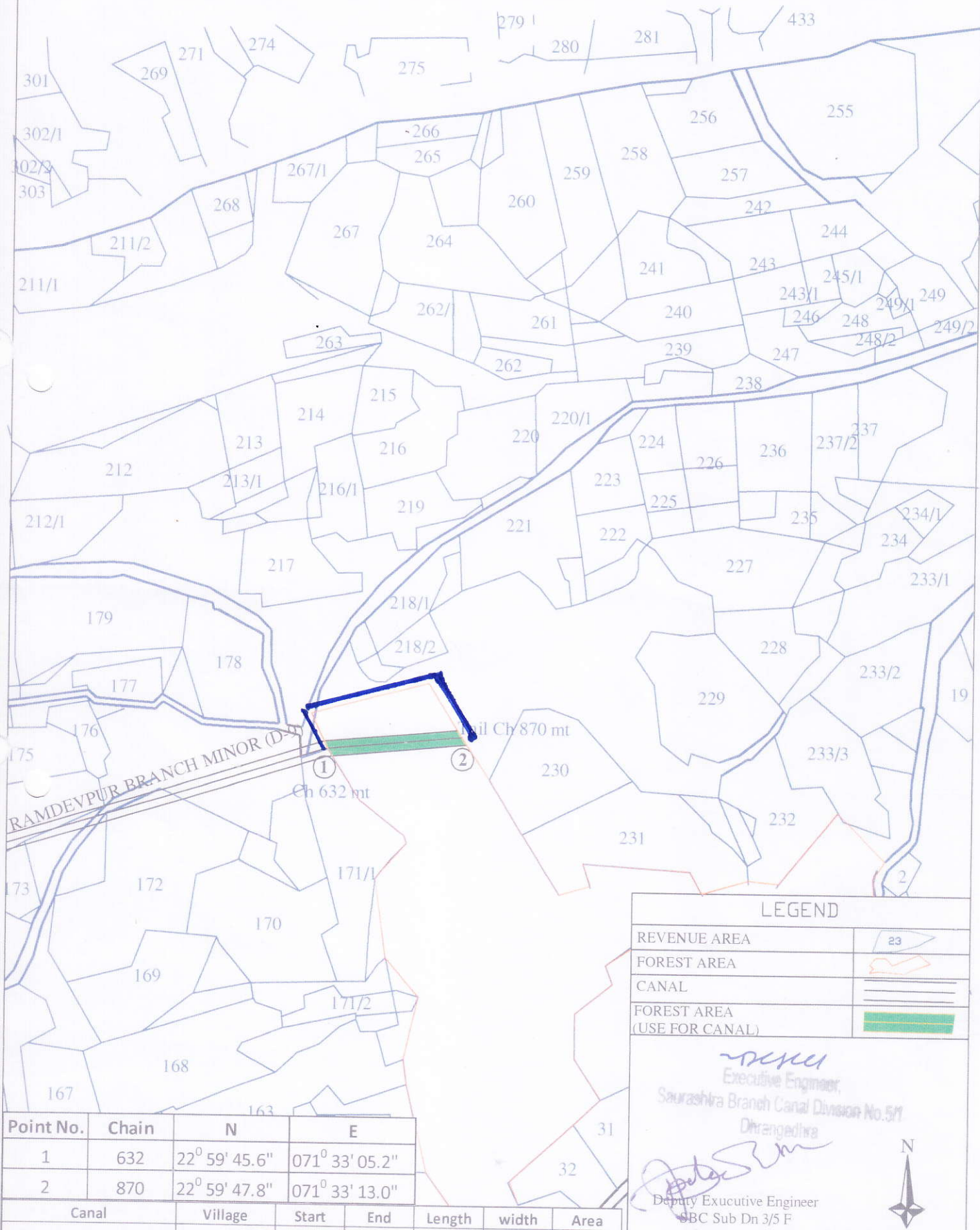


FIG. (2)

