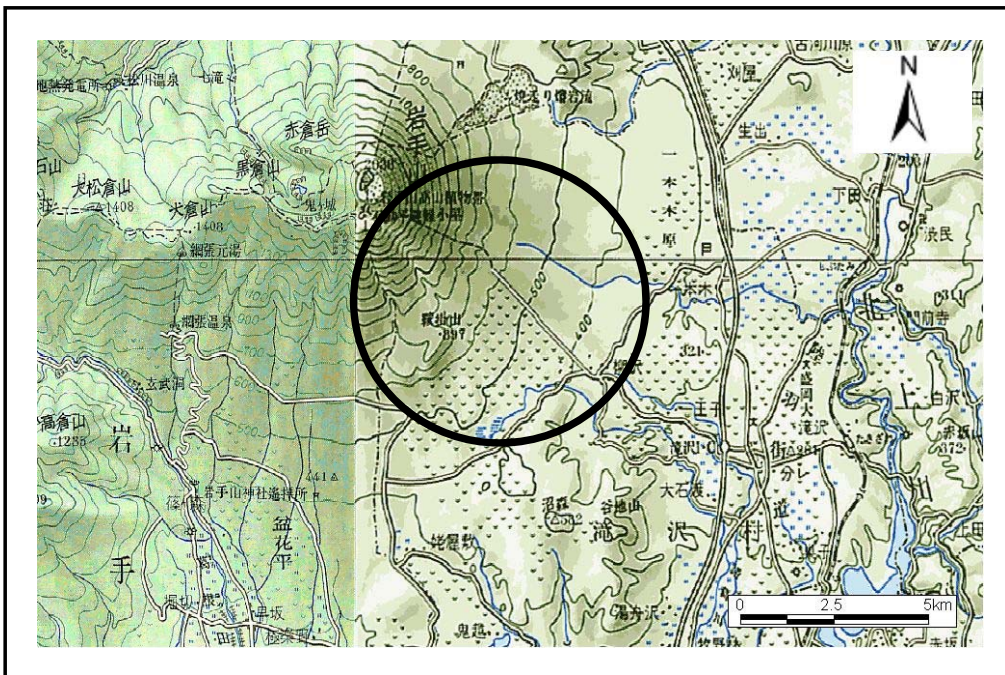


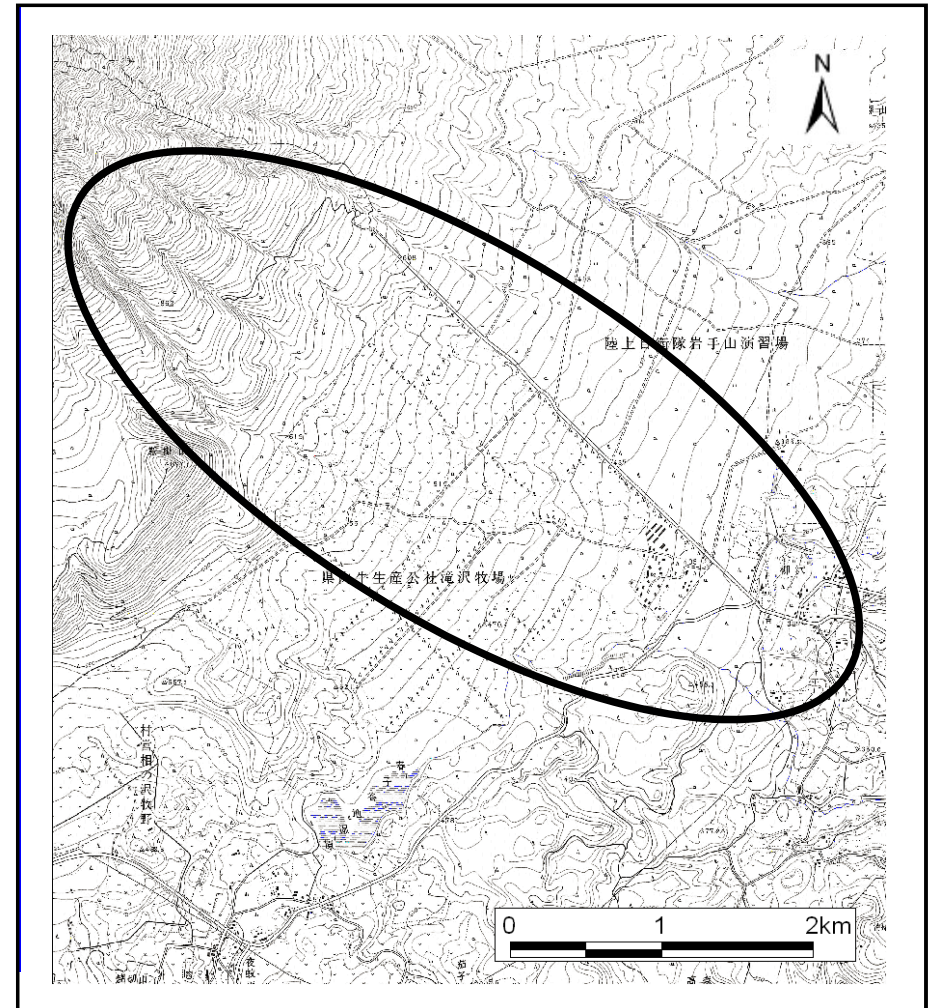
## 土砂災害防止に関する基礎調査(土石流)