VIL. DHRANGADHRA TAL. DHRANGADHRA DIST. SURENDRANGAR
DIGITAL MAP FOR ISHADRA MINOR D-10 & VAVDI DISTRY D-11

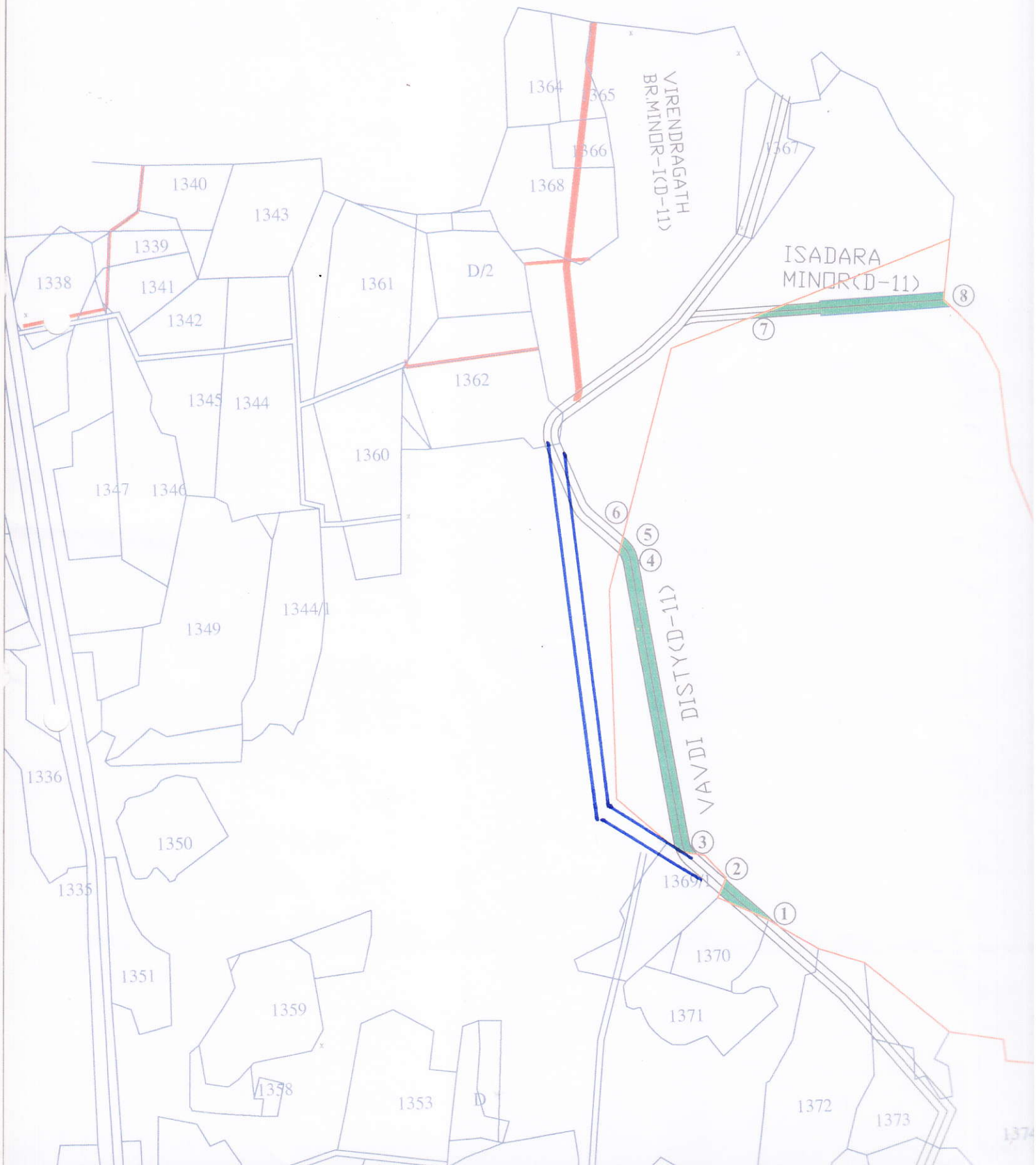
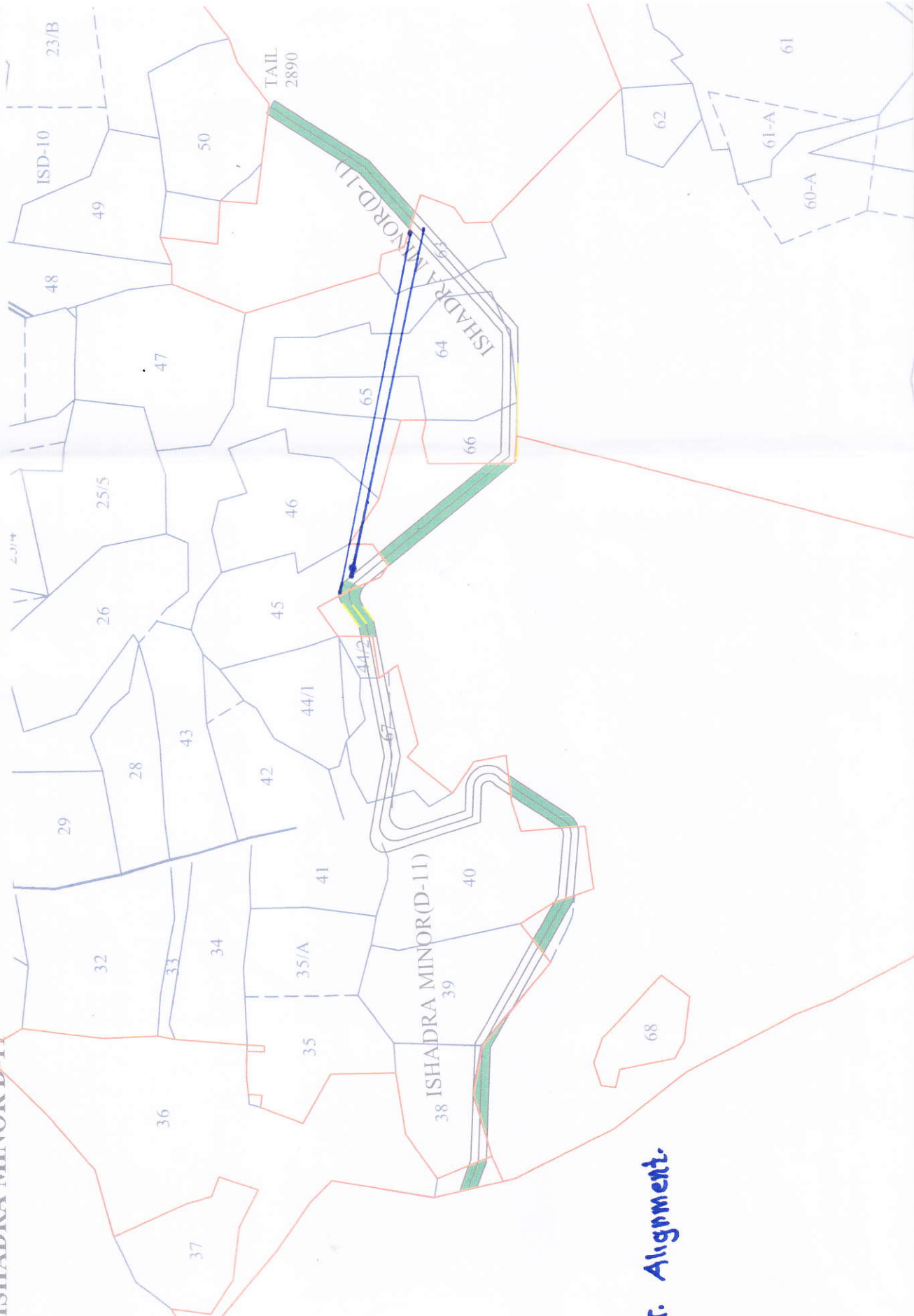