表紙 位置,位置図

|         |           |
|---------|-----------|
| 自然現象の種類 | 土石流       |
| 溪流番号    | I-46      |
| 水系名     | 北上川       |
| 河川名     | 諸葛川       |
| 溪流名     | 兎口沢       |
| 所在地     | 滝沢市滝沢字岩手山 |
| 調査機関    |           |



位置図(S=1:200,000)



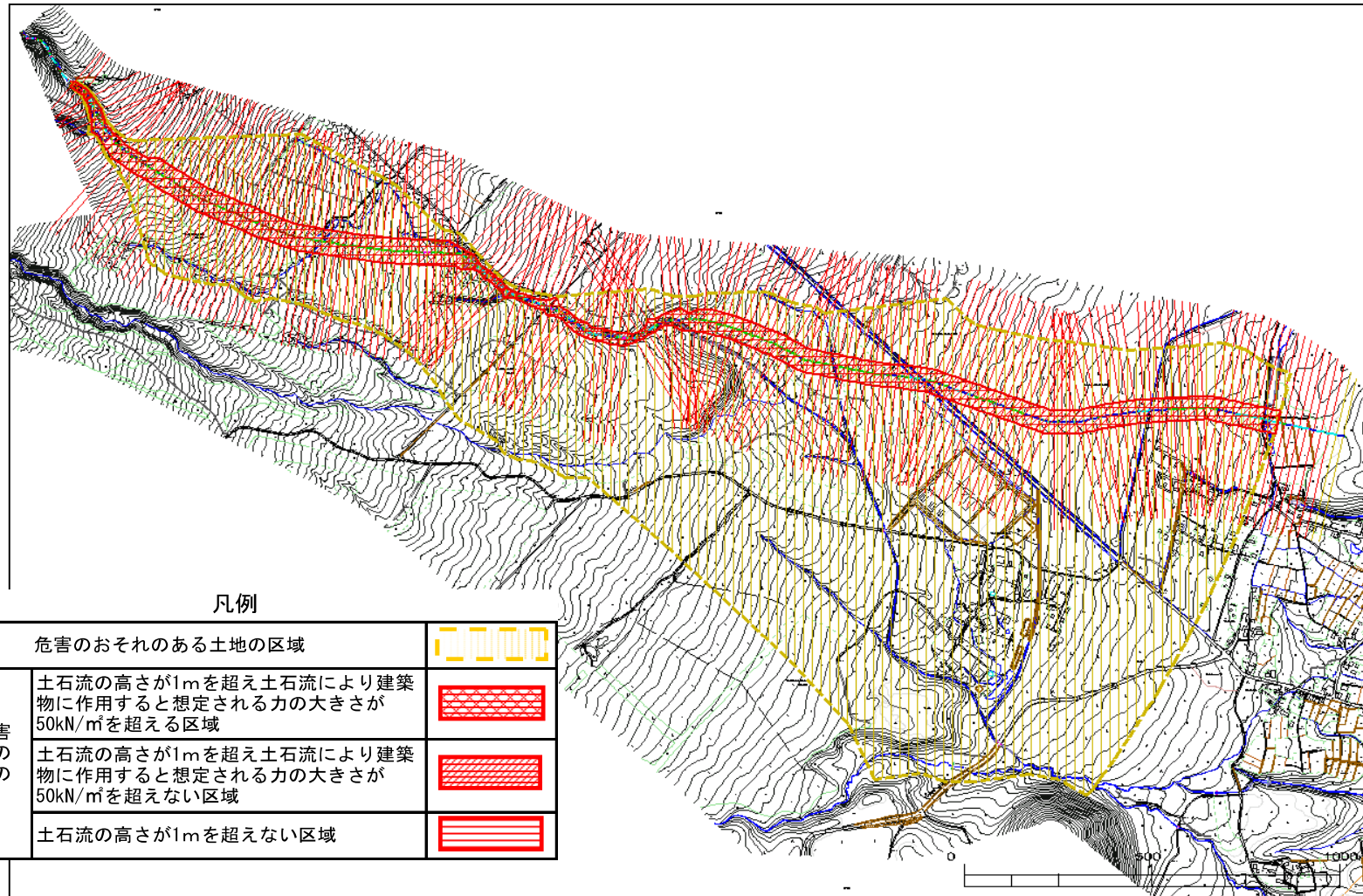
位置図(S=1:50,000)

# 土石流区域調査

様式3-1 危害のおそれのある土地、著しい危害のおそれのある土地の設定図

調査年度 平成15年度

渓流の位置 渓流番号 I-46 渓流名 兎口沢 所在地 滝沢市滝沢字岩手山



# 土 石 流 区 域 調 査

様式3-2 建築物に作用すると想定される衝撃に関する事項

調査年度 平成15年度

| 溪      | 流           | の                             | 位                            | 置      | 渓流番号        | I-46                          | 渓流名                          | 兎口沢 | 所在地 | 滝沢市滝沢字岩手山 |
|--------|-------------|-------------------------------|------------------------------|--------|-------------|-------------------------------|------------------------------|-----|-----|-----------|
| 横断測線番号 | 土石流の高さh(m)  | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) | 横断測線番号 | 土石流の高さh(m)  | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) |     |     |           |
| No. 0  | 2.755497448 | 53.36068321                   | 4.503688706                  | No. 27 | 1.114657033 | 19.48822691                   | 7.060537894                  |     |     |           |
| No. 1  | 2.904153877 | 57.12297911                   | 4.50255102                   | No. 28 | 1.105513555 | 19.81192635                   | 7.104451575                  |     |     |           |
| No. 2  | 2.627659262 | 54.51096012                   | 4.51967351                   | No. 29 | 1.098917291 | 20.05048284                   | 7.136622178                  |     |     |           |
| No. 3  | 2.465451979 | 51.94477886                   | 4.567759504                  | No. 30 | 1.096388526 | 20.14308035                   | 7.149066                     |     |     |           |
| No. 4  | 2.274468858 | 46.95550542                   | 4.666955839                  | No. 31 | 1.094882222 | 20.19854289                   | 7.156507851                  |     |     |           |
| No. 5  | 1.930687058 | 36.45750354                   | 4.98285291                   | No. 32 | 1.104276757 | 19.85633021                   | 7.11045195                   |     |     |           |
| No. 6  | 1.883210408 | 34.31423168                   | 5.043219647                  | No. 33 | 1.099104901 | 20.04363845                   | 7.135701426                  |     |     |           |
| No. 7  | 1.131098175 | 20.44509416                   | 6.983507273                  | No. 34 | 1.095868723 | 20.1621938                    | 7.151631579                  |     |     |           |
| No. 8  | 1.688705551 | 33.33990632                   | 5.34441609                   | No. 35 | 1.095136216 | 20.18917473                   | 7.155251455                  |     |     |           |
| No. 9  | 1.611123093 | 34.06137276                   | 5.492819756                  | No. 36 | 1.093314301 | 20.25651786                   | 7.164277601                  |     |     |           |
| No. 10 | 1.447107853 | 25.22160417                   | 5.873854069                  | No. 37 | 1.086812615 | 20.49960569                   | 7.196754186                  |     |     |           |
| No. 11 | 1.183255123 | 18.68241141                   | 6.754512317                  | No. 38 | 1.085734408 | 20.54034087                   | 7.202180434                  |     |     |           |
| No. 12 | 1.21563756  | 17.1676631                    | 6.623143224                  | No. 39 | 1.093123851 | 20.26357687                   | 7.165223001                  |     |     |           |
| No. 13 | 1.218152977 | 16.80305876                   | 6.613260999                  | No. 40 | 1.106807747 | 19.76562122                   | 7.098188261                  |     |     |           |
| No. 14 | 1.20518441  | 17.16662806                   | 6.664699058                  | No. 41 | 1.116949351 | 19.40831752                   | 7.049650389                  |     |     |           |
| No. 15 | 1.173808473 | 18.09662254                   | 6.794339796                  | No. 42 | 1.110162317 | 19.64635041                   | 7.082027081                  |     |     |           |
| No. 16 | 1.16622282  | 18.33280579                   | 6.826833429                  | No. 43 | 1.113414812 | 19.53173665                   | 7.066458173                  |     |     |           |
| No. 17 | 1.221750999 | 16.34028791                   | 6.599203871                  | No. 44 | 1.119563888 | 19.31777421                   | 7.037291402                  |     |     |           |
| No. 18 | 1.223047777 | 16.18706103                   | 6.594159943                  | No. 45 | 1.129178711 | 18.99019769                   | 6.992375034                  |     |     |           |
| No. 19 | 1.220449564 | 16.25605559                   | 6.604277855                  | No. 46 | 1.139377067 | 18.65176356                   | 6.945631189                  |     |     |           |
| No. 20 | 1.21201363  | 16.48313597                   | 6.637460225                  | No. 47 | 1.158719673 | 18.03425008                   | 6.85943174                   |     |     |           |
| No. 21 | 1.200626698 | 16.79727591                   | 6.683068214                  | No. 48 | 1.178039175 | 17.44758743                   | 6.776416351                  |     |     |           |
| No. 22 | 1.176606313 | 17.49010839                   | 6.782470875                  | No. 49 | 1.192745177 | 17.01999825                   | 6.715198806                  |     |     |           |
| No. 23 | 1.163078321 | 17.89933628                   | 6.840439119                  | No. 50 | 1.1941611   | 16.97966078                   | 6.709392093                  |     |     |           |
| No. 24 | 1.159349209 | 18.01466991                   | 6.856678924                  | No. 51 | 1.203460396 | 16.71826648                   | 6.671629386                  |     |     |           |
| No. 25 | 1.150114174 | 18.30513506                   | 6.897391564                  | No. 52 | 1.221577157 | 16.2260587                    | 6.599880945                  |     |     |           |
| No. 26 | 1.1300947   | 18.95942549                   | 6.988139165                  | No. 53 | 1.229441897 | 15.51110997                   | 6.569461899                  |     |     |           |