FIG. (3)

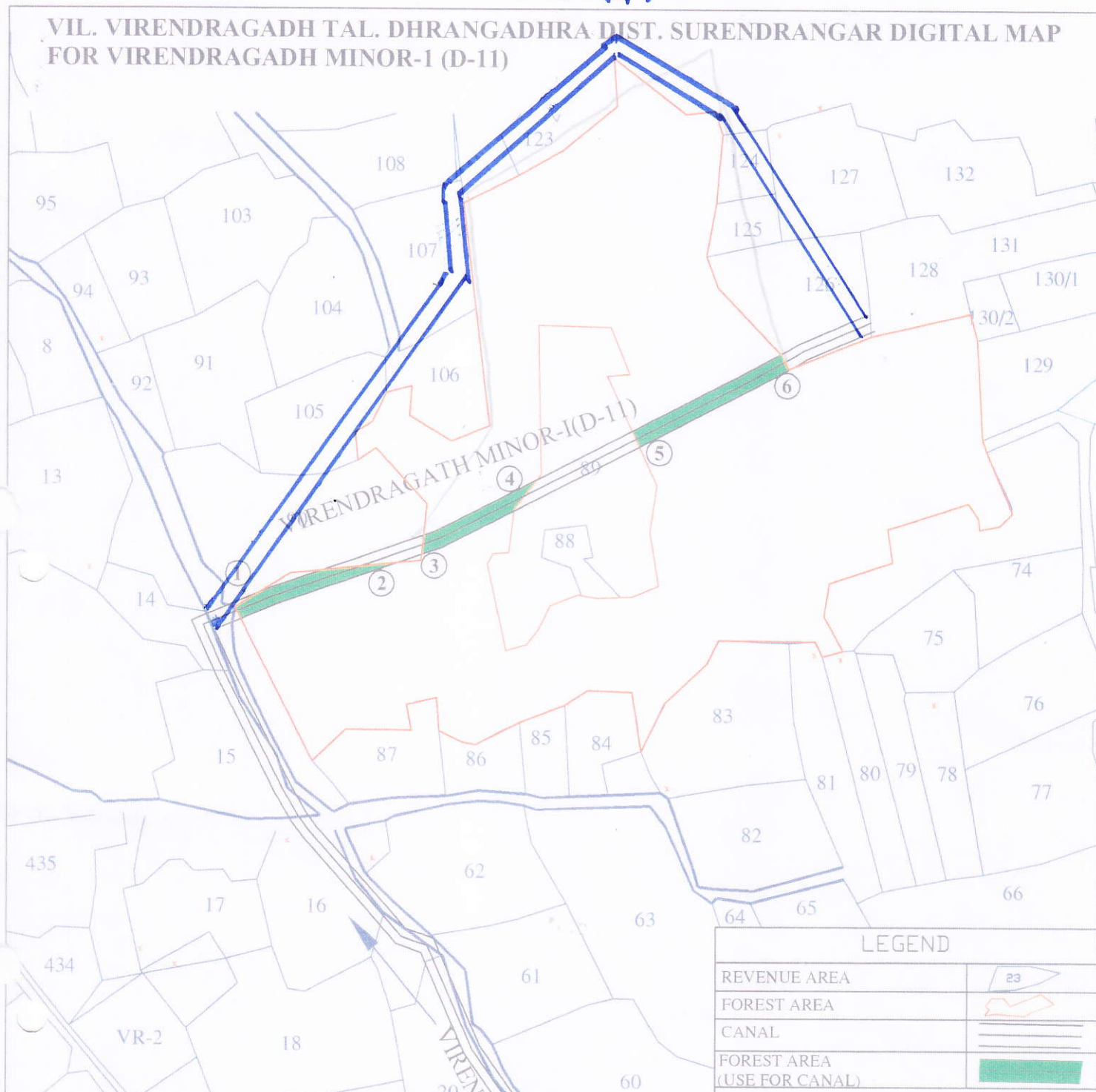
VIL. ISHADRA
TAL. DHRANGADHRA
DIST. SURENDRANGAR
DIGITAL MAP FOR
ISHADRA MINOR D-11



Alignment

FIG. (4)

VIL. VIRENDRAGADH TAL. DHRANGADHRA DIST. SURENDRANGAR DIGITAL MAP FOR VIRENDRAGADH MINOR-1 (D-11)



LEGEND

REVENUE AREA

23

FOREST AREA

CANAL

FOREST AREA
(USE FOR CANAL)

Point No.	Chain	N	E
1	4381	23° 04' 09.9"	071° 27' 18.3"
2	4622	23° 04' 10.6"	071° 27' 26.8"
3	4650	23° 04' 10.7"	071° 27' 27.7"
4	4775	23° 04' 11.9"	071° 27' 32.0"
5	4969	23° 04' 13.6"	071° 27' 38.5"
6	5218	23° 04' 15.9"	071° 27' 46.9"

Executive Engineer,
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Dhrangadhra

Deputy Executive Engineer
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Surendranagar



SCALE :- 1:7920

Canal	Village	Start	End	Length	width	Area	Point No.
Virendragadh Mr.1 (D11)	Virendragadh	4381	4622	241	12	2892	1 to 2
		4650	4775	125	12	1500	3 to 4
		4969	5218	249	12	2988	5 to 6

FIG. (5)

VIL. JUNA GHANSYAMGADH TAL. DHRANGADHRA DIST. SURENDRANGAR DIGITAL MAP FOR JASMATPUR DYSTRY D-13



Point No.	Chain	N	E
1	28	23° 02' 12.9"	071° 23' 01.1"

Canal

Village

Start

End

Length

width

Area

Point No.