# 土 石 流 区 域 調 査

様式3-2 建築物に作用すると想定される衝撃に関する事項

調査年度 平成15年度

| 溪      | 流            | の                             | 位                            | 置       | 溪流番号         | I-46                          | 溪流名                          | 兎口沢 | 所在地 | 滝沢市滝沢字岩手山 |
|--------|--------------|-------------------------------|------------------------------|---------|--------------|-------------------------------|------------------------------|-----|-----|-----------|
| 横断測線番号 | 土石流の高さh(m)   | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) | 横断測線番号  | 土石流の高さh(m)   | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) |     |     |           |
| No. 54 | 1. 231533679 | 15. 31327033                  | 6. 561443906                 | No. 81  | 1. 873029114 | 19. 82638439                  | 5. 056781368                 |     |     |           |
| No. 55 | 1. 215476322 | 15. 72054252                  | 6. 623778217                 | No. 82  | 1. 844686331 | 20. 87964165                  | 5. 095724709                 |     |     |           |
| No. 56 | 1. 197534405 | 16. 19513367                  | 6. 695619033                 | No. 83  | 1. 874409708 | 22. 89837972                  | 5. 054929316                 |     |     |           |
| No. 57 | 1. 192680387 | 16. 32722512                  | 6. 715464874                 | No. 84  | 1. 822436065 | 23. 15330527                  | 5. 127557989                 |     |     |           |
| No. 58 | 1. 182081228 | 16. 62133469                  | 6. 759423514                 | No. 85  | 1. 747962967 | 22. 65055817                  | 5. 242663994                 |     |     |           |
| No. 59 | 1. 158994525 | 17. 29011041                  | 6. 858229473                 | No. 86  | 2. 189534397 | 28. 60424822                  | 4. 727257499                 |     |     |           |
| No. 60 | 1. 167082501 | 17. 05129706                  | 6. 823127694                 | No. 87  | 2. 248100048 | 34. 1117132                   | 4. 684551559                 |     |     |           |
| No. 61 | 1. 385193252 | 21. 78847357                  | 6. 046257951                 | No. 88  | 2. 249568775 | 36. 5492528                   | 4. 683545274                 |     |     |           |
| No. 62 | 1. 92579577  | 37. 94632019                  | 4. 988858477                 | No. 89  | 1. 662251027 | 24. 41425612                  | 5. 392995631                 |     |     |           |
| No. 63 | 2. 772337603 | 68. 9253855                   | 4. 502990526                 | No. 90  | 2. 054463222 | 23. 74160979                  | 4. 84612196                  |     |     |           |
| No. 64 | 2. 009299723 | 41. 66755594                  | 4. 892725217                 | No. 91  | 1. 992709723 | 23. 89682661                  | 4. 910769777                 |     |     |           |
| No. 65 | 2. 39507442  | 53. 29855483                  | 4. 598728216                 | No. 92  | 1. 692512407 | 19. 29325505                  | 5. 337590317                 |     |     |           |