FIG. (6)

VIL. JASMATPUR TAL. DHRANGADHRA DIST. SURENDRANGAR DIGITAL MAP FOR JASMATPUR BR. MINOR (D-13) & JASMATPUR MINOR (D-13)

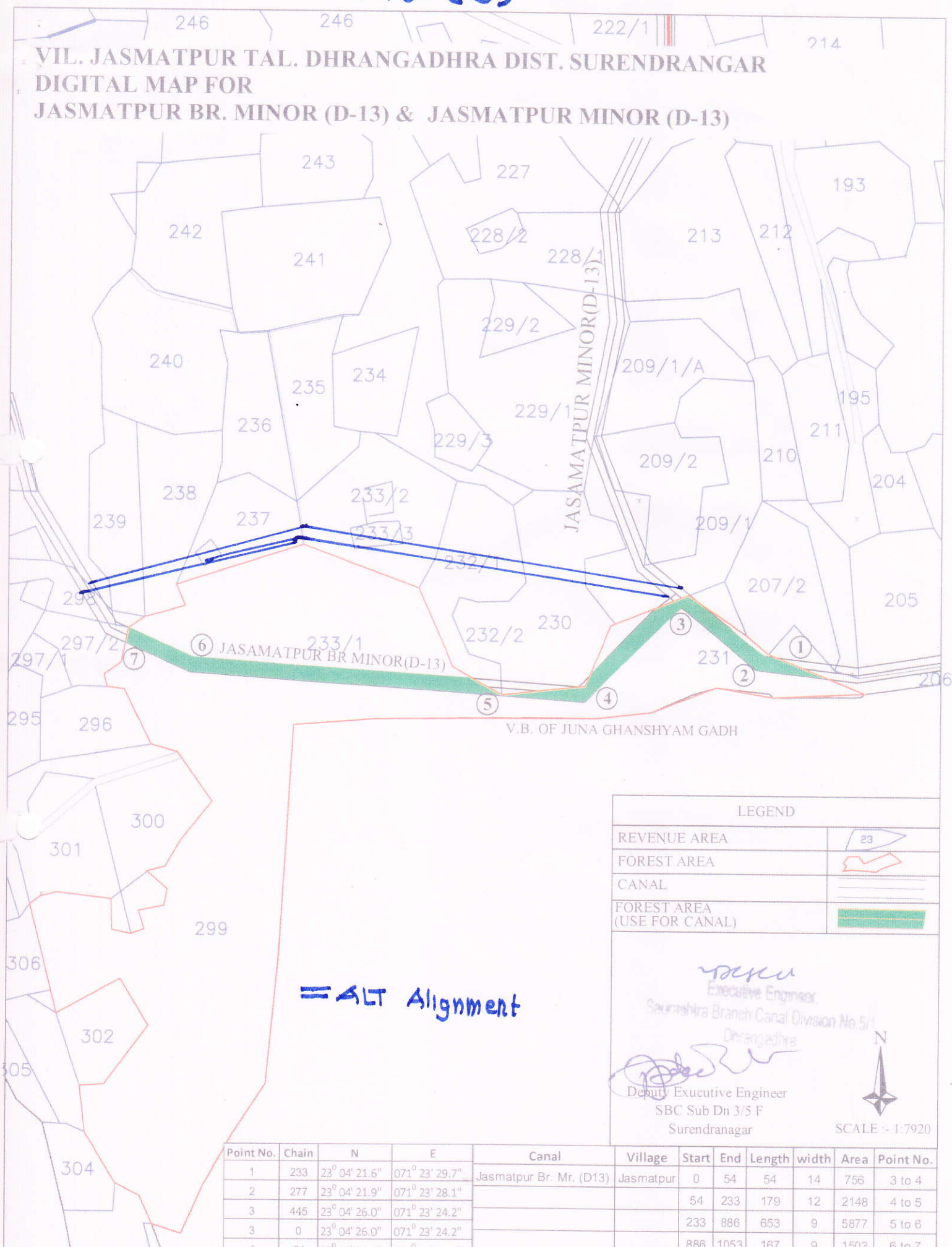


FIG. (7)