| No. 66 | 2. 452179088 | 48. 87333314                  | 4. 573119022                 | No. 93  | 1. 399593278 | 10. 68308809                  | 6. 004564477                 |     |     |           |
| No. 67 | 2. 56368405  | 55. 04127418                  | 4. 534853306                 | No. 94  | 1. 415714057 | 10. 33639401                  | 5. 95906065                  |     |     |           |
| No. 68 | 2. 026530943 | 37. 28852107                  | 4. 874515326                 | No. 95  | 1. 434441373 | 9. 871354935                  | 5. 907702965                 |     |     |           |
| No. 69 | 2. 748149125 | 51. 49378817                  | 4. 504095577                 | No. 96  | 1. 437911951 | 9. 790171638                  | 5. 898358274                 |     |     |           |
| No. 70 | 2. 551723983 | 48. 86792868                  | 4. 538232282                 | No. 97  | 1. 478634284 | 8. 934130552                  | 5. 792589859                 |     |     |           |
| No. 71 | 2. 398730428 | 42. 93313252                  | 4. 596963067                 | No. 98  | 1. 50594481  | 8. 442011543                  | 5. 725480717                 |     |     |           |
| No. 72 | 2. 336745258 | 32. 91795474                  | 4. 629268359                 | No. 99  | 1. 463786526 | 8. 935288178                  | 5. 830341793                 |     |     |           |
| No. 73 | 2. 203792977 | 20. 18242013                  | 4. 716390489                 | No. 100 | 1. 450976611 | 9. 093754597                  | 5. 863655009                 |     |     |           |
| No. 74 | 1. 356133219 | 11. 49391794                  | 6. 133531619                 | No. 101 | 1. 397266101 | 9. 806314293                  | 6. 011234767                 |     |     |           |
| No. 75 | 2. 273467812 | 20. 28441968                  | 4. 667605743                 | No. 102 | 1. 399864929 | 9. 769937545                  | 6. 00378754                  |     |     |           |
| No. 76 | 2. 144133498 | 24. 07804789                  | 4. 763936082                 | No. 103 | 1. 242436923 | 12. 40267476                  | 6. 520136286                 |     |     |           |
| No. 77 | 2. 267915549 | 19. 9816147                   | 4. 671236189                 | No. 104 | 1. 243220037 | 12. 3870546                   | 6. 517200432                 |     |     |           |
| No. 78 | 2. 053551781 | 18. 27968396                  | 4. 847026833                 | No. 105 | 1. 256137072 | 12. 13360878                  | 6. 469363588                 |     |     |           |
| No. 79 | 1. 962734857 | 16. 58252671                  | 4. 94467907                  | No. 106 | 1. 272768167 | 11. 81858396                  | 6. 409368439                 |     |     |           |
| No. 80 | 1. 960402854 | 23. 14809829                  | 4. 94738905                  | No. 107 | 1. 268965798 | 11. 88951721                  | 6. 422929796                 |     |     |           |