VIL. BAISABGADH TAL. DHIRANGADHRA DIST.
SURENDRANGAR DIGITAL MAP FOR KANKAVATI BR.
MINOR (D-14)

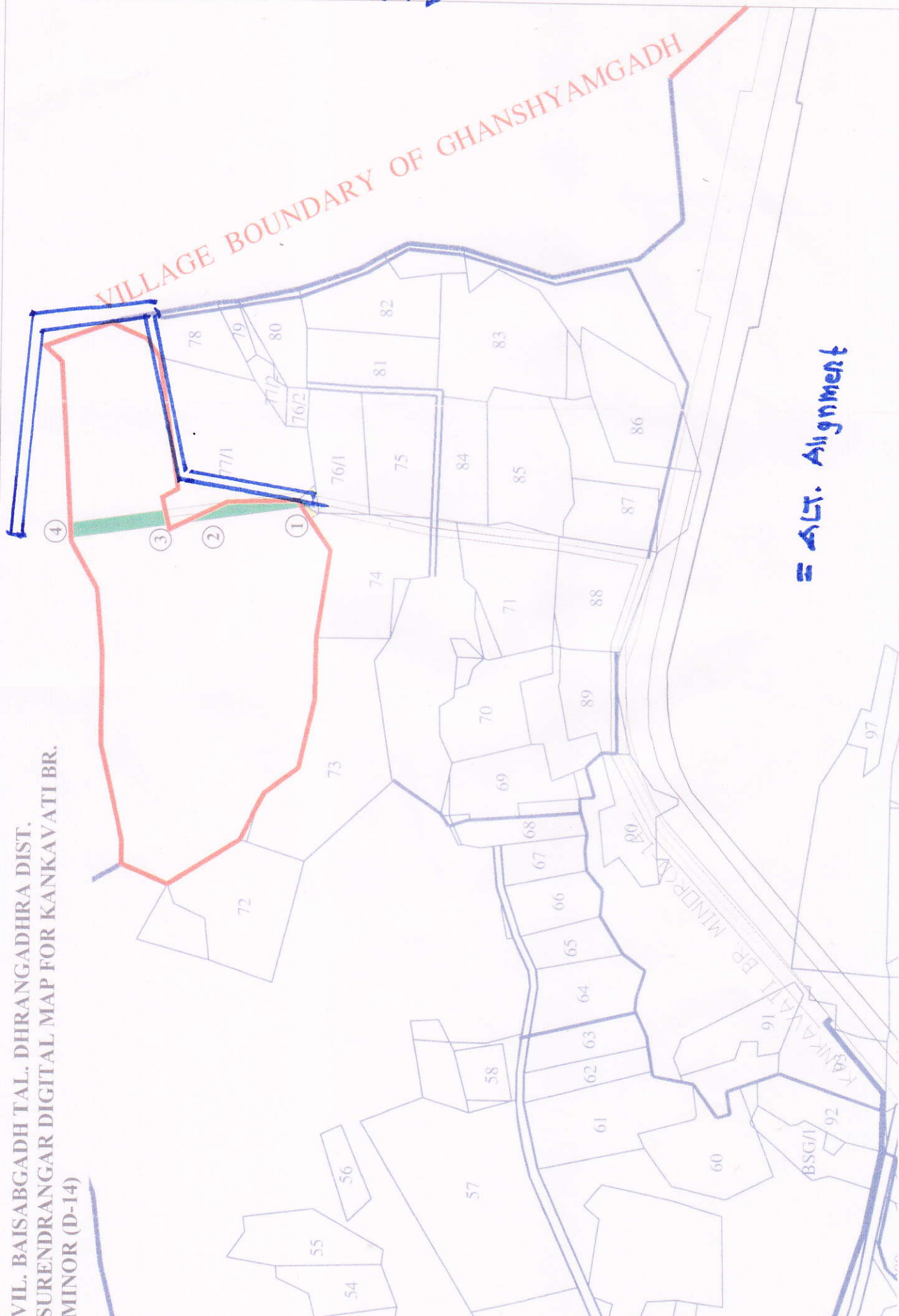


FIG. (C9)