# 土 石 流 区 域 調 査

様式3-2 建築物に作用すると想定される衝撃に関する事項

調査年度 平成15年度

| 溪 流 の 位 置 |             | 溪流番号                          | I-46                         | 溪流名     | 兎口沢         | 所在地                           | 滝沢市滝沢字岩手山                    |
|-----------|-------------|-------------------------------|------------------------------|---------|-------------|-------------------------------|------------------------------|
| 横断測線番号    | 土石流の高さh(m)  | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) | 横断測線番号  | 土石流の高さh(m)  | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) |
| No. 108   | 1.265248937 | 11.95947434                   | 6.436274565                  | No. 135 | 1.396452925 | 9.817738357                   | 6.013571652                  |
| No. 109   | 1.262975897 | 12.0025612                    | 6.444478917                  | No. 136 | 1.383550846 | 10.00169958                   | 6.051077477                  |
| No. 110   | 1.263238774 | 11.9975663                    | 6.443528391                  | No. 137 | 1.369492892 | 10.20808997                   | 6.092878163                  |
| No. 111   | 1.270467673 | 11.86142361                   | 6.417562395                  | No. 138 | 1.380609821 | 10.04435693                   | 6.059740958                  |
| No. 112   | 1.273544279 | 11.80418359                   | 6.406611557                  | No. 139 | 1.39960143  | 9.773616604                   | 6.004541155                  |
| No. 113   | 1.276193394 | 11.75522833                   | 6.39722981                   | No. 140 | 1.413464012 | 9.582846757                   | 5.965338894                  |
| No. 114   | 1.266102909 | 11.94334674                   | 6.433200753                  | No. 141 | 1.404093969 | 9.711173341                   | 5.991737494                  |
| No. 115   | 1.319147417 | 11.00214568                   | 6.251023065                  | No. 142 | 1.393322113 | 9.861909086                   | 6.022598576                  |
| No. 116   | 1.288902755 | 11.524544                     | 6.35282269                   | No. 143 | 1.383743441 | 9.998915618                   | 6.050511633                  |
| No. 117   | 1.2876516   | 11.54695067                   | 6.357150496                  | No. 144 | 1.384499215 | 9.988002137                   | 6.048292936                  |
| No. 118   | 1.294399448 | 11.4268734                    | 6.333921115                  | No. 145 | 1.397968155 | 9.796467386                   | 6.009219772                  |
| No. 119   | 1.302085036 | 11.29237672                   | 6.30779454                   | No. 146 | 1.412817821 | 9.591614708                   | 5.967146275                  |
| No. 120   | 1.301844354 | 11.29655253                   | 6.308607431                  | No. 147 | 1.426840743 | 9.404009299                   | 5.928355582                  |
| No. 121   | 1.296023445 | 11.3982542                    | 6.328371274                  | No. 148 | 1.433522943 | 9.316542256                   | 5.910184828                  |
| No. 122   | 1.298908082 | 11.34768353                   | 6.318551977                  | No. 149 | 1.436736911 | 9.274906829                   | 5.901516151                  |
| No. 123   | 1.313043825 | 11.10466881                   | 6.271139185                  | No. 150 | 1.44852864  | 9.124516929                   | 5.870100988                  |
| No. 124   | 1.332207845 | 10.78748191                   | 6.208682592                  | No. 151 | 1.451659401 | 9.085202083                   | 5.861861695                  |
| No. 125   | 1.290419895 | 11.49746123                   | 6.34758752                   | No. 152 | 1.441758728 | 9.210408144                   | 5.888062776                  |
| No. 126   | 1.3350926   | 10.74091492                   | 6.199457834                  | No. 153 | 1.440639511 | 9.224724633                   | 5.891051533                  |
| No. 127   | 1.355622751 | 10.41804805                   | 6.135103285                  | No. 154 | 1.43828863  | 9.254904879                   | 5.897347254                  |
| No. 128   | 1.357657291 | 10.38684717                   | 6.128847285                  | No. 155 | 1.430035892 | 9.362033233                   | 5.919642107                  |
| No. 129   | 1.349519695 | 10.51249009                   | 6.15399969                   | No. 156 | 1.430515414 | 9.355757799                   | 5.918338362                  |
| No. 130   | 1.343182526 | 10.61192049                   | 6.173829667                  | No. 157 | 1.458198435 | 9.003902802                   | 5.844788356                  |
| No. 131   | 1.362902656 | 10.30704989                   | 6.11281744                   | No. 158 | 1.494392911 | 8.57303223                    | 5.753505361                  |
| No. 132   | 1.387290712 | 9.94784699                    | 6.040122359                  | No. 159 | 1.500173802 | 8.5070875                     | 5.739415709                  |
| No. 133   | 1.397984301 | 9.796241097                   | 6.009173458                  | No. 160 | 1.500441654 | 8.504050485                   | 5.738766064                  |
| No. 134   | 1.406329708 | 9.680320848                   | 5.985401268                  | No. 161 | 1.4774897   | 8.770313744                   | 5.795467757                  |