**VIL. KANKAVATI
TAL. DHRANGADHRA DIST. SURENDRANGAR
DIGITAL MAP FOR KANKAVATI MINOR-I (D-15)**

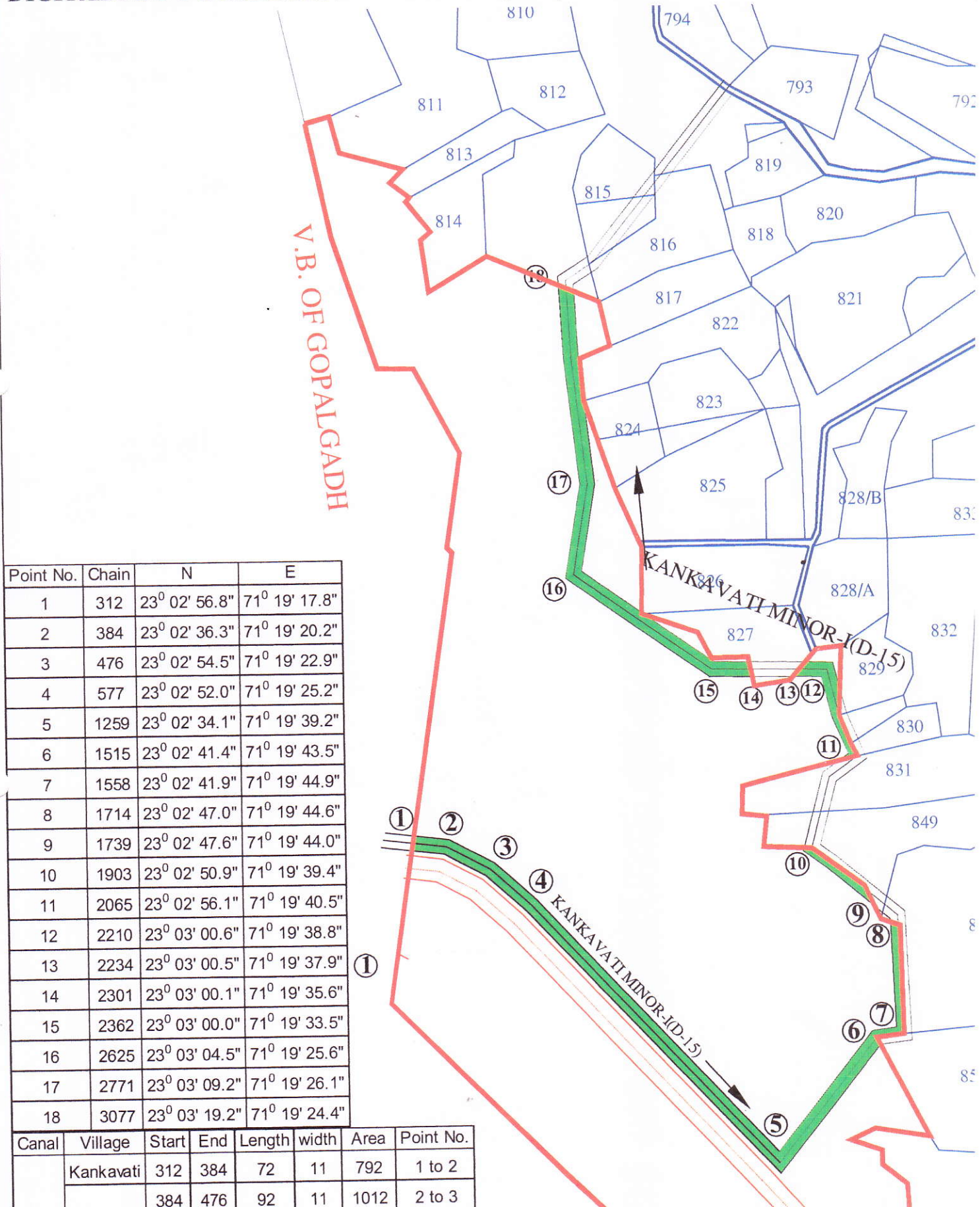


FIG. (10)

VIL. MANGALPUR TAL. HALVAD DIST. MORBI
DIGITAL MAP FOR MANGALPUR MINOR (D-16)