# 土 石 流 区 域 調 書

様式3-2 建築物に作用すると想定される衝撃に関する事項

調査年度 平成15年度

| 溪       | 流           | の                             | 位                            | 置      | 溪流番号       | I-46                          | 溪流名                          | 兎口沢 | 所在地 | 滝沢市滝沢字岩手山 |
|---------|-------------|-------------------------------|------------------------------|--------|------------|-------------------------------|------------------------------|-----|-----|-----------|
| 横断測線番号  | 土石流の高さh(m)  | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) | 横断測線番号 | 土石流の高さh(m) | 土石流の流体力Fd(kN/m <sup>2</sup> ) | 建築物の耐力P2(kN/m <sup>2</sup> ) |     |     |           |
| No. 162 | 1.431455325 | 9.343475624                   | 5.915785882                  |        |            |                               |                              |     |     |           |
| No. 163 | 1.391592124 | 9.886444431                   | 6.027606861                  |        |            |                               |                              |     |     |           |
| No. 164 | 1.368011466 | 10.23021072                   | 6.097341021                  |        |            |                               |                              |     |     |           |
| No. 165 | 1.353547499 | 10.45001834                   | 6.141506757                  |        |            |                               |                              |     |     |           |
| No. 166 | 1.345657105 | 10.57292707                   | 6.166060847                  |        |            |                               |                              |     |     |           |
| No. 167 | 1.321223715 | 10.96759319                   | 6.244228181                  |        |            |                               |                              |     |     |           |
| No. 168 | 1.299749557 | 11.33299501                   | 6.315696879                  |        |            |                               |                              |     |     |           |
| No. 169 | 1.297404861 | 11.37399447                   | 6.323662781                  |        |            |                               |                              |     |     |           |
| No. 170 | 1.303294692 | 11.27142436                   | 6.303714139                  |        |            |                               |                              |     |     |           |
| No. 171 | 1.331858489 | 10.79314193                   | 6.209802849                  |        |            |                               |                              |     |     |           |
| No. 172 | 1.390323224 | 9.904498696                   | 6.031289522                  |        |            |                               |                              |     |     |           |
| No. 173 | 1.450001102 | 9.105994613                   | 5.866220613                  |        |            |                               |                              |     |     |           |
| No. 174 | 1.511594207 | 8.346986919                   | 5.711964393                  |        |            |                               |                              |     |     |           |
| No. 175 | 1.558519671 | 7.632592042                   | 5.604307392                  |        |            |                               |                              |     |     |           |
| No. 176 | 1.568143374 | 7.500564255                   | 5.583208647                  |        |            |                               |                              |     |     |           |
| No. 177 | 1.631806294 | 6.725677906                   | 5.451465118                  |        |            |                               |                              |     |     |           |
| No. 178 | 1.645068618 | 6.582736699                   | 5.425649503                  |        |            |                               |                              |     |     |           |
| No. 179 | 1.712448351 | 5.934449559                   | 5.302504574                  |        |            |                               |                              |     |     |           |
| No. 180 | 1.688439926 | 6.104416806                   | 5.344893888                  |        |            |                               |                              |     |     |           |
| No. 181 | 1.72527293  | 5.823898612                   | 5.280508918                  |        |            |                               |                              |     |     |           |
| No. 182 | 1.811434117 | 5.166072374                   | 5.143719984                  |        |            |                               |                              |     |     |           |
| No. 183 | 1.88911778  | 4.675281985                   | 5.035452451                  |        |            |                               |                              |     |     |           |
| No. 184 | 2.138524178 | 3.527537354                   | 4.768691616                  |        |            |                               |                              |     |     |           |
|         |             |                               |                              |        |            |                               |                              |     |     |           |
|         |             |                               |                              |        |            |                               |                              |     |     |           |
|         |             |                               |                              |        |            |                               |                              |     |     |           |
|         |             |                               |                              |        |            |                               |                              |     |     |           |